Microbac

Laboratory Report Number: L12050011

Shane Lowe
CH2MHILL, Inc
CH2MHILL
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
(740) 373-4071
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 May 15 2012

David E. Vandenberg

David Vandenberg – Managing Director

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

Microbac

Lab Report #: L12050011
Lab Project #: 2736.061
Project Name: DOW WATERLOO GW
Lab Contact: Kathy Albertson

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.

There were no discrepancies.

Discrepancy	Resolution

Coolers

Cooler #	Temperature Gun	Temperature	COC #	Airbill #
0013735	G	2.0		1015924684510004575000795544735911
0013273	G	4.0		3457502311002560795544735922681 3
0013962	G	2.0		1002239984510004575000872087763809

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?	Yes
4	Was ice present?	Yes
5	Were COC's received/information complete/signed and dated?	Yes
6	Were sample containers intact and match COC?	Yes
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 perservatives used? (water only)	Yes
11	Were pH ranges acceptable? (voa's excluded)	Yes
12	Were VOA samples free of headspace (less than 6mm)?	Yes

Microbac

Lab Report #: L12050011
Lab Project #: 2736.061
Project Name: DOW WATERLOO GW
Lab Contact: Kathy Albertson

Samples Received

Client ID	Laboratory ID	Date Collected	Date Received
MW-29-043012	L12050011-01	04/30/2012 13:07	05/01/2012 10:34
MW-29-043012	L12050011-02	04/30/2012 13:07	05/01/2012 10:34
DUP-GW-043012	L12050011-03	04/30/2012 14:00	05/01/2012 10:34
DUP-GW-043012	L12050011-04	04/30/2012 14:00	05/01/2012 10:34
EB-043012-GW	L12050011-05	04/30/2012 14:15	05/01/2012 10:34
TB-043012	L12050011-06	04/30/2012 08:05	05/01/2012 10:34

Microbac REPORT L12050011
PREPARED FOR CH2MHILL, Inc
WORK ID:

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2.3.2.2 QC Summary Data 698
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2.4.3.2 QC Summary Data 1335
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1.0 Summary Data

1.1 Narratives

Login Number: L12050011
Department: Volatiles
Analyst: Mary Schilling

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: All acceptance criteria were met.

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: trans-1,3-Dichloropropene. Please see the applicable QC report for a detailed presentation of the failures.

Matrix Spikes: 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: None.

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: 46411
Approved By: Michael Albertson

Login Number: L12050011
Department: Volatiles - GC
Analyst: Franci Bolden

Analysis RSK-175

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: All acceptance criteria were met.

Continuing Calibration and Tune: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes/Sample Duplicates: Microbac Laboratories recommends site specific MS/MSD samples to avoid possible data qualifications.

SAMPLES

Samples: All acceptance criteria were met.

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 Laboratory Director or the QA/QC Supervisor

will be required.

Narrative ID: 45829
Approved By: Michael Albertson

Login Number: L12050011
Department: Semivolatiles
Analyst: Cassie A. Augenstein

METHOD

Preparation 3520C

Analysis SW-846 8270C/40 CFR 264 App. IX

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: 2,4-Dinitrophenol, 2-Chloronaphthalene, Pentachlorophenol. Please see the applicable QC report for a detailed presentation of the failures.

Continuing Calibration and Tune: Recoveries out of range were observed for the following analytes: Benzoic Acid. Please see the applicable QC report for a detailed presentation of the failures.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: Recoveries out of range were observed for the following analytes/surrogates: 2,4,5-Trichlorophenol, 2,6-Dinitrotoluene, 2-Chloronaphthalene, 2-Nitroaniline, 3,3'-Dichlorobenzidine, 3-,4-Methylphenol, 3-Nitroaniline, 4-Bromophenyl Phenyl Ether, Benzo[b]fluoranthene, bis(2-Chloroethoxy)methane, Di-n-Butyl Phthalate, Dibenz[ah]anthracene, Diethylphthalate, Dimethylphthalate, Phenanthrene, Sym-Trinitrobenzene, 2,4,6-Tribromophenol, Phenol-d5. Please see the applicable QC report for a detailed presentation of the failures.

All hits in the LCS were biased high; there were no hits found in the samples associated with the LCS.

Matrix Spikes: The MS/MSD results were not associated with this sample delivery group.

SAMPLES

Samples: All acceptance criteria were met. The extracts were library searched using the NIST library and the top twenty TICs found were reported. Requested acid compounds listed as TICs in the Waterloo QAPP may not have been detected due to unknown extraction efficiency and chromatographic performance.

Internal Standards: All acceptance criteria were met.

Surrogates: Recoveries out of range were observed for the following surrogates: Phenol-d5, 2,4,6-Tribromophenol. Please see the applicable QC report for a detailed presentation of the failures.

No analytes were detected in the samples with high surrogate recoveries.

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.

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Narrative ID: 46339
Approved By: Mike Cochran

Login Number: L12050011
Department: Semivolatiles
Analyst: Cassie A. Augenstein

METHOD

Preparation 3510C

Analysis SW-846 8270C

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: All acceptance criteria were met.

Continuing Calibration and Tune: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: The MS/MSD results were not associated with this sample delivery group.

SAMPLES

Samples: All acceptance criteria were met.

Internal Standards: All acceptance criteria were met.

Surrogates: All acceptance criteria were met.

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.

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Narrative ID: 45940
Approved By: Mike Cochran

Login Number: L12050011
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: WG396793 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: WG396793 - Client samples 01 through 04 required dilution analyses in order to obtain results for sodium within the linear range.

Narrative ID: 45919
Approved By: Sheri Pfalzgraf

Login Number: L12050011
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: WG396772 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

Narrative ID: 45977
Approved By: Sheri Pfalzgraf

Login Number: L12050011
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: WG397020 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

Narrative ID: 45901
Approved By: Sheri Pfalzgraf

Login Number: L12050011
Department: Conventionals
Analyst: Deanna Hesson

METHOD

Analysis EPA 310.2 (Alkalinity)

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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Narrative ID: 46368
Approved By: Deanna Hesson

Login Number: L12050011
Department: Conventionals
Analyst: Deanna Hesson

METHOD

Analysis EPA 353.2/SM4500-NO3 F (Nitrate)

HOLDING TIMES

Sample Analysis: Nitrate is reported as the difference of nitrate-nitrite (28 day hold) and nitrite (48 hour hold). Both analysis were analyzed within the appropriate hold time. The nitrate hold time is within compliance.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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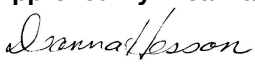
Narrative ID: 46371
Approved By: Deanna Hesson



Login Number: L12050011
Department: Conventionals
Analyst: Deanna Hesson

METHOD

Analysis EPA 365.4 (Phosphorus)

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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Narrative ID: 46369
Approved By: Deanna Hesson

Login Number: L12050011
Department: Conventionals
Analyst: Deanna Hesson

METHOD

Analysis EPA 375.4/SM426C(15th ed) (Sulfate)

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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Narrative ID: 46370
Approved By: Deanna Hesson

Login Number: L12050011
Department: Conventionals
Analyst: Jeremy Kinney

METHOD

Analysis Water: EPA 415.1/SM5310C/SW846 9060 (Total Organic Carbon)
Soil: Lloyd-Khan Methodology

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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: 46372
Approved By: Deanna Hesson

1.2 Certificate of Analysis

Microbac

Lab Report #: L12050011
Lab Project #: 2736.061
Project Name: DOW WATERLOO GW
Lab Contact: Kathy Albertson

Certificate of Analysis

Sample #:	L12050011-01	**PrePrep Method:**	N/A	**Instrument:**	HPMS6
Client ID:	MW-29-043012	**Prep Method:**	5030B/5030C/5035A	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	8260B	**Cal Date:**	04/25/2012 14:42
Workgroup #:	WG397130	**Analyst:**	MES	**Run Date:**	05/07/2012 03:21
Collect Date:	04/30/2012 13:07	**Dilution:**	1	**File ID:**	6M107939
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
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

Certificate of Analysis

Sample #:	L12050011-01	**PrePrep Method:**	N/A	**Instrument:**	HPMS6
Client ID:	MW-29-043012	**Prep Method:**	5030B/5030C/5035A	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	8260B	**Cal Date:**	04/25/2012 14:42
Workgroup #:	WG397130	**Analyst:**	MES	**Run Date:**	05/07/2012 03:21
Collect Date:	04/30/2012 13:07	**Dilution:**	1	**File ID:**	6M107939
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
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	110	80	120	
Dibromofluoromethane	109	86	118	
p-Bromofluorobenzene	105	86	115	
Toluene-d8	99.0	88	110	

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12050011-01	**PrePrep Method:**	N/A	**Instrument:**	HP16
Client ID:	MW-29-043012	**Prep Method:**	5021	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	RSK175	**Cal Date:**	04/30/2012 15:04
Workgroup #:	WG396843	**Analyst:**	FJB	**Run Date:**	05/02/2012 17:03
Collect Date:	04/30/2012 13:07	**Dilution:**	1	**File ID:**	16G32145
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	257		5.00	1.00
Carbon Dioxide	124-38-9	40900		10000	2500

Sample #:	L12050011-01	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-29-043012	**Prep Method:**	3520C	**Prep Date:**	05/07/2012 11:00
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG397604	**Analyst:**	CAA	**Run Date:**	05/12/2012 15:27
Collect Date:	04/30/2012 13:07	**Dilution:**	1	**File ID:**	4M60824
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
Butane, 2-methoxy-2-methyl-		5.67		0.000	0.000
Morpholine		4.30		0.000	0.000
unknown		7.05		0.000	0.000
unknown		4.94		0.000	0.000
1,4-Oxathiane		14.3		0.000	0.000
[1,4,5]Oxadithiepane		32.6		0.000	0.000
unknown		8.11		0.000	0.000
unknown		13.5		0.000	0.000
unknown		4.65		0.000	0.000
unknown		5.67		0.000	0.000
unknown		6.04		0.000	0.000

Certificate of Analysis

Sample #:	L12050011-01	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-29-043012	**Prep Method:**	3520C	**Prep Date:**	05/07/2012 11:00
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG397604	**Analyst:**	CAA	**Run Date:**	05/12/2012 15:27
Collect Date:	04/30/2012 13:07	**Dilution:**	1	**File ID:**	4M60824
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
1,1'-Biphenyl	92-52-4		U	20.0	2.50
1,3,5-Trinitrobenzene	99-35-4		U	5.00	2.50
1,3-Dinitrobenzene	99-65-0		U	5.00	2.50
1,4-Dioxane	123-91-1		U	10.0	5.00
2,4,5-Trichlorophenol	95-95-4		U	5.00	2.50
2,4,6-Trichlorophenol	88-06-2		U	5.00	2.50
2,4-Dichlorophenol	120-83-2		U	5.00	2.50
2,4-Dimethylphenol	105-67-9		U	5.00	2.50
2,4-Dinitrophenol	51-28-5		U	25.0	12.5
2,4-Dinitrotoluene	121-14-2		U	5.00	2.50
2,6-Dinitrotoluene	606-20-2		U	5.00	2.50
2-Chloronaphthalene	91-58-7		U	5.00	2.50
2-Chlorophenol	95-57-8		U	5.00	2.50
2-Methylnaphthalene	91-57-6		U	5.00	2.50
2-Methylphenol	95-48-7		U	5.00	2.50
2-Nitroaniline	88-74-4		U	25.0	12.5
2-Nitrophenol	88-75-5		U	5.00	2.50
3-Nitroaniline	99-09-2		U	25.0	12.5
3,3'-Dichlorobenzidine	91-94-1		U	5.00	2.50
3-,4-Methylphenol	106-44-5		U	5.00	2.50
4-Bromophenyl-phenylether	101-55-3		U	5.00	2.50
4-Chloroaniline	106-47-8		U	5.00	2.50
4-Nitrophenol	100-02-7		U	25.0	12.5
Acenaphthene	83-32-9		U	5.00	2.50
Acenaphthylene	208-96-8		U	5.00	2.50
Anthracene	120-12-7		U	5.00	2.50
Benzo(a)anthracene	56-55-3		U	5.00	2.50
Benzo(a)pyrene	50-32-8		U	5.00	2.50
Benzo(b)fluoranthene	205-99-2		U	5.00	2.50
Benzo(g,h,i)Perylene	191-24-2		U	5.00	2.50
Benzo(k)fluoranthene	207-08-9		U	5.00	2.50
Benzoic acid	65-85-0		U	20.0	10.0
Benzyl alcohol	100-51-6		U	5.00	2.50

Certificate of Analysis

Sample #:	L12050011-01	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-29-043012	**Prep Method:**	3520C	**Prep Date:**	05/07/2012 11:00
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG397604	**Analyst:**	CAA	**Run Date:**	05/12/2012 15:27
Collect Date:	04/30/2012 13:07	**Dilution:**	1	**File ID:**	4M60824
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
Bis(2-Chloroethyl)ether	111-44-4		U	5.00	2.50
Bis(2-Chloroethoxy)Methane	111-91-1		U	5.00	2.50
bis(2-Ethylhexyl)phthalate	117-81-7		U	5.00	2.50
Butylbenzylphthalate	85-68-7		U	5.00	2.50
Carbazole	86-74-8		U	20.0	2.50
Chrysene	218-01-9		U	5.00	2.50
Di-N-Butylphthalate	84-74-2		U	5.00	2.50
Di-n-octylphthalate	117-84-0		U	5.00	2.50
Dibenzo(a,h)Anthracene	53-70-3		U	5.00	2.50
Dibenzofuran	132-64-9		U	5.00	2.50
Diethylphthalate	84-66-2		U	5.00	2.50
Dimethylphthalate	131-11-3		U	5.00	2.50
Fluoranthene	206-44-0		U	5.00	2.50
Fluorene	86-73-7		U	5.00	2.50
Hexachlorobenzene	118-74-1		U	5.00	2.50
Hexachlorobutadiene	87-68-3		U	5.00	2.50
Hexachlorocyclopentadiene	77-47-4		U	5.00	2.50
Hexachloroethane	67-72-1		U	5.00	2.50
Indeno(1,2,3-cd)pyrene	193-39-5		U	5.00	2.50
Isophorone	78-59-1		U	5.00	2.50
N-Nitrosodiphenylamine	86-30-6		U	5.00	2.50
Naphthalene	91-20-3		U	5.00	2.50
Nitrobenzene	98-95-3		U	5.00	2.50
Pentachlorophenol	87-86-5		U	25.0	12.5
Phenanthrene	85-01-8		U	5.00	2.50
Phenol	108-95-2		U	5.00	2.50
Pyrene	129-00-0		U	5.00	2.50

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2,4,6-Tribromophenol	126	10	123	*
2-Fluorobiphenyl	105	43	116	
2-Fluorophenol	95.9	21	100	
Nitrobenzene-d5	108	35	114	
p-Terphenyl-d14	101	33	141	

Certificate of Analysis

Sample #:	L12050011-01	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-29-043012	**Prep Method:**	3520C	**Prep Date:**	05/07/2012 11:00
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG397604	**Analyst:**	CAA	**Run Date:**	05/12/2012 15:27
Collect Date:	04/30/2012 13:07	**Dilution:**	1	**File ID:**	4M60824
Sample Tag:	01	**Units:**	ug/L		

Surrogate	Recovery	Lower Limit	Upper Limit	Q
Phenol-d5	102	10	94	*

U	Not detected at or above adjusted sample detection limit.

Sample #:	L12050011-01	**PrePrep Method:**	N/A	**Instrument:**	HPMS7
Client ID:	MW-29-043012	**Prep Method:**	3510C	**Prep Date:**	05/03/2012 09:30
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/04/2012 12:53
Workgroup #:	WG397013	**Analyst:**	CAA	**Run Date:**	05/04/2012 15:04
Collect Date:	04/30/2012 13:07	**Dilution:**	1	**File ID:**	7M54896
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
2-Methylnaphthalene	91-57-6		U	0.0500	0.0250
Acenaphthene	83-32-9		U	0.0500	0.0250
Acenaphthylene	208-96-8		U	0.0500	0.0250
Anthracene	120-12-7		U	0.0500	0.0250
Benzo(a)anthracene	56-55-3		U	0.0500	0.0250
Benzo(a)pyrene	50-32-8		U	0.0500	0.0250
Benzo(b)fluoranthene	205-99-2		U	0.0500	0.0250
Benzo(g,h,i)perylene	191-24-2		U	0.0500	0.0250
Benzo(k)fluoranthene	207-08-9		U	0.0500	0.0250
Chrysene	218-01-9		U	0.0500	0.0250
Dibenzo(a,h)anthracene	53-70-3		U	0.0500	0.0250
Fluoranthene	206-44-0		U	0.0500	0.0250
Fluorene	86-73-7		U	0.0500	0.0250
Indeno(1,2,3-cd)pyrene	193-39-5		U	0.0500	0.0250
Naphthalene	91-20-3		U	0.0500	0.0250
Phenanthrene	85-01-8		U	0.0500	0.0250
Pyrene	129-00-0		U	0.0500	0.0250

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2-Fluorobiphenyl	66.0	43	116	
Nitrobenzene-d5	68.4	35	114	
p-Terphenyl-d14	79.9	33	141	

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12050011-01	**PrePrep Method:**	N/A	**Instrument:**	PE-ICP2
Client ID:	MW-29-043012	**Prep Method:**	3005A	**Prep Date:**	05/02/2012 10:11
Matrix:	Water	**Analytical Method:**	6010B	**Cal Date:**	05/04/2012 09:37
Workgroup #:	WG396793	**Analyst:**	KHR	**Run Date:**	05/04/2012 13:45
Collect Date:	04/30/2012 13:07	**Dilution:**	1	**File ID:**	P2.050412.134505
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	0.253		0.100	0.0500
Barium, Total	7440-39-3	0.104		0.0100	0.00250
Beryllium, Total	7440-41-7	0.000508		0.00200	0.000500
Cadmium, Total	7440-43-9	0.000699		0.000500	0.000250
Calcium, Total	7440-70-2	268		0.200	0.100
Chromium, Total	7440-47-3		U	0.00500	0.00250
Cobalt, Total	7440-48-4		U	0.0200	0.00250
Copper, Total	7440-50-8		U	0.0200	0.00500
Iron, Total	7439-89-6	1.58		0.100	0.0250
Magnesium, Total	7439-95-4	44.1		0.500	0.250
Manganese, Total	7439-96-5	0.327		0.0100	0.00500
Nickel, Total	7440-02-0		U	0.0400	0.00500
Potassium, Total	7440-09-7	14.0		1.00	0.250
Silver, Total	7440-22-4	0.00547		0.0100	0.00500
Vanadium, Total	7440-62-2	0.0231		0.0100	0.00500
Zinc, Total	7440-66-6	0.0128		0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Sample #:	L12050011-01	**PrePrep Method:**	N/A	**Instrument:**	PE-ICP2
Client ID:	MW-29-043012	**Prep Method:**	3005A	**Prep Date:**	05/02/2012 10:11
Matrix:	Water	**Analytical Method:**	6010B	**Cal Date:**	05/04/2012 09:37
Workgroup #:	WG396793	**Analyst:**	KHR	**Run Date:**	05/04/2012 15:09
Collect Date:	04/30/2012 13:07	**Dilution:**	100	**File ID:**	P2.050412.150915
Sample Tag:	DL01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Sodium, Total	7440-23-5	1090		50.0	25.0

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12050011-01	**PrePrep Method:**	N/A	**Instrument:**	ICP-MS2
Client ID:	MW-29-043012	**Prep Method:**	3015	**Prep Date:**	05/02/2012 07:07
Matrix:	Water	**Analytical Method:**	6020	**Cal Date:**	05/03/2012 10:49
Workgroup #:	WG396772	**Analyst:**	SLP	**Run Date:**	05/03/2012 11:28
Collect Date:	04/30/2012 13:07	**Dilution:**	1	**File ID:**	NI.050312.112848
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		U	0.00100	0.000500
Arsenic, Total	7440-38-2	0.000627		0.00100	0.000500
Lead, Total	7439-92-1	0.000936		0.00100	0.000500
Selenium, Total	7782-49-2	0.00186		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 #:	L12050011-01	**PrePrep Method:**	N/A	**Instrument:**	HYDRA
Client ID:	MW-29-043012	**Prep Method:**	7470A	**Prep Date:**	05/02/2012 09:16
Matrix:	Water	**Analytical Method:**	7470A	**Cal Date:**	05/04/2012 13:23
Workgroup #:	WG397020	**Analyst:**	PDM	**Run Date:**	05/04/2012 14:09
Collect Date:	04/30/2012 13:07	**Dilution:**	1	**File ID:**	HY.050412.140934
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 #:	L12050011-01	**PrePrep Method:**	N/A	**Instrument:**	SMARTCHEM
Client ID:	MW-29-043012	**Prep Method:**	310.2	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	310.2	**Cal Date:**	05/04/2012 15:58
Workgroup #:	WG397067	**Analyst:**	DIH	**Run Date:**	05/04/2012 16:07
Collect Date:	04/30/2012 13:07	**Dilution:**	2	**File ID:**	SC120504006.023
Sample Tag:	DL01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Alkalinity, Total (as CaCO3)		359		40.0	20.0

Certificate of Analysis

Sample #:	L12050011-01	**PrePrep Method:**	N/A	**Instrument:**	SMARTCHEM
Client ID:	MW-29-043012	**Prep Method:**	353.2	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	353.2	**Cal Date:**	05/01/2012 15:43
Workgroup #:	WG396738	**Analyst:**	DIH	**Run Date:**	05/02/2012 11:35
Collect Date:	04/30/2012 13:07	**Dilution:**	1	**File ID:**	SC12050709061601
Sample Tag:		**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8	0.270		0.0500	0.0250

Sample #:	L12050011-01	**PrePrep Method:**	N/A	**Instrument:**	SMARTCHEM
Client ID:	MW-29-043012	**Prep Method:**	365.4	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	365.4	**Cal Date:**	05/08/2012 12:37
Workgroup #:	WG397261	**Analyst:**	DIH	**Run Date:**	05/08/2012 12:42
Collect Date:	04/30/2012 13:07	**Dilution:**	1	**File ID:**	SC120508004.015
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Phosphorus, Total	7723-14-0		U	0.200	0.100

U	Not detected at or above adjusted sample detection limit.

Sample #:	L12050011-01	**PrePrep Method:**	N/A	**Instrument:**	SMARTCHEM
Client ID:	MW-29-043012	**Prep Method:**	375.4	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	375.4	**Cal Date:**	05/03/2012 07:30
Workgroup #:	WG396805	**Analyst:**	DIH	**Run Date:**	05/03/2012 07:49
Collect Date:	04/30/2012 13:07	**Dilution:**	20	**File ID:**	SC120503001.040
Sample Tag:	DL01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	459		100	50.0

Sample #:	L12050011-01	**PrePrep Method:**	N/A	**Instrument:**	TOC-VWP
Client ID:	MW-29-043012	**Prep Method:**	415.1	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	415.1	**Cal Date:**	12/06/2011 09:40
Workgroup #:	WG397189	**Analyst:**	JBK	**Run Date:**	05/08/2012 11:12
Collect Date:	04/30/2012 13:07	**Dilution:**	1	**File ID:**	TC05072012.037
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		2.70		1.00	0.500

Certificate of Analysis

Sample #:	L12050011-02	**PrePrep Method:**	N/A	**Instrument:**	PE-ICP2
Client ID:	MW-29-043012	**Prep Method:**	3005A	**Prep Date:**	05/02/2012 06:55
Matrix:	Water	**Analytical Method:**	6010B	**Cal Date:**	05/04/2012 09:37
Workgroup #:	WG396793	**Analyst:**	KHR	**Run Date:**	05/04/2012 14:03
Collect Date:	04/30/2012 13:07	**Dilution:**	1	**File ID:**	P2.050412.140302
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	0.101		0.0100	0.00250
Beryllium, Dissolved	7440-41-7		U	0.00200	0.000500
Cadmium, Dissolved	7440-43-9	0.000667		0.000500	0.000250
Calcium, Dissolved	7440-70-2	270		0.200	0.100
Chromium, Dissolved	7440-47-3		U	0.00500	0.00250
Cobalt, Dissolved	7440-48-4		U	0.0200	0.00250
Copper, Dissolved	7440-50-8		U	0.0200	0.00500
Iron, Dissolved	7439-89-6	1.19		0.100	0.0250
Magnesium, Dissolved	7439-95-4	43.8		0.500	0.250
Manganese, Dissolved	7439-96-5	0.307		0.0100	0.00500
Nickel, Dissolved	7440-02-0		U	0.0400	0.00500
Potassium, Dissolved	7440-09-7	13.9		1.00	0.250
Silver, Dissolved	7440-22-4	0.00537		0.0100	0.00500
Vanadium, Dissolved	7440-62-2	0.0220		0.0100	0.00500
Zinc, Dissolved	7440-66-6		U	0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Sample #:	L12050011-02	**PrePrep Method:**	N/A	**Instrument:**	PE-ICP2
Client ID:	MW-29-043012	**Prep Method:**	3005A	**Prep Date:**	05/02/2012 06:55
Matrix:	Water	**Analytical Method:**	6010B	**Cal Date:**	05/04/2012 09:37
Workgroup #:	WG396793	**Analyst:**	KHR	**Run Date:**	05/04/2012 15:30
Collect Date:	04/30/2012 13:07	**Dilution:**	100	**File ID:**	P2.050412.153003
Sample Tag:	DL01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Sodium, Dissolved	7440-23-5	1110		50.0	25.0

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12050011-02	**PrePrep Method:**	N/A	**Instrument:**	ICP-MS2
Client ID:	MW-29-043012	**Prep Method:**	3015	**Prep Date:**	05/02/2012 07:07
Matrix:	Water	**Analytical Method:**	6020	**Cal Date:**	05/03/2012 10:49
Workgroup #:	WG396772	**Analyst:**	SLP	**Run Date:**	05/03/2012 11:37
Collect Date:	04/30/2012 13:07	**Dilution:**	1	**File ID:**	NI.050312.113710
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Dissolved	7440-36-0		U	0.00100	0.000500
Arsenic, Dissolved	7440-38-2	0.00167		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.

Sample #:	L12050011-02	**PrePrep Method:**	N/A	**Instrument:**	HYDRA
Client ID:	MW-29-043012	**Prep Method:**	7470A	**Prep Date:**	05/02/2012 09:16
Matrix:	Water	**Analytical Method:**	7470A	**Cal Date:**	05/04/2012 13:23
Workgroup #:	WG397020	**Analyst:**	PDM	**Run Date:**	05/04/2012 14:14
Collect Date:	04/30/2012 13:07	**Dilution:**	1	**File ID:**	HY.050412.141457
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.

Certificate of Analysis

Sample #:	L12050011-03	**PrePrep Method:**	N/A	**Instrument:**	HPMS6
Client ID:	DUP-GW-043012	**Prep Method:**	5030B/5030C/5035A	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	8260B	**Cal Date:**	04/25/2012 14:42
Workgroup #:	WG397130	**Analyst:**	MES	**Run Date:**	05/07/2012 03:54
Collect Date:	04/30/2012 14:00	**Dilution:**	1	**File ID:**	6M107940
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
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

Certificate of Analysis

Sample #:	L12050011-03	**PrePrep Method:**	N/A	**Instrument:**	HPMS6
Client ID:	DUP-GW-043012	**Prep Method:**	5030B/5030C/5035A	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	8260B	**Cal Date:**	04/25/2012 14:42
Workgroup #:	WG397130	**Analyst:**	MES	**Run Date:**	05/07/2012 03:54
Collect Date:	04/30/2012 14:00	**Dilution:**	1	**File ID:**	6M107940
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
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	109	80	120	
Dibromofluoromethane	108	86	118	
p-Bromofluorobenzene	105	86	115	
Toluene-d8	99.0	88	110	

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12050011-03	**PrePrep Method:**	N/A	**Instrument:**	HP16
Client ID:	DUP-GW-043012	**Prep Method:**	5021	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	RSK175	**Cal Date:**	04/30/2012 15:04
Workgroup #:	WG396843	**Analyst:**	FJB	**Run Date:**	05/02/2012 17:12
Collect Date:	04/30/2012 14:00	**Dilution:**	1	**File ID:**	16G32146
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	242		5.00	1.00
Carbon Dioxide	124-38-9	37000		10000	2500

Sample #:	L12050011-03	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	DUP-GW-043012	**Prep Method:**	3520C	**Prep Date:**	05/07/2012 11:00
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG397604	**Analyst:**	CAA	**Run Date:**	05/12/2012 16:01
Collect Date:	04/30/2012 14:00	**Dilution:**	1	**File ID:**	4M60825
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
Butane, 2-methoxy-2-methyl-		5.09		0.000	0.000
Morpholine		5.00		0.000	0.000
unknown		6.21		0.000	0.000
unknown		4.62		0.000	0.000
1,4-Oxathiane		14.2		0.000	0.000
[1,4,5]Oxadithiepane		31.5		0.000	0.000
unknown		7.09		0.000	0.000
unknown		4.43		0.000	0.000
unknown		6.36		0.000	0.000
unknown		5.03		0.000	0.000
unknown		4.90		0.000	0.000

Certificate of Analysis

Sample #:	L12050011-03	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	DUP-GW-043012	**Prep Method:**	3520C	**Prep Date:**	05/07/2012 11:00
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG397604	**Analyst:**	CAA	**Run Date:**	05/12/2012 16:01
Collect Date:	04/30/2012 14:00	**Dilution:**	1	**File ID:**	4M60825
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
1,1'-Biphenyl	92-52-4		U	20.0	2.50
1,3,5-Trinitrobenzene	99-35-4		U	5.00	2.50
1,3-Dinitrobenzene	99-65-0		U	5.00	2.50
1,4-Dioxane	123-91-1		U	10.0	5.00
2,4,5-Trichlorophenol	95-95-4		U	5.00	2.50
2,4,6-Trichlorophenol	88-06-2		U	5.00	2.50
2,4-Dichlorophenol	120-83-2		U	5.00	2.50
2,4-Dimethylphenol	105-67-9		U	5.00	2.50
2,4-Dinitrophenol	51-28-5		U	25.0	12.5
2,4-Dinitrotoluene	121-14-2		U	5.00	2.50
2,6-Dinitrotoluene	606-20-2		U	5.00	2.50
2-Chloronaphthalene	91-58-7		U	5.00	2.50
2-Chlorophenol	95-57-8		U	5.00	2.50
2-Methylnaphthalene	91-57-6		U	5.00	2.50
2-Methylphenol	95-48-7		U	5.00	2.50
2-Nitroaniline	88-74-4		U	25.0	12.5
2-Nitrophenol	88-75-5		U	5.00	2.50
3-Nitroaniline	99-09-2		U	25.0	12.5
3,3'-Dichlorobenzidine	91-94-1		U	5.00	2.50
3-,4-Methylphenol	106-44-5		U	5.00	2.50
4-Bromophenyl-phenylether	101-55-3		U	5.00	2.50
4-Chloroaniline	106-47-8		U	5.00	2.50
4-Nitrophenol	100-02-7		U	25.0	12.5
Acenaphthene	83-32-9		U	5.00	2.50
Acenaphthylene	208-96-8		U	5.00	2.50
Anthracene	120-12-7		U	5.00	2.50
Benzo(a)anthracene	56-55-3		U	5.00	2.50
Benzo(a)pyrene	50-32-8		U	5.00	2.50
Benzo(b)fluoranthene	205-99-2		U	5.00	2.50
Benzo(g,h,i)Perylene	191-24-2		U	5.00	2.50
Benzo(k)fluoranthene	207-08-9		U	5.00	2.50
Benzoic acid	65-85-0		U	20.0	10.0
Benzyl alcohol	100-51-6		U	5.00	2.50

Certificate of Analysis

Sample #:	L12050011-03	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	DUP-GW-043012	**Prep Method:**	3520C	**Prep Date:**	05/07/2012 11:00
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG397604	**Analyst:**	CAA	**Run Date:**	05/12/2012 16:01
Collect Date:	04/30/2012 14:00	**Dilution:**	1	**File ID:**	4M60825
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
Bis(2-Chloroethyl)ether	111-44-4		U	5.00	2.50
Bis(2-Chloroethoxy)Methane	111-91-1		U	5.00	2.50
bis(2-Ethylhexyl)phthalate	117-81-7		U	5.00	2.50
Butylbenzylphthalate	85-68-7		U	5.00	2.50
Carbazole	86-74-8		U	20.0	2.50
Chrysene	218-01-9		U	5.00	2.50
Di-N-Butylphthalate	84-74-2		U	5.00	2.50
Di-n-octylphthalate	117-84-0		U	5.00	2.50
Dibenzo(a,h)Anthracene	53-70-3		U	5.00	2.50
Dibenzofuran	132-64-9		U	5.00	2.50
Diethylphthalate	84-66-2		U	5.00	2.50
Dimethylphthalate	131-11-3		U	5.00	2.50
Fluoranthene	206-44-0		U	5.00	2.50
Fluorene	86-73-7		U	5.00	2.50
Hexachlorobenzene	118-74-1		U	5.00	2.50
Hexachlorobutadiene	87-68-3		U	5.00	2.50
Hexachlorocyclopentadiene	77-47-4		U	5.00	2.50
Hexachloroethane	67-72-1		U	5.00	2.50
Indeno(1,2,3-cd)pyrene	193-39-5		U	5.00	2.50
Isophorone	78-59-1		U	5.00	2.50
N-Nitrosodiphenylamine	86-30-6		U	5.00	2.50
Naphthalene	91-20-3		U	5.00	2.50
Nitrobenzene	98-95-3		U	5.00	2.50
Pentachlorophenol	87-86-5		U	25.0	12.5
Phenanthrene	85-01-8		U	5.00	2.50
Phenol	108-95-2		U	5.00	2.50
Pyrene	129-00-0		U	5.00	2.50

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2,4,6-Tribromophenol	124	10	123	*
2-Fluorobiphenyl	104	43	116	
2-Fluorophenol	92.0	21	100	
Nitrobenzene-d5	105	35	114	
p-Terphenyl-d14	98.3	33	141	

Certificate of Analysis

Sample #:	L12050011-03	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	DUP-GW-043012	**Prep Method:**	3520C	**Prep Date:**	05/07/2012 11:00
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG397604	**Analyst:**	CAA	**Run Date:**	05/12/2012 16:01
Collect Date:	04/30/2012 14:00	**Dilution:**	1	**File ID:**	4M60825
Sample Tag:	01	**Units:**	ug/L		

Surrogate	Recovery	Lower Limit	Upper Limit	Q
Phenol-d5	99.0	10	94	*

U	Not detected at or above adjusted sample detection limit.

Sample #:	L12050011-03	**PrePrep Method:**	N/A	**Instrument:**	HPMS7
Client ID:	DUP-GW-043012	**Prep Method:**	3510C	**Prep Date:**	05/03/2012 09:30
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/04/2012 12:53
Workgroup #:	WG397013	**Analyst:**	CAA	**Run Date:**	05/04/2012 15:32
Collect Date:	04/30/2012 14:00	**Dilution:**	1	**File ID:**	7M54897
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
2-Methylnaphthalene	91-57-6		U	0.0529	0.0265
Acenaphthene	83-32-9		U	0.0529	0.0265
Acenaphthylene	208-96-8		U	0.0529	0.0265
Anthracene	120-12-7		U	0.0529	0.0265
Benzo(a)anthracene	56-55-3		U	0.0529	0.0265
Benzo(a)pyrene	50-32-8		U	0.0529	0.0265
Benzo(b)fluoranthene	205-99-2		U	0.0529	0.0265
Benzo(g,h,i)perylene	191-24-2		U	0.0529	0.0265
Benzo(k)fluoranthene	207-08-9		U	0.0529	0.0265
Chrysene	218-01-9		U	0.0529	0.0265
Dibenzo(a,h)anthracene	53-70-3		U	0.0529	0.0265
Fluoranthene	206-44-0		U	0.0529	0.0265
Fluorene	86-73-7		U	0.0529	0.0265
Indeno(1,2,3-cd)pyrene	193-39-5		U	0.0529	0.0265
Naphthalene	91-20-3		U	0.0529	0.0265
Phenanthrene	85-01-8		U	0.0529	0.0265
Pyrene	129-00-0		U	0.0529	0.0265

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2-Fluorobiphenyl	65.0	43	116	
Nitrobenzene-d5	69.9	35	114	
p-Terphenyl-d14	83.7	33	141	

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12050011-03	**PrePrep Method:**	N/A	**Instrument:**	PE-ICP2
Client ID:	DUP-GW-043012	**Prep Method:**	3005A	**Prep Date:**	05/02/2012 10:11
Matrix:	Water	**Analytical Method:**	6010B	**Cal Date:**	05/04/2012 09:37
Workgroup #:	WG396793	**Analyst:**	KHR	**Run Date:**	05/04/2012 14:21
Collect Date:	04/30/2012 14:00	**Dilution:**	1	**File ID:**	P2.050412.142159
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	0.274		0.100	0.0500
Barium, Total	7440-39-3	0.106		0.0100	0.00250
Beryllium, Total	7440-41-7	0.000503		0.00200	0.000500
Cadmium, Total	7440-43-9	0.000619		0.000500	0.000250
Calcium, Total	7440-70-2	274		0.200	0.100
Chromium, Total	7440-47-3		U	0.00500	0.00250
Cobalt, Total	7440-48-4		U	0.0200	0.00250
Copper, Total	7440-50-8		U	0.0200	0.00500
Iron, Total	7439-89-6	1.60		0.100	0.0250
Magnesium, Total	7439-95-4	44.8		0.500	0.250
Manganese, Total	7439-96-5	0.329		0.0100	0.00500
Nickel, Total	7440-02-0		U	0.0400	0.00500
Potassium, Total	7440-09-7	14.4		1.00	0.250
Silver, Total	7440-22-4	0.00526		0.0100	0.00500
Vanadium, Total	7440-62-2	0.0251		0.0100	0.00500
Zinc, Total	7440-66-6	0.0199		0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Sample #:	L12050011-03	**PrePrep Method:**	N/A	**Instrument:**	PE-ICP2
Client ID:	DUP-GW-043012	**Prep Method:**	3005A	**Prep Date:**	05/02/2012 10:11
Matrix:	Water	**Analytical Method:**	6010B	**Cal Date:**	05/04/2012 09:37
Workgroup #:	WG396793	**Analyst:**	KHR	**Run Date:**	05/04/2012 15:36
Collect Date:	04/30/2012 14:00	**Dilution:**	100	**File ID:**	P2.050412.153658
Sample Tag:	DL01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Sodium, Total	7440-23-5	1120		50.0	25.0

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12050011-03	**PrePrep Method:**	N/A	**Instrument:**	ICP-MS2
Client ID:	DUP-GW-043012	**Prep Method:**	3015	**Prep Date:**	05/02/2012 07:07
Matrix:	Water	**Analytical Method:**	6020	**Cal Date:**	05/03/2012 10:49
Workgroup #:	WG396772	**Analyst:**	SLP	**Run Date:**	05/03/2012 11:45
Collect Date:	04/30/2012 14:00	**Dilution:**	1	**File ID:**	NI.050312.114536
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		U	0.00100	0.000500
Arsenic, Total	7440-38-2	0.00127		0.00100	0.000500
Lead, Total	7439-92-1	0.000823		0.00100	0.000500
Selenium, Total	7782-49-2	0.00411		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 #:	L12050011-03	**PrePrep Method:**	N/A	**Instrument:**	HYDRA
Client ID:	DUP-GW-043012	**Prep Method:**	7470A	**Prep Date:**	05/02/2012 09:16
Matrix:	Water	**Analytical Method:**	7470A	**Cal Date:**	05/04/2012 13:23
Workgroup #:	WG397020	**Analyst:**	PDM	**Run Date:**	05/04/2012 14:16
Collect Date:	04/30/2012 14:00	**Dilution:**	1	**File ID:**	HY.050412.141639
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 #:	L12050011-03	**PrePrep Method:**	N/A	**Instrument:**	SMARTCHEM
Client ID:	DUP-GW-043012	**Prep Method:**	310.2	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	310.2	**Cal Date:**	05/04/2012 15:58
Workgroup #:	WG397067	**Analyst:**	DIH	**Run Date:**	05/04/2012 16:08
Collect Date:	04/30/2012 14:00	**Dilution:**	2	**File ID:**	SC120504006.024
Sample Tag:	DL01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Alkalinity, Total (as CaCO3)		361		40.0	20.0

Certificate of Analysis

Sample #:	L12050011-03	**PrePrep Method:**	N/A	**Instrument:**	SMARTCHEM
Client ID:	DUP-GW-043012	**Prep Method:**	353.2	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	353.2	**Cal Date:**	05/01/2012 15:43
Workgroup #:	WG396738	**Analyst:**	DIH	**Run Date:**	05/02/2012 11:35
Collect Date:	04/30/2012 14:00	**Dilution:**	1	**File ID:**	SC12050709062401
Sample Tag:		**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8	0.0370		0.0500	0.0250

Sample #:	L12050011-03	**PrePrep Method:**	N/A	**Instrument:**	SMARTCHEM
Client ID:	DUP-GW-043012	**Prep Method:**	365.4	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	365.4	**Cal Date:**	05/08/2012 12:37
Workgroup #:	WG397261	**Analyst:**	DIH	**Run Date:**	05/08/2012 12:43
Collect Date:	04/30/2012 14:00	**Dilution:**	1	**File ID:**	SC120508004.016
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Phosphorus, Total	7723-14-0		U	0.200	0.100

U	Not detected at or above adjusted sample detection limit.

Sample #:	L12050011-03	**PrePrep Method:**	N/A	**Instrument:**	SMARTCHEM
Client ID:	DUP-GW-043012	**Prep Method:**	375.4	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	375.4	**Cal Date:**	05/03/2012 07:30
Workgroup #:	WG396805	**Analyst:**	DIH	**Run Date:**	05/03/2012 08:08
Collect Date:	04/30/2012 14:00	**Dilution:**	20	**File ID:**	SC120503001.059
Sample Tag:	DL01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	428		100	50.0

Sample #:	L12050011-03	**PrePrep Method:**	N/A	**Instrument:**	TOC-VWP
Client ID:	DUP-GW-043012	**Prep Method:**	415.1	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	415.1	**Cal Date:**	12/06/2011 09:40
Workgroup #:	WG397189	**Analyst:**	JBK	**Run Date:**	05/08/2012 11:26
Collect Date:	04/30/2012 14:00	**Dilution:**	1	**File ID:**	TC05072012.038
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		3.03		1.00	0.500

Certificate of Analysis

Sample #:	L12050011-04	**PrePrep Method:**	N/A	**Instrument:**	PE-ICP2
Client ID:	DUP-GW-043012	**Prep Method:**	3005A	**Prep Date:**	05/02/2012 06:55
Matrix:	Water	**Analytical Method:**	6010B	**Cal Date:**	05/04/2012 09:37
Workgroup #:	WG396793	**Analyst:**	KHR	**Run Date:**	05/04/2012 14:27
Collect Date:	04/30/2012 14:00	**Dilution:**	1	**File ID:**	P2.050412.142759
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	0.104		0.0100	0.00250
Beryllium, Dissolved	7440-41-7	0.000508		0.00200	0.000500
Cadmium, Dissolved	7440-43-9	0.000597		0.000500	0.000250
Calcium, Dissolved	7440-70-2	280		0.200	0.100
Chromium, Dissolved	7440-47-3		U	0.00500	0.00250
Cobalt, Dissolved	7440-48-4		U	0.0200	0.00250
Copper, Dissolved	7440-50-8		U	0.0200	0.00500
Iron, Dissolved	7439-89-6	1.23		0.100	0.0250
Magnesium, Dissolved	7439-95-4	45.3		0.500	0.250
Manganese, Dissolved	7439-96-5	0.316		0.0100	0.00500
Nickel, Dissolved	7440-02-0		U	0.0400	0.00500
Potassium, Dissolved	7440-09-7	14.7		1.00	0.250
Silver, Dissolved	7440-22-4	0.00557		0.0100	0.00500
Vanadium, Dissolved	7440-62-2	0.0214		0.0100	0.00500
Zinc, Dissolved	7440-66-6		U	0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Sample #:	L12050011-04	**PrePrep Method:**	N/A	**Instrument:**	PE-ICP2
Client ID:	DUP-GW-043012	**Prep Method:**	3005A	**Prep Date:**	05/02/2012 06:55
Matrix:	Water	**Analytical Method:**	6010B	**Cal Date:**	05/04/2012 09:37
Workgroup #:	WG396793	**Analyst:**	KHR	**Run Date:**	05/04/2012 15:43
Collect Date:	04/30/2012 14:00	**Dilution:**	100	**File ID:**	P2.050412.154353
Sample Tag:	DL01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Sodium, Dissolved	7440-23-5	1140		50.0	25.0

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12050011-04	**PrePrep Method:**	N/A	**Instrument:**	ICP-MS2
Client ID:	DUP-GW-043012	**Prep Method:**	3015	**Prep Date:**	05/02/2012 07:07
Matrix:	Water	**Analytical Method:**	6020	**Cal Date:**	05/03/2012 10:49
Workgroup #:	WG396772	**Analyst:**	SLP	**Run Date:**	05/03/2012 11:48
Collect Date:	04/30/2012 14:00	**Dilution:**	1	**File ID:**	NI.050312.114823
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Dissolved	7440-36-0		U	0.00100	0.000500
Arsenic, Dissolved	7440-38-2	0.00146		0.00100	0.000500
Lead, Dissolved	7439-92-1		U	0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.00461		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 #:	L12050011-04	**PrePrep Method:**	N/A	**Instrument:**	HYDRA
Client ID:	DUP-GW-043012	**Prep Method:**	7470A	**Prep Date:**	05/02/2012 09:16
Matrix:	Water	**Analytical Method:**	7470A	**Cal Date:**	05/04/2012 13:23
Workgroup #:	WG397020	**Analyst:**	PDM	**Run Date:**	05/04/2012 14:21
Collect Date:	04/30/2012 14:00	**Dilution:**	1	**File ID:**	HY.050412.142131
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.

Certificate of Analysis

Sample #:	L12050011-05	**PrePrep Method:**	N/A	**Instrument:**	HPMS6
Client ID:	EB-043012-GW	**Prep Method:**	5030B/5030C/5035A	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	8260B	**Cal Date:**	04/25/2012 14:42
Workgroup #:	WG397130	**Analyst:**	MES	**Run Date:**	05/07/2012 00:39
Collect Date:	04/30/2012 14:15	**Dilution:**	1	**File ID:**	6M107934
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	9.90		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

Certificate of Analysis

Sample #:	L12050011-05	**PrePrep Method:**	N/A	**Instrument:**	HPMS6
Client ID:	EB-043012-GW	**Prep Method:**	5030B/5030C/5035A	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	8260B	**Cal Date:**	04/25/2012 14:42
Workgroup #:	WG397130	**Analyst:**	MES	**Run Date:**	05/07/2012 00:39
Collect Date:	04/30/2012 14:15	**Dilution:**	1	**File ID:**	6M107934
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
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	11.0		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	107	80	120	
Dibromofluoromethane	105	86	118	
p-Bromofluorobenzene	103	86	115	
Toluene-d8	101	88	110	

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12050011-05	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	EB-043012-GW	**Prep Method:**	3520C	**Prep Date:**	05/07/2012 11:00
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG397604	**Analyst:**	CAA	**Run Date:**	05/12/2012 16:36
Collect Date:	04/30/2012 14:15	**Dilution:**	1	**File ID:**	4M60826
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
Benzene		10.8		0.000	0.000
unknown		6.61		0.000	0.000
unknown		8.27		0.000	0.000
unknown		9.26		0.000	0.000
unknown		5.80		0.000	0.000
unknown		8.19		0.000	0.000
unknown		4.54		0.000	0.000
unknown		5.09		0.000	0.000
unknown		5.60		0.000	0.000

Certificate of Analysis

Sample #:	L12050011-05	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	EB-043012-GW	**Prep Method:**	3520C	**Prep Date:**	05/07/2012 11:00
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG397604	**Analyst:**	CAA	**Run Date:**	05/12/2012 16:36
Collect Date:	04/30/2012 14:15	**Dilution:**	1	**File ID:**	4M60826
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
1,1'-Biphenyl	92-52-4		U	22.5	2.81
1,3,5-Trinitrobenzene	99-35-4		U	5.62	2.81
1,3-Dinitrobenzene	99-65-0		U	5.62	2.81
1,4-Dioxane	123-91-1		U	11.2	5.62
2,4,5-Trichlorophenol	95-95-4		U	5.62	2.81
2,4,6-Trichlorophenol	88-06-2		U	5.62	2.81
2,4-Dichlorophenol	120-83-2		U	5.62	2.81
2,4-Dimethylphenol	105-67-9		U	5.62	2.81
2,4-Dinitrophenol	51-28-5		U	28.1	14.0
2,4-Dinitrotoluene	121-14-2		U	5.62	2.81
2,6-Dinitrotoluene	606-20-2		U	5.62	2.81
2-Chloronaphthalene	91-58-7		U	5.62	2.81
2-Chlorophenol	95-57-8		U	5.62	2.81
2-Methylnaphthalene	91-57-6		U	5.62	2.81
2-Methylphenol	95-48-7		U	5.62	2.81
2-Nitroaniline	88-74-4		U	28.1	14.0
2-Nitrophenol	88-75-5		U	5.62	2.81
3-Nitroaniline	99-09-2		U	28.1	14.0
3,3'-Dichlorobenzidine	91-94-1		U	5.62	2.81
3-,4-Methylphenol	106-44-5		U	5.62	2.81
4-Bromophenyl-phenylether	101-55-3		U	5.62	2.81
4-Chloroaniline	106-47-8		U	5.62	2.81
4-Nitrophenol	100-02-7		U	28.1	14.0
Acenaphthene	83-32-9		U	5.62	2.81
Acenaphthylene	208-96-8		U	5.62	2.81
Anthracene	120-12-7		U	5.62	2.81
Benzo(a)anthracene	56-55-3		U	5.62	2.81
Benzo(a)pyrene	50-32-8		U	5.62	2.81
Benzo(b)fluoranthene	205-99-2		U	5.62	2.81
Benzo(g,h,i)Perylene	191-24-2		U	5.62	2.81
Benzo(k)fluoranthene	207-08-9		U	5.62	2.81
Benzoic acid	65-85-0		U	22.5	11.2
Benzyl alcohol	100-51-6		U	5.62	2.81

Certificate of Analysis

Sample #:	L12050011-05	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	EB-043012-GW	**Prep Method:**	3520C	**Prep Date:**	05/07/2012 11:00
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG397604	**Analyst:**	CAA	**Run Date:**	05/12/2012 16:36
Collect Date:	04/30/2012 14:15	**Dilution:**	1	**File ID:**	4M60826
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
Bis(2-Chloroethyl)ether	111-44-4		U	5.62	2.81
Bis(2-Chloroethoxy)Methane	111-91-1		U	5.62	2.81
bis(2-Ethylhexyl)phthalate	117-81-7		U	5.62	2.81
Butylbenzylphthalate	85-68-7		U	5.62	2.81
Carbazole	86-74-8		U	22.5	2.81
Chrysene	218-01-9		U	5.62	2.81
Di-N-Butylphthalate	84-74-2		U	5.62	2.81
Di-n-octylphthalate	117-84-0		U	5.62	2.81
Dibenzo(a,h)Anthracene	53-70-3		U	5.62	2.81
Dibenzofuran	132-64-9		U	5.62	2.81
Diethylphthalate	84-66-2		U	5.62	2.81
Dimethylphthalate	131-11-3		U	5.62	2.81
Fluoranthene	206-44-0		U	5.62	2.81
Fluorene	86-73-7		U	5.62	2.81
Hexachlorobenzene	118-74-1		U	5.62	2.81
Hexachlorobutadiene	87-68-3		U	5.62	2.81
Hexachlorocyclopentadiene	77-47-4		U	5.62	2.81
Hexachloroethane	67-72-1		U	5.62	2.81
Indeno(1,2,3-cd)pyrene	193-39-5		U	5.62	2.81
Isophorone	78-59-1		U	5.62	2.81
N-Nitrosodiphenylamine	86-30-6		U	5.62	2.81
Naphthalene	91-20-3		U	5.62	2.81
Nitrobenzene	98-95-3		U	5.62	2.81
Pentachlorophenol	87-86-5		U	28.1	14.0
Phenanthrene	85-01-8		U	5.62	2.81
Phenol	108-95-2		U	5.62	2.81
Pyrene	129-00-0		U	5.62	2.81

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2,4,6-Tribromophenol	120	10	123	
2-Fluorobiphenyl	110	43	116	
2-Fluorophenol	98.2	21	100	
Nitrobenzene-d5	110	35	114	
p-Terphenyl-d14	139	33	141	

Certificate of Analysis

Sample #:	L12050011-05	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	EB-043012-GW	**Prep Method:**	3520C	**Prep Date:**	05/07/2012 11:00
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/19/2012 13:23
Workgroup #:	WG397604	**Analyst:**	CAA	**Run Date:**	05/12/2012 16:36
Collect Date:	04/30/2012 14:15	**Dilution:**	1	**File ID:**	4M60826
Sample Tag:	01	**Units:**	ug/L		

Surrogate	Recovery	Lower Limit	Upper Limit	Q
Phenol-d5	107	10	94	*

U	Not detected at or above adjusted sample detection limit.

Sample #:	L12050011-05	**PrePrep Method:**	N/A	**Instrument:**	HPMS7
Client ID:	EB-043012-GW	**Prep Method:**	3510C	**Prep Date:**	05/03/2012 09:30
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/04/2012 12:53
Workgroup #:	WG397013	**Analyst:**	CAA	**Run Date:**	05/04/2012 15:59
Collect Date:	04/30/2012 14:15	**Dilution:**	1	**File ID:**	7M54898
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
2-Methylnaphthalene	91-57-6		U	0.0543	0.0272
Acenaphthene	83-32-9		U	0.0543	0.0272
Acenaphthylene	208-96-8		U	0.0543	0.0272
Anthracene	120-12-7		U	0.0543	0.0272
Benzo(a)anthracene	56-55-3		U	0.0543	0.0272
Benzo(a)pyrene	50-32-8		U	0.0543	0.0272
Benzo(b)fluoranthene	205-99-2		U	0.0543	0.0272
Benzo(g,h,i)perylene	191-24-2		U	0.0543	0.0272
Benzo(k)fluoranthene	207-08-9		U	0.0543	0.0272
Chrysene	218-01-9		U	0.0543	0.0272
Dibenzo(a,h)anthracene	53-70-3		U	0.0543	0.0272
Fluoranthene	206-44-0		U	0.0543	0.0272
Fluorene	86-73-7		U	0.0543	0.0272
Indeno(1,2,3-cd)pyrene	193-39-5		U	0.0543	0.0272
Naphthalene	91-20-3		U	0.0543	0.0272
Phenanthrene	85-01-8		U	0.0543	0.0272
Pyrene	129-00-0		U	0.0543	0.0272

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2-Fluorobiphenyl	54.2	43	116	
Nitrobenzene-d5	57.3	35	114	
p-Terphenyl-d14	72.0	33	141	

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12050011-05	**PrePrep Method:**	N/A	**Instrument:**	PE-ICP2
Client ID:	EB-043012-GW	**Prep Method:**	3005A	**Prep Date:**	05/02/2012 06:55
Matrix:	Water	**Analytical Method:**	6010B	**Cal Date:**	05/04/2012 09:37
Workgroup #:	WG396793	**Analyst:**	KHR	**Run Date:**	05/04/2012 14:34
Collect Date:	04/30/2012 14:15	**Dilution:**	1	**File ID:**	P2.050412.143402
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		U	0.0100	0.00250
Beryllium, Total	7440-41-7		U	0.00200	0.000500
Cadmium, Total	7440-43-9	0.000325		0.000500	0.000250
Calcium, Total	7440-70-2	0.263		0.200	0.100
Chromium, Total	7440-47-3		U	0.00500	0.00250
Cobalt, Total	7440-48-4		U	0.0200	0.00250
Copper, Total	7440-50-8		U	0.0200	0.00500
Iron, Total	7439-89-6		U	0.100	0.0250
Magnesium, Total	7439-95-4		U	0.500	0.250
Manganese, Total	7439-96-5		U	0.0100	0.00500
Nickel, Total	7440-02-0		U	0.0400	0.00500
Potassium, Total	7440-09-7		U	1.00	0.250
Silver, Total	7440-22-4		U	0.0100	0.00500
Sodium, Total	7440-23-5	0.753		0.500	0.250
Vanadium, Total	7440-62-2	0.00845		0.0100	0.00500
Zinc, Total	7440-66-6	0.00680		0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Sample #:	L12050011-05	**PrePrep Method:**	N/A	**Instrument:**	ICP-MS2
Client ID:	EB-043012-GW	**Prep Method:**	3015	**Prep Date:**	05/02/2012 07:07
Matrix:	Water	**Analytical Method:**	6020	**Cal Date:**	05/03/2012 10:49
Workgroup #:	WG396772	**Analyst:**	SLP	**Run Date:**	05/03/2012 11:51
Collect Date:	04/30/2012 14:15	**Dilution:**	1	**File ID:**	NI.050312.115110
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		U	0.00100	0.000500
Arsenic, Total	7440-38-2		U	0.00100	0.000500
Lead, Total	7439-92-1		U	0.00100	0.000500
Selenium, Total	7782-49-2		U	0.00100	0.000500
Thallium, Total	7440-28-0		U	0.000200	0.000100

Certificate of Analysis

Sample #:	L12050011-05	**PrePrep Method:**	N/A	**Instrument:**	ICP-MS2
Client ID:	EB-043012-GW	**Prep Method:**	3015	**Prep Date:**	05/02/2012 07:07
Matrix:	Water	**Analytical Method:**	6020	**Cal Date:**	05/03/2012 10:49
Workgroup #:	WG396772	**Analyst:**	SLP	**Run Date:**	05/03/2012 11:51
Collect Date:	04/30/2012 14:15	**Dilution:**	1	**File ID:**	NI.050312.115110
Sample Tag:	01	**Units:**	mg/L		

U	Not detected at or above adjusted sample detection limit.

Sample #:	L12050011-05	**PrePrep Method:**	N/A	**Instrument:**	HYDRA
Client ID:	EB-043012-GW	**Prep Method:**	7470A	**Prep Date:**	05/02/2012 09:16
Matrix:	Water	**Analytical Method:**	7470A	**Cal Date:**	05/04/2012 13:23
Workgroup #:	WG397020	**Analyst:**	PDM	**Run Date:**	05/04/2012 14:23
Collect Date:	04/30/2012 14:15	**Dilution:**	1	**File ID:**	HY.050412.142314
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.

Certificate of Analysis

Sample #:	L12050011-06	**PrePrep Method:**	N/A	**Instrument:**	HPMS6
Client ID:	TB-043012	**Prep Method:**	5030B/5030C/5035A	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	8260B	**Cal Date:**	04/25/2012 14:42
Workgroup #:	WG397130	**Analyst:**	MES	**Run Date:**	05/06/2012 21:57
Collect Date:	04/30/2012 08:05	**Dilution:**	1	**File ID:**	6M107929
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
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

Certificate of Analysis

Sample #:	L12050011-06	**PrePrep Method:**	N/A	**Instrument:**	HPMS6
Client ID:	TB-043012	**Prep Method:**	5030B/5030C/5035A	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	8260B	**Cal Date:**	04/25/2012 14:42
Workgroup #:	WG397130	**Analyst:**	MES	**Run Date:**	05/06/2012 21:57
Collect Date:	04/30/2012 08:05	**Dilution:**	1	**File ID:**	6M107929
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
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	104	80	120	
Dibromofluoromethane	107	86	118	
p-Bromofluorobenzene	107	86	115	
Toluene-d8	103	88	110	

U	Not detected at or above adjusted sample detection limit.

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: L12050011
Department: Volatiles
Analyst: Mary Schilling

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: All acceptance criteria were met.

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: trans-1,3-Dichloropropene. Please see the applicable QC report for a detailed presentation of the failures.

Matrix Spikes: 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: None.

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: 46411
Approved By: Michael Albertson

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)]

where:	Example
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)]

where:	**Example**
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)]

where:	**Example**
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

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

Step 4: Solve for analyte concentration Cx

Cx = (Cis)(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 quantiation 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: 042512
Analyst1: ADC Analyst2: NA
Method: 8260B SOP: MSV01 Rev: 14
Method: 5030C SOP: PAT01 Rev: 13

Maintenance Log ID: 41536

Internal Standard: STD51188 Surrogate Standard: STD51262
CCV: STD51130 LCS: STD51176 MS/MSD: NA

Column 1 ID: RTX502.2 Column 2 ID: NA
Workgroups: WG396001 (ICAL)

Comments:

File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
6M107637	WG396001-01 50ng/L BFB STD 8260	NA	1	1	STD51241	04/25/12 08:52
6M107638	RINSE	NA	1	1	STD51130	04/25/12 09:17
6M107639	WG396001-02 0.3 ug/L STD 8260	NA	1	1	STD51130	04/25/12 09:49
6M107640	WG396001-03 0.4 ug/L STD 8260	NA	1	1	STD51130	04/25/12 10:22
6M107641	WG396001-04 1.0 ug/L STD 8260	NA	1	1	STD51130	04/25/12 10:54
6M107642	WG396001-05 2.0 ug/L STD 8260	NA	1	1	STD51130	04/25/12 11:27
6M107643	WG396001-06 5.0 ug/L STD 8260	NA	1	1	STD51130	04/25/12 11:59
6M107644	WG396001-07 20.0 ug/L STD 8260	NA	1	1	STD51130	04/25/12 12:32
6M107645	WG396001-08 50.0 ug/L STD 8260	NA	1	1	STD51130	04/25/12 13:04
6M107646	WG396001-09 100.0 ug/L STD 8260	NA	1	1	STD51130	04/25/12 13:37
6M107647	WG396001-10 200.0 ug/L STD 8260	NA	1	1	STD51130	04/25/12 14:10
6M107648	WG396001-11 300.0 ug/L STD 8260	NA	1	1	STD51130	04/25/12 14:42
6M107649	RINSE	NA	1	1	STD51130	04/25/12 15:15
6M107650	WG396001-12 50.0 ug/L ALT SRC 8260	NA	1	1	STD51176	04/25/12 15:46

Approved: May 01, 2012

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Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS6 Dataset: 050612
Analyst1: MES Analyst2: NA
Method: 8260 SOP: MSV01 Rev:
Method: 5030/5035 SOP: PAT01 Rev:

Maintenance Log ID: 41730

Internal Standard: STD51188 Surrogate Standard: STD51262
CCV: STD51468 LCS: STD51372 MS/MSD: STD51372

Column 1 ID: RTX502.2 Column 2 ID: NA
Workgroups: WG397130

Comments:

File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
6M107918	WG397129-01 50ng BFB STD 8260	NA	1	1	STD51241	05/06/12 16:05
6M107919	WG397129-01 50ng BFB STD 8260	NA	1	1	STD51241	05/06/12 16:33
6M107920	WG397129-02 50ug/L CCV STD 8260	NA	1	1	STD51468	05/06/12 17:04
6M107921	WG397131-01 100ug/L A9CCV STD 8260	NA	1	1	STD51240	05/06/12 17:36
6M107922	WG397130-01 BLANK 5/6 8260	NA	1	1		05/06/12 18:09
6M107923	WG397130-02 20ug/L LCS 8260	NA	1	1	STD51372	05/06/12 18:42
6M107924	L12050010-02 MS A 826-SPE	<2	1	1	STD51372	05/06/12 19:14
6M107925	L12050010-03 MSD A 826-SPE	<2	1	1	STD51372	05/06/12 19:47
6M107926	L12040879-04 B 20X 826-SPE	<2	1	20		05/06/12 20:19
6M107927	L12050010-01 A 826-SPE	<2	1	1		05/06/12 20:52
6M107928	L12050013-03 A 826-A9	<2	1	1		05/06/12 21:24
6M107929	L12050011-06 A 826-SPE	<2	1	1		05/06/12 21:57
6M107930	L12050050-09 A 826-SPE	<2	1	1		05/06/12 22:29
6M107931	L12050008-01 A 826-SPE	<2	1	1		05/06/12 23:02
6M107932	L12050013-01 A 826-A9	<2	1	1		05/06/12 23:34
6M107933	L12050013-02 A 826-A9	<2	1	1		05/07/12 00:07
6M107934	L12050011-05 A 826-SPE	<2	1	1		05/07/12 00:39
6M107935	L12050050-01 A 826-SPE	<2	1	1		05/07/12 01:11
6M107936	L12050050-03 A 826-SPE	<2	1	1		05/07/12 01:44
6M107937	L12050050-05 A 826-SPE	<2	1	1		05/07/12 02:16
6M107938	L12050050-07 A 826-SPE	<2	1	1		05/07/12 02:49
6M107939	L12050011-01 A 826-SPE	<2	1	1		05/07/12 03:21
6M107940	L12050011-03 A 826-SPE	<2	1	1		05/07/12 03:54
6M107941	L12050008-02 A 20X 826-SPE	<2	1	20		05/07/12 04:26
6M107942	RINSE	NA	1	1		05/07/12 04:59
6M107943	RINSE	NA	1	1		05/07/12 05:31
6M107944	RINSE	NA	1	1		05/07/12 06:03

Comments

Seq.	Rerun	Dil.	Reason	Analytes
24				
File ID: 6M107941				
dnr rr 10x				

Approved: May 15, 2012

Page: 1

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

CHECKLIST1 - Modified 03/05/2008
Generated: FEB-02-2012 14:41:12

Microbac Laboratories Inc.

Data Checklist

Date: 25-APR-2012
Analyst: ADC
Analyst: NA
Method: 8260
Instrument: HPMS8
Curve Workgroup: WG396001
Runlog ID: 46468
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	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:
30-APR-2012

Secondary Reviewer:
01-MAY-2012

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-01-2012 08:59:51

Microbac Laboratories Inc.

Data Checklist

Date: 06-MAY-2012
Analyst: MES
Analyst: NA
Method: 8260
Instrument: HPMS6
Curve Workgroup: NA
Runlog ID: 46754
Analytical Workgroups: WG397130

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	X
Samples	X
TCL Hits	X
Spectra of TCL Hits	X
Surrogates	X
Internal Standards Criteria	X
Library Searches	NA
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	MES
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-MAY-2012

Secondary Reviewer: 15-MAY-2012

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-15-2012 14:58:18

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 8260B

AAB#: WG397130

Login Number: L12050011

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
MW-29-043012	01	04/30/12							14		05/07/12	6.6	14	
DUP-GW-043012	03	04/30/12							14		05/07/12	6.6	14	
EB-043012-GW	05	04/30/12							14		05/07/12	6.4	14	
TB-043012	06	04/30/12							14		05/06/12	6.6	14	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2415608
Report generated 05/15/2012 15:17

Microbac Laboratories Inc.
SURROGATE STANDARDS

Login Number: L12050011
Instrument Id: HPMS6
Workgroup (AAB#): WG397130

Method: 8260
CAL ID: HPMS6 - 25-APR-12
Matrix: Water

Sample Number	Dilution	Tag	1	2	3	4
L12050011-01	1.00	01	110	109	105	99.0
L12050011-03	1.00	01	109	108	105	99.0
L12050011-05	1.00	01	107	105	103	101
L12050011-06	1.00	01	104	107	107	103
WG397130-01	1.00	01	106	106	108	103
WG397130-02	1.00	01	102	103	105	100

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

SURROGATES - Modified 03/06/2008
PDF File ID: 2415616
Report generated: 05/15/2012 15:18

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12050011
Blank File ID: 6M107922
Prep Date: 05/06/12 18:09
Analyzed Date: 05/06/12 18:09
Analyst: MES

Work Group: WG397130
Blank Sample ID: WG397130-01
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	WG397130-02	6M107923	05/06/12 18:42	01
TB-043012	L12050011-06	6M107929	05/06/12 21:57	01
EB-043012-GW	L12050011-05	6M107934	05/07/12 00:39	01
MW-29-043012	L12050011-01	6M107939	05/07/12 03:21	01
DUP-GW-043012	L12050011-03	6M107940	05/07/12 03:54	01

Report Name: BLANK_SUMMARY
PDF File ID: 2415609
Report generated 05/15/2012 15:17

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050011 Prep Date: 05/06/12 18:09 Sample ID: WG397130-01
Instrument ID: HPMS6 Run Date: 05/06/12 18:09 Prep Method: 5030B/5030C/503
File ID: 6M107922 Analyst: MES Method: 8260B
Workgroup (AAB#): WG397130 Matrix: Water Units: ug/L
Contract #: Cal ID: HPMS6-25-APR-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: 2415610
15-MAY-2012 15:17

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050011 Prep Date: 05/06/12 18:09 Sample ID: WG397130-01
Instrument ID: HPMS6 Run Date: 05/06/12 18:09 Prep Method: 5030B/5030C/503
File ID: 6M107922 Analyst: MES Method: 8260B
Workgroup (AAB#): WG397130 Matrix: Water Units: ug/L
Contract #: Cal ID: HPMS6-25-APR-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	106	80 - 120	PASS
Dibromofluoromethane	106	86 - 118	PASS
p-Bromofluorobenzene	108	86 - 115	PASS
Toluene-d8	103	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: 2415610
15-MAY-2012 15:17

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050011 Run Date: 05/06/2012 Sample ID: WG397130-02
Instrument ID: HPMS6 Run Time: 18:42 Prep Method: 5030B/5030C/503
File ID: 6M107923 Analyst: MES Method: 8260B
Workgroup (AAB#): WG397130 Matrix: Water Units: ug/L
QC Key: WATERLOO Lot#: STD51372 Cal ID: HPMS6-25-APR-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
1,1,1-Trichloroethane	20.0	18.8	94.1	80 - 134	
1,1,2,2-Tetrachloroethane	20.0	19.7	98.5	79 - 125	
1,1,2-Trichloro-1,2,2-Trifluoroethane	20.0	17.7	88.5	80 - 130	
1,1,2-Trichloroethane	20.0	18.5	92.3	80 - 125	
1,1-Dichloroethane	20.0	19.0	94.9	80 - 125	
1,1-Dichloroethene	20.0	18.6	93.0	80 - 132	
1,2,3-Trichlorobenzene	20.0	19.6	98.2	55 - 140	
1,2,4-Trichlorobenzene	20.0	19.9	99.7	65 - 135	
1,2-Dibromo-3-chloropropane	20.0	18.6	92.8	50 - 130	
1,2-Dibromoethane	20.0	18.7	93.3	80 - 125	
1,2-Dichlorobenzene	20.0	18.6	92.8	80 - 125	
1,2-Dichloroethane	20.0	19.5	97.7	80 - 129	
cis-1,2-Dichloroethene	20.0	19.9	99.4	70 - 125	
trans-1,2-Dichloroethene	20.0	18.4	92.0	80 - 127	
1,2-Dichloropropane	20.0	20.2	101	80 - 120	
1,3-Dichlorobenzene	20.0	18.4	92.1	80 - 120	
1,4-Dichlorobenzene	20.0	17.8	89.1	80 - 120	
2-Butanone	20.0	22.7	113	30 - 150	
2-Hexanone	20.0	21.6	108	55 - 130	
4-Methyl-2-pentanone	20.0	21.1	106	64 - 140	
Acetone	20.0	21.5	108	40 - 142	
Benzene	20.0	19.0	95.1	80 - 121	
Bromochloromethane	20.0	20.4	102	65 - 130	
Bromodichloromethane	20.0	20.6	103	80 - 131	
Bromoform	20.0	19.7	98.4	70 - 130	
Bromomethane	20.0	16.4	81.8	30 - 145	
Carbon disulfide	20.0	20.2	101	58 - 138	
Carbon tetrachloride	20.0	19.8	99.2	65 - 140	
Chlorobenzene	20.0	17.6	88.0	80 - 120	
Chloroethane	20.0	18.5	92.5	60 - 135	
Chloroform	20.0	19.3	96.5	80 - 125	
Chloromethane	20.0	23.7	118	40 - 125	
cis-1,3-Dichloropropene	20.0	18.3	91.5	70 - 130	
Cyclohexane	20.0	20.2	101	80 - 130	
Dibromochloromethane	20.0	17.4	87.2	60 - 135	
Dichlorodifluoromethane	20.0	24.2	121	50 - 133	
Ethyl benzene	20.0	18.4	92.2	80 - 122	
Isopropylbenzene	20.0	16.0	80.1	80 - 122	
Methyl acetate	20.0	18.0	89.8	80 - 130	
Methyl tert-butyl ether	20.0	18.6	93.0	65 - 125	
Methylcyclohexane	20.0	21.3	107	80 - 130	

LCS - Modified 03/06/2008
PDF File ID: 2415611
Report generated: 05/15/2012 15:17

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050011 Run Date: 05/06/2012 Sample ID: WG397130-02
Instrument ID: HPMS6 Run Time: 18:42 Prep Method: 5030B/5030C/503
File ID: 6M107923 Analyst: MES Method: 8260B
Workgroup (AAB#): WG397130 Matrix: Water Units: ug/L
QC Key: WATERLOO Lot#: STD51372 Cal ID: HPMS6-25-APR-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Methylene chloride	20.0	19.1	95.6	80 - 123	
m,p-Xylene	40.0	36.8	91.9	80 - 122	
o-Xylene	20.0	18.2	90.8	80 - 122	
Styrene	20.0	17.0	85.1	80 - 123	
Tetrachloroethene	20.0	18.7	93.5	80 - 124	
Toluene	20.0	18.0	89.9	80 - 124	
trans-1,3-Dichloropropene	20.0	15.7	78.7	80 - 130	*
Trichloroethene	20.0	19.3	96.3	80 - 122	
Trichlorofluoromethane	20.0	17.8	89.0	62 - 151	
Vinyl chloride	20.0	19.7	98.5	65 - 140	

Surrogates	% Recovery	Surrogate Limits	Qualifier
1,2-Dichloroethane-d4	102	80 - 120	PASS
Dibromofluoromethane	103	86 - 118	PASS
p-Bromofluorobenzene	105	86 - 115	PASS
Toluene-d8	100	88 - 110	PASS

* EXCEEDS %REC LIMIT

LCS - Modified 03/06/2008
PDF File ID: 2415611
Report generated: 05/15/2012 15:17

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

BFB

Login Number: L12050011
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: 2415613
Report generated 05/15/2012 15:18

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

BFB

Login Number: L12050011
Instrument: HPMS6
Analyst: ADC
Workgroup: WG396001

Tune ID: WG396001-01
Run Date: 04/25/2012
Run Time: 08:52
File ID: 6M107637
Cal ID: HPMS6 - 25-APR-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	21.9	4659	PASS
75.0	95.0	30.0	60.0	48.5	10324	PASS
95.0	95.0	100	100	100	21302	PASS
96.0	95.0	5.00	9.00	6.91	1471	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	76.2	16231	PASS
175	174	5.00	9.00	7.67	1245	PASS
176	174	95.0	101	100	16295	PASS
177	176	5.00	9.00	6.52	1063	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG396001-02	STD	01	04/25/2012 09:49	
WG396001-03	STD	01	04/25/2012 10:22	
WG396001-04	STD	01	04/25/2012 10:54	
WG396001-05	STD	01	04/25/2012 11:27	
WG396001-06	STD	01	04/25/2012 11:59	
WG396001-07	STD	01	04/25/2012 12:32	
WG396001-08	STD-CCV	01	04/25/2012 13:04	
WG396001-09	STD	01	04/25/2012 13:37	
WG396001-10	STD	01	04/25/2012 14:10	
WG396001-11	STD	01	04/25/2012 14:42	
WG396001-12	SSCV	01	04/25/2012 15:46	

* Sample past 12 hour tune limit

TUNE - Modified 03/06/2008
PDF File ID: 2415613
Report generated 05/15/2012 15:18

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

BFB

Login Number: L12050011
Instrument: HPMS6
Analyst: MES
Workgroup: WG397129

Tune ID: WG397129-01
Run Date: 05/06/2012
Run Time: 16:33
File ID: 6M107919
Cal ID: HPMS6 - 25-APR-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	4121	PASS
75.0	95.0	30.0	60.0	49.7	8851	PASS
95.0	95.0	100	100	100	17817	PASS
96.0	95.0	5.00	9.00	6.02	1072	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	78.3	13954	PASS
175	174	5.00	9.00	6.54	913	PASS
176	174	95.0	101	97.6	13617	PASS
177	176	5.00	9.00	6.07	826	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG397129-02	CCV	01	05/06/2012 17:04	
WG397130-01	BLANK	01	05/06/2012 18:09	
WG397130-01	BLANK	01	05/06/2012 18:09	
WG397130-02	LCS	01	05/06/2012 18:42	
L12050011-06	TB-043012	01	05/06/2012 21:57	
L12050011-05	EB-043012-GW	01	05/07/2012 00:39	
L12050011-01	MW-29-043012	01	05/07/2012 03:21	
L12050011-03	DUP-GW-043012	01	05/07/2012 03:54	

* Sample past 12 hour tune limit

TUNE - Modified 03/06/2008
PDF File ID: 2415613
Report generated 05/15/2012 15:18

Calibration Table Report
Method: A9FOOWTR.M
Title: A9-FOO Water - IC: 01/25/12 - HPMS6
Last Calibration: Thu Feb 02 09:44:46 2012
Curve: WG388587
Calibration Files

Compound	5 6M105371.D	20 6M105372.D	50 6M105373.D	100 6M105374.D	200 6M105375.D	300 6M105376.D	400 6M105377.D	Avg	%RSD	R^2 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 04/25/12 - HPMS6
Last Calibration: Wed Apr 25 15:22:20 2012
Curve: WG396001
Calibration Files

Compound	0.3 (6M107639.D)	0.4 (6M107640.D)	1 (6M107641.D)	2 (6M107642.D)	5 (6M107643.D)	20 (6M107644.D)	50 (6M107645.D)	100 (6M107646.D)	200 (6M107647.D)	300 (6M107648.D)	Avg	%RSD	R^2 Linear	R^2 Quadratic
Fluorobenzene	ISTD													
Dichlorodifluoromethane			0.393	0.337	0.330	0.334	0.315	0.302	0.284		0.328	10.513		
Chloromethane			0.676	0.584	0.509	0.494	0.455	0.436	0.443		0.514	17.086	0.999	
Vinyl Chloride		0.437	0.518	0.440	0.406	0.403	0.361	0.337			0.415	14.262		
1,3-Butadiene					0.388	0.278	0.224	0.203	0.187	0.182	0.243	32.329	0.997	
Bromomethane			0.276	0.272	0.212	0.219	0.216	0.220	0.230		0.235	11.636		
Chloroethane			0.269	0.235	0.224	0.238	0.229	0.224	0.225		0.235	6.834		
Trichlorofluoromethane		0.526	0.629	0.547	0.512	0.537	0.515	0.507	0.493		0.533	7.934		
Diethyl ether			0.180	0.180	0.183	0.179	0.179	0.183		0.184	0.181	1.089		
Isoprene			0.451	0.430	0.440	0.460	0.457	0.463	0.472		0.453	3.140		
Acrolein					0.007	0.008	0.011	0.013	0.014	0.014	0.011	27.396	0.994	
1,1,2-Trichloro-1,2,2-Trifluoroet			0.344	0.270	0.266	0.283	0.276	0.279	0.277		0.285	9.365		
Acetone					0.050	0.046	0.047	0.048	0.046	0.047	0.047	3.225		
1,1-Dichloroethene		0.361	0.498	0.476	0.458	0.475	0.465	0.465	0.470		0.459	9.002		
Tert-Butyl Alcohol				0.013	0.013	0.011	0.012	0.012		0.013	0.012	5.266		
Dimethyl Sulfide			0.354	0.365	0.348	0.367	0.362	0.373	0.379		0.364	2.890		
Iodomethane			0.217	0.214	0.251	0.289	0.294	0.286	0.285		0.262	13.266		
Methyl acetate			0.188	0.156	0.187	0.187	0.192	0.199	0.199		0.187	7.764		
Methylene Chloride		0.261	0.323	0.298	0.275	0.283	0.274	0.277	0.282		0.284	6.621		
Carbon Disulfide			0.867	0.825	0.775	0.836	0.822	0.833	0.857		0.831	3.560		
Acrylonitrile					0.054	0.063	0.068	0.068	0.067	0.063	0.064	8.441		
Methyl Tert Butyl Ether			0.676	0.628	0.552	0.578	0.586	0.587	0.581		0.598	6.871		
trans-1,2-Dichloroethene		0.212	0.300	0.297	0.269	0.288	0.280	0.281	0.293		0.277	10.160		
n-Hexane			0.345	0.306	0.292	0.325	0.318	0.321	0.323		0.318	5.190		
Diisopropyl ether			0.999	0.972	1.005	1.020	1.022	1.032		1.023	1.011	2.023		
Vinyl Acetate					0.153	0.140	0.148	0.147	0.146	0.145	0.146	2.851		
1,1-Dichloroethane		0.504	0.628	0.607	0.540	0.567	0.553	0.564	0.571		0.567	6.783		
Ethyl-Tert-Butyl ether			0.802	0.792	0.820	0.818	0.833	0.836		0.849	0.821	2.413		
2-Butanone					0.061	0.062	0.069	0.070	0.064	0.071	0.066	6.186		
Propionitrile			0.014	0.018	0.019	0.019	0.020	0.021		0.021	0.019	12.991		
2,2-Dichloropropane		0.358	0.510	0.462	0.410	0.425	0.419	0.419	0.424		0.428	10.159		
cis-1,2-Dichloroethene		0.198	0.313	0.315	0.288	0.306	0.295	0.299	0.306		0.290	13.185		
Chloroform	0.493	0.483	0.571	0.538	0.498	0.513	0.502	0.504	0.510		0.512	5.222		
1-Bromopropane			0.029	0.044	0.049	0.053	0.051	0.052	0.053	0.053	0.048	16.894	1.000	
Bromochloromethane		0.095	0.167	0.160	0.155	0.160	0.158	0.157	0.152		0.150	15.265	1.000	
Tetrahydrofuran			0.042	0.041	0.043	0.042	0.045	0.046		0.047	0.044	5.002		
Dibromofluoromethane					0.254	0.245	0.281	0.285	0.289		0.271	7.320		
1,1,1-Trichloroethane		0.366	0.489	0.468	0.426	0.457	0.452	0.455	0.466		0.447	8.370		
Cyclohexane			0.463	0.433	0.420	0.454	0.450	0.456	0.462		0.448	3.580		
1,1-Dichloropropene		0.265	0.370	0.401	0.364	0.388	0.382	0.388	0.395		0.369	11.916		
Tert-Amyl-Methyl ether			0.616	0.589	0.600	0.602	0.622	0.626		0.624	0.611	2.334		
Carbon Tetrachloride		0.311	0.437	0.403	0.374	0.413	0.408	0.413	0.41		0.3961	9.7382		
1,2-Dichloroethane-d4					0.256	0.242	0.276	0.281	0.273		0.2657	6.0249		
Heptane											0	0		
1,2-Dichloroethane		0.306	0.391	0.362	0.346	0.356	0.353	0.351	0.349		0.3519	6.6624		
Benzene		1.044	1.197	1.141	1.056	1.114	1.082	1.096	1.105		1.1044	4.4164		
Trichloroethene		0.233	0.298	0.286	0.257	0.288	0.282	0.285	0.289		0.277	7.7272		
Methylcyclohexane			0.317	0.309	0.307	0.328	0.322	0.325	0.329		0.3195	2.8152		
1,2-Dichloropropane		0.244	0.299	0.295	0.271	0.29	0.288	0.293	0.301		0.2851	6.6665		
1,4-Dioxane					0	0.001	0.001	0.001		0.001	0.0009	36.952	0.995	
Bromodichloromethane		0.283	0.366	0.341	0.335	0.35	0.353	0.354	0.359		0.3425	7.579		
Dibromomethane		0.048	0.127	0.13	0.122	0.136	0.14	0.137	0.137		0.122	25.181	1	
2-Chloroethyl Vinyl Ether				0.074	0.093	0.111	0.123	0.127	0.126	0.132	0.1124	19.035	0.999	
4-Methyl-2-Pentanone					0.038	0.046	0.054	0.053	0.049	0.057	0.0497	13.434		
cis-1,3-Dichloropropene		0.205	0.372	0.37	0.358	0.398	0.405	0.41	0.416		0.3667	18.759	1	
Dimethyl Disulfide			0.15	0.173	0.171	0.213	0.227	0.241	0.25		0.2035	19.093	0.998	
Chlorobenzene-d5	ISTD													
Toluene-d8					1.316	1.221	1.385	1.411	1.461		1.3587	6.8471		
Toluene		1.391	1.787	1.687	1.579	1.679	1.649	1.669	1.703		1.6429	7.126		
Ethyl Methacrylate			0.114	0.215	0.21	0.285	0.308	0.314	0.302		0.25	29.485	0.999	
Paraldehyde				0.004	0.004	0.004	0.005	0.005		0.005	0.0044	8.7856		
trans-1,3-Dichloropropene		0.185	0.348	0.429	0.428	0.497	0.535	0.54	0.544		0.4381	28.195	0.999	
1,1,2-Trichloroethane		0.221	0.285	0.284	0.253	0.271	0.269	0.267	0.261		0.2639	7.7377		
2-Hexanone					0.053	0.109	0.132	0.131	0.125	0.137	0.1145	27.539	0.998	
1,3-Dichloropropane		0.303	0.46	0.488	0.437	0.482	0.484	0.478	0.467		0.45	13.668		
Tetrachloroethene		0.29	0.424	0.402	0.376	0.398	0.39	0.388	0.402		0.3837	10.517		
Dibromochloromethane		0.187	0.329	0.334	0.315	0.354	0.357	0.357	0.355		0.3236	17.697	1	
1,2-Dibromoethane		0.074	0.229	0.223	0.241	0.258	0.262	0.263	0.259		0.226	27.979	1	
1-Chlorohexane		0.36	0.423	0.434	0.414	0.458	0.453	0.457	0.482		0.435	8.5785		
Chlorobenzene		0.936	1.141	1.062	0.985	1.069	1.04	1.047	1.07		1.0439	5.8629		
1,1,1,2-Tetrachloroethane		0.295	0.385	0.386	0.355	0.388	0.391	0.4	0.407		0.3759	9.5778		
Ethylbenzene		0.428	0.539	0.527	0.52	0.562	0.555	0.575	0.602		0.5384	9.62		
m-,p-Xylene		0.485	0.702	0.651	0.618	0.691	0.688	0.709	0.722		0.6582	11.79		
o-Xylene		0.524	0.631	0.62	0.586	0.656	0.655	0.665	0.676		0.6268	8.0546		
Styrene		0.695	0.881	0.947	0.932	1.079	1.112	1.148	1.14		0.9916	15.899	1	
Bromoform			0.13	0.166	0.167	0.189	0.2	0.201	0.19		0.1778	14.239		
Isopropylbenzene		1.319	1.595	1.571	1.468	1.619	1.612	1.649	1.648		1.5599	7.2602		
1,4-Dichlorobenzene-d4	ISTD													
1,1,2,2-Tetrachloroethane		0.392	0.569	0.536	0.545	0.558	0.566	0.54	0.523		0.5287	10.831		
p-Bromofluorobenzene					0.982	0.879	1.014	1.01	1.02		0.981	6.0103		

1,2,3-Trichloropropane			0.123	0.133	0.133	0.145	0.146	0.14	0.135	0.1363	5.8577	
trans-1,4-Dichloro-2-Butene				0.212	0.127	0.164	0.168	0.17	0.167	0.168	15.93	0.999
n-Propylbenzene		3.135	3.816	3.74	3.544	3.841	3.722	3.751	3.837	3.6735	6.461	
Bromobenzene	0.564	0.487	0.816	0.803	0.767	0.836	0.814	0.817	0.829	0.748	17.264	1
1,3,5-Trimethylbenzene		2.164	2.508	2.486	2.42	2.608	2.568	2.597	2.699	2.5061	6.4815	
2-Chlorotoluene		2.052	2.536	2.728	2.405	2.453	2.416	2.45	2.473	2.4391	7.6879	
4-Chlorotoluene		2.221	2.806	2.404	2.138	2.561	2.461	2.475	2.551	2.4521	8.4686	
a-Methylstyrene			1.094	1.106	1.103	1.377	1.387	1.438	1.491	1.2852	13.721	
tert-Butylbenzene			0.567	0.504	0.461	0.504	0.488	0.499	0.52	0.5061	6.4169	
1,2,4-Trimethylbenzene		2.28	2.744	2.674	2.495	2.742	2.702	2.754	2.806	2.6496	6.6453	
sec-Butylbenzene		2.583	3.077	2.843	2.681	2.912	2.856	2.879	2.958	2.8487	5.4395	
p-Isopropyltoluene		1.914	2.411	2.267	2.126	2.394	2.33	2.383	2.482	2.2883	8.1113	
1,3-Dichlorobenzene		1.27	1.464	1.479	1.363	1.514	1.473	1.469	1.52	1.4439	5.8813	
1,4-Dichlorobenzene	1.553	1.3	1.761	1.497	1.453	1.54	1.492	1.496	1.537	1.5143	7.8862	
n-Butylbenzene		1.71	2.061	1.961	1.836	2.088	2.048	2.059	2.183	1.9934	7.6504	
1,2-Dichlorobenzene	1.237	1.186	1.451	1.354	1.234	1.33	1.314	1.305	1.334	1.305	6.0024	
1,2-Dibromo-3-Chloropropane				0.053	0.059	0.081	0.082	0.084	0.086	0.0741	19.554	1
1,2,4-Trichlorobenzene		0.499	0.823	0.737	0.697	0.728	0.717	0.721	0.758	0.7103	13.127	
Hexachlorobutadiene		0.16	0.315	0.293	0.266	0.291	0.268	0.273	0.295	0.27	17.621	0.998
Naphthalene		1.109	1.376	1.36	1.243	1.399	1.448	1.439	1.447	1.3525	8.8321	
1,2,3-Trichlorobenzene	0.64	0.61	0.625	0.663	0.565	0.623	0.596	0.611	0.624	0.6174	4.4706	

Mon Apr 30 09:55:47 2012

Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12050011 Run Date: 04/25/2012 Sample ID: WG396001-12
Instrument ID: HPMS6 Run Time: 15:46 Method: 8260B
File ID: 6M107650 Analyst: ADC QC Key: WATERLOO
ICal Workgroup: WG396001 Cal ID: HPMS6 - 25-APR-12

Analyte		Expected	Found	Units	RF	%D	UCL	Q
1,1-Dichloroethene	CCC	50.0	48.8	ug/L	0.448	2.40	25	
1,2-Dichloropropane	CCC	50.0	50.2	ug/L	0.286	0.400	25	
Chloroform	CCC	50.0	47.7	ug/L	0.489	4.50	25	
Ethylbenzene	CCC	50.0	50.0	ug/L	0.538	0	25	
Toluene	CCC	50.0	48.8	ug/L	1.60	2.50	25	
Vinyl Chloride	CCC	50.0	44.8	ug/L	0.372	10.4	25	
1,1,2,2-Tetrachloroethane	SPCC	50.0	52.6	ug/L	0.556	5.20	25	
1,1-Dichloroethane	SPCC	50.0	47.3	ug/L	0.537	5.30	25	
Bromoform	SPCC	50.0	52.3	ug/L	0.186	4.60	25	
Chlorobenzene	SPCC	50.0	46.9	ug/L	0.980	6.10	25	
Chloromethane	SPCC	50.0	52.5	ug/L	0.470	5.00	25	
1,1,1-Trichloroethane		50.0	48.8	ug/L	0.437	2.30	25	
1,1,2-Trichloro-1,2,2-Trifluoroethane		50.0	45.3	ug/L	0.258	9.40	25	
1,1,2-Trichloroethane		50.0	49.8	ug/L	0.263	0.500	25	
1,2,3-Trichlorobenzene		50.0	48.1	ug/L	0.594	3.70	25	
1,2,4-Trichlorobenzene		50.0	48.6	ug/L	0.691	2.70	25	
1,2-Dibromo-3-Chloropropane		50.0	48.0	ug/L	0.0804	4.00	25	
1,2-Dibromoethane		50.0	49.3	ug/L	0.256	1.50	25	
1,2-Dichlorobenzene		50.0	47.6	ug/L	1.24	4.80	25	
1,2-Dichloroethane		50.0	48.5	ug/L	0.341	3.00	25	
cis-1,2-Dichloroethene		50.0	49.7	ug/L	0.288	0.600	25	
trans-1,2-Dichloroethene		50.0	47.7	ug/L	0.265	4.60	25	
1,3-Dichlorobenzene		50.0	48.2	ug/L	1.39	3.60	25	
1,4-Dichlorobenzene		50.0	46.6	ug/L	1.41	6.70	25	
2-Butanone		50.0	53.0	ug/L	0.0702	5.90	25	
2-Hexanone		50.0	48.7	ug/L	0.123	2.60	25	
4-Methyl-2-Pentanone		50.0	53.4	ug/L	0.0531	6.90	25	
Acetone		50.0	43.4	ug/L	0.0411	13.2	25	
Benzene		50.0	48.1	ug/L	1.06	3.80	25	
Bromochloromethane		50.0	51.1	ug/L	0.158	2.20	25	
Bromodichloromethane		50.0	51.8	ug/L	0.355	3.50	25	
Bromomethane		50.0	44.2	ug/L	0.208	11.5	25	
Carbon Disulfide		50.0	47.0	ug/L	0.782	5.90	25	
Carbon Tetrachloride		50.0	50.3	ug/L	0.399	0.700	25	
Chloroethane		50.0	46.3	ug/L	0.217	7.50	25	
cis-1,3-Dichloropropene		50.0	48.0	ug/L	0.394	4.10	25	
Cyclohexane		50.0	49.9	ug/L	0.447	0.200	25	
Dibromochloromethane		50.0	47.4	ug/L	0.336	5.20	25	
Dichlorodifluoromethane		50.0	56.3	ug/L	0.370	12.7	25	
Isopropylbenzene		50.0	43.8	ug/L	1.37	12.5	25	
Methyl acetate		50.0	40.3	ug/L	0.151	19.5	25	
Methyl Tert Butyl Ether		50.0	47.0	ug/L	0.563	6.00	25	

ALT - Modified 09/06/2007
Version 1.5 PDF File ID: 2415612
Report generated 05/15/2012 15:18

Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12050011 Run Date: 04/25/2012 Sample ID: WG396001-12
Instrument ID: HPMS6 Run Time: 15:46 Method: 8260B
File ID: 6M107650 Analyst: ADC QC Key: WATERLOO
ICal Workgroup: WG396001 Cal ID: HPMS6 - 25-APR-12

Analyte		Expected	Found	Units	RF	%D	UCL	Q
Methylcyclohexane		50.0	52.0	ug/L	0.332	3.90	25	
Methylene Chloride		50.0	47.3	ug/L	0.269	5.40	25	
m-,p-Xylene		100	100	ug/L	0.660	0.200	25	
o-Xylene		50.0	48.9	ug/L	0.613	2.30	25	
Styrene		50.0	48.0	ug/L	1.08	4.10	25	
Tetrachloroethene		50.0	48.5	ug/L	0.372	3.00	25	
trans-1,3-Dichloropropene		50.0	43.7	ug/L	0.468	12.7	25	
Trichloroethene		50.0	48.8	ug/L	0.270	2.50	25	
Trichlorofluoromethane		50.0	44.8	ug/L	0.478	10.4	25	

* Exceeds %D Limit

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

ALT - Modified 09/06/2007
Version 1.5 PDF File ID: 2415612
Report generated 05/15/2012 15:18

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050011 Run Date: 05/06/2012 Sample ID: WG397129-02
Instrument ID: HPMS6 Run Time: 17:04 Method: 8260B
File ID: 6M107920 Analyst: MES QC Key: WATERLOO
Workgroup (AAB#): WG397130 Cal ID: HPMS6 - 25-APR-12
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
1,1-Dichloroethene	CCC	50.0	50.8	ug/L	0.466	1.50	20	
1,2-Dichloropropane	CCC	50.0	51.9	ug/L	0.296	3.86	20	
Chloroform	CCC	50.0	49.9	ug/L	0.511	0.186	20	
Ethylbenzene	CCC	50.0	49.5	ug/L	0.533	1.06	20	
Toluene	CCC	50.0	47.9	ug/L	1.57	4.18	20	
Vinyl Chloride	CCC	50.0	47.6	ug/L	0.395	4.86	20	
1,1,2,2-Tetrachloroethane	SPCC	50.0	50.6	ug/L	0.535	1.26	20	
1,1-Dichloroethane	SPCC	50.0	49.9	ug/L	0.565	0.252	20	
Bromoform	SPCC	50.0	54.4	ug/L	0.194	8.86	20	
Chlorobenzene	SPCC	50.0	47.6	ug/L	0.994	4.75	20	
Chloromethane	SPCC	50.0	60.0	ug/L	0.536	19.9	20	
1,1,1-Trichloroethane		50.0	51.0	ug/L	0.456	1.91	20	
1,1,2-Trichloro-1,2,2-Trifluoroethane		50.0	47.3	ug/L	0.270	5.48	20	
1,1,2-Trichloroethane		50.0	47.7	ug/L	0.252	4.70	20	
1,2,3-Trichlorobenzene		50.0	51.1	ug/L	0.631	2.26	20	
1,2,4-Trichlorobenzene		50.0	53.3	ug/L	0.757	6.51	20	
1,2-Dibromo-3-Chloropropane		50.0	48.9	ug/L	0.0819	2.20	20	
1,2-Dibromoethane		50.0	47.8	ug/L	0.248	4.45	20	
1,2-Dichlorobenzene		50.0	49.4	ug/L	1.29	1.29	20	
1,2-Dichloroethane		50.0	50.6	ug/L	0.356	1.12	20	
cis-1,2-Dichloroethene		50.0	51.9	ug/L	0.301	3.73	20	
trans-1,2-Dichloroethene		50.0	50.2	ug/L	0.278	0.348	20	
1,3-Dichlorobenzene		50.0	50.5	ug/L	1.46	0.939	20	
1,4-Dichlorobenzene		50.0	48.2	ug/L	1.46	3.59	20	
2-Butanone		50.0	55.5	ug/L	0.0736	11.1	20	
2-Hexanone		50.0	54.0	ug/L	0.137	7.97	20	
4-Methyl-2-Pentanone		50.0	55.3	ug/L	0.0550	10.6	20	
Acetone		50.0	51.3	ug/L	0.0486	2.51	20	
Benzene		50.0	49.7	ug/L	1.10	0.569	20	
Bromochloromethane		50.0	53.4	ug/L	0.165	6.82	20	
Bromodichloromethane		50.0	51.8	ug/L	0.355	3.60	20	
Bromomethane		50.0	43.5	ug/L	0.205	13.0	20	
Carbon Disulfide		50.0	51.4	ug/L	0.854	2.72	20	
Carbon Tetrachloride		50.0	53.0	ug/L	0.420	5.97	20	
Chloroethane		50.0	50.3	ug/L	0.236	0.525	20	
cis-1,3-Dichloropropene		50.0	49.1	ug/L	0.403	1.85	20	
Cyclohexane		50.0	50.4	ug/L	0.452	0.823	20	
Dibromochloromethane		50.0	48.1	ug/L	0.342	3.71	20	
Dichlorodifluoromethane		50.0	52.8	ug/L	0.346	5.61	20	
Isopropylbenzene		50.0	50.6	ug/L	1.58	1.12	20	
Methyl acetate		50.0	49.8	ug/L	0.186	0.395	20	
Methyl Tert Butyl Ether		50.0	47.1	ug/L	0.564	5.72	20	

CCV - Modified 03/05/2008
PDF File ID: 2415614
Report generated 05/15/2012 15:18

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050011 Run Date: 05/06/2012 Sample ID: WG397129-02
Instrument ID: HPMS6 Run Time: 17:04 Method: 8260B
File ID: 6M107920 Analyst: MES QC Key: WATERLOO
Workgroup (AAB#): WG397130 Cal ID: HPMS6 - 25-APR-12
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Methylcyclohexane		50.0	52.2	ug/L	0.333	4.33	20	
Methylene Chloride		50.0	50.0	ug/L	0.284	0.0940	20	
m-,p-Xylene		100	100	ug/L	0.658	0.0154	20	
o-Xylene		50.0	49.2	ug/L	0.616	1.70	20	
Styrene		50.0	46.7	ug/L	1.06	6.52	20	
Tetrachloroethene		50.0	49.7	ug/L	0.381	0.606	20	
trans-1,3-Dichloropropene		50.0	46.9	ug/L	0.503	6.24	20	
Trichloroethene		50.0	50.7	ug/L	0.281	1.46	20	
Trichlorofluoromethane		50.0	47.7	ug/L	0.509	4.56	20	
1,2-Dichloroethene		100	102	ug/L	0.290	2.04	20	
Xylenes		150	149	ug/L	0.637	0.556	20	

* Exceeds %D Criteria

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

CCV - Modified 03/05/2008
PDF File ID: 2415614
Report generated 05/15/2012 15:18

Microbac Laboratories Inc.

INTERNAL STANDARD AREA SUMMARY
(COMPARED TO CCV)

Login Number: L12050011
Instrument ID: HPMS6
Workgroup (AAB#): WG397130

CCV Number: WG397129-02
CAL ID: HPMS6-25-APR-12
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG397129-02	NA	NA	190870	384743	560032
Upper Limit	NA	NA	381740	769486	1120064
Lower Limit	NA	NA	95435	192372	280016
L12050011-01	1.00	01	135480	293881	407496
L12050011-03	1.00	01	133468	290614	407172
L12050011-05	1.00	01	142754	299403	436242
L12050011-06	1.00	01	146135	311670	453901
WG397130-01	1.00	01	154507	331341	477310
WG397130-02	1.00	01	173456	349504	502214

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

Underline = Response outside limits

INTERNAL_STD - Modified 03/06/2008
PDF File ID: 2415615
Report generated 05/15/2012 15:18

Microbac Laboratories Inc.

INTERNAL STANDARD RETENTION TIME SUMMARY
(COMPARED TO CCV)

Login Number: L12050011
Instrument ID: HPMS6
Workgroup (AAB#): WG397130

CCV Number: WG397129-02
CAL ID: HPMS6 - 25-APR-12
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG397129-02	NA	NA	18.6	15.03	10.54
Upper Limit	NA	NA	19.1	15.53	11.04
Lower Limit	NA	NA	18.1	14.53	10.04
L12050011-01	1.00	01	18.6	15.04	10.54
L12050011-03	1.00	01	18.6	15.04	10.54
L12050011-05	1.00	01	18.6	15.03	10.54
L12050011-06	1.00	01	18.6	15.04	10.54
WG397130-01	1.00	01	18.6	15.03	10.54
WG397130-02	1.00	01	18.6	15.03	10.54

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: 2415617
Report generated 05/15/2012 15:18

2.1.1.3 Sample Data

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050612\6M107939.D Vial: 21
Acq On : 7 May 2012 3:21 Operator: MES
Sample : L12050011-01 A 826-SPE Inst : HPMS6
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 10:49:46 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.54	96	407496	25.00 ug/L	0.00
57) Chlorobenzene-d5	15.04	117	293881	25.00 ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	135480	25.00 ug/L	0.00

System Monitoring Compounds

37) Dibromofluoromethane	9.35	111	120780	27.3737 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 109.48%		
43) 1,2-Dichloroethane-d4	10.07	65	119434	27.5814 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 110.32%		
58) Toluene-d8	12.83	98	395249	24.7462 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 99.00%		
80) p-Bromofluorobenzene	16.81	95	139260	26.1949 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 104.76%		

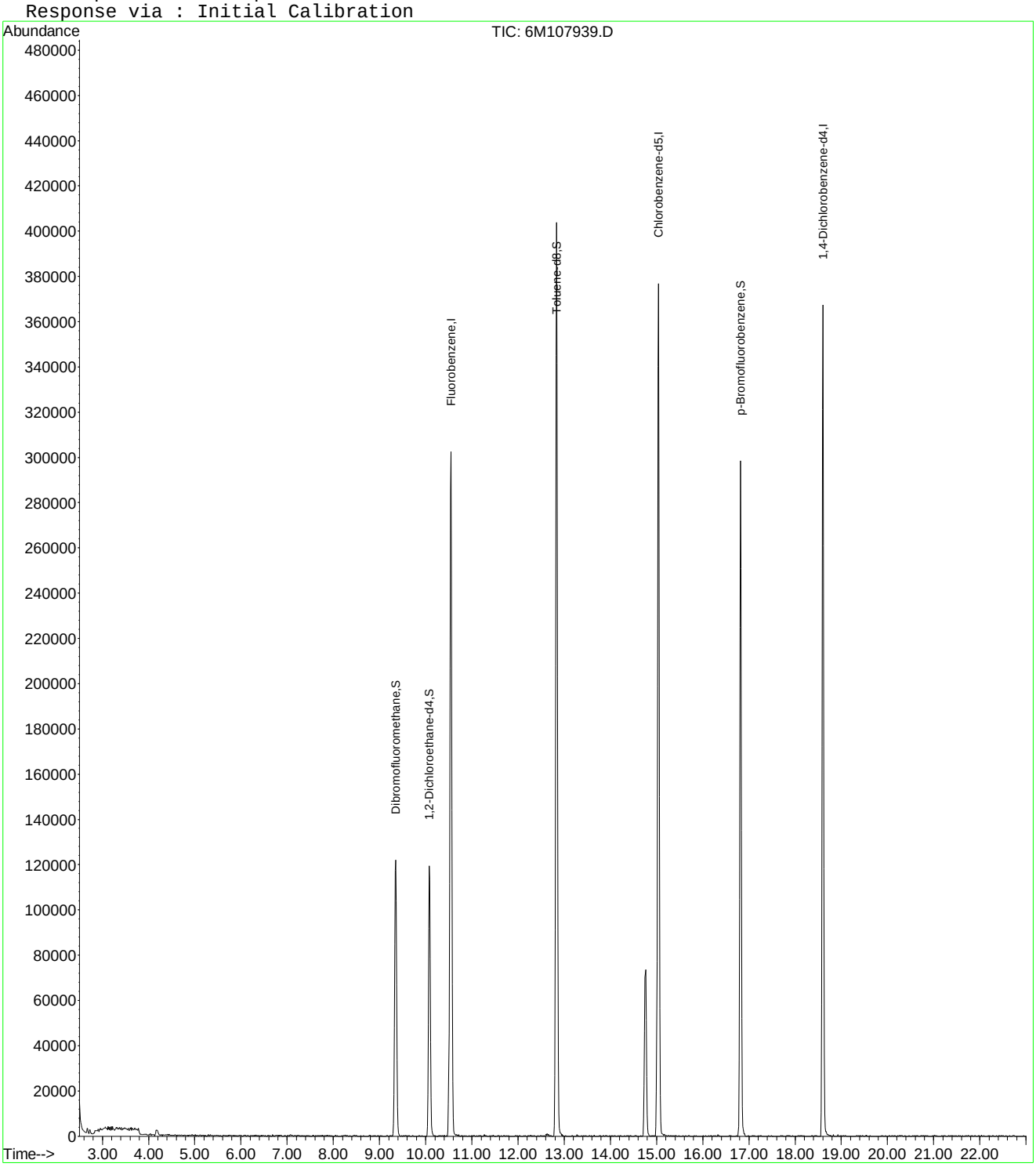
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
6M107939.D 8260WTR.M Fri May 11 10:49:46 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050612\6M107939.D Vial: 21
Acq On : 7 May 2012 3:21 Operator: MES
Sample : L12050011-01 A 826-SPE Inst : HPMS6
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 10:49 2012 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Initial Calibration



6M107939.D 8260WTR.M Fri May 11 10:49:46 2012 Page 2

LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\050612\6M107939.D Vial: 21
Acq On : 7 May 2012 3:21 Operator: MES
Sample : L12050011-01 A 826-SPE 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 04/25/12 - 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	4.040	148	152	155	rVB	640	1130	0.10%	0.021%
2	4.183	161	166	172	rBV4	2777	10943	1.01%	0.201%
3	4.305	177	178	182	rBV	609	1649	0.15%	0.030%
4	4.571	202	204	208	rVB	782	1489	0.14%	0.027%
5	4.632	208	210	215	rBV	579	1952	0.18%	0.036%
6	4.898	232	236	238	rBV	493	1515	0.14%	0.028%
7	4.949	238	241	244	rVV	367	822	0.08%	0.015%
8	5.102	254	256	260	rBB	585	1436	0.13%	0.026%
9	5.173	260	263	267	rBB	515	1301	0.12%	0.024%
10	5.224	267	268	271	rBB	472	524	0.05%	0.010%
11	5.296	272	275	276	rBB	676	948	0.09%	0.017%
12	5.337	276	279	286	rBB	815	2217	0.20%	0.041%
13	5.418	286	287	290	rBV	396	907	0.08%	0.017%
14	5.623	304	307	308	rBV	417	844	0.08%	0.016%
15	5.735	317	318	323	rBV	466	1398	0.13%	0.026%
16	5.888	331	333	334	rBB	375	420	0.04%	0.008%
17	5.980	338	342	347	rBB	436	1620	0.15%	0.030%
18	6.072	348	351	355	rBB	525	1418	0.13%	0.026%
19	6.133	356	357	362	rBB	408	851	0.08%	0.016%
20	6.205	363	364	368	rBB	364	848	0.08%	0.016%
21	6.256	368	369	371	rBB	395	483	0.04%	0.009%
22	6.297	371	373	374	rBB	462	489	0.05%	0.009%
23	6.317	374	375	378	rBB	483	740	0.07%	0.014%
24	6.388	381	382	385	rBB	405	463	0.04%	0.009%
25	6.480	389	391	394	rBB	389	841	0.08%	0.015%
26	6.531	394	396	398	rBB	385	455	0.04%	0.008%
27	6.582	399	401	404	rBB	442	688	0.06%	0.013%
28	6.685	409	411	413	rBB	667	599	0.06%	0.011%
29	6.776	416	420	423	rBB	484	1415	0.13%	0.026%
30	6.838	425	426	432	rBB	432	1132	0.10%	0.021%
31	6.950	434	437	441	rBB	363	599	0.06%	0.011%
32	7.011	442	443	445	rBB	474	482	0.04%	0.009%
33	7.073	446	449	451	rBV	765	1470	0.14%	0.027%
34	7.165	456	458	461	rBB	408	901	0.08%	0.017%
35	7.236	463	465	470	rBB	465	1116	0.10%	0.020%
36	7.563	493	497	500	rBB	470	674	0.06%	0.012%
37	7.624	501	503	504	rBB	383	437	0.04%	0.008%
38	7.655	505	506	508	rBB	347	411	0.04%	0.008%
39	7.736	512	514	515	rBB	379	432	0.04%	0.008%
40	7.808	520	521	523	rBB	370	413	0.04%	0.008%
41	7.838	523	524	526	rBB	400	463	0.04%	0.009%
42	7.869	526	527	530	rBB	503	693	0.06%	0.013%

43	8.043	542	544	547	rBB	428	488	0.04%	0.009%
44	8.257	560	565	567	rBB	462	1320	0.12%	0.024%
45	8.298	567	569	572	rBB	363	598	0.06%	0.011%
46	8.461	580	585	587	rBB	475	1130	0.10%	0.021%
47	8.788	613	617	621	rBB	418	856	0.08%	0.016%
48	8.890	626	627	631	rBB	393	450	0.04%	0.008%
49	8.962	632	634	638	rBB	385	447	0.04%	0.008%
50	9.176	651	655	657	rBB	354	589	0.05%	0.011%
51	9.350	663	672	683	rBB2	122034	381343	35.14%	7.004%
52	9.564	691	693	695	rBB	356	618	0.06%	0.011%
53	10.075	736	743	753	rBB	119538	333216	30.70%	6.120%
54	10.361	769	771	773	rBB	379	416	0.04%	0.008%
55	10.544	778	789	800	rBV	302574	898422	82.78%	16.501%
56	11.045	836	838	841	rBB	340	614	0.06%	0.011%
57	11.167	847	850	855	rBB	406	893	0.08%	0.016%
58	11.270	857	860	866	rBB	609	930	0.09%	0.017%
59	11.464	878	879	882	rBB	450	500	0.05%	0.009%
60	11.586	886	891	893	rBB	388	657	0.06%	0.012%
61	11.688	899	901	906	rBB	403	650	0.06%	0.012%
62	12.270	956	958	960	rBB	420	477	0.04%	0.009%
63	12.495	977	980	984	rBB	385	649	0.06%	0.012%
64	12.607	989	991	992	rBV	853	1065	0.10%	0.020%
65	12.720	1000	1002	1004	rBB	404	453	0.04%	0.008%
66	12.832	1005	1013	1030	rBB	403898	1085268	100.00%	19.932%
67	13.179	1044	1047	1049	rBB	363	413	0.04%	0.008%
68	13.271	1054	1056	1058	rBB	694	425	0.04%	0.008%
69	13.782	1102	1106	1108	rBB	343	413	0.04%	0.008%
70	13.894	1116	1117	1122	rBB	391	692	0.06%	0.013%
71	14.088	1135	1136	1139	rBB	373	430	0.04%	0.008%
72	14.231	1147	1150	1152	rBB	388	455	0.04%	0.008%
73	14.374	1160	1164	1166	rBB	395	477	0.04%	0.009%
74	14.445	1169	1171	1173	rBB	377	417	0.04%	0.008%
75	14.537	1177	1180	1184	rBB	315	572	0.05%	0.011%
76	14.762	1195	1202	1212	rBB	73602	192791	17.76%	3.541%
77	15.038	1221	1229	1240	rBV	376897	945137	87.09%	17.359%
78	15.252	1249	1250	1253	rBB	358	427	0.04%	0.008%
79	15.415	1264	1266	1269	rBB	330	597	0.06%	0.011%
80	15.711	1291	1295	1297	rBB	390	650	0.06%	0.012%
81	16.191	1339	1342	1344	rBB	349	423	0.04%	0.008%
82	16.324	1353	1355	1360	rBB	656	801	0.07%	0.015%
83	16.814	1397	1403	1415	rBB	298608	691430	63.71%	12.699%
84	17.070	1426	1428	1431	rBB	382	436	0.04%	0.008%
85	17.835	1499	1503	1505	rBB	412	627	0.06%	0.012%
86	18.070	1523	1526	1528	rBB	376	433	0.04%	0.008%
87	18.152	1532	1534	1536	rBB	399	433	0.04%	0.008%
88	18.601	1572	1578	1597	rBB	367334	837949	77.21%	15.390%
89	18.928	1608	1610	1612	rBB	706	433	0.04%	0.008%
90	19.459	1661	1662	1665	rBB	400	442	0.04%	0.008%
91	19.541	1666	1670	1672	rBB	479	486	0.04%	0.009%
92	20.092	1722	1724	1727	rBB	362	435	0.04%	0.008%
93	20.143	1728	1729	1733	rBB	370	443	0.04%	0.008%
94	20.296	1742	1744	1748	rBB	377	838	0.08%	0.015%
95	20.746	1784	1788	1790	rBB	347	615	0.06%	0.011%
96	21.011	1813	1814	1818	rBB	430	656	0.06%	0.012%
97	21.236	1835	1836	1839	rBB	366	412	0.04%	0.008%
98	21.389	1850	1851	1856	rBB	381	622	0.06%	0.011%
99	22.410	1949	1951	1955	rBB	350	423	0.04%	0.008%
100	22.737	1979	1983	1986	rBB	374	829	0.08%	0.015%

Sum of corrected areas: 5444739

6M107939.D 8260WTR.M Tue May 15 14:47:00 2012 Page 2

```
File        : C:\MSDCHEM\1\DATA\050612\6M107939.D
Operator    : MES
Acquired    :  7 May 2012   3:21     using AcqMethod 8260WTR
Instrument :   HPMS6
Sample Name: L12050011-01 A 826-SPE
Misc Info   : 1,1
Vial Number: 21
Quant File :8260WTR.RES (RTE Integrator)
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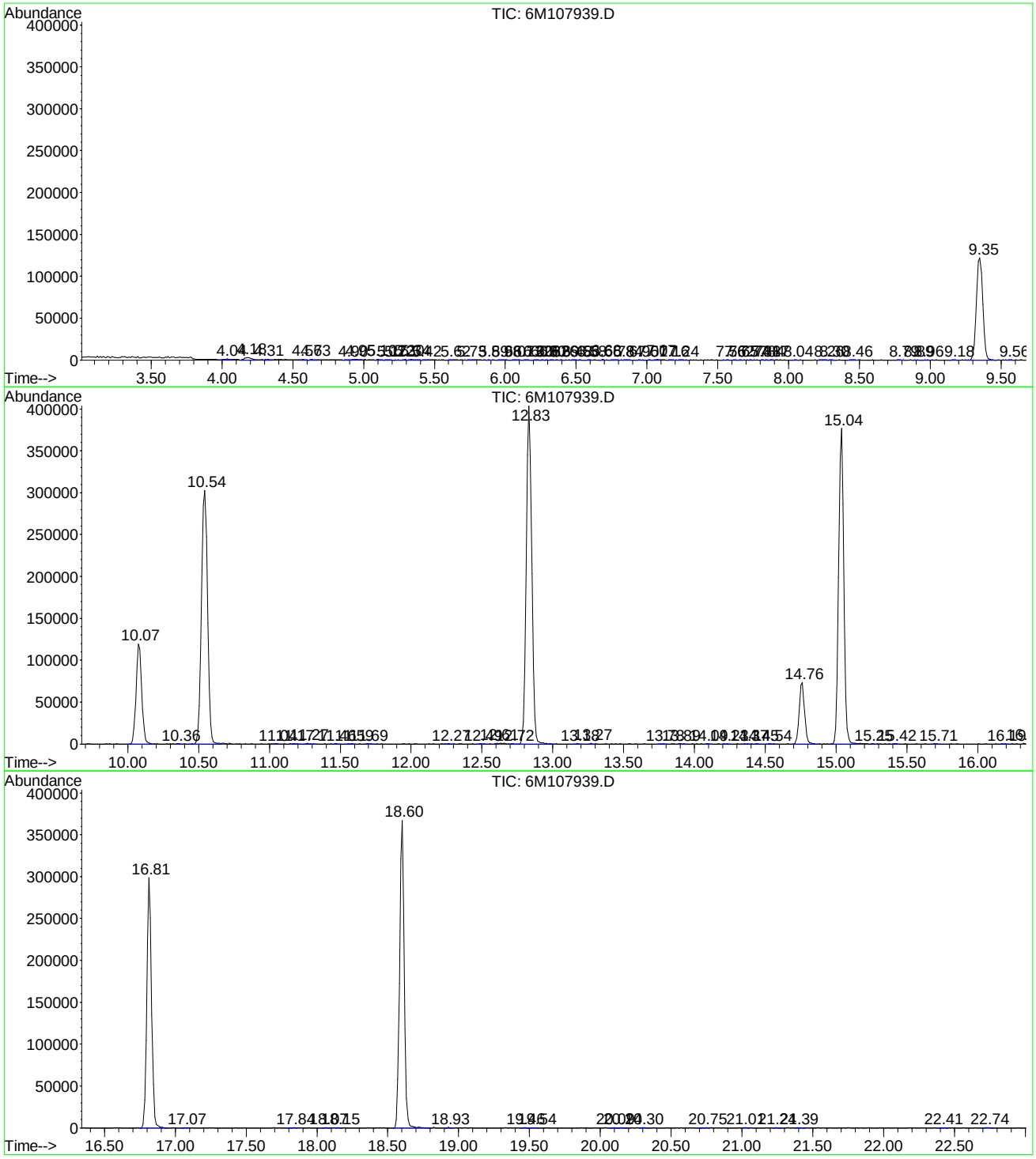

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Data File : C:\MSDCHEM\1\DATA\050612\6M107939.D          Vial: 21
Acq On    :  7 May 2012   3:21                        Operator: MES
Sample    : L12050011-01 A 826-SPE                    Inst    : HPMS6
Misc      : 1,1                                       Multiplr: 1.00
MS Integration Params: RTEINT.P

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title        : 8260B/624_WATER SOP:OVLMSV01  04/25/12 - HPMS6
Library      : C:\DATABASE\NIST02.L
 ******************************************************************
 Peak Number  1  n-Butyl ether                    Concentration Rank  1

   R.T.   EstConc           Area       Relative to ISTD         R.T.
 ------------------------------------------------------------------
  14.76    5.10 ug/L       192791    Chlorobenzene-d5           15.04

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------
  1 n-Butyl ether                         130 C8H18O        000142-96-1 56
  2 n-Butyl ether                         130 C8H18O        000142-96-1 56
  3 Ethanol, 2-butoxy-                    118 C6H14O2       000111-76-2 50
  4 Isobutyl ether                        130 C8H18O        000628-55-7 42
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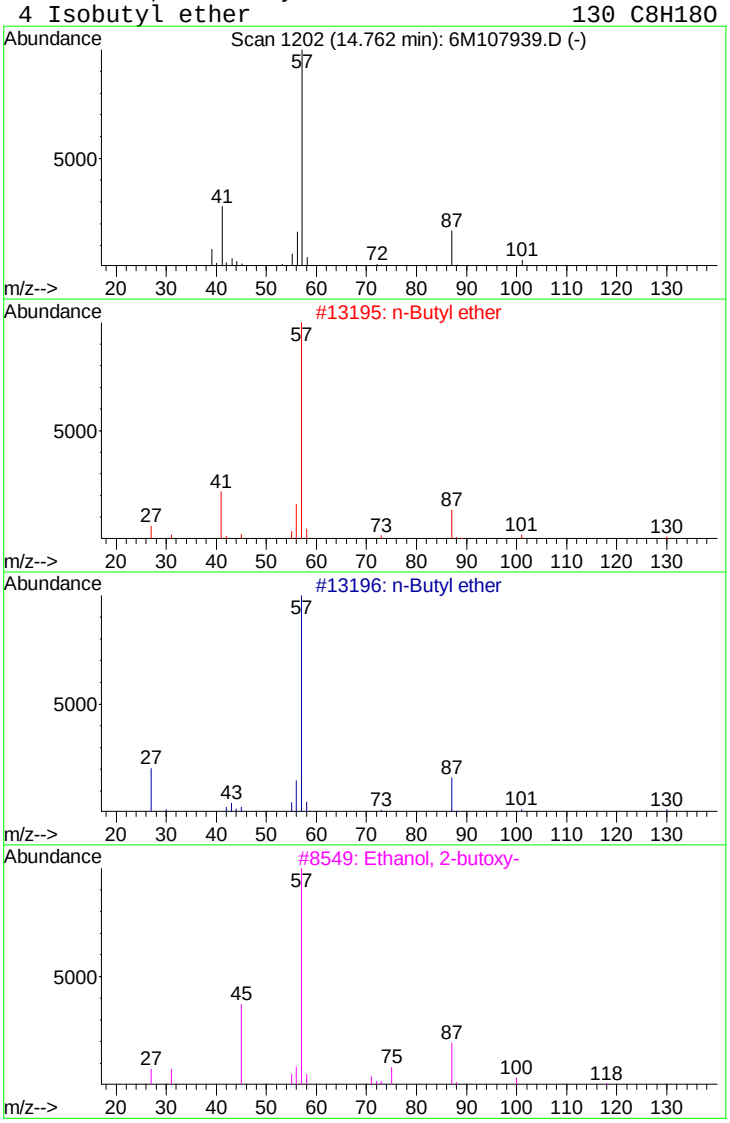
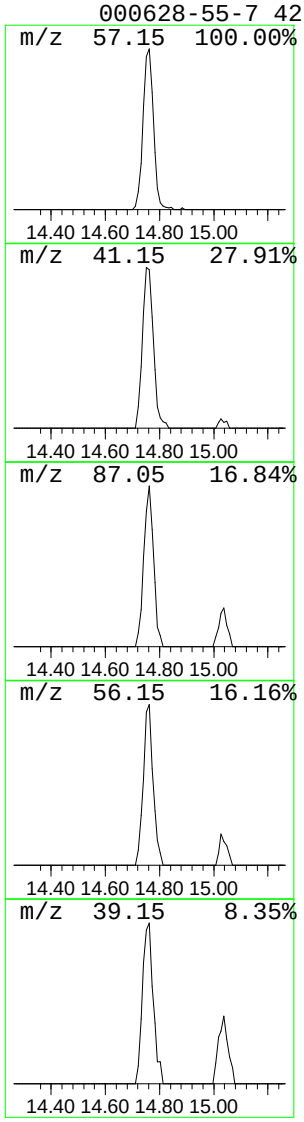




Tentatively Identified Compound (LSC) summary

Operator ID: MES Date Acquired: 7 May 2012 3:21
Data File: C:\MSDCHEM\1\DATA\050612\6M107939.D
Name: L12050011-01 A 826-SPE
Misc: 1,1
Method: C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title: 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Library Searched: C:\DATABASE\NIST02.L

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	RT	Resp	Conc
n-Butyl ether	14.76	5.1	ug/L	192791	2	15.04	945137	25.0

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050612\6M107940.D Vial: 22
Acq On : 7 May 2012 3:54 Operator: MES
Sample : L12050011-03 A 826-SPE Inst : HPMS6
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 10:49:47 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

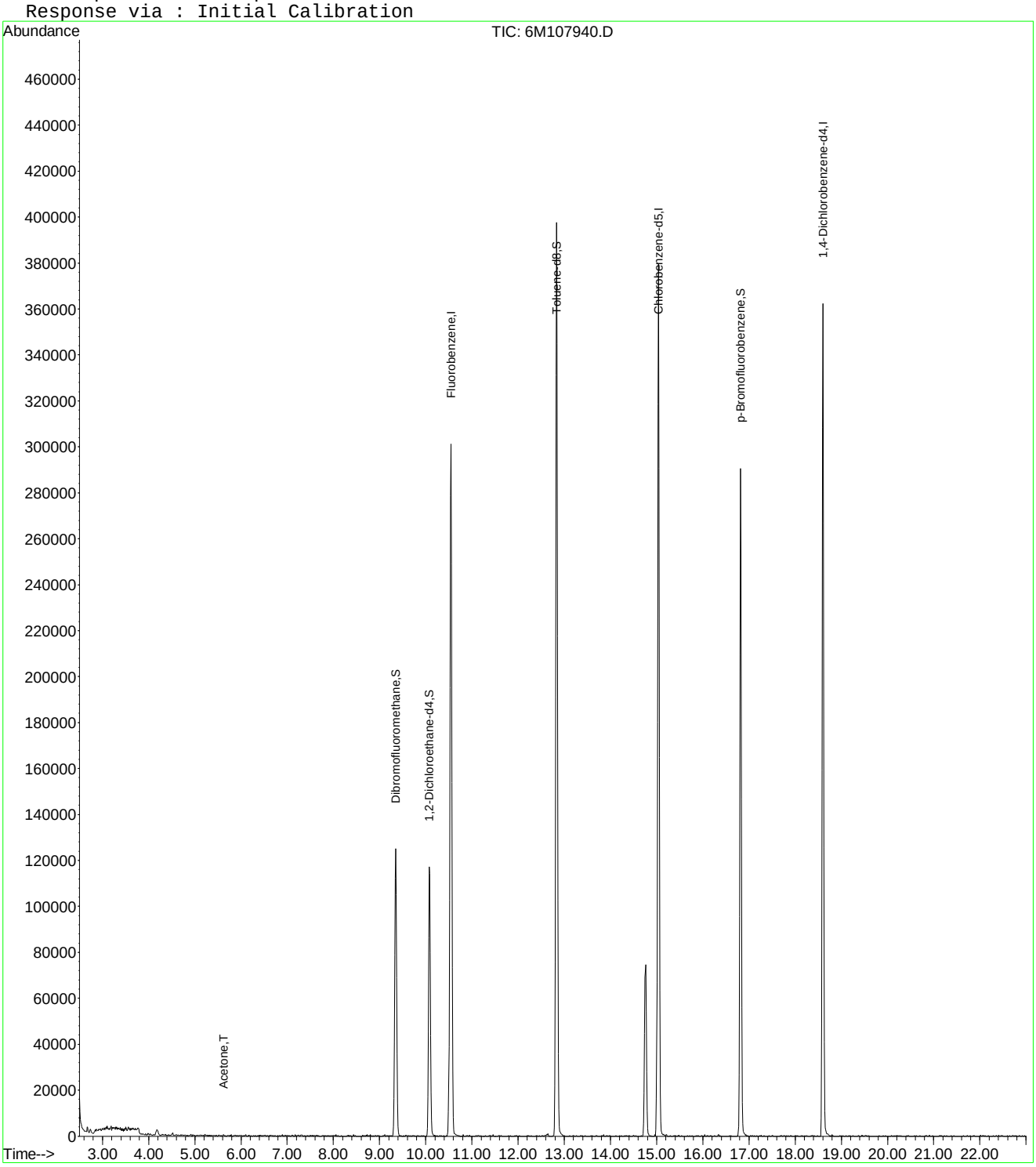
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.54	96	407172	25.00 ug/L	0.00
57) Chlorobenzene-d5	15.04	117	290614	25.00 ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	133468	25.00 ug/L	0.00
System Monitoring Compounds					
37) Dibromofluoromethane	9.35	111	118715	26.9271 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 107.72%		
43) 1,2-Dichloroethane-d4	10.07	65	118338	27.3500 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 109.40%		
58) Toluene-d8	12.83	98	390741	24.7390 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 98.96%		
80) p-Bromofluorobenzene	16.81	95	137448	26.2439 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 104.96%		
Target Compounds					Qvalue
13) Acetone	5.62	43	198	0.2566 ug/L #	46

(#) = qualifier out of range (m) = manual integration
6M107940.D 8260WTR.M Fri May 11 10:49:47 2012 Page 1

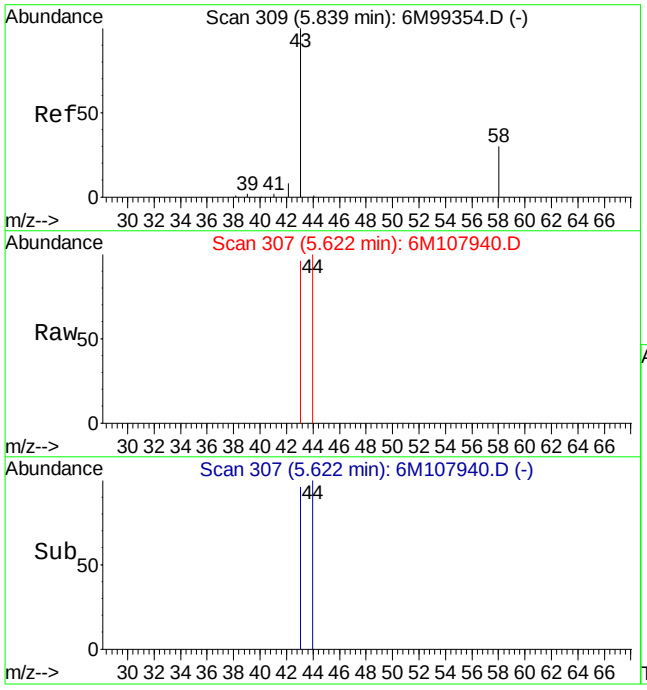
Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050612\6M107940.D Vial: 22
Acq On : 7 May 2012 3:54 Operator: MES
Sample : L12050011-03 A 826-SPE Inst : HPMS6
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 10:49 2012 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Initial Calibration



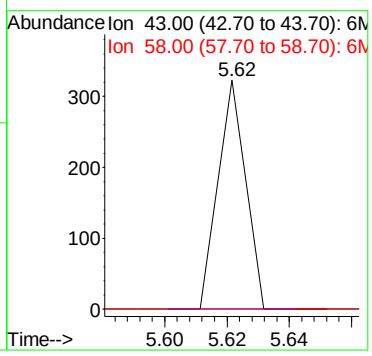
6M107940.D 8260WTR.M Fri May 11 10:49:48 2012 Page 2



#13
Acetone
Concen: 0.26 ug/L
RT: 5.62 min Scan# 307
Delta R.T. 0.01 min
Lab File: 6M107940.D
Acq: 7 May 2012 3:54

Tgt Ion: 43 Resp: 198

Ion	Ratio	Lower	Upper
43	100		
58	0.0	17.3	40.3#



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\050612\6M107940.D Vial: 22
Acq On : 7 May 2012 3:54 Operator: MES
Sample : L12050011-03 A 826-SPE 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 04/25/12 - 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

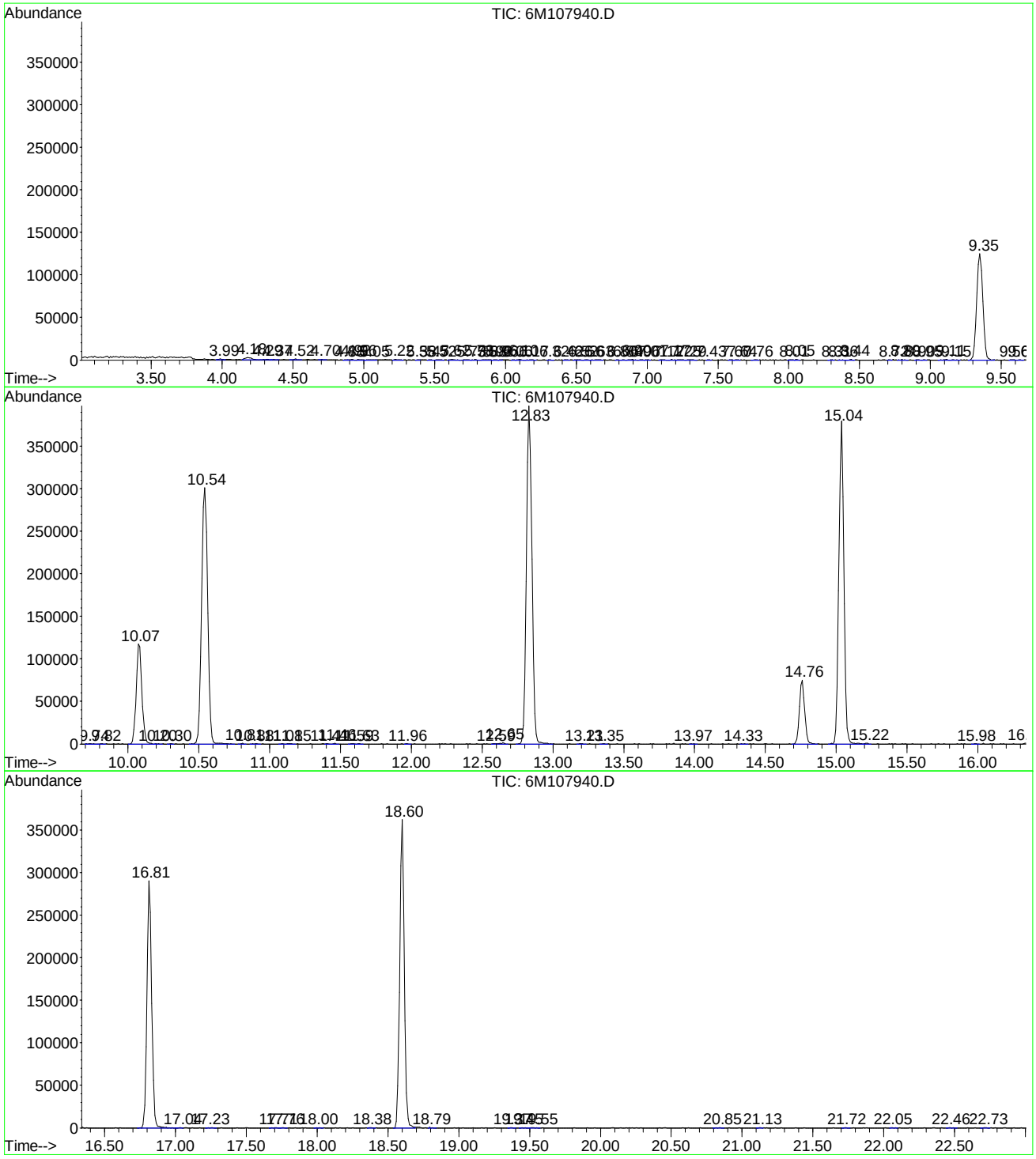
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.988	144	147	150	rVB	807	1043	0.10%	0.019%
2	4.182	162	166	173	rVB3	2456	7786	0.73%	0.145%
3	4.294	174	177	182	rVV	460	961	0.09%	0.018%
4	4.365	182	184	187	rVB	628	515	0.05%	0.010%
5	4.519	195	199	203	rVB	1068	1336	0.12%	0.025%
6	4.702	215	217	220	rBV	450	519	0.05%	0.010%
7	4.876	232	234	235	rBV	409	640	0.06%	0.012%
8	4.917	235	238	240	rVB	844	1198	0.11%	0.022%
9	4.958	241	242	247	rBB	653	1290	0.12%	0.024%
10	5.050	247	251	255	rBV	475	1896	0.18%	0.035%
11	5.223	266	268	273	rBB	800	1703	0.16%	0.032%
12	5.376	282	283	285	rBV	372	652	0.06%	0.012%
13	5.468	290	292	294	rBB	421	660	0.06%	0.012%
14	5.519	295	297	301	rBB	465	1256	0.12%	0.023%
15	5.622	304	307	313	rBB	660	1529	0.14%	0.028%
16	5.734	314	318	320	rBB	392	1097	0.10%	0.020%
17	5.785	320	323	326	rBB	747	968	0.09%	0.018%
18	5.877	327	332	335	rBB	457	1539	0.14%	0.029%
19	5.918	335	336	339	rBB	413	692	0.06%	0.013%
20	5.958	339	340	342	rBV	358	596	0.06%	0.011%
21	6.061	348	350	351	rBB	375	433	0.04%	0.008%
22	6.101	351	354	357	rBB	617	1005	0.09%	0.019%
23	6.173	358	361	365	rBB	436	914	0.09%	0.017%
24	6.316	373	375	377	rBB	407	481	0.04%	0.009%
25	6.418	384	385	388	rBB	434	719	0.07%	0.013%
26	6.520	391	395	397	rBB	457	1091	0.10%	0.020%
27	6.561	398	399	403	rBB	317	575	0.05%	0.011%
28	6.632	403	406	411	rBB	427	1252	0.12%	0.023%
29	6.796	420	422	423	rBB	400	459	0.04%	0.009%
30	6.837	424	426	427	rBB	413	447	0.04%	0.008%
31	6.898	428	432	435	rBB	676	1270	0.12%	0.024%
32	6.959	436	438	440	rBB	450	708	0.07%	0.013%
33	7.010	440	443	444	rBB	380	628	0.06%	0.012%
34	7.123	450	454	456	rBB	458	978	0.09%	0.018%
35	7.174	457	459	462	rBB	692	618	0.06%	0.012%
36	7.245	462	466	468	rBB	467	1179	0.11%	0.022%
37	7.286	469	470	476	rBB	504	1385	0.13%	0.026%
38	7.429	483	484	486	rBB	353	407	0.04%	0.008%
39	7.603	498	501	502	rBB	357	617	0.06%	0.011%
40	7.643	502	505	506	rBB	425	638	0.06%	0.012%
41	7.756	514	516	519	rBB	415	687	0.06%	0.013%
42	8.011	539	541	544	rBB	351	845	0.08%	0.016%

43	8.052	544	545	547	rBB	690	636	0.06%	0.012%
44	8.307	567	570	571	rBB	379	421	0.04%	0.008%
45	8.358	574	575	579	rBB	369	425	0.04%	0.008%
46	8.440	580	583	585	rBB	653	625	0.06%	0.012%
47	8.716	608	610	611	rBB	416	493	0.05%	0.009%
48	8.797	615	618	622	rBB	652	792	0.07%	0.015%
49	8.899	627	628	631	rBB	398	641	0.06%	0.012%
50	8.950	632	633	635	rBB	353	417	0.04%	0.008%
51	9.114	643	649	651	rBB	655	1037	0.10%	0.019%
52	9.155	652	653	658	rBB	345	601	0.06%	0.011%
53	9.349	664	672	682	rBV	125061	374313	34.96%	6.976%
54	9.563	692	693	697	rBB	418	868	0.08%	0.016%
55	9.624	698	699	702	rBB	374	428	0.04%	0.008%
56	9.737	706	710	714	rBB	341	775	0.07%	0.014%
57	9.818	715	718	720	rBB	390	464	0.04%	0.009%
58	10.074	736	743	754	rBB	117214	330061	30.83%	6.151%
59	10.196	754	755	759	rBB	452	474	0.04%	0.009%
60	10.298	763	765	767	rBB	367	434	0.04%	0.008%
61	10.543	778	789	809	rBB	301305	889809	83.11%	16.583%
62	10.809	812	815	817	rBB	677	619	0.06%	0.012%
63	10.880	820	822	827	rBB	364	632	0.06%	0.012%
64	11.085	840	842	844	rBB	380	457	0.04%	0.009%
65	11.146	845	848	851	rBB	344	808	0.08%	0.015%
66	11.411	872	874	876	rBB	372	434	0.04%	0.008%
67	11.462	877	879	881	rBB	637	583	0.05%	0.011%
68	11.585	888	891	893	rBB	336	581	0.05%	0.011%
69	11.626	894	895	898	rBB	366	423	0.04%	0.008%
70	11.963	927	928	931	rBB	384	441	0.04%	0.008%
71	12.586	987	989	990	rBV	473	719	0.07%	0.013%
72	12.647	991	995	998	rVB	1114	2080	0.19%	0.039%
73	12.831	1004	1013	1029	rBB	397706	1070637	100.00%	19.953%
74	13.209	1046	1050	1052	rBB	350	616	0.06%	0.011%
75	13.352	1062	1064	1067	rBB	380	447	0.04%	0.008%
76	13.974	1124	1125	1129	rBB	334	409	0.04%	0.008%
77	14.332	1159	1160	1164	rBB	408	448	0.04%	0.008%
78	14.761	1195	1202	1212	rBB	74731	192202	17.95%	3.582%
79	15.036	1220	1229	1244	rBB	379602	929741	86.84%	17.327%
80	15.220	1244	1247	1249	rBB	666	1069	0.10%	0.020%
81	15.976	1319	1321	1324	rBB	371	438	0.04%	0.008%
82	16.333	1353	1356	1359	rBB	686	1027	0.10%	0.019%
83	16.813	1395	1403	1421	rBB	290539	681004	63.61%	12.692%
84	17.038	1422	1425	1426	rBB	344	411	0.04%	0.008%
85	17.232	1442	1444	1449	rBB	303	555	0.05%	0.010%
86	17.712	1486	1491	1493	rBB	353	603	0.06%	0.011%
87	17.763	1494	1496	1498	rBB	393	444	0.04%	0.008%
88	17.998	1517	1519	1523	rBB	383	426	0.04%	0.008%
89	18.376	1554	1556	1559	rBB	330	596	0.06%	0.011%
90	18.600	1572	1578	1587	rBV	362398	822264	76.80%	15.324%
91	18.794	1596	1597	1601	rBB	649	584	0.05%	0.011%
92	19.366	1651	1653	1656	rBB	351	423	0.04%	0.008%
93	19.448	1659	1661	1665	rBB	435	459	0.04%	0.009%
94	19.550	1666	1671	1673	rBB	323	762	0.07%	0.014%
95	20.847	1793	1798	1800	rBB	415	669	0.06%	0.012%
96	21.133	1823	1826	1827	rBB	413	453	0.04%	0.008%
97	21.725	1882	1884	1887	rBB	400	478	0.04%	0.009%
98	22.052	1915	1916	1920	rBB	345	596	0.06%	0.011%
99	22.460	1954	1956	1961	rBB	389	652	0.06%	0.012%
100	22.726	1978	1982	1984	rBB	401	664	0.06%	0.012%

Sum of corrected areas: 5365780

6M107940.D 8260WTR.M Tue May 15 14:47:02 2012 Page 2

File : C:\MSDCHEM\1\DATA\050612\6M107940.D
Operator : MES
Acquired : 7 May 2012 3:54 using AcqMethod 8260WTR
Instrument : HPMS6
Sample Name: L12050011-03 A 826-SPE
Misc Info : 1,1
Vial Number: 22
Quant File :8260WTR.RES (RTE Integrator)



6M107940.D 8260WTR.M Tue May 15 14:47:02 2012 Page 3

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Data File : C:\MSDCHEM\1\DATA\050612\6M107940.D          Vial: 22
Acq On    :  7 May 2012   3:54                        Operator: MES
Sample    : L12050011-03 A 826-SPE                    Inst    : HPMS6
Misc      : 1,1                                       Multiplr: 1.00
MS Integration Params: RTEINT.P

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title        : 8260B/624_WATER SOP:OVLMSV01  04/25/12 - HPMS6
Library      : C:\DATABASE\NIST02.L
 ******************************************************************
 Peak Number  1  n-Butyl ether                    Concentration Rank  1

   R.T.   EstConc           Area       Relative to ISTD         R.T.
 ------------------------------------------------------------------
  14.76    5.17 ug/L       192202    Chlorobenzene-d5           15.04

  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 56
  3 n-Butyl ether                         130 C8H18O        000142-96-1 53
  4 Sulfurous acid, dibutyl ester         194 C8H18O3S      000626-85-7 53
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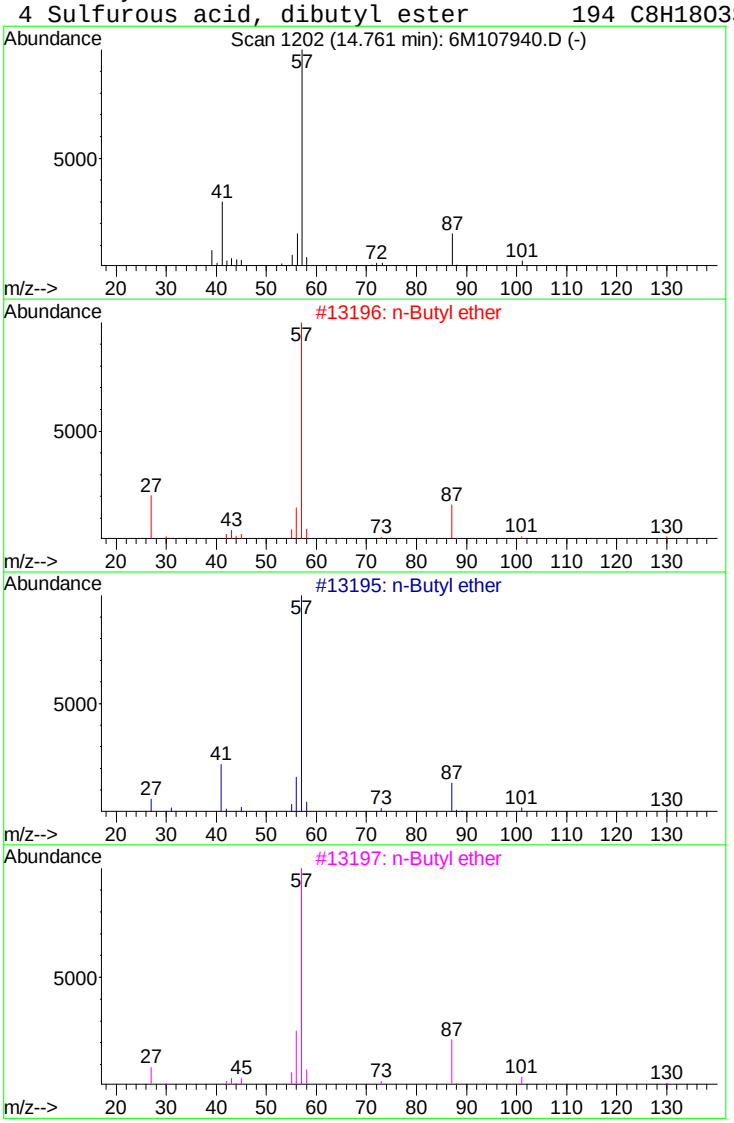
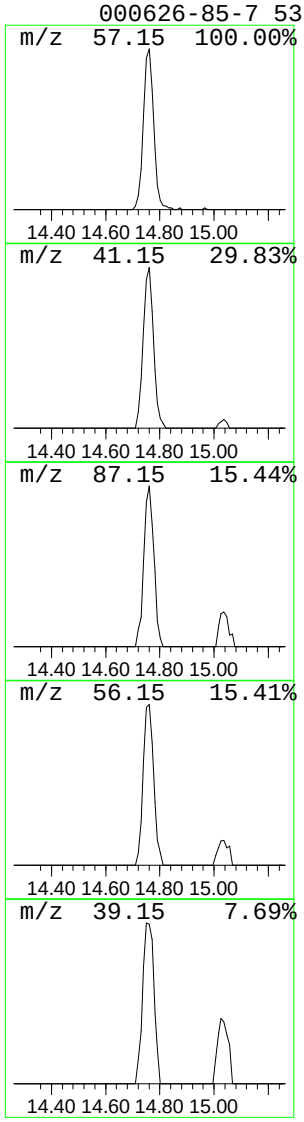




Tentatively Identified Compound (LSC) summary

Operator ID: MES Date Acquired: 7 May 2012 3:54
Data File: C:\MSDCHEM\1\DATA\050612\6M107940.D
Name: L12050011-03 A 826-SPE
Misc: 1,1
Method: C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title: 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Library Searched: C:\DATABASE\NIST02.L

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	RT	Resp	Conc
n-Butyl ether	14.76	5.2	ug/L	192202	2	15.04	929741	25.0

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050612\6M107934.D Vial: 16
Acq On : 7 May 2012 00:39 Operator: MES
Sample : L12050011-05 A 826-SPE Inst : HPMS6
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 10:49:39 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.54	96	436242	25.00 ug/L	0.00
57) Chlorobenzene-d5	15.03	117	299403	25.00 ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	142754	25.00 ug/L	0.00

System Monitoring Compounds

37) Dibromofluoromethane	9.35	111	123665	26.1807 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 104.72%		
43) 1,2-Dichloroethane-d4	10.08	65	123828	26.7118 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 106.84%		
58) Toluene-d8	12.83	98	412204	25.3318 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 101.32%		
80) p-Bromofluorobenzene	16.81	95	143559	25.6276 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 102.52%		

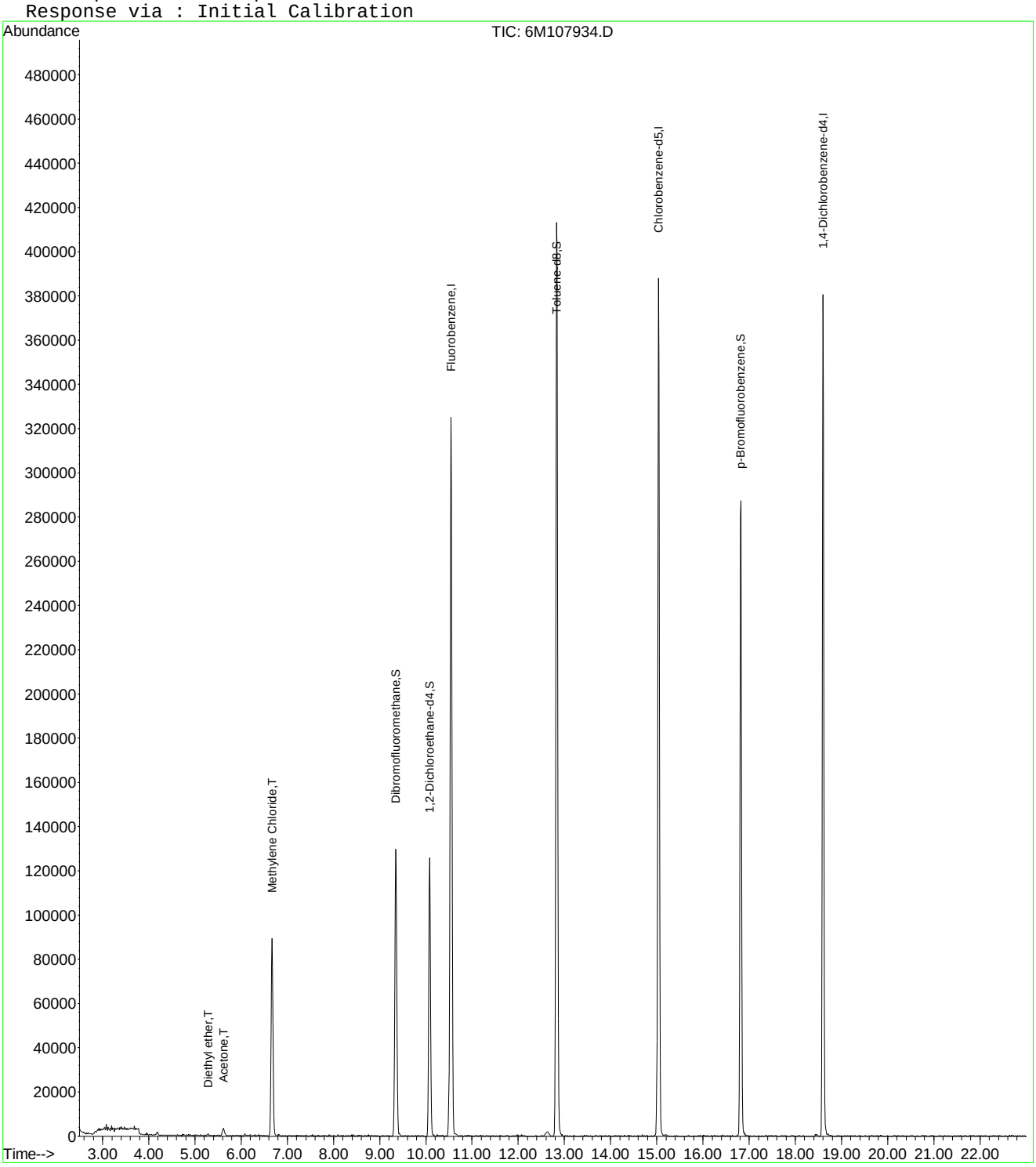
Target Compounds					Qvalue
9) Diethyl ether	5.28	59	678	0.2144 ug/L #	35
13) Acetone	5.62	43	8180	9.8962 ug/L	95
19) Methylene Chloride	6.67	84	54406	10.9764 ug/L	97

(#) = qualifier out of range (m) = manual integration
6M107934.D 8260WTR.M Fri May 11 10:49:39 2012 Page 1

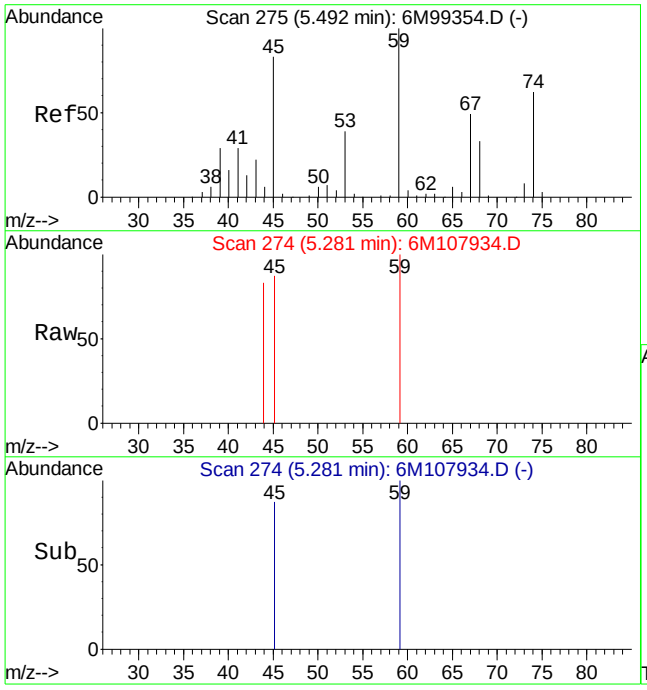
Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050612\6M107934.D Vial: 16
Acq On : 7 May 2012 00:39 Operator: MES
Sample : L12050011-05 A 826-SPE Inst : HPMS6
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 10:49 2012 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Initial Calibration



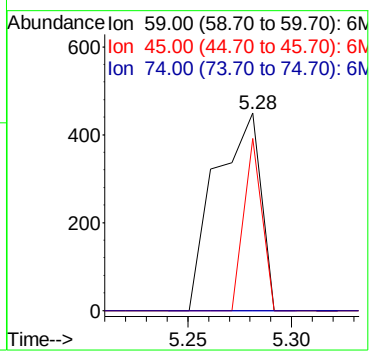
6M107934.D 8260WTR.M Fri May 11 10:49:39 2012 Page 2

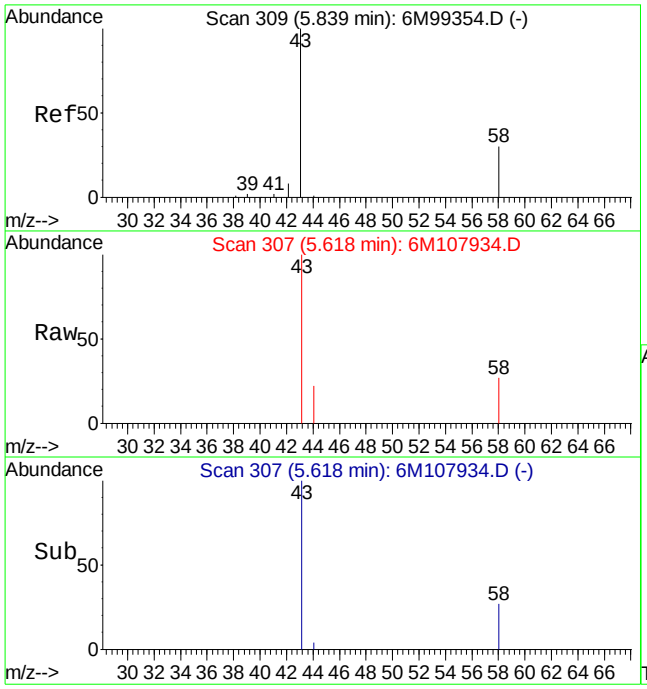


#9
Diethyl ether
Concen: 0.21 ug/L
RT: 5.28 min Scan# 274
Delta R.T. 0.02 min
Lab File: 6M107934.D
Acq: 7 May 2012 00:39

Tgt Ion: 59 Resp: 678

Ion	Ratio	Lower	Upper
59	100		
45	35.3	48.8	113.8#
74	0.0	38.9	90.9#

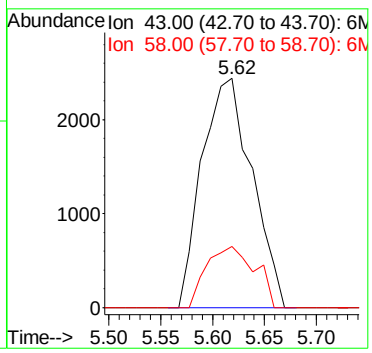


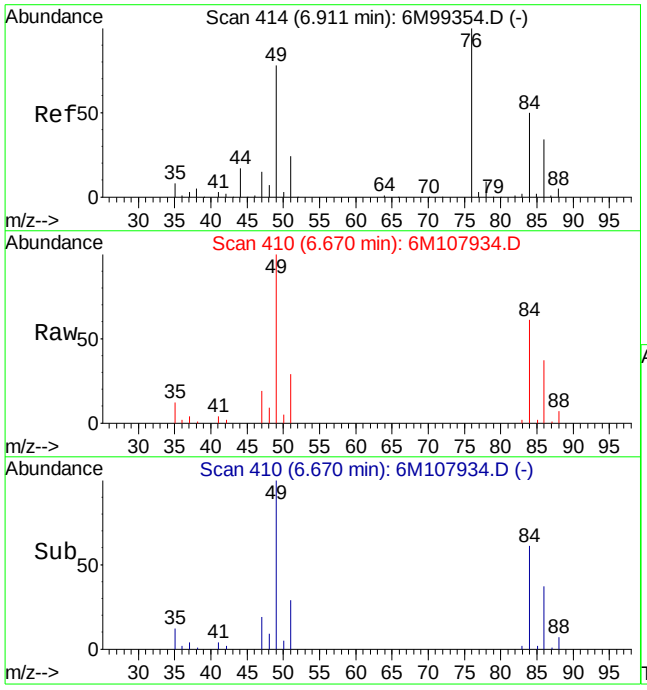


#13
Acetone
Concen: 9.90 ug/L
RT: 5.62 min Scan# 307
Delta R.T. 0.01 min
Lab File: 6M107934.D
Acq: 7 May 2012 00:39

Tgt Ion: 43 Resp: 8180

Ion	Ratio	Lower	Upper
43	100		
58	25.9	17.3	40.3

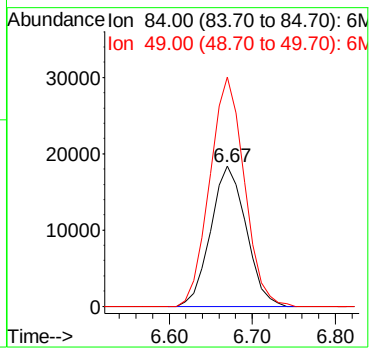




#19
Methylene Chloride
Concen: 10.98 ug/L
RT: 6.67 min Scan# 410
Delta R.T. -0.00 min
Lab File: 6M107934.D
Acq: 7 May 2012 00:39

Tgt Ion: 84 Resp: 54406

Ion	Ratio	Lower	Upper
84	100		
49	159.8	93.3	217.7



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\050612\6M107934.D Vial: 16
Acq On : 7 May 2012 00:39 Operator: MES
Sample : L12050011-05 A 826-SPE 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 04/25/12 - 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

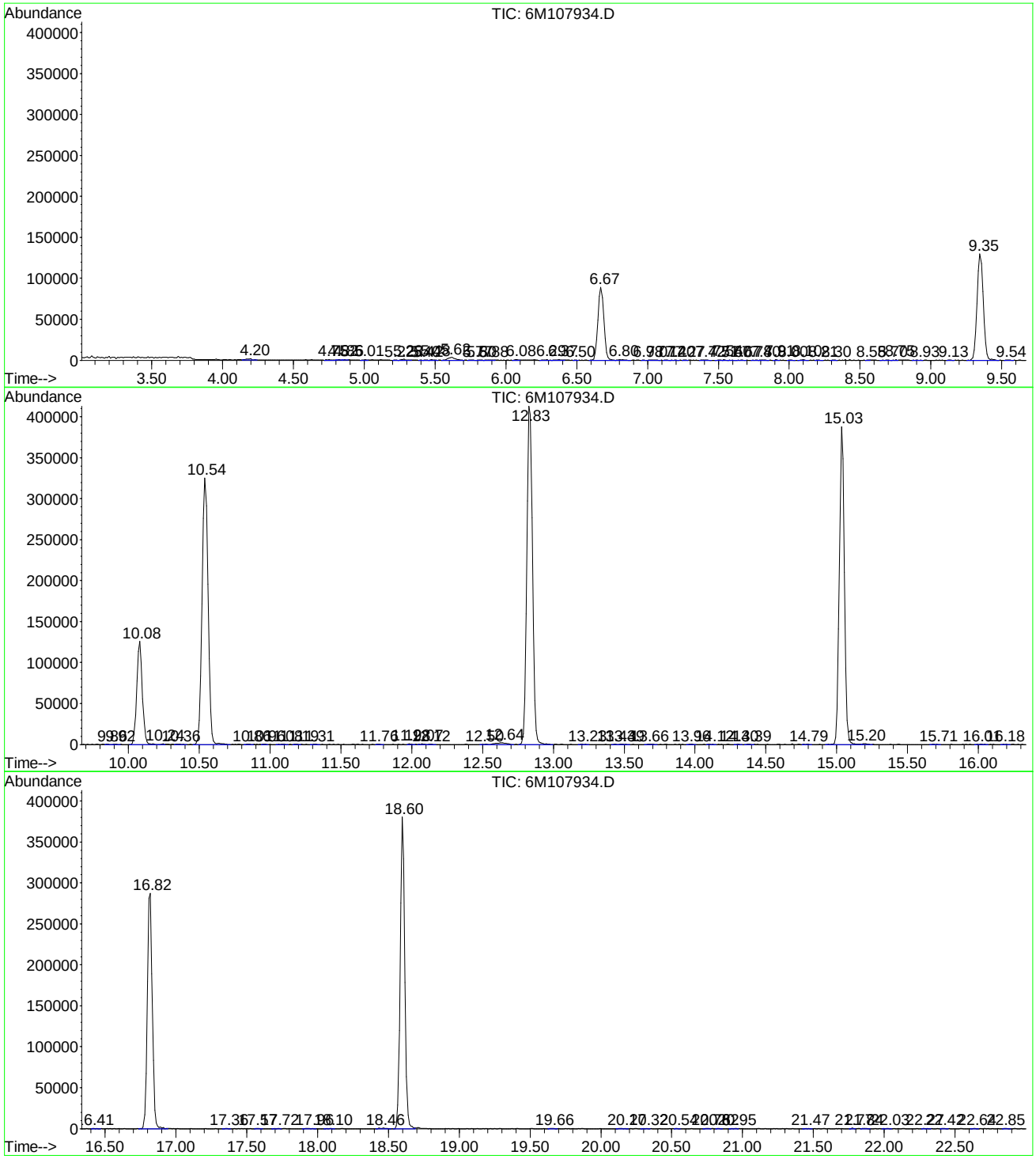
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.199	162	168	172	rVB2	1579	4275	0.38%	0.075%
2	4.750	219	222	227	rBV	845	2572	0.23%	0.045%
3	4.822	227	229	231	rVV	497	618	0.05%	0.011%
4	4.863	231	233	235	rVV	542	539	0.05%	0.009%
5	5.006	244	247	249	rBV	703	1306	0.12%	0.023%
6	5.220	266	268	270	rBB	517	857	0.08%	0.015%
7	5.281	270	274	279	rBV	1212	3089	0.27%	0.054%
8	5.404	284	286	287	rBB	530	563	0.05%	0.010%
9	5.424	287	288	291	rBB	520	742	0.07%	0.013%
10	5.475	291	293	297	rBB	582	1298	0.11%	0.023%
11	5.618	300	307	315	rBB2	3622	13575	1.20%	0.238%
12	5.771	318	322	323	rBB2	409	949	0.08%	0.017%
13	5.802	324	325	329	rBB2	506	1021	0.09%	0.018%
14	5.884	329	333	337	rBV2	465	1818	0.16%	0.032%
15	6.078	349	352	354	rBV2	1041	1826	0.16%	0.032%
16	6.292	368	373	376	rBB	746	1506	0.13%	0.026%
17	6.374	376	381	385	rBV	658	2293	0.20%	0.040%
18	6.497	391	393	394	rBB	482	552	0.05%	0.010%
19	6.670	402	410	420	rBB	89362	258994	22.88%	4.532%
20	6.803	420	423	430	rBB	844	2401	0.21%	0.042%
21	6.976	438	440	441	rBB	384	461	0.04%	0.008%
22	7.068	442	449	451	rBB	430	1562	0.14%	0.027%
23	7.140	453	456	458	rBB	338	601	0.05%	0.011%
24	7.201	458	462	464	rBB	436	666	0.06%	0.012%
25	7.273	466	469	470	rBB	342	590	0.05%	0.010%
26	7.416	478	483	486	rBB	511	1414	0.12%	0.025%
27	7.507	489	492	494	rBB	353	613	0.05%	0.011%
28	7.538	494	495	498	rBB	702	710	0.06%	0.012%
29	7.599	498	501	503	rBB	409	482	0.04%	0.008%
30	7.671	504	508	510	rBB	458	716	0.06%	0.013%
31	7.742	514	515	519	rBB	335	612	0.05%	0.011%
32	7.804	519	521	526	rBB	326	965	0.09%	0.017%
33	7.906	529	531	533	rBB	809	721	0.06%	0.013%
34	7.998	539	540	544	rBB	418	690	0.06%	0.012%
35	8.100	546	550	553	rBB	670	1102	0.10%	0.019%
36	8.212	558	561	563	rBB	510	697	0.06%	0.012%
37	8.304	569	570	573	rBB	398	654	0.06%	0.011%
38	8.549	593	594	596	rBV	436	689	0.06%	0.012%
39	8.702	603	609	611	rBB	415	940	0.08%	0.016%
40	8.753	611	614	615	rBB	641	581	0.05%	0.010%
41	8.927	625	631	632	rBB	375	864	0.08%	0.015%
42	9.131	649	651	654	rBB	319	572	0.05%	0.010%

43	9.345	663	672	685	rBB	129873	394502	34.84%	6.903%
44	9.540	689	691	695	rBB	373	852	0.08%	0.015%
45	9.856	720	722	724	rBB	421	475	0.04%	0.008%
46	9.917	725	728	730	rBB	409	646	0.06%	0.011%
47	10.081	737	744	756	rBB	125848	345151	30.48%	6.040%
48	10.244	757	760	761	rBB	700	642	0.06%	0.011%
49	10.356	768	771	776	rBB	481	1088	0.10%	0.019%
50	10.540	781	789	806	rBB	325136	952034	84.09%	16.659%
51	10.857	816	820	822	rBB	366	650	0.06%	0.011%
52	10.959	828	830	832	rBB	405	650	0.06%	0.011%
53	11.081	838	842	846	rBB	403	872	0.08%	0.015%
54	11.194	850	853	855	rBB	453	684	0.06%	0.012%
55	11.306	862	864	868	rBB	404	716	0.06%	0.013%
56	11.755	907	908	912	rBB	403	676	0.06%	0.012%
57	11.980	929	930	934	rBB	651	845	0.07%	0.015%
58	12.072	936	939	942	rBB	628	982	0.09%	0.017%
59	12.123	943	944	948	rBB	418	633	0.06%	0.011%
60	12.501	979	981	985	rBB	330	597	0.05%	0.010%
61	12.644	986	995	1002	rBB3	2056	10407	0.92%	0.182%
62	12.828	1006	1013	1029	rBB	413279	1132208	100.00%	19.812%
63	13.226	1047	1052	1054	rBB	335	582	0.05%	0.010%
64	13.430	1070	1072	1074	rBB	439	491	0.04%	0.009%
65	13.491	1075	1078	1082	rBB	386	821	0.07%	0.014%
66	13.665	1093	1095	1101	rBB	372	1043	0.09%	0.018%
67	13.961	1122	1124	1128	rBB	366	627	0.06%	0.011%
68	14.124	1136	1140	1142	rBB	396	660	0.06%	0.012%
69	14.298	1155	1157	1160	rBB	464	500	0.04%	0.009%
70	14.390	1162	1166	1168	rBB	456	684	0.06%	0.012%
71	14.788	1202	1205	1208	rBB	397	715	0.06%	0.013%
72	15.033	1218	1229	1243	rBV	387963	960829	84.86%	16.813%
73	15.197	1243	1245	1250	rVB	672	1656	0.15%	0.029%
74	15.707	1290	1295	1297	rBB	314	569	0.05%	0.010%
75	16.014	1321	1325	1330	rBB	452	957	0.08%	0.017%
76	16.177	1339	1341	1345	rBB	371	453	0.04%	0.008%
77	16.412	1363	1364	1369	rBB	472	766	0.07%	0.013%
78	16.820	1396	1404	1416	rBV	287483	701937	62.00%	12.283%
79	17.361	1454	1457	1459	rBB	435	470	0.04%	0.008%
80	17.566	1476	1477	1481	rBB	339	616	0.05%	0.011%
81	17.719	1488	1492	1494	rBB	367	659	0.06%	0.012%
82	17.964	1509	1516	1518	rBB	383	1051	0.09%	0.018%
83	18.097	1524	1529	1531	rBB	333	577	0.05%	0.010%
84	18.464	1560	1565	1570	rBB	896	2304	0.20%	0.040%
85	18.597	1572	1578	1587	rBV	380732	863673	76.28%	15.113%
86	19.659	1679	1682	1685	rBB	409	907	0.08%	0.016%
87	20.170	1726	1732	1734	rBB	352	806	0.07%	0.014%
88	20.323	1743	1747	1749	rBB	406	481	0.04%	0.008%
89	20.537	1766	1768	1770	rBB	412	478	0.04%	0.008%
90	20.762	1786	1790	1791	rBB	349	633	0.06%	0.011%
91	20.823	1795	1796	1799	rBB	428	465	0.04%	0.008%
92	20.946	1804	1808	1810	rBB	342	611	0.05%	0.011%
93	21.467	1855	1859	1861	rBB	395	469	0.04%	0.008%
94	21.773	1887	1889	1891	rBB	617	591	0.05%	0.010%
95	21.844	1895	1896	1901	rBB	396	906	0.08%	0.016%
96	22.028	1910	1914	1916	rBB	360	602	0.05%	0.011%
97	22.273	1937	1938	1943	rBB	335	588	0.05%	0.010%
98	22.416	1950	1952	1955	rBB	391	639	0.06%	0.011%
99	22.641	1971	1974	1976	rBB	469	475	0.04%	0.008%
100	22.845	1993	1994	1998	rBB	333	579	0.05%	0.010%

Sum of corrected areas: 5714876

6M107934.D 8260WTR.M Tue May 15 14:46:50 2012 Page 2

File : C:\MSDCHEM\1\DATA\050612\6M107934.D
Operator : MES
Acquired : 7 May 2012 00:39 using AcqMethod 8260WTR
Instrument : HPMS6
Sample Name: L12050011-05 A 826-SPE
Misc Info : 1,1
Vial Number: 16
Quant File :8260WTR.RES (RTE Integrator)



6M107934.D 8260WTR.M Tue May 15 14:46:51 2012 Page 3

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050612\6M107929.D Vial: 11
Acq On : 6 May 2012 21:57 Operator: MES
Sample : L12050011-06 A 826-SPE Inst : HPMS6
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 10:49:32 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.54	96	453901	25.00 ug/L	0.00
57) Chlorobenzene-d5	15.04	117	311670	25.00 ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	146135	25.00 ug/L	0.00

System Monitoring Compounds

37) Dibromofluoromethane	9.35	111	131549	26.7663 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 107.08%		
43) 1,2-Dichloroethane-d4	10.07	65	124885	25.8917 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 103.56%		
58) Toluene-d8	12.83	98	437902	25.8518 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 103.40%		
80) p-Bromofluorobenzene	16.81	95	153890	26.8363 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 107.36%		

Target Compounds

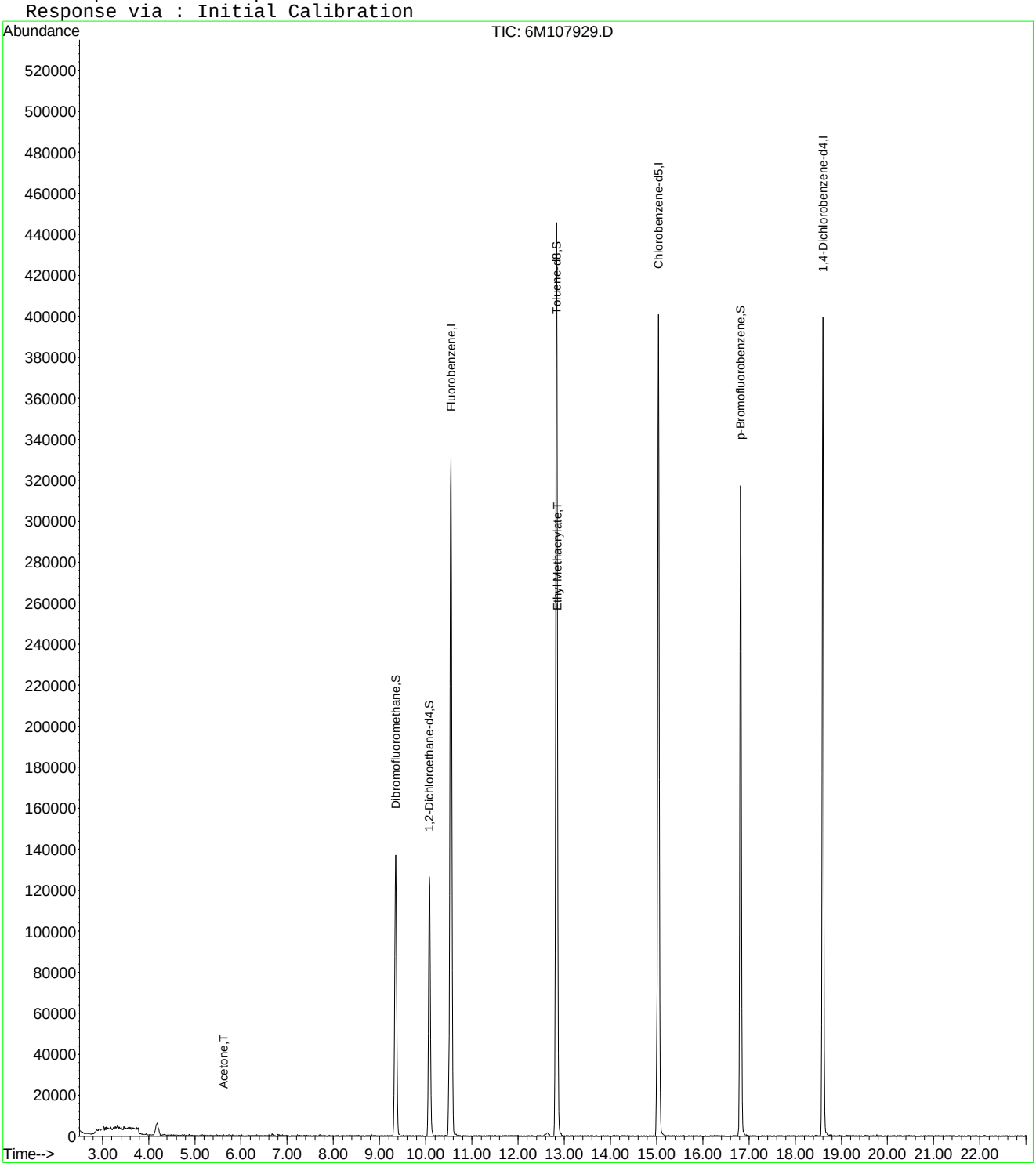
					Qvalue
3) Chloromethane	3.13	50	192	Below Cal	# 43
13) Acetone	5.62	43	184	0.2139 ug/L	# 46
60) Ethyl Methacrylate	12.85	69	391	0.9554 ug/L	# 8

(#) = qualifier out of range (m) = manual integration
6M107929.D 8260WTR.M Fri May 11 10:49:32 2012 Page 1

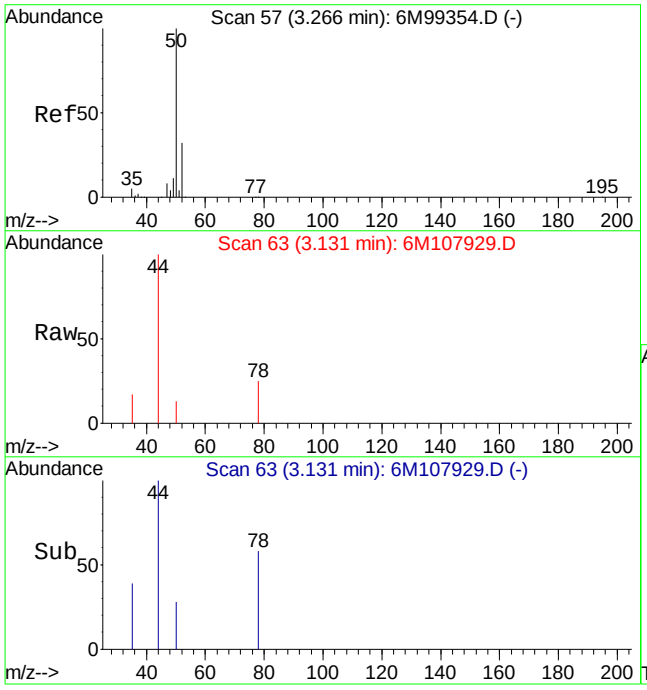
Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050612\6M107929.D Vial: 11
Acq On : 6 May 2012 21:57 Operator: MES
Sample : L12050011-06 A 826-SPE Inst : HPMS6
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 10:49 2012 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Initial Calibration



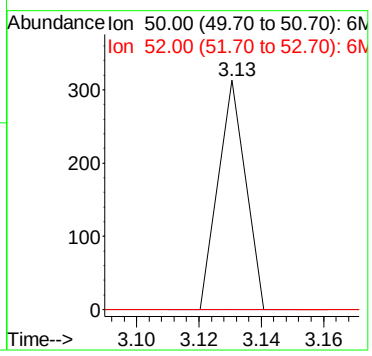
6M107929.D 8260WTR.M Fri May 11 10:49:32 2012 Page 2

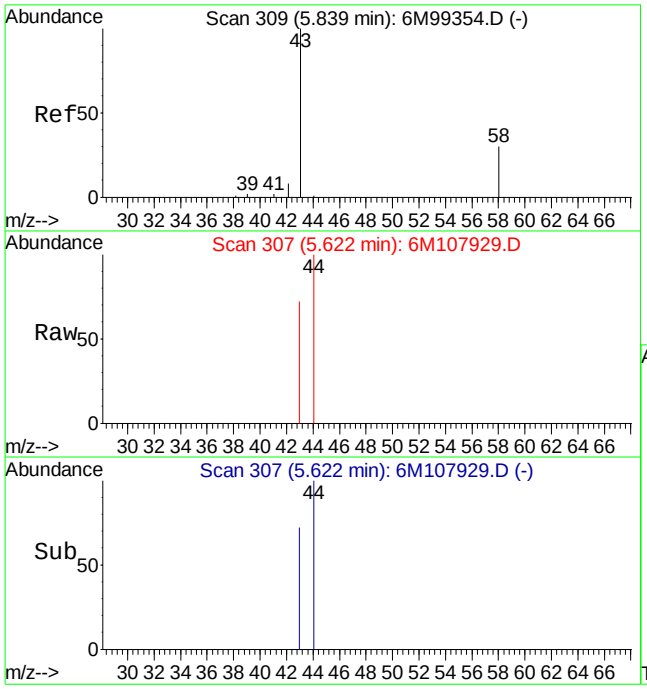


#3
Chloromethane
Concen: Below Cal
RT: 3.13 min Scan# 63
Delta R.T. 0.02 min
Lab File: 6M107929.D
Acq: 6 May 2012 21:57

Tgt Ion: 50 Resp: 192

Ion	Ratio	Lower	Upper
50	100		
52	0.0	18.8	44.0#

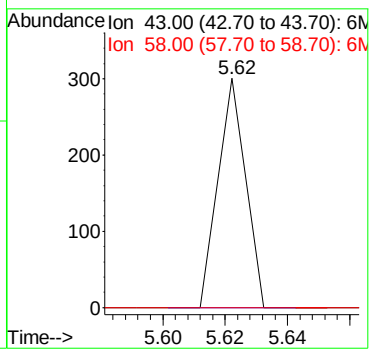


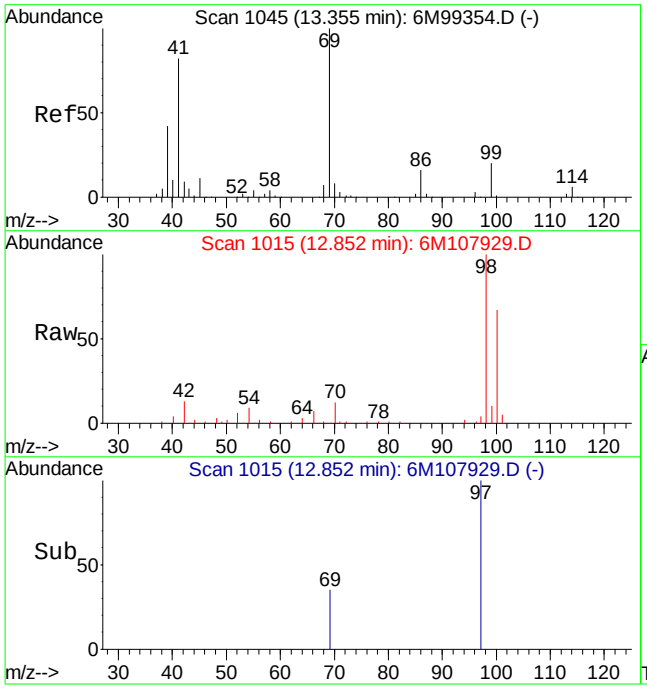


#13
Acetone
Concen: 0.21 ug/L
RT: 5.62 min Scan# 307
Delta R.T. 0.01 min
Lab File: 6M107929.D
Acq: 6 May 2012 21:57

Tgt Ion: 43 Resp: 184

Ion	Ratio	Lower	Upper
43	100		
58	0.0	17.3	40.3#

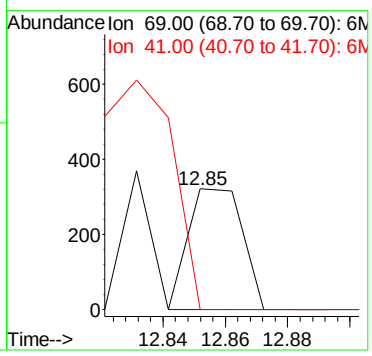




#60
Ethyl Methacrylate
Concen: 0.96 ug/L
RT: 12.85 min Scan# 1015
Delta R.T. -0.27 min
Lab File: 6M107929.D
Acq: 6 May 2012 21:57

Tgt Ion: 69 Resp: 391

Ion	Ratio	Lower	Upper
69	100		
41	0.0	49.4	115.4#



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\050612\6M107929.D Vial: 11
Acq On : 6 May 2012 21:57 Operator: MES
Sample : L12050011-06 A 826-SPE 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 04/25/12 - 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	4.192	159	167	174	rVB4	6057	26334	2.21%	0.459%
2	4.979	243	244	250	rBV	659	1920	0.16%	0.033%
3	5.132	254	259	260	rBV	686	1644	0.14%	0.029%
4	5.367	281	282	287	rBV	455	1458	0.12%	0.025%
5	5.540	298	299	305	rBV	481	1730	0.15%	0.030%
6	5.622	305	307	310	rVB	717	1128	0.09%	0.020%
7	5.694	310	314	317	rBV	495	1735	0.15%	0.030%
8	5.908	333	335	337	rBB	468	768	0.06%	0.013%
9	5.959	337	340	343	rBV	501	1577	0.13%	0.027%
10	6.163	355	360	363	rBV	540	1760	0.15%	0.031%
11	6.541	392	397	399	rBB	542	1455	0.12%	0.025%
12	6.602	402	403	407	rBV	691	1372	0.12%	0.024%
13	6.674	407	410	415	rVB	1223	3099	0.26%	0.054%
14	6.796	419	422	427	rBV	1098	2910	0.24%	0.051%
15	7.225	460	464	469	rBB	705	1791	0.15%	0.031%
16	7.327	469	474	475	rBB	460	1225	0.10%	0.021%
17	7.368	475	478	481	rBB	509	1242	0.10%	0.022%
18	7.409	481	482	485	rBB	743	1002	0.08%	0.017%
19	7.450	485	486	489	rBB	405	701	0.06%	0.012%
20	7.511	489	492	494	rBB	395	690	0.06%	0.012%
21	7.593	497	500	502	rBV	446	1148	0.10%	0.020%
22	7.705	507	511	517	rBB	771	2271	0.19%	0.040%
23	7.797	517	520	523	rBB	527	1285	0.11%	0.022%
24	7.920	527	532	534	rBB	586	1423	0.12%	0.025%
25	7.991	537	539	543	rBB	423	879	0.07%	0.015%
26	8.052	544	545	547	rBV	389	649	0.05%	0.011%
27	8.195	554	559	563	rBB	424	1369	0.11%	0.024%
28	8.277	565	567	571	rBB	415	1183	0.10%	0.021%
29	8.359	571	575	578	rBV	806	1536	0.13%	0.027%
30	8.420	578	581	583	rVB	371	825	0.07%	0.014%
31	8.481	586	587	590	rBB	411	678	0.06%	0.012%
32	8.543	590	593	597	rBB	483	1337	0.11%	0.023%
33	8.716	608	610	613	rBB	453	900	0.08%	0.016%
34	8.788	613	617	618	rBB	429	963	0.08%	0.017%
35	8.829	618	621	623	rBB	720	891	0.07%	0.016%
36	8.900	623	628	633	rBB	508	1764	0.15%	0.031%
37	8.992	633	637	638	rBB	405	648	0.05%	0.011%
38	9.053	640	643	645	rBB	380	869	0.07%	0.015%
39	9.186	653	656	657	rBB	450	710	0.06%	0.012%
40	9.349	664	672	684	rBB	137278	415475	34.85%	7.234%
41	9.605	695	697	700	rBB	436	969	0.08%	0.017%
42	9.656	700	702	706	rBB	352	1000	0.08%	0.017%

43	9.717	707	708	712	rBB	388	666	0.06%	0.012%
44	9.778	713	714	718	rBB	395	865	0.07%	0.015%
45	10.074	735	743	754	rBB	126505	357261	29.97%	6.220%
46	10.299	759	765	766	rBB	387	1079	0.09%	0.019%
47	10.340	767	769	772	rBB	382	833	0.07%	0.015%
48	10.432	773	778	780	rBV	481	1517	0.13%	0.026%
49	10.544	780	789	804	rBV	331060	986260	82.73%	17.172%
50	10.820	812	816	818	rBB	364	817	0.07%	0.014%
51	11.085	841	842	845	rBB	388	667	0.06%	0.012%
52	11.157	846	849	852	rBB	376	871	0.07%	0.015%
53	11.320	863	865	867	rBB	408	701	0.06%	0.012%
54	11.371	867	870	874	rBB	389	1224	0.10%	0.021%
55	11.504	880	883	886	rBB	440	954	0.08%	0.017%
56	11.749	901	907	909	rBB	409	1463	0.12%	0.025%
57	11.800	909	912	913	rBB	378	680	0.06%	0.012%
58	11.841	913	916	921	rBB	365	1405	0.12%	0.024%
59	11.943	923	926	927	rBB	439	715	0.06%	0.012%
60	12.004	928	932	934	rBB	421	972	0.08%	0.017%
61	12.290	958	960	963	rBB	442	922	0.08%	0.016%
62	12.433	970	974	976	rBB	490	920	0.08%	0.016%
63	12.464	976	977	981	rBB	393	900	0.08%	0.016%
64	12.637	984	994	1001	rBB	1713	8576	0.72%	0.149%
65	12.831	1005	1013	1025	rBV	445866	1192209	100.00%	20.758%
66	13.148	1041	1044	1045	rBB	468	726	0.06%	0.013%
67	13.352	1059	1064	1066	rBB	438	875	0.07%	0.015%
68	13.710	1094	1099	1101	rBB	450	847	0.07%	0.015%
69	13.863	1110	1114	1116	rBB	363	842	0.07%	0.015%
70	14.271	1150	1154	1155	rBB	395	647	0.05%	0.011%
71	14.363	1162	1163	1168	rBB	402	662	0.06%	0.012%
72	15.037	1222	1229	1244	rBB	400969	1001038	83.96%	17.429%
73	15.241	1248	1249	1253	rBB	442	922	0.08%	0.016%
74	15.783	1301	1302	1307	rBB	375	652	0.05%	0.011%
75	16.201	1341	1343	1345	rBB	377	651	0.05%	0.011%
76	16.273	1346	1350	1351	rBB	430	860	0.07%	0.015%
77	16.324	1351	1355	1356	rBB	383	843	0.07%	0.015%
78	16.814	1397	1403	1420	rBB	317327	757314	63.52%	13.186%
79	17.273	1446	1448	1453	rBB	351	793	0.07%	0.014%
80	17.375	1457	1458	1462	rBB	395	687	0.06%	0.012%
81	17.855	1501	1505	1506	rBB	398	841	0.07%	0.015%
82	18.448	1560	1563	1564	rBB	663	842	0.07%	0.015%
83	18.601	1571	1578	1590	rBV	399522	901204	75.59%	15.691%
84	18.968	1611	1614	1615	rBB	483	702	0.06%	0.012%
85	19.193	1633	1636	1639	rBB	380	1068	0.09%	0.019%
86	19.244	1639	1641	1645	rBB	408	1050	0.09%	0.018%
87	19.520	1664	1668	1670	rBV	499	1223	0.10%	0.021%
88	20.153	1727	1730	1733	rBB	419	885	0.07%	0.015%
89	20.214	1734	1736	1739	rBB	475	1018	0.09%	0.018%
90	20.296	1739	1744	1746	rBB	376	995	0.08%	0.017%
91	20.470	1759	1761	1764	rBB	551	938	0.08%	0.016%
92	20.796	1790	1793	1798	rBB	446	1074	0.09%	0.019%
93	20.888	1798	1802	1803	rBB	413	658	0.06%	0.011%
94	20.970	1809	1810	1813	rBB	376	665	0.06%	0.012%
95	21.021	1814	1815	1819	rBB	389	872	0.07%	0.015%
96	21.092	1821	1822	1828	rBB	351	813	0.07%	0.014%
97	21.195	1831	1832	1836	rBB	471	927	0.08%	0.016%
98	21.542	1864	1866	1870	rBB	464	704	0.06%	0.012%
99	21.746	1883	1886	1888	rBB	447	697	0.06%	0.012%
100	22.093	1916	1920	1925	rBB	509	1114	0.09%	0.019%

Sum of corrected areas: 5743439

6M107929.D 8260WTR.M Tue May 15 14:46:47 2012 Page 2

```
File        : C:\MSDCHEM\1\DATA\050612\6M107929.D
Operator    : MES
Acquired    :  6 May 2012  21:57     using AcqMethod 8260WTR
Instrument  :   HPMS6
Sample Name: L12050011-06 A 826-SPE
Misc Info   : 1,1
Vial Number: 11
Quant File :8260WTR.RES (RTE Integrator)
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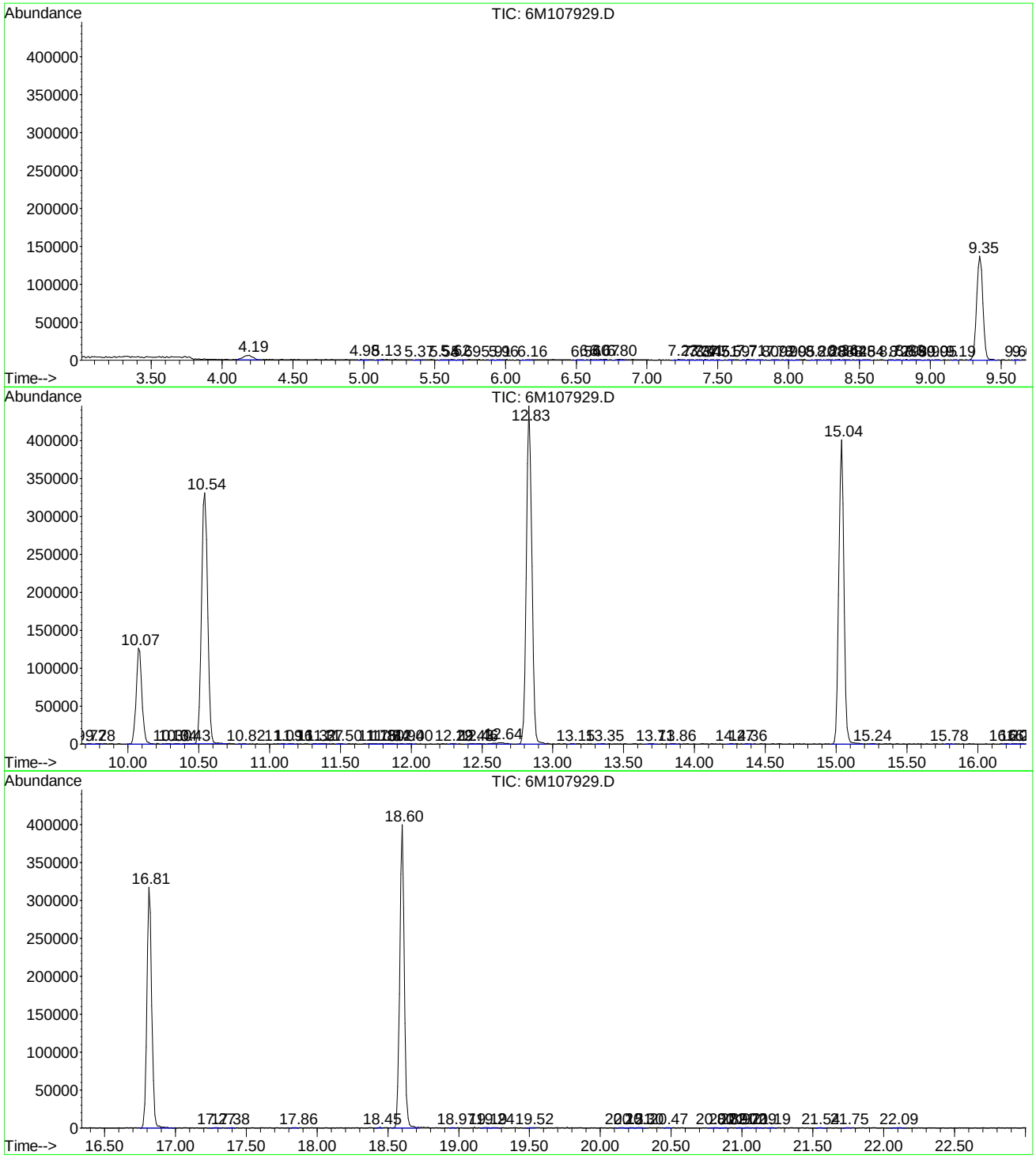


2.1.1.4 Standards Data

Quantitation Report (Not Reviewed)

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 826A9FOO 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: A9FOOWTR.RES

Quant Method : C:\MSDCHEM\2\METHODS\A9FOOWTR.M (RTE Integrator)
Title : A9-FOO 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

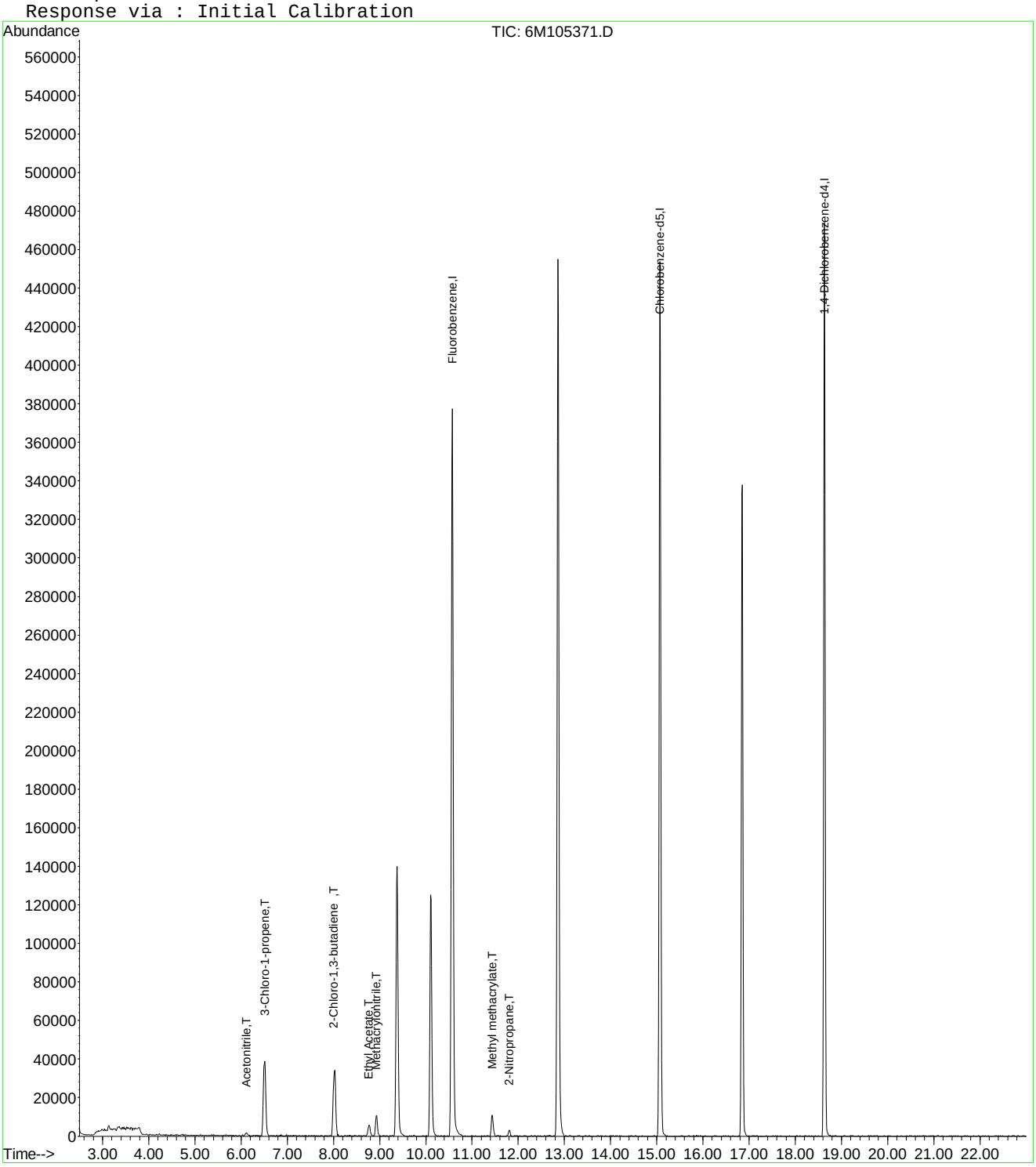
Target Compounds					Qvalue
2) Acetonitrile	6.11	41	1900	3.8474 ug/L #	1
3) 3-Chloro-1-propene	6.51	41	51181	4.3471 ug/L	99
4) 2-Chloro-1,3-butadiene	8.01	53	44354	3.9841 ug/L #	29
5) Ethyl Acetate	8.76	43	13368	4.1127 ug/L #	100
6) Methacrylonitrile	8.93	67	5420	3.9672 ug/L	98
9) Methyl methacrylate	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 A9FOOWTR.M Thu Feb 02 15:11:53 2012 Page 1

Quantitation Report (Not Reviewed)

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 826A9FOO 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: A9FOOWTR.RES

Method : C:\MSDCHEM\2\METHODS\A9FOOWTR.M (RTE Integrator)
Title : A9-FOO Water - IC: 01/25/12 - HPMS6
Last Update : Thu Feb 02 09:44:46 2012
Response via : Initial Calibration



6M105371.D A9FOOWTR.M Thu Feb 02 15:11:54 2012 Page 2

Quantitation Report (Not Reviewed)

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 826A9FOO 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: A9FOOWTR.RES

Quant Method : C:\MSDCHEM\2\METHODS\A9FOOWTR.M (RTE Integrator)
Title : A9-FOO 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

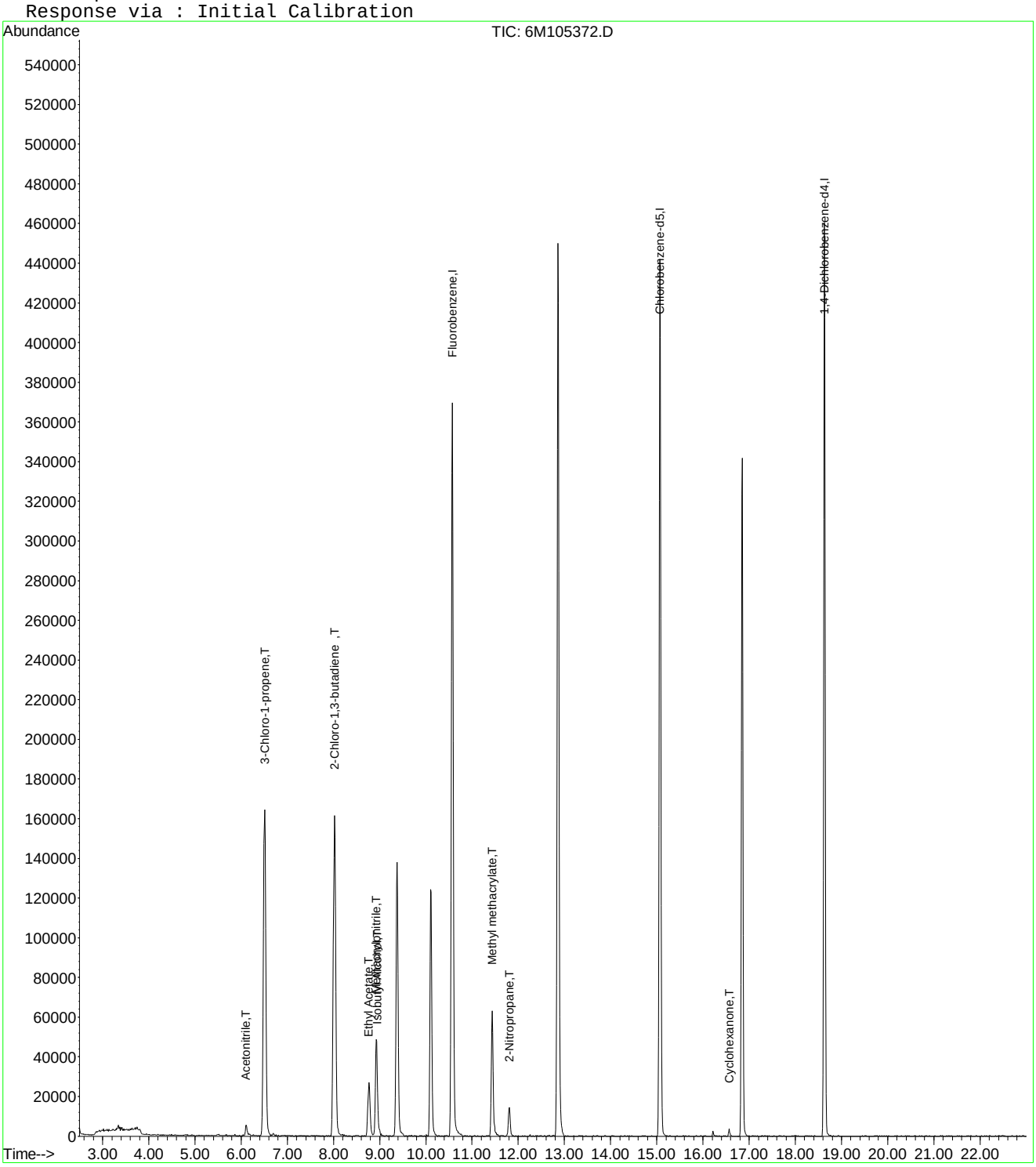
Target Compounds					Qvalue
2) Acetonitrile	6.10	41	8738	18.1873 ug/L	92
3) 3-Chloro-1-propene	6.51	41	209591	18.2980 ug/L	99
4) 2-Chloro-1,3-butadiene	8.02	53	194300	17.9398 ug/L	98
5) Ethyl Acetate	8.76	43	57089	18.0532 ug/L #	100
6) Methacrylonitrile	8.93	67	22789	17.1456 ug/L	94
7) Isobutyl Alcohol	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 A9FOOWTR.M Thu Feb 02 15:11:55 2012 Page 1

Quantitation Report (Not Reviewed)

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 826A9FOO 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: A9FOOWTR.RES

Method : C:\MSDCHEM\2\METHODS\A9FOOWTR.M (RTE Integrator)
Title : A9-FOO Water - IC: 01/25/12 - HPMS6
Last Update : Thu Feb 02 09:44:46 2012
Response via : Initial Calibration



6M105372.D A9FOOWTR.M Thu Feb 02 15:11:55 2012 Page 2

Quantitation Report (Not Reviewed)

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 826A9FOO 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: A9FOOWTR.RES

Quant Method : C:\MSDCHEM\2\METHODS\A9FOOWTR.M (RTE Integrator)
Title : A9-FOO 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

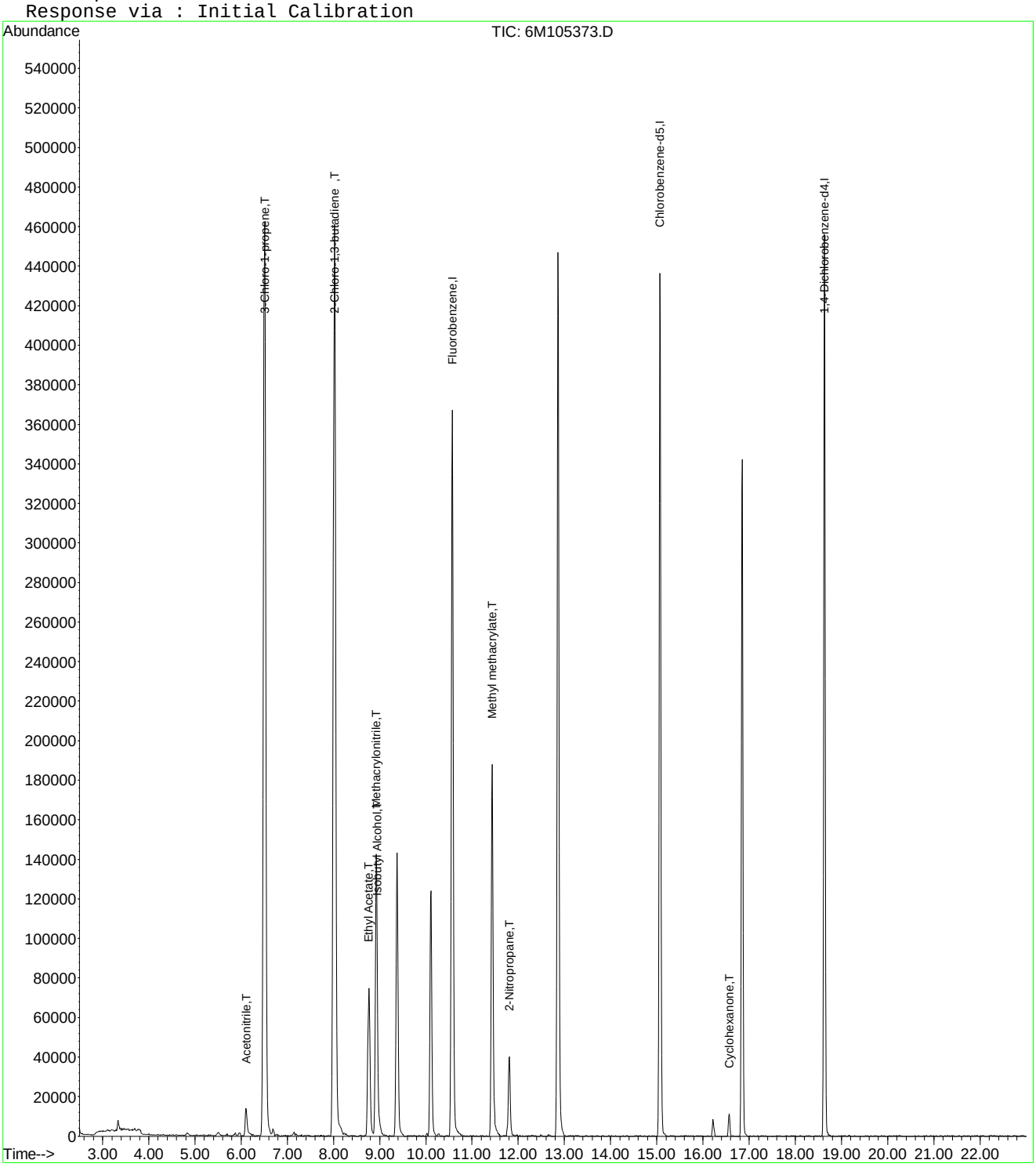
Target Compounds					Qvalue
2) Acetonitrile	6.11	41	24875	51.9208 ug/L	96
3) 3-Chloro-1-propene	6.51	41	587071	51.3977 ug/L	100
4) 2-Chloro-1,3-butadiene	8.02	53	557757	51.6431 ug/L	100
5) Ethyl Acetate	8.76	43	155016	49.1587 ug/L #	100
6) Methacrylonitrile	8.93	67	67503	50.9299 ug/L	98
7) Isobutyl Alcohol	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 A9FOOWTR.M Thu Feb 02 15:11:56 2012 Page 1

Quantitation Report (Not Reviewed)

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 826A9FOO 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: A9FOOWTR.RES

Method : C:\MSDCHEM\2\METHODS\A9FOOWTR.M (RTE Integrator)
Title : A9-FOO Water - IC: 01/25/12 - HPMS6
Last Update : Thu Feb 02 09:44:46 2012
Response via : Initial Calibration



6M105373.D A9FOOWTR.M Thu Feb 02 15:11:56 2012 Page 2

Quantitation Report (Not Reviewed)

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 826A9FOO 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: A9FOOWTR.RES

Quant Method : C:\MSDCHEM\2\METHODS\A9FOOWTR.M (RTE Integrator)
Title : A9-FOO 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

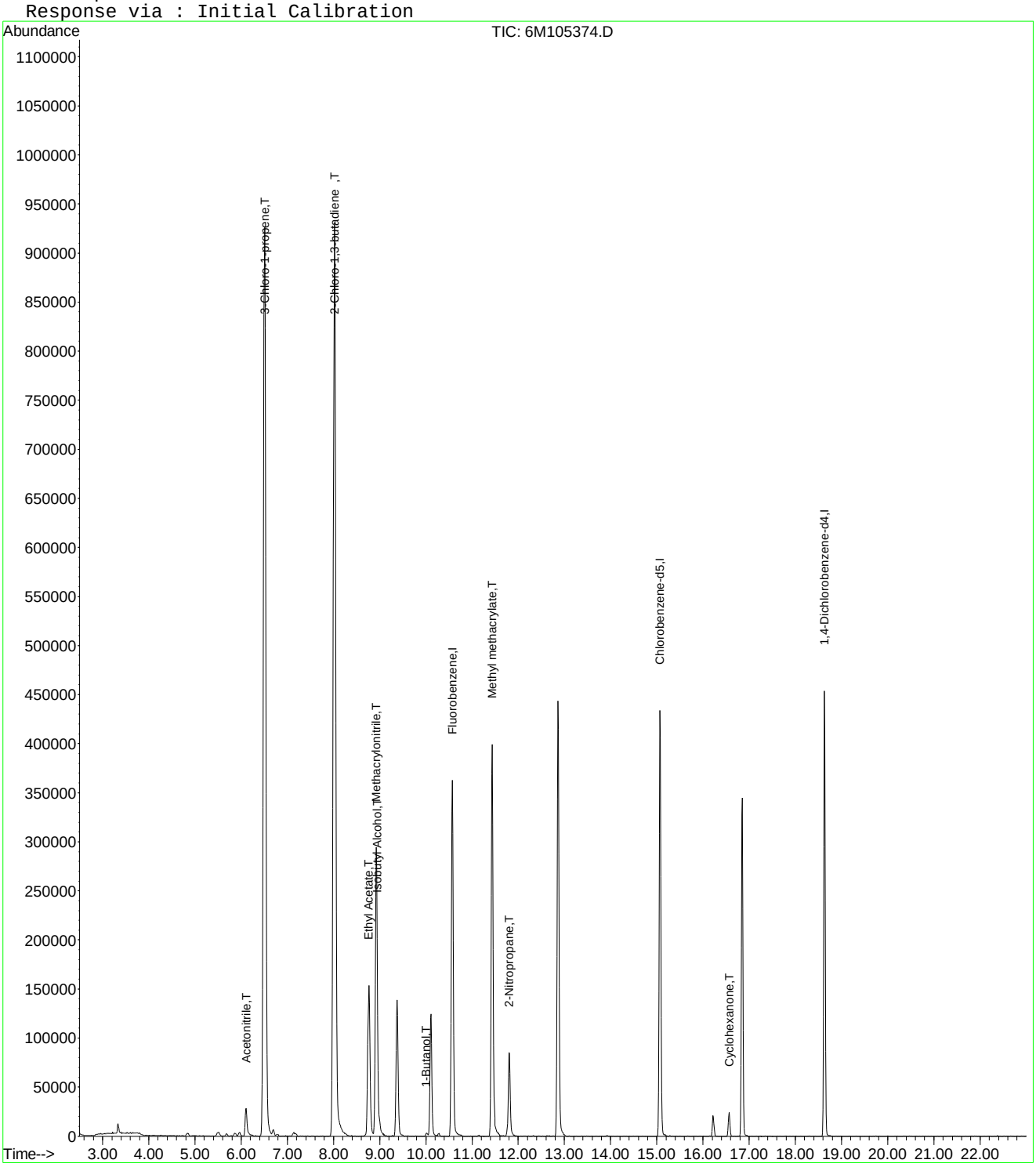
Target Compounds					Qvalue
2) Acetonitrile	6.11	41	49127	103.3162 ug/L	100
3) 3-Chloro-1-propene	6.51	41	1180872	104.1659 ug/L	100
4) 2-Chloro-1,3-butadiene	8.02	53	1129950	105.4136 ug/L	100
5) Ethyl Acetate	8.76	43	319926	102.2217 ug/L #	100
6) Methacrylonitrile	8.93	67	135748	103.1936 ug/L	100
7) 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 A9FOOWTR.M Thu Feb 02 15:11:57 2012 Page 1

Quantitation Report (Not Reviewed)

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 826A9FOO 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: A9FOOWTR.RES

Method : C:\MSDCHEM\2\METHODS\A9FOOWTR.M (RTE Integrator)
Title : A9-FOO Water - IC: 01/25/12 - HPMS6
Last Update : Thu Feb 02 09:44:46 2012
Response via : Initial Calibration



6M105374.D A9FOOWTR.M Thu Feb 02 15:11:58 2012 Page 2

Quantitation Report (Not Reviewed)

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 826A9FOO 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: A9FOOWTR.RES

Quant Method : C:\MSDCHEM\2\METHODS\A9FOOWTR.M (RTE Integrator)
Title : A9-FOO 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

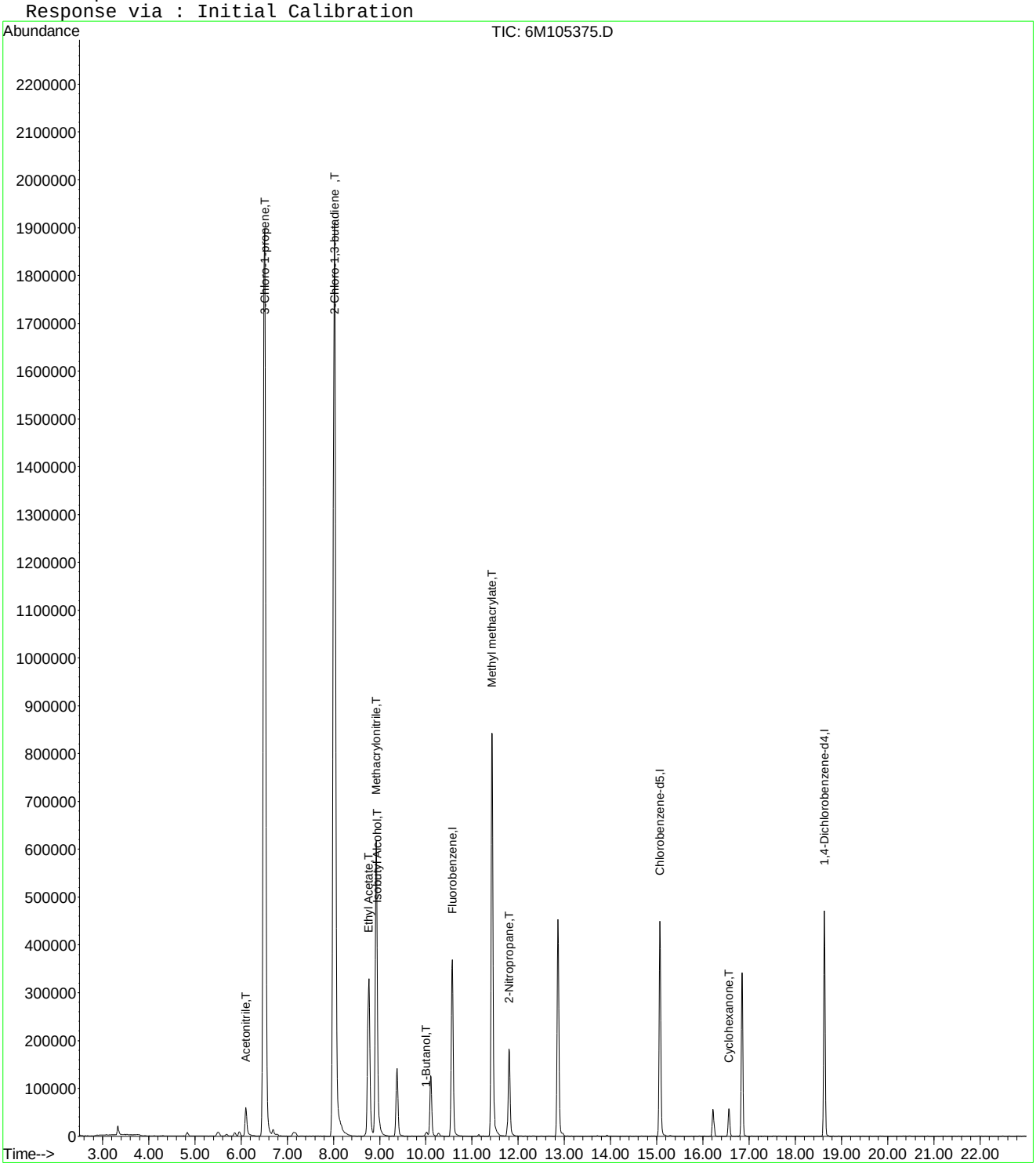
Target Compounds					Qvalue
2) Acetonitrile	6.10	41	104721	214.9064 ug/L	98
3) 3-Chloro-1-propene	6.51	41	2451072	210.9824 ug/L	99
4) 2-Chloro-1,3-butadiene	8.02	53	2371831	215.9180 ug/L	100
5) Ethyl Acetate	8.77	43	681737	212.5582 ug/L #	100
6) Methacrylonitrile	8.93	67	292287	216.8185 ug/L	98
7) Isobutyl 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 A9FOOWTR.M Thu Feb 02 15:11:58 2012 Page 1

Quantitation Report (Not Reviewed)

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 826A9FOO 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: A9FOOWTR.RES

Method : C:\MSDCHEM\2\METHODS\A9FOOWTR.M (RTE Integrator)
Title : A9-FOO Water - IC: 01/25/12 - HPMS6
Last Update : Thu Feb 02 09:44:46 2012
Response via : Initial Calibration



6M105375.D A9FOOWTR.M Thu Feb 02 15:11:59 2012 Page 2

Quantitation Report (Not Reviewed)

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 826A9FOO 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: A9FOOWTR.RES

Quant Method : C:\MSDCHEM\2\METHODS\A9FOOWTR.M (RTE Integrator)
Title : A9-FOO 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

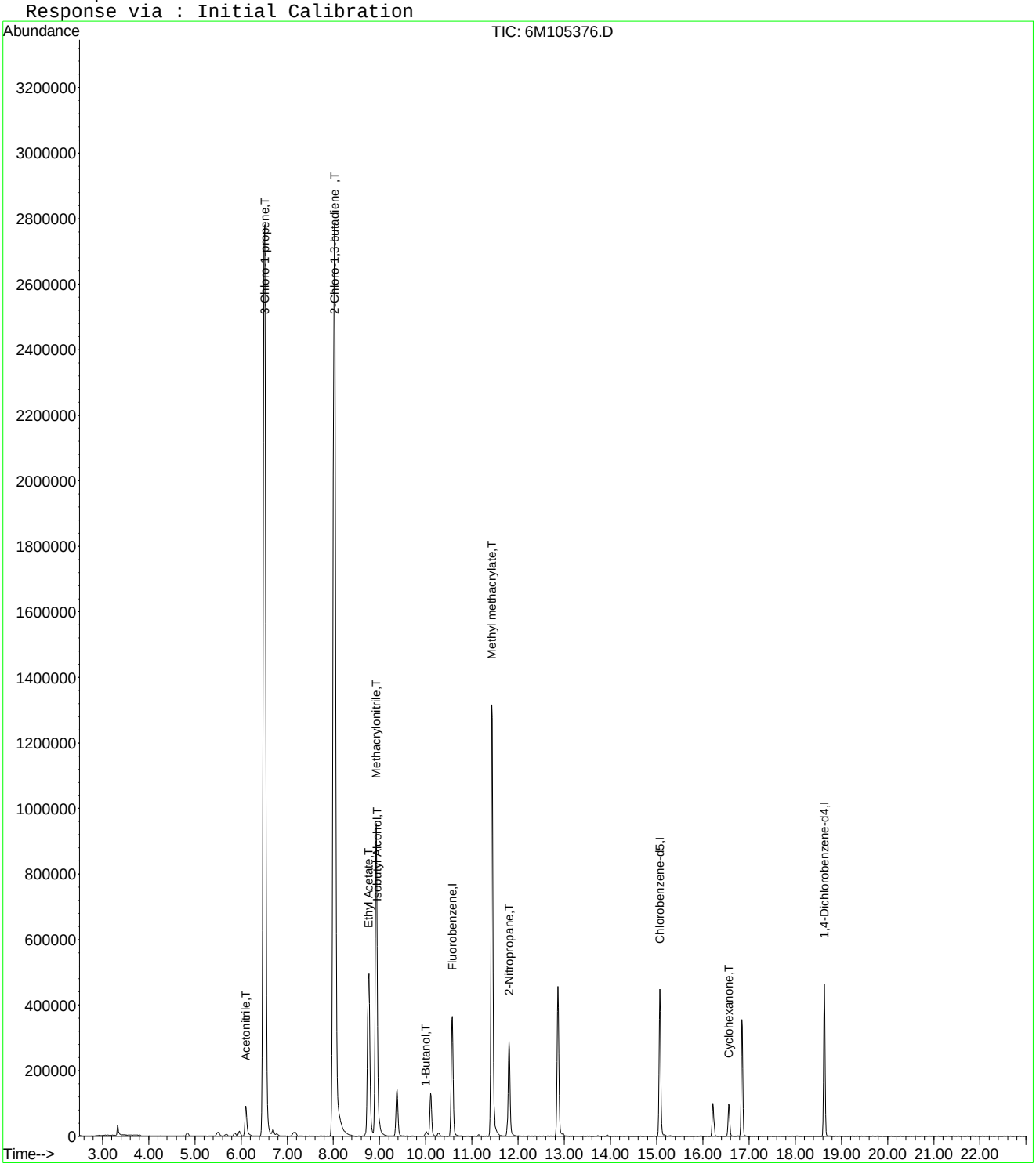
Target Compounds					Qvalue
2) Acetonitrile	6.10	41	156947	323.3252 ug/L	98
3) 3-Chloro-1-propene	6.51	41	3628216	313.5120 ug/L	100
4) 2-Chloro-1,3-butadiene	8.02	53	3511500	320.8992 ug/L	100
5) Ethyl Acetate	8.77	43	1044658	326.9686 ug/L #	100
6) Methacrylonitrile	8.93	67	444609	331.0823 ug/L	99
7) 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 A9FOOWTR.M Thu Feb 02 15:12:00 2012 Page 1

Quantitation Report (Not Reviewed)

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 826A9FOO 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: A9FOOWTR.RES

Method : C:\MSDCHEM\2\METHODS\A9FOOWTR.M (RTE Integrator)
Title : A9-FOO Water - IC: 01/25/12 - HPMS6
Last Update : Thu Feb 02 09:44:46 2012
Response via : Initial Calibration



6M105376.D A9FOOWTR.M Thu Feb 02 15:12:00 2012 Page 2

Quantitation Report (Not Reviewed)

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 826A9FOO 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: A9FOOWTR.RES

Quant Method : C:\MSDCHEM\2\METHODS\A9FOOWTR.M (RTE Integrator)
Title : A9-FOO 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

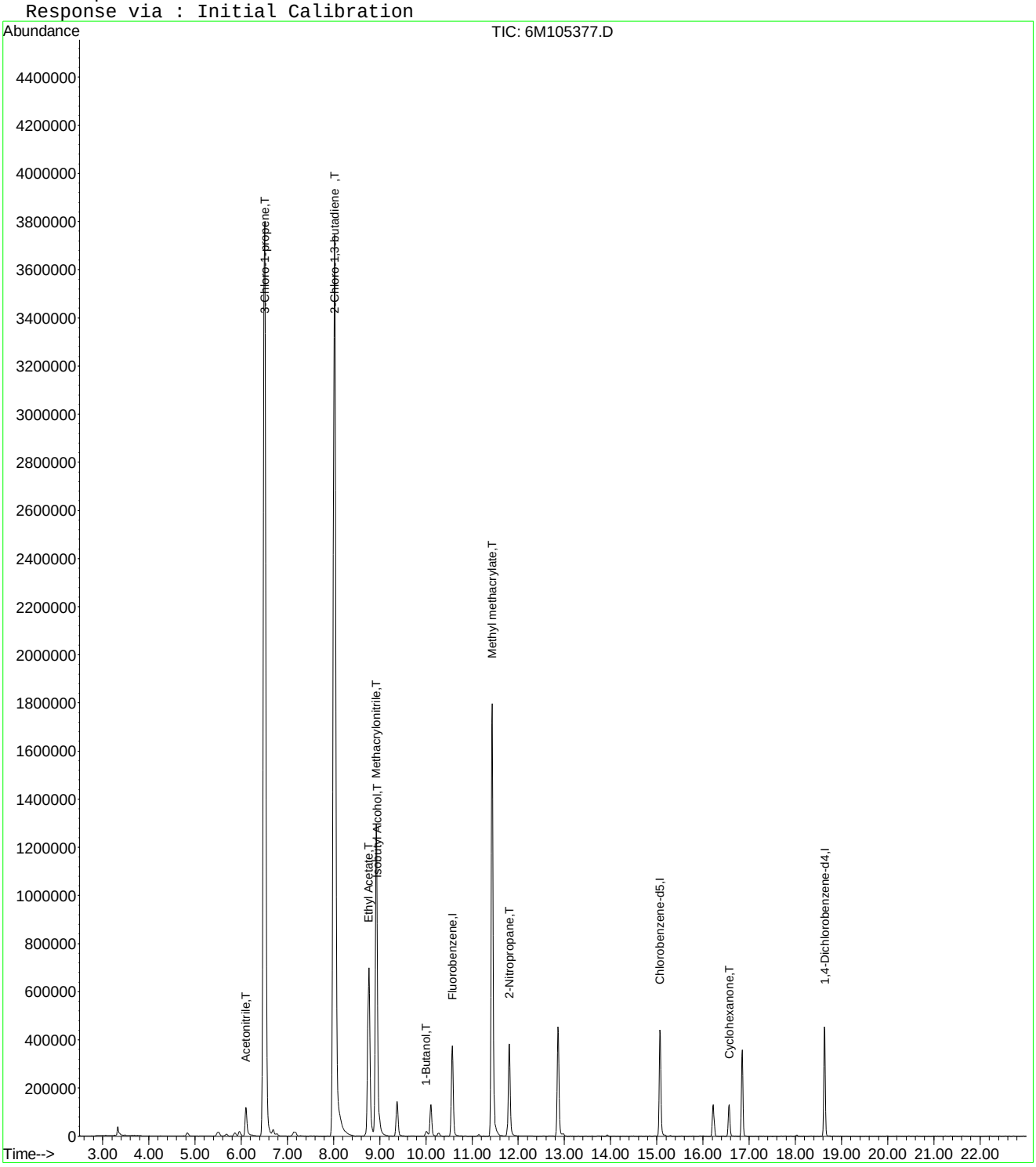
Target Compounds					Qvalue
2) Acetonitrile	6.10	41	215914	438.9189 ug/L	97
3) 3-Chloro-1-propene	6.51	41	4907559	418.4500 ug/L	99
4) 2-Chloro-1,3-butadiene	8.02	53	4745927	427.9707 ug/L	100
5) Ethyl Acetate	8.76	43	1446302	446.6917 ug/L #	100
6) Methacrylonitrile	8.93	67	604809	444.4194 ug/L	100
7) 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 A9FOOWTR.M Thu Feb 02 15:12:01 2012 Page 1

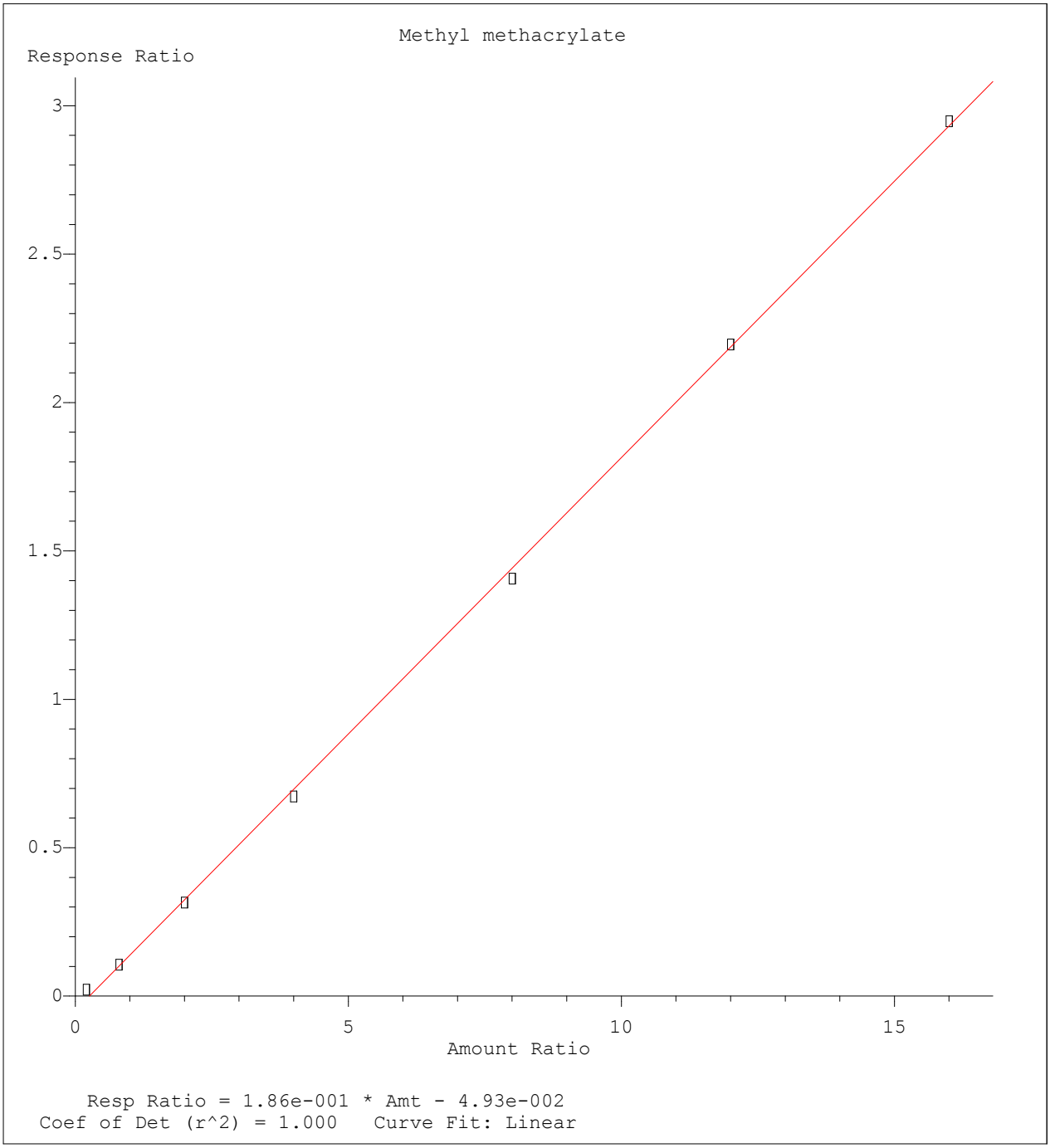
Quantitation Report (Not Reviewed)

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 826A9FOO 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: A9FOOWTR.RES

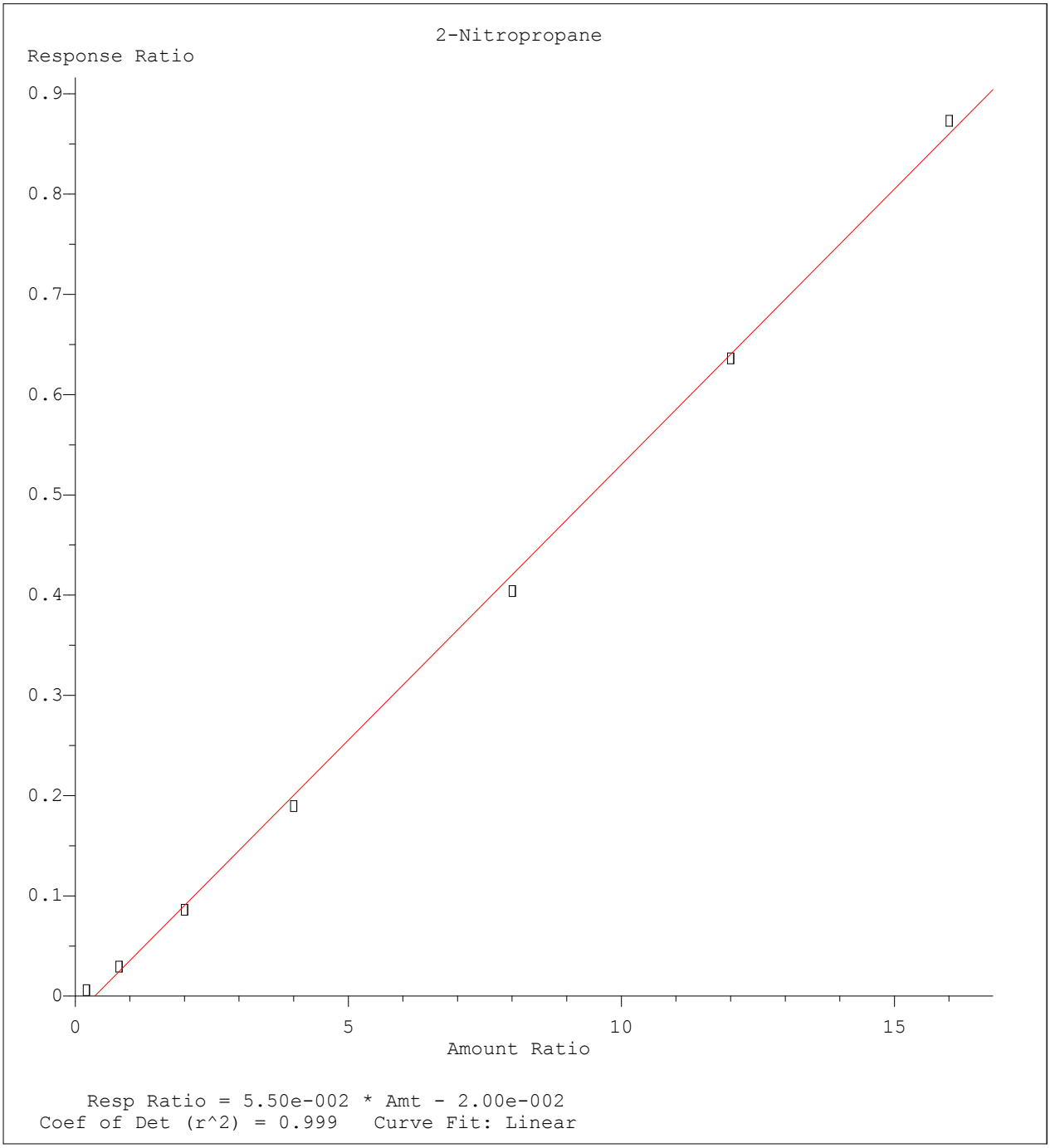
Method : C:\MSDCHEM\2\METHODS\A9FOOWTR.M (RTE Integrator)
Title : A9-FOO Water - IC: 01/25/12 - HPMS6
Last Update : Thu Feb 02 09:44:46 2012
Response via : Initial Calibration



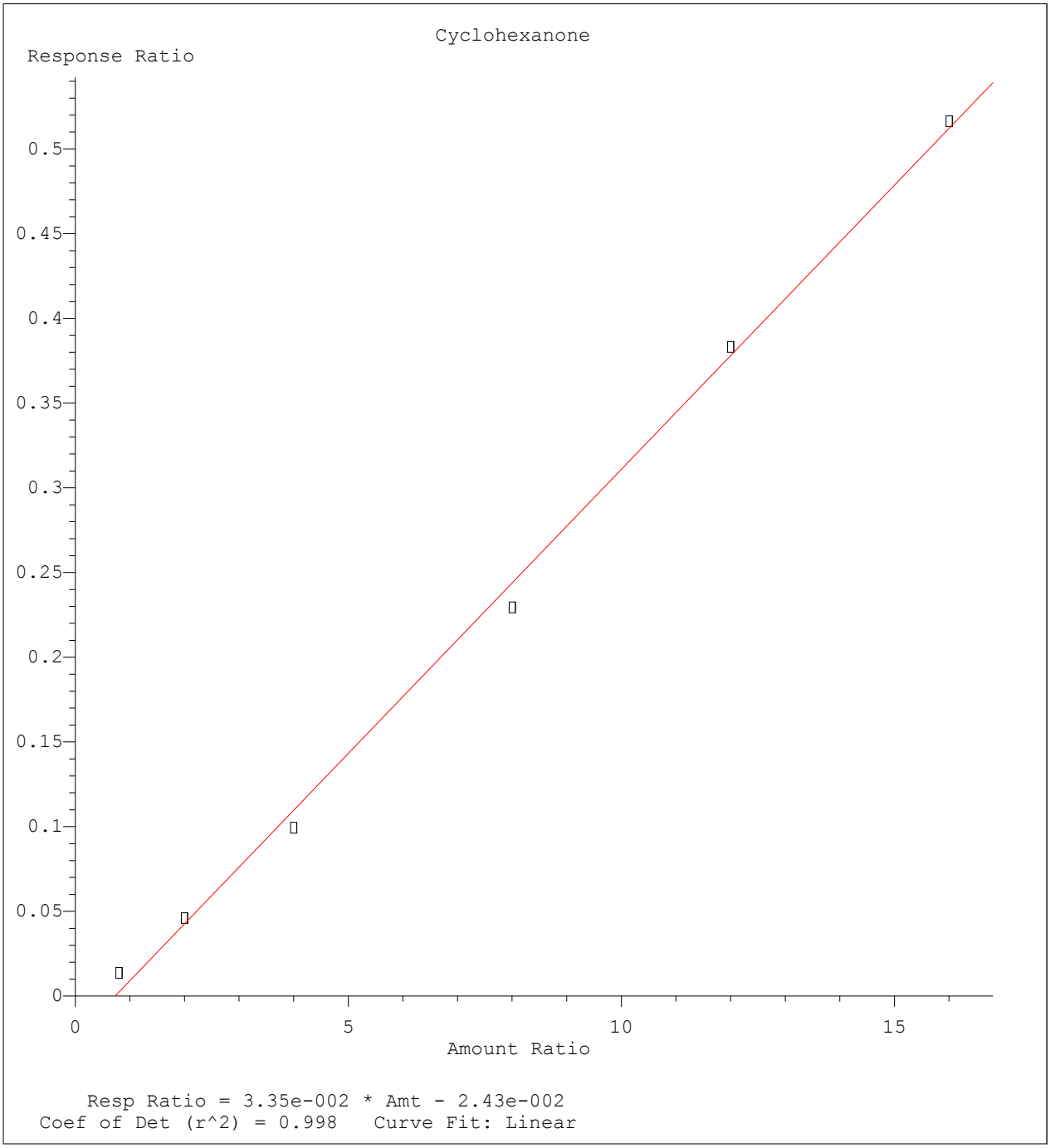
6M105377.D A9FOOWTR.M Thu Feb 02 15:12:01 2012 Page 2



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

Quantitation Report (Not Reviewed)

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 826A9FOO 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: A9FOOWTR.RES

Quant Method : C:\MSDCHEM\2\METHODS\A9FOOWTR.M (RTE Integrator)
Title : A9-FOO 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

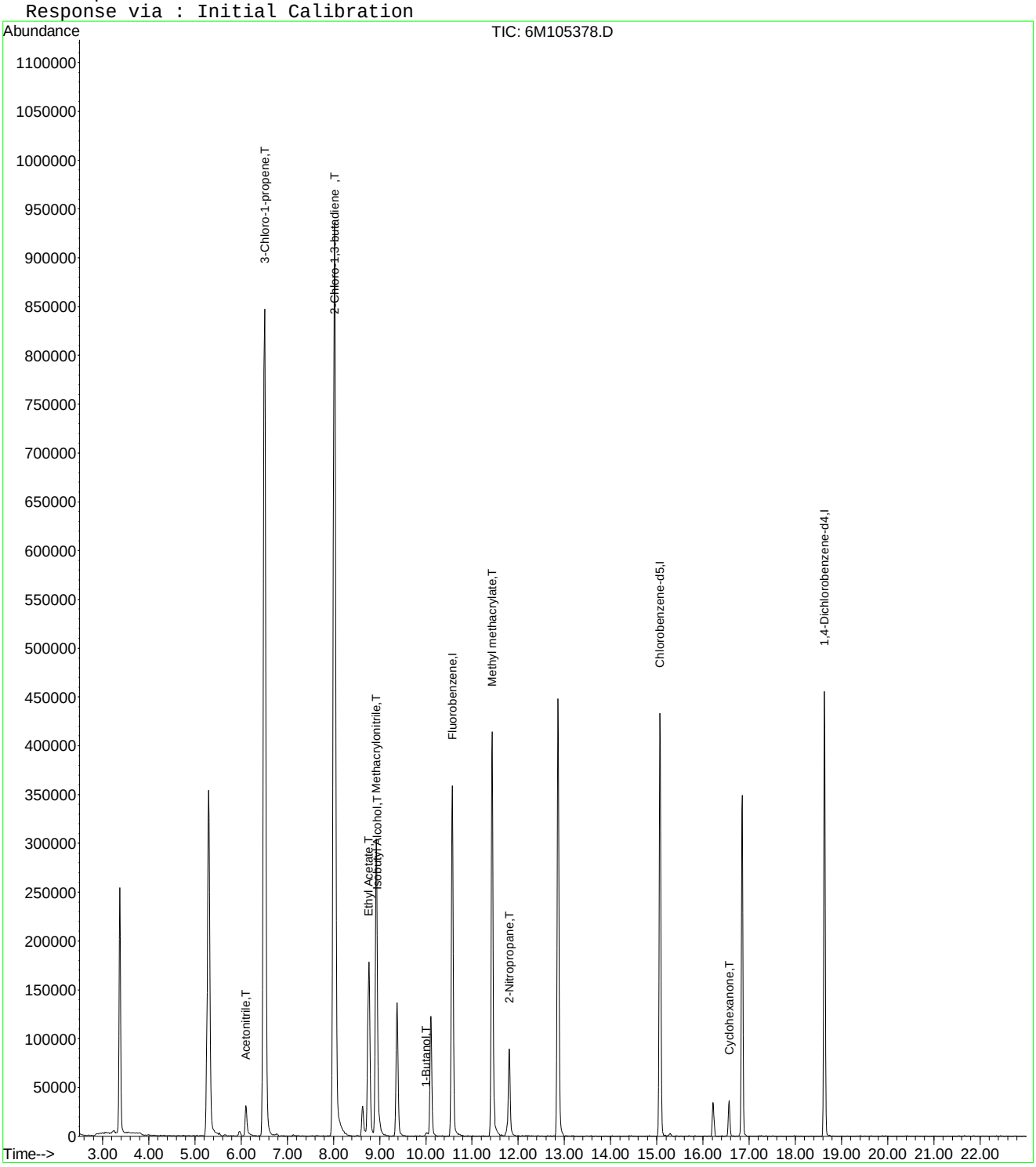
Target Compounds					Qvalue
2) Acetonitrile	6.10	41	54059	115.7031 ug/L	98
3) 3-Chloro-1-propene	6.51	41	1081081	97.0531 ug/L	100
4) 2-Chloro-1,3-butadiene	8.02	53	1145123	108.7223 ug/L	100
5) Ethyl Acetate	8.76	43	375275	122.0315 ug/L #	100
6) Methacrylonitrile	8.93	67	141969	109.8352 ug/L	100
7) Isobutyl 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 A9FOOWTR.M Thu Feb 02 15:12:02 2012 Page 1

Quantitation Report (Not Reviewed)

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 826A9FOO 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: A9FOOWTR.RES

Method : C:\MSDCHEM\2\METHODS\A9FOOWTR.M (RTE Integrator)
Title : A9-FOO Water - IC: 01/25/12 - HPMS6
Last Update : Thu Feb 02 09:44:46 2012
Response via : Initial Calibration



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 826A9FOO QC Inst : HPMS6
Misc : 1,1 STD49721 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\2\METHODS\A9FOOWTR.M (RTE Integrator)
Title : A9-FOO 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 A9FOOWTR.M Thu Feb 02 11:06:34 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\042512\6M107639.D Vial: 3
Acq On : 25 Apr 2012 9:49 Operator: ADC
Sample : WG396001-02 0.3 ug/L STD 8260 Inst : HPMS6
Misc : 1,1 STD51130 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 25 15:08:24 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:04:52 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.54	96	625762	25.00 ug/L	0.00
57) Chlorobenzene-d5	15.04	117	405212	25.00 ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	186071	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	0.00	98	0	0.0000 ug/L	
Spiked Amount 25.000	Range 88 - 110		Recovery =	0.00%#	
80) p-Bromofluorobenzene	0.00	95	0	0.0000 ug/L	
Spiked Amount 25.000	Range 86 - 115		Recovery =	0.00%#	

Target Compounds					Qvalue
3) Chloromethane	3.10	50	512	Below Cal #	1
14) 1,1-Dichloroethene	5.84	61	3084	0.2687 ug/L	96
18) Methyl acetate	6.43	43	771	0.1648 ug/L #	64
19) Methylene Chloride	6.66	84	2156	0.3032 ug/L	99
22) Methyl Tert Butyl Ether	6.94	73	4063	0.2712 ug/L #	51
23) trans-1,2-Dichloroethene	7.16	96	1668	0.2402 ug/L	92
27) 1,1-Dichloroethane	7.85	63	3358	0.2367 ug/L #	56
31) 2,2-Dichloropropane	8.71	77	3096	0.2887 ug/L	86
32) cis-1,2-Dichloroethene	8.79	96	2093	0.2885 ug/L	74
33) Chloroform	9.02	83	3699	0.2885 ug/L #	90
35) Bromochloromethane	9.28	130	1033	0.3188 ug/L #	38
38) 1,1,1-Trichloroethane	9.63	97	3315	0.2960 ug/L	81
40) 1,1-Dichloropropene	9.84	75	3075	0.3328 ug/L #	71
42) Carbon Tetrachloride	10.00	117	2402	0.2423 ug/L #	87
45) 1,2-Dichloroethane	10.21	62	1966	0.2232 ug/L #	73
46) Benzene	10.24	78	8322	0.3010 ug/L	90
47) Trichloroethene	11.13	130	1635	0.2358 ug/L	87
49) 1,2-Dichloropropane	11.38	63	1143	0.1601 ug/L #	35
51) Bromodichloromethane	11.71	83	2208	0.2575 ug/L	88
52) Dibromomethane	11.80	93	237	0.2826 ug/L	98
55) cis-1,3-Dichloropropene	12.48	75	1487	0.3509 ug/L #	62
59) Toluene	12.94	91	6712	0.2521 ug/L	96
62) trans-1,3-Dichloropropene	13.19	75	967	0.4630 ug/L #	53
63) 1,1,2-Trichloroethane	13.41	97	921	0.2153 ug/L #	72
65) 1,3-Dichloropropane	13.79	76	1501	0.2058 ug/L	93
66) Tetrachloroethene	13.89	166	1784	0.2869 ug/L	73
67) Dibromochloromethane	14.19	129	1095	0.3599 ug/L	81
68) 1,2-Dibromoethane	14.50	107	265	0.3139 ug/L #	2
70) Chlorobenzene	15.09	112	4491	0.2654 ug/L	94
71) 1,1,1,2-Tetrachloroethane	15.14	131	1441	0.2365 ug/L #	23
72) Ethylbenzene	15.15	106	2526	0.2894 ug/L	89
73) m-,p-Xylene	15.26	106	5784	0.5421 ug/L	100
74) o-Xylene	15.92	106	2570	0.2530 ug/L	100
75) Styrene	15.96	104	3513	0.4275 ug/L	84
77) Isopropylbenzene	16.43	105	7162	0.2833 ug/L	89
83) n-Propylbenzene	17.02	91	7123	0.2605 ug/L #	90
84) Bromobenzene	17.14	156	1260	0.3151 ug/L	92
85) 1,3,5-Trimethylbenzene	17.24	105	4964	0.2661 ug/L	91
86) 2-Chlorotoluene	17.31	91	5127	0.2824 ug/L	93
87) 4-Chlorotoluene	17.39	91	5576	0.3055 ug/L #	80

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

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\042512\6M107639.D Vial: 3
Acq On : 25 Apr 2012 9:49 Operator: ADC
Sample : WG396001-02 0.3 ug/L STD 8260 Inst : HPMS6
Misc : 1,1 STD51130 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 25 15:08:24 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:04:52 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

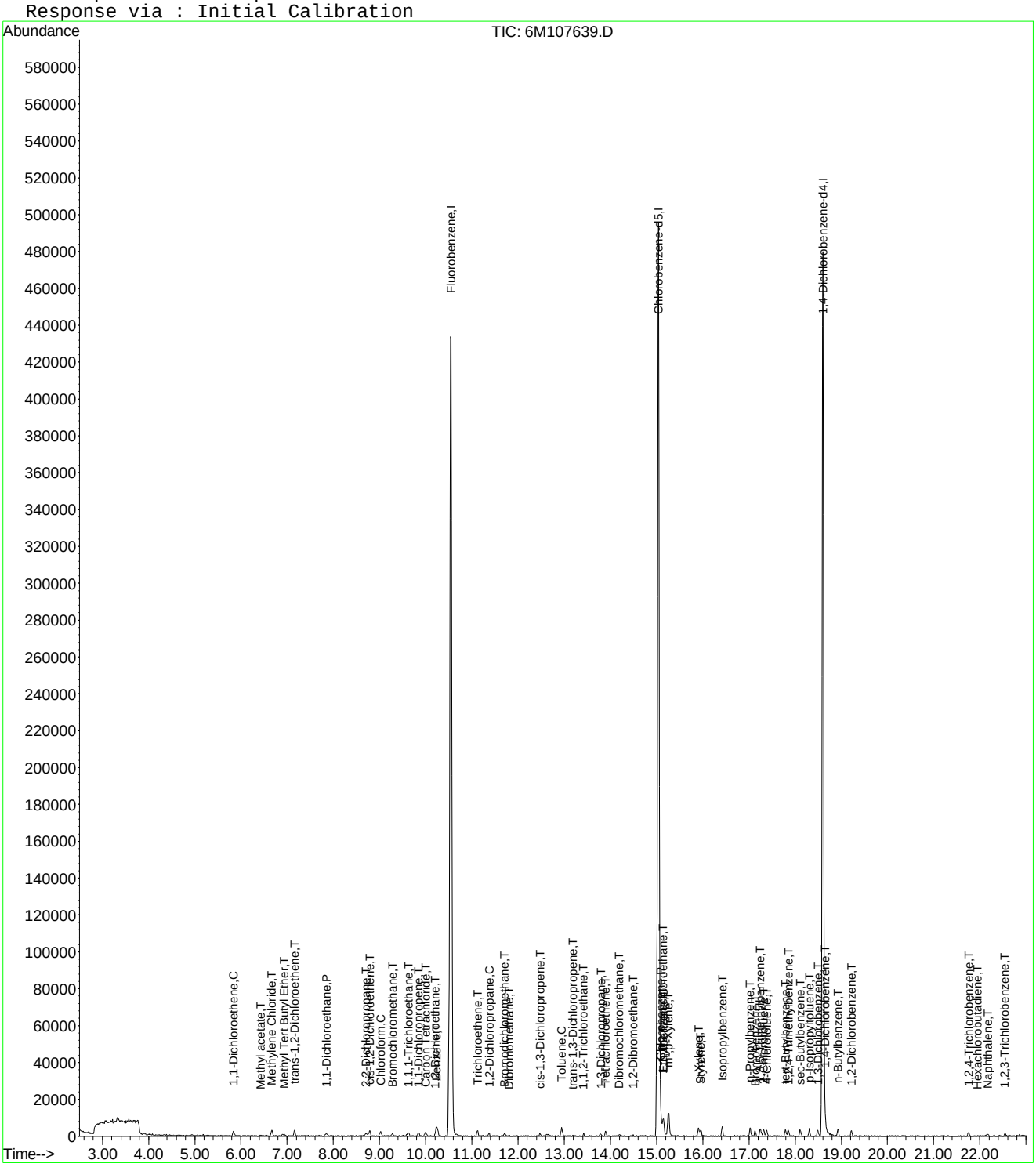
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
89)	tert-Butylbenzene	17.78	134	589	0.1564 ug/L #	1
90)	1,2,4-Trimethylbenzene	17.86	105	4759	0.2413 ug/L	89
91)	sec-Butylbenzene	18.11	105	5777	0.2725 ug/L #	83
92)	p-Isopropyltoluene	18.30	119	4803	0.2820 ug/L	82
93)	1,3-Dichlorobenzene	18.50	146	2837	0.2640 ug/L	82
94)	1,4-Dichlorobenzene	18.65	146	3467	0.3076 ug/L #	35
95)	n-Butylbenzene	18.93	91	4596	0.3098 ug/L	83
96)	1,2-Dichlorobenzene	19.22	146	2763	0.2845 ug/L	79
98)	1,2,4-Trichlorobenzene	21.76	180	1456	0.2754 ug/L #	78
99)	Hexachlorobutadiene	21.95	225	276	0.2317 ug/L #	18
100)	Naphthalene	22.17	128	2777	0.2759 ug/L #	68
101)	1,2,3-Trichlorobenzene	22.53	180	1429	0.3110 ug/L #	81

(#) = qualifier out of range (m) = manual integration
6M107639.D 8260WTR.M Wed Apr 25 15:08:24 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\042512\6M107639.D Vial: 3
Acq On : 25 Apr 2012 9:49 Operator: ADC
Sample : WG396001-02 0.3 ug/L STD 8260 Inst : HPMS6
Misc : 1,1 STD51130 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 25 15:08 2012 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:04:52 2012
Response via : Initial Calibration



6M107639.D 8260WTR.M Wed Apr 25 15:08:24 2012 Page 3

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\042512\6M107640.D Vial: 4
Acq On : 25 Apr 2012 10:22 Operator: ADC
Sample : WG396001-03 0.4 ug/L STD 8260 Inst : HPMS6
Misc : 1,1 STD51130 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 25 15:15:49 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:04:52 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.54	96	591975	25.00 ug/L	0.00
57) Chlorobenzene-d5	15.03	117	392542	25.00 ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	176332	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	0.00	98	0	0.0000 ug/L	
Spiked Amount 25.000	Range 88 - 110		Recovery	=	0.00%#
80) p-Bromofluorobenzene	0.00	95	0	0.0000 ug/L	
Spiked Amount 25.000	Range 86 - 115		Recovery	=	0.00%#

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	2.72	85	3370	0.4340 ug/L #	67
3) Chloromethane	3.12	50	8770	0.2050 ug/L	98
4) Vinyl Chloride	3.31	62	4143	0.4219 ug/L	97
6) Bromomethane	4.11	94	2300	0.4133 ug/L	88
7) Chloroethane	4.27	64	2030	0.3654 ug/L #	63
8) Trichlorofluoromethane	4.72	101	4980	0.3944 ug/L #	91
10) Isoprene	5.29	67	3535	0.3292 ug/L	89
12) 1,1,2-Trichloro-1,2,2-Trif	5.53	101	1497	0.2217 ug/L #	54
14) 1,1-Dichloroethene	5.82	61	3418	0.3148 ug/L	93
16) Dimethyl Sulfide	6.12	62	3396	0.3939 ug/L	91
17) Iodomethane	6.37	142	1553	0.2501 ug/L #	30
18) Methyl acetate	6.44	43	599	0.1353 ug/L #	64
19) Methylene Chloride	6.67	84	2468	0.3669 ug/L	90
20) Carbon Disulfide	6.69	76	7622	0.3874 ug/L	91
22) Methyl Tert Butyl Ether	6.94	73	4459	0.3147 ug/L #	62
23) trans-1,2-Dichloroethene	7.16	96	2011	0.3062 ug/L	60
24) n-Hexane	7.25	57	2779	0.3688 ug/L	96
27) 1,1-Dichloroethane	7.84	63	4770	0.3554 ug/L	88
31) 2,2-Dichloropropane	8.71	77	3393	0.3344 ug/L	85
32) cis-1,2-Dichloroethene	8.78	96	1875	0.2732 ug/L	84
33) Chloroform	9.02	83	4573	0.3770 ug/L #	90
35) Bromochloromethane	9.27	130	896	0.2966 ug/L	94
36) Tetrahydrofuran	9.64	42	235	0.2305 ug/L #	40
38) 1,1,1-Trichloroethane	9.62	97	3466	0.3271 ug/L	85
39) Cyclohexane	9.65	56	3456	0.3256 ug/L	90
40) 1,1-Dichloropropene	9.86	75	2506	0.2867 ug/L	93
42) Carbon Tetrachloride	10.01	117	2941	0.3136 ug/L #	94
45) 1,2-Dichloroethane	10.20	62	2897	0.3477 ug/L #	81
46) Benzene	10.24	78	9887	0.3781 ug/L	94
47) Trichloroethene	11.13	130	2204	0.3360 ug/L	80
48) Methylcyclohexane	11.20	83	2180	0.2882 ug/L #	76
49) 1,2-Dichloropropane	11.36	63	2309	0.3420 ug/L #	73
51) Bromodichloromethane	11.70	83	2679	0.3303 ug/L	93
52) Dibromomethane	11.80	93	450	0.3518 ug/L #	8
55) cis-1,3-Dichloropropene	12.48	75	1938	0.4053 ug/L #	68
56) Dimethyl Disulfide	12.75	79	1126	0.9500 ug/L #	50
59) Toluene	12.95	91	8735	0.3386 ug/L	99
62) trans-1,3-Dichloropropene	13.19	75	1160	0.4893 ug/L #	53
63) 1,1,2-Trichloroethane	13.42	97	1385	0.3343 ug/L #	65
65) 1,3-Dichloropropane	13.78	76	1905	0.2696 ug/L	95

(#) = qualifier out of range (m) = manual integration
6M107640.D 8260WTR.M Wed Apr 25 15:16:11 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\042512\6M107640.D Vial: 4
Acq On : 25 Apr 2012 10:22 Operator: ADC
Sample : WG396001-03 0.4 ug/L STD 8260 Inst : HPMS6
Misc : 1,1 STD51130 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 25 15:15:49 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:04:52 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

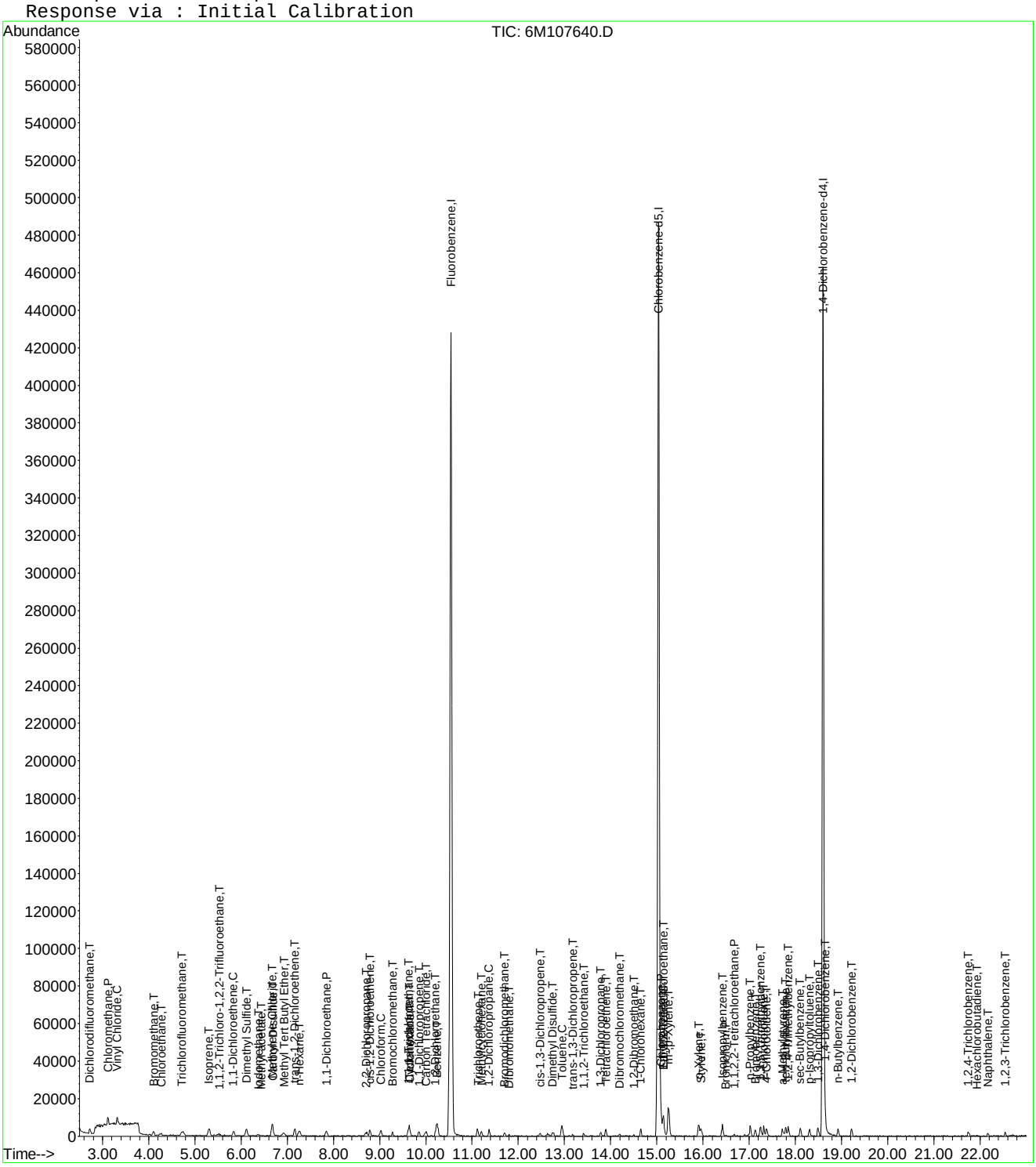
	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
66)	Tetrachloroethene	13.90	166	1822	0.3024 ug/L		91
67)	Dibromochloromethane	14.20	129	1177	0.3807 ug/L		69
68)	1,2-Dibromoethane	14.50	107	467	0.3651 ug/L		82
69)	1-Chlorohexane	14.65	91	2262	0.3311 ug/L		94
70)	Chlorobenzene	15.10	112	5879	0.3587 ug/L		96
71)	1,1,1,2-Tetrachloroethane	15.15	131	1852	0.3138 ug/L	#	23
72)	Ethylbenzene	15.15	106	2690	0.3182 ug/L		88
73)	m-,p-Xylene	15.26	106	6094	0.5896 ug/L		72
74)	o-Xylene	15.91	106	3290	0.3343 ug/L		100
75)	Styrene	15.96	104	4365	0.4815 ug/L		92
76)	Bromoform	16.49	173	398	0.1426 ug/L	#	34
77)	Isopropylbenzene	16.42	105	8284	0.3382 ug/L		96
79)	1,1,2,2-Tetrachloroethane	16.68	83	1107	0.2969 ug/L	#	42
83)	n-Propylbenzene	17.01	91	8846	0.3414 ug/L	#	90
84)	Bromobenzene	17.14	156	1373	0.3459 ug/L		76
85)	1,3,5-Trimethylbenzene	17.25	105	6105	0.3454 ug/L		94
86)	2-Chlorotoluene	17.31	91	5788	0.3364 ug/L	#	93
87)	4-Chlorotoluene	17.37	91	6265	0.3622 ug/L	#	87
88)	a-Methylstyrene	17.73	118	2310	0.2548 ug/L		88
89)	tert-Butylbenzene	17.78	134	851	0.2384 ug/L		48
90)	1,2,4-Trimethylbenzene	17.84	105	6432	0.3442 ug/L		81
91)	sec-Butylbenzene	18.10	105	7287	0.3627 ug/L		90
92)	p-Isopropyltoluene	18.30	119	5400	0.3346 ug/L		81
93)	1,3-Dichlorobenzene	18.50	146	3584	0.3519 ug/L		93
94)	1,4-Dichlorobenzene	18.65	146	3668	0.3434 ug/L		83
95)	n-Butylbenzene	18.92	91	4824	0.3431 ug/L		84
96)	1,2-Dichlorobenzene	19.22	146	3346	0.3635 ug/L		94
98)	1,2,4-Trichlorobenzene	21.74	180	1409	0.2812 ug/L		70
99)	Hexachlorobutadiene	21.94	225	450	0.3253 ug/L	#	18
100)	Naphthalene	22.17	128	3128	0.3279 ug/L	#	68
101)	1,2,3-Trichlorobenzene	22.54	180	1720	0.3950 ug/L	#	70

(#) = qualifier out of range (m) = manual integration
6M107640.D 8260WTR.M Wed Apr 25 15:16:11 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\042512\6M107640.D Vial: 4
Acq On : 25 Apr 2012 10:22 Operator: ADC
Sample : WG396001-03 0.4 ug/L STD 8260 Inst : HPMS6
Misc : 1,1 STD51130 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 25 15:15 2012 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:15:28 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\042512\6M107641.D Vial: 5
Acq On : 25 Apr 2012 10:54 Operator: ADC
Sample : WG396001-04 1.0 ug/L STD 8260 Inst : HPMS6
Misc : 1,1 STD51130 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 25 15:15:49 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:15:28 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.54	96	581881	25.00 ug/L	0.00
57) Chlorobenzene-d5	15.03	117	378697	25.00 ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	176026	25.00 ug/L	0.00

System Monitoring Compounds					
37) Dibromofluoromethane	9.36	111	2819	0.4474 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery	= 1.80%#	
43) 1,2-Dichloroethane-d4	10.08	65	3292	0.5324 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery	= 2.12%#	
58) Toluene-d8	12.83	98	10550	0.5126 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery	= 2.04%#	
80) p-Bromofluorobenzene	16.82	95	3639	0.5268 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery	= 2.12%#	

Target Compounds					Qvalue
2) Dichlorodifluoromethane	2.72	85	9155	1.1995 ug/L	94
3) Chloromethane	3.12	50	15738	0.8962 ug/L	92
4) Vinyl Chloride	3.31	62	12066	1.2499 ug/L	95
5) 1,3-Butadiene	3.36	54	9992	1.6783 ug/L #	72
6) Bromomethane	4.11	94	6430	1.1755 ug/L	95
7) Chloroethane	4.26	64	6255	1.1453 ug/L	93
8) Trichlorofluoromethane	4.73	101	14644	1.1798 ug/L	91
9) Diethyl ether	5.27	59	21000	4.9922 ug/L	99
10) Isoprene	5.29	67	10493	0.9942 ug/L	94
12) 1,1,2-Trichloro-1,2,2-Trif	5.52	101	8018	1.2078 ug/L	88
13) Acetone	5.61	43	499	0.4519 ug/L #	46
14) 1,1-Dichloroethene	5.84	61	11594	1.0862 ug/L	100
15) Tert-Butyl Alcohol	5.97	59	2587	9.1172 ug/L #	60
16) Dimethyl Sulfide	6.12	62	8242	0.9726 ug/L	97
17) Iodomethane	6.37	142	5055	0.8283 ug/L	94
18) Methyl acetate	6.42	43	4380	1.0066 ug/L #	71
19) Methylene Chloride	6.66	84	7513	1.1364 ug/L	99
20) Carbon Disulfide	6.68	76	20186	1.0438 ug/L	98
21) Acrylonitrile	6.89	53	242	0.1627 ug/L #	1
22) Methyl Tert Butyl Ether	6.93	73	15745	1.1304 ug/L	91
23) trans-1,2-Dichloroethene	7.16	96	6975	1.0803 ug/L	99
24) n-Hexane	7.26	57	8027	1.0837 ug/L	91
25) Diisopropyl ether	7.65	45	116212	4.9513 ug/L	98
26) Vinyl Acetate	7.86	43	3282	0.9617 ug/L #	77
27) 1,1-Dichloroethane	7.86	63	14623	1.1085 ug/L	93
28) Ethyl-Tert-Butyl ether	8.29	59	93335	4.9103 ug/L	99
29) 2-Butanone	8.50	43	1189	0.7825 ug/L #	56
30) Propionitrile	8.61	54	1634	3.7893 ug/L #	55
31) 2,2-Dichloropropane	8.71	77	11868	1.1901 ug/L	91
32) cis-1,2-Dichloroethene	8.78	96	7282	1.0794 ug/L	95
33) Chloroform	9.02	83	13286	1.1144 ug/L	99
34) 1-Bromopropane	9.17	122	683	0.6200 ug/L	69
35) Bromochloromethane	9.27	130	3890	1.1331 ug/L	93
36) Tetrahydrofuran	9.33	42	4906	4.8966 ug/L	95
38) 1,1,1-Trichloroethane	9.61	97	11387	1.0934 ug/L	98
39) Cyclohexane	9.65	56	10784	1.0336 ug/L	97
40) 1,1-Dichloropropene	9.85	75	8617	1.0029 ug/L	96
41) Tert-Amyl-Methyl ether	9.98	73	71707	5.0562 ug/L	99
42) Carbon Tetrachloride	10.00	117	10173	1.1036 ug/L	97
45) 1,2-Dichloroethane	10.21	62	9110	1.1124 ug/L #	91

(#) = qualifier out of range (m) = manual integration
6M107641.D 8260WTR.M Wed Apr 25 15:16:42 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\042512\6M107641.D Vial: 5
Acq On : 25 Apr 2012 10:54 Operator: ADC
Sample : WG396001-04 1.0 ug/L STD 8260 Inst : HPMS6
Misc : 1,1 STD51130 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 25 15:15:49 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:15:28 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

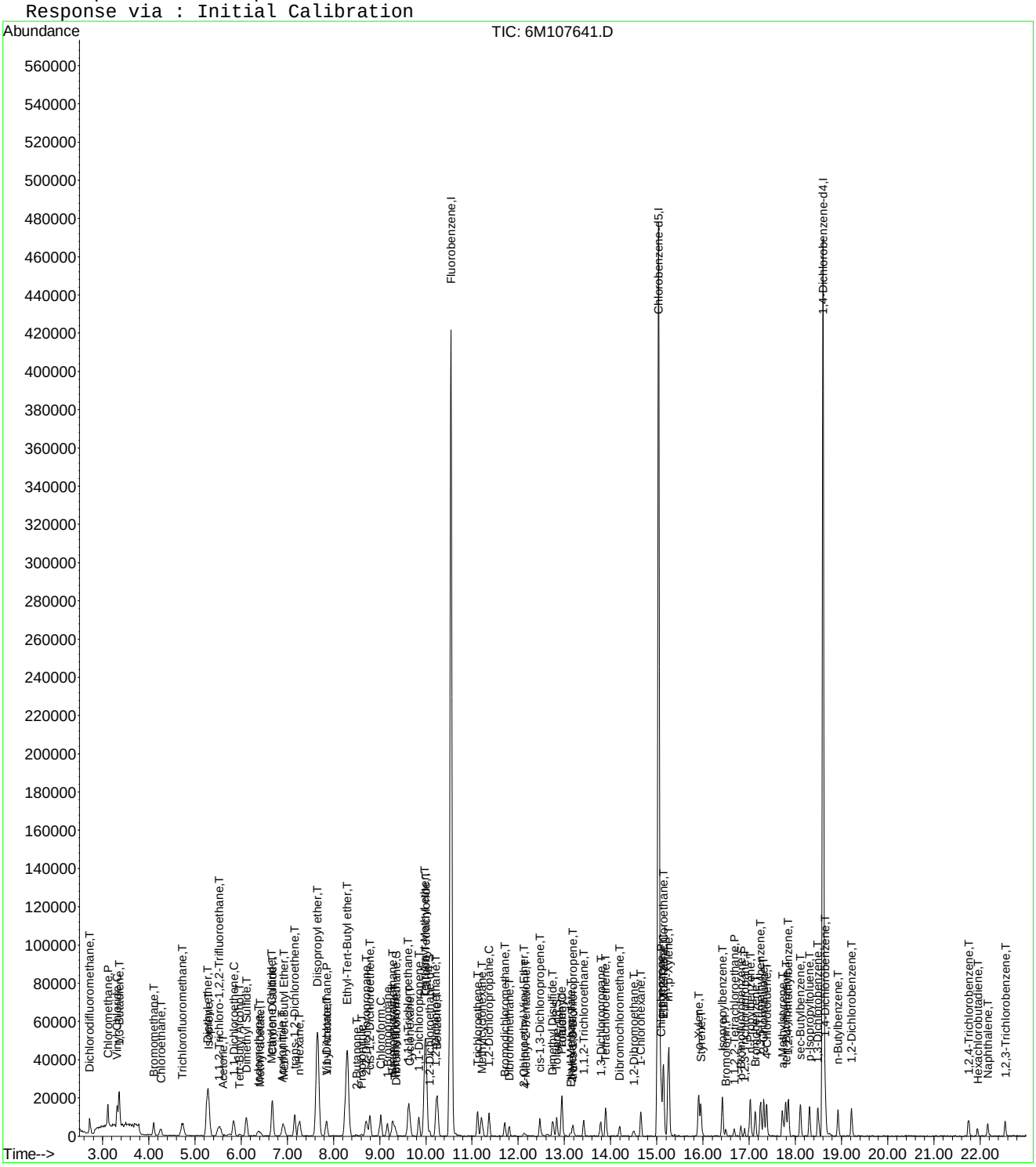
	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
46)	Benzene	10.24	78	27867	1.0841 ug/L		95
47)	Trichloroethene	11.12	130	6929	1.0747 ug/L		98
48)	Methylcyclohexane	11.21	83	7387	0.9934 ug/L		97
49)	1,2-Dichloropropane	11.37	63	6960	1.0487 ug/L		99
51)	Bromodichloromethane	11.72	83	8511	1.0676 ug/L		99
52)	Dibromomethane	11.81	93	2959	1.1364 ug/L		90
53)	2-Chloroethyl Vinyl Ether	12.12	63	1123	0.4421 ug/L	#	44
54)	4-Methyl-2-Pentanone	12.16	58	188	0.1671 ug/L	#	37
55)	cis-1,3-Dichloropropene	12.47	75	8668	1.1098 ug/L		90
56)	Dimethyl Disulfide	12.75	79	3486	1.3692 ug/L	#	62
59)	Toluene	12.95	91	27064	1.0875 ug/L		95
60)	Ethyl Methacrylate	13.14	69	1734	1.2257 ug/L		80
61)	Paraldehyde	12.94	89	610	9.1745 ug/L	#	16
62)	trans-1,3-Dichloropropene	13.19	75	5274	0.9971 ug/L	#	78
63)	1,1,2-Trichloroethane	13.42	97	4311	1.0785 ug/L		91
64)	2-Hexanone	13.17	43	1113	0.6683 ug/L	#	27
65)	1,3-Dichloropropane	13.79	76	6974	1.0231 ug/L		99
66)	Tetrachloroethene	13.89	166	6427	1.1058 ug/L		98
67)	Dibromochloromethane	14.20	129	4987	1.0947 ug/L		89
68)	1,2-Dibromoethane	14.50	107	3467	1.1276 ug/L		100
69)	1-Chlorohexane	14.66	91	6401	0.9713 ug/L		96
70)	Chlorobenzene	15.10	112	17289	1.0934 ug/L		91
71)	1,1,1,2-Tetrachloroethane	15.15	131	5838	1.0253 ug/L	#	49
72)	Ethylbenzene	15.15	106	8158	1.0002 ug/L		90
73)	m-,p-Xylene	15.26	106	21275	2.1338 ug/L		100
74)	o-Xylene	15.91	106	9565	1.0075 ug/L		97
75)	Styrene	15.96	104	13344	1.0124 ug/L		93
76)	Bromoform	16.50	173	1973	0.7327 ug/L	#	77
77)	Isopropylbenzene	16.42	105	24157	1.0223 ug/L		98
79)	1,1,2,2-Tetrachloroethane	16.69	83	4008	1.0767 ug/L		98
81)	1,2,3-Trichloropropane	16.90	110	864	0.9002 ug/L		61
83)	n-Propylbenzene	17.02	91	26872	1.0389 ug/L		97
84)	Bromobenzene	17.14	156	5746	1.0994 ug/L		99
85)	1,3,5-Trimethylbenzene	17.25	105	17658	1.0007 ug/L		100
86)	2-Chlorotoluene	17.31	91	17858	1.0398 ug/L		98
87)	4-Chlorotoluene	17.38	91	19756	1.1443 ug/L		92
88)	a-Methylstyrene	17.73	118	7700	0.8509 ug/L		97
89)	tert-Butylbenzene	17.80	134	3992	1.1202 ug/L		74
90)	1,2,4-Trimethylbenzene	17.84	105	19324	1.0358 ug/L		98
91)	sec-Butylbenzene	18.11	105	21668	1.0803 ug/L		99
92)	p-Isopropyltoluene	18.30	119	16974	1.0535 ug/L		92
93)	1,3-Dichlorobenzene	18.49	146	10307	1.0138 ug/L		96
94)	1,4-Dichlorobenzene	18.65	146	12397	1.1627 ug/L		97
95)	n-Butylbenzene	18.92	91	14513	1.0340 ug/L		98
96)	1,2-Dichlorobenzene	19.22	146	10218	1.1121 ug/L		90
98)	1,2,4-Trichlorobenzene	21.75	180	5795	1.1587 ug/L		84
99)	Hexachlorobutadiene	21.96	225	2217	1.2044 ug/L		80
100)	Naphthalene	22.17	128	9686	1.0171 ug/L		94
101)	1,2,3-Trichlorobenzene	22.55	180	4399	1.0120 ug/L		94

(#) = qualifier out of range (m) = manual integration
6M107641.D 8260WTR.M Wed Apr 25 15:16:42 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\042512\6M107641.D Vial: 5
Acq On : 25 Apr 2012 10:54 Operator: ADC
Sample : WG396001-04 1.0 ug/L STD 8260 Inst : HPMS6
Misc : 1,1 STD51130 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 25 15:15 2012 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:15:28 2012
Response via : Initial Calibration



6M107641.D 8260WTR.M Wed Apr 25 15:16:42 2012 Page 3

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\042512\6M107642.D Vial: 6
Acq On : 25 Apr 2012 11:27 Operator: ADC
Sample : WG396001-05 2.0 ug/L STD 8260 Inst : HPMS6
Misc : 1,1 STD51130 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 25 15:15:49 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:15:28 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.54	96	582585	25.00 ug/L	0.00
57) Chlorobenzene-d5	15.03	117	377148	25.00 ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	178106	25.00 ug/L	0.00

System Monitoring Compounds					
37) Dibromofluoromethane	9.35	111	6278	0.9952 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery =	4.00%#	
43) 1,2-Dichloroethane-d4	10.07	65	6128	0.9899 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery =	3.96%#	
58) Toluene-d8	12.83	98	20901	1.0197 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery =	4.08%#	
80) p-Bromofluorobenzene	16.82	95	7075	1.0123 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery =	4.04%#	

Target Compounds					Qvalue
2) Dichlorodifluoromethane	2.73	85	15707	2.0554 ug/L	96
3) Chloromethane	3.12	50	27211	2.0071 ug/L	99
4) Vinyl Chloride	3.31	62	20520	2.1231 ug/L	99
5) 1,3-Butadiene	3.36	54	18300	3.0701 ug/L #	76
6) Bromomethane	4.10	94	12682	2.3156 ug/L	98
7) Chloroethane	4.26	64	10931	1.9990 ug/L	98
8) Trichlorofluoromethane	4.73	101	25474	2.0499 ug/L	94
9) Diethyl ether	5.27	59	105009	24.9331 ug/L	97
10) Isoprene	5.29	67	40120	3.7968 ug/L	100
11) Acrolein	5.52	56	390	8.8893 ug/L #	15
12) 1,1,2-Trichloro-1,2,2-Trif	5.53	101	12601	1.8958 ug/L	98
13) Acetone	5.64	43	1945	1.7593 ug/L #	46
14) 1,1-Dichloroethene	5.83	61	22196	2.0770 ug/L	94
15) Tert-Butyl Alcohol	5.98	59	14716	51.8000 ug/L #	87
16) Dimethyl Sulfide	6.11	62	34015	4.0093 ug/L	97
17) Iodomethane	6.37	142	19963	3.2671 ug/L	98
18) Methyl acetate	6.42	43	14583	3.3475 ug/L #	92
19) Methylene Chloride	6.67	84	13885	2.0976 ug/L	96
20) Carbon Disulfide	6.69	76	76928	3.9731 ug/L	100
21) Acrylonitrile	6.89	53	2226	1.4948 ug/L	94
22) Methyl Tert Butyl Ether	6.93	73	29291	2.1004 ug/L	97
23) trans-1,2-Dichloroethene	7.16	96	13838	2.1407 ug/L	99
24) n-Hexane	7.26	57	28491	3.8420 ug/L	99
25) Diisopropyl ether	7.65	45	566354	24.1008 ug/L	100
26) Vinyl Acetate	7.84	43	8091	2.3679 ug/L #	77
27) 1,1-Dichloroethane	7.84	63	28306	2.1432 ug/L	97
28) Ethyl-Tert-Butyl ether	8.28	59	461143	24.2310 ug/L	100
29) 2-Butanone	8.49	43	2585	1.6991 ug/L #	56
30) Propionitrile	8.60	54	10470	24.2506 ug/L	92
31) 2,2-Dichloropropane	8.71	77	21551	2.1584 ug/L	100
32) cis-1,2-Dichloroethene	8.78	96	14676	2.1728 ug/L	91
33) Chloroform	9.02	83	25059	2.0993 ug/L	98
34) 1-Bromopropane	9.17	122	2071	1.8777 ug/L	95
35) Bromochloromethane	9.27	130	7448	2.1197 ug/L	97
36) Tetrahydrofuran	9.30	42	23813	23.7385 ug/L	99
38) 1,1,1-Trichloroethane	9.61	97	21821	2.0927 ug/L	97
39) Cyclohexane	9.64	56	40320	3.8599 ug/L	98
40) 1,1-Dichloropropene	9.85	75	18675	2.1710 ug/L	99
41) Tert-Amyl-Methyl ether	9.99	73	343289	24.1768 ug/L	99
42) Carbon Tetrachloride	10.00	117	18775	2.0342 ug/L	99

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

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\042512\6M107642.D Vial: 6
Acq On : 25 Apr 2012 11:27 Operator: ADC
Sample : WG396001-05 2.0 ug/L STD 8260 Inst : HPMS6
Misc : 1,1 STD51130 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 25 15:15:49 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:15:28 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

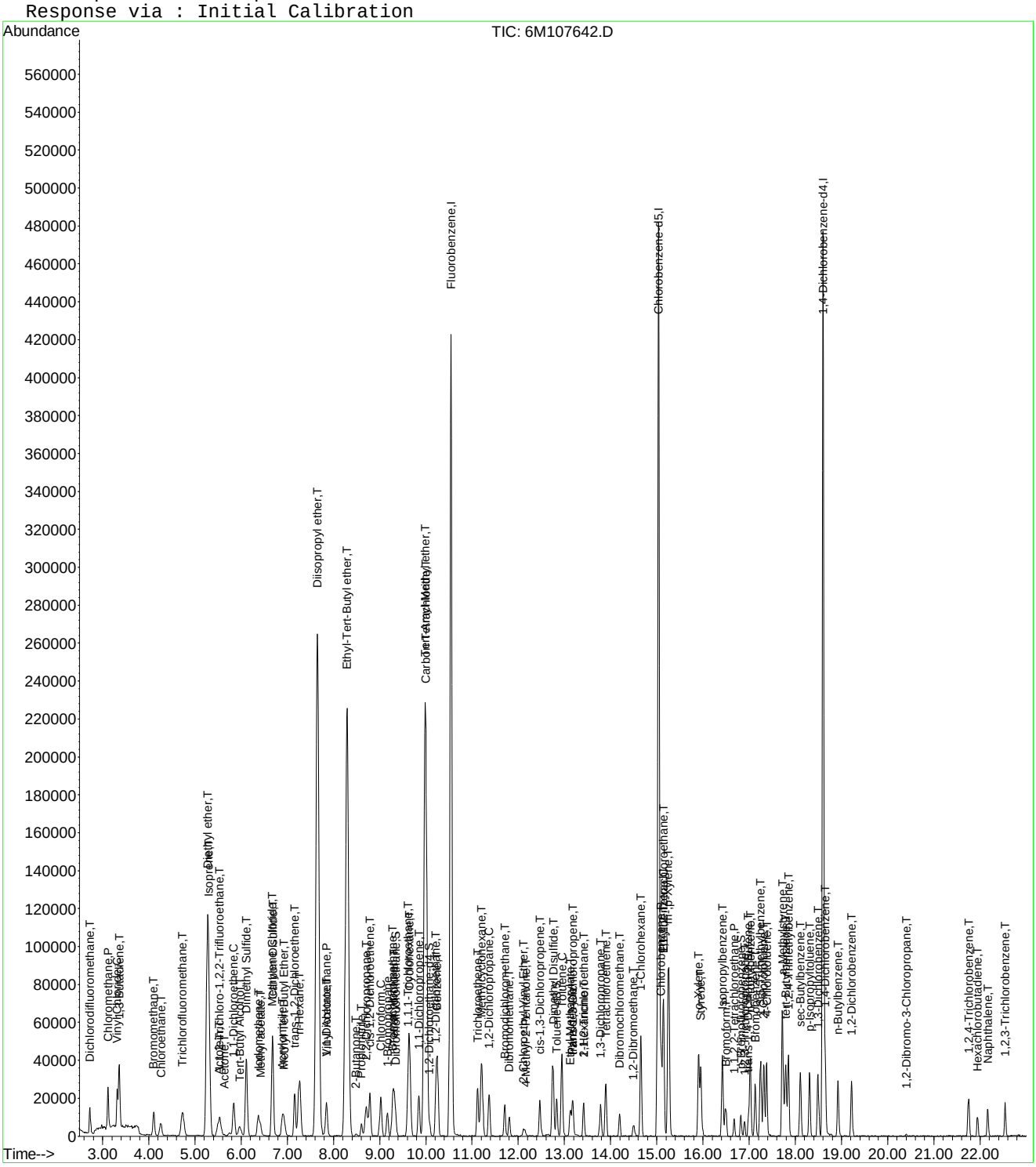
	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
45)	1,2-Dichloroethane	10.21	62	16880	2.0586 ug/L		92
46)	Benzene	10.24	78	53190	2.0667 ug/L		99
47)	Trichloroethene	11.12	130	13317	2.0629 ug/L		98
48)	Methylcyclohexane	11.20	83	28758	3.8629 ug/L		99
49)	1,2-Dichloropropane	11.37	63	13749	2.0691 ug/L		99
51)	Bromodichloromethane	11.71	83	15885	1.9901 ug/L		95
52)	Dibromomethane	11.80	93	6053	2.0988 ug/L		97
53)	2-Chloroethyl Vinyl Ether	12.11	63	3443	1.3539 ug/L	#	64
54)	4-Methyl-2-Pentanone	12.16	58	702	0.6231 ug/L	#	37
55)	cis-1,3-Dichloropropene	12.47	75	17241	2.0008 ug/L		97
56)	Dimethyl Disulfide	12.76	79	16097	3.5875 ug/L		99
59)	Toluene	12.95	91	50895	2.0535 ug/L		99
60)	Ethyl Methacrylate	13.12	69	12992	3.6540 ug/L		90
61)	Paraldehyde	13.17	89	1662	25.0994 ug/L	#	46
62)	trans-1,3-Dichloropropene	13.18	75	12945	1.9413 ug/L		95
63)	1,1,2-Trichloroethane	13.42	97	8570	2.1529 ug/L		95
64)	2-Hexanone	13.42	43	222	0.1338 ug/L	#	27
65)	1,3-Dichloropropane	13.78	76	14724	2.1689 ug/L		97
66)	Tetrachloroethene	13.90	166	12127	2.0951 ug/L		99
67)	Dibromochloromethane	14.20	129	10086	2.0476 ug/L		95
68)	1,2-Dibromoethane	14.49	107	6715	1.9556 ug/L		89
69)	1-Chlorohexane	14.66	91	26182	3.9893 ug/L		98
70)	Chlorobenzene	15.08	112	32042	2.0347 ug/L		97
71)	1,1,1,2-Tetrachloroethane	15.15	131	11635	2.0518 ug/L	#	74
72)	Ethylbenzene	15.15	106	15909	1.9585 ug/L		96
73)	m-,p-Xylene	15.25	106	39276	3.9553 ug/L		95
74)	o-Xylene	15.90	106	18716	1.9794 ug/L		96
75)	Styrene	15.95	104	28586	1.9053 ug/L		96
76)	Bromoform	16.50	173	5004	1.8660 ug/L		94
77)	Isopropylbenzene	16.42	105	47392	2.0138 ug/L		99
79)	1,1,2,2-Tetrachloroethane	16.68	83	7637	2.0277 ug/L		99
81)	1,2,3-Trichloropropane	16.90	110	1898	1.9545 ug/L		62
82)	trans-1,4-Dichloro-2-Buten	16.98	53	3015	2.5032 ug/L		93
83)	n-Propylbenzene	17.02	91	53289	2.0362 ug/L		99
84)	Bromobenzene	17.14	156	11443	2.0574 ug/L		97
85)	1,3,5-Trimethylbenzene	17.25	105	35419	1.9838 ug/L		99
86)	2-Chlorotoluene	17.31	91	38866	2.2367 ug/L		100
87)	4-Chlorotoluene	17.38	91	34257	1.9610 ug/L		98
88)	a-Methylstyrene	17.73	118	31522	3.4427 ug/L		98
89)	tert-Butylbenzene	17.79	134	7184	1.9923 ug/L		90
90)	1,2,4-Trimethylbenzene	17.85	105	38101	2.0184 ug/L		98
91)	sec-Butylbenzene	18.11	105	40503	1.9957 ug/L		99
92)	p-Isopropyltoluene	18.31	119	32296	1.9811 ug/L		99
93)	1,3-Dichlorobenzene	18.49	146	21069	2.0482 ug/L		99
94)	1,4-Dichlorobenzene	18.65	146	21327	1.9769 ug/L		83
95)	n-Butylbenzene	18.92	91	27948	1.9680 ug/L		96
96)	1,2-Dichlorobenzene	19.22	146	19286	2.0744 ug/L		94
97)	1,2-Dibromo-3-Chloropropan	20.40	75	750	2.2556 ug/L		80
98)	1,2,4-Trichlorobenzene	21.75	180	10506	2.0761 ug/L		96
99)	Hexachlorobutadiene	21.95	225	4168	2.1505 ug/L		96
100)	Naphthalene	22.17	128	19377	2.0110 ug/L		100
101)	1,2,3-Trichlorobenzene	22.54	180	9449	2.1484 ug/L		94

(#) = qualifier out of range (m) = manual integration
6M107642.D 8260WTR.M Wed Apr 25 15:17:16 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\042512\6M107642.D Vial: 6
Acq On : 25 Apr 2012 11:27 Operator: ADC
Sample : WG396001-05 2.0 ug/L STD 8260 Inst : HPMS6
Misc : 1,1 STD51130 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 25 15:15 2012 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:15:28 2012
Response via : Initial Calibration



6M107642.D 8260WTR.M Wed Apr 25 15:17:17 2012 Page 3

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\042512\6M107643.D Vial: 7
Acq On : 25 Apr 2012 11:59 Operator: ADC
Sample : WG396001-06 5.0 ug/L STD 8260 Inst : HPMS6
Misc : 1,1 STD51130 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 25 15:22:33 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.54	96	575550	25.00 ug/L	0.00
57) Chlorobenzene-d5	15.03	117	376063	25.00 ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	177055	25.00 ug/L	0.00

System Monitoring Compounds					
37) Dibromofluoromethane	9.35	111	14601	2.3429 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery =	9.36%#	
43) 1,2-Dichloroethane-d4	10.08	65	14760	2.4133 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery =	9.64%#	
58) Toluene-d8	12.83	98	49480	2.4209 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery =	9.68%#	
80) p-Bromofluorobenzene	16.82	95	17382	2.5018 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery =	10.00%#	

Target Compounds					Qvalue
2) Dichlorodifluoromethane	2.73	85	37947	5.0265 ug/L	95
3) Chloromethane	3.12	50	58571	5.1181 ug/L	97
4) Vinyl Chloride	3.31	62	46706	4.8915 ug/L	98
5) 1,3-Butadiene	3.35	54	44622	3.6880 ug/L	83
6) Bromomethane	4.11	94	24347	4.4999 ug/L	100
7) Chloroethane	4.25	64	25758	4.7681 ug/L	100
8) Trichlorofluoromethane	4.73	101	58962	4.8027 ug/L	99
9) Diethyl ether	5.26	59	210605	50.4880 ug/L	97
10) Isoprene	5.30	67	50690	4.8557 ug/L	99
11) Acrolein	5.51	56	1570	13.1948 ug/L	74
12) 1,1,2-Trichloro-1,2,2-Trif	5.52	101	30663	4.6697 ug/L	99
13) Acetone	5.62	43	5754	5.2763 ug/L #	70
14) 1,1-Dichloroethene	5.83	61	52701	4.9917 ug/L	97
15) Tert-Butyl Alcohol	5.98	59	29303	102.9244 ug/L #	94
16) Dimethyl Sulfide	6.11	62	40108	4.7852 ug/L	94
17) Iodomethane	6.36	142	28857	4.7804 ug/L	100
18) Methyl acetate	6.41	43	21484	4.9918 ug/L	95
19) Methylene Chloride	6.67	84	31639	4.8382 ug/L	98
20) Carbon Disulfide	6.69	76	89235	4.6651 ug/L	98
21) Acrylonitrile	6.88	53	6205	4.2230 ug/L	94
22) Methyl Tert Butyl Ether	6.91	73	63560	4.6135 ug/L	99
23) trans-1,2-Dichloroethene	7.16	96	30919	4.8415 ug/L	100
24) n-Hexane	7.26	57	33579	4.5834 ug/L	100
25) Diisopropyl ether	7.65	45	1156939	49.7305 ug/L	99
26) Vinyl Acetate	7.84	43	17599	5.2255 ug/L	92
27) 1,1-Dichloroethane	7.84	63	62138	4.7623 ug/L	98
28) Ethyl-Tert-Butyl ether	8.29	59	943556	49.9070 ug/L	99
29) 2-Butanone	8.49	43	7075	4.6396 ug/L	91
30) Propionitrile	8.61	54	21710	49.7760 ug/L	95
31) 2,2-Dichloropropane	8.71	77	47225	4.7876 ug/L	97
32) cis-1,2-Dichloroethene	8.78	96	33123	4.9637 ug/L	97
33) Chloroform	9.02	83	57332	4.8617 ug/L	100
34) 1-Bromopropane	9.17	122	5621	5.0224 ug/L	96
35) Bromochloromethane	9.27	130	17793	5.0523 ug/L	96
36) Tetrahydrofuran	9.30	42	48924	48.7869 ug/L	96
38) 1,1,1-Trichloroethane	9.62	97	49012	4.7578 ug/L	97
39) Cyclohexane	9.64	56	48367	4.6868 ug/L	99
40) 1,1-Dichloropropene	9.85	75	41863	4.9261 ug/L	97
41) Tert-Amyl-Methyl ether	9.99	73	690718	49.0690 ug/L	99
42) Carbon Tetrachloride	10.00	117	43100	4.7269 ug/L	97

(#) = qualifier out of range (m) = manual integration
6M107643.D 8260WTR.M Wed Apr 25 15:22:47 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\042512\6M107643.D Vial: 7
Acq On : 25 Apr 2012 11:59 Operator: ADC
Sample : WG396001-06 5.0 ug/L STD 8260 Inst : HPMS6
Misc : 1,1 STD51130 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 25 15:22:33 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

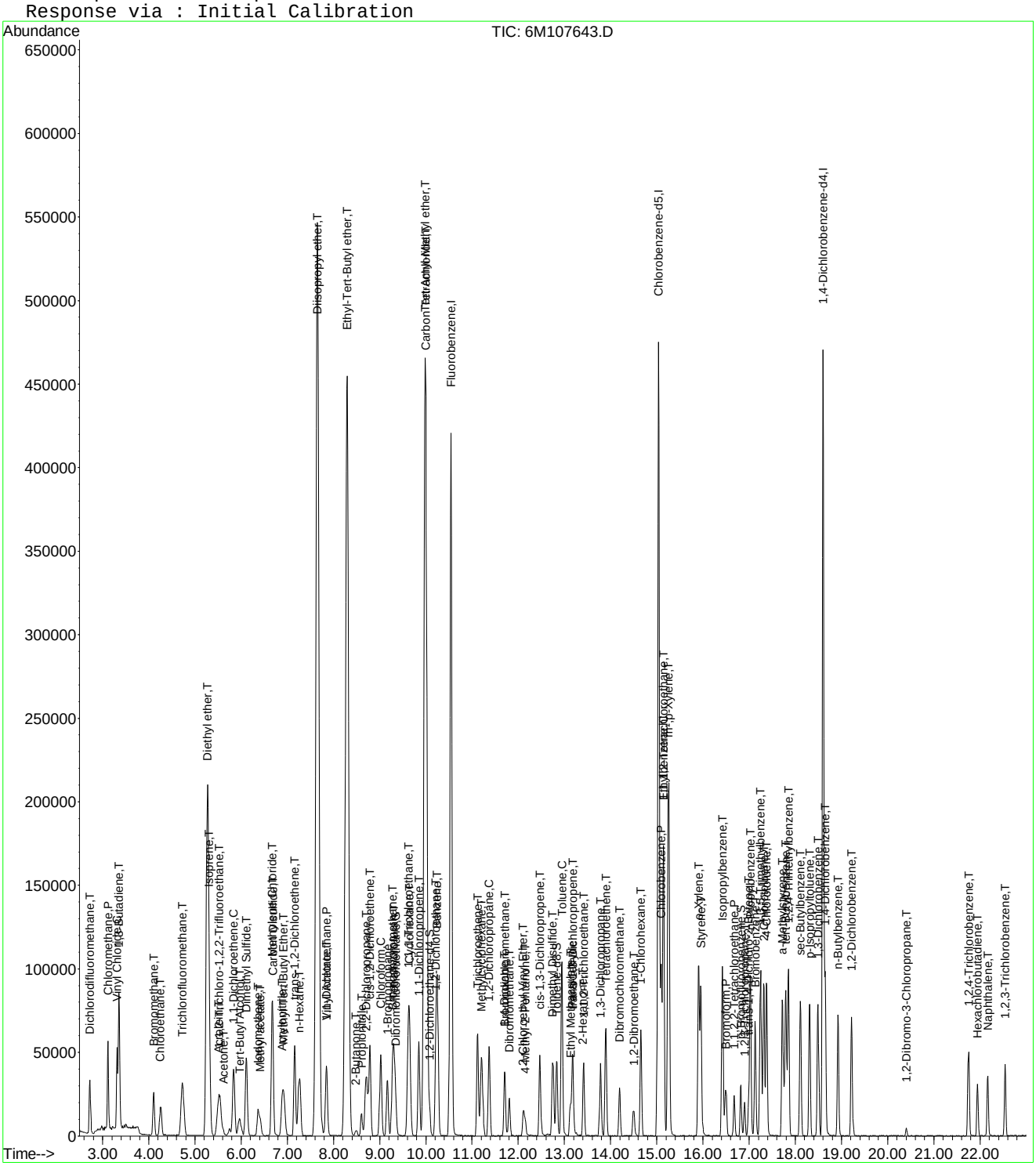
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
45)	1,2-Dichloroethane	10.21	62	39847	4.9190 ug/L	98
46)	Benzene	10.24	78	121550	4.7805 ug/L	97
47)	Trichloroethene	11.12	130	29578	4.6379 ug/L	99
48)	Methylcyclohexane	11.20	83	35302	4.7998 ug/L	98
49)	1,2-Dichloropropane	11.37	63	31224	4.7565 ug/L	95
50)	1,4-Dioxane	11.70	88	965	99.0876 ug/L	71
51)	Bromodichloromethane	11.71	83	38570	4.8913 ug/L	94
52)	Dibromomethane	11.81	93	13994	4.6249 ug/L	99
53)	2-Chloroethyl Vinyl Ether	12.10	63	10732	4.7663 ug/L	88
54)	4-Methyl-2-Pentanone	12.15	58	4414	3.8562 ug/L	99
55)	cis-1,3-Dichloropropene	12.47	75	41204	4.5466 ug/L	96
56)	Dimethyl Disulfide	12.75	79	19721	4.2676 ug/L	97
59)	Toluene	12.95	91	118735	4.8046 ug/L	99
60)	Ethyl Methacrylate	13.13	69	15829	4.2754 ug/L	97
61)	Paraldehyde	13.17	89	2990	45.0606 ug/L	89
62)	trans-1,3-Dichloropropene	13.18	75	32174	4.3127 ug/L	95
63)	1,1,2-Trichloroethane	13.42	97	19062	4.8024 ug/L	98
64)	2-Hexanone	13.40	43	4014	5.0659 ug/L	72
65)	1,3-Dichloropropane	13.78	76	32898	4.8600 ug/L	95
66)	Tetrachloroethene	13.90	166	28254	4.8953 ug/L	98
67)	Dibromochloromethane	14.20	129	23661	4.5872 ug/L	99
68)	1,2-Dibromoethane	14.50	107	18090	4.8561 ug/L	100
69)	1-Chlorohexane	14.66	91	31120	4.7554 ug/L	99
70)	Chlorobenzene	15.09	112	74111	4.7197 ug/L	93
71)	1,1,1,2-Tetrachloroethane	15.15	131	26733	4.7279 ug/L	91
72)	Ethylbenzene	15.15	106	39088	4.8260 ug/L	97
73)	m-,p-Xylene	15.26	106	92973	9.3899 ug/L	98
74)	o-Xylene	15.91	106	44107	4.6782 ug/L	98
75)	Styrene	15.96	104	70107	4.3408 ug/L	97
76)	Bromoform	16.50	173	12591	4.7089 ug/L	96
77)	Isopropylbenzene	16.42	105	110378	4.7039 ug/L	99
79)	1,1,2,2-Tetrachloroethane	16.68	83	19305	5.1561 ug/L	96
81)	1,2,3-Trichloropropane	16.90	110	4706	4.8749 ug/L	90
82)	trans-1,4-Dichloro-2-Buten	16.99	53	4507	3.7760 ug/L	99
83)	n-Propylbenzene	17.02	91	125508	4.8242 ug/L	99
84)	Bromobenzene	17.14	156	27148	4.7578 ug/L	96
85)	1,3,5-Trimethylbenzene	17.25	105	85678	4.8272 ug/L	96
86)	2-Chlorotoluene	17.32	91	85157	4.9297 ug/L	99
87)	4-Chlorotoluene	17.37	91	75711	4.3598 ug/L	99
88)	a-Methylstyrene	17.72	118	39064	4.2917 ug/L	97
89)	tert-Butylbenzene	17.79	134	16325	4.5542 ug/L	98
90)	1,2,4-Trimethylbenzene	17.85	105	88337	4.7075 ug/L	100
91)	sec-Butylbenzene	18.11	105	94949	4.7062 ug/L	99
92)	p-Isopropyltoluene	18.31	119	75290	4.6458 ug/L	98
93)	1,3-Dichlorobenzene	18.49	146	48257	4.7191 ug/L	99
94)	1,4-Dichlorobenzene	18.65	146	51458	4.7982 ug/L	95
95)	n-Butylbenzene	18.92	91	65032	4.6065 ug/L	97
96)	1,2-Dichlorobenzene	19.22	146	43687	4.7270 ug/L	98
97)	1,2-Dibromo-3-Chloropropan	20.40	75	2080	4.4580 ug/L	80
98)	1,2,4-Trichlorobenzene	21.75	180	24696	4.9093 ug/L	95
99)	Hexachlorobutadiene	21.95	225	9408	4.7534 ug/L	98
100)	Naphthalene	22.17	128	43999	4.5934 ug/L	97
101)	1,2,3-Trichlorobenzene	22.54	180	19994	4.5729 ug/L	99

(#) = qualifier out of range (m) = manual integration
6M107643.D 8260WTR.M Wed Apr 25 15:22:48 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\042512\6M107643.D Vial: 7
Acq On : 25 Apr 2012 11:59 Operator: ADC
Sample : WG396001-06 5.0 ug/L STD 8260 Inst : HPMS6
Misc : 1,1 STD51130 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 25 15:22 2012 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Initial Calibration



6M107643.D 8260WTR.M Wed Apr 25 15:22:48 2012 Page 3

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\042512\6M107644.D Vial: 8
Acq On : 25 Apr 2012 12:32 Operator: ADC
Sample : WG396001-07 20.0 ug/L STD 8260 Inst : HPMS6
Misc : 1,1 STD51130 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 25 15:22:58 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.54	96	594227	25.00 ug/L	0.00
57) Chlorobenzene-d5	15.03	117	383762	25.00 ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	183925	25.00 ug/L	0.00

System Monitoring Compounds					
37) Dibromofluoromethane	9.35	111	58307	9.0621 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 36.24%#		
43) 1,2-Dichloroethane-d4	10.07	65	57557	9.1150 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 36.48%#		
58) Toluene-d8	12.83	98	187435	8.9867 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 35.96%#		
80) p-Bromofluorobenzene	16.81	95	64661	8.9592 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 35.84%#		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	2.73	85	158858	20.3809 ug/L	100
3) Chloromethane	3.12	50	234659	21.6813 ug/L	100
4) Vinyl Chloride	3.31	62	191525	19.4279 ug/L	98
5) 1,3-Butadiene	3.34	54	131957	23.4663 ug/L	96
6) Bromomethane	4.11	94	104168	18.6477 ug/L	99
7) Chloroethane	4.26	64	113251	20.3052 ug/L	99
8) Trichlorofluoromethane	4.73	101	255332	20.1443 ug/L	100
9) Diethyl ether	5.26	59	339919	78.9271 ug/L	99
10) Isoprene	5.30	67	218497	20.2725 ug/L	98
11) Acrolein	5.50	56	7970	32.4391 ug/L	98
12) 1,1,2-Trichloro-1,2,2-Trif	5.53	101	134612	19.8557 ug/L	98
13) Acetone	5.61	43	21788	19.3512 ug/L	95
14) 1,1-Dichloroethene	5.83	61	226043	20.7372 ug/L	100
15) Tert-Butyl Alcohol	5.97	59	43289	147.2701 ug/L	97
16) Dimethyl Sulfide	6.11	62	174474	20.1619 ug/L	99
17) Iodomethane	6.36	142	137221	22.0175 ug/L	98
18) Methyl acetate	6.42	43	88859	19.9975 ug/L	99
19) Methylene Chloride	6.67	84	134360	19.9002 ug/L	99
20) Carbon Disulfide	6.69	76	397265	20.1157 ug/L	100
21) Acrylonitrile	6.89	53	29729	19.5968 ug/L	99
22) Methyl Tert Butyl Ether	6.92	73	274821	19.3207 ug/L	100
23) trans-1,2-Dichloroethene	7.16	96	136845	20.7544 ug/L	100
24) n-Hexane	7.26	57	154306	20.4003 ug/L	98
25) Diisopropyl ether	7.65	45	1940470	80.7886 ug/L	99
26) Vinyl Acetate	7.83	43	66581	19.1479 ug/L	98
27) 1,1-Dichloroethane	7.84	63	269329	19.9929 ug/L	99
28) Ethyl-Tert-Butyl ether	8.28	59	1555823	79.7048 ug/L	100
29) 2-Butanone	8.48	43	29635	18.8229 ug/L	96
30) Propionitrile	8.60	54	36779	81.6752 ug/L	92
31) 2,2-Dichloropropane	8.71	77	202027	19.8373 ug/L	98
32) cis-1,2-Dichloroethene	8.78	96	145344	21.0963 ug/L	98
33) Chloroform	9.02	83	243884	20.0310 ug/L	99
34) 1-Bromopropane	9.17	122	25054	20.2993 ug/L	94
35) Bromochloromethane	9.27	130	76045	20.7517 ug/L	100
36) Tetrahydrofuran	9.31	42	80017	77.2848 ug/L	99
38) 1,1,1-Trichloroethane	9.61	97	217361	20.4370 ug/L	99
39) Cyclohexane	9.64	56	215903	20.2636 ug/L	99
40) 1,1-Dichloropropene	9.85	75	184496	21.0277 ug/L	99
41) Tert-Amyl-Methyl ether	9.99	73	1145087	78.7909 ug/L	100
42) Carbon Tetrachloride	10.00	117	196271	20.8489 ug/L	100

(#) = qualifier out of range (m) = manual integration
6M107644.D 8260WTR.M Wed Apr 25 15:22:58 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\042512\6M107644.D Vial: 8
Acq On : 25 Apr 2012 12:32 Operator: ADC
Sample : WG396001-07 20.0 ug/L STD 8260 Inst : HPMS6
Misc : 1,1 STD51130 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 25 15:22:58 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

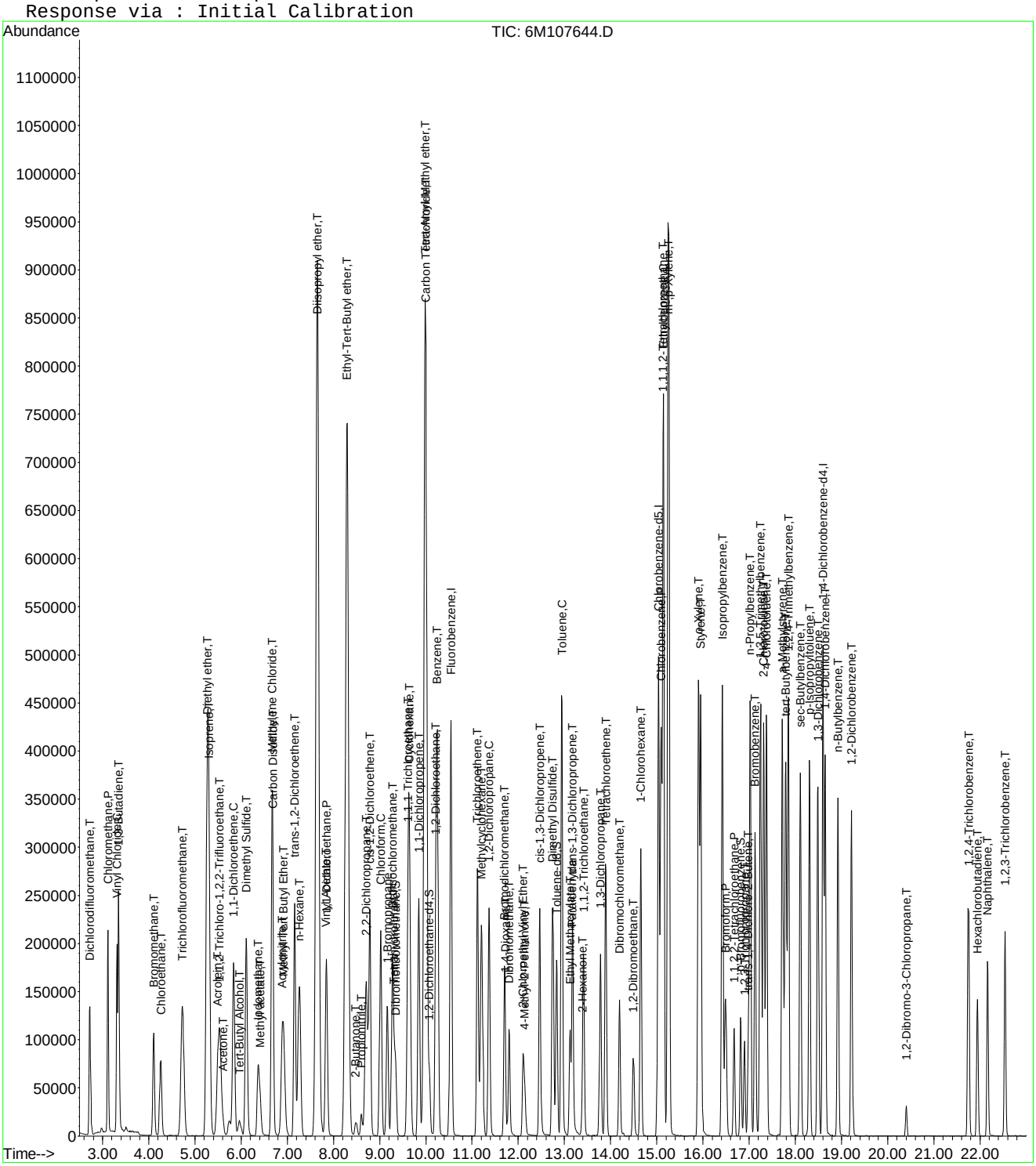
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
45)	1,2-Dichloroethane	10.21	62	169343	20.2481 ug/L	99
46)	Benzene	10.24	78	529661	20.1764 ug/L	99
47)	Trichloroethene	11.11	130	136718	20.7638 ug/L	100
48)	Methylcyclohexane	11.20	83	155717	20.5066 ug/L	99
49)	1,2-Dichloropropane	11.37	63	137745	20.3236 ug/L	98
50)	1,4-Dioxane	11.73	88	2645	149.7640 ug/L	83
51)	Bromodichloromethane	11.70	83	166255	20.4209 ug/L	98
52)	Dibromomethane	11.80	93	64483	19.9008 ug/L	100
53)	2-Chloroethyl Vinyl Ether	12.10	63	52910	18.3848 ug/L	99
54)	4-Methyl-2-Pentanone	12.13	58	22023	18.6351 ug/L	99
55)	cis-1,3-Dichloropropene	12.47	75	189292	19.5174 ug/L	98
56)	Dimethyl Disulfide	12.75	79	101341	18.2378 ug/L	98
59)	Toluene	12.95	91	515527	20.4420 ug/L	99
60)	Ethyl Methacrylate	13.12	69	87414	19.3722 ug/L	99
61)	Paraldehyde	13.17	89	4848	71.5957 ug/L	95
62)	trans-1,3-Dichloropropene	13.18	75	152515	18.7487 ug/L	98
63)	1,1,2-Trichloroethane	13.42	97	83236	20.5493 ug/L	98
64)	2-Hexanone	13.39	43	33386	19.2631 ug/L	97
65)	1,3-Dichloropropane	13.78	76	147996	21.4248 ug/L	99
66)	Tetrachloroethene	13.90	166	122076	20.7268 ug/L	98
67)	Dibromochloromethane	14.20	129	108751	20.0645 ug/L	100
68)	1,2-Dibromoethane	14.49	107	79058	19.9718 ug/L	98
69)	1-Chlorohexane	14.66	91	140563	21.0482 ug/L	100
70)	Chlorobenzene	15.10	112	328061	20.4731 ug/L	100
71)	1,1,1,2-Tetrachloroethane	15.14	131	119161	20.6515 ug/L	99
72)	Ethylbenzene	15.15	106	172428	20.8615 ug/L	99
73)	m-,p-Xylene	15.26	106	423993	41.9627 ug/L	100
74)	o-Xylene	15.90	106	201450	20.9382 ug/L	99
75)	Styrene	15.95	104	331150	19.2337 ug/L	100
76)	Bromoform	16.49	173	58140	21.3073 ug/L	99
77)	Isopropylbenzene	16.42	105	496925	20.7521 ug/L	99
79)	1,1,2,2-Tetrachloroethane	16.68	83	82099	21.1085 ug/L	98
81)	1,2,3-Trichloropropane	16.90	110	21336	21.2762 ug/L	93
82)	trans-1,4-Dichloro-2-Buten	16.98	53	24139	19.5659 ug/L	100
83)	n-Propylbenzene	17.01	91	565214	20.9139 ug/L	100
84)	Bromobenzene	17.13	156	122973	20.3776 ug/L	99
85)	1,3,5-Trimethylbenzene	17.25	105	383800	20.8162 ug/L	100
86)	2-Chlorotoluene	17.31	91	360977	20.1164 ug/L	96
87)	4-Chlorotoluene	17.37	91	376791	20.8868 ug/L	96
88)	a-Methylstyrene	17.72	118	202662	21.4336 ug/L	100
89)	tert-Butylbenzene	17.79	134	74160	19.9158 ug/L	100
90)	1,2,4-Trimethylbenzene	17.85	105	403504	20.6998 ug/L	99
91)	sec-Butylbenzene	18.11	105	428513	20.4461 ug/L	100
92)	p-Isopropyltoluene	18.30	119	352322	20.9282 ug/L	99
93)	1,3-Dichlorobenzene	18.50	146	222773	20.9716 ug/L	100
94)	1,4-Dichlorobenzene	18.65	146	226621	20.3420 ug/L	100
95)	n-Butylbenzene	18.92	91	307212	20.9484 ug/L	100
96)	1,2-Dichlorobenzene	19.22	146	195685	20.3823 ug/L	99
97)	1,2-Dibromo-3-Chloropropan	20.41	75	11859	19.8670 ug/L	98
98)	1,2,4-Trichlorobenzene	21.75	180	107171	20.5085 ug/L	100
99)	Hexachlorobutadiene	21.95	225	42869	20.5058 ug/L	97
100)	Naphthalene	22.16	128	205794	20.6821 ug/L	99
101)	1,2,3-Trichlorobenzene	22.54	180	91731	20.1965 ug/L	97

(#) = qualifier out of range (m) = manual integration
6M107644.D 8260WTR.M Wed Apr 25 15:22:58 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\042512\6M107644.D Vial: 8
Acq On : 25 Apr 2012 12:32 Operator: ADC
Sample : WG396001-07 20.0 ug/L STD 8260 Inst : HPMS6
Misc : 1,1 STD51130 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 25 15:22 2012 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Initial Calibration



6M107644.D 8260WTR.M Wed Apr 25 15:22:59 2012 Page 3

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\042512\6M107645.D Vial: 9
Acq On : 25 Apr 2012 13:04 Operator: ADC
Sample : WG396001-08 50.0 ug/L STD 8260 Inst : HPMS6
Misc : 1,1 STD51130 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 25 15:23:00 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.54	96	619560	25.00 ug/L	0.00
57) Chlorobenzene-d5	15.03	117	408189	25.00 ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	200465	25.00 ug/L	0.00
System Monitoring Compounds					
37) Dibromofluoromethane	9.35	111	173852	25.9154 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 103.68%		
43) 1,2-Dichloroethane-d4	10.07	65	171150	25.9959 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 104.00%		
58) Toluene-d8	12.83	98	565413	25.4867 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 101.96%		
80) p-Bromofluorobenzene	16.81	95	203222	25.8344 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 103.32%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	2.73	85	389869	47.9736 ug/L	100
3) Chloromethane	3.11	50	563326	50.7436 ug/L	100
4) Vinyl Chloride	3.30	62	447570	43.5442 ug/L	100
5) 1,3-Butadiene	3.34	54	277307	54.3268 ug/L	100
6) Bromomethane	4.10	94	267764	45.9739 ug/L	100
7) Chloroethane	4.25	64	283167	48.6941 ug/L	100
8) Trichlorofluoromethane	4.73	101	638353	48.3034 ug/L	100
9) Diethyl ether	5.26	59	444538	98.9985 ug/L	100
10) Isoprene	5.29	67	566599	50.4205 ug/L	100
11) Acrolein	5.50	56	26584	85.5644 ug/L	100
12) 1,1,2-Trichloro-1,2,2-Trif	5.52	101	341895	48.3686 ug/L	100
13) Acetone	5.61	43	58270	49.6368 ug/L	100
14) 1,1-Dichloroethene	5.83	61	575898	50.6727 ug/L	100
15) Tert-Butyl Alcohol	5.98	59	60766	198.2744 ug/L	100
16) Dimethyl Sulfide	6.11	62	448523	49.7113 ug/L	100
17) Iodomethane	6.36	142	364829	56.1443 ug/L	100
18) Methyl acetate	6.41	43	237429	51.2481 ug/L	100
19) Methylene Chloride	6.67	84	339978	48.2956 ug/L	100
20) Carbon Disulfide	6.68	76	1018674	49.4719 ug/L	100
21) Acrylonitrile	6.88	53	84022	53.1212 ug/L	100
22) Methyl Tert Butyl Ether	6.91	73	726233	48.9687 ug/L	100
23) trans-1,2-Dichloroethene	7.16	96	347320	50.5220 ug/L	100
24) n-Hexane	7.26	57	393526	49.8994 ug/L	100
25) Diisopropyl ether	7.65	45	2532589	101.1292 ug/L	100
26) Vinyl Acetate	7.84	43	182804	50.4227 ug/L	100
27) 1,1-Dichloroethane	7.85	63	685786	48.8260 ug/L	100
28) Ethyl-Tert-Butyl ether	8.28	59	2063658	101.3984 ug/L	100
29) 2-Butanone	8.49	43	85577	52.1325 ug/L	100
30) Propionitrile	8.60	54	49932	106.3502 ug/L	100
31) 2,2-Dichloropropane	8.71	77	518745	48.8534 ug/L	100
32) cis-1,2-Dichloroethene	8.79	96	364938	50.8040 ug/L	100
33) Chloroform	9.02	83	621509	48.9593 ug/L	100
34) 1-Bromopropane	9.17	122	63136	48.4718 ug/L	100
35) Bromochloromethane	9.28	130	195266	51.0311 ug/L	100
36) Tetrahydrofuran	9.31	42	111425	103.2199 ug/L	100
38) 1,1,1-Trichloroethane	9.62	97	559652	50.4687 ug/L	100
39) Cyclohexane	9.64	56	557070	50.1460 ug/L	100
40) 1,1-Dichloropropene	9.85	75	473524	51.7624 ug/L	100
41) Tert-Amyl-Methyl ether	9.99	73	1541516	101.7313 ug/L	100
42) Carbon Tetrachloride	10.00	117	505898	51.5417 ug/L	100

(#) = qualifier out of range (m) = manual integration
6M107645.D 8260WTR.M Wed Apr 25 15:23:01 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\042512\6M107645.D Vial: 9
Acq On : 25 Apr 2012 13:04 Operator: ADC
Sample : WG396001-08 50.0 ug/L STD 8260 Inst : HPMS6
Misc : 1,1 STD51130 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 25 15:23:00 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

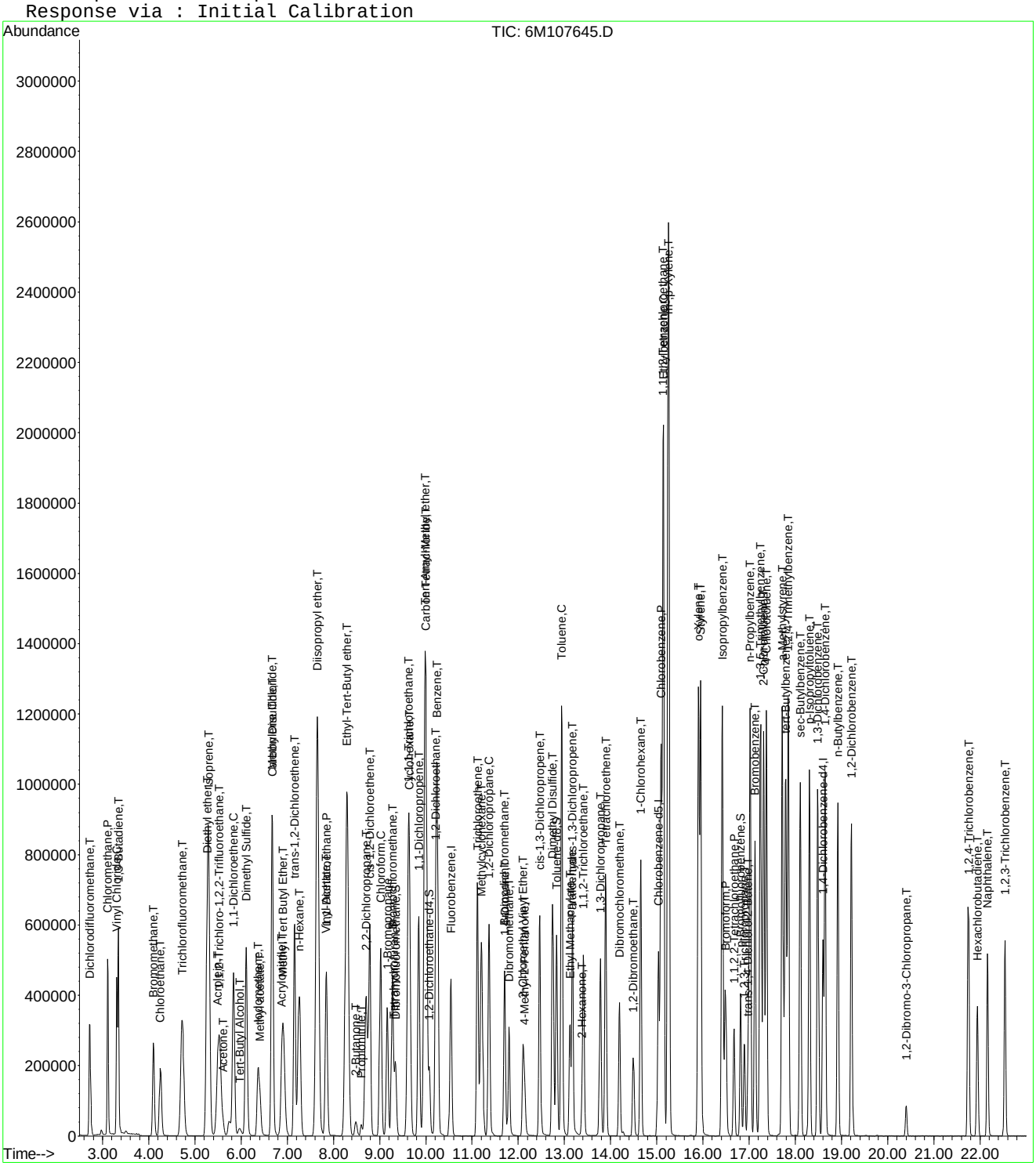
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
45)	1,2-Dichloroethane	10.21	62	437086	50.1247 ug/L	100
46)	Benzene	10.25	78	1341106	48.9979 ug/L	100
47)	Trichloroethene	11.12	130	349281	50.8774 ug/L	100
48)	Methylcyclohexane	11.21	83	398780	50.3686 ug/L	100
49)	1,2-Dichloropropane	11.37	63	357464	50.5856 ug/L	100
50)	1,4-Dioxane	11.72	88	4923	213.5967 ug/L	100
51)	Bromodichloromethane	11.71	83	437323	51.5196 ug/L	100
52)	Dibromomethane	11.80	93	173176	50.9232 ug/L	100
53)	2-Chloroethyl Vinyl Ether	12.10	63	152980	48.9280 ug/L	100
54)	4-Methyl-2-Pentanone	12.13	58	67436	54.7289 ug/L	100
55)	cis-1,3-Dichloropropene	12.47	75	501922	49.3167 ug/L	100
56)	Dimethyl Disulfide	12.75	79	280946	47.2405 ug/L	100
59)	Toluene	12.94	91	1346173	50.1850 ug/L	100
60)	Ethyl Methacrylate	13.12	69	251664	50.9783 ug/L	100
61)	Paraldehyde	13.17	89	7692	106.7982 ug/L	100
62)	trans-1,3-Dichloropropene	13.18	75	436693	49.8740 ug/L	100
63)	1,1,2-Trichloroethane	13.41	97	219399	50.9238 ug/L	100
64)	2-Hexanone	13.38	43	107845	52.2262 ug/L	100
65)	1,3-Dichloropropane	13.78	76	395241	53.7933 ug/L	100
66)	Tetrachloroethene	13.90	166	318010	50.7625 ug/L	100
67)	Dibromochloromethane	14.20	129	291803	50.3565 ug/L	100
68)	1,2-Dibromoethane	14.49	107	214207	50.4864 ug/L	100
69)	1-Chlorohexane	14.66	91	369827	52.0648 ug/L	100
70)	Chlorobenzene	15.10	112	849241	49.8264 ug/L	100
71)	1,1,1,2-Tetrachloroethane	15.14	131	319317	52.0283 ug/L	100
72)	Ethylbenzene	15.15	106	453223	51.5526 ug/L	100
73)	m-,p-Xylene	15.25	106	1122680	104.4627 ug/L	100
74)	o-Xylene	15.90	106	534717	52.2512 ug/L	100
75)	Styrene	15.95	104	907595	49.1867 ug/L	100
76)	Bromoform	16.49	173	163380	56.2928 ug/L	100
77)	Isopropylbenzene	16.42	105	1315619	51.6538 ug/L	100
79)	1,1,2,2-Tetrachloroethane	16.68	83	226876	53.5194 ug/L	100
81)	1,2,3-Trichloropropane	16.89	110	58346	53.3819 ug/L	100
82)	trans-1,4-Dichloro-2-Buten	16.97	53	67259	50.0554 ug/L	100
83)	n-Propylbenzene	17.02	91	1492386	50.6648 ug/L	100
84)	Bromobenzene	17.13	156	326293	49.4507 ug/L	100
85)	1,3,5-Trimethylbenzene	17.25	105	1029566	51.2334 ug/L	100
86)	2-Chlorotoluene	17.31	91	968625	49.5254 ug/L	100
87)	4-Chlorotoluene	17.37	91	986711	50.1837 ug/L	100
88)	a-Methylstyrene	17.72	118	556013	53.9522 ug/L	100
89)	tert-Butylbenzene	17.79	134	195513	48.1732 ug/L	100
90)	1,2,4-Trimethylbenzene	17.84	105	1083235	50.9851 ug/L	100
91)	sec-Butylbenzene	18.11	105	1145053	50.1274 ug/L	100
92)	p-Isopropyltoluene	18.30	119	934094	50.9078 ug/L	100
93)	1,3-Dichlorobenzene	18.49	146	590408	50.9946 ug/L	100
94)	1,4-Dichlorobenzene	18.65	146	598306	49.2740 ug/L	100
95)	n-Butylbenzene	18.93	91	821015	51.3648 ug/L	100
96)	1,2-Dichlorobenzene	19.22	146	526738	50.3377 ug/L	100
97)	1,2-Dibromo-3-Chloropropan	20.41	75	32970	49.0867 ug/L	100
98)	1,2,4-Trichlorobenzene	21.75	180	287652	50.5041 ug/L	100
99)	Hexachlorobutadiene	21.95	225	107425	47.0134 ug/L	100
100)	Naphthalene	22.16	128	580647	53.5397 ug/L	100
101)	1,2,3-Trichlorobenzene	22.54	180	238929	48.2649 ug/L	100

(#) = qualifier out of range (m) = manual integration
6M107645.D 8260WTR.M Wed Apr 25 15:23:01 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\042512\6M107645.D Vial: 9
Acq On : 25 Apr 2012 13:04 Operator: ADC
Sample : WG396001-08 50.0 ug/L STD 8260 Inst : HPMS6
Misc : 1,1 STD51130 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 25 15:23 2012 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Initial Calibration



6M107645.D 8260WTR.M Wed Apr 25 15:23:01 2012 Page 3

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\042512\6M107646.D Vial: 10
Acq On : 25 Apr 2012 13:37 Operator: ADC
Sample : WG396001-09 100.0 ug/L STD 8260 Inst : HPMS6
Misc : 1,1 STD51130 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 25 15:23:01 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.54	96	618856	25.00 ug/L	0.00
57) Chlorobenzene-d5	15.04	117	410376	25.00 ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	203764	25.00 ug/L	0.00

System Monitoring Compounds

37) Dibromofluoromethane	9.35	111	352242	52.5671 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 210.28%#		
43) 1,2-Dichloroethane-d4	10.07	65	347313	52.8133 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 211.24%#		
58) Toluene-d8	12.83	98	1158157	51.9272 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 207.72%#		
80) p-Bromofluorobenzene	16.81	95	411704	51.4901 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 205.96%#		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	2.72	85	748050	92.1528 ug/L	100
3) Chloromethane	3.11	50	1080230	97.9977 ug/L	100
4) Vinyl Chloride	3.30	62	835012	81.3310 ug/L	99
5) 1,3-Butadiene	3.33	54	502511	104.1932 ug/L	99
6) Bromomethane	4.10	94	545004	93.6813 ug/L	98
7) Chloroethane	4.25	64	553741	95.3309 ug/L	100
8) Trichlorofluoromethane	4.72	101	1255933	95.1430 ug/L	99
9) Diethyl ether	5.26	59	903969	201.5426 ug/L	99
10) Isoprene	5.29	67	1146761	102.1641 ug/L	99
11) Acrolein	5.51	56	62004	188.7394 ug/L	100
12) 1,1,2-Trichloro-1,2,2-Trif	5.52	101	690733	97.8306 ug/L	99
13) Acetone	5.61	43	119353	101.7854 ug/L	98
14) 1,1-Dichloroethene	5.83	61	1151147	101.4035 ug/L	100
15) Tert-Butyl Alcohol	5.98	59	118369	386.6675 ug/L	99
16) Dimethyl Sulfide	6.11	62	922818	102.3954 ug/L	99
17) Iodomethane	6.37	142	706856	108.9033 ug/L	98
18) Methyl acetate	6.41	43	493386	106.6165 ug/L	99
19) Methylene Chloride	6.66	84	686038	97.5661 ug/L	100
20) Carbon Disulfide	6.68	76	2063105	100.3086 ug/L	100
21) Acrylonitrile	6.88	53	167946	106.3012 ug/L	98
22) Methyl Tert Butyl Ether	6.91	73	1453163	98.0959 ug/L	99
23) trans-1,2-Dichloroethene	7.15	96	694499	101.1384 ug/L	98
24) n-Hexane	7.26	57	793462	100.7261 ug/L	100
25) Diisopropyl ether	7.65	45	5110546	204.3022 ug/L	100
26) Vinyl Acetate	7.84	43	363097	100.2668 ug/L	100
27) 1,1-Dichloroethane	7.85	63	1396149	99.5149 ug/L	100
28) Ethyl-Tert-Butyl ether	8.29	59	4138115	203.5588 ug/L	100
29) 2-Butanone	8.48	43	172061	104.9368 ug/L	98
30) Propionitrile	8.60	54	102974	219.5740 ug/L	97
31) 2,2-Dichloropropane	8.72	77	1037187	97.7895 ug/L	99
32) cis-1,2-Dichloroethene	8.79	96	740781	103.2435 ug/L	100
33) Chloroform	9.02	83	1246716	98.3216 ug/L	99
34) 1-Bromopropane	9.16	122	128449	98.2947 ug/L	99
35) Bromochloromethane	9.28	130	387609	101.3625 ug/L	99
36) Tetrahydrofuran	9.31	42	226285	209.8603 ug/L	99
38) 1,1,1-Trichloroethane	9.61	97	1127271	101.7714 ug/L	100
39) Cyclohexane	9.64	56	1129505	101.7907 ug/L	99
40) 1,1-Dichloropropene	9.84	75	960862	105.1544 ug/L	98
41) Tert-Amyl-Methyl ether	9.99	73	3100244	204.8312 ug/L	99
42) Carbon Tetrachloride	10.00	117	1021779	104.2189 ug/L	99

(#) = qualifier out of range (m) = manual integration
6M107646.D 8260WTR.M Wed Apr 25 15:23:02 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\042512\6M107646.D Vial: 10
Acq On : 25 Apr 2012 13:37 Operator: ADC
Sample : WG396001-09 100.0 ug/L STD 8260 Inst : HPMS6
Misc : 1,1 STD51130 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 25 15:23:01 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

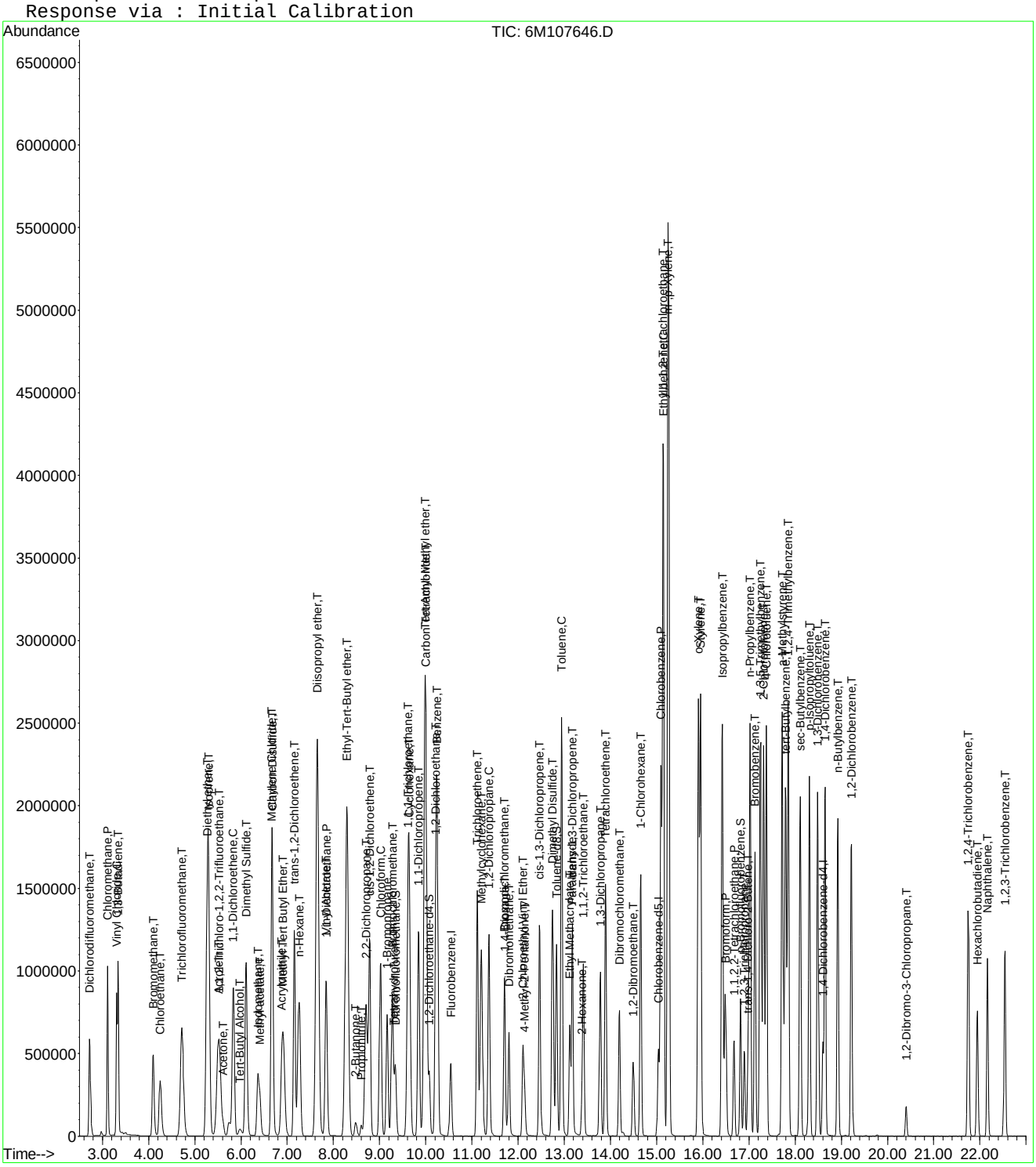
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
45)	1,2-Dichloroethane	10.22	62	869687	99.8486 ug/L	99
46)	Benzene	10.25	78	2712885	99.2291 ug/L	100
47)	Trichloroethene	11.12	130	704332	102.7119 ug/L	100
48)	Methylcyclohexane	11.21	83	804930	101.7838 ug/L	100
49)	1,2-Dichloropropane	11.37	63	726078	102.8660 ug/L	100
50)	1,4-Dioxane	11.72	88	11607	411.0347 ug/L	98
51)	Bromodichloromethane	11.71	83	877519	103.4953 ug/L	100
52)	Dibromomethane	11.80	93	339943	99.8692 ug/L	100
53)	2-Chloroethyl Vinyl Ether	12.11	63	313881	99.2820 ug/L	99
54)	4-Methyl-2-Pentanone	12.14	58	131959	107.2154 ug/L	99
55)	cis-1,3-Dichloropropene	12.46	75	1013688	99.5026 ug/L	99
56)	Dimethyl Disulfide	12.75	79	595788	99.4466 ug/L	100
59)	Toluene	12.94	91	2739455	101.5820 ug/L	99
60)	Ethyl Methacrylate	13.12	69	515704	103.0209 ug/L	98
61)	Paraldehyde	13.17	89	16105	222.4154 ug/L #	16
62)	trans-1,3-Dichloropropene	13.18	75	885834	100.2717 ug/L	99
63)	1,1,2-Trichloroethane	13.41	97	438573	101.2529 ug/L	99
64)	2-Hexanone	13.38	43	215037	100.5521 ug/L	97
65)	1,3-Dichloropropane	13.78	76	784256	106.1705 ug/L	100
66)	Tetrachloroethene	13.89	166	636988	101.1377 ug/L	99
67)	Dibromochloromethane	14.20	129	586579	100.5165 ug/L	98
68)	1,2-Dibromoethane	14.50	107	431014	100.7926 ug/L	98
69)	1-Chlorohexane	14.66	91	750548	105.1001 ug/L	99
70)	Chlorobenzene	15.09	112	1718715	100.3026 ug/L	99
71)	1,1,1,2-Tetrachloroethane	15.14	131	656150	106.3409 ug/L	99
72)	Ethylbenzene	15.15	106	944121	106.8184 ug/L	99
73)	m-,p-Xylene	15.25	106	2328167	215.4760 ug/L	98
74)	o-Xylene	15.90	106	1090889	106.0308 ug/L	99
75)	Styrene	15.96	104	1884086	101.3111 ug/L	100
76)	Bromoform	16.50	173	330321	113.2060 ug/L	99
77)	Isopropylbenzene	16.43	105	2707188	105.7231 ug/L	99
79)	1,1,2,2-Tetrachloroethane	16.68	83	440046	102.1249 ug/L	100
81)	1,2,3-Trichloropropane	16.89	110	114094	102.6967 ug/L	98
82)	trans-1,4-Dichloro-2-Buten	16.98	53	138810	101.6566 ug/L	100
83)	n-Propylbenzene	17.02	91	3057377	102.1139 ug/L	100
84)	Bromobenzene	17.13	156	666047	99.1964 ug/L	99
85)	1,3,5-Trimethylbenzene	17.25	105	2116324	103.6078 ug/L	100
86)	2-Chlorotoluene	17.31	91	1997279	100.4667 ug/L	99
87)	4-Chlorotoluene	17.37	91	2016953	100.9206 ug/L	100
88)	a-Methylstyrene	17.72	118	1172399	111.9207 ug/L	96
89)	tert-Butylbenzene	17.79	134	406794	98.6088 ug/L	98
90)	1,2,4-Trimethylbenzene	17.84	105	2244451	103.9303 ug/L	99
91)	sec-Butylbenzene	18.11	105	2346530	101.0617 ug/L	99
92)	p-Isopropyltoluene	18.30	119	1941960	104.1226 ug/L	99
93)	1,3-Dichlorobenzene	18.49	146	1197023	101.7150 ug/L	99
94)	1,4-Dichlorobenzene	18.65	146	1219336	98.7937 ug/L	100
95)	n-Butylbenzene	18.93	91	1678452	103.3082 ug/L	100
96)	1,2-Dichlorobenzene	19.22	146	1063847	100.0205 ug/L	100
97)	1,2-Dibromo-3-Chloropropan	20.41	75	68854	99.7711 ug/L	95
98)	1,2,4-Trichlorobenzene	21.75	180	587994	101.5649 ug/L	100
99)	Hexachlorobutadiene	21.95	225	222637	95.7513 ug/L	99
100)	Naphthalene	22.16	128	1173188	106.4247 ug/L	100
101)	1,2,3-Trichlorobenzene	22.54	180	497602	98.8907 ug/L	97

(#) = qualifier out of range (m) = manual integration
6M107646.D 8260WTR.M Wed Apr 25 15:23:02 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\042512\6M107646.D Vial: 10
Acq On : 25 Apr 2012 13:37 Operator: ADC
Sample : WG396001-09 100.0 ug/L STD 8260 Inst : HPMS6
Misc : 1,1 STD51130 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 25 15:23 2012 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Initial Calibration



6M107646.D 8260WTR.M Wed Apr 25 15:23:02 2012 Page 3

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\042512\6M107647.D Vial: 11
Acq On : 25 Apr 2012 14:10 Operator: ADC
Sample : WG396001-10 200.0 ug/L STD 8260 Inst : HPMS6
Misc : 1,1 STD51130 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 25 15:23:03 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.54	96	646443	25.00 ug/L	0.00
57) Chlorobenzene-d5	15.04	117	427412	25.00 ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	206804	25.00 ug/L	0.00
System Monitoring Compounds					
37) Dibromofluoromethane	9.35	111	748003	106.8650 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 427.44%#		
43) 1,2-Dichloroethane-d4	10.07	65	705535	102.7069 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 410.84%#		
58) Toluene-d8	12.83	98	2497059	107.4958 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 430.00%#		
80) p-Bromofluorobenzene	16.81	95	844107	104.0171 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 416.08%#		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	2.73	85	1471126	173.4950 ug/L	100
3) Chloromethane	3.11	50	2290270	199.5560 ug/L	100
4) Vinyl Chloride	3.30	62	1596234	148.8398 ug/L	100
5) 1,3-Butadiene	3.33	54	966749	197.7222 ug/L	100
6) Bromomethane	4.09	94	1188693	195.6060 ug/L	100
7) Chloroethane	4.25	64	1163931	191.8288 ug/L	98
8) Trichlorofluoromethane	4.72	101	2548054	184.7901 ug/L	99
9) Diethyl ether	5.27	59	2530	0.5400 ug/L #	76
10) Isoprene	5.29	67	2442948	208.3526 ug/L	100
11) Acrolein	5.51	56	149245	424.1108 ug/L	96
12) 1,1,2-Trichloro-1,2,2-Trif	5.52	101	1433620	194.3828 ug/L	99
13) Acetone	5.62	43	238655	194.8418 ug/L	98
14) 1,1-Dichloroethene	5.82	61	2432654	205.1455 ug/L	99
15) Tert-Butyl Alcohol	6.01	59	184	0.5754 ug/L #	60
16) Dimethyl Sulfide	6.11	62	1961365	208.3445 ug/L	99
17) Iodomethane	6.37	142	1472667	217.2072 ug/L	99
18) Methyl acetate	6.41	43	1031705	213.4286 ug/L	99
19) Methylene Chloride	6.67	84	1459127	198.6566 ug/L	99
20) Carbon Disulfide	6.68	76	4432597	206.3168 ug/L	99
21) Acrylonitrile	6.88	53	348621	211.2426 ug/L	98
22) Methyl Tert Butyl Ether	6.92	73	3003009	194.0673 ug/L	99
23) trans-1,2-Dichloroethene	7.15	96	1515128	211.2288 ug/L	99
24) n-Hexane	7.25	57	1668465	202.7646 ug/L	99
26) Vinyl Acetate	7.84	43	754935	199.5737 ug/L	99
27) 1,1-Dichloroethane	7.85	63	2952932	201.4973 ug/L	100
28) Ethyl-Tert-Butyl ether	8.02	59	3340	0.1573 ug/L #	63
29) 2-Butanone	8.49	43	331314	193.4393 ug/L	99
31) 2,2-Dichloropropane	8.71	77	2194398	198.0659 ug/L	98
32) cis-1,2-Dichloroethene	8.79	96	1581702	211.0362 ug/L	99
33) Chloroform	9.02	83	2637016	199.0920 ug/L	100
34) 1-Bromopropane	9.17	122	274833	200.9018 ug/L	100
35) Bromochloromethane	9.28	130	785715	196.6529 ug/L	99
36) Tetrahydrofuran	9.34	42	1607	1.4268 ug/L #	40
38) 1,1,1-Trichloroethane	9.61	97	2411233	208.3992 ug/L	100
39) Cyclohexane	9.64	56	2387897	206.0132 ug/L	99
40) 1,1-Dichloropropene	9.85	75	2045298	214.2804 ug/L	98
41) Tert-Amyl-Methyl ether	9.85	73	299091	18.9175 ug/L #	58
42) Carbon Tetrachloride	10.00	117	2118906	206.9000 ug/L	99
45) 1,2-Dichloroethane	10.22	62	1804814	198.3676 ug/L	99
46) Benzene	10.25	78	5713434	200.0619 ug/L	99

(#) = qualifier out of range (m) = manual integration
6M107647.D 8260WTR.M Wed Apr 25 15:23:03 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\042512\6M107647.D Vial: 11
Acq On : 25 Apr 2012 14:10 Operator: ADC
Sample : WG396001-10 200.0 ug/L STD 8260 Inst : HPMS6
Misc : 1,1 STD51130 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 25 15:23:03 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

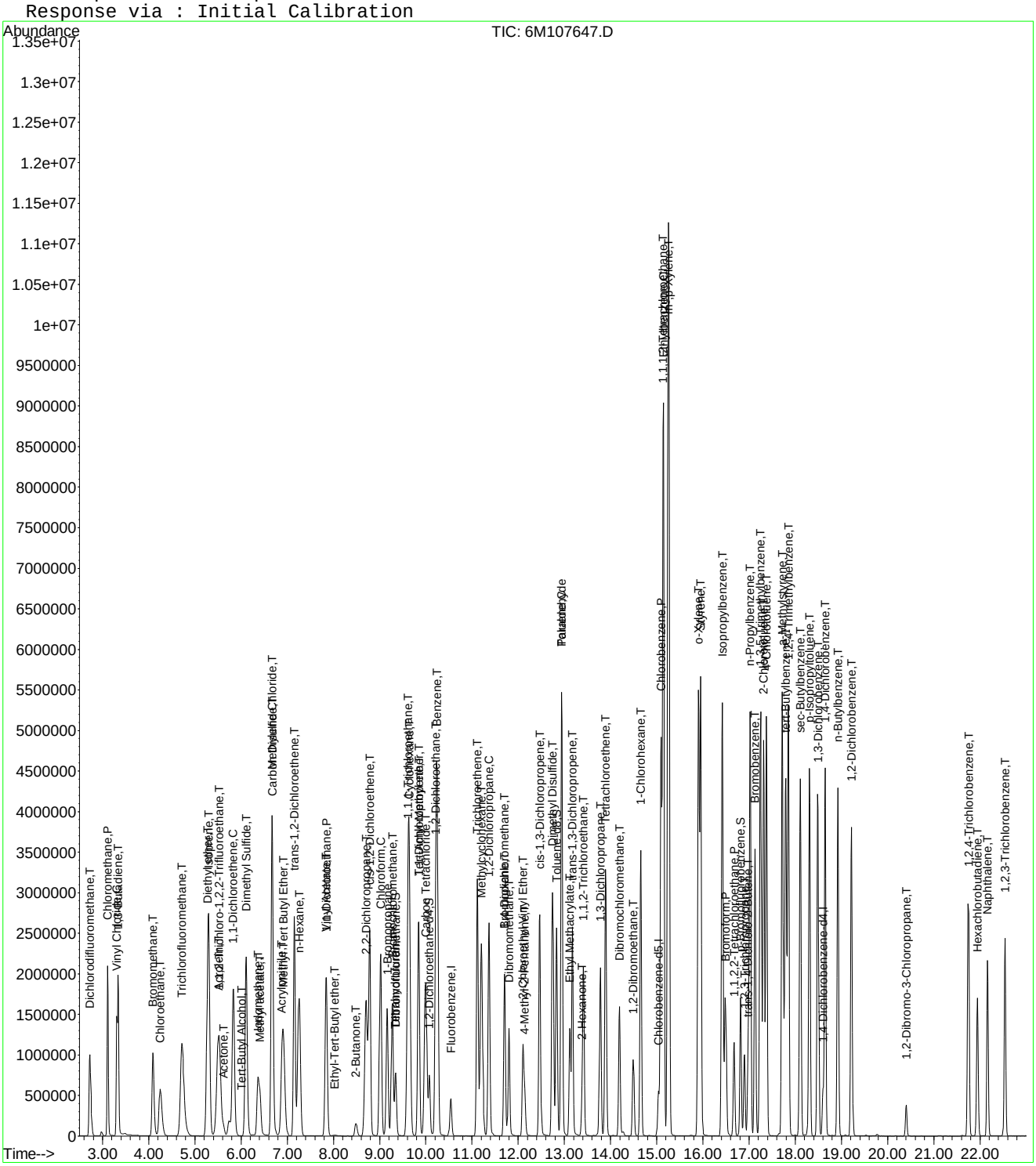
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
47)	Trichloroethene	11.11	130	1494861	208.6910 ug/L	100
48)	Methylcyclohexane	11.21	83	1702262	206.0660 ug/L	99
49)	1,2-Dichloropropane	11.37	63	1554158	210.7866 ug/L	99
50)	1,4-Dioxane	11.71	88	1997	124.8880 ug/L #	22
51)	Bromodichloromethane	11.71	83	1854502	209.3874 ug/L	100
52)	Dibromomethane	11.80	93	710088	199.4948 ug/L	100
53)	2-Chloroethyl Vinyl Ether	12.10	63	652112	196.3176 ug/L	99
54)	4-Methyl-2-Pentanone	12.13	58	255151	198.4609 ug/L	99
55)	cis-1,3-Dichloropropene	12.47	75	2151902	202.0008 ug/L	98
56)	Dimethyl Disulfide	12.75	79	1293328	205.8507 ug/L	99
59)	Toluene	12.94	91	5823352	207.3295 ug/L	98
60)	Ethyl Methacrylate	13.12	69	1033666	197.4734 ug/L	98
61)	Paraldehyde	12.94	89	259279	3438.0061 ug/L #	30
62)	trans-1,3-Dichloropropene	13.18	75	1859752	201.7652 ug/L	98
63)	1,1,2-Trichloroethane	13.41	97	893582	198.0776 ug/L	99
64)	2-Hexanone	13.38	43	425786	188.3874 ug/L	97
65)	1,3-Dichloropropane	13.78	76	1596551	207.5219 ug/L	100
66)	Tetrachloroethene	13.89	166	1375597	209.7048 ug/L	98
67)	Dibromochloromethane	14.20	129	1212662	199.3522 ug/L	99
68)	1,2-Dibromoethane	14.49	107	886699	198.8447 ug/L	99
69)	1-Chlorohexane	14.66	91	1647771	221.5424 ug/L	100
70)	Chlorobenzene	15.10	112	3660131	205.0879 ug/L	99
71)	1,1,1,2-Tetrachloroethane	15.14	131	1390947	216.4427 ug/L	100
72)	Ethylbenzene	15.15	106	2057569	223.5157 ug/L	95
73)	m-,p-Xylene	15.25	106	4938761	438.8721 ug/L	93
74)	o-Xylene	15.90	106	2312823	215.8386 ug/L	99
75)	Styrene	15.95	104	3896316	200.9286 ug/L	98
76)	Bromoform	16.50	173	649853	213.8375 ug/L	99
77)	Isopropylbenzene	16.42	105	5635512	211.3100 ug/L	98
79)	1,1,2,2-Tetrachloroethane	16.68	83	864951	197.7851 ug/L	99
81)	1,2,3-Trichloropropane	16.90	110	223056	197.8227 ug/L	97
82)	trans-1,4-Dichloro-2-Buten	16.98	53	276367	199.4429 ug/L	95
83)	n-Propylbenzene	17.02	91	6347701	208.8916 ug/L	99
84)	Bromobenzene	17.13	156	1371184	201.0997 ug/L	98
85)	1,3,5-Trimethylbenzene	17.25	105	4465299	215.3920 ug/L	99
86)	2-Chlorotoluene	17.31	91	4090941	202.7567 ug/L	100
87)	4-Chlorotoluene	17.37	91	4220740	208.0852 ug/L	100
88)	a-Methylstyrene	17.72	118	2466859	232.0320 ug/L	96
89)	tert-Butylbenzene	17.79	134	860399	205.4989 ug/L	97
90)	1,2,4-Trimethylbenzene	17.85	105	4642372	211.8071 ug/L	99
91)	sec-Butylbenzene	18.11	105	4894530	207.7017 ug/L	98
92)	p-Isopropyltoluene	18.30	119	4105898	216.9109 ug/L	100
93)	1,3-Dichlorobenzene	18.50	146	2514937	210.5612 ug/L	99
94)	1,4-Dichlorobenzene	18.65	146	2542186	202.9466 ug/L	100
95)	n-Butylbenzene	18.93	91	3611518	219.0202 ug/L	99
96)	1,2-Dichlorobenzene	19.22	146	2206949	204.4422 ug/L	99
97)	1,2-Dibromo-3-Chloropropan	20.41	75	141917	201.5616 ug/L	98
98)	1,2,4-Trichlorobenzene	21.75	180	1254005	213.4216 ug/L	99
99)	Hexachlorobutadiene	21.95	225	488050	206.6960 ug/L	99
100)	Naphthalene	22.16	128	2393849	213.9636 ug/L	100
101)	1,2,3-Trichlorobenzene	22.54	180	1032672	202.2109 ug/L	98

(#) = qualifier out of range (m) = manual integration
6M107647.D 8260WTR.M Wed Apr 25 15:23:03 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\042512\6M107647.D Vial: 11
Acq On : 25 Apr 2012 14:10 Operator: ADC
Sample : WG396001-10 200.0 ug/L STD 8260 Inst : HPMS6
Misc : 1,1 STD51130 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 25 15:23 2012 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Initial Calibration



6M107647.D 8260WTR.M Wed Apr 25 15:23:04 2012 Page 3

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\042512\6M107648.D Vial: 12
Acq On : 25 Apr 2012 14:42 Operator: ADC
Sample : WG396001-11 300.0 ug/L STD 8260 Inst : HPMS6
Misc : 1,1 STD51130 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 25 15:23:04 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.54	96	649576	25.00 ug/L	0.00
57) Chlorobenzene-d5	15.03	117	418427	25.00 ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	187665	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	10.00	65	5879	0.8517 ug/L	-0.07
Spiked Amount 25.000	Range 80 - 120		Recovery	= 3.40%#	
58) Toluene-d8	12.84	98	579	0.0255 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery	= 0.12%#	
80) p-Bromofluorobenzene	16.83	95	1324	0.1798 ug/L	0.02
Spiked Amount 25.000	Range 86 - 115		Recovery	= 0.72%#	

Target Compounds					Qvalue
2) Dichlorodifluoromethane	2.73	85	1114	0.1307 ug/L #	67
3) Chloromethane	3.11	50	16042	0.7633 ug/L	95
5) 1,3-Butadiene	3.33	54	1417086	291.6036 ug/L	100
6) Bromomethane	4.09	94	42970	7.0368 ug/L	96
8) Trichlorofluoromethane	4.72	101	1720	0.1241 ug/L #	58
9) Diethyl ether	5.27	59	1433924	304.5784 ug/L	99
11) Acrolein	5.51	56	215549	605.9515 ug/L	95
12) 1,1,2-Trichloro-1,2,2-Trif	5.54	101	1936	0.2612 ug/L #	20
13) Acetone	5.62	43	366429	297.7157 ug/L	99
15) Tert-Butyl Alcohol	6.00	59	206479	642.5918 ug/L	98
17) Iodomethane	6.37	142	16577	2.4332 ug/L	99
18) Methyl acetate	6.42	43	611611	125.9136 ug/L	100
19) Methylene Chloride	6.67	84	4267	0.5781 ug/L	97
20) Carbon Disulfide	6.68	76	8026	0.3718 ug/L #	75
21) Acrylonitrile	6.87	53	494473	298.1748 ug/L	91
24) n-Hexane	7.25	57	5569	0.6735 ug/L	89
25) Diisopropyl ether	7.65	45	7975502	303.7550 ug/L	100
26) Vinyl Acetate	7.83	43	1127218	296.5528 ug/L	99
28) Ethyl-Tert-Butyl ether	8.29	59	6614632	309.9935 ug/L	99
29) 2-Butanone	8.49	43	553348	321.5166 ug/L	99
30) Propionitrile	8.61	54	167232	339.7287 ug/L	98
34) 1-Bromopropane	9.17	122	415352	301.9461 ug/L	99
36) Tetrahydrofuran	9.30	42	363480	321.1550 ug/L	99
38) 1,1,1-Trichloroethane	9.62	97	1472	0.1266 ug/L #	31
39) Cyclohexane	9.65	56	3911	0.3358 ug/L #	73
40) 1,1-Dichloropropene	9.85	75	2008	0.2094 ug/L #	80
41) Tert-Amyl-Methyl ether	9.99	73	4865256	306.2426 ug/L	99
42) Carbon Tetrachloride	9.99	117	1448	0.1407 ug/L #	88
46) Benzene	10.24	78	5088	0.1773 ug/L	89
47) Trichloroethene	11.11	130	894	0.1242 ug/L #	61
48) Methylcyclohexane	11.21	83	2929	0.3529 ug/L	93
50) 1,4-Dioxane	11.73	88	18424	586.5169 ug/L	79
53) 2-Chloroethyl Vinyl Ether	12.10	63	1026968	307.0190 ug/L	99
54) 4-Methyl-2-Pentanone	12.13	58	441037	341.3917 ug/L	98
55) cis-1,3-Dichloropropene	12.47	75	591	0.2620 ug/L #	48
59) Toluene	12.95	91	6015	0.2188 ug/L	97
61) Paraldehyde	13.16	89	22698	307.4354 ug/L	90
64) 2-Hexanone	13.38	43	689282	309.5054 ug/L	99
66) Tetrachloroethene	13.90	166	1452	0.2261 ug/L #	75
69) 1-Chlorohexane	14.66	91	2013	0.2765 ug/L	92

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

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\042512\6M107648.D Vial: 12
Acq On : 25 Apr 2012 14:42 Operator: ADC
Sample : WG396001-11 300.0 ug/L STD 8260 Inst : HPMS6
Misc : 1,1 STD51130 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 25 15:23:04 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

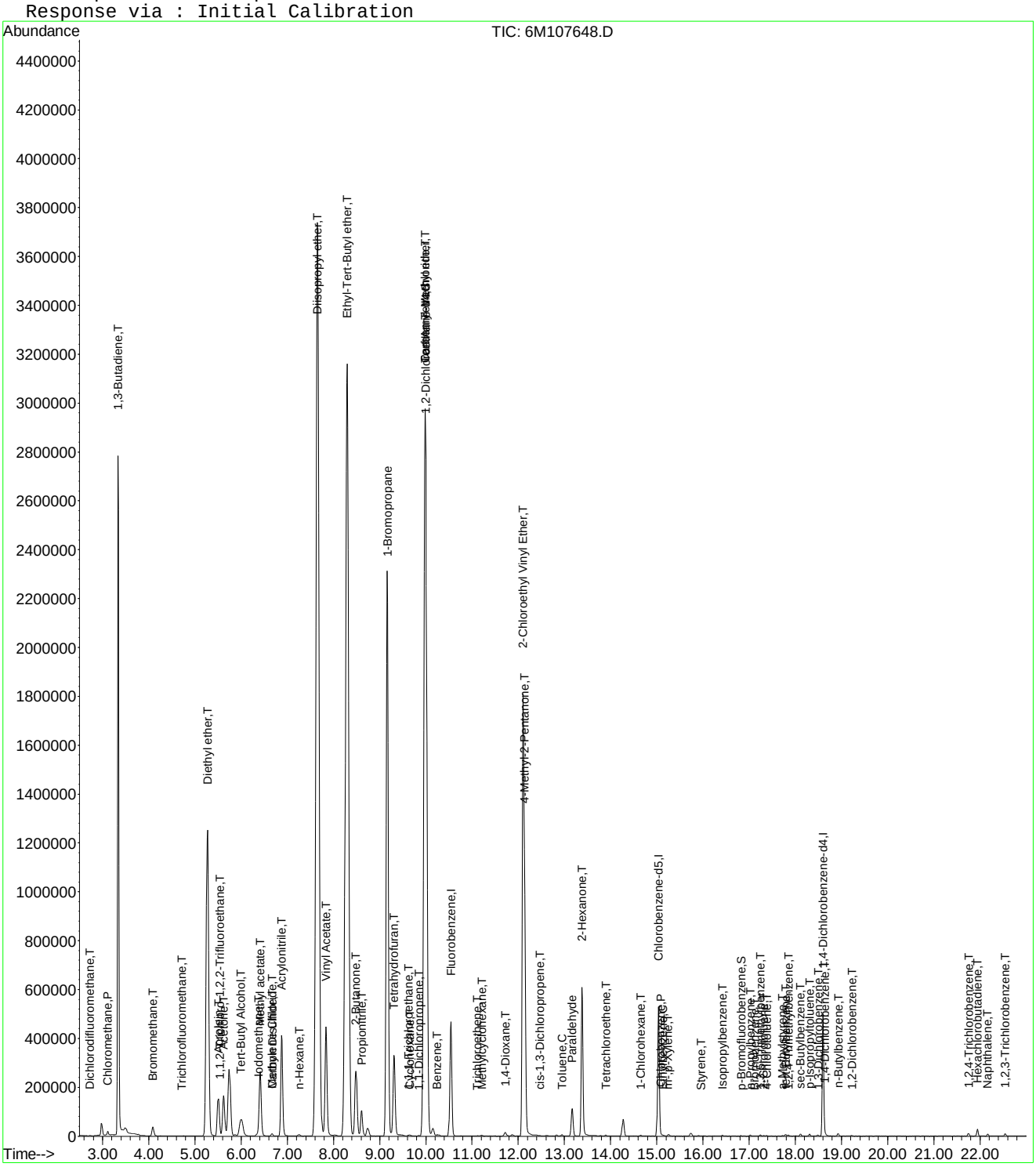
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
70)	Chlorobenzene	15.08	112	4245	0.2430 ug/L #	12
72)	Ethylbenzene	15.14	106	1381	0.1532 ug/L	91
73)	m-,p-Xylene	15.25	106	3367	0.3056 ug/L	88
75)	Styrene	15.96	104	1741	0.3282 ug/L	78
77)	Isopropylbenzene	16.42	105	5543	0.2123 ug/L	98
83)	n-Propylbenzene	17.02	91	7999	0.2901 ug/L #	97
84)	Bromobenzene	17.12	156	218	0.1450 ug/L #	1
85)	1,3,5-Trimethylbenzene	17.25	105	5710	0.3035 ug/L	87
86)	2-Chlorotoluene	17.31	91	4189	0.2288 ug/L #	77
87)	4-Chlorotoluene	17.38	91	3877	0.2106 ug/L #	80
88)	a-Methylstyrene	17.72	118	1541	0.1597 ug/L	88
89)	tert-Butylbenzene	17.79	134	1679	0.4419 ug/L	58
90)	1,2,4-Trimethylbenzene	17.85	105	5618	0.2825 ug/L	86
91)	sec-Butylbenzene	18.11	105	12345	0.5773 ug/L	91
92)	p-Isopropyltoluene	18.31	119	9715	0.5656 ug/L	93
93)	1,3-Dichlorobenzene	18.51	146	3008	0.2775 ug/L	99
94)	1,4-Dichlorobenzene	18.64	146	3690	0.3246 ug/L #	53
95)	n-Butylbenzene	18.93	91	11557	0.7724 ug/L	97
96)	1,2-Dichlorobenzene	19.23	146	3310	0.3379 ug/L	83
98)	1,2,4-Trichlorobenzene	21.75	180	6199	1.1626 ug/L	92
99)	Hexachlorobutadiene	21.95	225	8938	4.2712 ug/L	96
100)	Naphthalene	22.16	128	12830	1.2637 ug/L	89
101)	1,2,3-Trichlorobenzene	22.54	180	6412	1.3836 ug/L	90

(#) = qualifier out of range (m) = manual integration
6M107648.D 8260WTR.M Wed Apr 25 15:23:04 2012 Page 2

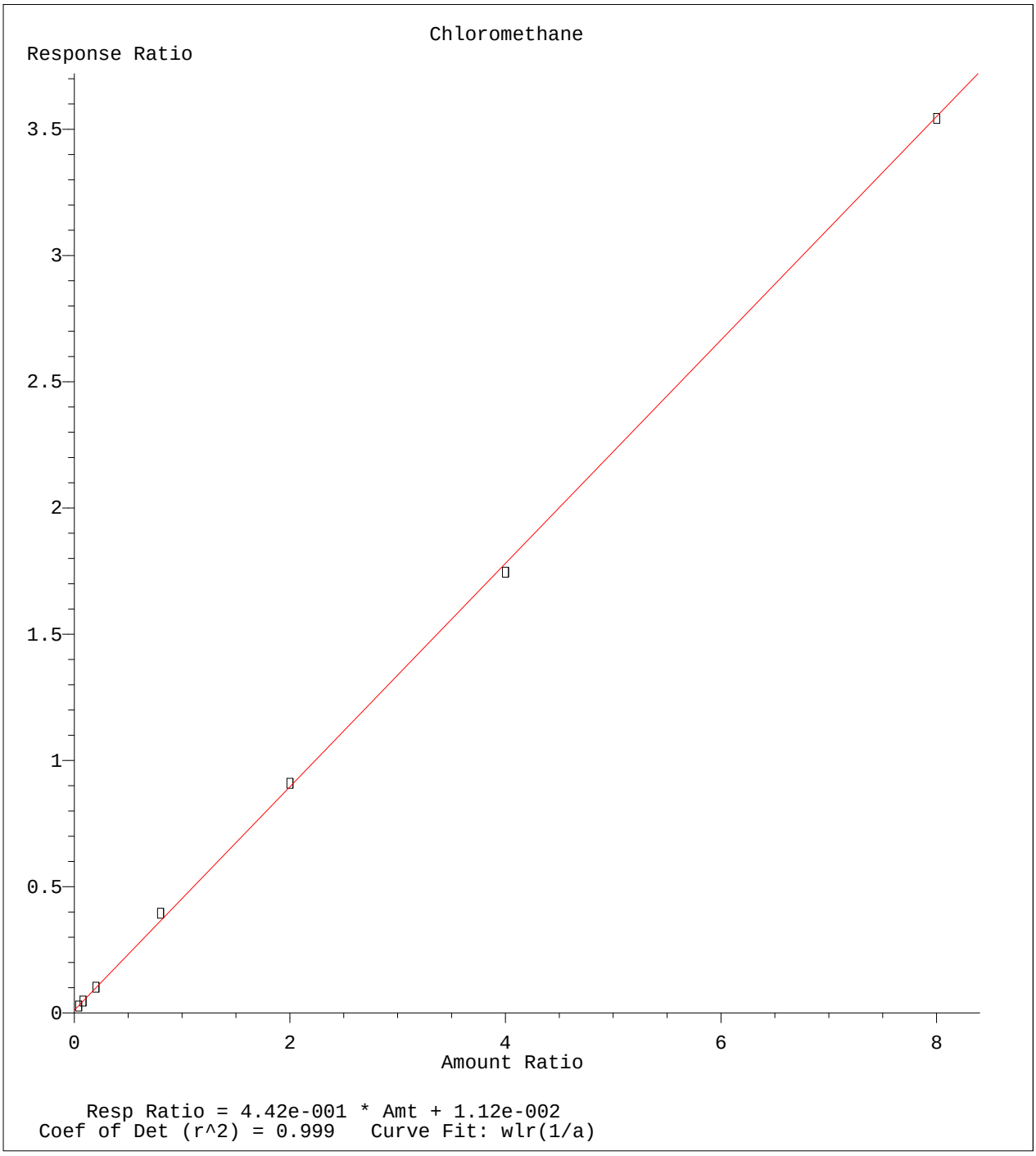
Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\042512\6M107648.D Vial: 12
Acq On : 25 Apr 2012 14:42 Operator: ADC
Sample : WG396001-11 300.0 ug/L STD 8260 Inst : HPMS6
Misc : 1,1 STD51130 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 25 15:23 2012 Quant Results File: 8260WTR.RES

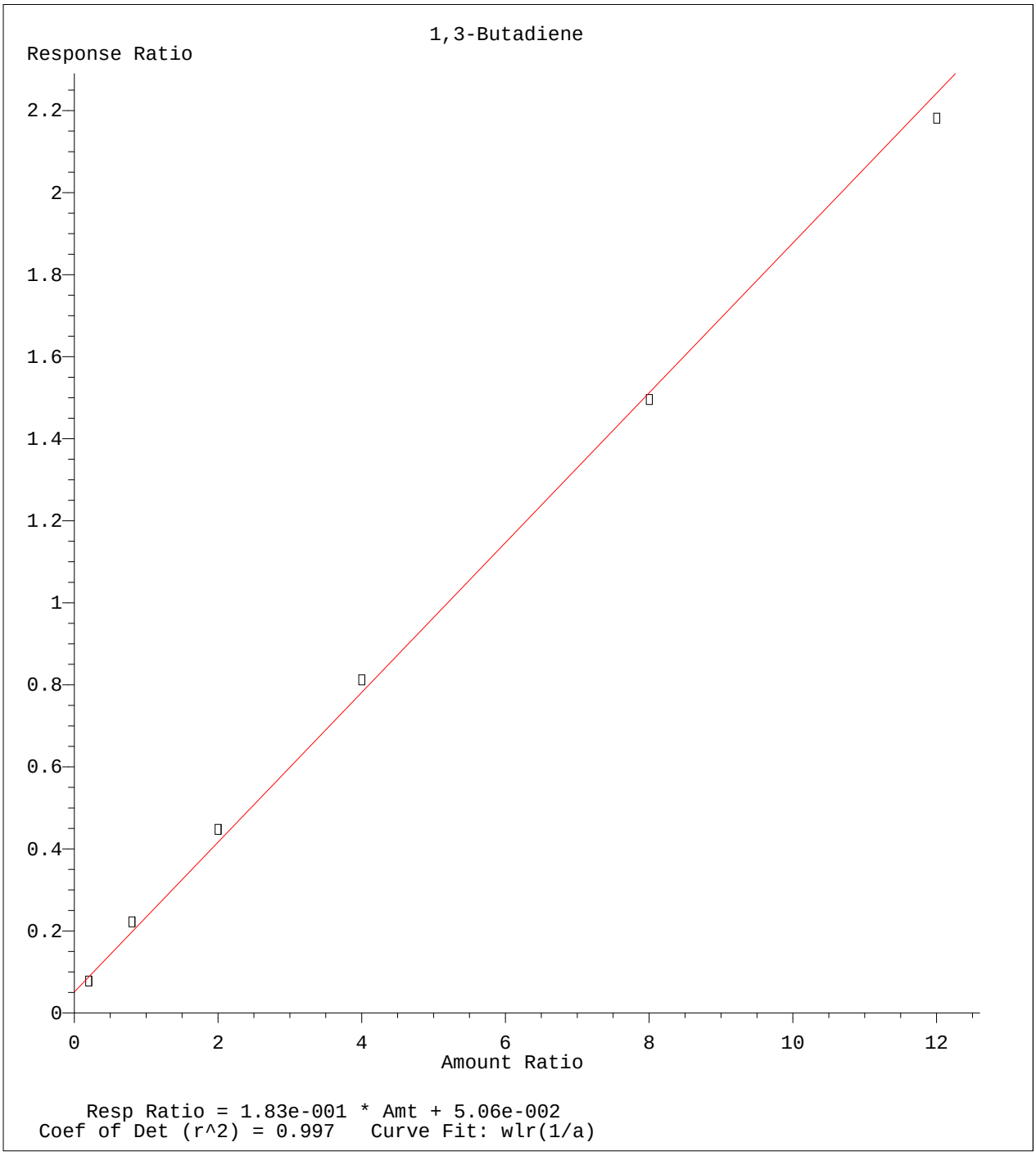
Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Initial Calibration



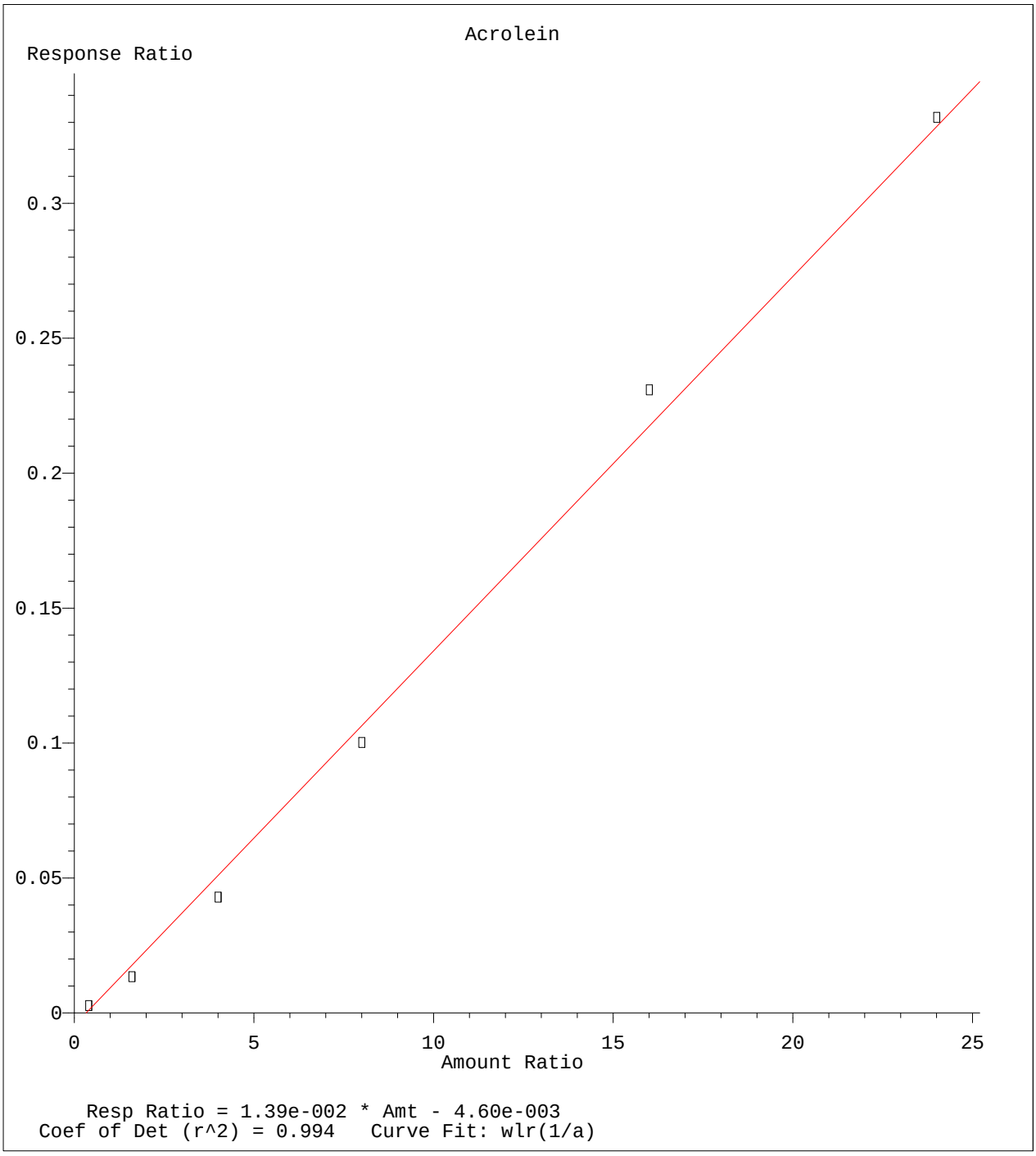
6M107648.D 8260WTR.M Wed Apr 25 15:23:05 2012 Page 3



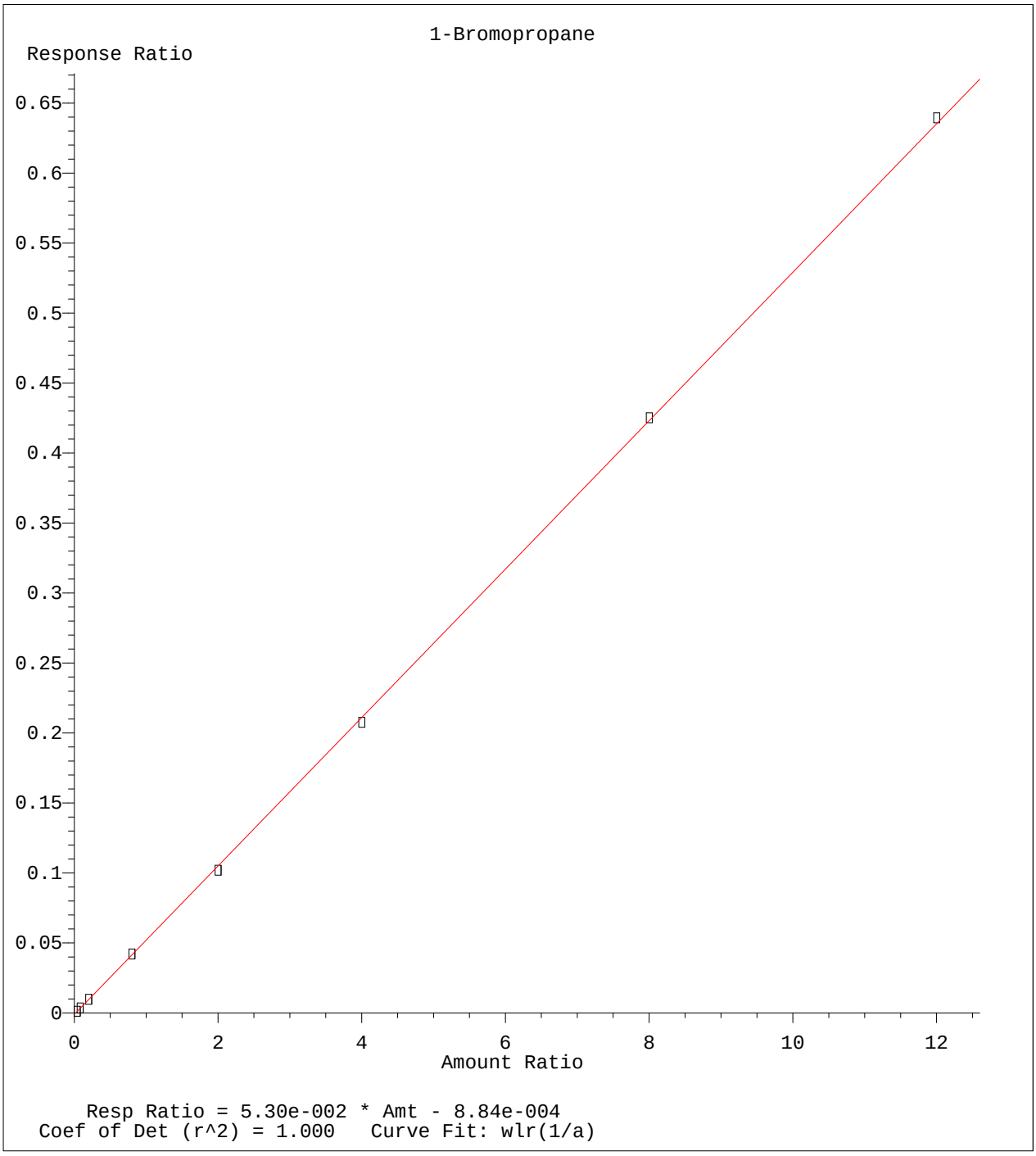
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



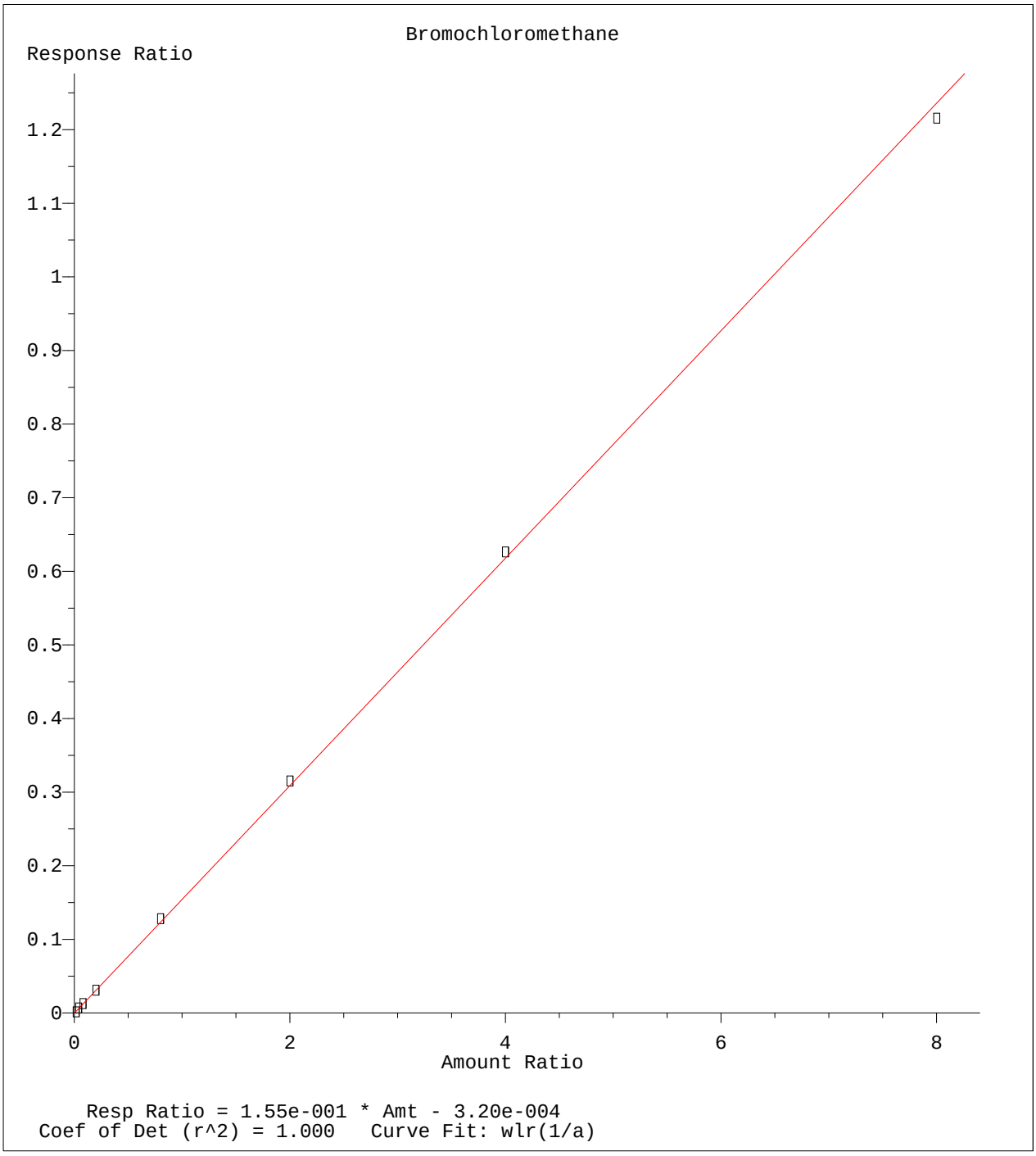
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



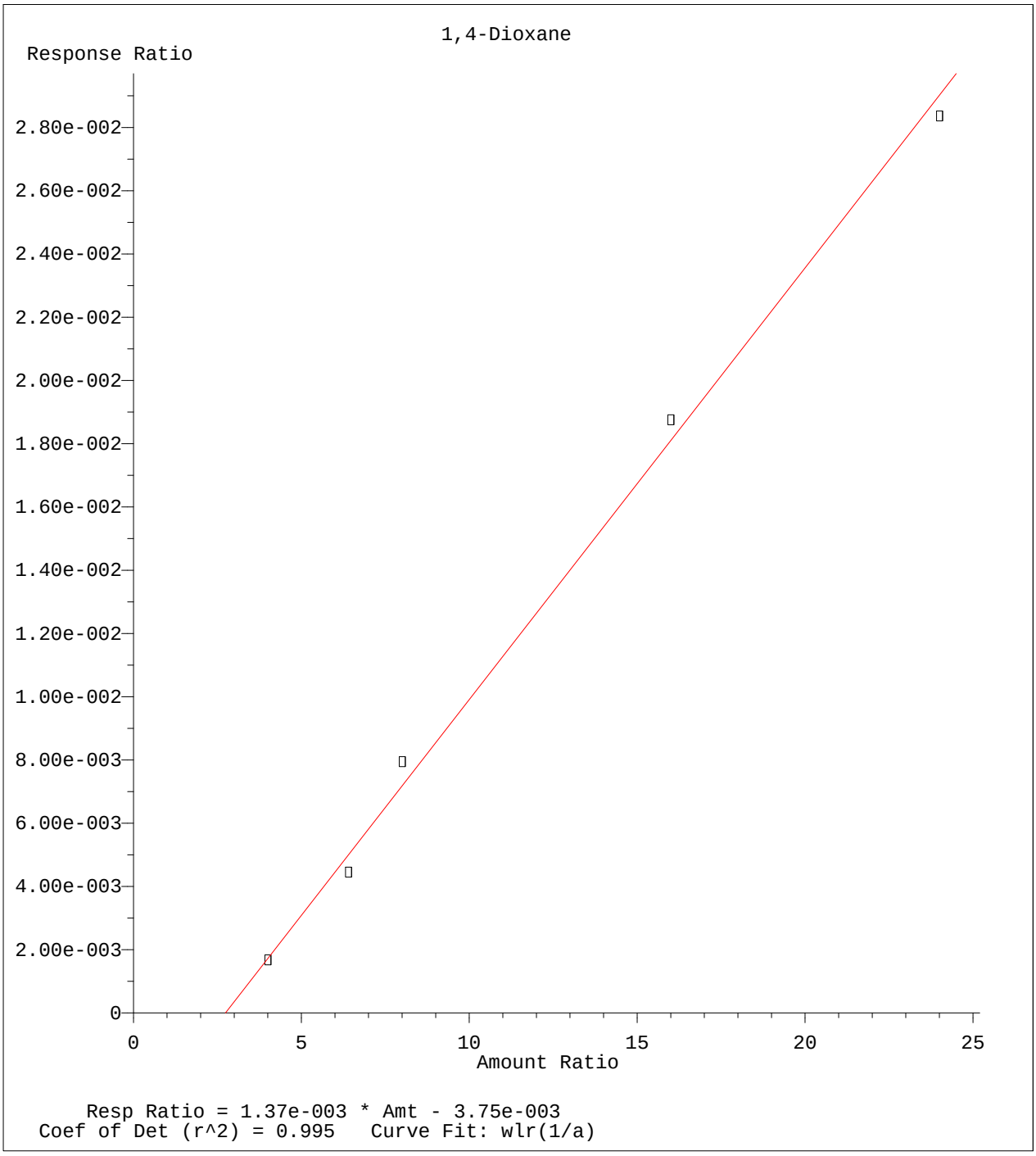
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



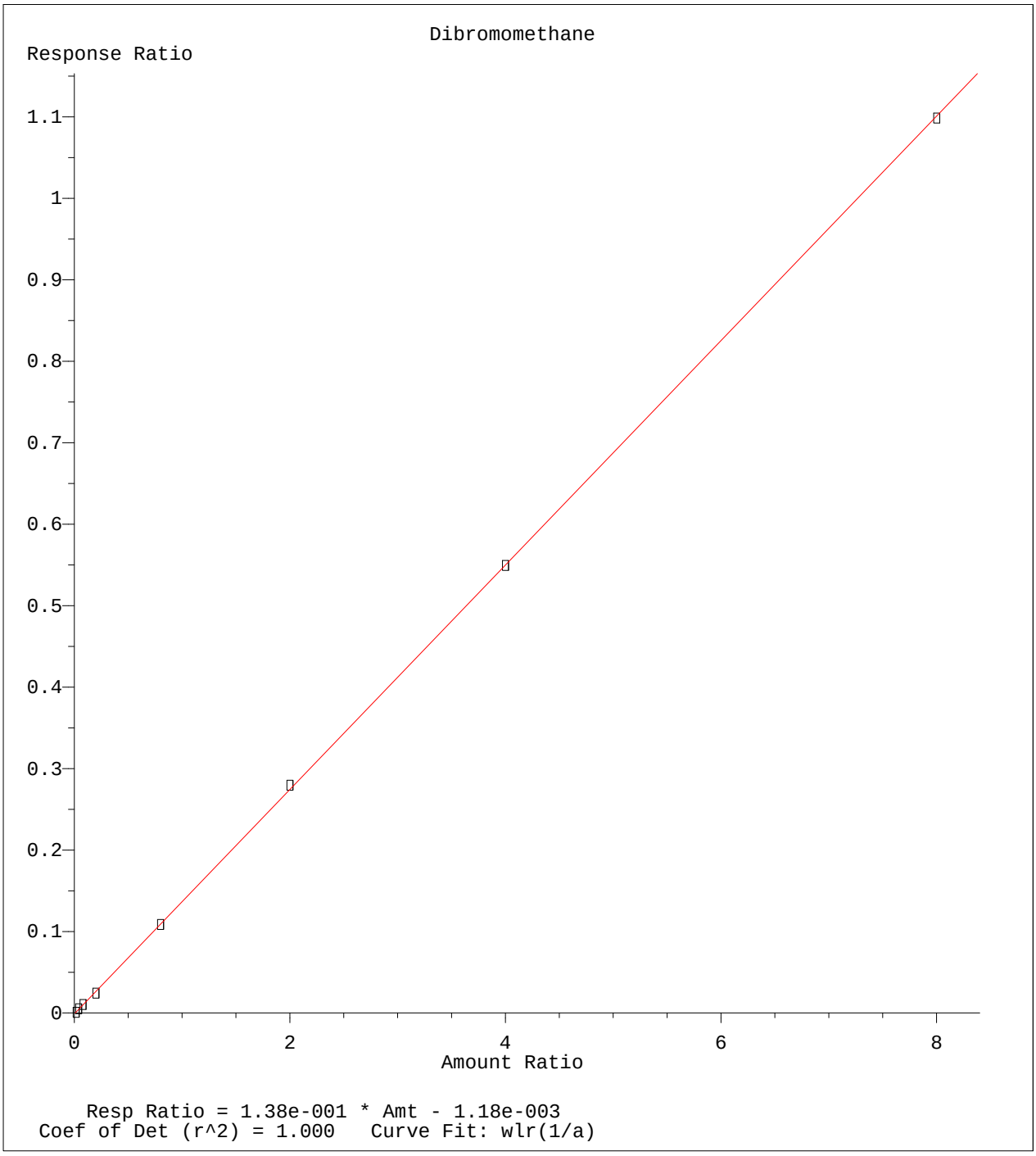
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



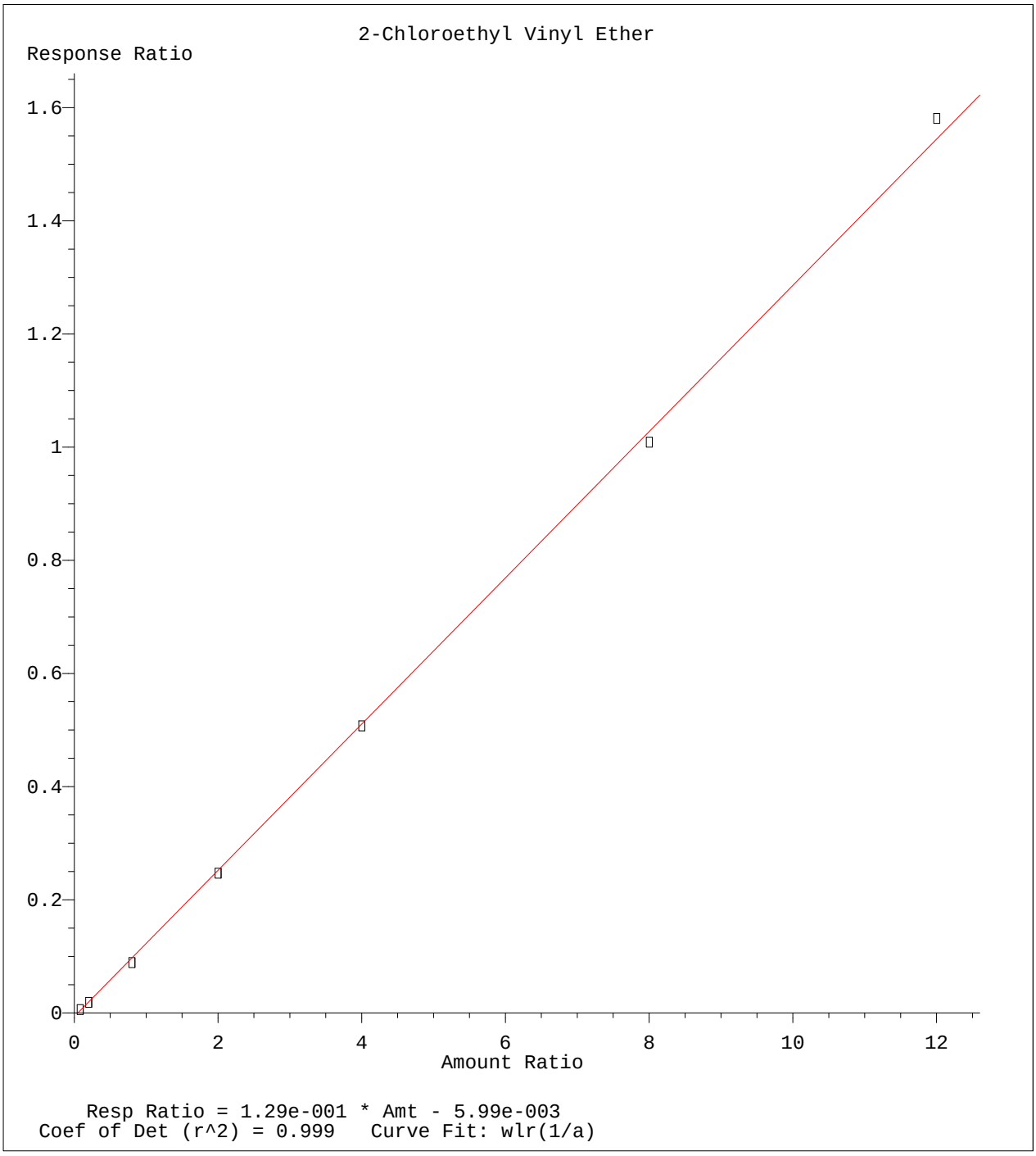
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



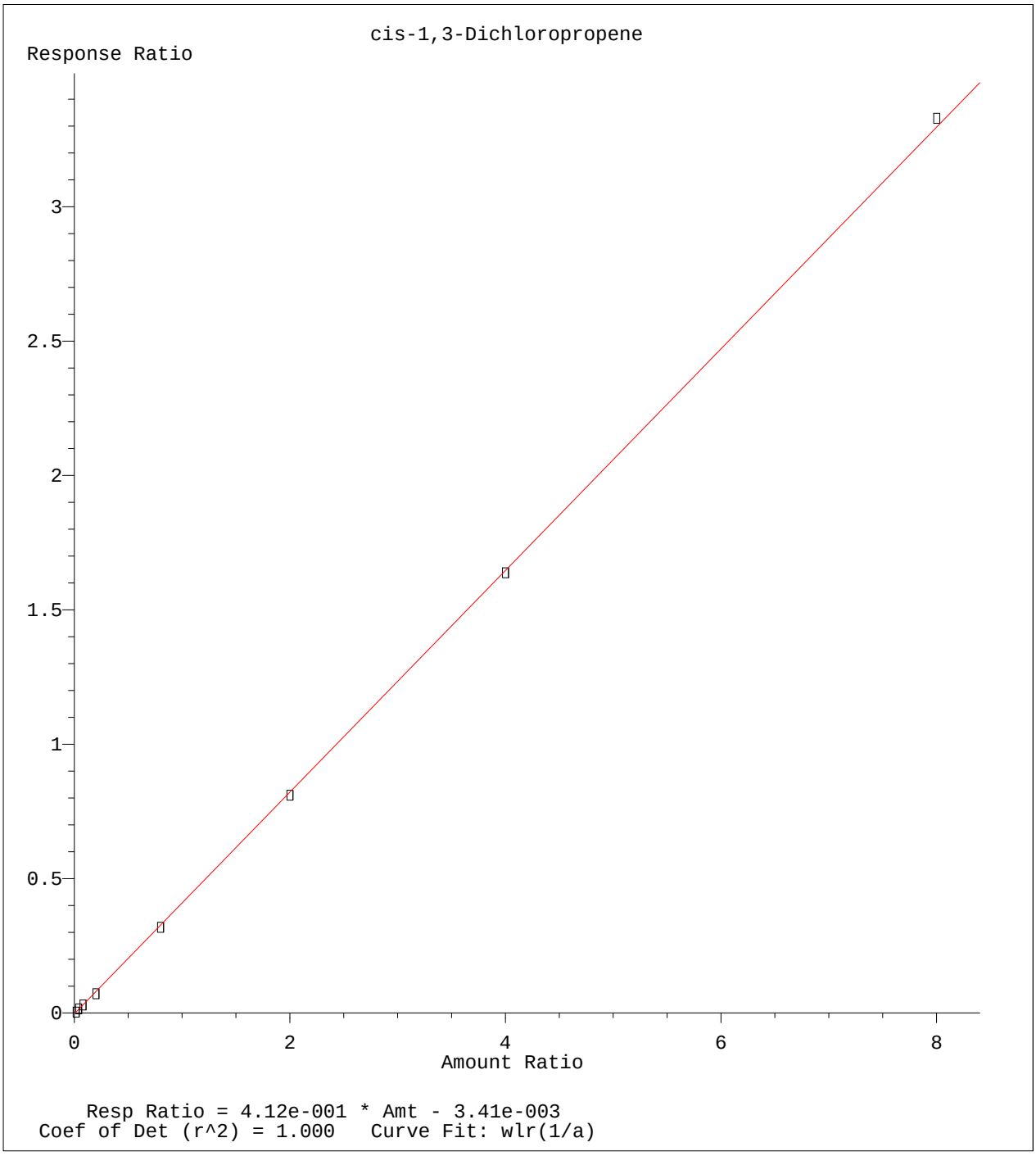
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



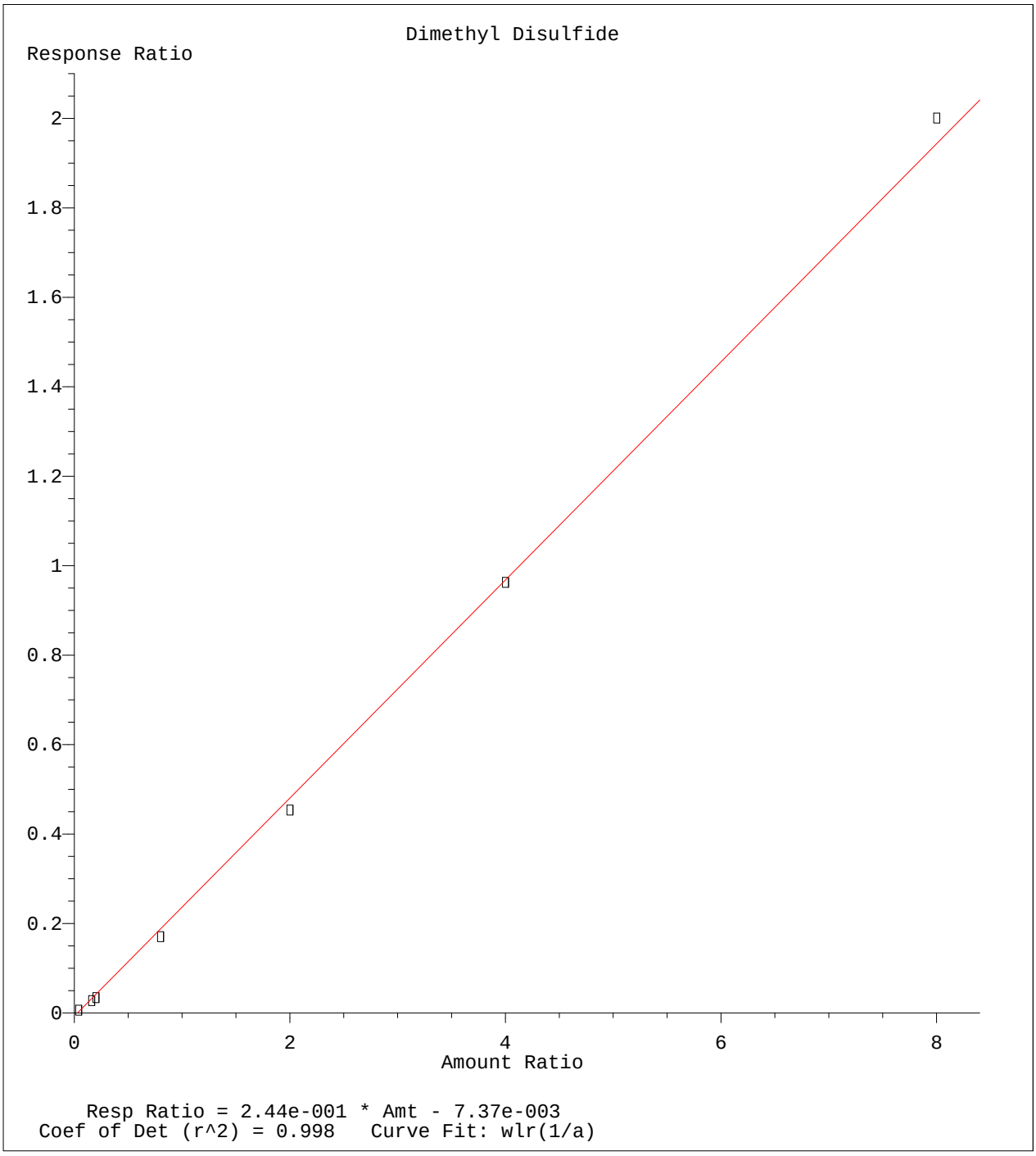
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



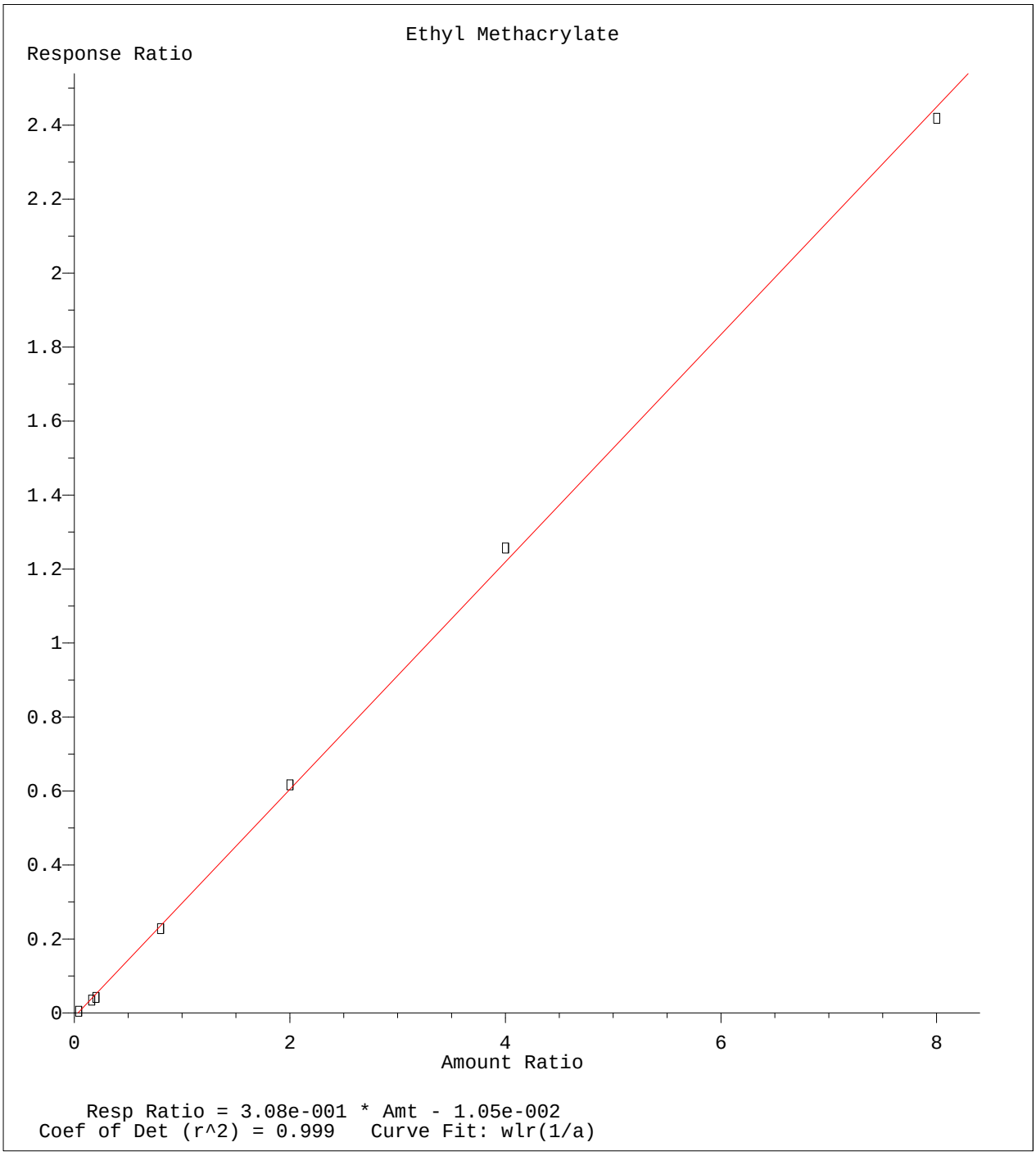
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



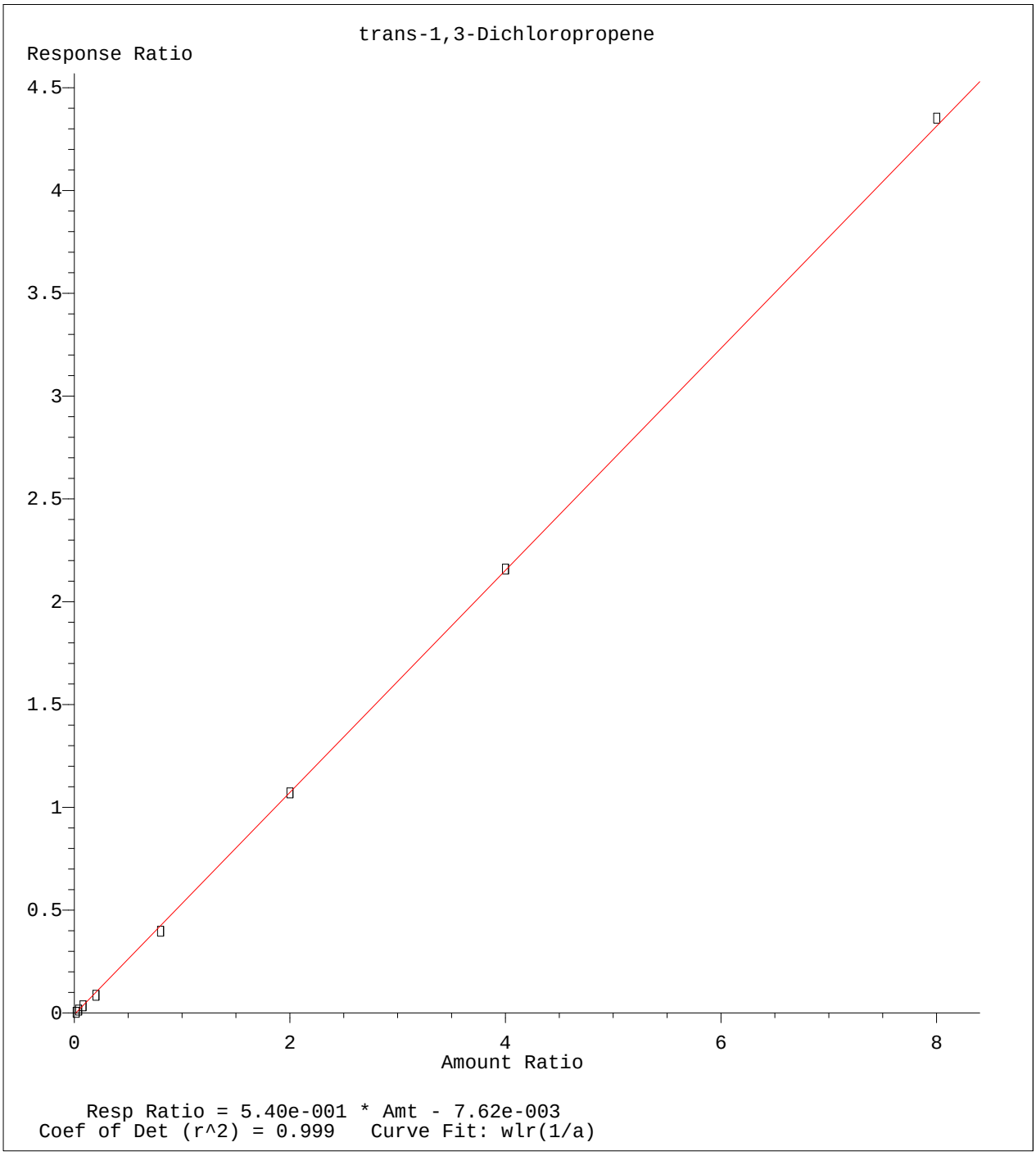
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



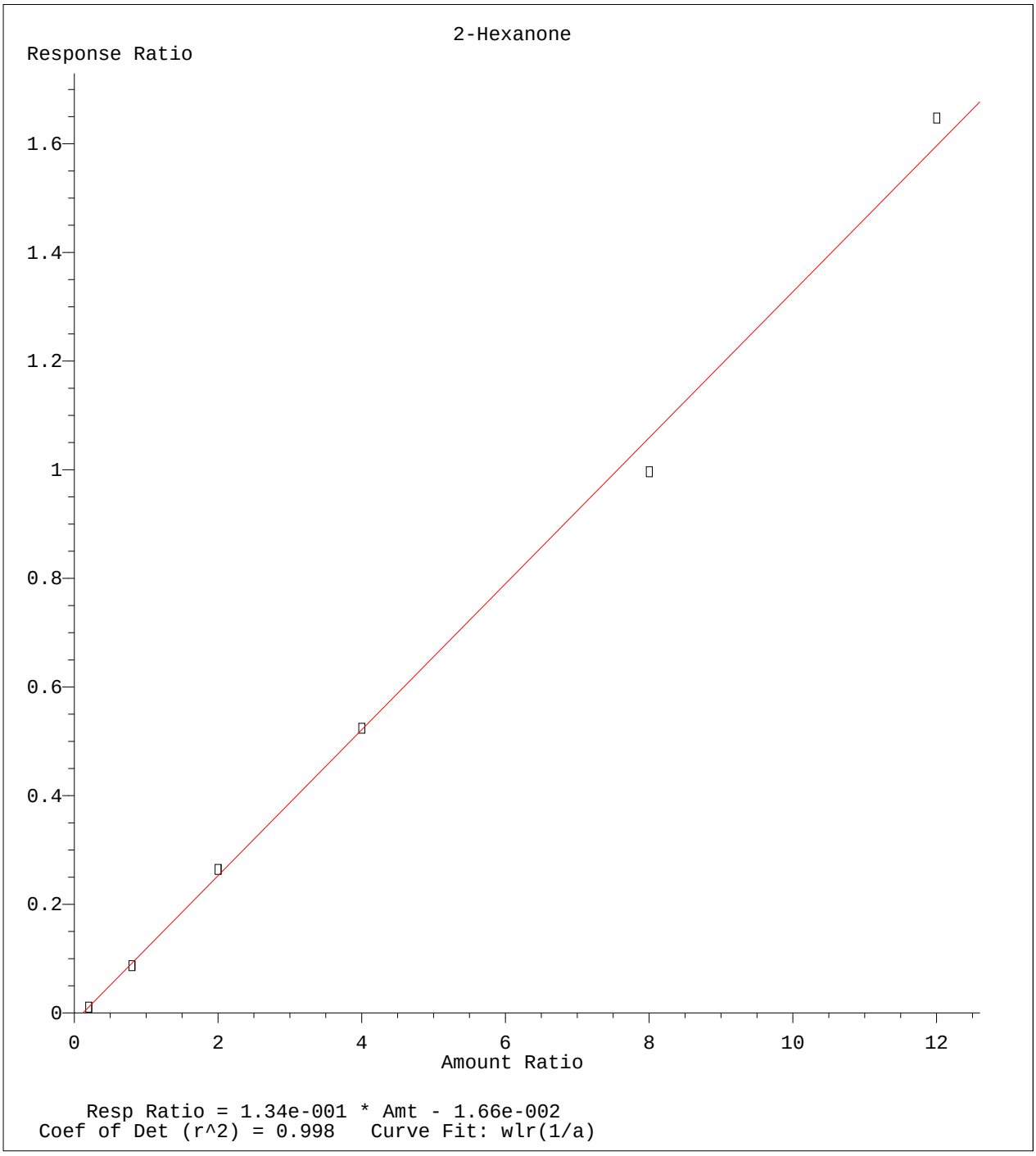
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



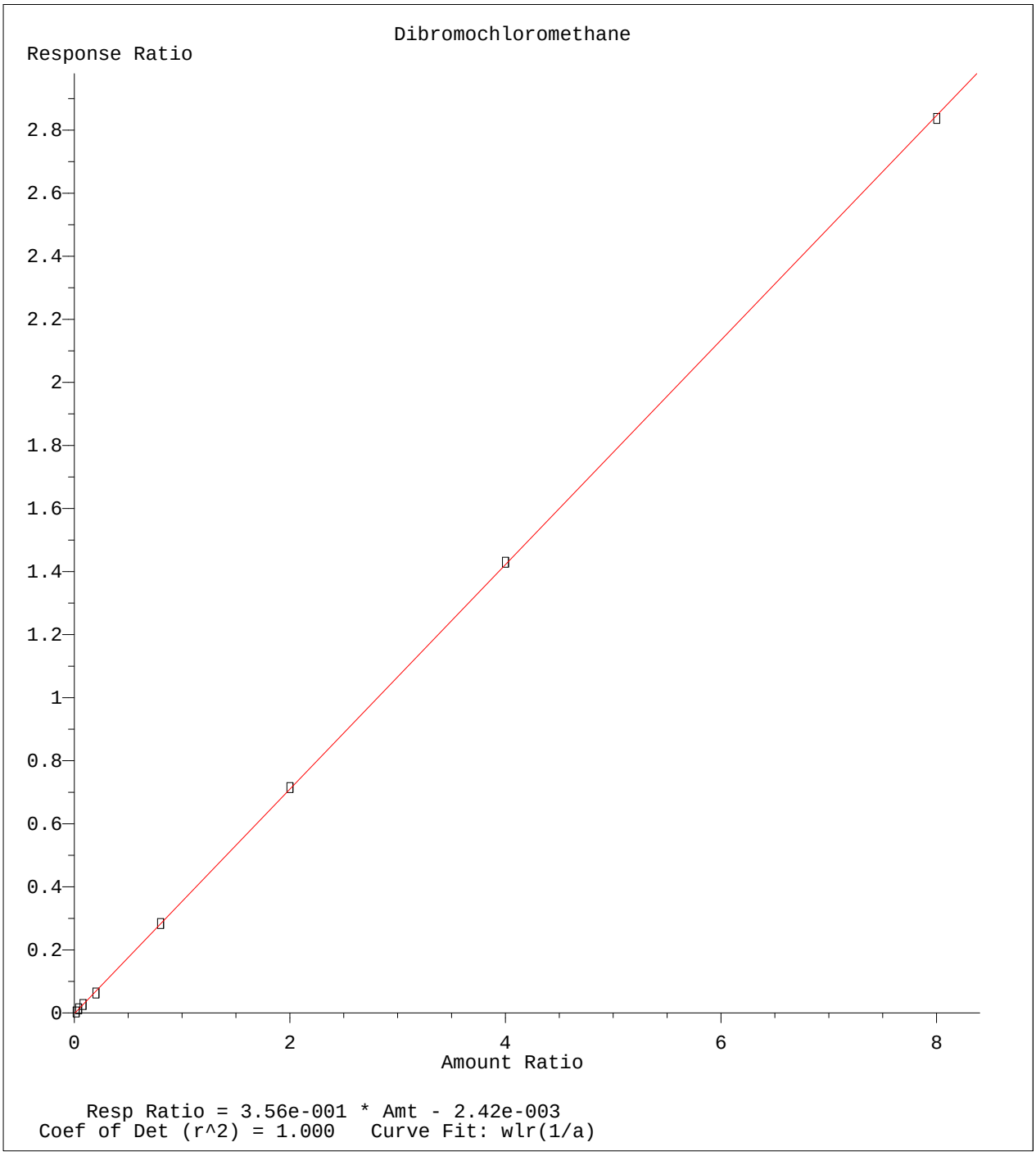
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



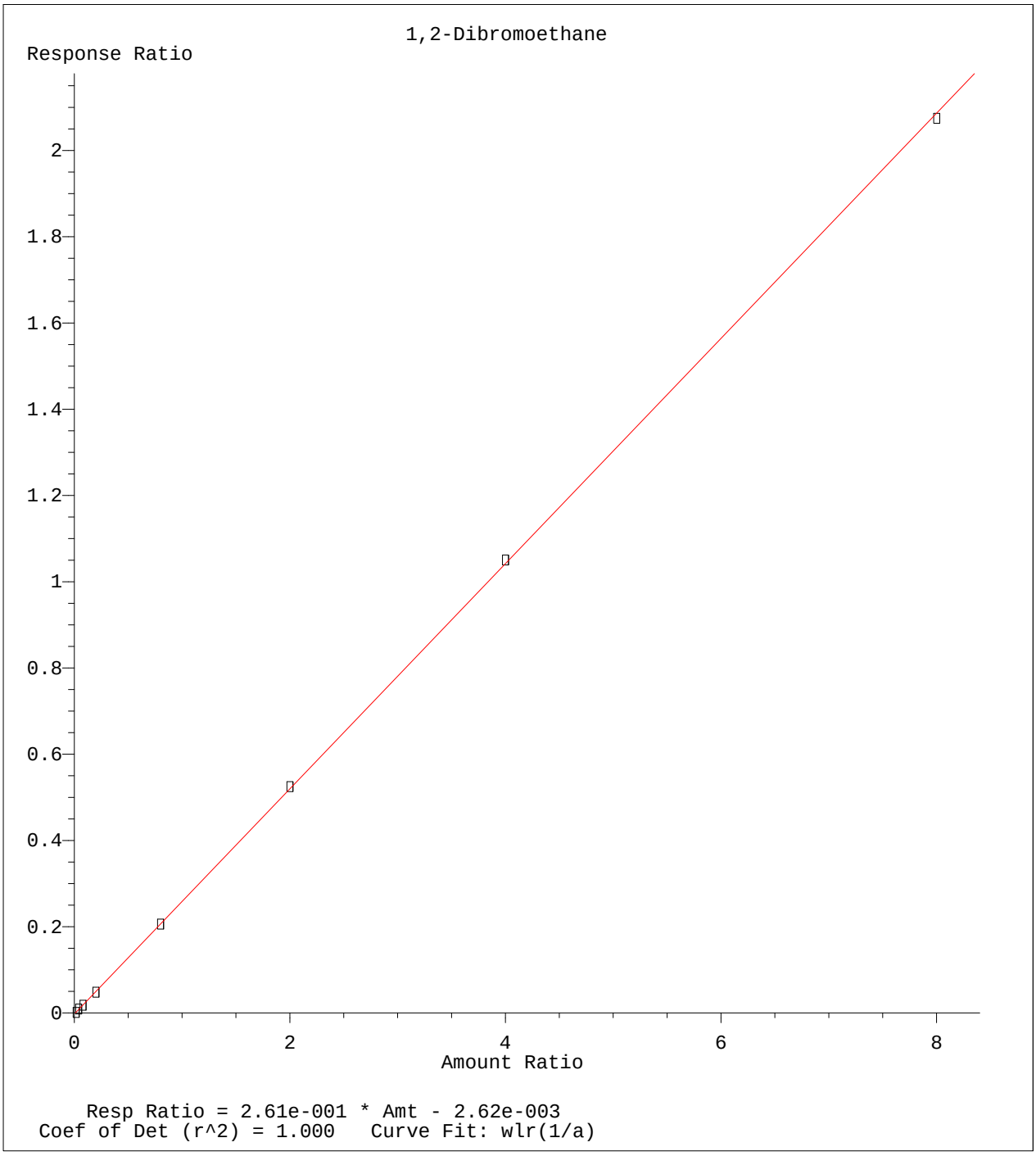
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



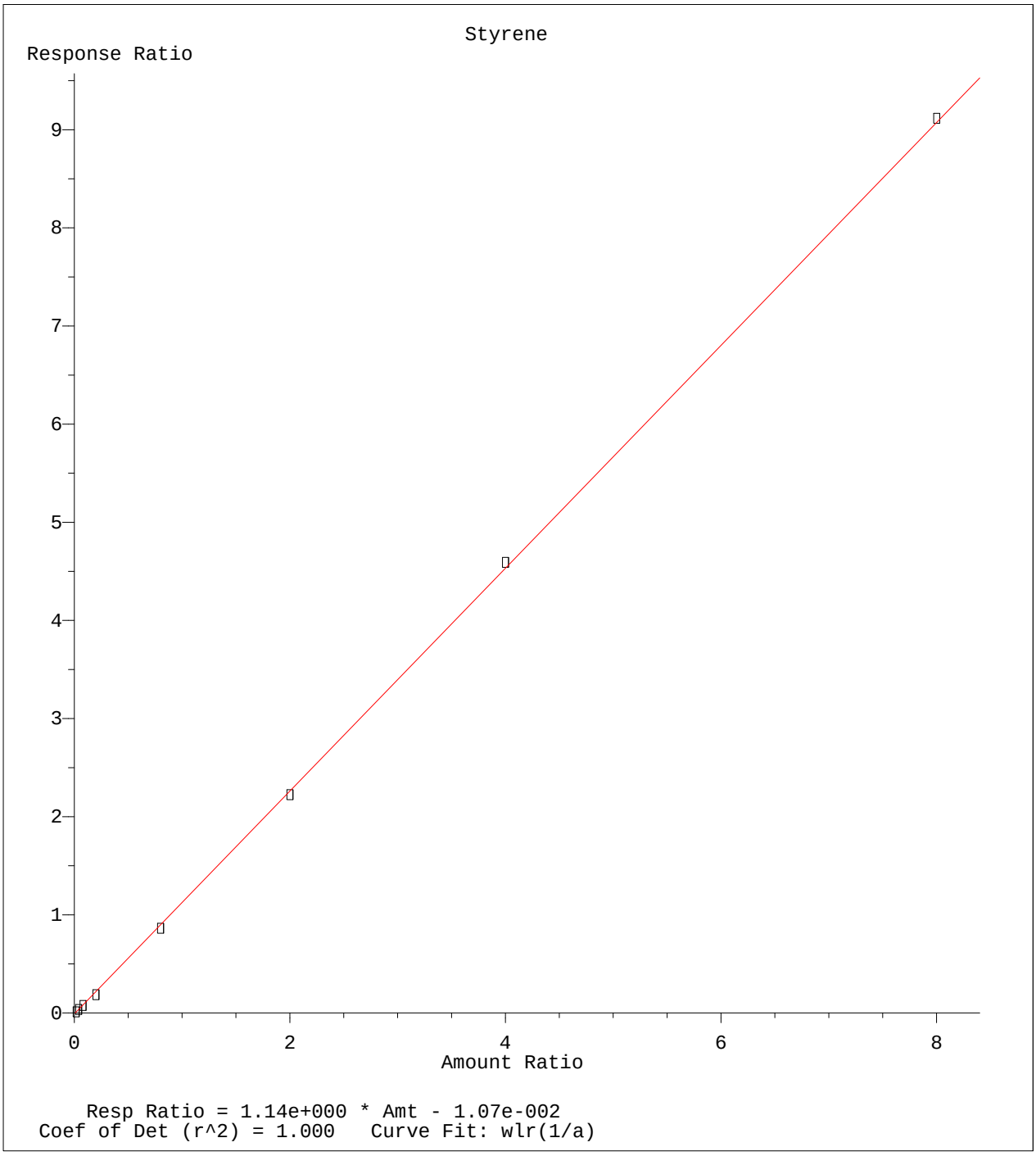
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



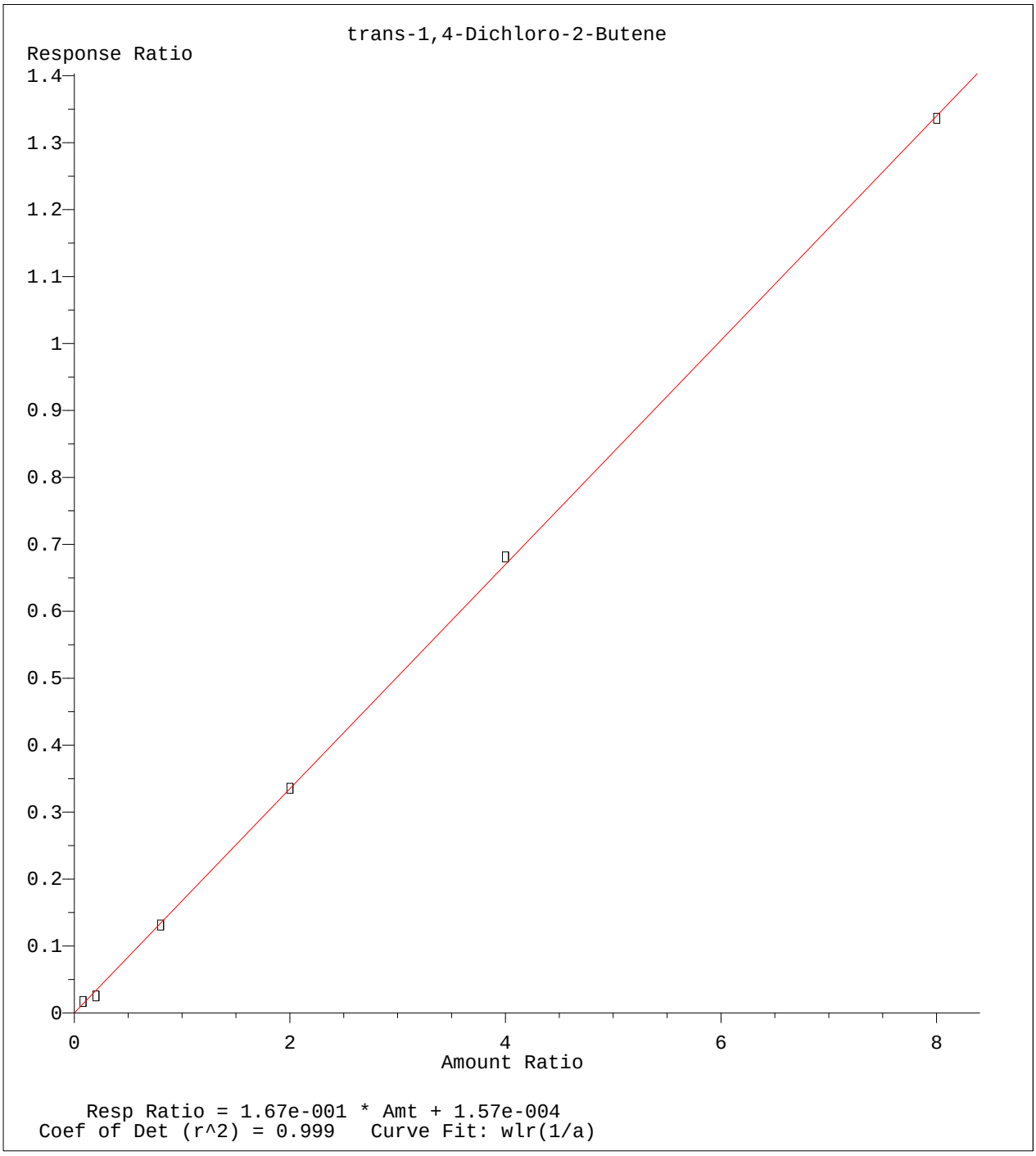
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



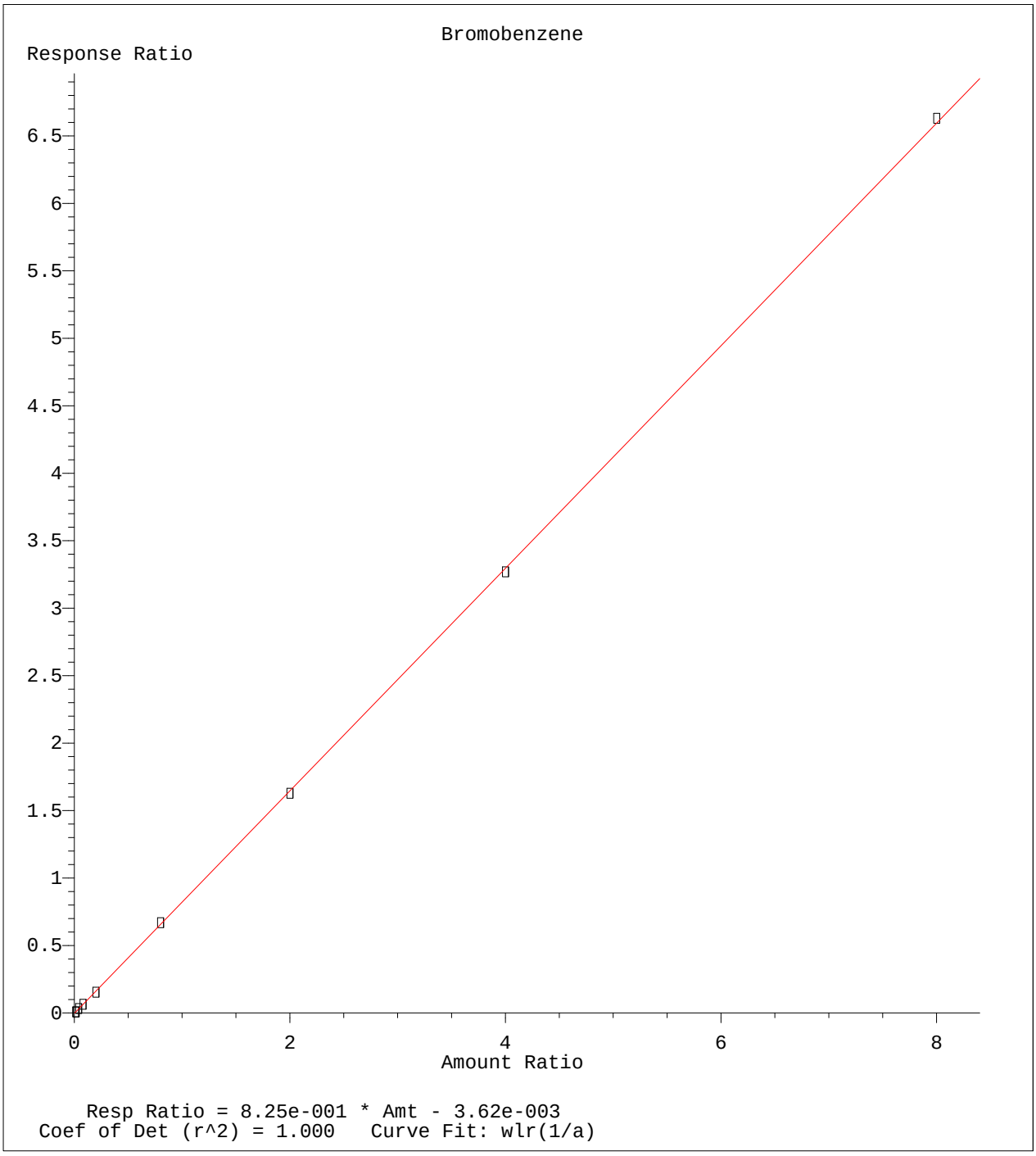
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



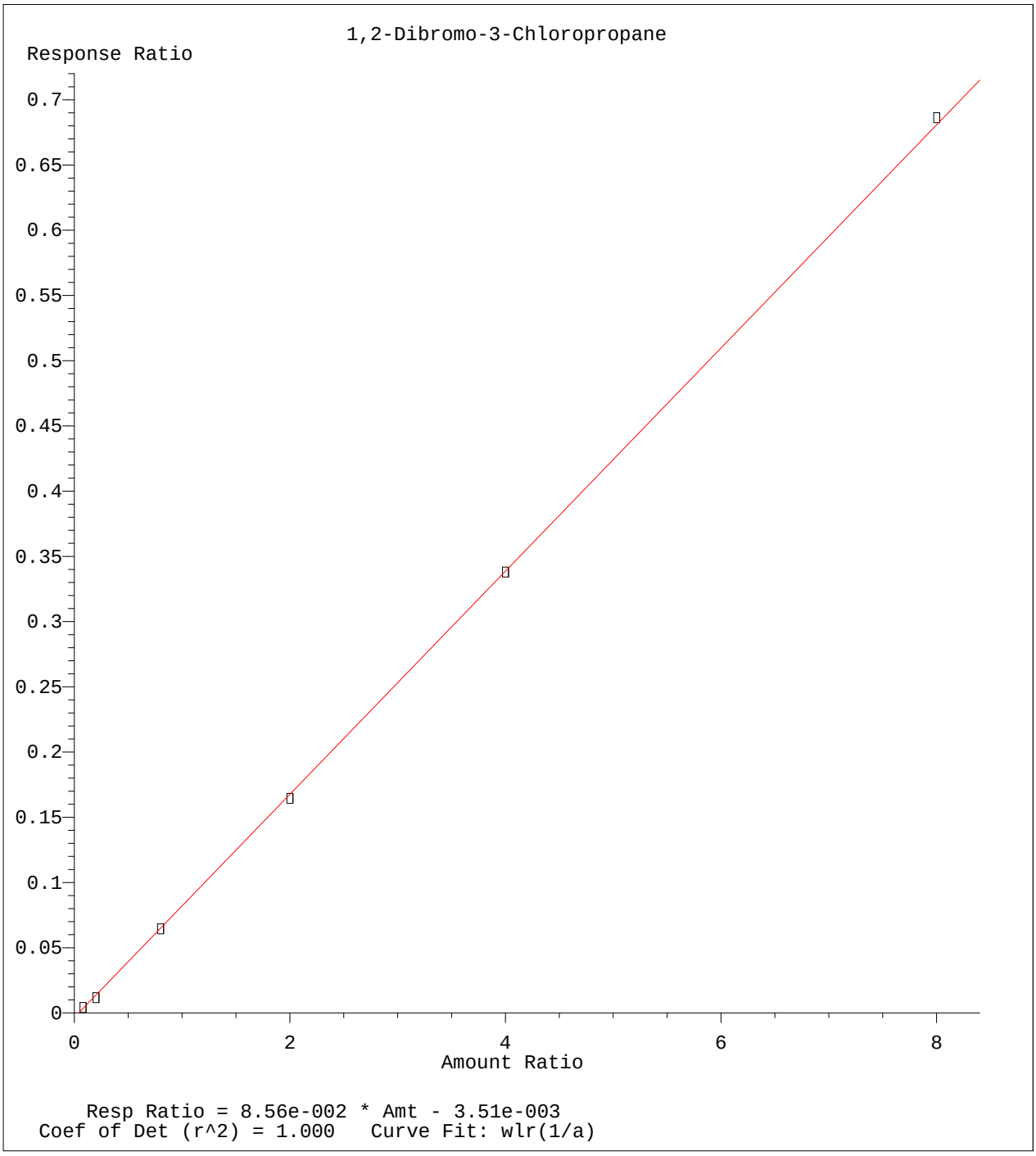
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



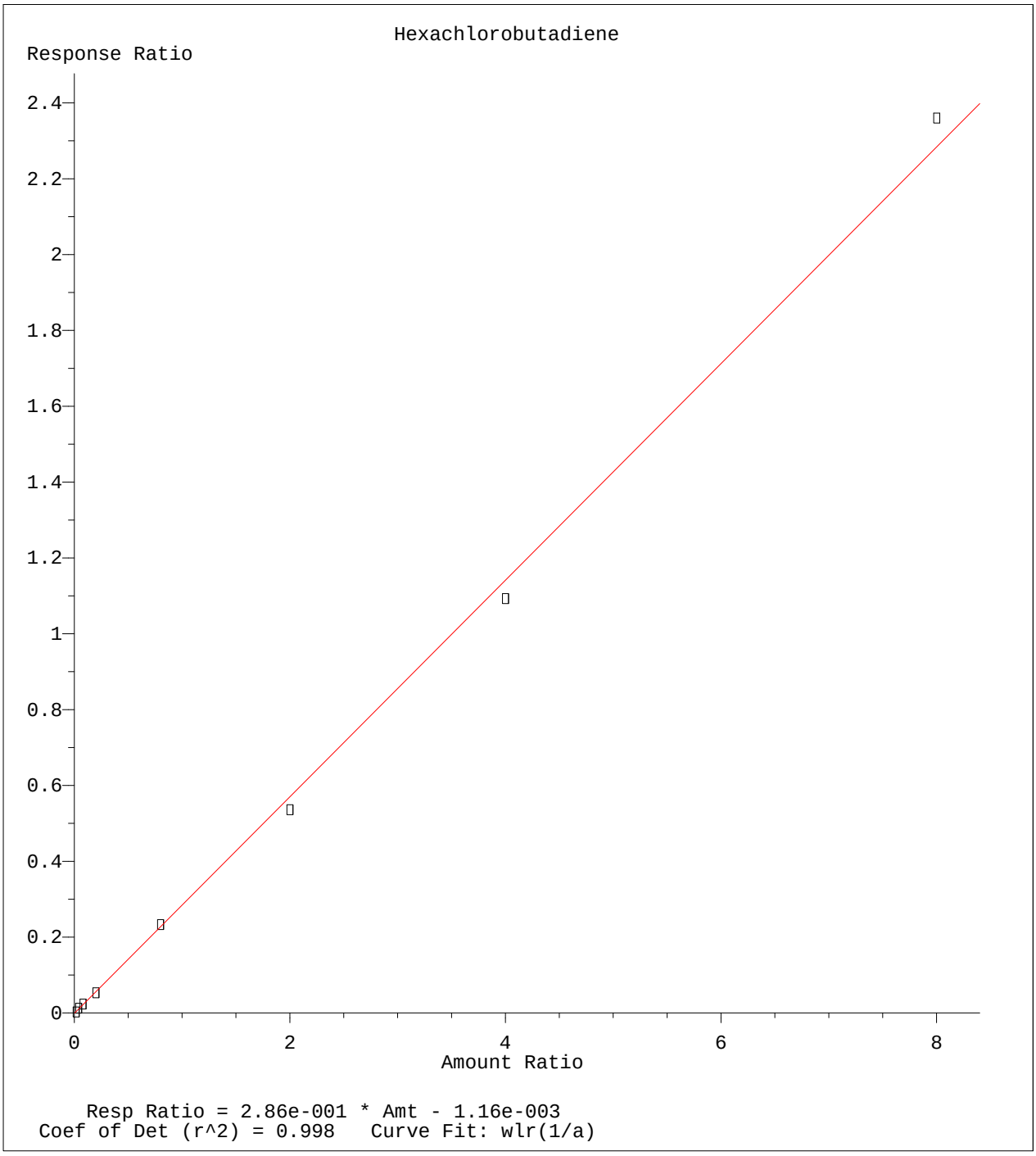
Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012



Method Name: C:\MSDCHEM\1\METHODS\8260WTR.M
Calibration Table Last Updated: Wed Apr 25 15:22:20 2012

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\042512\6M107650.D Vial: 14
Acq On : 25 Apr 2012 15:46 Operator: ADC
Sample : WG396001-12 50.0 ug/L ALT SRC 8260 Inst : HPMS6
Misc : 1,1 STD51130 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 25 16:09:39 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.54	96	627054	25.00 ug/L	0.00
57) Chlorobenzene-d5	15.04	117	415006	25.00 ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	203934	25.00 ug/L	0.00
System Monitoring Compounds					
37) Dibromofluoromethane	9.35	111	177547	26.1499 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 104.60%		
43) 1,2-Dichloroethane-d4	10.07	65	177652	26.6610 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 106.64%		
58) Toluene-d8	12.83	98	600469	26.6223 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 106.48%		
80) p-Bromofluorobenzene	16.81	95	216971	27.1131 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 108.44%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	2.72	85	463366	56.3361 ug/L	99
3) Chloromethane	3.11	50	589734	52.5093 ug/L	100
4) Vinyl Chloride	3.30	62	466091	44.8042 ug/L	99
5) 1,3-Butadiene	3.34	54	247860	47.1687 ug/L	99
6) Bromomethane	4.10	94	260778	44.2393 ug/L	100
7) Chloroethane	4.25	64	272240	46.2555 ug/L	99
8) Trichlorofluoromethane	4.73	101	599507	44.8218 ug/L	100
9) Diethyl ether	5.27	59	455104	100.1402 ug/L	99
10) Isoprene	5.30	67	511583	44.9807 ug/L	100
11) Acrolein	5.51	56	16740	56.3651 ug/L	100
12) 1,1,2-Trichloro-1,2,2-Trif	5.52	101	324004	45.2897 ug/L	99
13) Acetone	5.61	43	51583	43.4154 ug/L	95
14) 1,1-Dichloroethene	5.84	61	561416	48.8081 ug/L	99
15) Tert-Butyl Alcohol	5.98	59	59945	193.2579 ug/L	99
16) Dimethyl Sulfide	6.11	62	367255	40.2176 ug/L	100
17) Iodomethane	6.37	142	211784	32.2024 ug/L	99
18) Methyl acetate	6.42	43	188823	40.2696 ug/L	99
19) Methylene Chloride	6.67	84	336889	47.2849 ug/L	100
20) Carbon Disulfide	6.68	76	980289	47.0388 ug/L	100
21) Acrylonitrile	6.88	53	80798	50.4724 ug/L	98
22) Methyl Tert Butyl Ether	6.92	73	705537	47.0046 ug/L	100
23) trans-1,2-Dichloroethene	7.16	96	332046	47.7230 ug/L	100
24) n-Hexane	7.27	57	402378	50.4121 ug/L	99
25) Diisopropyl ether	7.65	45	2567846	101.3116 ug/L	100
26) Vinyl Acetate	7.84	43	586547	159.8534 ug/L	99
27) 1,1-Dichloroethane	7.85	63	672907	47.3365 ug/L	100
28) Ethyl-Tert-Butyl ether	8.30	59	2007921	97.4807 ug/L	100
29) 2-Butanone	8.48	43	87992	52.9631 ug/L	97
30) Propionitrile	8.60	54	52192	109.8353 ug/L	94
31) 2,2-Dichloropropane	8.72	77	552731	51.4320 ug/L	99
32) cis-1,2-Dichloroethene	8.79	96	361481	49.7214 ug/L	99
33) Chloroform	9.02	83	613189	47.7266 ug/L	100
34) 1-Bromopropane	9.18	122	71916	54.5003 ug/L	99
35) Bromochloromethane	9.28	130	197810	51.0781 ug/L	98
36) Tetrahydrofuran	9.31	42	112925	103.3592 ug/L	98
38) 1,1,1-Trichloroethane	9.61	97	548064	48.8330 ug/L	100
39) Cyclohexane	9.65	56	560998	49.8960 ug/L	99
40) 1,1-Dichloropropene	9.85	75	470661	50.8346 ug/L	99
41) Tert-Amyl-Methyl ether	9.99	73	1573902	102.6272 ug/L	99
42) Carbon Tetrachloride	10.00	117	500129	50.3450 ug/L	99

(#) = qualifier out of range (m) = manual integration
6M107650.D 8260WTR.M Thu Apr 26 08:08:19 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\042512\6M107650.D Vial: 14
Acq On : 25 Apr 2012 15:46 Operator: ADC
Sample : WG396001-12 50.0 ug/L ALT SRC 8260 Inst : HPMS6
Misc : 1,1 STD51130 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 25 16:09:39 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

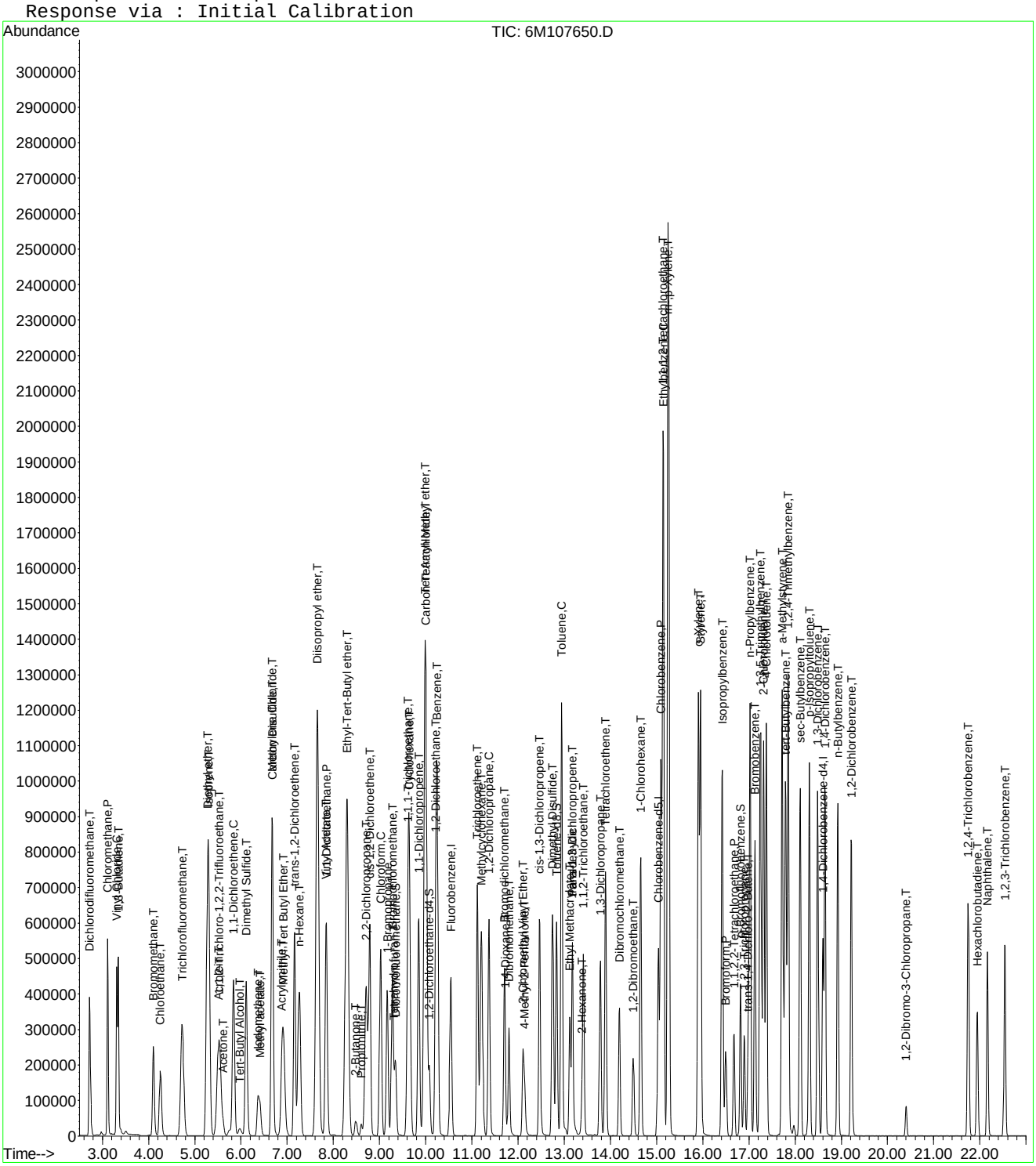
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
45)	1,2-Dichloroethane	10.22	62	427893	48.4840 ug/L	99
46)	Benzene	10.25	78	1331878	48.0792 ug/L	100
47)	Trichloroethene	11.12	130	338809	48.7622 ug/L	100
48)	Methylcyclohexane	11.21	83	416357	51.9602 ug/L	99
49)	1,2-Dichloropropane	11.37	63	359097	50.2094 ug/L	99
50)	1,4-Dioxane	11.73	88	3886	181.6561 ug/L	84
51)	Bromodichloromethane	11.71	83	444712	51.7639 ug/L	100
52)	Dibromomethane	11.80	93	168561	48.9820 ug/L	99
53)	2-Chloroethyl Vinyl Ether	12.11	63	140721	44.5749 ug/L	99
54)	4-Methyl-2-Pentanone	12.14	58	66644	53.4397 ug/L	98
55)	cis-1,3-Dichloropropene	12.46	75	493966	47.9606 ug/L	100
56)	Dimethyl Disulfide	12.75	79	271324	45.1120 ug/L	99
59)	Toluene	12.94	91	1330075	48.7704 ug/L	100
60)	Ethyl Methacrylate	13.12	69	260530	51.8919 ug/L	100
61)	Paraldehyde	13.18	89	6616	90.3498 ug/L #	16
62)	trans-1,3-Dichloropropene	13.18	75	388308	43.6637 ug/L	99
63)	1,1,2-Trichloroethane	13.41	97	217948	49.7561 ug/L	99
64)	2-Hexanone	13.38	43	101833	48.7242 ug/L	99
65)	1,3-Dichloropropane	13.78	76	394352	52.7907 ug/L	100
66)	Tetrachloroethene	13.89	166	309061	48.5237 ug/L	98
67)	Dibromochloromethane	14.20	129	279255	47.4095 ug/L	98
68)	1,2-Dibromoethane	14.50	107	212512	49.2702 ug/L	99
69)	1-Chlorohexane	14.66	91	384076	53.1826 ug/L	100
70)	Chlorobenzene	15.09	112	813540	46.9477 ug/L	98
71)	1,1,1,2-Tetrachloroethane	15.14	131	306212	49.0735 ug/L	99
72)	Ethylbenzene	15.15	106	446875	49.9956 ug/L	100
73)	m-,p-Xylene	15.25	106	1095197	100.2316 ug/L	100
74)	o-Xylene	15.90	106	508358	48.8595 ug/L	99
75)	Styrene	15.96	104	899501	47.9533 ug/L	98
76)	Bromoform	16.50	173	154270	52.2808 ug/L	99
77)	Isopropylbenzene	16.43	105	1133027	43.7541 ug/L	100
79)	1,1,2,2-Tetrachloroethane	16.68	83	226800	52.5913 ug/L	98
81)	1,2,3-Trichloropropane	16.90	110	63769	57.3510 ug/L	98
82)	trans-1,4-Dichloro-2-Buten	16.98	53	64366	47.0861 ug/L	100
83)	n-Propylbenzene	17.02	91	1489148	49.6949 ug/L	100
84)	Bromobenzene	17.13	156	322518	48.0502 ug/L	100
85)	1,3,5-Trimethylbenzene	17.25	105	1015062	49.6525 ug/L	99
86)	2-Chlorotoluene	17.31	91	951762	47.8354 ug/L	99
87)	4-Chlorotoluene	17.38	91	932263	46.6080 ug/L	100
88)	a-Methylstyrene	17.72	118	576379	54.9770 ug/L	95
89)	tert-Butylbenzene	17.79	134	191139	46.2944 ug/L	100
90)	1,2,4-Trimethylbenzene	17.84	105	1108696	51.2959 ug/L	99
91)	sec-Butylbenzene	18.11	105	1131650	48.6979 ug/L	99
92)	p-Isopropyltoluene	18.30	119	939170	50.3138 ug/L	100
93)	1,3-Dichlorobenzene	18.49	146	567527	48.1845 ug/L	99
94)	1,4-Dichlorobenzene	18.65	146	576032	46.6327 ug/L	100
95)	n-Butylbenzene	18.93	91	829549	51.0159 ug/L	100
96)	1,2-Dichlorobenzene	19.22	146	506587	47.5885 ug/L	100
97)	1,2-Dibromo-3-Chloropropan	20.40	75	32790	48.0112 ug/L	98
98)	1,2,4-Trichlorobenzene	21.75	180	281879	48.6487 ug/L	99
99)	Hexachlorobutadiene	21.95	225	103566	44.5588 ug/L	99
100)	Naphthalene	22.16	128	567608	51.4471 ug/L	100
101)	1,2,3-Trichlorobenzene	22.54	180	242392	48.1315 ug/L	97

(#) = qualifier out of range (m) = manual integration
6M107650.D 8260WTR.M Thu Apr 26 08:08:19 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\042512\6M107650.D Vial: 14
Acq On : 25 Apr 2012 15:46 Operator: ADC
Sample : WG396001-12 50.0 ug/L ALT SRC 8260 Inst : HPMS6
Misc : 1,1 STD51130 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 25 16:09 2012 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Initial Calibration



6M107650.D 8260WTR.M Thu Apr 26 08:08:20 2012 Page 3

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\042512\6M107650.D Vial: 14
Acq On : 25 Apr 2012 15:46 Operator: ADC
Sample : WG396001-12 50.0 ug/L ALT SRC 8260 Inst : HPMS6
Misc : 1,1 STD51130 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	25.0000	25.0000	0.0	101	0.00
2	T	Dichlorodifluoromethane	50.0000	56.3361	-12.7	119	0.00
3	P	Chloromethane	50.0000	52.5093	-5.0	105	0.00
4	C	Vinyl Chloride	50.0000	44.8042	10.4	104	0.00
5	T	1,3-Butadiene	50.0000	47.1687	5.7	89	0.00
6	T	Bromomethane	50.0000	44.2393	11.5	97	0.00
7	T	Chloroethane	50.0000	46.2555	7.5	96	0.00
8	T	Trichlorofluoromethane	50.0000	44.8218	10.4	94	0.00
9	T	Diethyl ether	100.0000	100.1402	-0.1	102	0.01
10	T	Isoprene	50.0000	44.9807	10.0	90	0.00
11	T	Acrolein	100.0000	56.3652	43.6#	63	0.01
12	T	1,1,2-Trichloro-1,2,2-Trifl	50.0000	45.2897	9.4	95	0.00
13	T	Acetone	50.0000	43.4154	13.2	89	0.00
14	C	1,1-Dichloroethene	50.0000	48.8081	2.4	97	0.00
15	T	Tert-Butyl Alcohol	200.0000	193.2579	3.4	99	0.00
16	T	Dimethyl Sulfide	50.0000	40.2176	19.6	82	0.00
17	T	Iodomethane	50.0000	32.2024	35.6#	58	0.00
18	T	Methyl acetate	50.0000	40.2696	19.5	80	0.01
19	T	Methylene Chloride	50.0000	47.2849	5.4	99	0.00
20	T	Carbon Disulfide	50.0000	47.0388	5.9	96	0.00
21	T	Acrylonitrile	50.0000	50.4724	-0.9	96	0.00
22	T	Methyl Tert Butyl Ether	50.0000	47.0046	6.0	97	0.01
23	T	trans-1,2-Dichloroethene	50.0000	47.7229	4.6	96	0.00
24	T	n-Hexane	50.0000	50.4121	-0.8	102	0.00
25	T	Diisopropyl ether	100.0000	101.3116	-1.3	101	0.00
26	T	Vinyl Acetate	50.0000	159.8534	-219.7#	321	0.00
27	P	1,1-Dichloroethane	50.0000	47.3365	5.3	98	0.00
28	T	Ethyl-Tert-Butyl ether	100.0000	97.4807	2.5	97	0.01
29	T	2-Butanone	50.0000	52.9631	-5.9	103	0.00
30	T	Propionitrile	100.0000	109.8353	-9.8	105	0.00
31	T	2,2-Dichloropropane	50.0000	51.4320	-2.9	107	0.00
32	T	cis-1,2-Dichloroethene	50.0000	49.7214	0.6	99	0.00
33	C	Chloroform	50.0000	47.7266	4.5	99	0.00
34		1-Bromopropane	50.0000	54.5003	-9.0	114	0.00
35	T	Bromochloromethane	50.0000	51.0781	-2.2	101	0.00
36	T	Tetrahydrofuran	100.0000	103.3593	-3.4	101	0.00
37	S	Dibromofluoromethane	25.0000	26.1499	-4.6	102	0.00
38	T	1,1,1-Trichloroethane	50.0000	48.8330	2.3	98	0.00
39	T	Cyclohexane	50.0000	49.8960	0.2	101	0.00
40	T	1,1-Dichloropropene	50.0000	50.8346	-1.7	99	0.00
41	T	Tert-Amyl-Methyl ether	100.0000	102.6272	-2.6	102	0.00
42	T	Carbon Tetrachloride	50.0000	50.3450	-0.7	99	0.00
43	S	1,2-Dichloroethane-d4	25.0000	26.6610	-6.6	104	0.00
44		Heptane	-1.0000	0.0000	0.0	103	0.00
45	T	1,2-Dichloroethane	50.0000	48.4840	3.0	98	0.00
46	T	Benzene	50.0000	48.0792	3.8	99	0.00
47	T	Trichloroethene	50.0000	48.7622	2.5	97	0.00
48	T	Methylcyclohexane	50.0000	51.9602	-3.9	104	0.00
49	C	1,2-Dichloropropane	50.0000	50.2094	-0.4	100	0.00
50	T	1,4-Dioxane	200.0000	181.6561	9.2	79	0.01
51	T	Bromodichloromethane	50.0000	51.7640	-3.5	102	0.00
52	T	Dibromomethane	50.0000	48.9820	2.0	97	0.00
53	T	2-Chloroethyl Vinyl Ether	50.0000	44.5749	10.9	92	0.00
54	T	4-Methyl-2-Pentanone	50.0000	53.4397	-6.9	99	0.00

(#) = Out of Range
6M107650.D 8260WTR.M Thu Apr 26 08:08:12 2012 Page 1

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\042512\6M107650.D Vial: 14
Acq On : 25 Apr 2012 15:46 Operator: ADC
Sample : WG396001-12 50.0 ug/L ALT SRC 8260 Inst : HPMS6
Misc : 1,1 STD51130 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
55	T	cis-1,3-Dichloropropene	50.0000	47.9606	4.1	98	0.00
56	T	Dimethyl Disulfide	50.0000	45.1120	9.8	97	0.00
57	I	Chlorobenzene-d5	25.0000	25.0000	0.0	102	0.00
58	S	Toluene-d8	25.0000	26.6223	-6.5	106	0.00
59	C	Toluene	50.0000	48.7704	2.5	99	0.00
60	T	Ethyl Methacrylate	50.0000	51.8918	-3.8	104	0.00
61		Paraldehyde	100.0000	90.3498	9.7	86	0.01
62	T	trans-1,3-Dichloropropene	50.0000	43.6637	12.7	89	0.00
63	T	1,1,2-Trichloroethane	50.0000	49.7561	0.5	99	0.00
64	T	2-Hexanone	50.0000	48.7242	2.6	94	0.00
65	T	1,3-Dichloropropane	50.0000	52.7907	-5.6	100	0.00
66	T	Tetrachloroethene	50.0000	48.5237	3.0	97	0.00
67	T	Dibromochloromethane	50.0000	47.4095	5.2	96	0.00
68	T	1,2-Dibromoethane	50.0000	49.2702	1.5	99	0.00
69	T	1-Chlorohexane	50.0000	53.1826	-6.4	104	0.00
70	P	Chlorobenzene	50.0000	46.9477	6.1	96	0.00
71	T	1,1,1,2-Tetrachloroethane	50.0000	49.0735	1.9	96	0.00
72	C	Ethylbenzene	50.0000	49.9956	0.0	99	0.00
73	T	m-,p-Xylene	100.0000	100.2316	-0.2	98	0.00
74	T	o-Xylene	50.0000	48.8595	2.3	95	0.00
75	T	Styrene	50.0000	47.9533	4.1	99	0.00
76	P	Bromoform	50.0000	52.2808	-4.6	94	0.00
77	T	Isopropylbenzene	50.0000	43.7541	12.5	86	0.00
78	I	1,4-Dichlorobenzene-d4	25.0000	25.0000	0.0	102	0.00
79	P	1,1,2,2-Tetrachloroethane	50.0000	52.5913	-5.2	100	0.00
80	S	p-Bromofluorobenzene	25.0000	27.1131	-8.5	107	0.00
81	T	1,2,3-Trichloropropane	50.0000	57.3510	-14.7	109	0.00
82	T	trans-1,4-Dichloro-2-Butene	50.0000	47.0861	5.8	96	0.00
83	T	n-Propylbenzene	50.0000	49.6949	0.6	100	0.00
84	T	Bromobenzene	50.0000	48.0502	3.9	99	0.00
85	T	1,3,5-Trimethylbenzene	50.0000	49.6525	0.7	99	0.00
86	T	2-Chlorotoluene	50.0000	47.8354	4.3	98	0.00
87	T	4-Chlorotoluene	50.0000	46.6080	6.8	94	0.00
88	T	a-Methylstyrene	50.0000	54.9770	-10.0	104	0.00
89	T	tert-Butylbenzene	50.0000	46.2944	7.4	98	0.00
90	T	1,2,4-Trimethylbenzene	50.0000	51.2959	-2.6	102	0.00
91	T	sec-Butylbenzene	50.0000	48.6979	2.6	99	0.00
92	T	p-Isopropyltoluene	50.0000	50.3138	-0.6	101	0.00
93	T	1,3-Dichlorobenzene	50.0000	48.1845	3.6	96	0.00
94	T	1,4-Dichlorobenzene	50.0000	46.6327	6.7	96	0.00
95	T	n-Butylbenzene	50.0000	51.0159	-2.0	101	0.00
96	T	1,2-Dichlorobenzene	50.0000	47.5885	4.8	96	0.00
97	T	1,2-Dibromo-3-Chloropropane	50.0000	48.0112	4.0	99	0.00
98	T	1,2,4-Trichlorobenzene	50.0000	48.6487	2.7	98	0.00
99	T	Hexachlorobutadiene	50.0000	44.5588	10.9	96	0.00
100	T	Naphthalene	50.0000	51.4471	-2.9	98	0.00
101	T	1,2,3-Trichlorobenzene	50.0000	48.1315	3.7	101	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6M107650.D 8260WTR.M Thu Apr 26 08:08:12 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\050612\6M107920.D Vial: 2
Acq On : 6 May 2012 17:04 Operator: MES
Sample : WG397129-02 50ug/L CCV STD 8260 Inst : HPMS6
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 06 17:27:09 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.54	96	560032	25.00 ug/L	0.00
57) Chlorobenzene-d5	15.03	117	384743	25.00 ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	190870	25.00 ug/L	0.00
System Monitoring Compounds					
37) Dibromofluoromethane	9.35	111	158996	26.2202 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 104.88%		
43) 1,2-Dichloroethane-d4	10.08	65	150228	25.2435 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 100.96%		
58) Toluene-d8	12.83	98	523855	25.0524 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 100.20%		
80) p-Bromofluorobenzene	16.82	95	198712	26.5309 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 106.12%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	2.73	85	387913	52.8067 ug/L	99
3) Chloromethane	3.12	50	600547	59.9600 ug/L	98
4) Vinyl Chloride	3.31	62	441985	47.5716 ug/L	99
5) 1,3-Butadiene	3.34	54	246644	53.3448 ug/L	100
6) Bromomethane	4.11	94	229019	43.5012 ug/L	100
7) Chloroethane	4.25	64	264204	50.2624 ug/L	98
8) Trichlorofluoromethane	4.73	101	570050	47.7200 ug/L	99
9) Diethyl ether	5.27	59	454212	111.9048 ug/L	98
10) Isoprene	5.30	67	503809	49.5984 ug/L	98
11) Acrolein	5.51	56	20547	74.3633 ug/L	97
12) 1,1,2-Trichloro-1,2,2-Trif	5.53	101	301956	47.2590 ug/L	99
13) Acetone	5.61	43	54391	51.2573 ug/L	100
14) 1,1-Dichloroethene	5.83	61	521364	50.7505 ug/L	99
15) Tert-Butyl Alcohol	5.97	59	52775	190.5042 ug/L	93
16) Dimethyl Sulfide	6.11	62	415737	50.9753 ug/L	97
17) Iodomethane	6.37	142	289622	49.3081 ug/L	97
18) Methyl acetate	6.41	43	208563	49.8026 ug/L	98
19) Methylene Chloride	6.67	84	317859	49.9530 ug/L	97
20) Carbon Disulfide	6.69	76	955930	51.3594 ug/L	99
21) Acrylonitrile	6.87	53	81964	57.3282 ug/L	100
22) Methyl Tert Butyl Ether	6.91	73	631975	47.1425 ug/L	98
23) trans-1,2-Dichloroethene	7.16	96	311788	50.1742 ug/L	99
24) n-Hexane	7.26	57	387580	54.3693 ug/L	98
25) Diisopropyl ether	7.65	45	2446152	108.0602 ug/L	99
26) Vinyl Acetate	7.83	43	256060	78.1363 ug/L	98
27) 1,1-Dichloroethane	7.84	63	633202	49.8742 ug/L	99
28) Ethyl-Tert-Butyl ether	8.29	59	1886142	102.5270 ug/L	99
29) 2-Butanone	8.49	43	82391	55.5267 ug/L	97
30) Propionitrile	8.60	54	47703	112.4024 ug/L	95
31) 2,2-Dichloropropane	8.71	77	499462	52.0372 ug/L	99
32) cis-1,2-Dichloroethene	8.78	96	336760	51.8645 ug/L	99
33) Chloroform	9.02	83	572667	49.9069 ug/L	99
34) 1-Bromopropane	9.17	122	57126	48.5191 ug/L	98
35) Bromochloromethane	9.27	130	184733	53.4077 ug/L	97
36) Tetrahydrofuran	9.31	42	105078	107.6870 ug/L	98
38) 1,1,1-Trichloroethane	9.62	97	510733	50.9528 ug/L	98
39) Cyclohexane	9.64	56	506211	50.4114 ug/L	99
40) 1,1-Dichloropropene	9.85	75	430233	52.0292 ug/L	97
41) Tert-Amyl-Methyl ether	9.99	73	1364069	99.5894 ug/L	100
42) Carbon Tetrachloride	10.00	117	470085	52.9837 ug/L	99

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

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\050612\6M107920.D Vial: 2
Acq On : 6 May 2012 17:04 Operator: MES
Sample : WG397129-02 50ug/L CCV STD 8260 Inst : HPMS6
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 06 17:27:09 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

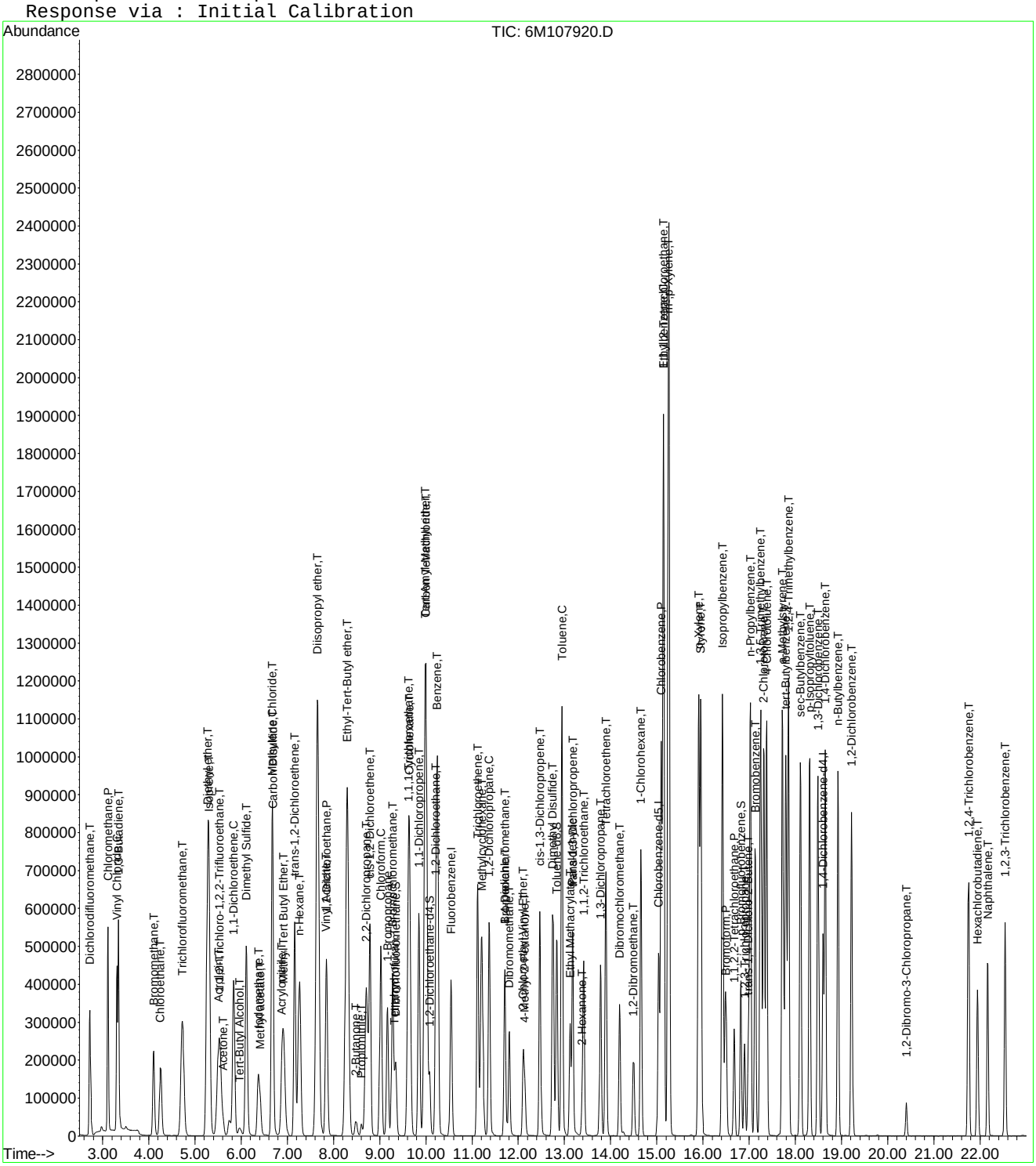
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
45)	1,2-Dichloroethane	10.21	62	398513	50.5590 ug/L	97
46)	Benzene	10.24	78	1230004	49.7154 ug/L	100
47)	Trichloroethene	11.12	130	314812	50.7308 ug/L	99
48)	Methylcyclohexane	11.21	83	373317	52.1645 ug/L	98
49)	1,2-Dichloropropane	11.37	63	331696	51.9285 ug/L	99
50)	1,4-Dioxane	11.71	88	4931	229.2844 ug/L	98
51)	Bromodichloromethane	11.71	83	397471	51.8019 ug/L	100
52)	Dibromomethane	11.80	93	152871	49.7356 ug/L	98
53)	2-Chloroethyl Vinyl Ether	12.10	63	122753	43.5637 ug/L	100
54)	4-Methyl-2-Pentanone	12.13	58	61607	55.3127 ug/L	96
55)	cis-1,3-Dichloropropene	12.47	75	451452	49.0737 ug/L	99
56)	Dimethyl Disulfide	12.75	79	247911	46.1347 ug/L	99
59)	Toluene	12.95	91	1211290	47.9084 ug/L	100
60)	Ethyl Methacrylate	13.12	69	221649	47.6904 ug/L	98
61)	Paraldehyde	13.17	89	6312	92.9784 ug/L #	16
62)	trans-1,3-Dichloropropene	13.18	75	386738	46.8816 ug/L	99
63)	1,1,2-Trichloroethane	13.42	97	193509	47.6517 ug/L	99
64)	2-Hexanone	13.38	43	105292	53.9867 ug/L	97
65)	1,3-Dichloropropane	13.78	76	345650	49.9107 ug/L	98
66)	Tetrachloroethene	13.90	166	293453	49.6972 ug/L	99
67)	Dibromochloromethane	14.20	129	262921	48.1448 ug/L	100
68)	1,2-Dibromoethane	14.49	107	191001	47.7739 ug/L	99
69)	1-Chlorohexane	14.66	91	344748	51.4918 ug/L	98
70)	Chlorobenzene	15.09	112	765069	47.6234 ug/L	99
71)	1,1,1,2-Tetrachloroethane	15.15	131	286205	49.4750 ug/L	99
72)	Ethylbenzene	15.15	106	409949	49.4720 ug/L	99
73)	m-,p-Xylene	15.26	106	1013143	100.0154 ug/L	100
74)	o-Xylene	15.91	106	474103	49.1513 ug/L	99
75)	Styrene	15.95	104	812704	46.7400 ug/L	100
76)	Bromoform	16.50	173	148894	54.4279 ug/L	100
77)	Isopropylbenzene	16.42	105	1213813	50.5609 ug/L	100
79)	1,1,2,2-Tetrachloroethane	16.68	83	204348	50.6283 ug/L	100
81)	1,2,3-Trichloropropane	16.90	110	50968	48.9757 ug/L	99
82)	trans-1,4-Dichloro-2-Buten	16.98	53	63546	49.6693 ug/L	96
83)	n-Propylbenzene	17.02	91	1413477	50.3982 ug/L	100
84)	Bromobenzene	17.14	156	306834	48.8406 ug/L	99
85)	1,3,5-Trimethylbenzene	17.25	105	949864	49.6434 ug/L	99
86)	2-Chlorotoluene	17.31	91	934368	50.1754 ug/L	99
87)	4-Chlorotoluene	17.38	91	854667	45.6531 ug/L	99
88)	a-Methylstyrene	17.72	118	522312	53.2298 ug/L	100
89)	tert-Butylbenzene	17.79	134	189017	48.9138 ug/L	96
90)	1,2,4-Trimethylbenzene	17.85	105	1008785	49.8678 ug/L	99
91)	sec-Butylbenzene	18.11	105	1118259	51.4153 ug/L	99
92)	p-Isopropyltoluene	18.31	119	914524	52.3467 ug/L	100
93)	1,3-Dichlorobenzene	18.49	146	556360	50.4694 ug/L	99
94)	1,4-Dichlorobenzene	18.65	146	557317	48.2057 ug/L	99
95)	n-Butylbenzene	18.92	91	820804	53.9331 ug/L	100
96)	1,2-Dichlorobenzene	19.22	146	491712	49.3526 ug/L	98
97)	1,2-Dibromo-3-Chloropropan	20.40	75	31269	48.8985 ug/L	93
98)	1,2,4-Trichlorobenzene	21.75	180	288789	53.2526 ug/L	100
99)	Hexachlorobutadiene	21.95	225	111841	51.3970 ug/L	99
100)	Naphthalene	22.17	128	520447	50.4012 ug/L	100
101)	1,2,3-Trichlorobenzene	22.54	180	240990	51.1284 ug/L	98

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

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\050612\6M107920.D Vial: 2
Acq On : 6 May 2012 17:04 Operator: MES
Sample : WG397129-02 50ug/L CCV STD 8260 Inst : HPMS6
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 6 17:27 2012 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Initial Calibration



6M107920.D 8260WTR.M Sun May 06 17:27:09 2012 Page 3

Continuing Calibration Area and RT check

Instrument: HPMS6
Initial cal date: 25 Apr 2012 13:04
CCV date: 6 May 2012 17:04
CCV Filename: 6M107920.D

	Fluorobenzene		Chlorobenzene-d5		1,4-Dichlorobenzene-d4	
	Amount	RT	Amount	RT	Amount	RT
InitCal	619560	10.54	408189	15.03	200465	18.60
CCV	560032	10.54	384743	15.03	190870	18.60

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\050612\6M107920.D Vial: 2
Acq On : 6 May 2012 17:04 Operator: MES
Sample : WG397129-02 50ug/L CCV STD 8260 Inst : HPMS6
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	1.0000	1.0000	0.0	90	0.00
2	T	Dichlorodifluoromethane	0.3279	0.3463	-5.6	99	0.00
3	P	Chloromethane	0.5138	0.5362	-4.4	107	0.00
4	C	Vinyl Chloride	0.4148	0.3946	4.9	99	0.00
5	T	1,3-Butadiene	0.2435	0.2202	9.5	89	0.00
6	T	Bromomethane	0.2350	0.2045	13.0	86	0.00
7	T	Chloroethane	0.2347	0.2359	-0.5	93	0.00
8	T	Trichlorofluoromethane	0.5333	0.5089	4.6	89	0.00
9	T	Diethyl ether	0.1812	0.2028	-11.9	102	0.00
10	T	Isoprene	0.4535	0.4498	0.8	89	0.00
11	T	Acrolein	0.0111	0.0092	17.5	77	0.00
12	T	1,1,2-Trichloro-1,2,2-Trifl	0.2852	0.2696	5.5	88	0.00
13	T	Acetone	0.0474	0.0486	-2.5	93	0.00
14	C	1,1-Dichloroethene	0.4586	0.4655	-1.5	91	0.00
15	T	Tert-Butyl Alcohol	0.0124	0.0118	4.8	87	-0.01
16	T	Dimethyl Sulfide	0.3641	0.3712	-2.0	93	0.00
17	T	Iodomethane	0.2622	0.2586	1.4	79	0.00
18	T	Methyl acetate	0.1869	0.1862	0.4	88	0.00
19	T	Methylene Chloride	0.2841	0.2838	0.1	93	0.00
20	T	Carbon Disulfide	0.8309	0.8535	-2.7	94	0.00
21	T	Acrylonitrile	0.0638	0.0732	-14.7	98	0.00
22	T	Methyl Tert Butyl Ether	0.5984	0.5642	5.7	87	0.00
23	T	trans-1,2-Dichloroethene	0.2774	0.2784	-0.3	90	0.00
24	T	n-Hexane	0.3182	0.3460	-8.7	98	0.00
25	T	Diisopropyl ether	1.0105	1.0920	-8.1	97	0.00
26	T	Vinyl Acetate	0.1463	0.2286	-56.3#	140	0.00
27	P	1,1-Dichloroethane	0.5667	0.5653	0.3	92	0.00
28	T	Ethyl-Tert-Butyl ether	0.8212	0.8420	-2.5	91	0.00
29	T	2-Butanone	0.0662	0.0736	-11.1	96	0.00
30	T	Propionitrile	0.0190	0.0213	-12.3	96	0.00
31	T	2,2-Dichloropropane	0.4285	0.4459	-4.1	96	0.00
32	T	cis-1,2-Dichloroethene	0.2899	0.3007	-3.7	92	0.00
33	C	Chloroform	0.5122	0.5113	0.2	92	0.00
34		1-Bromopropane	0.0481	0.0510	-6.1	90	0.00
35	T	Bromochloromethane	0.1503	0.1649	-9.8	95	0.00
36	T	Tetrahydrofuran	0.0436	0.0469	-7.7	94	0.00
37	S	Dibromofluoromethane	0.2707	0.2839	-4.9	91	0.00
38	T	1,1,1-Trichloroethane	0.4475	0.4560	-1.9	91	0.00
39	T	Cyclohexane	0.4483	0.4520	-0.8	91	0.00
40	T	1,1-Dichloropropene	0.3691	0.3841	-4.1	91	0.00
41	T	Tert-Amyl-Methyl ether	0.6114	0.6089	0.4	88	0.00
42	T	Carbon Tetrachloride	0.3961	0.4197	-6.0	93	0.00
43	S	1,2-Dichloroethane-d4	0.2657	0.2682	-1.0	88	0.00
44		Heptane	0.0000	0.0000	0.0	89	0.00
45	T	1,2-Dichloroethane	0.3519	0.3558	-1.1	91	0.00
46	T	Benzene	1.1044	1.0982	0.6	92	0.00
47	T	Trichloroethene	0.2770	0.2811	-1.5	90	0.00
48	T	Methylcyclohexane	0.3195	0.3333	-4.3	94	0.00
49	C	1,2-Dichloropropane	0.2851	0.2961	-3.9	93	0.00
50	T	1,4-Dioxane	0.0009	0.0011	-23.6#	100	0.00
51	T	Bromodichloromethane	0.3425	0.3549	-3.6	91	0.00
52	T	Dibromomethane	0.1220	0.1365	-11.9	88	0.00
53	T	2-Chloroethyl Vinyl Ether	0.1124	0.1096	2.5	80	0.00
54	T	4-Methyl-2-Pentanone	0.0497	0.0550	-10.6	91	0.00

(#) = Out of Range
6M107920.D 8260WTR.M Sun May 06 17:30:21 2012 Page 1

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\050612\6M107920.D Vial: 2
Acq On : 6 May 2012 17:04 Operator: MES
Sample : WG397129-02 50ug/L CCV STD 8260 Inst : HPMS6
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
55	T	cis-1,3-Dichloropropene	0.3667	0.4031	-9.9	90	0.00
56	T	Dimethyl Disulfide	0.2035	0.2213	-8.8	88	0.00
57	I	Chlorobenzene-d5	1.0000	1.0000	0.0	94	0.00
58	S	Toluene-d8	1.3587	1.3616	-0.2	93	0.00
59	C	Toluene	1.6429	1.5741	4.2	90	0.00
60	T	Ethyl Methacrylate	0.2500	0.2880	-15.2	88	0.00
61		Paraldehyde	0.0044	0.0041	7.0	82	0.00
62	T	trans-1,3-Dichloropropene	0.4381	0.5026	-14.7	89	0.00
63	T	1,1,2-Trichloroethane	0.2639	0.2515	4.7	88	0.00
64	T	2-Hexanone	0.1145	0.1368	-19.5	98	0.00
65	T	1,3-Dichloropropane	0.4500	0.4492	0.2	87	0.00
66	T	Tetrachloroethene	0.3837	0.3814	0.6	92	0.00
67	T	Dibromochloromethane	0.3236	0.3417	-5.6	90	0.00
68	T	1,2-Dibromoethane	0.2260	0.2482	-9.8	89	0.00
69	T	1-Chlorohexane	0.4350	0.4480	-3.0	93	0.00
70	P	Chlorobenzene	1.0439	0.9943	4.8	90	0.00
71	T	1,1,1,2-Tetrachloroethane	0.3759	0.3719	1.1	90	0.00
72	C	Ethylbenzene	0.5384	0.5328	1.1	90	0.00
73	T	m-,p-Xylene	0.6582	0.6583	-0.0	90	0.00
74	T	o-Xylene	0.6268	0.6161	1.7	89	0.00
75	T	Styrene	0.9916	1.0562	-6.5	90	0.00
76	P	Bromoform	0.1778	0.1935	-8.9	91	0.00
77	T	Isopropylbenzene	1.5599	1.5774	-1.1	92	0.00
78	I	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	95	0.00
79	P	1,1,2,2-Tetrachloroethane	0.5287	0.5353	-1.3	90	0.00
80	S	p-Bromofluorobenzene	0.9810	1.0411	-6.1	98	0.00
81	T	1,2,3-Trichloropropane	0.1363	0.1335	2.1	87	0.00
82	T	trans-1,4-Dichloro-2-Butene	0.1680	0.1665	0.9	94	0.00
83	T	n-Propylbenzene	3.6735	3.7027	-0.8	95	0.00
84	T	Bromobenzene	0.7480	0.8038	-7.5	94	0.00
85	T	1,3,5-Trimethylbenzene	2.5061	2.4882	0.7	92	0.00
86	T	2-Chlorotoluene	2.4391	2.4477	-0.4	96	0.00
87	T	4-Chlorotoluene	2.4520	2.2389	8.7	87	0.00
88	T	a-Methylstyrene	1.2852	1.3682	-6.5	94	0.00
89	T	tert-Butylbenzene	0.5061	0.4951	2.2	97	0.00
90	T	1,2,4-Trimethylbenzene	2.6496	2.6426	0.3	93	0.00
91	T	sec-Butylbenzene	2.8487	2.9294	-2.8	98	0.00
92	T	p-Isopropyltoluene	2.2883	2.3957	-4.7	98	0.00
93	T	1,3-Dichlorobenzene	1.4439	1.4574	-0.9	94	0.00
94	T	1,4-Dichlorobenzene	1.5143	1.4599	3.6	93	0.00
95	T	n-Butylbenzene	1.9934	2.1502	-7.9	100	0.00
96	T	1,2-Dichlorobenzene	1.3050	1.2881	1.3	93	0.00
97	T	1,2-Dibromo-3-Chloropropane	0.0741	0.0819	-10.6	95	0.00
98	T	1,2,4-Trichlorobenzene	0.7103	0.7565	-6.5	100	0.00
99	T	Hexachlorobutadiene	0.2700	0.2930	-8.5	104	0.00
100	T	Naphthalene	1.3525	1.3634	-0.8	90	0.00
101	T	1,2,3-Trichlorobenzene	0.6174	0.6313	-2.3	101	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6M107920.D 8260WTR.M Sun May 06 17:30:21 2012 Page 2

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\050612\6M107920.D Vial: 2
Acq On : 6 May 2012 17:04 Operator: MES
Sample : WG397129-02 50ug/L CCV STD 8260 Inst : HPMS6
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	25.0000	25.0000	0.0	90	0.00
2	T	Dichlorodifluoromethane	50.0000	52.8067	-5.6	99	0.00
3	P	Chloromethane	50.0000	59.9600	-19.9	107	0.00
4	C	Vinyl Chloride	50.0000	47.5716	4.9	99	0.00
5	T	1,3-Butadiene	50.0000	53.3448	-6.7	89	0.00
6	T	Bromomethane	50.0000	43.5012	13.0	86	0.00
7	T	Chloroethane	50.0000	50.2624	-0.5	93	0.00
8	T	Trichlorofluoromethane	50.0000	47.7200	4.6	89	0.00
9	T	Diethyl ether	100.0000	111.9048	-11.9	102	0.00
10	T	Isoprene	50.0000	49.5985	0.8	89	0.00
11	T	Acrolein	100.0000	74.3633	25.6#	77	0.00
12	T	1,1,2-Trichloro-1,2,2-Trifl	50.0000	47.2590	5.5	88	0.00
13	T	Acetone	50.0000	51.2573	-2.5	93	0.00
14	C	1,1-Dichloroethene	50.0000	50.7505	-1.5	91	0.00
15	T	Tert-Butyl Alcohol	200.0000	190.5043	4.7	87	-0.01
16	T	Dimethyl Sulfide	50.0000	50.9753	-2.0	93	0.00
17	T	Iodomethane	50.0000	49.3081	1.4	79	0.00
18	T	Methyl acetate	50.0000	49.8026	0.4	88	0.00
19	T	Methylene Chloride	50.0000	49.9530	0.1	93	0.00
20	T	Carbon Disulfide	50.0000	51.3594	-2.7	94	0.00
21	T	Acrylonitrile	50.0000	57.3282	-14.7	98	0.00
22	T	Methyl Tert Butyl Ether	50.0000	47.1425	5.7	87	0.00
23	T	trans-1,2-Dichloroethene	50.0000	50.1742	-0.3	90	0.00
24	T	n-Hexane	50.0000	54.3693	-8.7	98	0.00
25	T	Diisopropyl ether	100.0000	108.0602	-8.1	97	0.00
26	T	Vinyl Acetate	50.0000	78.1363	-56.3#	140	0.00
27	P	1,1-Dichloroethane	50.0000	49.8742	0.3	92	0.00
28	T	Ethyl-Tert-Butyl ether	100.0000	102.5270	-2.5	91	0.00
29	T	2-Butanone	50.0000	55.5267	-11.1	96	0.00
30	T	Propionitrile	100.0000	112.4024	-12.4	96	0.00
31	T	2,2-Dichloropropane	50.0000	52.0372	-4.1	96	0.00
32	T	cis-1,2-Dichloroethene	50.0000	51.8645	-3.7	92	0.00
33	C	Chloroform	50.0000	49.9069	0.2	92	0.00
34		1-Bromopropane	50.0000	48.5191	3.0	90	0.00
35	T	Bromochloromethane	50.0000	53.4077	-6.8	95	0.00
36	T	Tetrahydrofuran	100.0000	107.6870	-7.7	94	0.00
37	S	Dibromofluoromethane	25.0000	26.2202	-4.9	91	0.00
38	T	1,1,1-Trichloroethane	50.0000	50.9528	-1.9	91	0.00
39	T	Cyclohexane	50.0000	50.4114	-0.8	91	0.00
40	T	1,1-Dichloropropene	50.0000	52.0292	-4.1	91	0.00
41	T	Tert-Amyl-Methyl ether	100.0000	99.5894	0.4	88	0.00
42	T	Carbon Tetrachloride	50.0000	52.9837	-6.0	93	0.00
43	S	1,2-Dichloroethane-d4	25.0000	25.2435	-1.0	88	0.00
44		Heptane	-1.0000	0.0000	0.0	89	0.00
45	T	1,2-Dichloroethane	50.0000	50.5590	-1.1	91	0.00
46	T	Benzene	50.0000	49.7154	0.6	92	0.00
47	T	Trichloroethene	50.0000	50.7308	-1.5	90	0.00
48	T	Methylcyclohexane	50.0000	52.1645	-4.3	94	0.00
49	C	1,2-Dichloropropane	50.0000	51.9285	-3.9	93	0.00
50	T	1,4-Dioxane	200.0000	229.2844	-14.6	100	0.00
51	T	Bromodichloromethane	50.0000	51.8019	-3.6	91	0.00
52	T	Dibromomethane	50.0000	49.7357	0.5	88	0.00
53	T	2-Chloroethyl Vinyl Ether	50.0000	43.5637	12.9	80	0.00
54	T	4-Methyl-2-Pentanone	50.0000	55.3127	-10.6	91	0.00

(#) = Out of Range
6M107920.D 8260WTR.M Sun May 06 17:30:23 2012 Page 1

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\050612\6M107920.D Vial: 2
Acq On : 6 May 2012 17:04 Operator: MES
Sample : WG397129-02 50ug/L CCV STD 8260 Inst : HPMS6
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Multiple Level Calibration

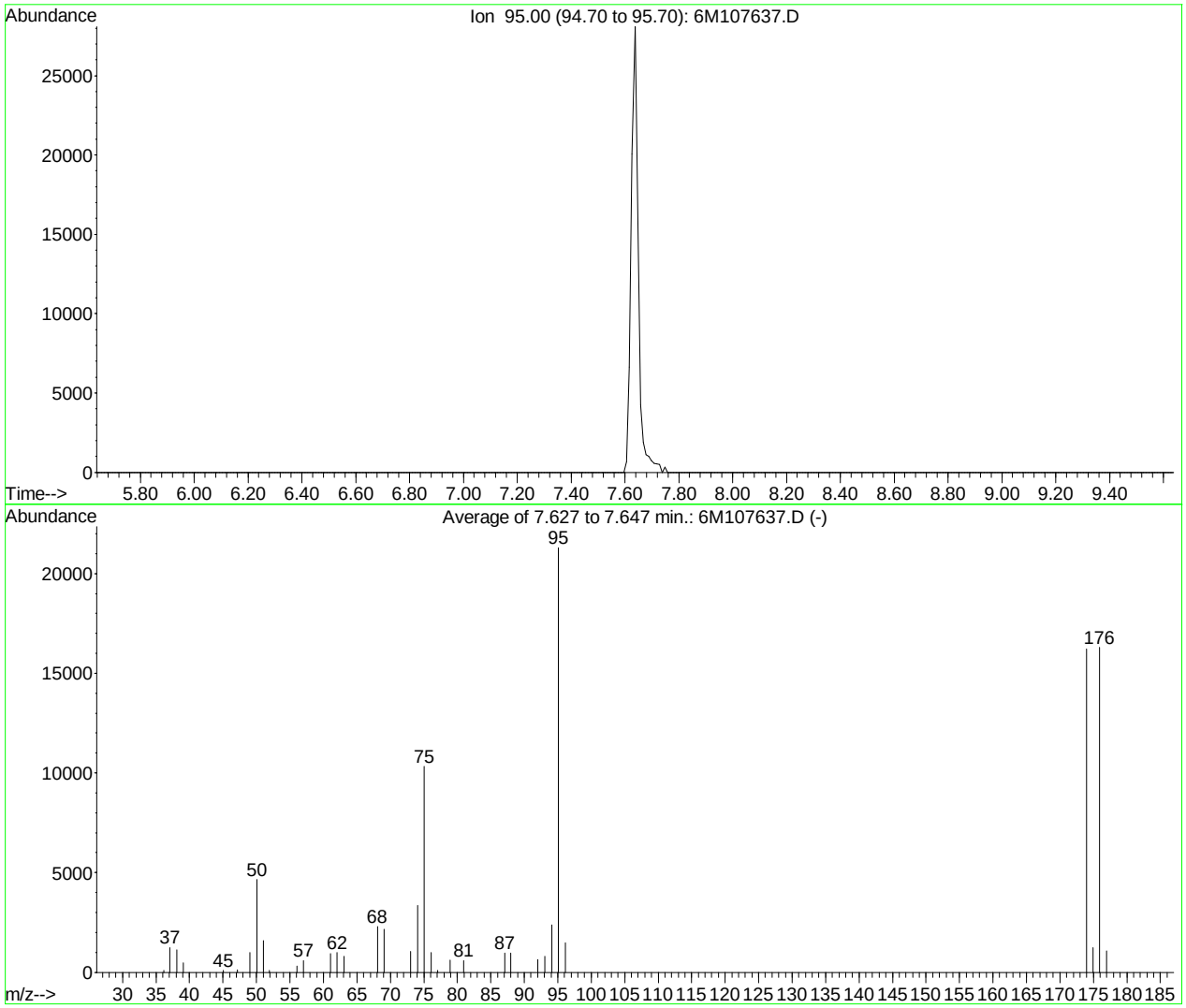
Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
55	T	cis-1,3-Dichloropropene	50.0000	49.0737	1.9	90	0.00
56	T	Dimethyl Disulfide	50.0000	46.1347	7.7	88	0.00
57	I	Chlorobenzene-d5	25.0000	25.0000	0.0	94	0.00
58	S	Toluene-d8	25.0000	25.0524	-0.2	93	0.00
59	C	Toluene	50.0000	47.9085	4.2	90	0.00
60	T	Ethyl Methacrylate	50.0000	47.6904	4.6	88	0.00
61		Paraldehyde	100.0000	92.9784	7.0	82	0.00
62	T	trans-1,3-Dichloropropene	50.0000	46.8816	6.2	89	0.00
63	T	1,1,2-Trichloroethane	50.0000	47.6517	4.7	88	0.00
64	T	2-Hexanone	50.0000	53.9867	-8.0	98	0.00
65	T	1,3-Dichloropropane	50.0000	49.9107	0.2	87	0.00
66	T	Tetrachloroethene	50.0000	49.6972	0.6	92	0.00
67	T	Dibromochloromethane	50.0000	48.1448	3.7	90	0.00
68	T	1,2-Dibromoethane	50.0000	47.7739	4.5	89	0.00
69	T	1-Chlorohexane	50.0000	51.4918	-3.0	93	0.00
70	P	Chlorobenzene	50.0000	47.6234	4.8	90	0.00
71	T	1,1,1,2-Tetrachloroethane	50.0000	49.4750	1.1	90	0.00
72	C	Ethylbenzene	50.0000	49.4720	1.1	90	0.00
73	T	m-,p-Xylene	100.0000	100.0154	-0.0	90	0.00
74	T	o-Xylene	50.0000	49.1514	1.7	89	0.00
75	T	Styrene	50.0000	46.7400	6.5	90	0.00
76	P	Bromoform	50.0000	54.4279	-8.9	91	0.00
77	T	Isopropylbenzene	50.0000	50.5609	-1.1	92	0.00
78	I	1,4-Dichlorobenzene-d4	25.0000	25.0000	0.0	95	0.00
79	P	1,1,2,2-Tetrachloroethane	50.0000	50.6283	-1.3	90	0.00
80	S	p-Bromofluorobenzene	25.0000	26.5310	-6.1	98	0.00
81	T	1,2,3-Trichloropropane	50.0000	48.9757	2.0	87	0.00
82	T	trans-1,4-Dichloro-2-Butene	50.0000	49.6693	0.7	94	0.00
83	T	n-Propylbenzene	50.0000	50.3982	-0.8	95	0.00
84	T	Bromobenzene	50.0000	48.8406	2.3	94	0.00
85	T	1,3,5-Trimethylbenzene	50.0000	49.6434	0.7	92	0.00
86	T	2-Chlorotoluene	50.0000	50.1754	-0.4	96	0.00
87	T	4-Chlorotoluene	50.0000	45.6531	8.7	87	0.00
88	T	a-Methylstyrene	50.0000	53.2298	-6.5	94	0.00
89	T	tert-Butylbenzene	50.0000	48.9138	2.2	97	0.00
90	T	1,2,4-Trimethylbenzene	50.0000	49.8678	0.3	93	0.00
91	T	sec-Butylbenzene	50.0000	51.4153	-2.8	98	0.00
92	T	p-Isopropyltoluene	50.0000	52.3467	-4.7	98	0.00
93	T	1,3-Dichlorobenzene	50.0000	50.4694	-0.9	94	0.00
94	T	1,4-Dichlorobenzene	50.0000	48.2056	3.6	93	0.00
95	T	n-Butylbenzene	50.0000	53.9331	-7.9	100	0.00
96	T	1,2-Dichlorobenzene	50.0000	49.3526	1.3	93	0.00
97	T	1,2-Dibromo-3-Chloropropane	50.0000	48.8985	2.2	95	0.00
98	T	1,2,4-Trichlorobenzene	50.0000	53.2526	-6.5	100	0.00
99	T	Hexachlorobutadiene	50.0000	51.3969	-2.8	104	0.00
100	T	Naphthalene	50.0000	50.4012	-0.8	90	0.00
101	T	1,2,3-Trichlorobenzene	50.0000	51.1284	-2.3	101	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6M107920.D 8260WTR.M Sun May 06 17:30:23 2012 Page 2

2.1.1.5 Raw QC Data

```
Data File : C:\MSDCHEM\1\DATA\042512\6M107637.D          Vial: 1
Acq On    : 25 Apr 2012   8:52                       Operator: ADC
Sample    : WG396001-01 50ng/L BFB STD 8260          Inst    : HPMS6
Misc      : 1,1 STD51241                             Multiplr: 1.00
MS Integration Params: RTEINT.P
Method    : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title     : 8260B/624_WATER SOP:OVLMSV01  04/25/12 - HPMS6
```

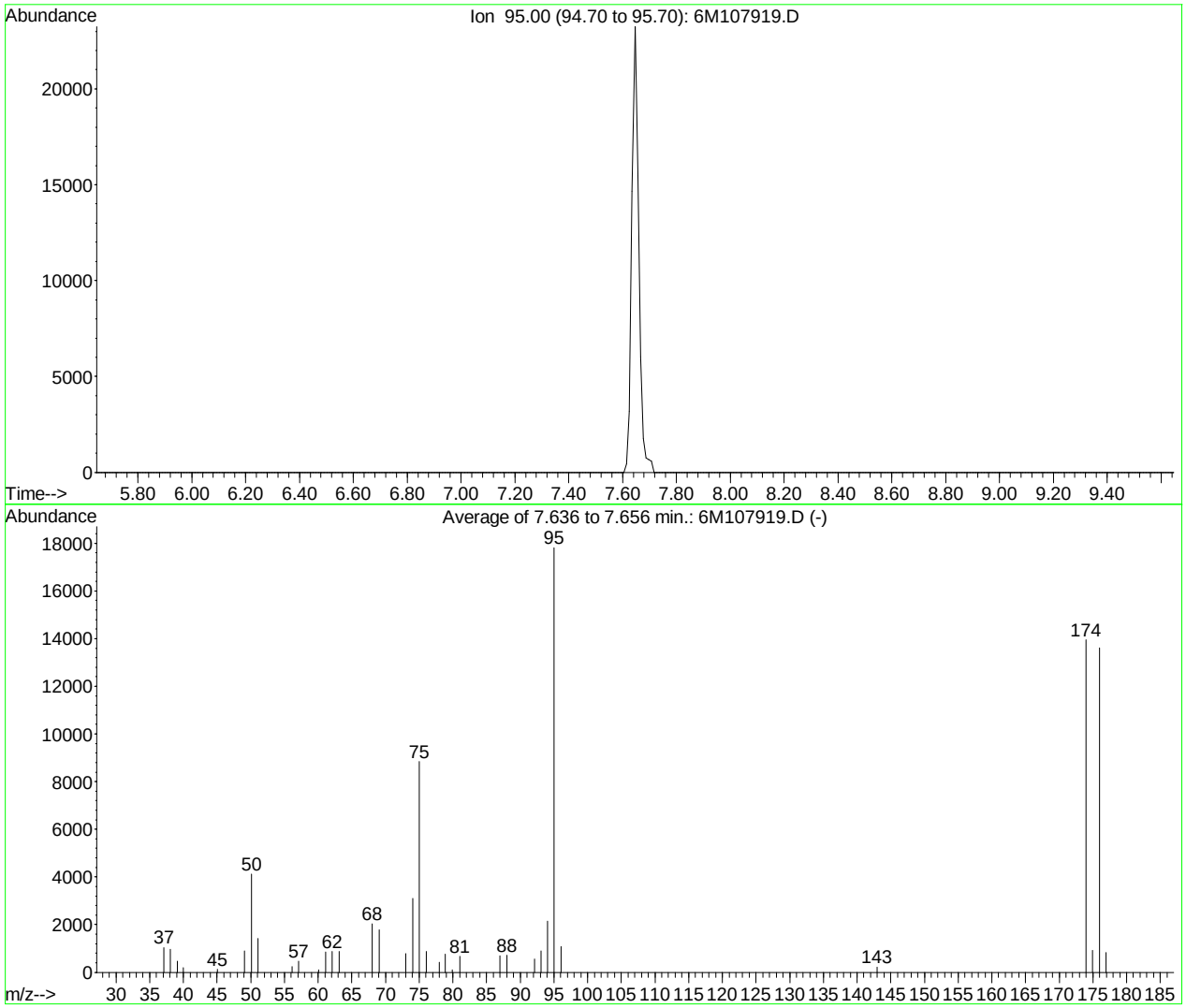


AutoFind: Scans 249, 250, 251; Background Corrected with Scan 244

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.9	4659	PASS
75	95	30	60	48.5	10324	PASS
95	95	100	100	100.0	21302	PASS
96	95	5	9	6.9	1471	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	76.2	16231	PASS
175	174	5	9	7.7	1245	PASS
176	174	95	101	100.4	16295	PASS
177	176	5	9	6.5	1063	PASS

6M107637.D 8260WTR.M Thu Apr 26 08:12:16 2012

```
Data File : C:\MSDCHEM\1\DATA\050612\6M107919.D          Vial: 4
Acq On    :  6 May 2012  16:33                        Operator: MES
Sample    : WG397129-01 50ng BFB STD 8260             Inst    : HPMS6
Misc      : 1,1 STD51241                              Multiplr: 1.00
MS Integration Params: rteint.p
Method    : C:\MSDCHEM\1\METHODS\BFB.M (RTE Integrator)
Title     : SOP: OVL MSV01
```



AutoFind: Scans 250, 251, 252; Background Corrected with Scan 245

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.1	4121	PASS
75	95	30	60	49.7	8851	PASS
95	95	100	100	100.0	17817	PASS
96	95	5	9	6.0	1072	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	78.3	13954	PASS
175	174	5	9	6.5	913	PASS
176	174	95	101	97.6	13617	PASS
177	176	5	9	6.1	826	PASS

6M107919.D BFB.M Sun May 06 17:13:14 2012

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050612\6M107922.D Vial: 4
Acq On : 6 May 2012 18:09 Operator: MES
Sample : WG397130-01 BLANK 5/6 8260 Inst : HPMS6
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 10:49:26 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.54	96	477310	25.00 ug/L	0.00
57) Chlorobenzene-d5	15.03	117	331341	25.00 ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	154507	25.00 ug/L	0.00

System Monitoring Compounds

37) Dibromofluoromethane	9.35	111	137407	26.5871 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 106.36%		
43) 1,2-Dichloroethane-d4	10.08	65	134882	26.5929 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 106.36%		
58) Toluene-d8	12.83	98	464210	25.7780 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 103.12%		
80) p-Bromofluorobenzene	16.81	95	163446	26.9583 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 107.84%		

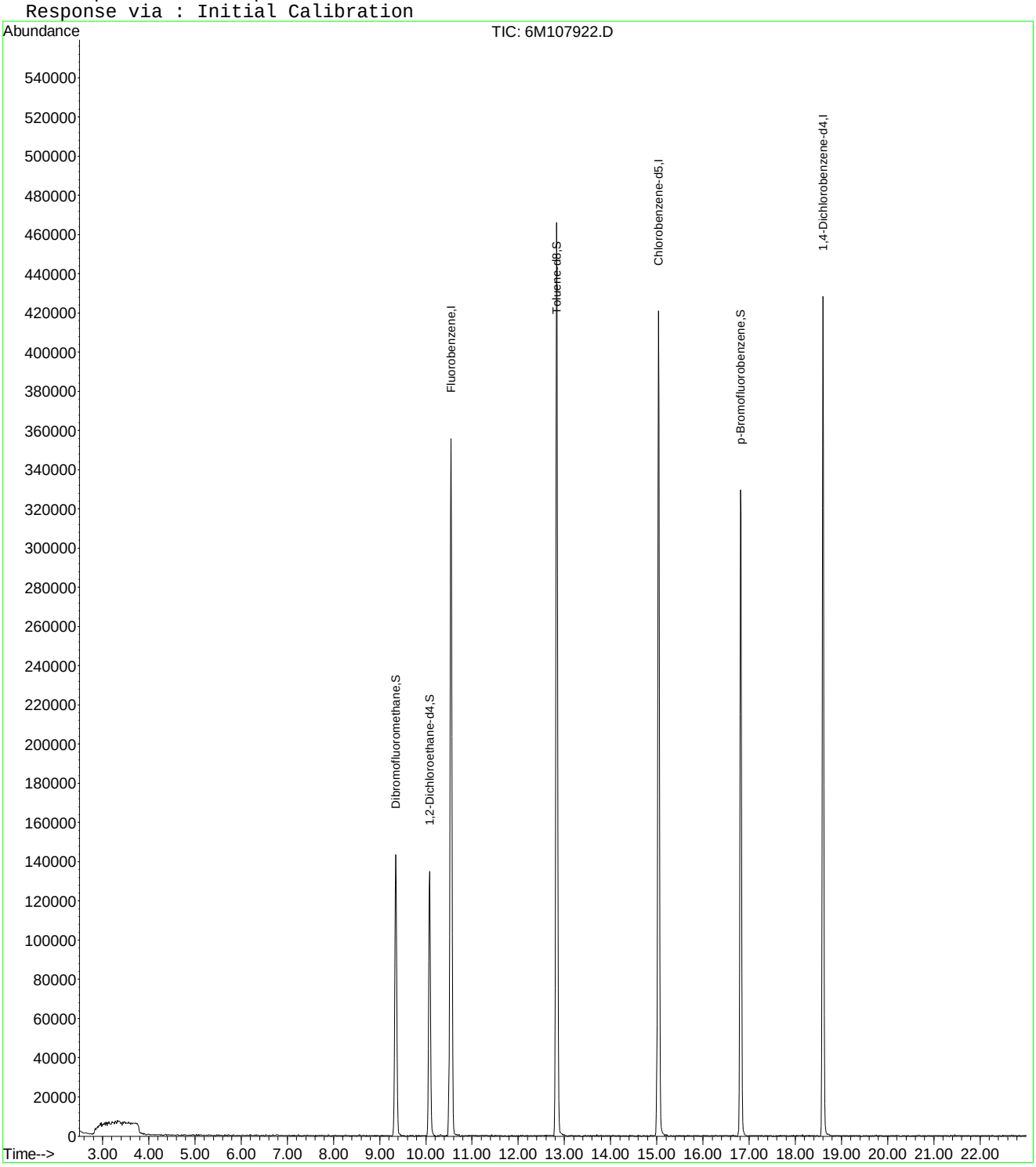
Target Compounds					Qvalue
3) Chloromethane	3.09	50	411	Below Cal	# 1

(#) = qualifier out of range (m) = manual integration
6M107922.D 8260WTR.M Fri May 11 10:49:26 2012 Page 1

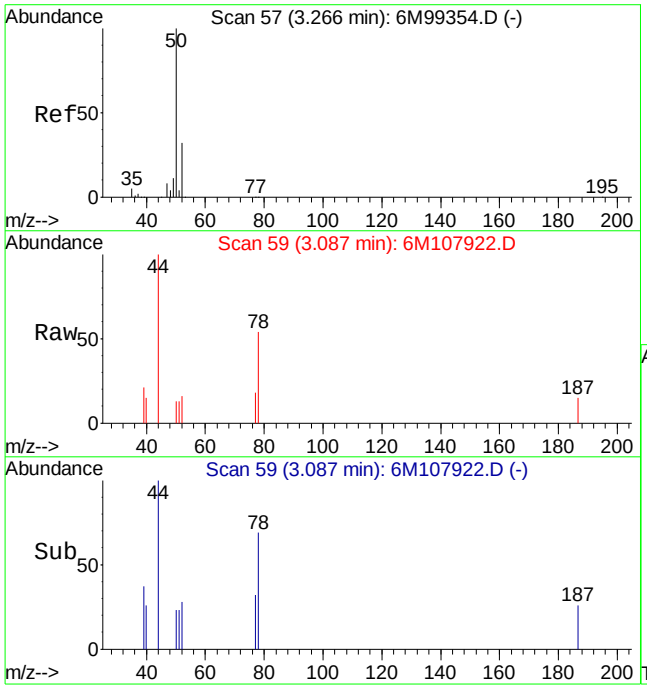
Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050612\6M107922.D Vial: 4
Acq On : 6 May 2012 18:09 Operator: MES
Sample : WG397130-01 BLANK 5/6 8260 Inst : HPMS6
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 10:49 2012 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Initial Calibration



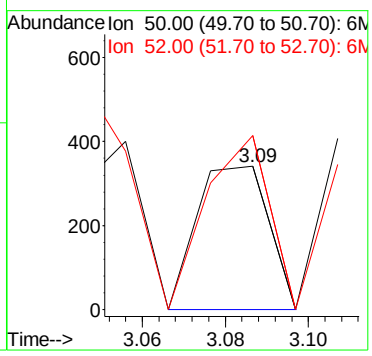
6M107922.D 8260WTR.M Fri May 11 10:49:26 2012 Page 2



#3
Chloromethane
Concen: Below Cal
RT: 3.09 min Scan# 59
Delta R.T. -0.02 min
Lab File: 6M107922.D
Acq: 6 May 2012 18:09

Tgt Ion: 50 Resp: 411

Ion	Ratio	Lower	Upper
50	100		
52	106.8	18.8	44.0#



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\050612\6M107922.D Vial: 4
Acq On : 6 May 2012 18:09 Operator: MES
Sample : WG397130-01 BLANK 5/6 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 04/25/12 - 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

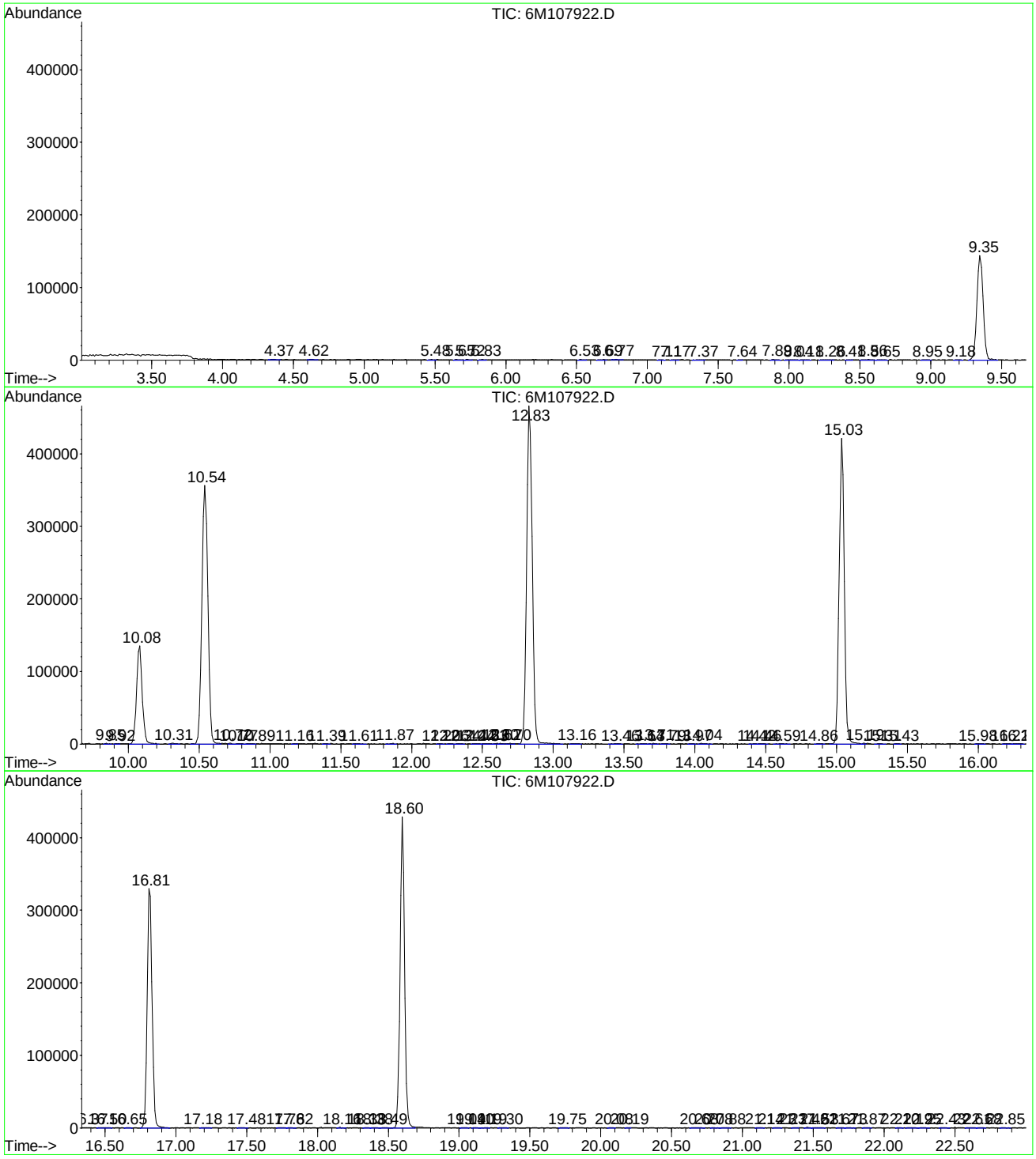
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.373	180	185	188	rBV	547	1078	0.08%	0.018%
2	4.618	207	209	214	rVB	536	951	0.07%	0.016%
3	5.476	290	293	296	rBV	834	1771	0.14%	0.029%
4	5.650	308	310	316	rBB	744	2106	0.17%	0.035%
5	5.721	316	317	321	rBV	821	1750	0.14%	0.029%
6	5.834	325	328	331	rBV	896	1934	0.15%	0.032%
7	6.528	394	396	400	rBV	718	1704	0.13%	0.028%
8	6.691	407	412	414	rBV	716	1743	0.14%	0.029%
9	6.773	417	420	425	rVB	517	1477	0.12%	0.024%
10	7.110	449	453	454	rBB	586	1019	0.08%	0.017%
11	7.171	458	459	464	rBV	422	1407	0.11%	0.023%
12	7.365	473	478	482	rBV	482	1956	0.15%	0.032%
13	7.641	504	505	508	rBV	463	1028	0.08%	0.017%
14	7.886	527	529	534	rBB	815	1647	0.13%	0.027%
15	8.039	537	544	547	rBB	629	2282	0.18%	0.038%
16	8.111	547	551	555	rBB	474	1532	0.12%	0.025%
17	8.264	561	566	571	rBV	500	2315	0.18%	0.038%
18	8.407	579	580	584	rBV	475	1166	0.09%	0.019%
19	8.560	589	595	600	rBB	709	2689	0.21%	0.044%
20	8.652	600	604	608	rBB	558	1709	0.13%	0.028%
21	8.948	631	633	638	rBB	513	1420	0.11%	0.023%
22	9.183	654	656	660	rBB	405	1151	0.09%	0.019%
23	9.346	664	672	684	rBB	143730	435303	34.23%	7.167%
24	9.847	719	721	724	rBB	698	905	0.07%	0.015%
25	9.918	726	728	730	rBV	470	911	0.07%	0.015%
26	10.082	737	744	757	rBB	135067	379619	29.85%	6.250%
27	10.306	764	766	771	rBB	800	1909	0.15%	0.031%
28	10.541	779	789	800	rBV	356011	1042383	81.97%	17.162%
29	10.725	805	807	809	rVB	1078	1202	0.09%	0.020%
30	10.766	810	811	816	rBB	477	1184	0.09%	0.019%
31	10.888	817	823	824	rBB	474	1372	0.11%	0.023%
32	11.164	849	850	853	rBV	418	985	0.08%	0.016%
33	11.389	870	872	875	rBB	415	914	0.07%	0.015%
34	11.613	891	894	900	rBB	470	1382	0.11%	0.023%
35	11.868	914	919	921	rBB	662	1029	0.08%	0.017%
36	12.195	949	951	954	rBB	634	1011	0.08%	0.017%
37	12.257	956	957	961	rBB	446	974	0.08%	0.016%
38	12.338	962	965	968	rBB	413	1073	0.08%	0.018%
39	12.440	973	975	980	rBB	422	1346	0.11%	0.022%
40	12.532	980	984	988	rBB	403	1451	0.11%	0.024%
41	12.604	988	991	992	rBB	698	974	0.08%	0.016%
42	12.624	992	993	996	rBV	697	1202	0.09%	0.020%

43	12.696	997	1000	1003	rVV	688	1510	0.12%	0.025%
44	12.828	1006	1013	1036	rVB	466196	1271609	100.00%	20.936%
45	13.155	1041	1045	1049	rBB	648	1835	0.14%	0.030%
46	13.461	1068	1075	1077	rBB	605	1522	0.12%	0.025%
47	13.635	1087	1092	1095	rBB	450	1397	0.11%	0.023%
48	13.707	1096	1099	1102	rVB	885	1250	0.10%	0.021%
49	13.788	1104	1107	1110	rBB	489	1154	0.09%	0.019%
50	13.972	1123	1125	1128	rBB	459	890	0.07%	0.015%
51	14.044	1130	1132	1139	rBB	677	1818	0.14%	0.030%
52	14.421	1165	1169	1171	rBB	485	1007	0.08%	0.017%
53	14.462	1171	1173	1178	rBB	430	1147	0.09%	0.019%
54	14.595	1182	1186	1193	rBB	507	1378	0.11%	0.023%
55	14.860	1210	1212	1217	rBB	514	1109	0.09%	0.018%
56	15.034	1221	1229	1243	rVB	421003	1061922	83.51%	17.483%
57	15.187	1243	1244	1246	rBV	768	1119	0.09%	0.018%
58	15.310	1252	1256	1259	rBB	425	948	0.07%	0.016%
59	15.432	1265	1268	1270	rBB	414	940	0.07%	0.015%
60	15.984	1321	1322	1328	rBB	470	1386	0.11%	0.023%
61	16.208	1340	1344	1347	rBB	442	1336	0.11%	0.022%
62	16.270	1347	1350	1355	rBB	616	1685	0.13%	0.028%
63	16.372	1356	1360	1364	rBB	392	1528	0.12%	0.025%
64	16.505	1367	1373	1377	rBB	436	1886	0.15%	0.031%
65	16.647	1386	1387	1391	rBB	647	1217	0.10%	0.020%
66	16.811	1397	1403	1417	rBB	329707	800292	62.94%	13.176%
67	17.178	1438	1439	1446	rBB	418	1491	0.12%	0.025%
68	17.485	1464	1469	1471	rBB	435	1102	0.09%	0.018%
69	17.761	1491	1496	1498	rBB	455	1364	0.11%	0.022%
70	17.822	1498	1502	1504	rBB	426	930	0.07%	0.015%
71	18.159	1533	1535	1539	rBB	739	940	0.07%	0.015%
72	18.332	1551	1552	1556	rBB	413	896	0.07%	0.015%
73	18.383	1556	1557	1562	rBB	407	1068	0.08%	0.018%
74	18.486	1563	1567	1570	rBB	391	1110	0.09%	0.018%
75	18.598	1571	1578	1587	rBV	428549	959442	75.45%	15.796%
76	19.037	1618	1621	1624	rBB	399	1092	0.09%	0.018%
77	19.098	1626	1627	1631	rBB	432	930	0.07%	0.015%
78	19.190	1632	1636	1638	rBB	461	968	0.08%	0.016%
79	19.302	1644	1647	1651	rBB	427	1319	0.10%	0.022%
80	19.752	1686	1691	1693	rBB	522	1425	0.11%	0.023%
81	20.079	1720	1723	1725	rBB	475	938	0.07%	0.015%
82	20.191	1732	1734	1736	rBV	527	952	0.07%	0.016%
83	20.681	1777	1782	1787	rBB	609	2009	0.16%	0.033%
84	20.783	1791	1792	1797	rBB	430	917	0.07%	0.015%
85	20.875	1798	1801	1805	rBB	449	1512	0.12%	0.025%
86	21.141	1822	1827	1828	rBB	437	1079	0.08%	0.018%
87	21.232	1834	1836	1840	rBB	412	1103	0.09%	0.018%
88	21.365	1847	1849	1852	rBV	489	1168	0.09%	0.019%
89	21.457	1856	1858	1861	rBB	743	1136	0.09%	0.019%
90	21.529	1861	1865	1870	rBB	397	1776	0.14%	0.029%
91	21.672	1878	1879	1884	rBB	380	1083	0.09%	0.018%
92	21.733	1884	1885	1891	rBB	447	1142	0.09%	0.019%
93	21.866	1896	1898	1902	rBB	409	1118	0.09%	0.018%
94	22.100	1919	1921	1924	rBB	456	946	0.07%	0.016%
95	22.192	1926	1930	1934	rBB	409	1574	0.12%	0.026%
96	22.254	1935	1936	1942	rBB	483	1226	0.10%	0.020%
97	22.427	1949	1953	1956	rBB	426	1073	0.08%	0.018%
98	22.611	1967	1971	1975	rBB	467	1550	0.12%	0.026%
99	22.682	1975	1978	1981	rBB	577	1352	0.11%	0.022%
100	22.846	1991	1994	1998	rBB	496	1283	0.10%	0.021%

Sum of corrected areas: 6073863

6M107922.D 8260WTR.M Tue May 15 14:46:44 2012 Page 2

File : C:\MSDCHEM\1\DATA\050612\6M107922.D
Operator : MES
Acquired : 6 May 2012 18:09 using AcqMethod 8260WTR
Instrument : HPMS6
Sample Name: WG397130-01 BLANK 5/6 8260
Misc Info : 1,1
Vial Number: 4
Quant File :8260WTR.RES (RTE Integrator)



Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\050612\6M107923.D Vial: 5
Acq On : 6 May 2012 18:42 Operator: MES
Sample : WG397130-02 20ug/L LCS 8260 Inst : HPMS6
Misc : 1,1 STD51372 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 06 19:05:10 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.54	96	502214	25.00 ug/L	0.00
57) Chlorobenzene-d5	15.03	117	349504	25.00 ug/L	0.00
78) 1,4-Dichlorobenzene-d4	18.60	152	173456	25.00 ug/L	0.00

System Monitoring Compounds

37) Dibromofluoromethane	9.35	111	139419	25.6387 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 102.56%		
43) 1,2-Dichloroethane-d4	10.08	65	135968	25.4777 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 101.92%		
58) Toluene-d8	12.83	98	476917	25.1073 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 100.44%		
80) p-Bromofluorobenzene	16.81	95	178433	26.2151 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 104.88%		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	2.73	85	159118	24.1545 ug/L	99
3) Chloromethane	3.12	50	215849	23.6532 ug/L	100
4) Vinyl Chloride	3.31	62	164071	19.6923 ug/L	100
5) 1,3-Butadiene	3.34	54	88937	17.3119 ug/L	96
6) Bromomethane	4.11	94	77193	16.3505 ug/L	99
7) Chloroethane	4.26	64	87247	18.5088 ug/L	98
8) Trichlorofluoromethane	4.73	101	190661	17.7981 ug/L	99
9) Diethyl ether	5.27	59	364423	100.1198 ug/L	98
10) Isoprene	5.30	67	158237	17.3714 ug/L	99
11) Acrolein	5.51	56	32682	125.4918 ug/L	97
12) 1,1,2-Trichloro-1,2,2-Trif	5.53	101	101371	17.6921 ug/L	100
13) Acetone	5.62	43	20475	21.5168 ug/L	92
14) 1,1-Dichloroethene	5.83	61	171348	18.5995 ug/L	100
15) Tert-Butyl Alcohol	5.97	59	47384	190.7358 ug/L	97
16) Dimethyl Sulfide	6.11	62	144647	19.7776 ug/L	99
17) Iodomethane	6.36	142	104908	19.9168 ug/L	100
18) Methyl acetate	6.41	43	67441	17.9582 ug/L	100
19) Methylene Chloride	6.67	84	109105	19.1204 ug/L	96
20) Carbon Disulfide	6.69	76	336586	20.1657 ug/L	100
21) Acrylonitrile	6.87	53	25998	20.2773 ug/L	98
22) Methyl Tert Butyl Ether	6.92	73	223672	18.6058 ug/L	98
23) trans-1,2-Dichloroethene	7.16	96	102555	18.4036 ug/L	99
24) n-Hexane	7.26	57	130580	20.4265 ug/L	98
25) Diisopropyl ether	7.65	45	2131711	105.0110 ug/L	99
26) Vinyl Acetate	7.84	43	142810	48.5953 ug/L	96
27) 1,1-Dichloroethane	7.84	63	216101	18.9808 ug/L	98
28) Ethyl-Tert-Butyl ether	8.29	59	1587778	96.2449 ug/L	99
29) 2-Butanone	8.49	43	30149	22.6579 ug/L	97
30) Propionitrile	8.60	54	43451	114.1705 ug/L	96
31) 2,2-Dichloropropane	8.71	77	159287	18.5062 ug/L	93
32) cis-1,2-Dichloroethene	8.78	96	115706	19.8715 ug/L	100
33) Chloroform	9.02	83	198689	19.3088 ug/L	99
34) 1-Bromopropane	9.17	122	22039	21.1111 ug/L	93
35) Bromochloromethane	9.27	130	63268	20.4291 ug/L	100
36) Tetrahydrofuran	9.30	42	92570	105.7902 ug/L	96
38) 1,1,1-Trichloroethane	9.62	97	169193	18.8226 ug/L	96
39) Cyclohexane	9.64	56	181785	20.1873 ug/L	99
40) 1,1-Dichloropropene	9.85	75	144287	19.4578 ug/L	98
41) Tert-Amyl-Methyl ether	9.99	73	1227829	99.9629 ug/L	99
42) Carbon Tetrachloride	10.00	117	157887	19.8443 ug/L	99

(#) = qualifier out of range (m) = manual integration
6M107923.D 8260WTR.M Sun May 06 19:05:10 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\050612\6M107923.D Vial: 5
Acq On : 6 May 2012 18:42 Operator: MES
Sample : WG397130-02 20ug/L LCS 8260 Inst : HPMS6
Misc : 1,1 STD51372 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 06 19:05:10 2012 Quant Results File: 8260WTR.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

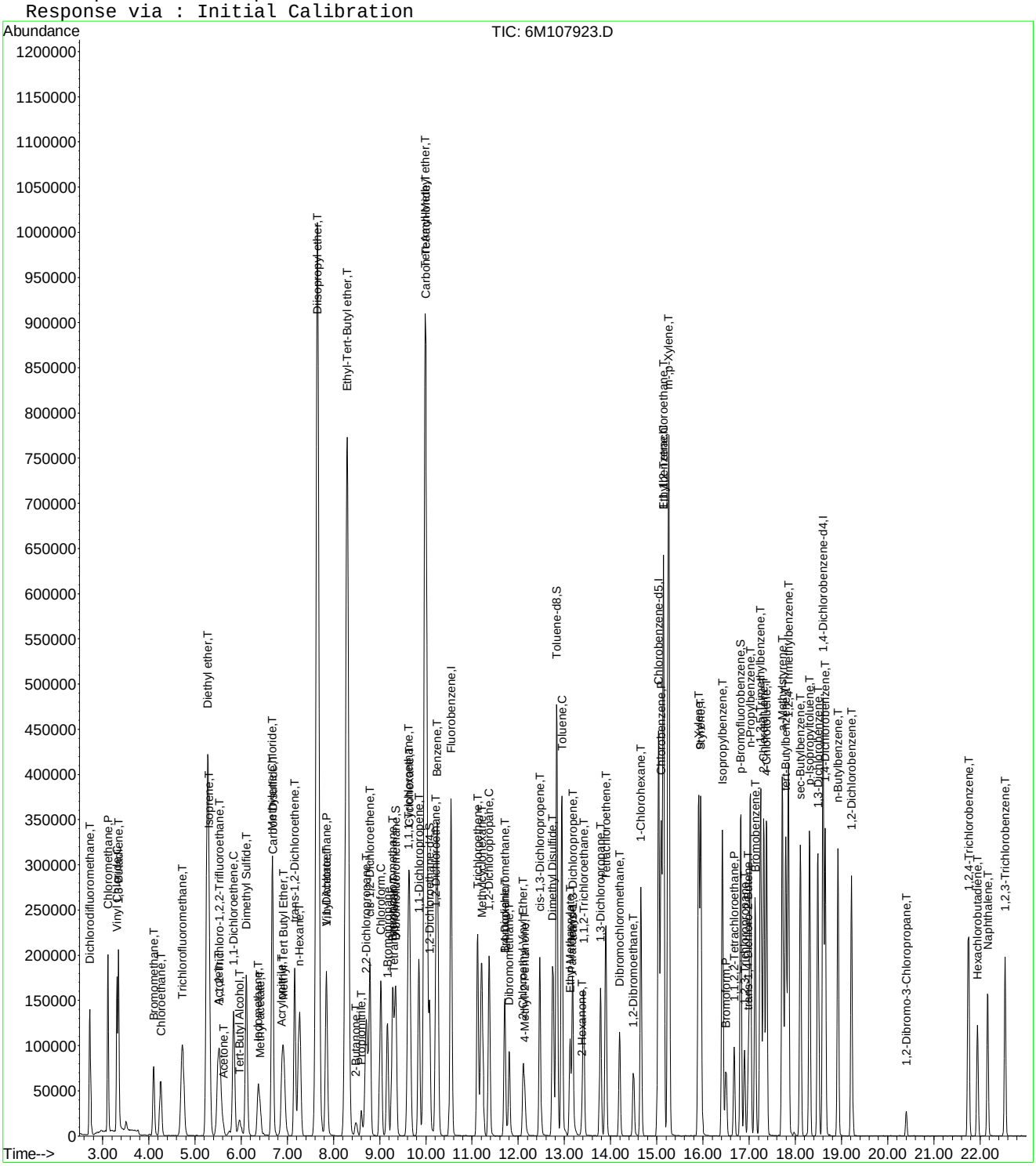
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
45)	1,2-Dichloroethane	10.21	62	138141	19.5435 ug/L	97
46)	Benzene	10.24	78	421895	19.0157 ug/L	99
47)	Trichloroethene	11.12	130	107219	19.2671 ug/L	100
48)	Methylcyclohexane	11.21	83	136750	21.3083 ug/L	99
49)	1,2-Dichloropropane	11.37	63	115651	20.1901 ug/L	100
50)	1,4-Dioxane	11.71	88	2924	174.8065 ug/L	95
51)	Bromodichloromethane	11.71	83	141784	20.6059 ug/L	100
52)	Dibromomethane	11.80	93	54061	19.7428 ug/L	99
53)	2-Chloroethyl Vinyl Ether	12.10	63	45875	18.8308 ug/L	100
54)	4-Methyl-2-Pentanone	12.14	58	21110	21.1352 ug/L	98
55)	cis-1,3-Dichloropropene	12.47	75	149927	18.3038 ug/L	100
56)	Dimethyl Disulfide	12.75	79	78878	16.8558 ug/L	98
59)	Toluene	12.95	91	413143	17.9880 ug/L	100
60)	Ethyl Methacrylate	13.12	69	80074	19.4800 ug/L	95
61)	Paraldehyde	13.16	89	4615	74.8351 ug/L #	60
62)	trans-1,3-Dichloropropene	13.18	75	116155	15.7363 ug/L	99
63)	1,1,2-Trichloroethane	13.42	97	68116	18.4648 ug/L	99
64)	2-Hexanone	13.38	43	34820	21.6125 ug/L	93
65)	1,3-Dichloropropane	13.78	76	123748	19.6704 ug/L	95
66)	Tetrachloroethene	13.90	166	100358	18.7096 ug/L	99
67)	Dibromochloromethane	14.20	129	86007	17.4460 ug/L	95
68)	1,2-Dibromoethane	14.49	107	67247	18.6698 ug/L	97
69)	1-Chlorohexane	14.66	91	124064	20.3986 ug/L	99
70)	Chlorobenzene	15.09	112	256753	17.5936 ug/L	98
71)	1,1,1,2-Tetrachloroethane	15.15	131	97736	18.5986 ug/L	98
72)	Ethylbenzene	15.15	106	138865	18.4476 ug/L	98
73)	m-,p-Xylene	15.26	106	338279	36.7612 ug/L	100
74)	o-Xylene	15.91	106	159068	18.1537 ug/L	99
75)	Styrene	15.95	104	266503	17.0236 ug/L	100
76)	Bromoform	16.50	173	48905	19.6796 ug/L	98
77)	Isopropylbenzene	16.42	105	349327	16.0182 ug/L	98
79)	1,1,2,2-Tetrachloroethane	16.68	83	72275	19.7042 ug/L	99
81)	1,2,3-Trichloropropane	16.90	110	20609	21.7916 ug/L	94
82)	trans-1,4-Dichloro-2-Buten	16.98	53	21686	18.6374 ug/L	92
83)	n-Propylbenzene	17.02	91	475326	18.6494 ug/L	100
84)	Bromobenzene	17.14	156	104237	18.3265 ug/L	98
85)	1,3,5-Trimethylbenzene	17.25	105	322246	18.5326 ug/L	100
86)	2-Chlorotoluene	17.31	91	291773	17.2412 ug/L	95
87)	4-Chlorotoluene	17.37	91	301172	17.7026 ug/L	96
88)	a-Methylstyrene	17.72	118	179337	20.1114 ug/L	98
89)	tert-Butylbenzene	17.79	134	61252	17.4421 ug/L	97
90)	1,2,4-Trimethylbenzene	17.85	105	348783	18.9725 ug/L	100
91)	sec-Butylbenzene	18.11	105	362417	18.3361 ug/L	99
92)	p-Isopropyltoluene	18.30	119	306414	19.2997 ug/L	99
93)	1,3-Dichlorobenzene	18.49	146	184433	18.4102 ug/L	100
94)	1,4-Dichlorobenzene	18.65	146	187205	17.8181 ug/L	99
95)	n-Butylbenzene	18.92	91	271412	19.6242 ug/L	100
96)	1,2-Dichlorobenzene	19.22	146	168006	18.5555 ug/L	96
97)	1,2-Dibromo-3-Chloropropan	20.40	75	10410	18.5630 ug/L	98
98)	1,2,4-Trichlorobenzene	21.75	180	98286	19.9435 ug/L	100
99)	Hexachlorobutadiene	21.95	225	36331	18.4377 ug/L	99
100)	Naphthalene	22.17	128	181029	19.2913 ug/L	100
101)	1,2,3-Trichlorobenzene	22.54	180	84102	19.6344 ug/L	99

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

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\050612\6M107923.D Vial: 5
Acq On : 6 May 2012 18:42 Operator: MES
Sample : WG397130-02 20ug/L LCS 8260 Inst : HPMS6
Misc : 1,1 STD51372 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 6 19:05 2012 Quant Results File: 8260WTR.RES

Method : C:\MSDCHEM\1\METHODS\8260WTR.M (RTE Integrator)
Title : 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Last Update : Wed Apr 25 15:22:20 2012
Response via : Initial Calibration



6M107923.D 8260WTR.M Sun May 06 19:05:11 2012 Page 3

2.1.2 RSK 175

2.1.2.1 Summary Data

Login Number: L12050011
Department: Volatiles - GC
Analyst: Franci Bolden

Analysis RSK-175

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: All acceptance criteria were met.

Continuing Calibration and Tune: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes/Sample Duplicates: Microbac Laboratories recommends site specific MS/MSD samples to avoid possible data qualifications.

SAMPLES

Samples: All acceptance criteria were met.

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 Laboratory Director or the QA/QC Supervisor

will be required.

Narrative ID: 45829
Approved By: Michael Albertson

Microbac

Lab Report #: L12050011
Lab Project #: 2736.061
Project Name: DOW WATERLOO GW
Lab Contact: Kathy Albertson

Certificate of Analysis

Sample #:	L12050011-01	**PrePrep Method:**	N/A	**Instrument:**	HP16
Client ID:	MW-29-043012	**Prep Method:**	5021	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	RSK175	**Cal Date:**	04/30/2012 15:04
Workgroup #:	WG396843	**Analyst:**	FJB	**Run Date:**	05/02/2012 17:03
Collect Date:	04/30/2012 13:07	**Dilution:**	1	**File ID:**	16G32145
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	257		5.00	1.00
Carbon Dioxide	124-38-9	40900		10000	2500

Sample #:	L12050011-03	**PrePrep Method:**	N/A	**Instrument:**	HP16
Client ID:	DUP-GW-043012	**Prep Method:**	5021	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	RSK175	**Cal Date:**	04/30/2012 15:04
Workgroup #:	WG396843	**Analyst:**	FJB	**Run Date:**	05/02/2012 17:12
Collect Date:	04/30/2012 14:00	**Dilution:**	1	**File ID:**	16G32146
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	242		5.00	1.00
Carbon Dioxide	124-38-9	37000		10000	2500

2.1.2.2 QC Summary Data

RSK-175 - Example Calculation for Methane

1.0 Linear Calibration Models

Option A - Average RF Method

ICAL_x	ICAL_r		RF
1.67	19901		11917
6.67	69174		10371
16.7	176923		10594
66.7	685135		10272
133	1324853		9961
300	2845104		9484
		Average RF:	**10433**

Where:
ICAL_x = the ICAL concentration
ICAL_r = the ICAL response (area)
RF = calibration factor = ICAL_r / ICAL_x

Option B - Agilent Linear Regression Constant

ICAL_x	ICAL_r	[ICAL_r}^2	[ICAL-x][ICAL-r]
1.67	19901	396049801	33235
6.67	69174	4785042276	461391
16.7	176923	31301747929	2954614
66.7	685135	4.6941E+11	45698505
133	1324853	1.75524E+12	176205449
300	2845104	8.09462E+12	853531200
Summation:		**1.03557E+13**	**1078884393**

Agilent Linear Regression Constant : **9598.567853**
(1.03557E+13)/1078884393)

2.0 Calculate the concentration in extract, Cx

Where:

y = area response of methane from quant report	**1157414**
a = average RF (or Agilent regression constant)	**10433.00**
Cx = y/a	**110.9377935**

3.0 Calculate the concentration in sample

Cs = Cx (MW/Tf) (HS/S) (DF)

Where:

Cx = Concentration in extract	**110.9377935**	umol/mol
MW = molecular weight of analyte	**16.04**	ug/umol
TF = temperature factor = (22.4)(313/273)	**25.68**	L/mol
HS = headspace volume	**0.015**	L
S = sample volume remaining after headspace removal	**0.00547**	L
DF = dilution factor	**2**	
Cs = calculated sample concentration	**380.034301**	ug/L

RSK-175 - Example Calculation for Carbon Dioxide

ICAL Plot - Quadratic Regression (y = Ax^2 + Bx +C)

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

Step 1 - Calculate the concentration in extract, Cx

Data from quadratic regression plot:		
Value of A from plot:	**0.916**	
Value of B from plot:	**1540**	
Value of C from plot:	**0**	
Response for methane from quantitation report (y):	**8763828**	
Value of C - y	**-8763828**	
Solving for Cx using the quadratic formula:		
Root 1 - Computed Cx1:	**2364.716284**	umol/mol
Root 2 - Computed Cx2:	**-4045.938991**	

Step 2 - Calculate the concentration in sample

Cs = Cx (MW/Tf) (HS/S) (DF)

Where:

Cx = Concentration in extract :	**2364.716284**	umol/mol
MW = molecular weight of analyte:	**44.0**	ug/umol
TF = temperature factor = (22.4)(313/273):	**25.68**	L/mol
HS = initial headspace volume (extraction log):	**0.015**	L
S = final volume (extraction log):	**0.00547**	L
DF = dilution factor:	**10**	
Cs = calculated sample concentration:	**111106.798**	ug/L

Other Notes:

Temperature of headspace = 40 C = 313 K

Analyte	**MW (g/mol)**
Methane	16.04
Ethane	30.07
Ethene	28.05
Propane	44.1
Carbon Dioxide	44.0

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HP16 Dataset: 043012
Analyst1: MDA Analyst2: NA
Method: RSK175 SOP: RSK01 Rev: 16
Method: 5021 SOP: RSK01 Rev: 16

Maintenance Log ID:

Internal Standard: NA Surrogate Standard: NA
CCV: STD38726 LCS: STD45308 MS/MSD: STD45308

Column 1 ID: RTQBOND Column 2 ID: RTQBOND
Workgroups: WG396526, WG396527

Comments: files 16G63290 and 16G32099 not used

File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
16G32089	WG396526-01 133umol/mol CCV RSK175	NA	1	1	STD38726	04/30/12 13:15
16G32091	WG396526-01 0.67umol/mol ICAL RSK175	NA	1	1	STD38726	04/30/12 13:39
16G32092	WG396526-02 1.67umol/mol ICAL RSK175	NA	1	1	STD38726	04/30/12 13:49
16G32093	WG396526-03 33umol/mol ICAL RSK175	NA	1	1	STD38726	04/30/12 13:58
16G32094	WG396526-04 67umol/mol ICAL RSK175	NA	1	1	STD38726	04/30/12 14:07
16G32095	WG396526-05 133umol/mol ICAL RSK175	NA	1	1	STD38726	04/30/12 14:16
16G32096	WG396526-06 333umol/mol ICAL RSK175	NA	1	1	STD38726	04/30/12 14:26
16G32097	WG396526-07 533umol/mol ICAL RSK175	NA	1	1	STD38726	04/30/12 14:35
16G32098	WG396526-08 133umol/mol ICV RSK175	NA	1	1	STD45308	04/30/12 14:44
16G32100	WG396526-02 1.67umol/mol CCV RSK175	NA	1	1	STD38726	04/30/12 15:04
16G32101	WG396526-08 133umol/mol ICV RSK175	NA	1	1	STD45308	04/30/12 15:24
16G32102	WG396526-09 133umol/mol CCV RSK175	NA	1	1	STD38726	04/30/12 15:41
16G32103	WG396527-01 BLANK RSK175	NA	1	1		04/30/12 15:51
16G32104	WG396527-02 67umol/mol LCS RSK175	NA	1	1	STD45308	04/30/12 16:00
16G32105	L12040681-01 A RSK175	<2	1	1		04/30/12 16:14
16G32106	L12040898-03 A RSK175EXT	7	1	1		04/30/12 16:24
16G32107	L12040898-05 A RSK175EXT	7	1	1		04/30/12 16:33
16G32108	L12040898-08 A RSK175EXT	7	1	1		04/30/12 16:43
16G32109	L12040898-10 A RSK175EXT	7	1	1		04/30/12 16:52
16G32110	L12040898-12 A RSK175EXT	7	1	1		04/30/12 17:01
16G32111	L12040898-01 A RSK175EXT	7	1	1		04/30/12 17:11
16G32112	RINSE	NA	1	1		04/30/12 17:20
16G32113	WG396526-10 133umol/mol CCV RSK175	NA	1	1	STD38726	04/30/12 17:30
16G32114	L12040928-01 A RSK175EXT	7	1	1		04/30/12 17:39
16G32115	L12040928-08 MS A RSK175EXT	7	1	1	STD45308	04/30/12 17:48
16G32116	L12040928-10 MSD A RSK175EXT	7	1	1	STD45308	04/30/12 17:58
16G32117	L12040928-03 A RSK175EXT	7	1	1		04/30/12 18:07
16G32118	L12040935-01 A RSK175	<2	1	1		04/30/12 18:17
16G32119	L12040936-01 A RSK175	<2	1	1		04/30/12 18:26
16G32120	L12040933-01 A RSK175	<2	1	1		04/30/12 18:36
16G32121	L12040938-01 A RSK175	<2	1	1		04/30/12 18:45
16G32122	L12040939-01 A RSK175	<2	1	1		04/30/12 18:55
16G32123	L12040928-05 A RSK175	10	1	1		04/30/12 19:04
16G32125	WG396526-11 133umol/mol CCV RSK175	NA	1	1	STD38726	04/30/12 19:23

Approved: May 01, 2012

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Microbac Laboratories Inc.

Instrument Run Log

Instrument: HP16 Dataset: 043012
Analyst1: MDA Analyst2: NA
Method: RSK175 SOP: RSK01 Rev: 16
Method: 5021 SOP: RSK01 Rev: 16

Maintenance Log ID:

Internal Standard: NA Surrogate Standard: NA
CCV: STD38726 LCS: STD45308 MS/MSD: STD45308

Column 1 ID: RTQBOND Column 2 ID: RTQBOND
Workgroups: WG396526, WG396527

Comments: files 16G63290 and 16G32099 not used

Comments

Seq.	Rerun	Dil.	Reason	Analytes
1 File ID: 16G32089				
	dnr needs ical			
3 File ID: 16G32092				
	dnr rr			
9 File ID: 16G32098				
	dnr rr			
18 File ID: 16G32109				
	rr 20x methane			
19 File ID: 16G32110				
	rr conf methane			
20 File ID: 16G32111				
	rr 20x methane			

Approved: May 01, 2012

Page: 2

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HP16 Dataset: 050212
Analyst1: FJB Analyst2: NA
Method: RSK175 SOP: RSK01 Rev: 16
Method: 5021 SOP: RSK01 Rev: 16

Maintenance Log ID: 41579

Internal Standard: NA Surrogate Standard: NA
CCV: STD38726 LCS: STD45308 MS/MSD: STD45308

Column 1 ID: RTQBOND Column 2 ID: RTQBOND
Workgroups: WG396843

Comments:

File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
16G32139	WG396842-01 133umol/mol CCV RSK175	NA	1	1	STD38726	05/02/12 16:06
16G32140	WG396843-01 BLANK RSK175	NA	1	1		05/02/12 16:17
16G32141	WG396843-02 67umol/mol LCS RSK175	NA	1	1	STD45308	05/02/12 16:27
16G32142	L12050012-01 A RSK175	<2	1	1		05/02/12 16:36
16G32143	L12050013-01 A RSK175	<2	1	1		05/02/12 16:45
16G32144	L12050013-02 A RSK175	<2	1	1		05/02/12 16:54
16G32145	L12050011-01 A RSK175	7	1	1		05/02/12 17:03
16G32146	L12050011-03 A RSK175	7	1	1		05/02/12 17:12
16G32147	L12050009-01 A RSK175	<2	1	1		05/02/12 17:21
16G32148	L12050009-02 A RSK175	<2	1	1		05/02/12 17:30
16G32149	L12050009-03 A RSK175	<2	1	1		05/02/12 17:39
16G32150	WG396842-02 133umol/mol CCV RSK175	NA	1	1	STD38726	05/02/12 17:48
16G32151	L12050009-04 A RSK175	<2	1	1		05/02/12 17:57
16G32152	L12050009-05 A RSK175	<2	1	1		05/02/12 18:06
16G32153	L12050010-01 REF A RSK175	<2	1	1		05/02/12 18:15
16G32154	L12050010-02 MS A RSK175	<2	1	1	STD45308	05/02/12 18:24
16G32155	L12050010-03 MSD A RSK175	<2	1	1	STD45308	05/02/12 18:33
16G32156	L12050010-04 REF A RSK175	<2	1	1		05/02/12 18:43
16G32157	L12050010-05 MS A RSK175	<2	1	1	STD45308	05/02/12 18:52
16G32158	L12050010-06 MSD A RSK175	<2	1	1	STD45308	05/02/12 19:01
16G32159	L12050010-10 A RSK175	<2	1	1		05/02/12 19:10
16G32160	L12050010-11 A RSK175	<2	1	1		05/02/12 19:19
16G32161	WG396842-03 133umol/mol CCV RSK175	NA	1	1	STD38726	05/02/12 19:28
16G32162	L12050010-12 A RSK175	<2	1	1		05/02/12 19:37
16G32163	L12050010-13 A RSK175	<2	1	1		05/02/12 19:46
16G32164	WG396842-04 133umol/mol CCV RSK175	NA	1	1	STD38726	05/02/12 19:55

Comments

Seq.	Rerun	Dil.	Reason	Analytes
5				
File ID: 16G32143				
	rr 5x co2			
6				

Approved: May 03, 2012

Page: 1

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HP16 Dataset: 050212
Analyst1: FJB Analyst2: NA
Method: RSK175 SOP: RSK01 Rev: 16
Method: 5021 SOP: RSK01 Rev: 16

Maintenance Log ID: 41579

Internal Standard: NA Surrogate Standard: NA
CCV: STD38726 LCS: STD45308 MS/MSD: STD45308

Column 1 ID: RTQBOND Column 2 ID: RTQBOND
Workgroups: WG396843

Comments:

Comments

Seq.	Rerun	Dil.	Reason	Analytes
File ID: 16G32144				
	rr st co2 ccv			
24				
File ID: 16G32162				
	rr 50x methane			
25				
File ID: 16G32163				
	rr 5x methane			

Approved: May 03, 2012

Page: 2

Microbac Laboratories Inc.
UPLOAD BATCH EXTRACTION INFORMATION

Batch #: B154145

	Initial Amount		Nominal Amount		Spike Amount		Surrogate Spike Amount		Final Amount		Final Nominal Amount		Temp (C)
WG396526-01	15	mL	15	mL					5.47	mL	5.47	mL	40
WG396526-03	15	mL	15	mL					5.47	mL	5.47	mL	40
WG396526-04	15	mL	15	mL					5.47	mL	5.47	mL	40
WG396526-05	15	mL	15	mL					5.47	mL	5.47	mL	40
WG396526-06	15	mL	15	mL					5.47	mL	5.47	mL	40
WG396526-07	15	mL	15	mL					5.47	mL	5.47	mL	40
WG396526-02	15	mL	15	mL					5.47	mL	5.47	mL	40
WG396526-08	15	mL	15	mL					5.47	mL	5.47	mL	40

Microbac Laboratories Inc.
UPLOAD BATCH EXTRACTION INFORMATION

Batch #: B154157

	Initial Amount		Nominal Amount		Spike Amount		Surrogate Spike Amount		Final Amount		Final Nominal Amount		Temp (C)
WG396526-08	15	mL	15	mL					5.47	mL	5.47	mL	40

Microbac Laboratories Inc.
UPLOAD BATCH EXTRACTION INFORMATION

Batch #: B154188

	Initial Amount		Nominal Amount		Spike Amount		Surrogate Spike Amount		Final Amount		Final Nominal Amount		Temp (C)
WG396842-01	15	mL	15	mL					5.47	mL	5.47	mL	40
WG396842-02	15	mL	15	mL					5.47	mL	5.47	mL	40
WG396842-03	15	mL	15	mL					5.47	mL	5.47	mL	40
WG396842-04	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050010-06	15	mL	15	mL	.1	mL			5.47	mL	5.47	mL	40
L12050013-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050011-03	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050009-02	15	mL	15	mL					5.47	mL	5.47	mL	40
WG396843-07	15	mL	15	mL	.1	mL			5.47	mL	5.47	mL	40
WG396843-01	15	mL	15	mL					5.47	mL	5.47	mL	40
WG396843-02	15	mL	15	mL	.1	mL			5.47	mL	5.47	mL	40
L12050010-04	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050010-05	15	mL	15	mL	.1	mL			5.47	mL	5.47	mL	40
WG396843-08	15	mL	15	mL	.1	mL			5.47	mL	5.47	mL	40
L12050010-03	15	mL	15	mL	.1	mL			5.47	mL	5.47	mL	40
L12050009-03	15	mL	15	mL					5.47	mL	5.47	mL	40
WG396843-04	15	mL	15	mL	.1	mL			5.47	mL	5.47	mL	40
L12050010-11	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050010-12	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050009-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050010-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050010-13	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050010-02	15	mL	15	mL	.1	mL			5.47	mL	5.47	mL	40
L12050012-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050009-04	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050009-05	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050010-10	15	mL	15	mL					5.47	mL	5.47	mL	40
WG396843-06	15	mL	15	mL					5.47	mL	5.47	mL	40
WG396843-05	15	mL	15	mL	.1	mL			5.47	mL	5.47	mL	40
WG396843-03	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050013-02	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050011-01	15	mL	15	mL					5.47	mL	5.47	mL	40

Microbac Laboratories Inc.

Data Checklist

Date: 30-APR-2012
Analyst: MDA
Analyst: NA
Method: RSK175
Instrument: HP16
Curve Workgroup: NA
Runlog ID: 46475
Analytical Workgroups: WG396526, WG396527

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	NA
Special Standards	NA
Blanks	X
TCL's	X
Surrogates	NA
LCS (Laboratory Control Sample)	X
Recoveries	X
Surrogates	NA
MS/MSD/Duplicates	X
Samples	X
Surrogates	NA
Calculations & Correct Factors	NA
Dilutions Run	NA
Reruns	X
Manual Integrations	NA
Case Narrative	X
Results Reporting/Data Qualifiers	X
KOBRA Workgroup Data	X
Check for Completeness	X
Primary Reviewer	MDA
Secondary Reviewer	FJB
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 resonableness of the results	X

Primary Reviewer:
01-MAY-2012

Secondary Reviewer:
01-MAY-2012

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-01-2012 13:42:32

Microbac Laboratories Inc.

Data Checklist

Date: 02-MAY-2012
Analyst: FJB
Analyst: NA
Method: RSK175
Instrument: HP16
Curve Workgroup: NA
Runlog ID: 46523
Analytical Workgroups: WG396843

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	NA
Special Standards	NA
Blanks	X
TCL's	X
Surrogates	NA
LCS (Laboratory Control Sample)	X
Recoveries	X
Surrogates	NA
MS/MSD/Duplicates	X
Samples	X
Surrogates	NA
Calculations & Correct Factors	NA
Dilutions Run	NA
Reruns	NA
Manual Integrations	NA
Case Narrative	X
Results Reporting/Data Qualifiers	X
KOBRA Workgroup Data	X
Check for Completeness	X
Primary Reviewer	FJB
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 resonableness of the results	X

Primary Reviewer: 03-MAY-2012

Secondary Reviewer:

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-03-2012 09:45:50

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: RSK175 AAB#: WG396843

Login Number: L12050011

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
MW-29-043012	01	04/30/12							7		05/02/12	2.2	7	
DUP-GW-043012	03	04/30/12							7		05/02/12	2.1	7	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2400830
Report generated 05/03/2012 11:28

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12050011
Blank File ID: 16G32140
Prep Date: 05/02/12 16:17
Analyzed Date: 05/02/12 16:17
Analyst: FJB

Work Group: WG396843
Blank Sample ID: WG396843-01
Instrument ID: HP16
Method: RSK175

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG396843-02	16G32141	05/02/12 16:27	01
MW-29-043012	L12050011-01	16G32145	05/02/12 17:03	01
DUP-GW-043012	L12050011-03	16G32146	05/02/12 17:12	01

Report Name: BLANK_SUMMARY
PDF File ID: 2400831
Report generated 05/03/2012 11:28

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050011 Prep Date: 05/02/12 16:17 Sample ID: WG396843-01
Instrument ID: HP16 Run Date: 05/02/12 16:17 Prep Method: 5021
File ID: 16G32140 Analyst: FJB Method: RSK175
Workgroup (AAB#): WG396843 Matrix: Water Units: ug/L
Contract #: Cal ID: HP16 - 30-APR-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Methane	1.00	5.0	1.00	1	U
Carbon Dioxide	2500	10000	2500	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: 2400832
03-MAY-2012 11:28

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050011 Run Date: 05/02/2012 Sample ID: WG396843-02
Instrument ID: HP16 Run Time: 16:27 Prep Method: 5021
File ID: 16G32141 Analyst: FJB Method: RSK175
Workgroup (AAB#): WG396843 Matrix: Water Units: ug/L
QC Key: WATERLOO Lot#: STD45308 Cal ID: HP16 - 30-APR-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Methane	116	104	89.6	56 - 140	
Carbon Dioxide	31300	28400	90.6	10 - 200	

LCS - Modified 03/06/2008
PDF File ID: 2400833
Report generated: 05/03/2012 11:28

Calibration Table Report
Method: RSK2EXT.M
Title: RSK175 HP16 (SOP: OVL RSK01) 043012
Last Calibration: Mon Apr 30 15:17:04 2012
Curve:WG396526
Calibration Files

Compound	0.66 16G32091.D	1.67 16G32100.D	33.3 16G32093.D	66.6 16G32094.D	133 16G32095.D	333 16G32096.D	533 16G32097.D	Avg	%RSD
methane		203409.458	166274.873	164502.812	172395.311	183639.278	197763.296	181331.000	9.070
ethene		310720.367	265124.455	268111.375	281538.282	306679.841	346282.858	296410.000	10.451
acetylene		349238.625	276348.807	255178.068	265686.413	301455.297		289581.000	12.955
ethane	282839.208	323174.294	278994.374	277864.668	291118.608	316353.022	357350.712	303956.000	9.767
propane	398712.601	472806.682	395734.605	397888.898	418106.154	456661.938	532205.243	438874.000	11.679
Signal #2								0.000	0.000
carbon dioxide		6531.748	4738.622	5195.669	5476.001	5711.500	6596.531	5708.350	12.930

Mon Apr 30 15:18:58 2012

Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12050011 Run Date: 04/30/2012 Sample ID: WG396526-08
Instrument ID: HP16 Run Time: 15:24 Method: RSK175
File ID: 16G32101 Analyst: MDA QC Key: WATERLOO
ICal Workgroup: WG396526 Cal ID: HP16 - 30-APR-12

Analyte		Expected	Found	Units	RF	%D	UCL	Q
methane		228	216	ug/L	172000	5.30	20	
carbon dioxide		62700	57900	ug/L	5280	7.50	30	

* Exceeds %D Limit

ALT - Modified 09/06/2007
Version 1.5 PDF File ID: 2400945
Report generated 05/03/2012 11:28

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050011
Run Date: 05/02/2012
Sample ID: WG396842-01
Instrument ID: HP16
Run Time: 16:06
Method: RSK175
File ID: 16G32139
Analyst: FJB
QC Key: WATERLOO
Workgroup (AAB#): WG396843
Cal ID: HP16 - 30-APR-12
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
methane		228	223	ug/L	177000	2.30	20	
carbon dioxide		62700	66300	ug/L	6040	5.75	30	

* Exceeds %D Criteria

CCV - Modified 03/05/2008
PDF File ID: 2400858
Report generated 05/03/2012 11:28

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050011
Run Date: 05/02/2012
Sample ID: WG396842-02
Instrument ID: HP16
Run Time: 17:48
Method: RSK175
File ID: 16G32150
Analyst: FJB
QC Key: WATERLOO
Workgroup (AAB#): WG396843
Cal ID: HP16 - 30-APR-12
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
methane		228	208	ug/L	166000	8.51	20	
carbon dioxide		62700	52200	ug/L	4760	16.6	30	

* Exceeds %D Criteria

CCV - Modified 03/05/2008
PDF File ID: 2400858
Report generated 05/03/2012 11:28

2.1.2.3 Sample Data

Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\050212\16G32145.D\FID1A.CH Vial: 7
Signal #2 : C:\MSDchem\1\DATA\050212\16G32145.D\TCD2B.CH
Acq On : 02 May 2012 17:03 Operator: FJB
Sample : L12050011-01 A RSK175 Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 02 17:08:33 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 043012
Last Update : Mon Apr 30 15:17:04 2012
Response via : Initial Calibration
DataAcq Meth : RSK2EXT.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.59	27215253	150.086	umol/
2) T	ethene	0.00	0	N.D.	umol/
3) T	acetylene	0.00	0	N.D.	umol/
4) T	ethane	1.48	6794	0.022	umol/
5) T	propane	3.90	12940	0.029	umol/
7) T	carbon dioxide	0.20	49687550	8704.370	umol/

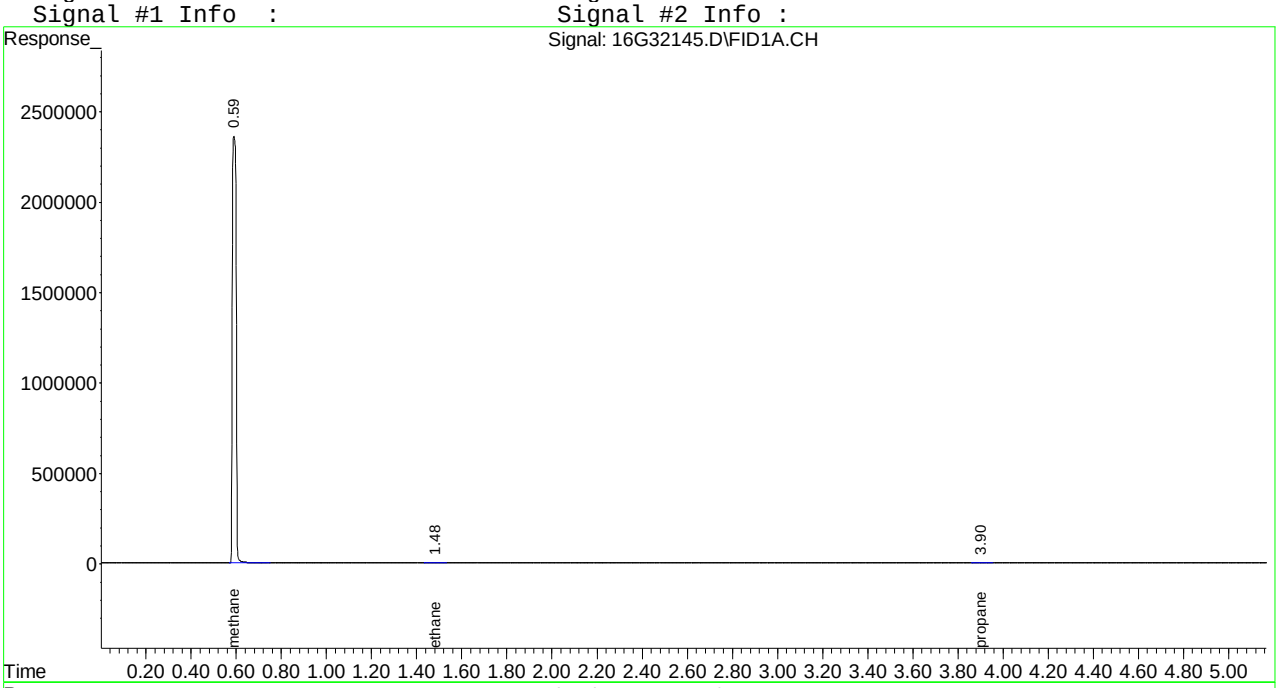
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32145.D RSK2EXT.M Wed May 02 17:08:33 2012 Page 1

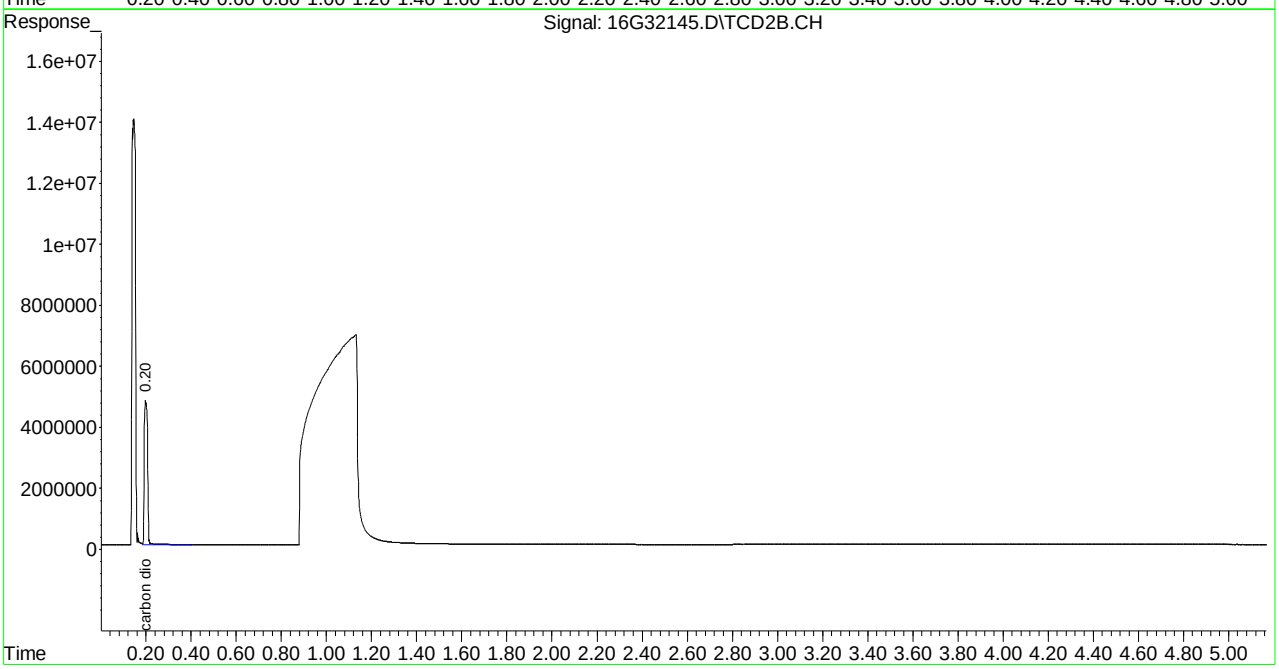
Quantitation Report (Not Reviewed)

```
Signal #1 : C:\MSDchem\1\DATA\050212\16G32145.D\FID1A.CH Vial: 7
Signal #2 : C:\MSDchem\1\DATA\050212\16G32145.D\TCD2B.CH
Acq On    : 02 May 2012  17:03                        Operator: FJB
Sample    : L12050011-01 A RSK175                     Inst    : HP16
Misc      : 1,1                                       Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: events2.e
Quant Time: May  2 17:08 2012  Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title        : RSK175 HP16 (SOP: OVL RSK01) 043012
Last Update  : Mon Apr 30 15:17:04 2012
Response via : Multiple Level Calibration
DataAcq Meth : RSK2EXT.M

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :
```





Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\050212\16G32146.D\FID1A.CH Vial: 8
Signal #2 : C:\MSDchem\1\DATA\050212\16G32146.D\TCD2B.CH
Acq On : 02 May 2012 17:12 Operator: FJB
Sample : L12050011-03 A RSK175 Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 02 17:17:39 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 043012
Last Update : Mon Apr 30 15:17:04 2012
Response via : Initial Calibration
DataAcq Meth : RSK2EXT.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.59	25594194	141.146	umol/
2) T	ethene	0.00	0	N.D.	umol/
3) T	acetylene	0.00	0	N.D.	umol/
4) T	ethane	1.48	5448	0.018	umol/
5) T	propane	3.90	13295	0.030	umol/
7) T	carbon dioxide	0.20	44960655	7876.303	umol/

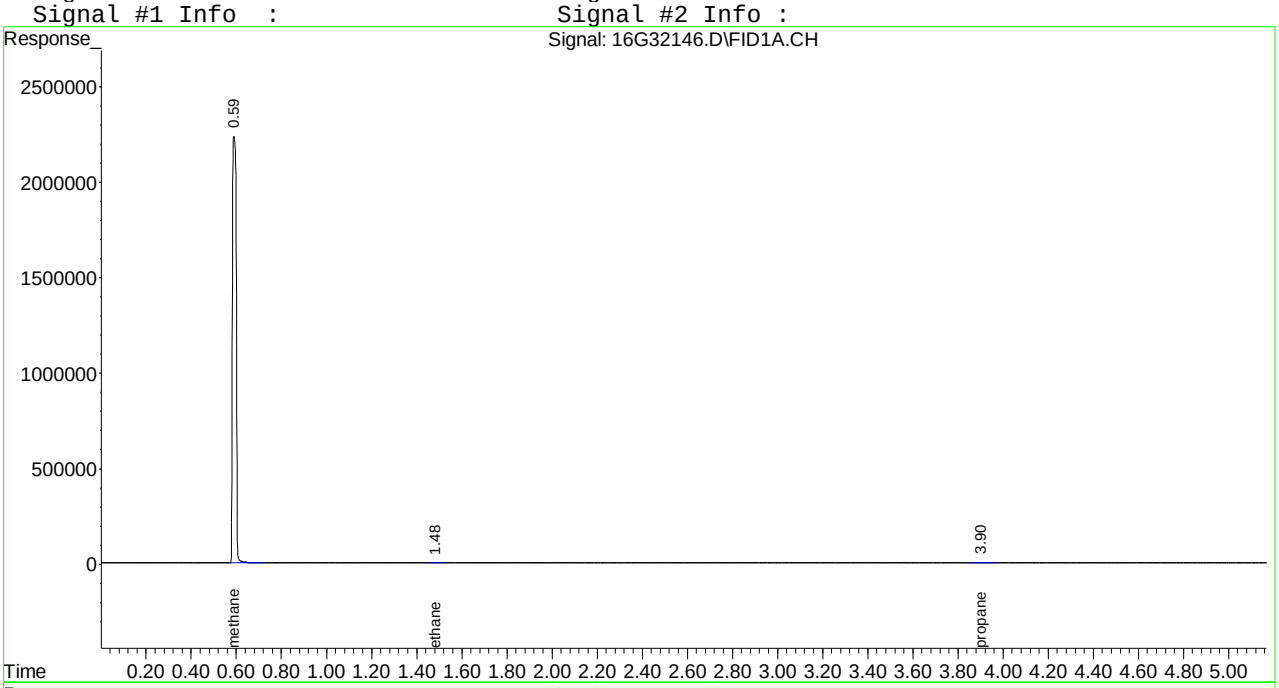
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32146.D RSK2EXT.M Wed May 02 17:17:39 2012 Page 1

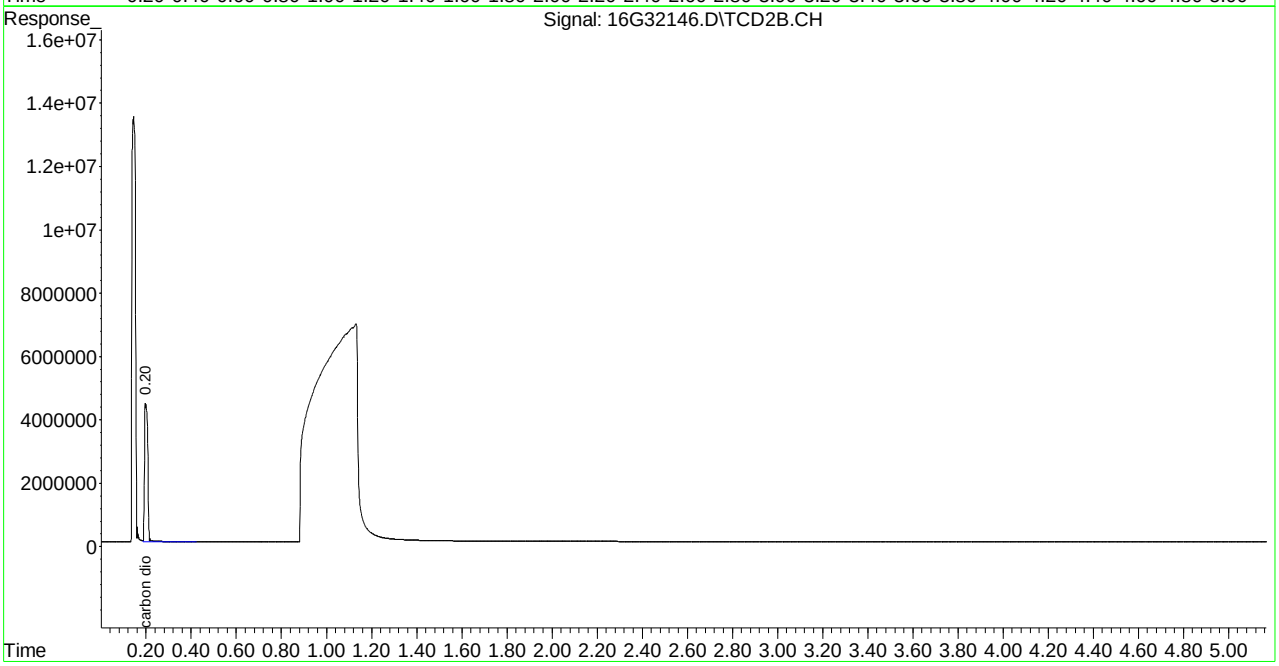
Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\050212\16G32146.D\FID1A.CH Vial: 8
Signal #2 : C:\MSDchem\1\DATA\050212\16G32146.D\TCD2B.CH
Acq On : 02 May 2012 17:12 Operator: FJB
Sample : L12050011-03 A RSK175 Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 2 17:17 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 043012
Last Update : Mon Apr 30 15:17:04 2012
Response via : Multiple Level Calibration
DataAcq Meth : RSK2EXT.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





2.1.2.4 Standards Data

Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\043012\16G32091.D\FID1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\043012\16G32091.D\TCD2B.CH
Acq On : 30 Apr 2012 13:39 Operator: MDA
Sample : WG396526-01 0.67umol/mol ICAL RSK175 Inst : HP16
Misc : 1,1 STD38726 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 30 14:43:35 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 043012
Last Update : Mon Apr 30 14:42:42 2012
Response via : Initial Calibration
DataAcq Meth : RSK2EXT.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.00	0	N.D.	umol/d
2) T	ethene	0.00	0	N.D.	umol/d
3) T	acetylene	0.00	0	N.D.	umol/d
4) T	ethane	1.49	188654	0.648	umol/
5) T	propane	3.90	265941	0.638	umol/
7) T	carbon dioxide	0.00	0	N.D.	umol/d

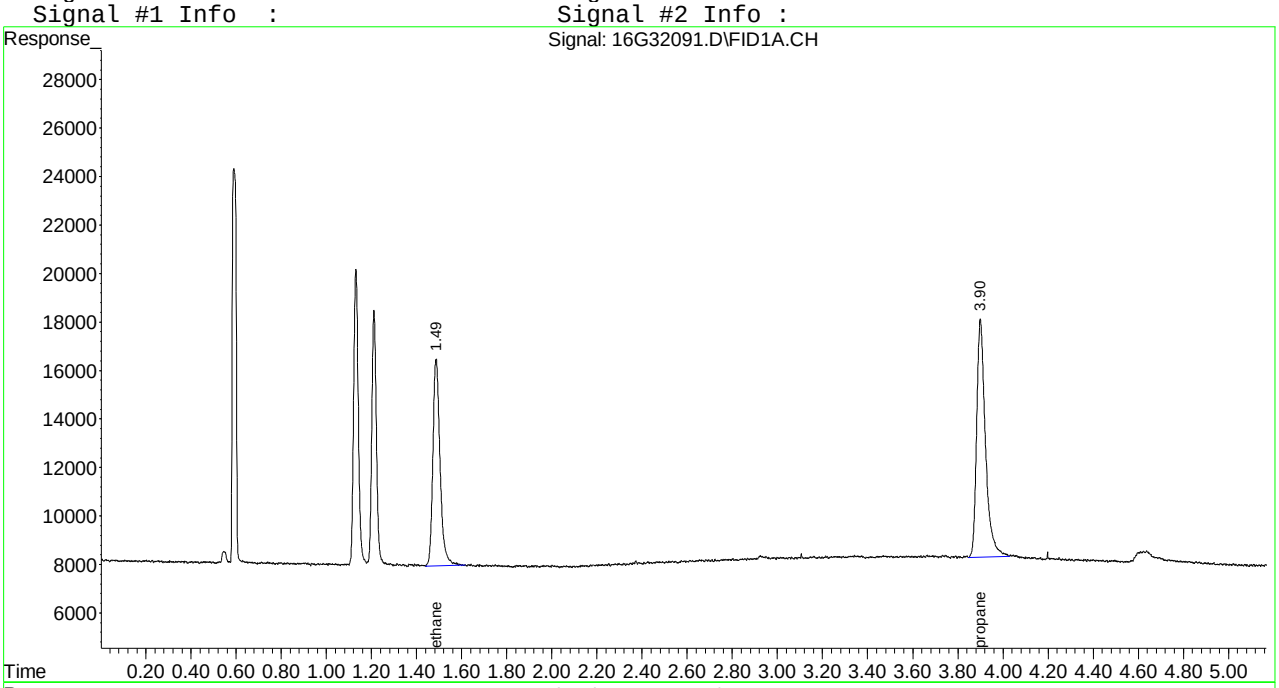
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32091.D RSK2EXT.M Mon Apr 30 14:45:33 2012 Page 1

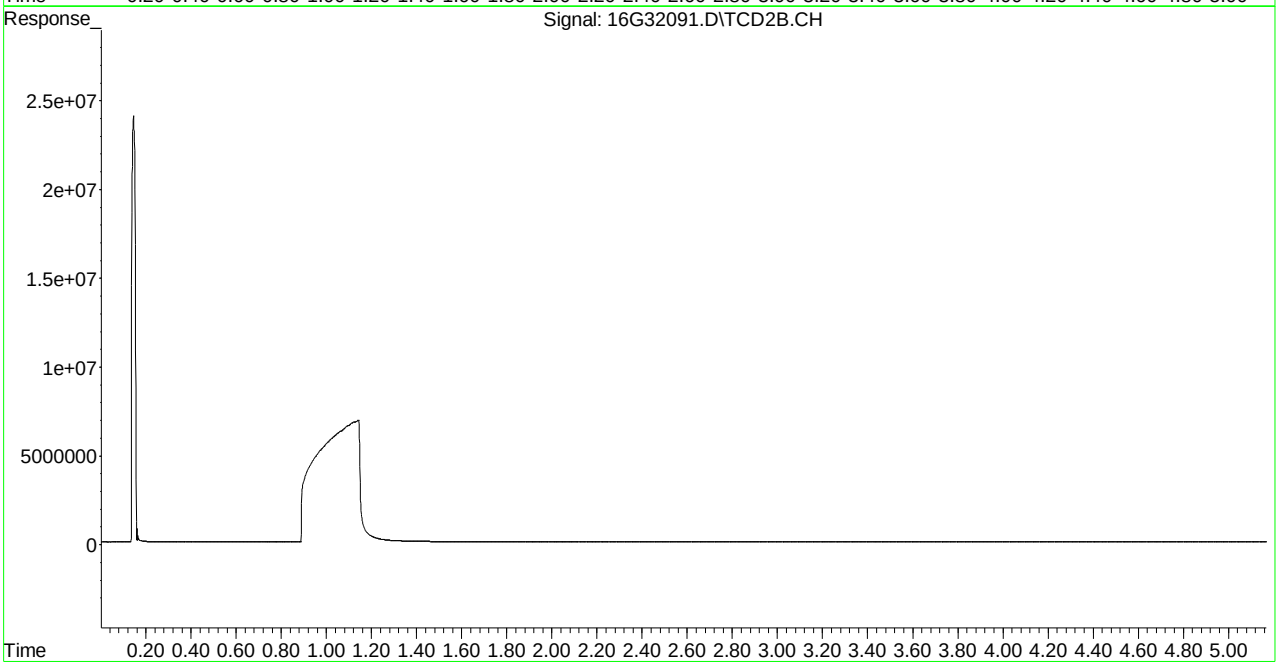
Quantitation Report (Not Reviewed)

```
Signal #1 : C:\MSDCHEM\1\DATA\043012\16G32091.D\FID1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\043012\16G32091.D\TCD2B.CH
Acq On    : 30 Apr 2012  13:39                        Operator: MDA
Sample    : WG396526-01 0.67umol/mol ICAL RSK175      Inst    : HP16
Misc      : 1,1 STD38726                              Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: events2.e
Quant Time: Apr 30 14:45 2012  Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title        : RSK175 HP16 (SOP: OVL RSK01) 043012
Last Update  : Mon Apr 30 14:42:42 2012
Response via : Multiple Level Calibration
DataAcq Meth : RSK2EXT.M

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :
```





Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\043012\16G32093.D\FID1A.CH Vial: 3
Signal #2 : C:\MSDchem\1\DATA\043012\16G32093.D\TCD2B.CH
Acq On : 30 Apr 2012 13:58 Operator: MDA
Sample : WG396526-03 33umol/mol ICAL RSK175 Inst : HP16
Misc : 1,1 STD38726 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 30 14:04:00 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 043012
Last Update : Mon Apr 23 16:53:59 2012
Response via : Initial Calibration
DataAcq Meth : RSK2EXT.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.59	5543604	28.647	umol/
2) T	ethene	1.13	8839249	28.434	umol/
3) T	acetylene	1.21	9213469	29.702	umol/
4) T	ethane	1.48	9301672	29.165	umol/
5) T	propane	3.90	13193792	28.593	umol/
7) T	carbon dioxide	0.20	20541926	3441.116	umol/

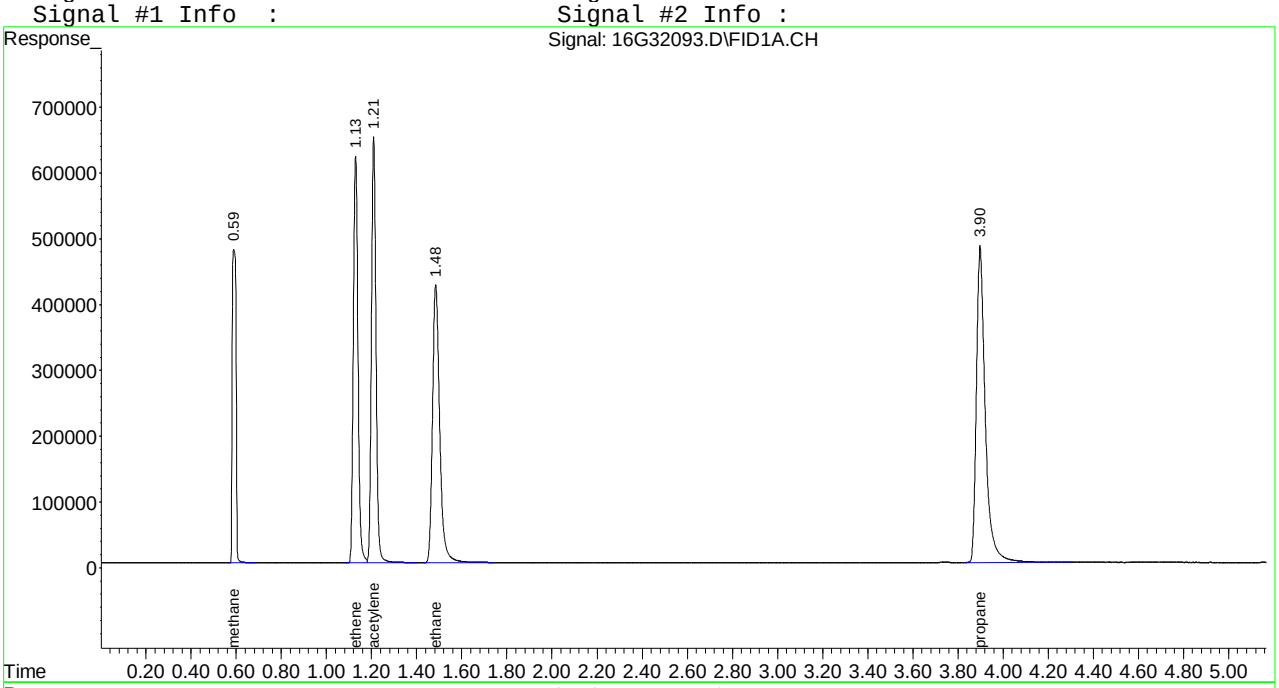
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32093.D RSK2EXT.M Mon Apr 30 14:04:00 2012 Page 1

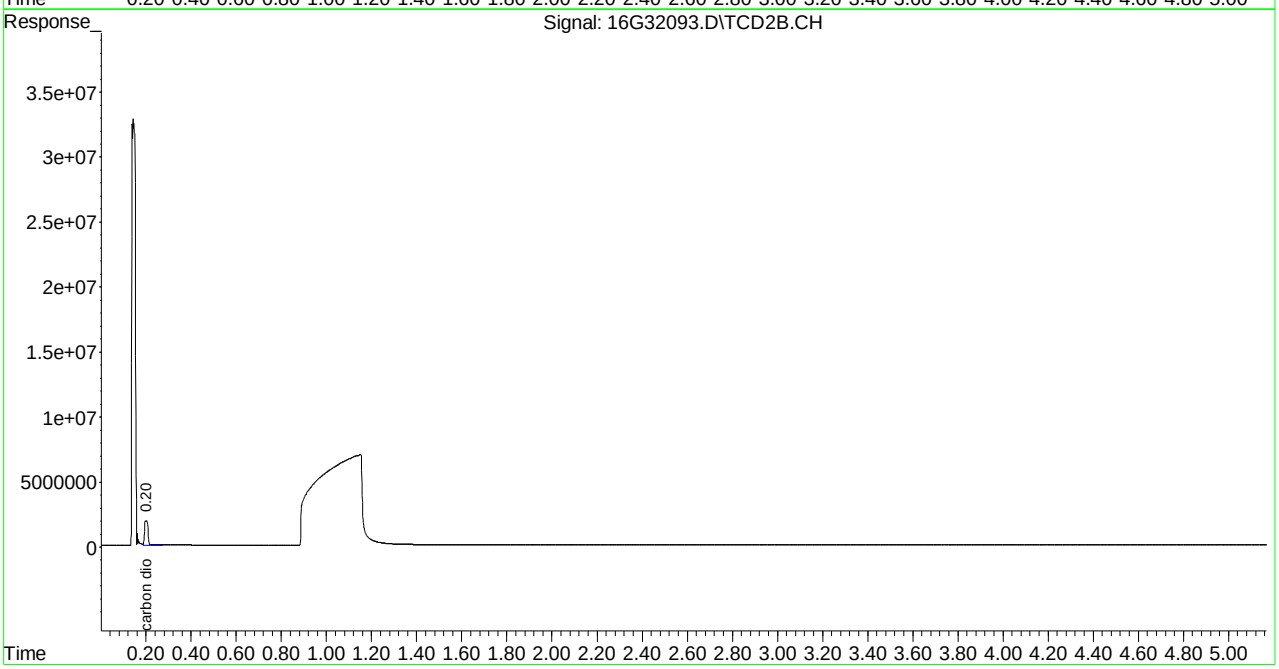
Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\043012\16G32093.D\FID1A.CH Vial: 3
Signal #2 : C:\MSDchem\1\DATA\043012\16G32093.D\TCD2B.CH
Acq On : 30 Apr 2012 13:58 Operator: MDA
Sample : WG396526-03 33umol/mol ICAL RSK175 Inst : HP16
Misc : 1,1 STD38726 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 30 14:04 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 043012
Last Update : Mon Apr 23 16:53:59 2012
Response via : Multiple Level Calibration
DataAcq Meth : RSK2EXT.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

```
Signal #1 : C:\MSDchem\1\DATA\043012\16G32094.D\FID1A.CH Vial: 4
Signal #2 : C:\MSDchem\1\DATA\043012\16G32094.D\TCD2B.CH
Acq On    : 30 Apr 2012  14:07                        Operator: MDA
Sample    : WG396526-04 67umol/mol ICAL RSK175        Inst    : HP16
Misc      : 1,1 STD38726                              Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: events2.e
Quant Time: Apr 30 14:13:09 2012  Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title        : RSK175 HP16 (SOP: OVL RSK01) 043012
Last Update  : Mon Apr 23 16:53:59 2012
Response via : Initial Calibration
DataAcq Meth : RSK2EXT.M

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :
```

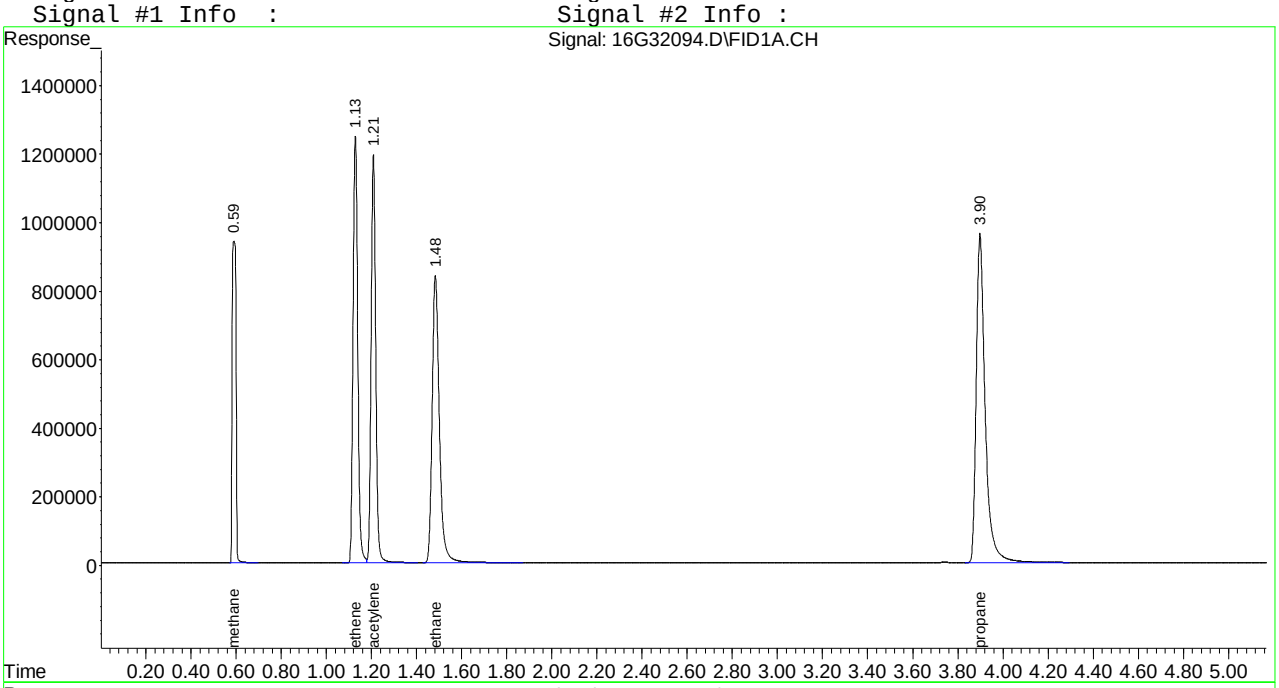
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.59	10967402	56.675	umol/
2) T	ethene	1.13	17874985	57.501	umol/
3) T	acetylene	1.21	17012722	54.845	umol/
4) T	ethane	1.48	18525237	58.085	umol/
5) T	propane	3.90	26527253	57.489	umol/
7) T	carbon dioxide	0.20	34639522	5802.700	umol/

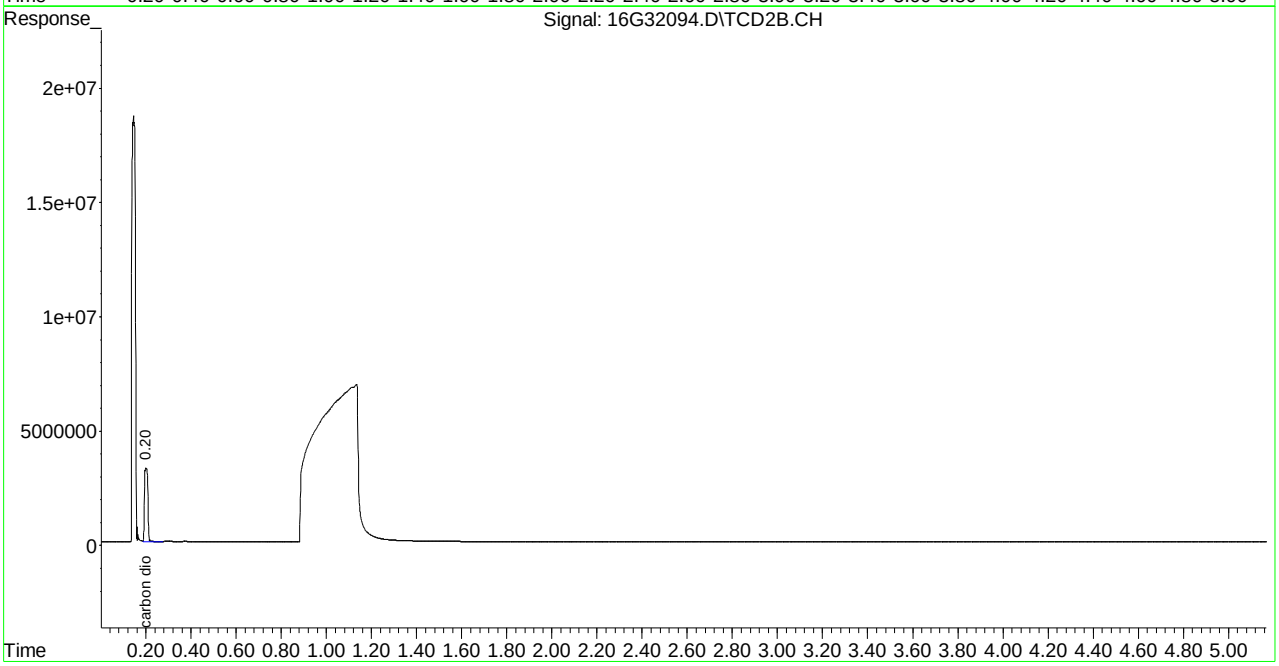
Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\043012\16G32094.D\FID1A.CH Vial: 4
Signal #2 : C:\MSDchem\1\DATA\043012\16G32094.D\TCD2B.CH
Acq On : 30 Apr 2012 14:07 Operator: MDA
Sample : WG396526-04 67umol/mol ICAL RSK175 Inst : HP16
Misc : 1,1 STD38726 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 30 14:13 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 043012
Last Update : Mon Apr 23 16:53:59 2012
Response via : Multiple Level Calibration
DataAcq Meth : RSK2EXT.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\043012\16G32095.D\FID1A.CH Vial: 5
Signal #2 : C:\MSDchem\1\DATA\043012\16G32095.D\TCD2B.CH
Acq On : 30 Apr 2012 14:16 Operator: MDA
Sample : WG396526-05 133umol/mol ICAL RSK175 Inst : HP16
Misc : 1,1 STD38726 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 30 14:22:09 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 043012
Last Update : Mon Apr 23 16:53:59 2012
Response via : Initial Calibration
DataAcq Meth : RSK2EXT.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.59	22928576	118.486	umol/
2) T	ethene	1.13	37444591	120.453	umol/
3) T	acetylene	1.21	35336293	113.917	umol/
4) T	ethane	1.48	38718775	121.400	umol/
5) T	propane	3.90	55608118	120.511	umol/
7) T	carbon dioxide	0.20	73011522	12230.652	umol/

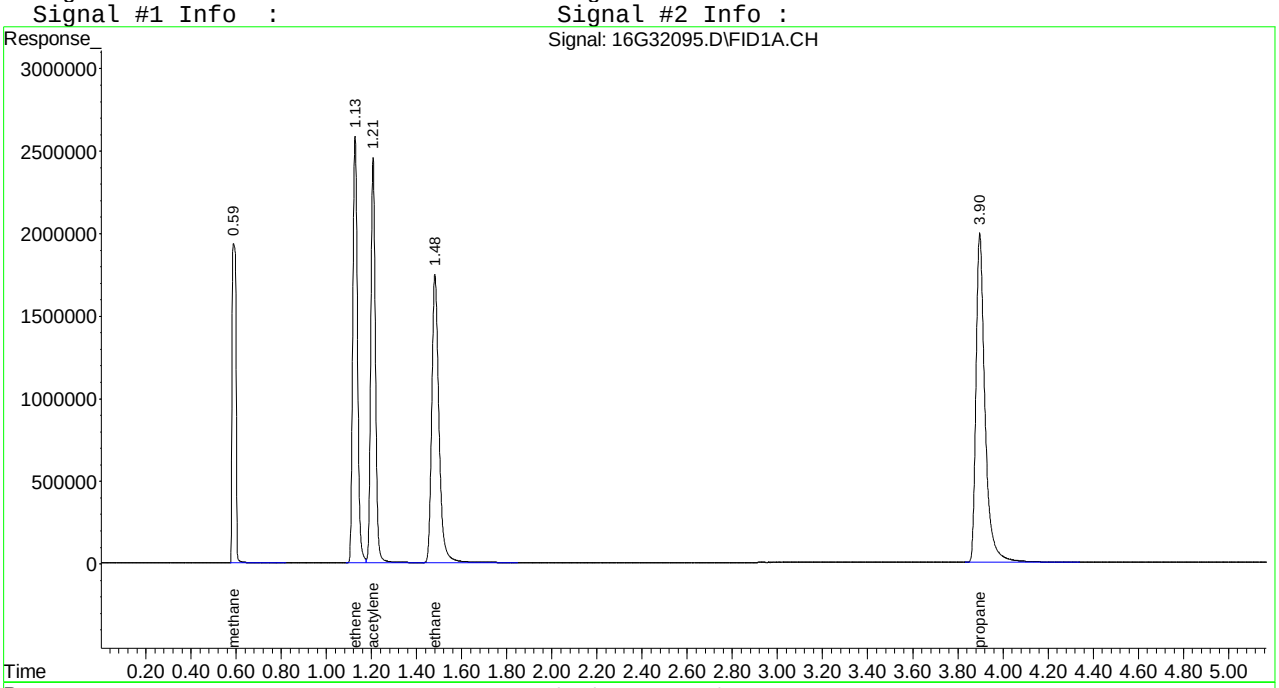
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32095.D RSK2EXT.M Mon Apr 30 14:22:09 2012 Page 1

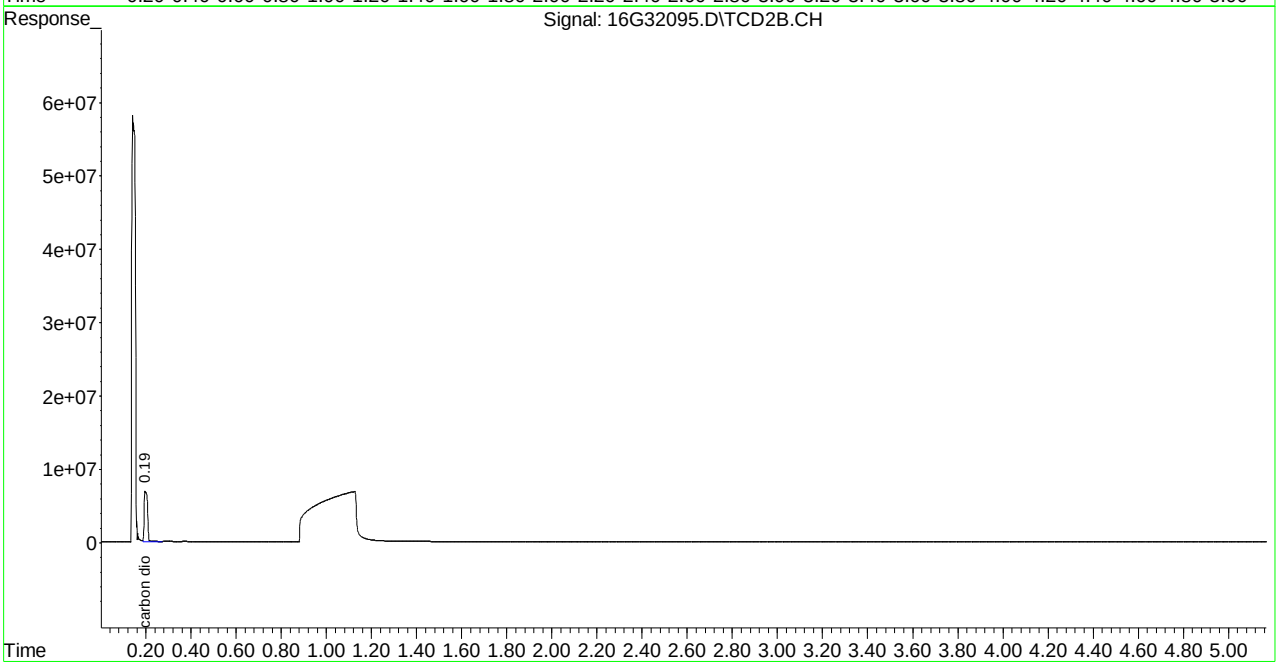
Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\043012\16G32095.D\FID1A.CH Vial: 5
Signal #2 : C:\MSDchem\1\DATA\043012\16G32095.D\TCD2B.CH
Acq On : 30 Apr 2012 14:16 Operator: MDA
Sample : WG396526-05 133umol/mol ICAL RSK175 Inst : HP16
Misc : 1,1 STD38726 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 30 14:22 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 043012
Last Update : Mon Apr 23 16:53:59 2012
Response via : Multiple Level Calibration
DataAcq Meth : RSK2EXT.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\043012\16G32096.D\FID1A.CH Vial: 6
Signal #2 : C:\MSDchem\1\DATA\043012\16G32096.D\TCD2B.CH
Acq On : 30 Apr 2012 14:26 Operator: MDA
Sample : WG396526-06 333umol/mol ICAL RSK175 Inst : HP16
Misc : 1,1 STD38726 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 30 14:31:51 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 043012
Last Update : Mon Apr 23 16:53:59 2012
Response via : Initial Calibration
DataAcq Meth : RSK2EXT.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.59	61151880	316.010	umol/
2) T	ethene	1.13	102124387	328.518	umol/
3) T	acetylene	1.21	100384614	323.619	umol/
4) T	ethane	1.48	105345556	330.304	umol/
5) T	propane	3.90	152068426	329.556	umol/
7) T	carbon dioxide	0.20	190381445	31892.078	umol/

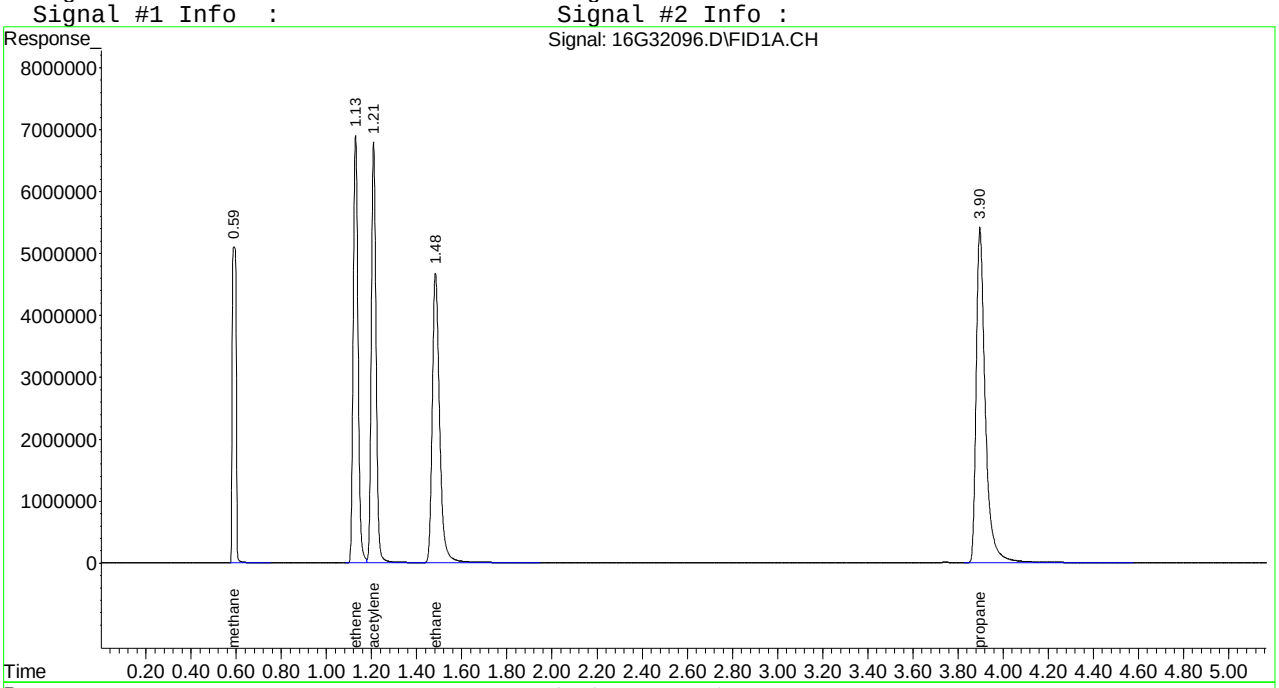
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32096.D RSK2EXT.M Mon Apr 30 14:31:51 2012 Page 1

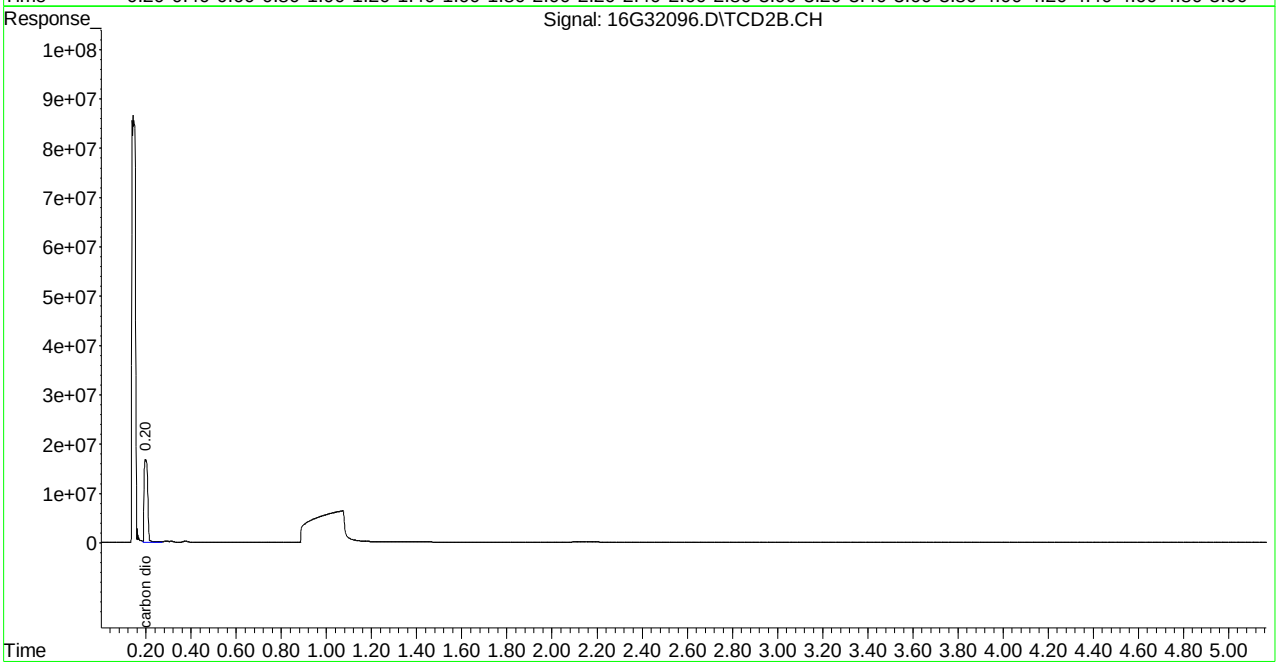
Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\043012\16G32096.D\FID1A.CH Vial: 6
Signal #2 : C:\MSDchem\1\DATA\043012\16G32096.D\TCD2B.CH
Acq On : 30 Apr 2012 14:26 Operator: MDA
Sample : WG396526-06 333umol/mol ICAL RSK175 Inst : HP16
Misc : 1,1 STD38726 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 30 14:31 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 043012
Last Update : Mon Apr 23 16:53:59 2012
Response via : Multiple Level Calibration
DataAcq Meth : RSK2EXT.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

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Signal #1 : C:\MSDchem\1\DATA\043012\16G32097.D\FID1A.CH Vial: 7
Signal #2 : C:\MSDchem\1\DATA\043012\16G32097.D\TCD2B.CH
Acq On    : 30 Apr 2012  14:35                        Operator: MDA
Sample    : WG396526-07 533umol/mol ICAL RSK175       Inst    : HP16
Misc      : 1,1 STD38726                              Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: events2.e
Quant Time: Apr 30 14:40:49 2012  Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title        : RSK175 HP16 (SOP: OVL RSK01) 043012
Last Update  : Mon Apr 23 16:53:59 2012
Response via : Initial Calibration
DataAcq Meth : RSK2EXT.M

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :
```

	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.59	105407837	544.709	umol/
2) T	ethene	1.13	184568763	593.729	umol/
3) T	acetylene	1.20	194109593	625.769	umol/
4) T	ethane	1.48	190467929	597.199	umol/
5) T	propane	3.89	283665394	614.747	umol/
7) T	carbon dioxide	0.19	351812796	58934.531	umol/

(f)=RT Delta > 1/2 Window (m)=manual int.

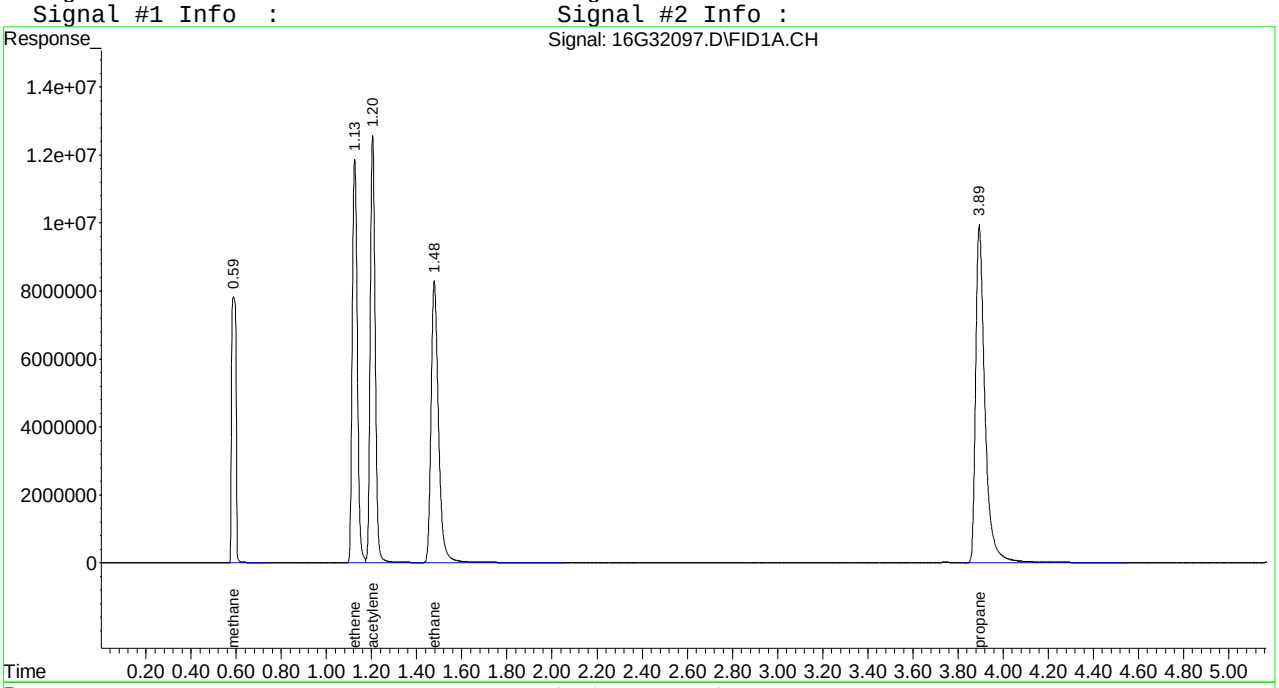
16G32097.D RSK2EXT.M Mon Apr 30 14:40:49 2012 Page 1

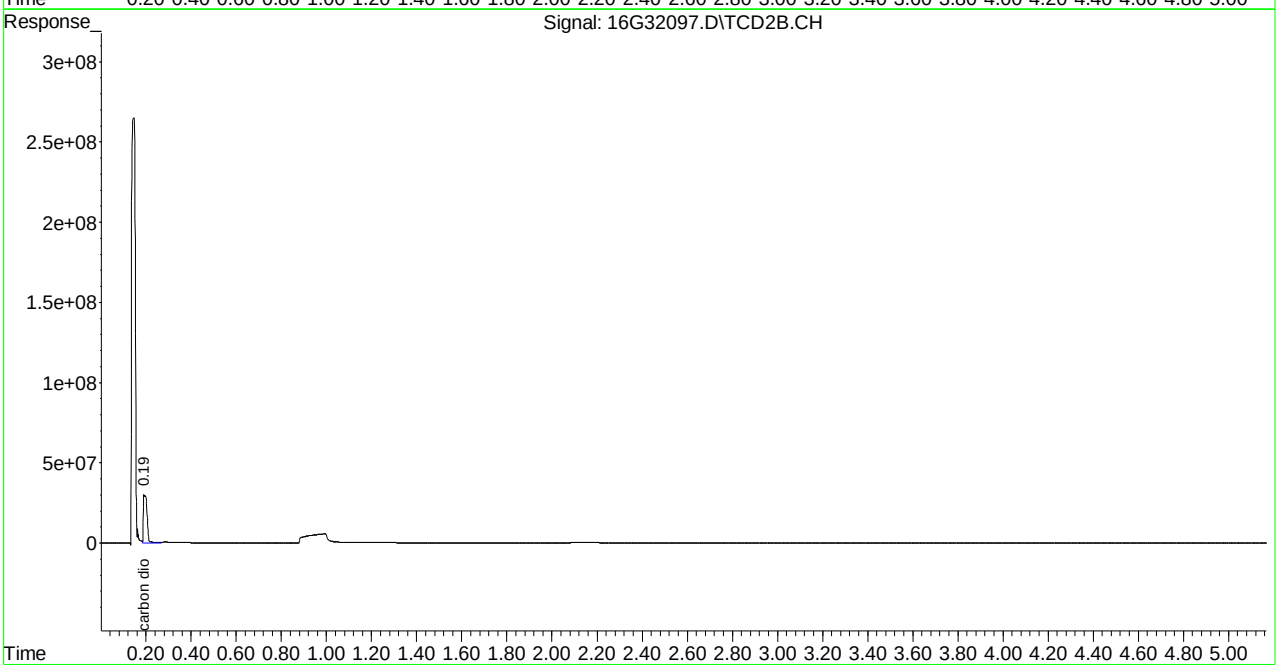
Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\043012\16G32097.D\FID1A.CH Vial: 7
Signal #2 : C:\MSDchem\1\DATA\043012\16G32097.D\TCD2B.CH
Acq On : 30 Apr 2012 14:35 Operator: MDA
Sample : WG396526-07 533umol/mol ICAL RSK175 Inst : HP16
Misc : 1,1 STD38726 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 30 14:40 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 043012
Last Update : Mon Apr 23 16:53:59 2012
Response via : Multiple Level Calibration
DataAcq Meth : RSK2EXT.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

```
Signal #1 : C:\MSDchem\1\DATA\043012\16G32100.D\FID1A.CH Vial: 10
Signal #2 : C:\MSDchem\1\DATA\043012\16G32100.D\TCD2B.CH
Acq On    : 30 Apr 2012  15:04                        Operator: MDA
Sample    : WG396526-02 1.67umol/mol CCV RSK175       Inst    : HP16
Misc      : 1,1 STD38726                              Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: events2.e
Quant Time: Apr 30 15:09:45 2012  Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title        : RSK175 HP16 (SOP: OVL RSK01) 043012
Last Update  : Mon Apr 30 14:45:53 2012
Response via : Initial Calibration
DataAcq Meth : RSK2EXT.M

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :
```

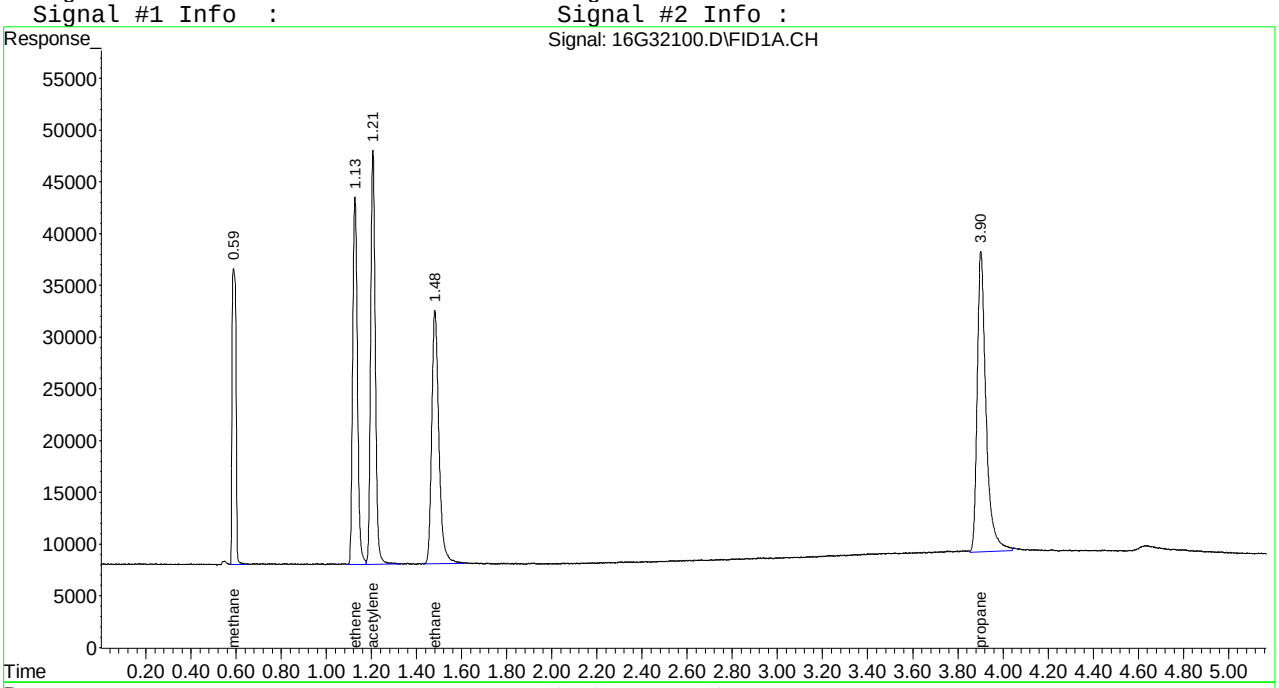
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.59	339694	1.927	umol/
2) T	ethene	1.13	518903	1.845	umol/
3) T	acetylene	1.21	583229	2.112	umol/
4) T	ethane	1.48	539701	1.855	umol/
5) T	propane	3.90	789587	1.895	umol/
7) T	carbon dioxide	0.20	13063496	2368.342	umol/

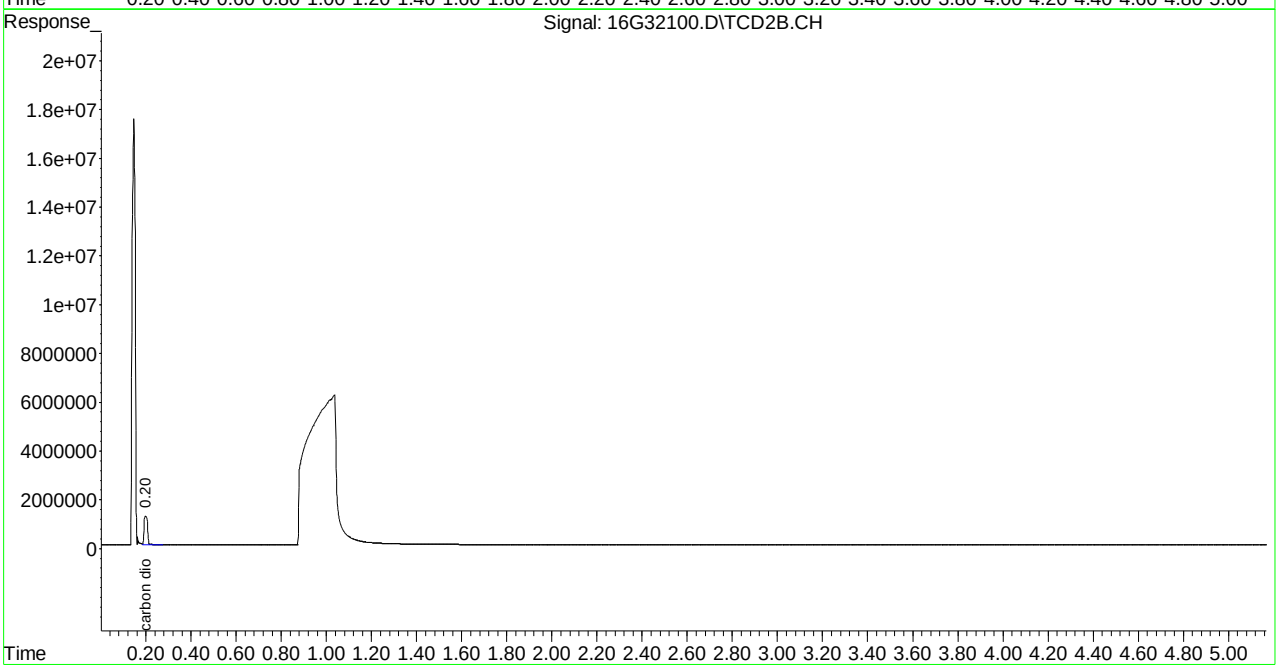
Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\043012\16G32100.D\FID1A.CH Vial: 10
Signal #2 : C:\MSDchem\1\DATA\043012\16G32100.D\TCD2B.CH
Acq On : 30 Apr 2012 15:04 Operator: MDA
Sample : WG396526-02 1.67umol/mol CCV RSK175 Inst : HP16
Misc : 1,1 STD38726 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 30 15:09 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 043012
Last Update : Mon Apr 30 14:45:53 2012
Response via : Multiple Level Calibration
DataAcq Meth : RSK2EXT.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

```
Signal #1 : C:\MSDchem\1\DATA\043012\16G32101.D\FID1A.CH Vial: 11
Signal #2 : C:\MSDchem\1\DATA\043012\16G32101.D\TCD2B.CH
Acq On    : 30 Apr 2012  15:24                        Operator: MDA
Sample    : WG396526-08 133umol/mol ICV RSK175        Inst    : HP16
Misc      : 1,1 STD45308                              Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: events2.e
Quant Time: Apr 30 15:29:41 2012  Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title        : RSK175 HP16 (SOP: OVL RSK01) 043012
Last Update  : Mon Apr 30 15:17:04 2012
Response via : Initial Calibration
DataAcq Meth : RSK2EXT.M

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :
```

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1) T	methane	0.59	22836049	125.936 umol/
2) T	ethene	1.13	37088559	125.126 umol/
3) T	acetylene	1.21	41185177	142.223 umol/
4) T	ethane	1.48	38937915	128.104 umol/
5) T	propane	3.90	55298984	126.002 umol/
7) T	carbon dioxide	0.20	70387680	12330.663 umol/

(f)=RT Delta > 1/2 Window (m)=manual int.

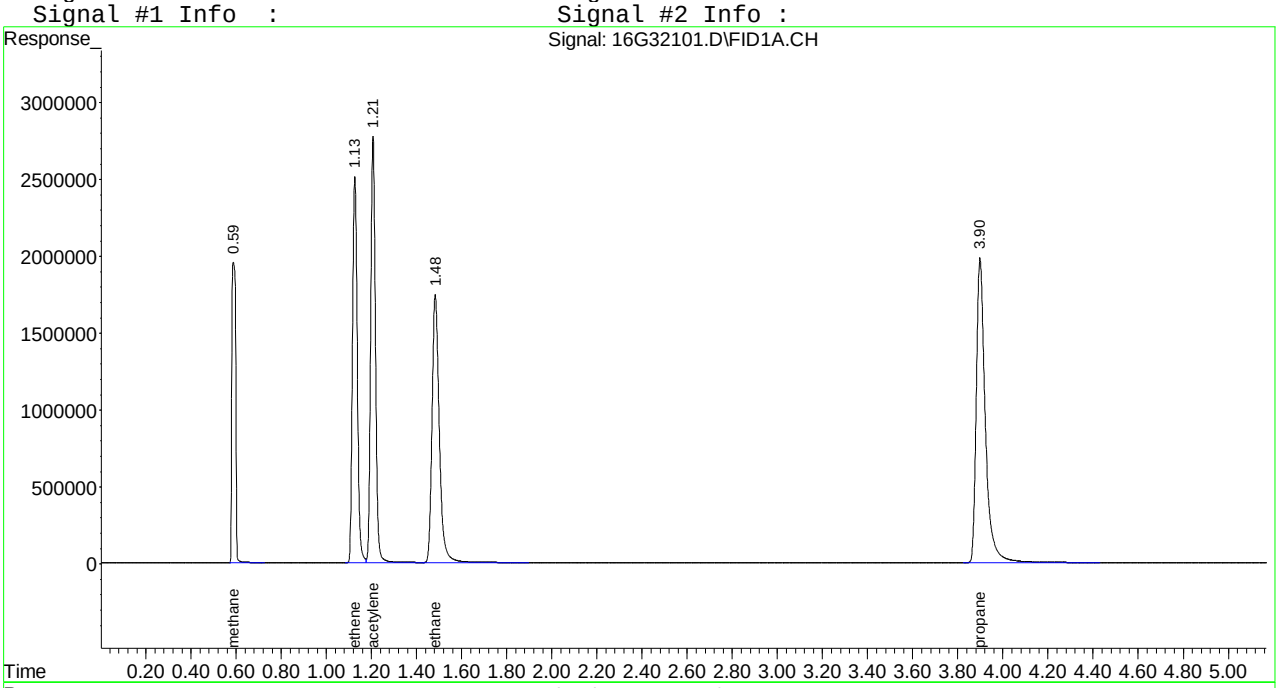
16G32101.D RSK2EXT.M Mon Apr 30 15:29:41 2012 Page 1

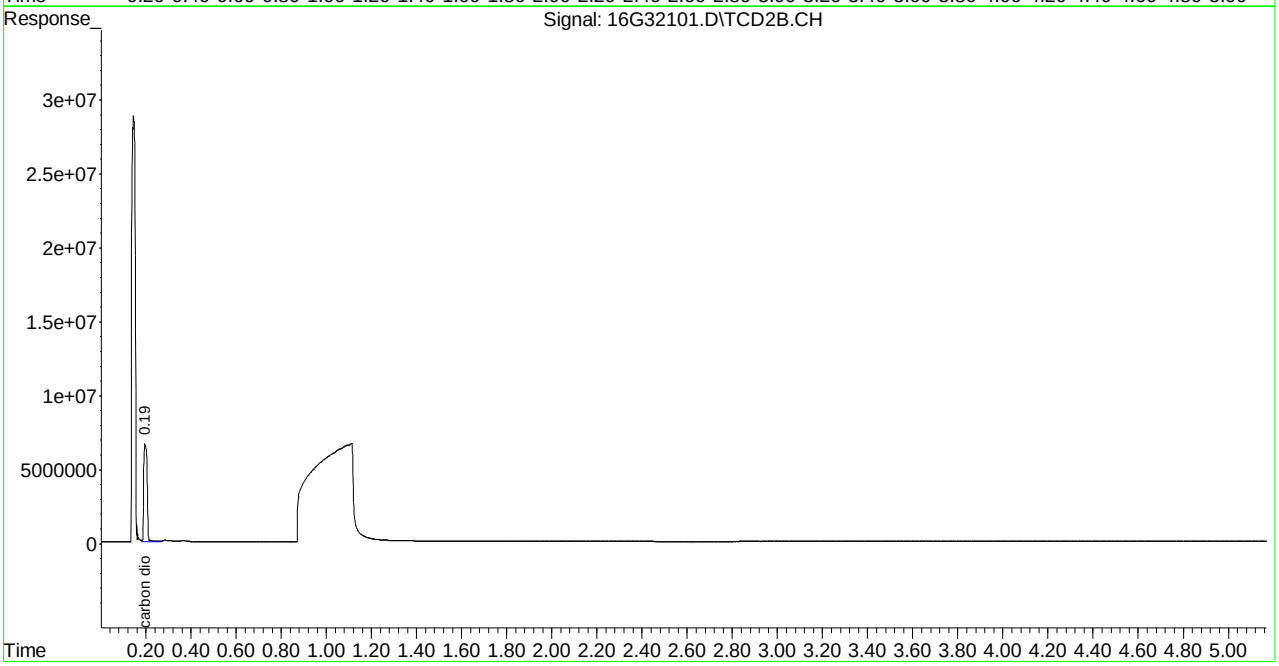
Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\043012\16G32101.D\FID1A.CH Vial: 11
Signal #2 : C:\MSDchem\1\DATA\043012\16G32101.D\TCD2B.CH
Acq On : 30 Apr 2012 15:24 Operator: MDA
Sample : WG396526-08 133umol/mol ICV RSK175 Inst : HP16
Misc : 1,1 STD45308 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: Apr 30 15:29 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 043012
Last Update : Mon Apr 30 15:17:04 2012
Response via : Multiple Level Calibration
DataAcq Meth : RSK2EXT.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\043012\16G32101.D\FID1A.CH Vial: 11
Signal #2 : C:\MSDCHEM\1\DATA\043012\16G32101.D\TCD2B.CH
Acq On : 30 Apr 2012 15:24 Operator: MDA
Sample : WG396526-08 133umol/mol ICV RSK175 Inst : HP16
Misc : 1,1 STD45308 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 043012
Last Update : Mon Apr 30 15:17:04 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	T	methane	133.000	125.936	5.3	100	0.00
2	T	ethene	133.000	125.126	5.9	99	0.00
3	T	acetylene	133.000	142.223	-6.9	117	0.00
4	T	ethane	133.000	128.104	3.7	101	0.00
5	T	propane	133.000	126.002	5.3	99	0.00

Signal #2

7	T	carbon dioxide	13333.000	12330.663	7.5	96	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
16G32101.D RSK2EXT.M Mon Apr 30 15:31:36 2012 Page 1

```
Signal #1 : C:\MSDCHEM\1\DATA\043012\16G32101.D\FID1A.CH Vial: 11
Signal #2 : C:\MSDCHEM\1\DATA\043012\16G32101.D\TCD2B.CH
Acq On    : 30 Apr 2012  15:24                      Operator: MDA
Sample    : WG396526-08 133umol/mol ICV RSK175      Inst    : HP16
Misc      : 1,1 STD45308                            Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: events2.e

Method       : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title        : RSK175 HP16 (SOP: OVL RSK01) 043012
Last Update  : Mon Apr 30 15:17:04 2012
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%

    Compound                      Amount  Calc.      %Dev  Area% Dev(min)
---------------------------------------------------------------------------


Signal #2
```

Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\050212\16G32139.D\FID1A.CH Vial: 1
Signal #2 : C:\MSDchem\1\DATA\050212\16G32139.D\TCD2B.CH
Acq On : 02 May 2012 16:06 Operator: FJB
Sample : WG396842-01 133umol/mol CCV RSK175 Inst : HP16
Misc : 1,1 STD38726 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 02 16:11:37 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 043012
Last Update : Mon Apr 30 15:17:04 2012
Response via : Initial Calibration
DataAcq Meth : RSK2EXT.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.59	23562744	129.943	umol/
2) T	ethene	1.13	39686681	133.891	umol/
3) T	acetylene	1.21	40141837	138.620	umol/
4) T	ethane	1.48	40904975	134.575	umol/
5) T	propane	3.90	59504413	135.584	umol/
7) T	carbon dioxide	0.20	80484541	14099.452	umol/

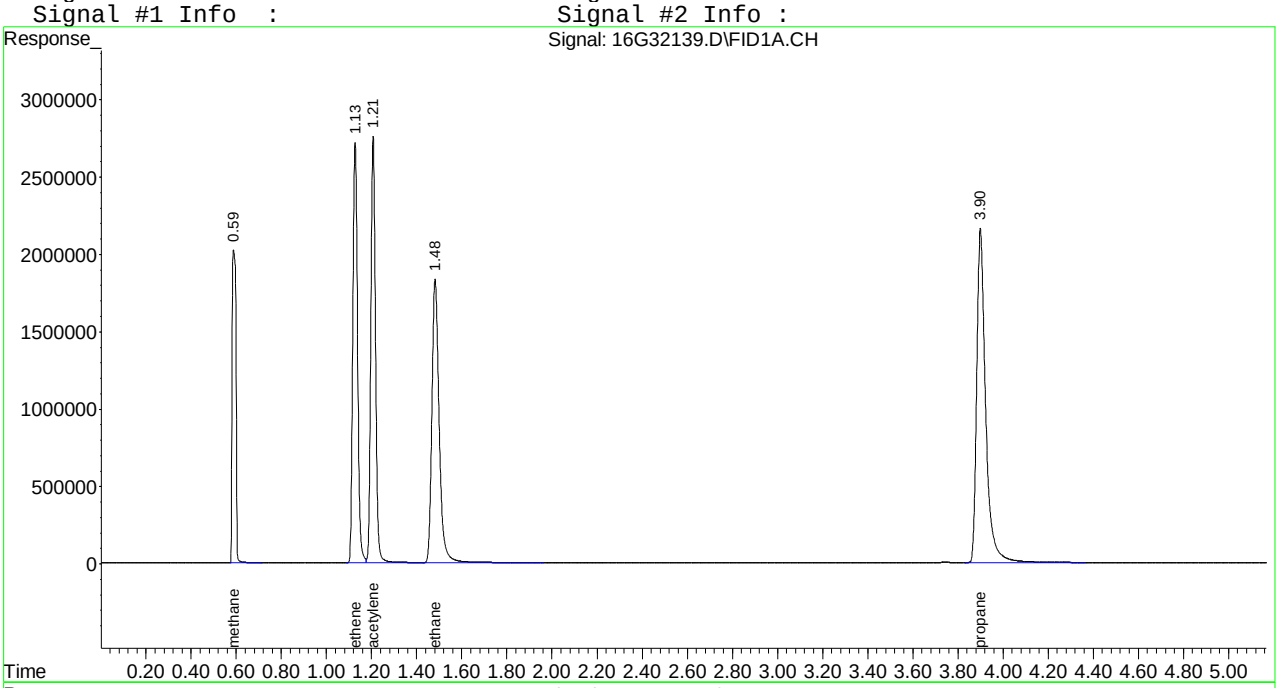
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32139.D RSK2EXT.M Wed May 02 16:11:37 2012 Page 1

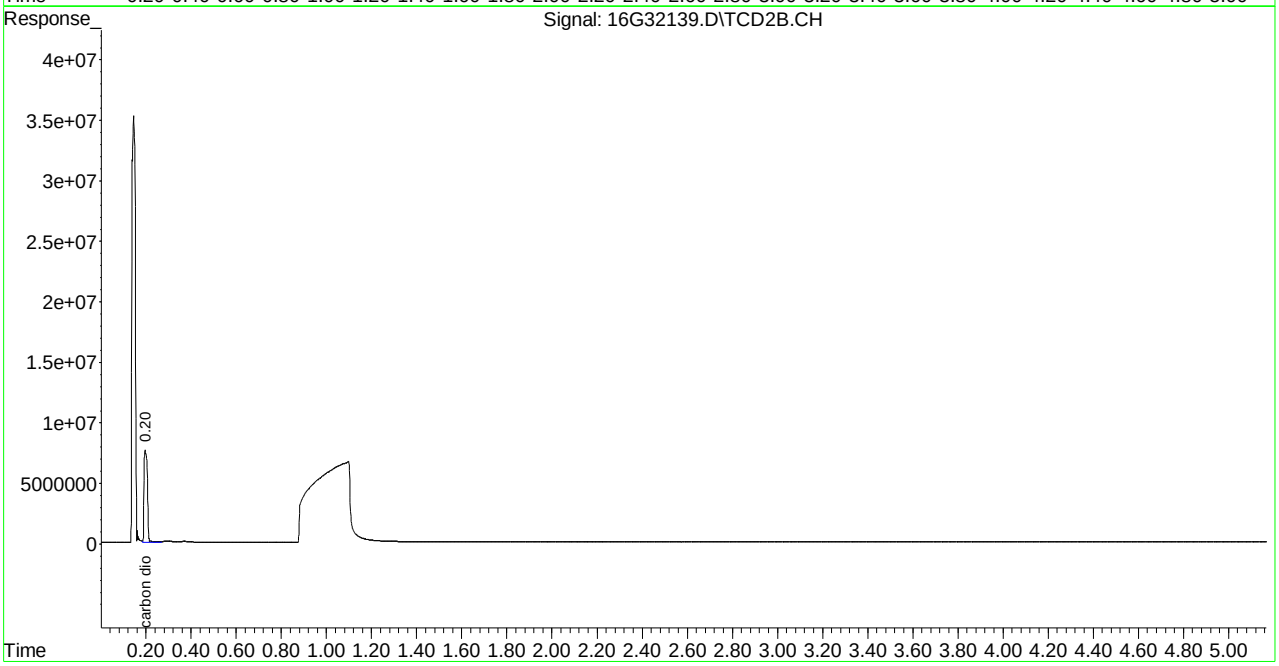
Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\050212\16G32139.D\FID1A.CH Vial: 1
Signal #2 : C:\MSDchem\1\DATA\050212\16G32139.D\TCD2B.CH
Acq On : 02 May 2012 16:06 Operator: FJB
Sample : WG396842-01 133umol/mol CCV RSK175 Inst : HP16
Misc : 1,1 STD38726 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 2 16:11 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 043012
Last Update : Mon Apr 30 15:17:04 2012
Response via : Multiple Level Calibration
DataAcq Meth : RSK2EXT.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\050212\16G32139.D\FID1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\050212\16G32139.D\TCD2B.CH
Acq On : 02 May 2012 16:06 Operator: FJB
Sample : WG396842-01 133umol/mol CCV RSK175 Inst : HP16
Misc : 1,1 STD38726 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 043012
Last Update : Mon Apr 30 15:17:04 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	T	methane	133.000	129.943	2.3	103	0.00
2	T	ethene	133.000	133.891	-0.7	106	0.00
3	T	acetylene	133.000	138.620	-4.2	114	0.00
4	T	ethane	133.000	134.575	-1.2	106	0.00
5	T	propane	133.000	135.584	-1.9	107	0.00

Signal #2

7	T	carbon dioxide	13333.000	14099.452	-5.7	110	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
16G32139.D RSK2EXT.M Wed May 02 16:12:27 2012 Page 1

```
Signal #1 : C:\MSDCHEM\1\DATA\050212\16G32139.D\FID1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\050212\16G32139.D\TCD2B.CH
Acq On    : 02 May 2012  16:06                        Operator: FJB
Sample    : WG396842-01 133umol/mol CCV RSK175        Inst    : HP16
Misc      : 1,1 STD38726                              Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: events2.e

Method       : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title        : RSK175 HP16 (SOP: OVL RSK01) 043012
Last Update  : Mon Apr 30 15:17:04 2012
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%

    Compound                      Amount  Calc.      %Dev  Area% Dev(min)
---------------------------------------------------------------------------


Signal #2
```

Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\050212\16G32150.D\FID1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\050212\16G32150.D\TCD2B.CH
Acq On : 02 May 2012 17:48 Operator: FJB
Sample : WG396842-02 133umol/mol CCV RSK175 Inst : HP16
Misc : 1,1 STD38726 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 02 17:53:44 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 043012
Last Update : Mon Apr 30 15:17:04 2012
Response via : Initial Calibration
DataAcq Meth : RSK2EXT.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	R.T.	Response	Conc Units
Target Compounds				
1) T	methane	0.59	22065474	121.686 umol/
2) T	ethene	1.13	35370180	119.329 umol/
3) T	acetylene	1.21	30706481	106.037 umol/
4) T	ethane	1.48	36929638	121.496 umol/
5) T	propane	3.90	52421688	119.446 umol/
7) T	carbon dioxide	0.20	63467962	11118.452 umol/

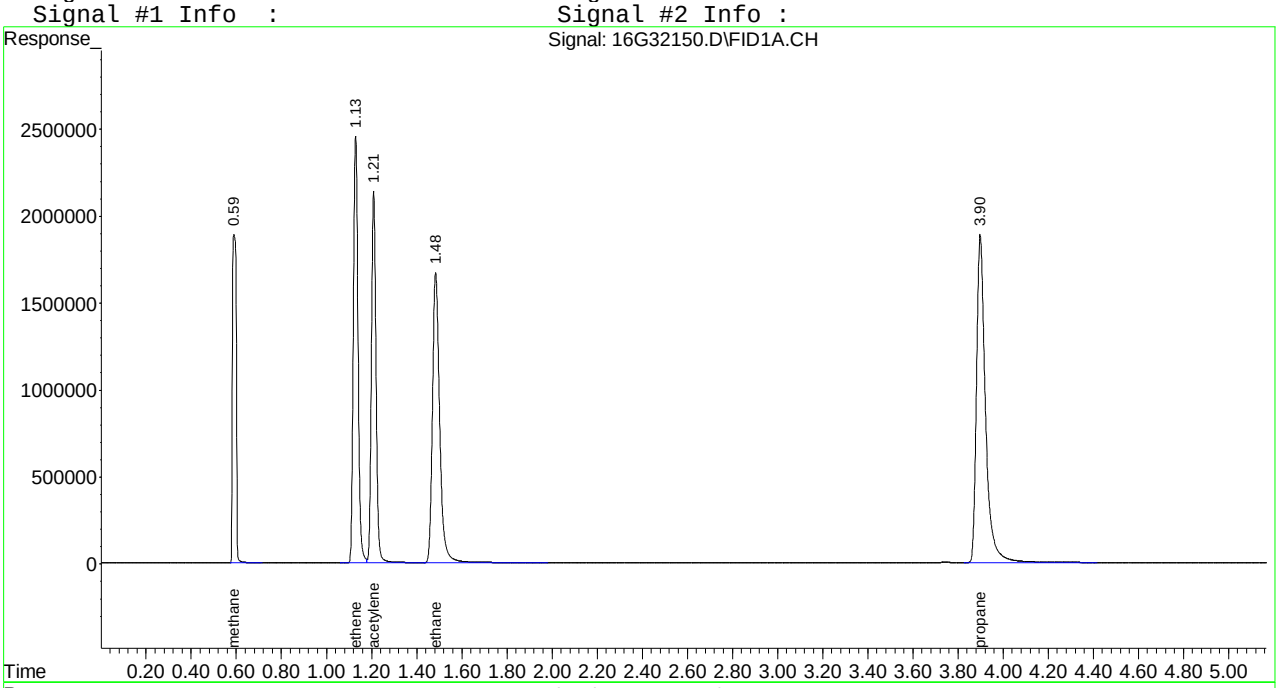
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32150.D RSK2EXT.M Thu May 03 08:26:35 2012 Page 1

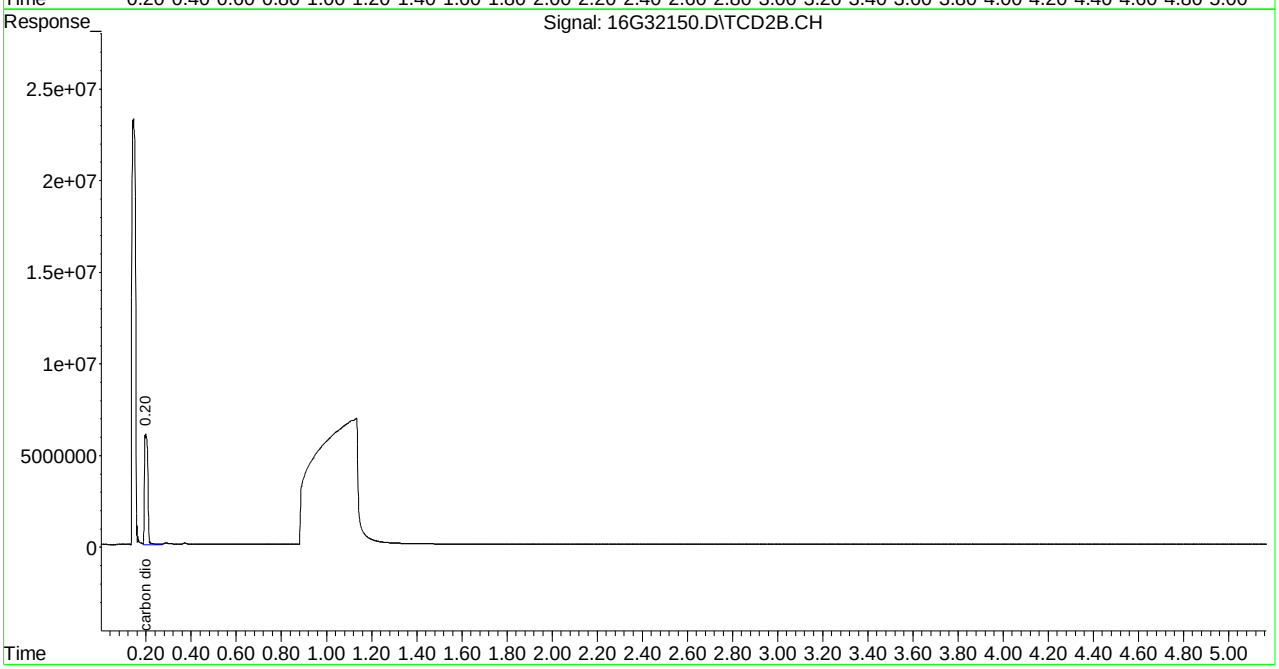
Quantitation Report (Not Reviewed)

```
Signal #1 : C:\MSDCHEM\1\DATA\050212\16G32150.D\FID1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\050212\16G32150.D\TCD2B.CH
Acq On    : 02 May 2012  17:48                        Operator: FJB
Sample    : WG396842-02 133umol/mol CCV RSK175        Inst    : HP16
Misc      : 1,1 STD38726                              Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: events2.e
Quant Time: May  2 17:53 2012  Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title        : RSK175 HP16 (SOP: OVL RSK01) 043012
Last Update  : Mon Apr 30 15:17:04 2012
Response via : Multiple Level Calibration
DataAcq Meth : RSK2EXT.M

Volume Inj.     :
Signal #1 Phase :                    Signal #2 Phase:
Signal #1 Info  :                    Signal #2 Info :
```





Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\050212\16G32150.D\FID1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\050212\16G32150.D\TCD2B.CH
Acq On : 02 May 2012 17:48 Operator: FJB
Sample : WG396842-02 133umol/mol CCV RSK175 Inst : HP16
Misc : 1,1 STD38726 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 043012
Last Update : Mon Apr 30 15:17:04 2012
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	T	methane	133.000	121.686	8.5	96	0.00
2	T	ethene	133.000	119.329	10.3	94	0.00
3	T	acetylene	133.000	106.037	20.3#	87	0.00
4	T	ethane	133.000	121.496	8.6	95	0.00
5	T	propane	133.000	119.446	10.2	94	0.00

Signal #2

7	T	carbon dioxide	13333.000	11118.452	16.6#	87	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
16G32150.D RSK2EXT.M Thu May 03 08:22:02 2012 Page 1

```
Signal #1 : C:\MSDCHEM\1\DATA\050212\16G32150.D\FID1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\050212\16G32150.D\TCD2B.CH
Acq On    : 02 May 2012  17:48                      Operator: FJB
Sample    : WG396842-02 133umol/mol CCV RSK175      Inst    : HP16
Misc      : 1,1 STD38726                            Multiplr: 1.00
IntFile Signal #1: EVENTS.E     IntFile Signal #2: events2.e

Method       : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title        : RSK175 HP16 (SOP: OVL RSK01) 043012
Last Update  : Mon Apr 30 15:17:04 2012
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%

    Compound                      Amount  Calc.      %Dev  Area% Dev(min)
---------------------------------------------------------------------------


Signal #2
```

Microbac Laboratories Inc.
Daily Retention Time Window Determination

Login #: L12050011 **Run Date:** 05/02/2012 **Sample ID:** WG396842-01
Instrument: HP16 **Run Time:** 16:06 **Method:** RSK175
Workgroup (AAB#): WG396843 **File ID:** 16G32139

RT Standard	Analysis Date	File ID	Analyst
WG388995-01	02/07/2012	16G30048	FJB
WG388902-01	02/06/2012	16G30023A	FJB
WG388437-01	01/31/2012	16G30009	ADC

Analyte	RT #1	RT #2	RT #3	STD	Lower	Upper
METHANE	.58	.59	.58	.59	0.560	0.620
ETHENE	1.12	1.13	1.11	1.13	1.100	1.160
ETHANE	1.47	1.48	1.46	1.48	1.450	1.510
PROPANE	3.89	3.89	3.89	3.9	3.870	3.930
CARBON DIOXIDE	.2	.2	.19	.2	0.170	0.230
ACETYLENE	1.2	1.21	1.19	1.21	1.180	1.240

RT_WIN - Modified 01/06/2010
PDF File ID: 2400946
Report generated 05/03/2012 11:28

2.1.2.5 Raw QC Data

Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\050212\16G32140.D\FID1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\050212\16G32140.D\TCD2B.CH
Acq On : 02 May 2012 16:17 Operator: FJB
Sample : WG396843-01 BLANK RSK175 Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 02 16:22:54 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 043012
Last Update : Mon Apr 30 15:17:04 2012
Response via : Initial Calibration
DataAcq Meth : RSK2EXT.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.59	61451	0.339	umol/
2) T	ethene	1.14	3869	0.013	umol/
3) T	acetylene	0.00	0	N.D.	umol/
4) T	ethane	0.00	0	N.D.	umol/
5) T	propane	0.00	0	N.D.	umol/
7) T	carbon dioxide	0.00	0	N.D.	umol/

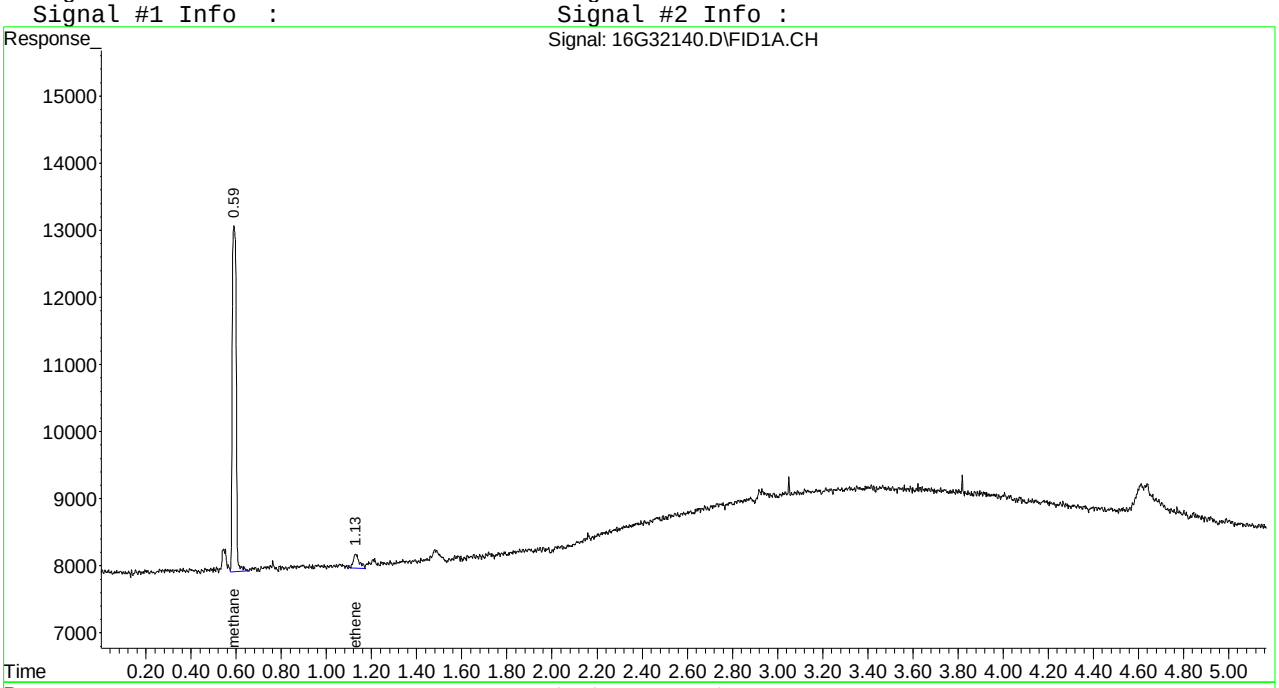
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32140.D RSK2EXT.M Thu May 03 08:24:01 2012 Page 1

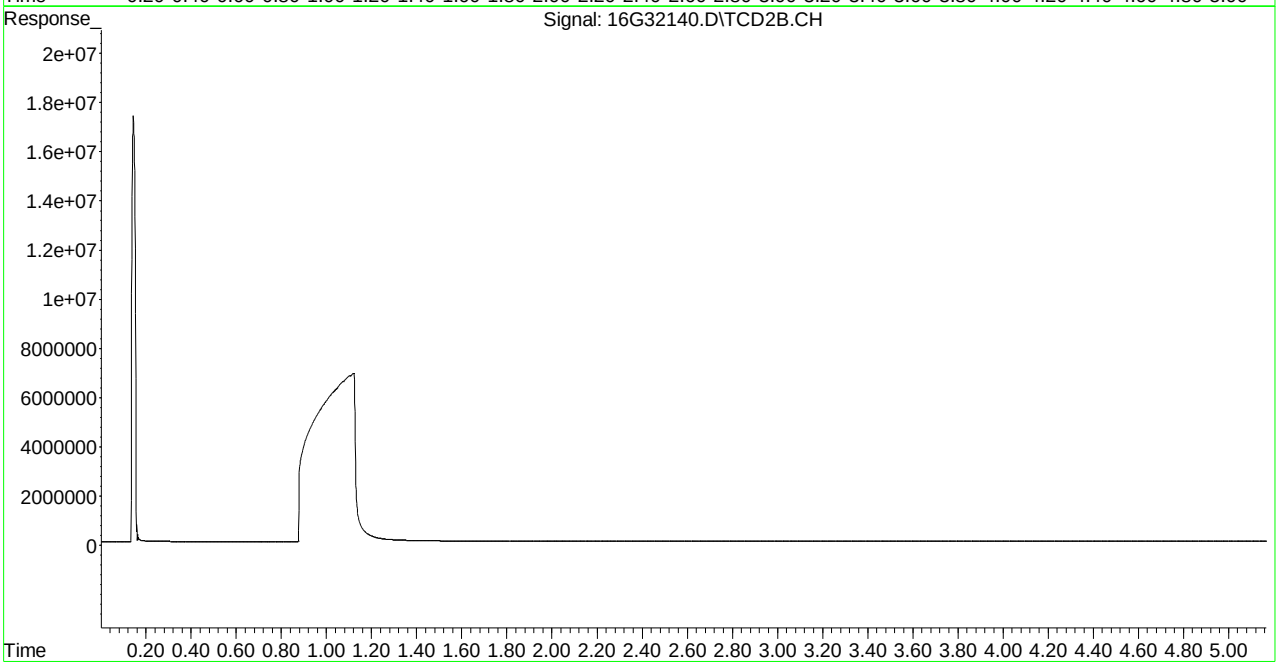
Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\050212\16G32140.D\FID1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\050212\16G32140.D\TCD2B.CH
Acq On : 02 May 2012 16:17 Operator: FJB
Sample : WG396843-01 BLANK RSK175 Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 2 16:22 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 043012
Last Update : Mon Apr 30 15:17:04 2012
Response via : Multiple Level Calibration
DataAcq Meth : RSK2EXT.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\050212\16G32141.D\FID1A.CH Vial: 3
Signal #2 : C:\MSDchem\1\DATA\050212\16G32141.D\TCD2B.CH
Acq On : 02 May 2012 16:27 Operator: FJB
Sample : WG396843-02 67umol/mol LCS RSK175 Inst : HP16
Misc : 1,1 STD45308 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 02 16:32:14 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 043012
Last Update : Mon Apr 30 15:17:04 2012
Response via : Initial Calibration
DataAcq Meth : RSK2EXT.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.59	11049207	60.934	umol/
2) T	ethene	1.13	17520046	59.108	umol/
3) T	acetylene	1.21	17871346	61.714	umol/
4) T	ethane	1.49	18472886	60.775	umol/
5) T	propane	3.90	26022550	59.294	umol/
7) T	carbon dioxide	0.20	34465210	6037.688	umol/

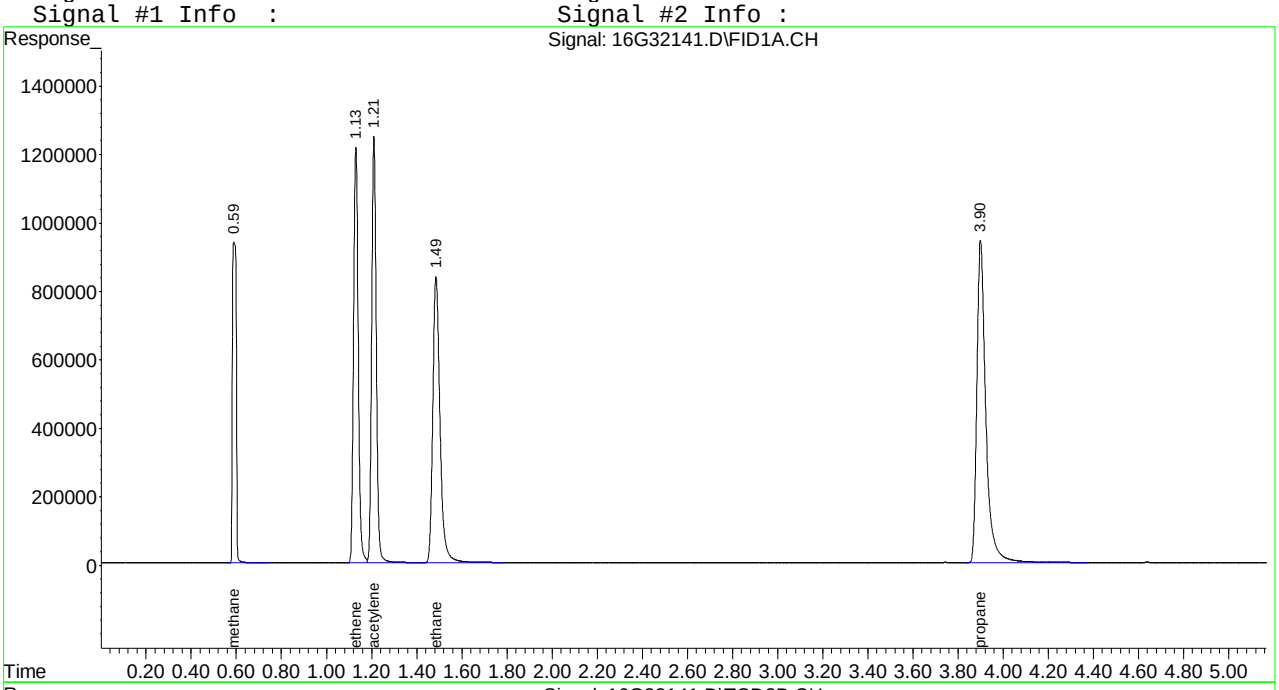
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32141.D RSK2EXT.M Wed May 02 16:32:14 2012 Page 1

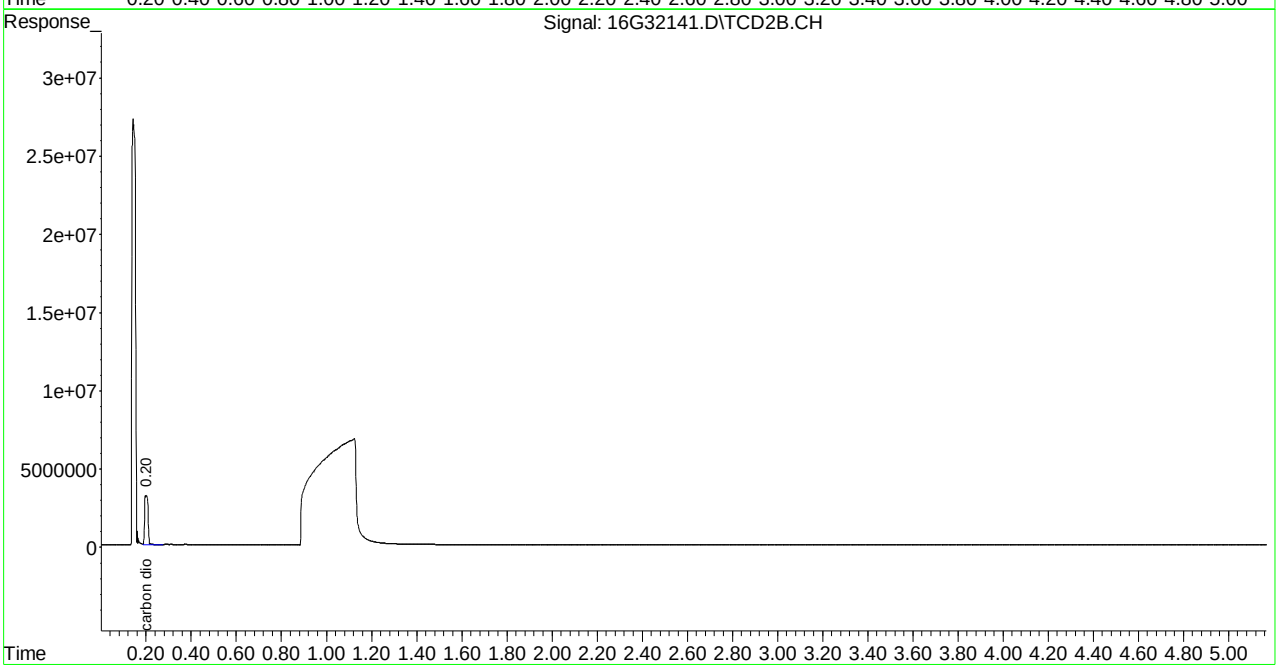
Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\050212\16G32141.D\FID1A.CH Vial: 3
Signal #2 : C:\MSDchem\1\DATA\050212\16G32141.D\TCD2B.CH
Acq On : 02 May 2012 16:27 Operator: FJB
Sample : WG396843-02 67umol/mol LCS RSK175 Inst : HP16
Misc : 1,1 STD45308 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 2 16:32 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 043012
Last Update : Mon Apr 30 15:17:04 2012
Response via : Multiple Level Calibration
DataAcq Meth : RSK2EXT.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





2.2 Semivolatiles Data

2.2.1 Semivolatiles GC/MS Data (8270)

2.2.1.1 Summary Data

Login Number: L12050011
Department: Semivolatiles
Analyst: Cassie A. Augenstein

METHOD

Preparation 3520C

Analysis SW-846 8270C/40 CFR 264 App. IX

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: 2,4-Dinitrophenol, 2-Chloronaphthalene, Pentachlorophenol. Please see the applicable QC report for a detailed presentation of the failures.

Continuing Calibration and Tune: Recoveries out of range were observed for the following analytes: Benzoic Acid. Please see the applicable QC report for a detailed presentation of the failures.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: Recoveries out of range were observed for the following analytes/surrogates: 2,4,5-Trichlorophenol, 2,6-Dinitrotoluene, 2-Chloronaphthalene, 2-Nitroaniline, 3,3'-Dichlorobenzidine, 3-,4-Methylphenol, 3-Nitroaniline, 4-Bromophenyl Phenyl Ether, Benzo[b]fluoranthene, bis(2-Chloroethoxy)methane, Di-n-Butyl Phthalate, Dibenz[ah]anthracene, Diethylphthalate, Dimethylphthalate, Phenanthrene, Sym-Trinitrobenzene, 2,4,6-Tribromophenol, Phenol-d5. Please see the applicable QC report for a detailed presentation of the failures.

All hits in the LCS were biased high; there were no hits found in the samples associated with the LCS.

Matrix Spikes: The MS/MSD results were not associated with this sample delivery group.

SAMPLES

Samples: All acceptance criteria were met. The extracts were library searched using the NIST library and the top twenty TICs found were reported. Requested acid compounds listed as TICs in the Waterloo QAPP may not have been detected due to unknown extraction efficiency and chromatographic performance.

Internal Standards: All acceptance criteria were met.

Surrogates: Recoveries out of range were observed for the following surrogates: Phenol-d5, 2,4,6-Tribromophenol. Please see the applicable QC report for a detailed presentation of the failures.

No analytes were detected in the samples with high surrogate recoveries.

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: 46339
Approved By: Mike Cochran

2.2.1.2 QC Summary Data

Example 8270 Calculations

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

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

where:	Example
Ax = Area of the characteristic ion for the compound being measured:	1261197
Cis = Concentration of the specific internal standard (ug/mL)	40
Ais = Area of the characteristic ion of the specific internal standard	608044
Cx = Concentration of the compound in the standard being measured (ug/mL)	50
RF = Calculated Response Factor	**1.65935**

2.0 Calculating the concentration (C) of a compound in water using the data from the prep log and quantitation report: *

Cx = [(Ax) (Cis) (Vf) (D)] / [(Ais) (RF) (Vi)]

where:	Example
Ax = Area of the characteristic ion for the compound being measured	367250
Cis = Concentration of the specific internal standard (ug/mL)	40
Vf = Final volume of sample extract from prep log (mL)	1
D = Dilution factor for sample as a multiplier (10x = 10)	1
Ais = Area of the characteristic ion of the specific internal standard	511641
RF = Average RF from the ICAL	1.65935
Vi = Initial volume of sample extracted from prep log (mL)	1021
Cx = Concentration of the compound in the sample being measured (ug/mL)	0.016947
Cx = Concentration of the compound in the sample being measured (ug/L)	**16.947**

3.0 Calculating the concentration (C) of a compound in soil using the data from the prep log and quantitation report: *

Cx = [(Ax) (Cis) (Vf) (D)] / [(Ais) (RF) (Wi)]

where:	Example
Ax = Area of the characteristic ion for the compound being measured	367250
Cis = Concentration of the specific internal standard (ug/mL)	40
Vf = Final volume of sample extract from prep log (mL)	1
D = Dilution factor for sample as a multiplier (10x = 10)	1
Ais = Area of the characteristic ion of the specific internal standard	511641
RF = Average RF from the ICAL	1.65935
Wi = Initial weight of sample extracted (g) from prep log	30
Cx = Concentration of the compound in the sample being measured (ug/g)	0.576763
Cx = Concentration of the compound in the sample being measured (ug/kg)	**576.7627**

Dry weight correction:

Percent solids (PCT_S)	50
Cd = (Cx) (100)/PCT_S	**1153.525** ug/kg

* 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 plot

b = intercept from curve plot

Step 2: Calculate y from Quantitation Report

y = 16790/784838 = 0.02139

Step 3: Solve for x

x = (y - b)/m = [(0.02139 -(- 0.0435)]/ 0.0783 = 0.829

Step 4: Solve for analyte concentration Cx

Cx = Cis (x) = (25.0)(0.829) = 20.72 ug/L

Example Spreadsheet Calculation:

Slope from curve, m:	0.0783	
Intercept from curve, b:	-0.0435	
Area of analyte, Ax:	16790	
Area of Internal Standard , Ais:	784484	
Concentration of IS, Cis	25.00	ug/L
Response Ratio (y) :	0.021403	
Amount Ratio:	0.828897	
Concentration (Cx):	20.72241	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

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

Step 4: Solve for analyte concentration Cx

Cx = (Cis)(Amount ratio)

Example Spreadsheet Calculation:

Value of A from plot:	**0.0259**	
Value of B from plot:	**0.0596**	
Value of C from plot:	**-0.0165**	
Area of analyte from quantitation report:	**203233**	
Area of IS from quantiation report:	**1425653**	
Response ratio, y:	**0.142554**	
C - y:	**-0.15905**	
Root 1 - Computed amount ratio , X1:	**-3.88278**	
Root 2 - Computed amount ratio , X2:	**1.581623**	use this solution
Concentration of IS, Cis:	**40.00**	
Concentration of analyte, Cx:	**63.26**	ug/L

Microbac Laboratories Inc.
Continuous Sample Extract Log

Workgroup: WG397140
Analyst: CSH
Spike Analyst: CSH
Method: 3520C
Run Date: 05/07/2012 11:00
SOP: EXB01 Revison 16
Spike Witness: CAF
Surr Solution: STD50249

TIME ON: 15:30 OFF: 10:30 ON: 18:40 OFF: 12:40
Methylene Chloride Lot #: COA16058
1:1 H2SO4 Lot #: RGT17192
10N NaOH Lot #: RGT17312
Sodium Sulfate,Anhydrous,Granular (Lot #COA15998

	SAMPLE #	Type	Reference	Prod	pH	Init Amnt	Surr Amnt	Spike Amnt	Spike Sol	Final Vol	Color
1	L12050011-01	SAMP		327-SPE-DIO	<2>12	1000 mL	.5 mL			1 mL	Transparent
2	L12050011-03	SAMP		327-SPE-DIO	<2>12	1000 mL	.5 mL			1 mL	Transparent
3	L12050011-05	SAMP		327-SPE-DIO	<2>12	890 mL	.5 mL			1 mL	Transparent
4	L12050050-01	SAMP		327-SPE-DIO	<2>12	1000 mL	.5 mL			1 mL	Transparent
5	L12050050-03	SAMP		327-SPE-DIO	<2>12	1000 mL	.5 mL			1 mL	Transparent
6	L12050050-05	SAMP		327-SPE-DIO	<2>12	840 mL	.5 mL			1 mL	Colored
7	L12050050-07	SAMP		327-SPE-DIO	<2>12	840 mL	.5 mL			1 mL	Transparent
8	L12050099-01	SAMP		327-SPE-DIO	<2>12	980 mL	.5 mL			1 mL	Transparent
9	L12050099-03	SAMP		327-SPE-DIO	<2>12	850 mL	.5 mL			1 mL	Transparent
10	L12050099-05	SAMP		327-SPE-DIO	<2>12	900 mL	.5 mL			1 mL	Transparent
11	L12050099-07	SAMP		327-SPE-DIO	<2>12	870 mL	.5 mL			1 mL	Transparent
12	L12050099-09	SAMP		327-SPE-DIO	<2>12	890 mL	.5 mL			1 mL	Transparent
13	L12050153-01	SAMP		327-SPE-DIO	<2>12	900 mL	.5 mL			1 mL	Transparent
14	L12050153-03	SAMP		327-SPE-DIO	<2>12	1000 mL	.5 mL			1 mL	Transparent
15	L12050153-05	SAMP		327-SPE-DIO	<2>12	900 mL	.5 mL			1 mL	Colored
16	L12050153-07	SAMP		327-SPE-DIO	<2>12	1000 mL	.5 mL			1 mL	Colored
17	L12050171-01	RS01		327-SPE-DIO	<2>12	900 mL	.5 mL			1 mL	Colored
18	L12050171-03	MS01	L12050171-01	327-SPE-DIO	<2>12	900 mL	.5 mL	1 mL	STD51286	1 mL	Colored
19	L12050171-05	SD01	L12050171-01	327-SPE-DIO	<2>12	880 mL	.5 mL	1 mL	STD51286	1 mL	Colored
20	L12050171-07	SAMP		327-SPE-DIO	<2>12	790 mL	.5 mL			1 mL	Transparent
21	WG397140-01	REF	L12050171-01	327-SPE-DIO	<2>12	900 mL	.5 mL			1 mL	Colored
22	WG397140-02	BLANK		327-SPE-DIO	<2>12	1000 mL	.5 mL			1 mL	Transparent
23	WG397140-03	LCS		327-SPE-DIO	<2>12	1000 mL	.5 mL	.5 mL	STD51286	1 mL	Colored
24	WG397140-04	MS	L12050171-01	327-SPE-DIO	<2>12	900 mL	.5 mL	1 mL	STD51286	1 mL	Colored
25	WG397140-05	MSD	L12050171-01	327-SPE-DIO	<2>12	880 mL	.5 mL	1 mL	STD51286	1 mL	Colored

Analyst: Chris Hill

Reviewer: Cheryl A. Flowers

EXTRACT - Modified 01/23/2009
PDF ID: 2408522
Report generated: 05/14/2012 11:57

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS4 Dataset: 041912
Analyst1: CAA Analyst2: NA
Method: 8270C SOP: MSS01 Rev: 19

Maintenance Log ID: 41422 Syringe Filter Lot#:

Column 1 ID: RXI-5MS Column 2 ID: NA
Workgroups: WG395647, WG395777
Internal STD: COA16051 Surrogate STD: NA Calibration STD
CCV STD: LCS STD: MS/MSD STD:

Comments: ICAL: a,a-dimethylphenethylamine, p-phenylenediamine, 1- and 2-naphthylamine, benzidine, and 3,3'-dimethylbenzidine fails.
Alt Src: 2-chloronaphthalene, 1,4-naphthoquinone, >25% but <30% biased high; 2,4-dinitrophenol, 4,6-dinitro-2-methylphenol, sym-trinitrobenzene, pentachlorophenol, methapyrilen, famphur >30% biased high; 4-nitroquinoline 1-oxide >20% but <25% biased high; 3-nitroaniline >20% but <25% biased low.

Seq.	File ID	Sample Information	Mat	Dil	Reference	Date/Time
1	4M60436	BAKEOUT	1	1		04/19/12 07:58
2	4M60437	WG395394-01 50PPM DFTPP STD	1	1	STD50659	04/19/12 08:26
3	4M60438	WG395394-02 50PPM Megamix STD	1	1	STD50886	04/19/12 08:46
4	4M60439	WG395394-02 50PPM Megamix STD	1	1	STD50886	04/19/12 09:22
5	4M60440	WG395394-03 3PPM Megamix STD	1	1	STD50886	04/19/12 09:56
6	4M60441	WG395394-04 10PPM Megamix STD	1	1	STD50886	04/19/12 10:30
7	4M60442	WG395394-05 15PPM Megamix STD	1	1	STD50886	04/19/12 11:05
8	4M60443	WG395394-06 25PPM Megamix STD	1	1	STD50886	04/19/12 11:40
9	4M60444	WG395394-07 80PPM Megamix STD	1	1	STD50886	04/19/12 12:14
10	4M60445	WG395394-08 100PPM Megamix STD	1	1	STD50886	04/19/12 12:48
11	4M60446	WG395394-09 120PPM Megamix STD	1	1	STD50886	04/19/12 13:23
12	4M60447	WG395394-10 50PPM Megamix Alt Src STD	1	1	STD50596	04/19/12 13:58
13	4M60448	WG395394-11 50PPM 1,4-Dioxane Alt Src ST	1	1	STD50848	04/19/12 14:33
14	4M60449	WG395521-02 BLK 04/18	7	1	SOIL	04/19/12 15:08
15	4M60450	WG395521-03 LCS 04/18	7	1	SOIL	04/19/12 15:43
16	4M60451	WG394868-02 BLK 04/11	1	1		04/19/12 16:18
17	4M60452	WG394868-03 LCS 04/11	1	1		04/19/12 16:52
23	4M60453	L12040365-01 REF	1	1		04/19/12 17:26
24	4M60454	L12040365-02 MS	1	1		04/19/12 18:00
25	4M60455	L12040365-03 MSD	1	1		04/19/12 18:35
21	4M60456	L12040567-01	7	1	SOIL	04/19/12 19:10
22	4M60457	L12040384-03	7	1	SOIL	04/19/12 19:45

Comments

Seq.	Rerun	Dil.	Reason	Analytes
3	X			
	WG395394-02 50PPM Megamix STD - Run time too short.			
4				
	WG395394-02 50PPM Megamix STD - New column, run ICAL.			
22	X	5	Over Calibration Range	#14, 20, 32, 40, 57, 68, 70, 71, 72, 73, 75, 79, 81, 95, 96, 103, 104, 107, 131
	L12040384-03			

Page: 1 Approved: 20-APR-12

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS4 Dataset: 050112
Analyst1: CAA Analyst2: NA
Method: 8270C SOP: MSS01 Rev: 19

Maintenance Log ID: 41572 Syringe Filter Lot#:

Column 1 ID: RXI-5MS Column 2 ID: NA
Workgroups: WG396716, WG396824
Internal STD: COA16051 Surrogate STD: NA Calibration STD
CCV STD: LCS STD: MS/MSD STD:

Comments:

Seq.	File ID	Sample Information	Mat	Dil	Reference	Date/Time
1	4M60599	WG396671-01 50PPM DFTPP STD	1	1	STD50659	05/01/12 12:55
2	4M60600	WG396671-01 50PPM DFTPP STD	1	1	STD50659	05/01/12 13:11
3	4M60601	WG396671-02 50PPM Megamix STD	1	1	STD50886	05/01/12 13:31
4	4M60602	WG396709-01 50PPM TCL STD	1	1	STD51428	05/01/12 14:05
5	4M60603	WG396709-02 3PPM TCL STD	1	1	STD51428	05/01/12 14:39
6	4M60604	WG396709-03 10PPM TCL STD	1	1	STD51428	05/01/12 15:13
7	4M60605	WG396709-04 25PPM TCL STD	1	1	STD51428	05/01/12 15:47
8	4M60606	WG396709-05 80PPM TCL STD	1	1	STD51428	05/01/12 16:22
9	4M60607	WG396709-06 100PPM TCL STD	1	1	STD51428	05/01/12 16:57
10	4M60608	WG396709-07 50PPM TCL Alt Src STD	1	1	STD51166	05/01/12 17:31
11	4M60609	WG396102-01 BLK 04/25	1	1		05/01/12 18:05
12	4M60610	WG396102-02 LCS 04/25	1	1		05/01/12 18:39
13	4M60611	WG396102-03 LCS DUP 04/25	1	1		05/01/12 19:13
14	4M60612	WG396595-01 BLK 05/01	7	1	SOIL	05/01/12 19:47
15	4M60613	WG396595-02 LCS 05/01	7	1	SOIL	05/01/12 20:21
16	4M60614	WG396595-03 LCS DUP 05/01	7	1	SOIL	05/01/12 20:56
17	4M60615	L12040844-01	1	1		05/01/12 21:30
18	4M60616	L12040844-03	1	1		05/01/12 22:04
19	4M60617	L12040844-05	1	1		05/01/12 22:38
20	4M60618	L12040916-04	7	1	SOIL	05/01/12 23:12
21	4M60619	L12040916-01	7	1	SOIL	05/01/12 23:46
22	4M60620	L12040916-03	7	1	SOIL	05/02/12 00:20
23	4M60621	L12040916-02 10X	7	10	SOIL	05/02/12 00:54

Comments

Seq.	Rerun	Dil.	Reason	Analytes
1	X			
	WG396671-01 50PPM DFTPP STD - Tune failed.			
4				
	WG396709-01 50PPM TCL STD - Run ICAL due to new column.			
12				
	WG396102-02 LCS 04/25 - 2 analytes high.			
13				
	WG396102-03 LCS DUP 04/25 - 2 analytes high.			

Page: 1 Approved: 03-MAY-12

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS4 Dataset: 050112
Analyst1: CAA Analyst2: NA
Method: 8270C SOP: MSS01 Rev: 19

Maintenance Log ID: 41572 Syringe Filter Lot#:

Column 1 ID: RXI-5MS Column 2 ID: NA
Workgroups: WG396716, WG396824
Internal STD: COA16051 Surrogate STD: NA
CCV STD: LCS STD:

Comments

Seq.	Rerun	Dil.	Reason	Analytes
15				
	WG396595-02 LCS 05/01 - 2 analytes high.			
16				
	WG396595-03 LCS DUP 05/01 - 7 analytes high.			
21				
	L12040916-01 - Needs re-extracted due to LCS/LCS DUP.			
22				
	L12040916-03 - Needs re-extracted due to LCS/LCS DUP.			
23	X	20	Over Calibration Range	#103, 112, 115
	L12040916-02 10X - Needs re-extracted due to LCS/LCS DUP, Sample was analyzed at a dilution due to extract appearance and viscosity.			

Page: 2 Approved: 03-MAY-12

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS4 Dataset: 051212
Analyst1: CAA Analyst2: NA
Method: 8270C SOP: MSS01 Rev: 19

Maintenance Log ID: 41703 Syringe Filter Lot#:

Column 1 ID: RXI-5MS Column 2 ID: NA
Workgroups: WG397828, WG397604
Internal STD: COA16051 Surrogate STD: NA Calibration STD
CCV STD: LCS STD: MS/MSD STD:

Comments: Currently investigating high LCS recoveries.

Seq.	File ID	Sample Information	Mat	Dil	Reference	Date/Time
1	4M60816	WG397824-01 50PPM DFTPP STD	1	1	STD50659	05/12/12 11:02
2	4M60817	WG397824-02 50PPM Megamix STD	1	1	STD50886	05/12/12 11:22
3	4M60818	WG397825-01 50PPM TCL STD	1	1	STD51428	05/12/12 11:57
4	4M60819	WG397434-02 BLK 05/09	1	1		05/12/12 12:32
5	4M60820	WG397434-03 LCS 05/09	1	1		05/12/12 13:07
6	4M60821	WG397140-02 BLK 05/07	1	1		05/12/12 13:42
7	4M60822	WG397140-03 LCS 05/07	1	1		05/12/12 14:17
8	4M60823	L12050134-08	1	1		05/12/12 14:52
9	4M60824	L12050011-01	1	1		05/12/12 15:27
10	4M60825	L12050011-03	1	1		05/12/12 16:01
11	4M60826	L12050011-05	1	1		05/12/12 16:36
12	4M60827	L12050050-01	1	1		05/12/12 17:11
13	4M60828	L12050050-03	1	1		05/12/12 17:45
14	4M60829	L12050050-05	1	1		05/12/12 18:21
15	4M60830	L12050050-07	1	1		05/12/12 18:56
16	4M60831	L12050099-01	1	1		05/12/12 19:31
17	4M60832	L12050099-03	1	1		05/12/12 20:06
18	4M60833	L12050099-05	1	1		05/12/12 20:41
19	4M60834	L12050099-07	1	1		05/12/12 21:15
20	4M60835	L12050099-09	1	1		05/12/12 21:50
21	4M60836	L12050153-01	1	1		05/12/12 22:24
22	4M60837	L12050153-03	1	1		05/12/12 22:58

Comments

Seq.	Rerun	Dil.	Reason	Analytes
5				
	WG397434-03 LCS 05/09 - 38 analytes high; SS FBP, NBZ high.			
7				
	WG397140-03 LCS 05/07 - 1 analyte low, 16 high; SS TBP, PHL high.			
9				
	L12050011-01 - SS TBP, PHL high.			
10				
	L12050011-03 - SS TBP, PHL high.			

Page: 1 Approved: 14-MAY-12

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS4 Dataset: 051212
Analyst1: CAA Analyst2: NA
Method: 8270C SOP: MSS01 Rev: 19

Maintenance Log ID: 41703 Syringe Filter Lot#:

Column 1 ID: RXI-5MS Column 2 ID: NA
Workgroups: WG397828, WG397604
Internal STD: COA16051 Surrogate STD: NA
CCV STD: LCS STD:

Comments

Seq.	Rerun	Dil.	Reason	Analytes
11				
	L12050011-05 - SS PHL high.			
22				
	L12050153-03 - SS PHL high.			

Page: 2 Approved: 14-MAY-12

Microbac Laboratories Inc.

Data Checklist

Date: 19-APR-2012
Analyst: CAA
Analyst: NA
Method: 8270
Instrument: HPMS4
Curve Workgroup: NA
Runlog ID: 46308
Analytical Workgroups: L12040365, L12040567, L12040384

ANALYTICAL	
System Performance Check	X
DFTPP (MS)	X
Endrin/DDT breakdown (8081/MS)	X
Pentachlorophenol/benzidine tailing (MS)	X
Eluent check (IC)/system pressure (HPLC)	NA
Window standard (FID)	NA
Initial Calibration	X
Average RF	X
Linear regression or higher order curve	X
Alternate source standard (ICV) % Difference	X
Continuing Calibration (CCV)	NA
% D/% Drift	NA
Minimum response factors (MS)	NA
Continuing calibration blank (CCB) (IC)	NA
Special standards	NA
Blanks	X
TCL hits	X
Surrogate recoveries	X
LCS/LCSD (Laboratory Control Sample)	X
Recoveries	X
Surrogate recoveries	X
MS/MSD/Sample duplicates	X
Recoveries	X
%RPD	X
Samples	X
TCL hits	X
Mass spectra (MS/HPLC)/2nd column confirmations (ECD/FID/HPLC)	X
Surrogate recoveries	X
Internal standard areas (MS)	X
Library searches (MS)	NA
Calculations & correct factors	X
Compounds above calibration range	X
Reruns	NA
Manual integrations	X
Project/client specific requirements	X
REPORTING	
Upload batch form	X
KOBRA workgroup data/forms/bench sheets	X
Case narratives	NA
Check for completeness	X
Primary Reviewer	CAA
SUPERVISORY/SECONDARY REVIEW	
Check for compliance with method and project specific requirements	X
Check the completeness/accuracy of reported information	X
Data qualifiers	X
Secondary Reviewer	MDC

Primary Reviewer: 20-APR-2012

Secondary Reviewer: 20-APR-2012

CHECKLIST1 - Modified 03/05/2008
Generated: APR-20-2012 11:32:28

Microbac Laboratories Inc.

Data Checklist

Date: 01-MAY-2012
Analyst: CAA
Analyst: NA
Method: 8270
Instrument: HPMS4
Curve Workgroup: NA
Runlog ID: 46517
Analytical Workgroups: L12040844, L12040916

ANALYTICAL	
System Performance Check	X
DFTPP (MS)	X
Endrin/DDT breakdown (8081/MS)	X
Pentachlorophenol/benzidine tailing (MS)	X
Eluent check (IC)/system pressure (HPLC)	NA
Window standard (FID)	NA
Initial Calibration	X
Average RF	X
Linear regression or higher order curve	NA
Alternate source standard (ICV) % Difference	X
Continuing Calibration (CCV)	X
% D/% Drift	X
Minimum response factors (MS)	X
Continuing calibration blank (CCB) (IC)	NA
Special standards	X
Blanks	X
TCL hits	X
Surrogate recoveries	X
LCS/LCSD (Laboratory Control Sample)	X
Recoveries	X
Surrogate recoveries	X
MS/MSD/Sample duplicates	NA
Recoveries	NA
%RPD	NA
Samples	X
TCL hits	X
Mass spectra (MS/HPLC)/2nd column confirmations (ECD/FID/HPLC)	X
Surrogate recoveries	X
Internal standard areas (MS)	X
Library searches (MS)	X
Calculations & correct factors	X
Compounds above calibration range	X
Reruns	NA
Manual integrations	X
Project/client specific requirements	X
REPORTING	
Upload batch form	X
KOBRA workgroup data/forms/bench sheets	X
Case narratives	NA
Check for completeness	X
Primary Reviewer	CAA
SUPERVISORY/SECONDARY REVIEW	
Check for compliance with method and project specific requirements	X
Check the completeness/accuracy of reported information	X
Data qualifiers	X
Secondary Reviewer	ECL

Primary Reviewer: 02-MAY-2012

Secondary Reviewer: 03-MAY-2012

CHECKLIST1 - Modified 03/05/2008

Generated: MAY-03-2012 14:47:41

Microbac Laboratories Inc.

Data Checklist

Date: 12-MAY-2012
Analyst: CAA
Analyst: NA
Method: 8270
Instrument: HPMS4
Curve Workgroup: NA
Runlog ID: 46726
Analytical Workgroups: L12050134, L12050011, L12050050, L12050099, L12050153

ANALYTICAL	
System Performance Check	X
DFTPP (MS)	X
Endrin/DDT breakdown (8081/MS)	X
Pentachlorophenol/benzidine tailing (MS)	X
Eluent check (IC)/system pressure (HPLC)	NA
Window standard (FID)	NA
Initial Calibration	NA
Average RF	NA
Linear regression or higher order curve	NA
Alternate source standard (ICV) % Difference	NA
Continuing Calibration (CCV)	X
% D/% Drift	X
Minimum response factors (MS)	X
Continuing calibration blank (CCB) (IC)	NA
Special standards	NA
Blanks	X
TCL hits	X
Surrogate recoveries	X
LCS/LCSD (Laboratory Control Sample)	X
Recoveries	X
Surrogate recoveries	X
MS/MSD/Sample duplicates	NA
Recoveries	NA
%RPD	NA
Samples	X
TCL hits	X
Mass spectra (MS/HPLC)/2nd column confirmations (ECD/FID/HPLC)	X
Surrogate recoveries	X
Internal standard areas (MS)	X
Library searches (MS)	X
Calculations & correct factors	X
Compounds above calibration range	NA
Reruns	NA
Manual integrations	X
Project/client specific requirements	X
REPORTING	
Upload batch form	X
KOBRA workgroup data/forms/bench sheets	X
Case narratives	NA
Check for completeness	X
Primary Reviewer	CAA
SUPERVISORY/SECONDARY REVIEW	
Check for compliance with method and project specific requirements	X
Check the completeness/accuracy of reported information	X
Data qualifiers	X
Secondary Reviewer	MDC

Primary Reviewer: 14-MAY-2012

Secondary Reviewer: 14-MAY-2012

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-14-2012 15:19:10

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 8270C

AAB#: WG397604

Login Number: L12050011

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
MW-29-043012	01	04/30/12					05/07/12	6.9	7		05/12/12	5.2	40	
DUP-GW-043012	03	04/30/12					05/07/12	6.9	7		05/12/12	5.2	40	
EB-043012-GW	05	04/30/12					05/07/12	6.9	7		05/12/12	5.2	40	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2413168
Report generated 05/14/2012 15:56

Microbac Laboratories Inc.
SURROGATE STANDARDS

Login Number: L12050011
Instrument Id: HPMS4
Workgroup (AAB#): WG397604

Method: 8270
CAL ID: HPMS4-19-APR-12
Matrix: Water

Sample Number	Dilution	Tag	1	2	3	4	5	6
L12050011-01	1.00	01	126	105	95.9	108	101	102
L12050011-03	1.00	01	124	104	92.0	105	98.3	99.0
L12050011-05	1.00	01	120	110	98.2	110	139	107
WG397140-02	1.00	01	106	91.7	85.3	96.8	125	90.8
WG397140-03	1.00	01	124	106	98.3	106	134	103

Surrogates	Surrogate Limits		
1 - 2,4,6-Tribromophenol	10	-	123
2 - 2-Fluorobiphenyl	43	-	116
3 - 2-Fluorophenol	21	-	100
4 - Nitrobenzene-d5	35	-	114
5 - p-Terphenyl-d14	33	-	141
6 - Phenol-d5	10	-	94

Underline = Result out of surrogate limits

DL = surrogate diluted out
ND = surrogate not detected

SURROGATES - Modified 03/06/2008
PDF File ID: 2413181
Report generated: 05/14/2012 15:57

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12050011
Blank File ID: 4M60821
Prep Date: 05/07/12 11:00
Analyzed Date: 05/12/12 13:42
Analyst: CAA

Work Group: WG397604
Blank Sample ID: WG397140-02
Instrument ID: HPMS4
Method: 8270C

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG397140-03	4M60822	05/12/12 14:17	01
MW-29-043012	L12050011-01	4M60824	05/12/12 15:27	01
DUP-GW-043012	L12050011-03	4M60825	05/12/12 16:01	01
EB-043012-GW	L12050011-05	4M60826	05/12/12 16:36	01

Report Name: BLANK_SUMMARY
PDF File ID: 2413169
Report generated 05/14/2012 15:56

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050011 Prep Date: 05/07/12 11:00 Sample ID: WG397140-02
Instrument ID: HPMS4 Run Date: 05/12/12 13:42 Prep Method: 3520C
File ID: 4M60821 Analyst: CAA Method: 8270C
Workgroup (AAB#): WG397604 Matrix: Water Units: ug/L
Contract #: Cal ID: HPMS4-19-APR-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
1,1'-Biphenyl	2.50	20.0	2.50	1	U
1,3,5-Trinitrobenzene	2.50	5.00	2.50	1	U
1,3-Dinitrobenzene	2.50	5.00	2.50	1	U
1,4-Dioxane	5.00	10.0	5.00	1	U
2,4,5-Trichlorophenol	2.50	5.00	2.50	1	U
2,4,6-Trichlorophenol	2.50	5.00	2.50	1	U
2,4-Dichlorophenol	2.50	5.00	2.50	1	U
2,4-Dimethylphenol	2.50	5.00	2.50	1	U
2,4-Dinitrophenol	12.5	25.0	12.5	1	U
2,4-Dinitrotoluene	2.50	5.00	2.50	1	U
2,6-Dinitrotoluene	2.50	5.00	2.50	1	U
2-Chloronaphthalene	2.50	5.00	2.50	1	U
2-Chlorophenol	2.50	5.00	2.50	1	U
2-Methylnaphthalene	2.50	5.00	2.50	1	U
2-Methylphenol	2.50	5.00	2.50	1	U
2-Nitroaniline	12.5	25.0	12.5	1	U
2-Nitrophenol	2.50	5.00	2.50	1	U
3-Nitroaniline	12.5	25.0	12.5	1	U
3,3'-Dichlorobenzidine	2.50	5.00	2.50	1	U
3-,4-Methylphenol	2.50	5.00	2.50	1	U
4-Bromophenyl-phenylether	2.50	5.00	2.50	1	U
4-Chloroaniline	2.50	5.00	2.50	1	U
4-Nitrophenol	12.5	25.0	12.5	1	U
Acenaphthene	2.50	5.00	2.50	1	U
Acenaphthylene	2.50	5.00	2.50	1	U
Anthracene	2.50	5.00	2.50	1	U
Benzo(a)anthracene	2.50	5.00	2.50	1	U
Benzo(a)pyrene	2.50	5.00	2.50	1	U
Benzo(b)fluoranthene	2.50	5.00	2.50	1	U
Benzo(g,h,i)Perylene	2.50	5.00	2.50	1	U
Benzo(k)fluoranthene	2.50	5.00	2.50	1	U
Benzoic acid	10.0	20.0	10.0	1	U
Benzyl alcohol	2.50	5.00	2.50	1	U
Bis(2-Chloroethyl)ether	2.50	5.00	2.50	1	U
Bis(2-Chloroethoxy)Methane	2.50	5.00	2.50	1	U
bis(2-Ethylhexyl)phthalate	2.50	5.00	2.50	1	U
Butylbenzylphthalate	2.50	5.00	2.50	1	U
Carbazole	2.50	20.0	2.50	1	U
Chrysene	2.50	5.00	2.50	1	U
Di-N-Butylphthalate	2.50	5.00	2.50	1	U
Di-n-octylphthalate	2.50	5.00	2.50	1	U
Dibenzo(a,h)Anthracene	2.50	5.00	2.50	1	U

Report Name: BLANK
PDF ID: 2413170
14-MAY-2012 15:56

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050011 Prep Date: 05/07/12 11:00 Sample ID: WG397140-02
Instrument ID: HPMS4 Run Date: 05/12/12 13:42 Prep Method: 3520C
File ID: 4M60821 Analyst: CAA Method: 8270C
Workgroup (AAB#): WG397604 Matrix: Water Units: ug/L
Contract #: Cal ID: HPMS4-19-APR-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Dibenzofuran	2.50	5.00	2.50	1	U
Diethylphthalate	2.50	5.00	2.50	1	U
Dimethylphthalate	2.50	5.00	2.50	1	U
Fluoranthene	2.50	5.00	2.50	1	U
Fluorene	2.50	5.00	2.50	1	U
Hexachlorobenzene	2.50	5.00	2.50	1	U
Hexachlorobutadiene	2.50	5.00	2.50	1	U
Hexachlorocyclopentadiene	2.50	5.00	2.50	1	U
Hexachloroethane	2.50	5.00	2.50	1	U
Indeno(1,2,3-cd)pyrene	2.50	5.00	2.50	1	U
Isophorone	2.50	5.00	2.50	1	U
N-Nitrosodiphenylamine	2.50	5.00	2.50	1	U
Naphthalene	2.50	5.00	2.50	1	U
Nitrobenzene	2.50	5.00	2.50	1	U
Pentachlorophenol	12.5	25.0	12.5	1	U
Phenanthrene	2.50	5.00	2.50	1	U
Phenol	2.50	5.00	2.50	1	U
Pyrene	2.50	5.00	2.50	1	U

Surrogates	% Recovery	Surrogate Limits	Qualifier
2,4,6-Tribromophenol	106	10 - 123	PASS
2-Fluorobiphenyl	91.7	43 - 116	PASS
2-Fluorophenol	85.3	21 - 100	PASS
Nitrobenzene-d5	96.8	35 - 114	PASS
p-Terphenyl-d14	125	33 - 141	PASS
Phenol-d5	90.8	10 - 94	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: 2413170
14-MAY-2012 15:56

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050011 Run Date: 05/12/2012 Sample ID: WG397140-03
Instrument ID: HPMS4 Run Time: 14:17 Prep Method: 3520C
File ID: 4M60822 Analyst: CAA Method: 8270C
Workgroup (AAB#): WG397604 Matrix: Water Units: ug/L
QC Key: WATERLOO Lot#: STD51286 Cal ID: HPMS4-19-APR-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
1,1'-Biphenyl	50.0	46.9	93.8	40 - 140	
1,3,5-Trinitrobenzene	50.0	67.9	136	10 - 120	*
1,3-Dinitrobenzene	50.0	59.7	119	30 - 130	
1,4-Dioxane	50.0	37.4	74.8	50 - 150	
2,4,5-Trichlorophenol	50.0	61.3	123	35 - 120	*
2,4,6-Trichlorophenol	50.0	57.4	115	30 - 120	
2,4-Dichlorophenol	50.0	52.9	106	20 - 110	
2,4-Dimethylphenol	50.0	50.5	101	20 - 120	
2,4-Dinitrophenol	50.0	57.1	114	20 - 140	
2,4-Dinitrotoluene	50.0	65.3	131	50 - 139	
2,6-Dinitrotoluene	50.0	61.5	123	50 - 120	*
2-Chloronaphthalene	50.0	61.9	124	25 - 120	*
2-Chlorophenol	50.0	48.2	96.4	25 - 110	
2-Methylnaphthalene	50.0	50.3	101	25 - 120	
2-Methylphenol	50.0	49.3	98.5	20 - 110	
2-Nitroaniline	50.0	58.2	116	45 - 115	*
2-Nitrophenol	50.0	50.3	101	20 - 115	
3-Nitroaniline	50.0	84.7	169	40 - 120	*
3,3'-Dichlorobenzidine	50.0	89.3	179	30 - 140	*
3-,4-Methylphenol	50.0	56.7	113	20 - 110	*
4-Bromophenyl-phenylether	50.0	62.6	125	40 - 115	*
4-Chloroaniline	50.0	55.2	110	25 - 120	
4-Nitrophenol	50.0	57.5	115	10 - 132	
Acenaphthene	50.0	54.4	109	30 - 120	
Acenaphthylene	50.0	57.7	115	30 - 120	
Anthracene	50.0	56.0	112	55 - 130	
Benzo(a)anthracene	50.0	61.5	123	60 - 130	
Benzo(a)pyrene	50.0	65.1	130	55 - 135	
Benzo(b)fluoranthene	50.0	68.3	137	45 - 125	*
Benzo(g,h,i)Perylene	50.0	66.2	132	45 - 140	
Benzo(k)fluoranthene	50.0	63.3	127	55 - 140	
Benzoic acid	50.0		0	10 - 100	*
Benzyl alcohol	50.0	51.0	102	20 - 110	
Bis(2-Chloroethyl)ether	50.0	48.4	96.8	25 - 110	
Bis(2-Chloroethoxy)Methane	50.0	58.0	116	20 - 105	*
bis(2-Ethylhexyl)phthalate	50.0	68.0	136	50 - 150	
Butylbenzylphthalate	50.0	70.1	140	55 - 150	
Carbazole	50.0	63.0	126	50 - 130	
Chrysene	50.0	63.5	127	55 - 130	
Di-N-Butylphthalate	50.0	64.7	129	55 - 118	*
Di-n-octylphthalate	50.0	71.4	143	40 - 146	

LCS - Modified 03/06/2008
PDF File ID: 2413171
Report generated: 05/14/2012 15:56

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050011 Run Date: 05/12/2012 Sample ID: WG397140-03
Instrument ID: HPMS4 Run Time: 14:17 Prep Method: 3520C
File ID: 4M60822 Analyst: CAA Method: 8270C
Workgroup (AAB#): WG397604 Matrix: Water Units: ug/L
QC Key: WATERLOO Lot#: STD51286 Cal ID: HPMS4-19-APR-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Dibenzo(a,h)Anthracene	50.0	68.0	136	45 - 125	*
Dibenzofuran	50.0	57.5	115	35 - 115	
Diethylphthalate	50.0	64.8	130	45 - 120	*
Dimethylphthalate	50.0	63.1	126	25 - 112	*
Fluoranthene	50.0	61.7	123	50 - 137	
Fluorene	50.0	58.2	116	40 - 120	
Hexachlorobenzene	50.0	61.6	123	50 - 130	
Hexachlorobutadiene	50.0	41.5	82.9	24 - 105	
Hexachlorocyclopentadiene	50.0	30.3	60.6	20 - 143	
Hexachloroethane	50.0	30.0	60.0	25 - 95	
Indeno(1,2,3-cd)pyrene	50.0	67.6	135	50 - 135	
Isophorone	50.0	53.9	108	30 - 110	
N-Nitrosodiphenylamine	100	105	105	40 - 110	
Naphthalene	50.0	48.5	97.1	25 - 110	
Nitrobenzene	50.0	54.3	109	30 - 110	
Pentachlorophenol	50.0	61.6	123	40 - 140	
Phenanthrene	50.0	61.7	123	55 - 120	*
Phenol	50.0	49.6	99.3	10 - 120	
Pyrene	50.0	63.6	127	55 - 130	

Surrogates	% Recovery	Surrogate Limits	Qualifier
2,4,6-Tribromophenol	124	10 - 123	FAIL
2-Fluorobiphenyl	106	43 - 116	PASS
2-Fluorophenol	98.3	21 - 100	PASS
Nitrobenzene-d5	106	35 - 114	PASS
p-Terphenyl-d14	134	33 - 141	PASS
Phenol-d5	103	10 - 94	FAIL

* EXCEEDS %REC LIMIT

LCS - Modified 03/06/2008
PDF File ID: 2413171
Report generated: 05/14/2012 15:56

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

DFTPP

Login Number: L12050011
Instrument: HPMS4
Analyst: CAA
Workgroup: WG395394

Tune ID: WG395394-01
Run Date: 04/19/2012
Run Time: 08:26
File ID: 4M60437
Cal ID: HPMS4 - 19-APR-12

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51.0	198	30.0	60.0	40.7	46389	PASS
68.0	69.0	0	2.00	0.659	296	PASS
69.0	198	0	100	39.4	44901	PASS
70.0	69.0	0	2.00	0	0	PASS
127	198	40.0	60.0	49.8	56768	PASS
197	198	0	1.00	0	0	PASS
198	198	100	100	100	114077	PASS
199	198	5.00	9.00	6.83	7794	PASS
275	198	10.0	30.0	24.0	27400	PASS
365	198	1.00	100	2.91	3319	PASS
441	443	0.0100	100	76.9	16803	PASS
442	198	40.0	100	98.8	112693	PASS
443	442	17.0	23.0	19.4	21851	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG395394-02	STD-CCV	01	04/19/2012 09:22	
WG395394-03	STD	01	04/19/2012 09:56	
WG395394-04	STD	01	04/19/2012 10:30	
WG395394-05	STD	01	04/19/2012 11:05	
WG395394-06	STD	01	04/19/2012 11:40	
WG395394-07	STD	01	04/19/2012 12:14	
WG395394-08	STD	01	04/19/2012 12:48	
WG395394-09	STD	01	04/19/2012 13:23	
WG395394-10	SSCV	01	04/19/2012 13:58	
WG395394-11	SSCV	01	04/19/2012 14:33	

* Sample past 12 hour tune limit

TUNE - Modified 03/06/2008
PDF File ID: 2413178
Report generated 05/14/2012 15:57

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

DFTPP

Login Number: L12050011
Instrument: HPMS4
Analyst: CAA
Workgroup: WG396671

Tune ID: WG396671-01
Run Date: 05/01/2012
Run Time: 13:11
File ID: 4M60600
Cal ID: HPMS4 - 19-APR-12

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51.0	198	30.0	60.0	36.0	62456	PASS
68.0	69.0	0	2.00	0	0	PASS
69.0	198	0	100	39.0	67664	PASS
70.0	69.0	0	2.00	0	0	PASS
127	198	40.0	60.0	50.1	86805	PASS
197	198	0	1.00	0	0	PASS
198	198	100	100	100	173418	PASS
199	198	5.00	9.00	6.70	11620	PASS
275	198	10.0	30.0	24.6	42746	PASS
365	198	1.00	100	2.76	4791	PASS
441	443	0.0100	100	80.8	27090	PASS
442	198	40.0	100	97.5	169160	PASS
443	442	17.0	23.0	19.8	33546	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG396709-01	STD-CCV	01	05/01/2012 14:05	
WG396709-02	STD	01	05/01/2012 14:39	
WG396709-03	STD	01	05/01/2012 15:13	
WG396709-04	STD	01	05/01/2012 15:47	
WG396709-05	STD	01	05/01/2012 16:22	
WG396709-06	STD	01	05/01/2012 16:57	
WG396709-07	SSCV	01	05/01/2012 17:31	

* Sample past 12 hour tune limit

TUNE - Modified 03/06/2008
PDF File ID: 2413178
Report generated 05/14/2012 15:57

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

DFTPP

Login Number: L12050011
Instrument: HPMS4
Analyst: CAA
Workgroup: WG397824

Tune ID: WG397824-01
Run Date: 05/12/2012
Run Time: 11:02
File ID: 4M60816
Cal ID: HPMS4 - 19-APR-12

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51.0	198	30.0	60.0	35.7	89354	PASS
68.0	69.0	0	2.00	0	0	PASS
69.0	198	0	100	37.7	94325	PASS
70.0	69.0	0	2.00	0.389	367	PASS
127	198	40.0	60.0	50.3	125853	PASS
197	198	0	1.00	0	0	PASS
198	198	100	100	100	249962	PASS
199	198	5.00	9.00	6.83	17080	PASS
275	198	10.0	30.0	24.1	60320	PASS
365	198	1.00	100	2.87	7186	PASS
441	443	0.0100	100	81.4	40104	PASS
442	198	40.0	100	98.9	247146	PASS
443	442	17.0	23.0	19.9	49288	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG397824-02	CCV	01	05/12/2012 11:22	
WG397825-01	CCV	01	05/12/2012 11:57	
WG397140-02	BLANK	01	05/12/2012 13:42	
WG397140-02	BLANK	01	05/12/2012 13:42	
WG397140-03	LCS	01	05/12/2012 14:17	
L12050011-01	MW-29-043012	01	05/12/2012 15:27	
L12050011-03	DUP-GW-043012	01	05/12/2012 16:01	
L12050011-05	EB-043012-GW	01	05/12/2012 16:36	

* Sample past 12 hour tune limit

TUNE - Modified 03/06/2008
PDF File ID: 2413178
Report generated 05/14/2012 15:57

Microbac Laboratories Inc.
INITIAL CALIBRATION SUMMARY

Login Number: L12050011
Analytical Method: 8270C
ICAL Workgroup: WG395394

Instrument ID: HPMS4
Initial Calibration Date: 19-APR-12 13:23
Column ID: F

Analyte		AVG RF	% RSD	LINEAR (R)	QUAD (R^2)
2,4,6-Trichlorophenol	CCC	0.3673	2.63		
2,4-Dichlorophenol	CCC	0.2857	5.98		
2-Nitrophenol	CCC	0.1988	2.83		
Acenaphthene	CCC	1.181	8.52		
Benzo[a]pyrene	CCC	1.055	1.74		
Di-n-Octyl Phthalate	CCC	1.292	1.30		
Fluoranthene	CCC	1.112	8.91		
Hexachlorobutadiene	CCC	0.1661	7.56		
Pentachlorophenol	CCC	0.1399	1.49		
Phenol	CCC	1.516	6.15		
2,4-Dinitrophenol	SPCC	0.1506	18.0	1.00000	
4-Nitrophenol	SPCC	0.2330	9.39		
Hexachlorocyclopentadiene	SPCC	0.2711	6.05		
n-Nitrosodipropylamine	SPCC	0.8546	11.1		
1,3-Dinitrobenzene		0.2427	2.31		
1,4-Dioxane		0.4985	3.57		
2,4,5-Trichlorophenol		0.3781	2.62		
2,4-Dimethylphenol		0.3413	13.6		
2,4-Dinitrotoluene		0.4023	3.16		
2,6-Dinitrotoluene		0.3161	2.33		
2-Chloronaphthalene		1.129	5.90		
2-Chlorophenol		1.357	4.28		
2-Methylnaphthalene		0.6882	8.15		
2-Methylphenol		1.045	5.05		
2-Nitroaniline		0.3238	2.12		
3,3'-Dichlorobenzidine		0.2427	18.9	0.99900	
3-Nitroaniline		0.2332	11.0		
4-Bromophenyl Phenyl Ether		0.2024	6.28		
4-Chloroaniline		0.3902	10.4		
Acenaphthylene		1.814	9.50		
Anthracene		1.088	8.21		
Benzo[a]anthracene		1.061	6.56		
Benzo[b]fluoranthene		1.157	4.65		
Benzo[ghi]perylene		0.9723	2.25		
Benzo[k]fluoranthene		1.072	4.72		
Benzoic Acid		0.2352	10.4		
Benzyl Alcohol		0.8788	2.67		
Butyl Benzyl Phthalate		0.5442	5.54		
Carbazole		0.9526	5.16		
Chrysene		0.9961	8.13		
Di-n-Butyl Phthalate		1.183	7.95		
Dibenz[ah]anthracene		0.9802	1.55		
Dibenzofuran		1.582	8.47		
Diethylphthalate		1.260	6.91		
Dimethylphthalate		1.266	7.30		

INT_CAL - Modified 03/06/2008
PDF File ID: 2413173
Report generated 05/14/2012 15:56

Microbac Laboratories Inc.
INITIAL CALIBRATION SUMMARY

Login Number: L12050011
Analytical Method: 8270C
ICAL Workgroup: WG395394

Instrument ID: HPMS4
Initial Calibration Date: 19-APR-12 13:23
Column ID: F

Analyte		AVG RF	% RSD	LINEAR (R)	QUAD (R^2)
Fluorene		1.344	8.89		
Hexachlorobenzene		0.2212	7.78		
Hexachloroethane		0.5705	3.33		
Indeno[1,2,3-cd]pyrene		1.175	1.51		
Isophorone		0.6155	6.91		
Naphthalene		1.059	9.10		
Nitrobenzene		0.3372	5.94		
Phenanthrene		1.061	9.08		
Pyrene		1.196	7.44		
Sym-Trinitrobenzene		0.1582	11.2		
bis(2-Chloroethoxy)methane		0.4677	9.37		
bis(2-Chloroethyl)ether		0.9490	7.24		
bis(2-Ethylhexyl)phthalate		0.7426	4.79		

R = Correlation coefficient; 0.995 minimum
R^2 = Coefficient of determination; 0.99 minimum

If the %RSD is greater than the limit specified by the method or project QAP, then linear or quadratic equations will be used.

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Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L12050011
Analytical Method: 8270C
ICAL Workgroup: WG396709

Instrument ID: HPMS4
Initial Calibration Date: 01-MAY-12 16:57
Column ID: F

Analyte		AVG RF	% RSD	LINEAR (R)	QUAD (R^2)
1,1'-Biphenyl		1.642	6.66		

R = Correlation coefficient; 0.995 minimum
R^2 = Coefficient of determination; 0.99 minimum

If the %RSD is greater than the limit specified by the method or project QAP, then linear or quadratic equations will be used.

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Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L12050011
Analytical Method: 8270C

Instrument ID: HPMS4
Initial Calibration Date: 19-APR-12 13:23
Column ID: F

Analyte	WG395394-02			WG395394-03			WG395394-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
2,4,6-Trichlorophenol	50.0	302655.000	0.3692	3.00	15865.0000	0.3732	10.0	48642.0000	0.3812
2,4-Dichlorophenol	50.0	406146.000	0.2843	3.00	23297.0000	0.3097	10.0	68171.0000	0.3052
2-Nitrophenol	50.0	296019.000	0.2072	3.00	14686.0000	0.1953	10.0	44266.0000	0.1982
Acenaphthene	50.0	959014.000	1.170	3.00	54687.0000	1.286	10.0	164631.000	1.290
Benzo[a]pyrene	50.0	1420992.00	1.050	3.00	76197.0000	1.089	10.0	230518.000	1.068
Di-n-Octyl Phthalate	50.0	1737436.00	1.283	3.00	92158.0000	1.317	10.0	278406.000	1.290
Fluoranthene	50.0	1596911.00	1.089	3.00	93933.0000	1.257	10.0	276101.000	1.217
Hexachlorobutadiene	50.0	236674.000	0.1657	3.00	13857.0000	0.1842	10.0	39698.0000	0.1777
Pentachlorophenol	50.0	206843.000	0.1411	NA	NA	NA	10.0	31968.0000	0.1409
Phenol	50.0	548117.000	1.480	3.00	33658.0000	1.678	10.0	94119.0000	1.582
2,4-Dinitrophenol	50.0	130897.000	0.1597	NA	NA	NA	NA	NA	NA
4-Nitrophenol	50.0	186191.000	0.2271	NA	NA	NA	10.0	32506.0000	0.2547
Hexachlorocyclopentadiene	50.0	244269.000	0.2980	3.00	10305.0000	0.2424	10.0	34278.0000	0.2686
n-Nitrosodipropylamine	50.0	311009.000	0.8398	3.00	19190.0000	0.9568	10.0	56111.0000	0.9434
1,3-Dinitrobenzene	50.0	201353.000	0.2456	3.00	9788.00000	0.2302	10.0	31289.0000	0.2452
1,4-Dioxane	50.0	185033.000	0.4996	3.00	9565.00000	0.4769	10.0	31667.0000	0.5324
2,4,5-Trichlorophenol	50.0	308844.000	0.3768	3.00	16640.0000	0.3914	10.0	49310.0000	0.3864
2,4-Dimethylphenol	50.0	463322.000	0.3243	3.00	33490.0000	0.4453	10.0	81553.0000	0.3651
2,4-Dinitrotoluene	50.0	332745.000	0.4059	3.00	17015.0000	0.4002	10.0	53272.0000	0.4175
2,6-Dinitrotoluene	50.0	256989.000	0.3135	3.00	13905.0000	0.3271	10.0	41342.0000	0.3240
2-Chloronaphthalene	50.0	906729.000	1.106	3.00	52303.0000	1.230	10.0	153572.000	1.204
2-Chlorophenol	50.0	497875.000	1.344	3.00	29118.0000	1.452	10.0	83952.0000	1.412
2-Methylnaphthalene	50.0	967916.000	0.6775	3.00	57527.0000	0.7649	10.0	167733.000	0.7510
2-Methylphenol	50.0	380206.000	1.027	3.00	22411.0000	1.117	10.0	64478.0000	1.084
2-Nitroaniline	50.0	261334.000	0.3188	3.00	13815.0000	0.3250	10.0	42993.0000	0.3369
3,3'-Dichlorobenzidine	50.0	322552.000	0.2327	3.00	25330.0000	0.3536	10.0	53915.0000	0.2449
3-Nitroaniline	50.0	174456.000	0.2128	NA	NA	NA	10.0	29679.0000	0.2326
4-Bromophenyl Phenyl Ether	50.0	293263.000	0.2000	3.00	16506.0000	0.2208	10.0	49608.0000	0.2187
4-Chloroaniline	50.0	522329.000	0.3656	3.00	34347.0000	0.4567	10.0	88805.0000	0.3976
Acenaphthylene	50.0	1459231.00	1.780	3.00	86364.0000	2.031	10.0	253419.000	1.986
Anthracene	50.0	1564112.00	1.067	3.00	91274.0000	1.221	10.0	268336.000	1.183
Benzo[a]anthracene	50.0	1436678.00	1.036	3.00	83823.0000	1.170	10.0	248867.000	1.130
Benzo[b]fluoranthene	50.0	1510511.00	1.116	3.00	87582.0000	1.251	10.0	261129.000	1.210
Benzo[ghi]perylene	50.0	1336874.00	0.9874	3.00	70328.0000	1.005	10.0	213268.000	0.9878
Benzo[k]fluoranthene	50.0	1477424.00	1.091	3.00	80556.0000	1.151	10.0	242271.000	1.122
Benzoic Acid	50.0	336174.000	0.2353	NA	NA	NA	NA	NA	NA
Benzyl Alcohol	50.0	323130.000	0.8725	3.00	18359.0000	0.9154	10.0	52708.0000	0.8862
Butyl Benzyl Phthalate	50.0	736908.000	0.5316	3.00	42313.0000	0.5907	10.0	126613.000	0.5751
Carbazole	50.0	1383835.00	0.9437	3.00	80012.0000	1.071	10.0	214134.000	0.9439
Chrysene	50.0	1327816.00	0.9578	3.00	81007.0000	1.131	10.0	234491.000	1.065
Di-n-Butyl Phthalate	50.0	1699050.00	1.159	3.00	98435.0000	1.317	10.0	291024.000	1.283
Dibenz[ah]anthracene	50.0	1352159.00	0.9987	3.00	67905.0000	0.9703	10.0	213369.000	0.9883

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Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L12050011

Analytical Method: 8270C

Instrument ID: HPMS4

Initial Calibration Date: 19-APR-12 13:23

Column ID: F

Analyte	WG395394-02			WG395394-03			WG395394-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Dibenzofuran	50.0	1276287.00	1.557	3.00	75169.0000	1.768	10.0	219802.000	1.723
Diethylphthalate	50.0	1020028.00	1.244	3.00	58814.0000	1.383	10.0	172211.000	1.350
Dimethylphthalate	50.0	1022202.00	1.247	3.00	59595.0000	1.402	10.0	173033.000	1.356
Fluorene	50.0	1088180.00	1.328	3.00	64601.0000	1.520	10.0	186598.000	1.462
Hexachlorobenzene	50.0	321319.000	0.2191	3.00	18694.0000	0.2501	10.0	54193.0000	0.2389
Hexachloroethane	50.0	207953.000	0.5615	3.00	11768.0000	0.5867	10.0	35410.0000	0.5953
Indeno[1,2,3-cd]pyrene	50.0	1616295.00	1.194	3.00	82885.0000	1.184	10.0	254952.000	1.181
Isophorone	50.0	857268.000	0.6000	3.00	51229.0000	0.6811	10.0	147532.000	0.6606
Naphthalene	50.0	1478551.00	1.035	3.00	89968.0000	1.196	10.0	258782.000	1.159
Nitrobenzene	50.0	471369.000	0.3299	3.00	28033.0000	0.3727	10.0	78736.0000	0.3525
Phenanthrene	50.0	1519697.00	1.036	3.00	90590.0000	1.212	10.0	263680.000	1.162
Pyrene	50.0	1618198.00	1.167	3.00	96680.0000	1.350	10.0	278837.000	1.267
Sym-Trinitrobenzene	50.0	245626.000	0.1675	3.00	9014.00000	0.1206	10.0	33591.0000	0.1481
bis(2-Chloroethoxy)methane	50.0	654041.000	0.4578	3.00	39621.0000	0.5268	10.0	115030.000	0.5150
bis(2-Chloroethyl)ether	50.0	334727.000	0.9039	3.00	21246.0000	1.059	10.0	60185.0000	1.012
bis(2-Ethylhexyl)phthalate	50.0	1020072.00	0.7358	3.00	56427.0000	0.7877	10.0	171936.000	0.7810

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Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L12050011
Analytical Method: 8270C

Instrument ID: HPMS4
Initial Calibration Date: 19-APR-12 13:23
Column ID: F

Analyte	WG395394-05			WG395394-06			WG395394-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
2,4,6-Trichlorophenol	15.0	77554.0000	0.3761	25.0	124477.000	0.3645	80.0	439102.000	0.3649
2,4-Dichlorophenol	15.0	106895.000	0.2950	25.0	170393.000	0.2845	80.0	591204.000	0.2792
2-Nitrophenol	15.0	73595.0000	0.2031	25.0	120323.000	0.2009	80.0	428368.000	0.2023
Acenaphthene	15.0	263554.000	1.278	25.0	408883.000	1.197	80.0	1355981.00	1.127
Benzo[a]pyrene	15.0	370228.000	1.061	25.0	586115.000	1.029	80.0	2027472.00	1.059
Di-n-Octyl Phthalate	15.0	449194.000	1.288	25.0	719604.000	1.263	80.0	2511032.00	1.312
Fluoranthene	15.0	437692.000	1.180	25.0	683155.000	1.108	80.0	2265098.00	1.057
Hexachlorobutadiene	15.0	63330.0000	0.1748	25.0	100093.000	0.1671	80.0	335869.000	0.1586
Pentachlorophenol	15.0	53277.0000	0.1436	25.0	85623.0000	0.1389	80.0	297153.000	0.1387
Phenol	15.0	149867.000	1.583	25.0	235368.000	1.495	80.0	801301.000	1.483
2,4-Dinitrophenol	15.0	22655.0000	0.1099	25.0	42104.0000	0.1233	80.0	201666.000	0.1676
4-Nitrophenol	15.0	53528.0000	0.2596	25.0	85342.0000	0.2499	80.0	267741.000	0.2225
Hexachlorocyclopentadiene	15.0	57593.0000	0.2793	25.0	93776.0000	0.2746	80.0	336327.000	0.2795
n-Nitrosodipropylamine	15.0	89924.0000	0.9501	25.0	138764.000	0.8815	80.0	435156.000	0.8054
1,3-Dinitrobenzene	15.0	49953.0000	0.2423	25.0	82367.0000	0.2412	80.0	300061.000	0.2493
1,4-Dioxane	15.0	48051.0000	0.5077	25.0	77889.0000	0.4948	80.0	257642.000	0.4768
2,4,5-Trichlorophenol	15.0	80341.0000	0.3896	25.0	126653.000	0.3709	80.0	450522.000	0.3744
2,4-Dimethylphenol	15.0	122457.000	0.3379	25.0	197889.000	0.3304	80.0	674316.000	0.3184
2,4-Dinitrotoluene	15.0	86594.0000	0.4200	25.0	136727.000	0.4004	80.0	484503.000	0.4026
2,6-Dinitrotoluene	15.0	66191.0000	0.3210	25.0	106277.000	0.3112	80.0	380371.000	0.3161
2-Chloronaphthalene	15.0	241377.000	1.171	25.0	384238.000	1.125	80.0	1316383.00	1.094
2-Chlorophenol	15.0	131982.000	1.394	25.0	209656.000	1.332	80.0	725693.000	1.343
2-Methylnaphthalene	15.0	262619.000	0.7247	25.0	413423.000	0.6902	80.0	1399298.00	0.6608
2-Methylphenol	15.0	103944.000	1.098	25.0	163750.000	1.040	80.0	561625.000	1.039
2-Nitroaniline	15.0	67899.0000	0.3293	25.0	110145.000	0.3226	80.0	389293.000	0.3235
3,3'-Dichlorobenzidine	15.0	83197.0000	0.2350	25.0	128645.000	0.2212	80.0	433623.000	0.2166
3-Nitroaniline	15.0	44675.0000	0.2167	25.0	69340.0000	0.2031	80.0	283165.000	0.2353
4-Bromophenyl Phenyl Ether	15.0	77958.0000	0.2101	25.0	122053.000	0.1980	80.0	414109.000	0.1933
4-Chloroaniline	15.0	129166.000	0.3565	25.0	194712.000	0.3251	80.0	840914.000	0.3971
Acenaphthylene	15.0	404588.000	1.962	25.0	629983.000	1.845	80.0	2059422.00	1.711
Anthracene	15.0	425502.000	1.147	25.0	667031.000	1.082	80.0	2228606.00	1.040
Benzo[a]anthracene	15.0	392679.000	1.109	25.0	614266.000	1.056	80.0	2052367.00	1.025
Benzo[b]fluoranthene	15.0	406702.000	1.166	25.0	655699.000	1.151	80.0	2178762.00	1.138
Benzo[ghi]perylene	15.0	337233.000	0.9668	25.0	544579.000	0.9557	80.0	1882226.00	0.9835
Benzo[k]fluoranthene	15.0	363539.000	1.042	25.0	603465.000	1.059	80.0	2073723.00	1.084
Benzoic Acid	15.0	73064.0000	0.2016	25.0	127036.000	0.2121	80.0	518434.000	0.2448
Benzyl Alcohol	15.0	85215.0000	0.9003	25.0	135966.000	0.8638	80.0	480683.000	0.8896
Butyl Benzyl Phthalate	15.0	199823.000	0.5644	25.0	316262.000	0.5438	80.0	1058648.00	0.5288
Carbazole	15.0	352808.000	0.9510	25.0	569024.000	0.9231	80.0	2025195.00	0.9454
Chrysene	15.0	373919.000	1.056	25.0	577331.000	0.9926	80.0	1906476.00	0.9524
Di-n-Butyl Phthalate	15.0	464423.000	1.252	25.0	730780.000	1.186	80.0	2430902.00	1.135
Dibenz[ah]anthracene	15.0	340635.000	0.9766	25.0	543273.000	0.9534	80.0	1911785.00	0.9989

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Analytical Method: 8270C

Instrument ID: HPMS4

Initial Calibration Date: 19-APR-12 13:23

Column ID: F

Analyte	WG395394-05			WG395394-06			WG395394-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Dibenzofuran	15.0	345492.000	1.676	25.0	542792.000	1.590	80.0	1809858.00	1.504
Diethylphthalate	15.0	273892.000	1.328	25.0	427533.000	1.252	80.0	1465764.00	1.218
Dimethylphthalate	15.0	275007.000	1.334	25.0	432481.000	1.267	80.0	1452767.00	1.207
Fluorene	15.0	294134.000	1.427	25.0	461256.000	1.351	80.0	1524152.00	1.267
Hexachlorobenzene	15.0	85076.0000	0.2293	25.0	133370.000	0.2164	80.0	454706.000	0.2123
Hexachloroethane	15.0	55844.0000	0.5900	25.0	87874.0000	0.5582	80.0	310495.000	0.5746
Indeno[1,2,3-cd]pyrene	15.0	406105.000	1.164	25.0	649328.000	1.140	80.0	2284765.00	1.194
Isophorone	15.0	231590.000	0.6391	25.0	370301.000	0.6182	80.0	1254518.00	0.5924
Naphthalene	15.0	408896.000	1.128	25.0	637382.000	1.064	80.0	2143165.00	1.012
Nitrobenzene	15.0	126438.000	0.3489	25.0	200659.000	0.3350	80.0	698206.000	0.3297
Phenanthrene	15.0	414064.000	1.116	25.0	651360.000	1.057	80.0	2157063.00	1.007
Pyrene	15.0	443567.000	1.253	25.0	695786.000	1.196	80.0	2297635.00	1.148
Sym-Trinitrobenzene	15.0	57944.0000	0.1562	25.0	97026.0000	0.1574	80.0	374190.000	0.1747
bis(2-Chloroethoxy)methane	15.0	180101.000	0.4970	25.0	285147.000	0.4760	80.0	937865.000	0.4429
bis(2-Chloroethyl)ether	15.0	94566.0000	0.9991	25.0	149268.000	0.9483	80.0	497418.000	0.9206
bis(2-Ethylhexyl)phthalate	15.0	273457.000	0.7724	25.0	431927.000	0.7426	80.0	1454801.00	0.7267

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INITIAL CALIBRATION DATA

Login Number: L12050011

Analytical Method: 8270C

Instrument ID: HPMS4

Initial Calibration Date: 19-APR-12 13:23

Column ID: F

Analyte	WG395394-08			WG395394-09		
	CONC	RESP	RF	CONC	RESP	RF
2,4,6-Trichlorophenol	100	535987.000	0.3570	120	669686.000	0.3523
2,4-Dichlorophenol	100	715757.000	0.2655	120	900159.000	0.2624
2-Nitrophenol	100	514984.000	0.1910	120	659346.000	0.1922
Acenaphthene	100	1612771.00	1.074	120	1951899.00	1.027
Benzo[a]pyrene	100	2422076.00	1.044	120	2982535.00	1.043
Di-n-Octyl Phthalate	100	3002395.00	1.294	120	3682000.00	1.288
Fluoranthene	100	2684844.00	1.005	120	3249661.00	0.9809
Hexachlorobutadiene	100	411451.000	0.1526	120	507887.000	0.1481
Pentachlorophenol	100	367513.000	0.1376	120	458736.000	0.1385
Phenol	100	991961.000	1.432	120	1231425.00	1.391
2,4-Dinitrophenol	100	256771.000	0.1710	120	327279.000	0.1722
4-Nitrophenol	100	320939.000	0.2137	120	386132.000	0.2032
Hexachlorocyclopentadiene	100	403426.000	0.2687	120	490221.000	0.2579
n-Nitrosodipropylamine	100	522498.000	0.7543	120	624493.000	0.7052
1,3-Dinitrobenzene	100	365872.000	0.2437	120	463456.000	0.2438
1,4-Dioxane	100	348759.000	0.5035	120	439725.000	0.4965
2,4,5-Trichlorophenol	100	556900.000	0.3709	120	692553.000	0.3644
2,4-Dimethylphenol	100	831386.000	0.3084	120	1031288.00	0.3007
2,4-Dinitrotoluene	100	583421.000	0.3886	120	727634.000	0.3828
2,6-Dinitrotoluene	100	466415.000	0.3106	120	580776.000	0.3056
2-Chloronaphthalene	100	1597789.00	1.064	120	1980928.00	1.042
2-Chlorophenol	100	903123.000	1.304	120	1130760.00	1.277
2-Methylnaphthalene	100	1696852.00	0.6294	120	2083523.00	0.6074
2-Methylphenol	100	686225.000	0.9906	120	853772.000	0.9640
2-Nitroaniline	100	478820.000	0.3189	120	598982.000	0.3151
3,3'-Dichlorobenzidine	100	535244.000	0.2164	120	679065.000	0.2212
3-Nitroaniline	100	384870.000	0.2563	120	523691.000	0.2755
4-Bromophenyl Phenyl Ether	100	505367.000	0.1892	120	625697.000	0.1889
4-Chloroaniline	100	1131551.00	0.4197	120	1382212.00	0.4030
Acenaphthylene	100	2438377.00	1.624	120	2981097.00	1.568
Anthracene	100	2652184.00	0.9930	120	3213859.00	0.9701
Benzo[a]anthracene	100	2445804.00	0.9887	120	2986908.00	0.9731
Benzo[b]fluoranthene	100	2654859.00	1.144	120	3081081.00	1.078
Benzo[ghi]perylene	100	2198670.00	0.9474	120	2700031.00	0.9446
Benzo[k]fluoranthene	100	2404348.00	1.036	120	2836726.00	0.9924
Benzoic Acid	100	675656.000	0.2506	120	915551.000	0.2669
Benzyl Alcohol	100	594299.000	0.8579	120	747792.000	0.8444
Butyl Benzyl Phthalate	100	1272202.00	0.5143	120	1549387.00	0.5048
Carbazole	100	2461069.00	0.9215	120	3053064.00	0.9215
Chrysene	100	2259995.00	0.9136	120	2763239.00	0.9003
Di-n-Butyl Phthalate	100	2883140.00	1.080	120	3504116.00	1.058
Dibenz[ah]anthracene	100	2261465.00	0.9745	120	2804015.00	0.9810

INT_CAL - Modified 03/06/2008
PDF File ID: 2413173
Report generated 05/14/2012 15:56

Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L12050011

Analytical Method: 8270C

Instrument ID: HPMS4

Initial Calibration Date: 19-APR-12 13:23

Column ID: F

Analyte	WG395394-08			WG395394-09		
	CONC	RESP	RF	CONC	RESP	RF
Dibenzofuran	100	2178444.00	1.451	120	2633898.00	1.386
Diethylphthalate	100	1756256.00	1.170	120	2162475.00	1.138
Dimethylphthalate	100	1760527.00	1.173	120	2165968.00	1.140
Fluorene	100	1832624.00	1.221	120	2243623.00	1.180
Hexachlorobenzene	100	543444.000	0.2035	120	663561.000	0.2003
Hexachloroethane	100	384708.000	0.5553	120	480318.000	0.5424
Indeno[1,2,3-cd]pyrene	100	2721409.00	1.173	120	3353339.00	1.173
Isophorone	100	1546209.00	0.5735	120	1916721.00	0.5588
Naphthalene	100	2577401.00	0.9560	120	3171066.00	0.9245
Nitrobenzene	100	854248.000	0.3168	120	1069745.00	0.3119
Phenanthrene	100	2552198.00	0.9556	120	3120483.00	0.9419
Pyrene	100	2734557.00	1.105	120	3331157.00	1.085
Sym-Trinitrobenzene	100	450708.000	0.1688	120	571928.000	0.1726
bis(2-Chloroethoxy)methane	100	1134885.00	0.4209	120	1390586.00	0.4054
bis(2-Chloroethyl)ether	100	615863.000	0.8890	120	761552.000	0.8599
bis(2-Ethylhexyl)phthalate	100	1738038.00	0.7026	120	2123921.00	0.6920

INT_CAL - Modified 03/06/2008
PDF File ID: 2413173
Report generated 05/14/2012 15:56

Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L12050011

Analytical Method: 8270C

Instrument ID: HPMS4

Initial Calibration Date: 01-MAY-12 16:57

Column ID: F

Analyte	WG396709-01			WG396709-02			WG396709-03		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1'-Biphenyl	50.0	861006.000	1.619	3.00	52218.0000	1.758	10.0	178056.000	1.725

INT_CAL - Modified 03/06/2008
PDF File ID: 2413173
Report generated 05/14/2012 15:56

Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L12050011

Analytical Method: 8270C

Instrument ID: HPMS4

Initial Calibration Date: 01-MAY-12 16:57

Column ID: F

Analyte	WG396709-04			WG396709-05			WG396709-06		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1'-Biphenyl	25.0	424267.000	1.719	80.0	1307719.00	1.536	100	1556681.00	1.495

INT_CAL - Modified 03/06/2008
PDF File ID: 2413173
Report generated 05/14/2012 15:56

Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12050011 Run Date: 04/19/2012 Sample ID: WG395394-10
Instrument ID: HPMS4 Run Time: 13:58 Method: 8270C
File ID: 4M60447 Analyst: CAA QC Key: WATERLOO
ICal Workgroup: WG395394 Cal ID: HPMS4 - 19-APR-12

Analyte		Expected	Found	Units	RF	%D	UCL	Q
2,4,6-Trichlorophenol	CCC	50000	57700	ug/L	0.424	15.5	25	
2,4-Dichlorophenol	CCC	50000	53800	ug/L	0.307	7.50	25	
2-Nitrophenol	CCC	50000	58700	ug/L	0.233	17.4	25	
Acenaphthene	CCC	50000	56400	ug/L	1.33	12.9	25	
Benzo[a]pyrene	CCC	50000	56200	ug/L	1.19	12.4	25	
Di-n-Octyl Phthalate	CCC	50000	58500	ug/L	1.51	17.0	25	
Fluoranthene	CCC	50000	53900	ug/L	1.20	7.90	25	
Hexachlorobutadiene	CCC	50000	55500	ug/L	0.184	10.9	25	
n-Nitrosodiphenylamine	CCC	50000	55300	ug/L	0.715	10.5	25	
Pentachlorophenol	CCC	50000	65800	ug/L	0.184	31.6	25	*
Phenol	CCC	50000	55000	ug/L	1.67	10.1	25	
2,4-Dinitrophenol	SPCC	50000	77300	ug/L	0.258	54.6	25	*
4-Nitrophenol	SPCC	50000	58600	ug/L	0.273	17.1	25	
Hexachlorocyclopentadiene	SPCC	50000	55500	ug/L	0.301	11.0	25	
n-Nitrosodipropylamine	SPCC	50000	56200	ug/L	0.960	12.4	25	
1,3-Dinitrobenzene		50000	52900	ug/L	0.257	5.70	25	
2,4,5-Trichlorophenol		50000	58300	ug/L	0.441	16.7	25	
2,4-Dimethylphenol		50000	51900	ug/L	0.355	3.90	25	
2,4-Dinitrotoluene		50000	57000	ug/L	0.459	14.0	25	
2,6-Dinitrotoluene		50000	57700	ug/L	0.365	15.4	25	
2-Chloronaphthalene		50000	64600	ug/L	1.46	29.3	25	*
2-Chlorophenol		50000	55800	ug/L	1.51	11.5	25	
2-Methylnaphthalene		50000	54300	ug/L	0.748	8.60	25	
2-Methylphenol		50000	54700	ug/L	1.14	9.30	25	
2-Nitroaniline		50000	58000	ug/L	0.375	16.0	25	
3-Nitroaniline		50000	39600	ug/L	0.185	20.8	25	
3,3'-Dichlorobenzidine		50000	52000	ug/L	0.231	4.00	25	
3-,4-Methylphenol		50000	54100	ug/L	1.47	8.20	25	
4-Bromophenyl Phenyl Ether		50000	53200	ug/L	0.215	6.30	25	
4-Chloroaniline		50000	48900	ug/L	0.381	2.20	25	
Acenaphthylene		50000	57000	ug/L	2.07	14.0	25	
Anthracene		50000	55100	ug/L	1.20	10.2	25	
Benzo[a]anthracene		50000	54200	ug/L	1.15	8.40	25	
Benzo[b]fluoranthene		50000	54600	ug/L	1.26	9.10	25	
Benzo[ghi]perylene		50000	54600	ug/L	1.06	9.10	25	
Benzo[k]fluoranthene		50000	51500	ug/L	1.10	3.00	25	
Benzoic Acid		50000	59700	ug/L	0.281	19.3	25	
Benzyl Alcohol		50000	58800	ug/L	1.03	17.5	25	
bis(2-Chloroethyl)ether		50000	54000	ug/L	1.03	8.10	25	
bis(2-Chloroethoxy)methane		50000	56800	ug/L	0.531	13.5	25	
bis(2-Ethylhexyl)phthalate		50000	56700	ug/L	0.842	13.4	25	
Butyl Benzyl Phthalate		50000	58500	ug/L	0.637	17.0	25	

ALT - Modified 09/06/2007
Version 1.5 PDF File ID: 2413177
Report generated 05/14/2012 15:56

Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12050011 Run Date: 04/19/2012 Sample ID: WG395394-10
Instrument ID: HPMS4 Run Time: 13:58 Method: 8270C
File ID: 4M60447 Analyst: CAA QC Key: WATERLOO
ICal Workgroup: WG395394 Cal ID: HPMS4 - 19-APR-12

Analyte		Expected	Found	Units	RF	%D	UCL	Q
Carbazole		50000	53700	ug/L	1.02	7.40	25	
Chrysene		50000	56500	ug/L	1.12	12.9	25	
Di-n-Butyl Phthalate		50000	54500	ug/L	1.29	8.90	25	
Dibenz[ah]anthracene		50000	55500	ug/L	1.09	11.0	25	
Dibenzofuran		50000	56700	ug/L	1.79	13.4	25	
Diethylphthalate		50000	56200	ug/L	1.42	12.4	25	
Dimethylphthalate		50000	55300	ug/L	1.40	10.6	25	
Fluorene		50000	55600	ug/L	1.50	11.3	25	
Hexachlorobenzene		50000	52000	ug/L	0.230	3.90	25	
Hexachloroethane		50000	54700	ug/L	0.624	9.30	25	
Indeno[1,2,3-cd]pyrene		50000	55600	ug/L	1.31	11.2	25	
Isophorone		50000	52700	ug/L	0.649	5.50	25	
Naphthalene		50000	54200	ug/L	1.15	8.40	25	
Nitrobenzene		50000	54200	ug/L	0.366	8.40	25	
Phenanthrene		50000	55400	ug/L	1.17	10.7	25	
Pyrene		50000	56100	ug/L	1.34	12.2	25	

* Exceeds %D Limit

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

ALT - Modified 09/06/2007
Version 1.5 PDF File ID: 2413177
Report generated 05/14/2012 15:56

Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12050011 Run Date: 04/19/2012 Sample ID: WG395394-11
Instrument ID: HPMS4 Run Time: 14:33 Method: 8270C
File ID: 4M60448 Analyst: CAA QC Key: WATERLOO
ICal Workgroup: WG395394 Cal ID: HPMS4 - 19-APR-12

Analyte		Expected	Found	Units	RF	%D	UCL	Q
1,4-Dioxane		50000	59900	ug/L	0.598	19.9	25	

* Exceeds %D Limit

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

ALT - Modified 09/06/2007
Version 1.5 PDF File ID: 2413177
Report generated 05/14/2012 15:56

Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12050011 Run Date: 05/01/2012 Sample ID: WG396709-07
Instrument ID: HPMS4 Run Time: 17:31 Method: 8270C
File ID: 4M60608 Analyst: CAA QC Key: WATERLOO
ICal Workgroup: WG396709 Cal ID: HPMS4 - 01-MAY-12

Analyte		Expected	Found	Units	RF	%D	UCL	Q
1,1'-Biphenyl		50000	47400	ug/L	1.56	5.20	25	

* Exceeds %D Limit

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

ALT - Modified 09/06/2007
Version 1.5 PDF File ID: 2413177
Report generated 05/14/2012 15:56

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050011 Run Date: 05/12/2012 Sample ID: WG397824-02
Instrument ID: HPMS4 Run Time: 11:22 Method: 8270C
File ID: 4M60817 Analyst: CAA QC Key: WATERLOO
Workgroup (AAB#): WG397604 Cal ID: HPMS4 - 19-APR-12
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
2,4,6-Trichlorophenol	CCC	50000	52100	ug/L	0.383	4.14	20	
2,4-Dichlorophenol	CCC	50000	51400	ug/L	0.294	2.83	20	
2-Nitrophenol	CCC	50000	53000	ug/L	0.211	6.03	20	
Acenaphthene	CCC	50000	49100	ug/L	1.16	1.77	20	
Benzo[a]pyrene	CCC	50000	51800	ug/L	1.09	3.58	20	
Di-n-Octyl Phthalate	CCC	50000	53800	ug/L	1.39	7.60	20	
Fluoranthene	CCC	50000	49300	ug/L	1.10	1.30	20	
Hexachlorobutadiene	CCC	50000	52500	ug/L	0.175	5.10	20	
n-Nitrosodiphenylamine	CCC	50000	49800	ug/L	0.645	0.416	20	
Pentachlorophenol	CCC	50000	47100	ug/L	0.132	5.81	20	
Phenol	CCC	50000	48900	ug/L	1.48	2.25	20	
1,4-Dichlorobenzene	CCC	50000	48900	ug/L	1.51	2.12	20	
4-Chloro-3-Methylphenol	CCC	50000	50200	ug/L	0.291	0.474	20	
2,4-Dinitrophenol	SPCC	50000	46900	ug/L	0.147	6.11	20	
4-Nitrophenol	SPCC	50000	48800	ug/L	0.227	2.50	20	
Hexachlorocyclopentadiene	SPCC	50000	51000	ug/L	0.277	1.98	20	
n-Nitrosodipropylamine	SPCC	50000	49600	ug/L	0.848	0.797	20	
Sym-Trinitrobenzene		50000	56200	ug/L	0.178	12.3	20	
1,3-Dinitrobenzene		50000	53400	ug/L	0.259	6.78	20	
1,4-Dioxane		50000	45400	ug/L	0.453	9.17	20	
2,4,5-Trichlorophenol		50000	52000	ug/L	0.393	4.02	20	
2,4-Dimethylphenol		50000	46400	ug/L	0.317	7.22	20	
2,4-Dinitrotoluene		50000	52400	ug/L	0.422	4.84	20	
2,6-Dinitrotoluene		50000	52000	ug/L	0.329	4.05	20	
2-Chloronaphthalene		50000	51300	ug/L	1.16	2.58	20	
2-Chlorophenol		50000	49000	ug/L	1.33	1.93	20	
2-Methylnaphthalene		50000	49500	ug/L	0.681	0.997	20	
2-Methylphenol		50000	47200	ug/L	0.986	5.66	20	
2-Nitroaniline		50000	50700	ug/L	0.329	1.49	20	
3-Nitroaniline		50000	47100	ug/L	0.220	5.87	20	
3,3'-Dichlorobenzidine		50000	57400	ug/L	0.255	14.7	20	
3-,4-Methylphenol		50000	47500	ug/L	1.29	5.04	20	
4-Bromophenyl Phenyl Ether		50000	51200	ug/L	0.207	2.45	20	
4-Chloroaniline		50000	55000	ug/L	0.429	10.1	20	
Acenaphthylene		50000	49500	ug/L	1.80	1.02	20	
Anthracene		50000	48700	ug/L	1.06	2.64	20	
Benzo[a]anthracene		50000	49900	ug/L	1.06	0.179	20	
Benzo[b]fluoranthene		50000	54700	ug/L	1.27	9.39	20	
Benzo[ghi]perylene		50000	53200	ug/L	1.03	6.37	20	
Benzo[k]fluoranthene		50000	49900	ug/L	1.07	0.273	20	
Benzoic Acid		50000	11200	ug/L	0.0526	77.6	20	*
Benzyl Alcohol		50000	48500	ug/L	0.853	2.99	20	

CCV - Modified 03/05/2008
PDF File ID: 2413179
Report generated 05/14/2012 15:57

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050011 Run Date: 05/12/2012 Sample ID: WG397824-02
Instrument ID: HPMS4 Run Time: 11:22 Method: 8270C
File ID: 4M60817 Analyst: CAA QC Key: WATERLOO
Workgroup (AAB#): WG397604 Cal ID: HPMS4 - 19-APR-12
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
bis(2-Chloroethyl)ether		50000	46700	ug/L	0.887	6.54	20	
bis(2-Chloroethoxy)methane		50000	51200	ug/L	0.479	2.45	20	
bis(2-Ethylhexyl)phthalate		50000	51700	ug/L	0.767	3.34	20	
Butyl Benzyl Phthalate		50000	51600	ug/L	0.561	3.14	20	
Carbazole		50000	49900	ug/L	0.950	0.240	20	
Chrysene		50000	49300	ug/L	0.983	1.37	20	
Di-n-Butyl Phthalate		50000	50300	ug/L	1.19	0.573	20	
Dibenz[ah]anthracene		50000	55200	ug/L	1.08	10.4	20	
Dibenzofuran		50000	49800	ug/L	1.57	0.440	20	
Diethylphthalate		50000	51000	ug/L	1.28	1.91	20	
Dimethylphthalate		50000	50500	ug/L	1.28	0.941	20	
Fluorene		50000	49700	ug/L	1.34	0.689	20	
Hexachlorobenzene		50000	52600	ug/L	0.233	5.12	20	
Hexachloroethane		50000	49600	ug/L	0.566	0.869	20	
Indeno[1,2,3-cd]pyrene		50000	54500	ug/L	1.28	9.08	20	
Isophorone		50000	49700	ug/L	0.612	0.578	20	
Naphthalene		50000	49000	ug/L	1.04	2.01	20	
Nitrobenzene		50000	51400	ug/L	0.347	2.80	20	
Phenanthrene		50000	48300	ug/L	1.02	3.48	20	
Pyrene		50000	50500	ug/L	1.21	0.959	20	

* Exceeds %D Criteria

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

CCV - Modified 03/05/2008
PDF File ID: 2413179
Report generated 05/14/2012 15:57

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050011
Run Date: 05/12/2012
Sample ID: WG397825-01
Instrument ID: HPMS4
Run Time: 11:57
Method: 8270C
File ID: 4M60818
Analyst: CAA
QC Key: WATERLOO
Workgroup (AAB#): WG397604
Cal ID: HPMS4 - 01-MAY-12
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
1,1'-Biphenyl		50000	49500	ug/L	1.63	1.02	20	

* Exceeds %D Criteria

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

CCV - Modified 03/05/2008
PDF File ID: 2413179
Report generated 05/14/2012 15:57

Microbac Laboratories Inc.

INTERNAL STANDARD AREA SUMMARY
(COMPARED TO CCV)

Login Number: L12050011
Instrument ID: HPMS4
Workgroup (AAB#): WG397604

CCV Number: WG397824-02
CAL ID: HPMS4-19-APR-12
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3	IS-4	IS-5	IS-6
WG397824-02	NA	NA	379992	798531	1334202	1412784	1243573	1443768
Upper Limit	NA	NA	759984	1597062	2668404	2825568	2487146	2887536
Lower Limit	NA	NA	189996	399266	667101	706392	621787	721884
L12050011-01	1.00	01	264452	548450	918188	986500	895431	990144
L12050011-03	1.00	01	267143	555044	950566	996522	916739	989502
L12050011-05	1.00	01	262514	547322	946018	988413	918453	986162
WG397140-02	1.00	01	270729	559392	951577	1008897	919790	1005180
WG397140-03	1.00	01	262198	562715	959585	999831	885225	1021385

IS-1 - 1,4-Dichlorobenzene-d4
IS-2 - Acenaphthene-d10
IS-3 - Chrysene-d12
IS-4 - Naphthalene-D8
IS-5 - Perylene-d12
IS-6 - Phenanthrene-d10

Underline = Response outside limits

INTERNAL_STD - Modified 03/06/2008
PDF File ID: 2413180
Report generated 05/14/2012 15:57

Microbac Laboratories Inc.

INTERNAL STANDARD RETENTION TIME SUMMARY
(COMPARED TO CCV)

Login Number: L12050011
Instrument ID: HPMS4
Workgroup (AAB#): WG397604

CCV Number: WG397824-02
CAL ID: HPMS4-19-APR-12
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3	IS-4	IS-5	IS-6
WG397824-02	NA	NA	7.23	10.32	15.6	8.51	18.33	11.92
Upper Limit	NA	NA	7.73	10.82	16.1	9.01	18.83	12.42
Lower Limit	NA	NA	6.73	9.82	15.1	8.01	17.83	11.42
L12050011-01	1.00	01	7.23	10.32	15.6	8.51	18.33	11.92
L12050011-03	1.00	01	7.23	10.32	15.6	8.51	18.33	11.91
L12050011-05	1.00	01	7.23	10.32	15.6	8.51	18.33	11.92
WG397140-02	1.00	01	7.23	10.32	15.6	8.51	18.33	11.92
WG397140-03	1.00	01	7.23	10.32	15.61	8.51	18.34	11.92

IS-1 - 1,4-Dichlorobenzene-d4
IS-2 - Acenaphthene-d10
IS-3 - Chrysene-d12
IS-4 - Naphthalene-D8
IS-5 - Perylene-d12
IS-6 - Phenanthrene-d10

Underline = Response outside limits

INTERNAL_STD_RT - Modified 03/06/2008
PDF File ID: 2413182
Report generated 05/14/2012 15:57

2.2.1.3 Sample Data

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051212\4M60824.D Vial: 9
Acq On : 12 May 2012 15:27 Operator: CAA
Sample : L12050011-01 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 14 11:40:48 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Mon May 14 11:40:35 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.23	152	264452	40.00 ug/ml	0.00
30) Naphthalene-d8	8.51	136	986500	40.00 ug/ml	0.00
54) Acenaphthene-d10	10.32	164	548450	40.00 ug/ml	0.00
87) Phenanthrene-d10	11.92	188	990144	40.00 ug/ml	0.00
113) Chrysene-d12	15.60	240	918188	40.00 ug/ml	0.00
128) Perylene-d12	18.33	264	895431	40.00 ug/ml	-0.01

System Monitoring Compounds

8) 2-Fluorophenol	6.00	112	768962	95.9040 ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 95.90%		
12) Phenol-d5	6.83	99	958227	102.1126 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 102.11%#		
31) Nitrobenzene-d5	7.79	82	449539	53.8778 ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 107.76%		
59) 2-Fluorobiphenyl	9.58	172	958024	52.3110 ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 104.62%		
86) 2,4,6-Tribromophenol	11.14	330	307868	125.8796 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 125.88%#		
117) p-Terphenyl-d14	13.95	244	852029	50.3466 ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 100.70%		

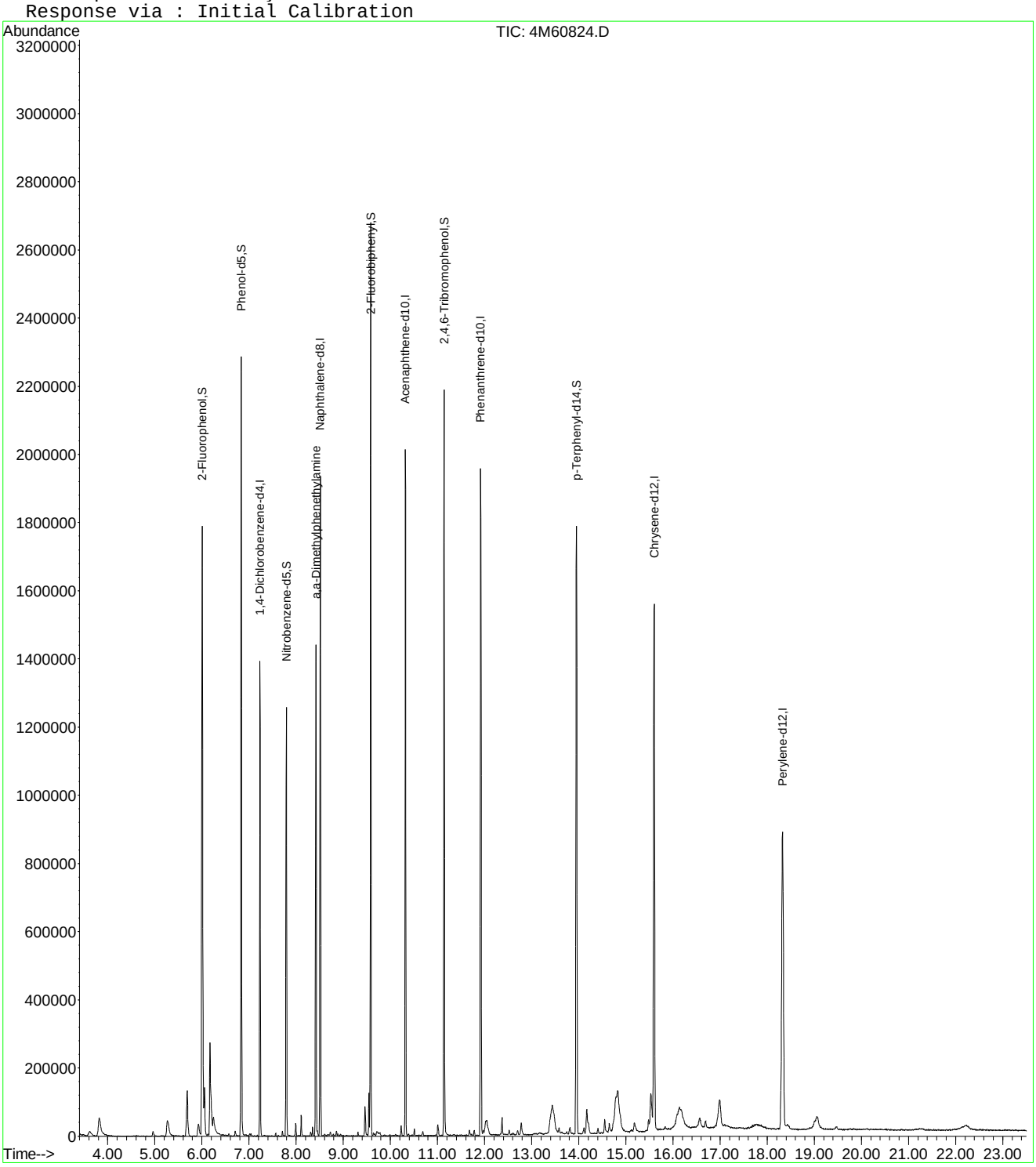
Target Compounds					Qvalue
41) a,a-Dimethylphenethylamine	8.42	58	29863	2.5066 ug/ml#	75

(#) = qualifier out of range (m) = manual integration
4M60824.D MEGAMIX.M Mon May 14 11:46:28 2012 Page 1

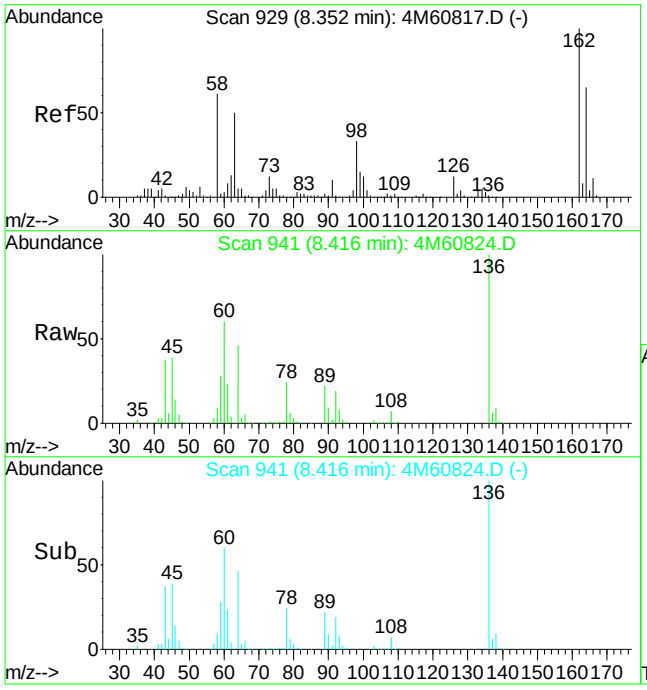
Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051212\4M60824.D Vial: 9
Acq On : 12 May 2012 15:27 Operator: CAA
Sample : L12050011-01 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 14 11:40 2012 Quant Results File: MEGAMIX.RES

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Mon May 14 11:40:35 2012
Response via : Initial Calibration



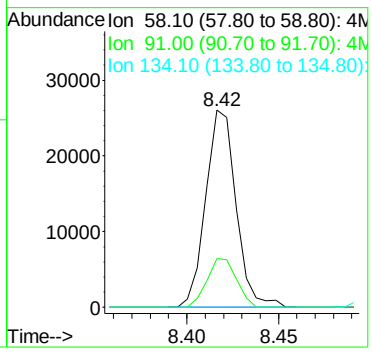
4M60824.D MEGAMIX.M Mon May 14 11:46:28 2012 Page 2



#41
a,a-Dimethylphenethylamine
Concen: 2.51 ug/ml
RT: 8.42 min Scan# 941
Delta R.T. 0.07 min
Lab File: 4M60824.D
Acq: 12 May 2012 15:27

Tgt Ion: 58 Resp: 29863

Ion	Ratio	Lower	Upper
58	100		
91	24.0	10.1	15.1#
134	0.0	5.0	7.4#



Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\051212\4M60824.D Vial: 9
Acq On : 12 May 2012 15:27 Operator: CAA
Sample : L12050011-01 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 14 11:54:25 2012 Quant Results File: TCL.RES

Quant Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Mon May 14 11:53:23 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.23	152	264452	40.00	ug/mL	0.00
3) Naphthalene-d8	8.51	136	986500	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.32	164	548450	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.92	188	990144	40.00	ug/mL	0.00

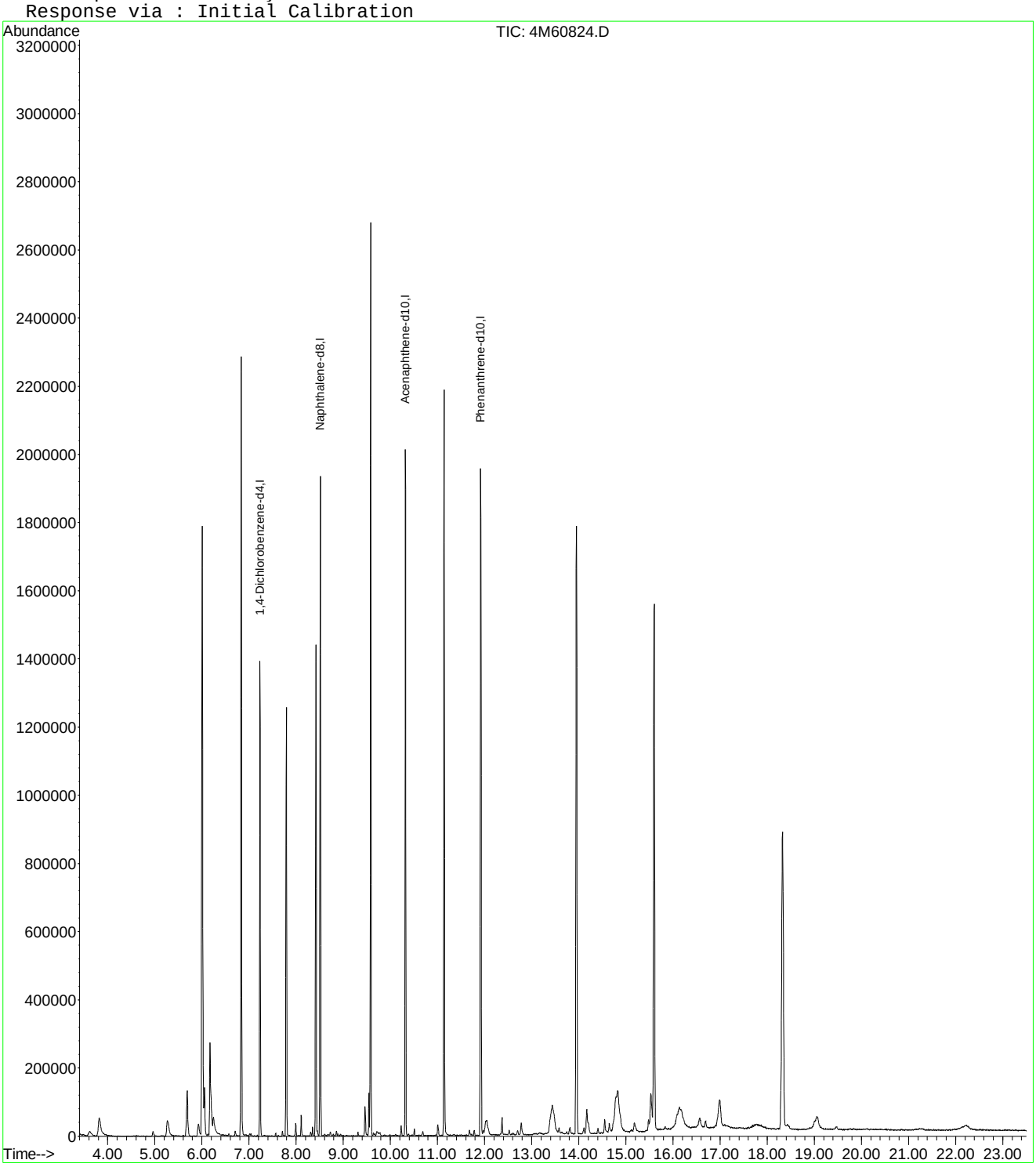
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
4M60824.D TCL.M Mon May 14 11:54:26 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\051212\4M60824.D Vial: 9
Acq On : 12 May 2012 15:27 Operator: CAA
Sample : L12050011-01 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 14 11:54 2012 Quant Results File: TCL.RES

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Mon May 14 11:53:23 2012
Response via : Initial Calibration



4M60824.D TCL.M Mon May 14 11:54:26 2012 Page 2

LSC Area Percent Report

Data File : I:\MSDCHEM\1\DATA\051212\4M60824.D Vial: 9
Acq On : 12 May 2012 15:27 Operator: CAA
Sample : L12050011-01 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

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

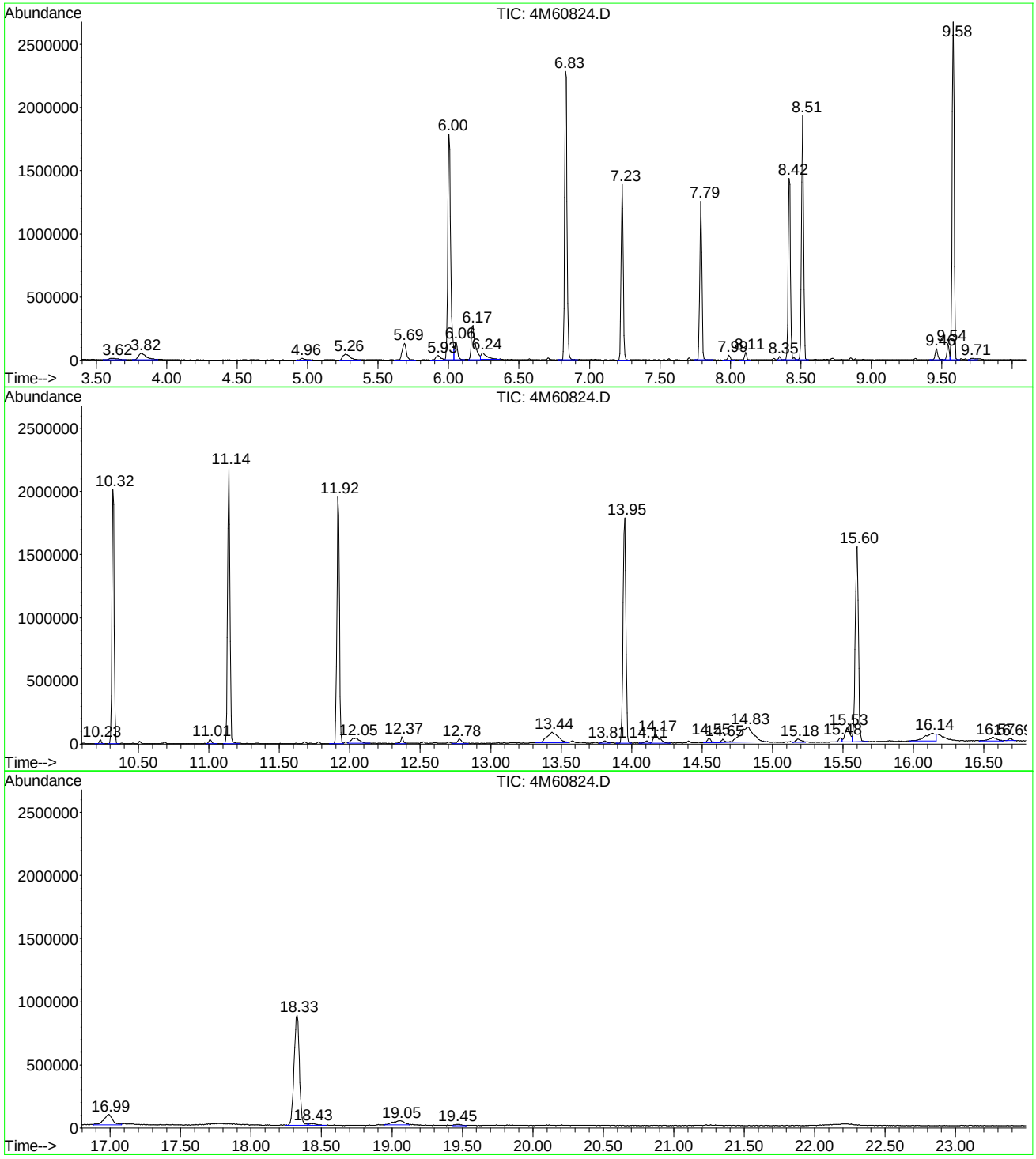
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.619	30	43	59	rBV6	12384	52698	1.95%	0.154%
2	3.822	69	81	102	rBV2	53632	213236	7.89%	0.622%
3	4.960	286	294	306	rBB2	13523	27361	1.01%	0.080%
4	5.265	344	351	371	rBV3	45600	161518	5.97%	0.471%
5	5.687	417	430	444	rBB2	133925	265126	9.81%	0.773%
6	5.927	465	475	483	rBV	35508	87561	3.24%	0.255%
7	6.002	483	489	496	rVV	1788677	2544647	94.12%	7.421%
8	6.055	496	499	509	rVB	140733	185616	6.87%	0.541%
9	6.173	515	521	531	rBV3	271402	538317	19.91%	1.570%
10	6.242	531	534	556	rVB3	51718	143025	5.29%	0.417%
11	6.830	635	644	659	rBV	2286780	2638158	97.57%	7.694%
12	7.230	713	719	728	rBB	1393722	1503407	55.60%	4.385%
13	7.791	816	824	839	rBV	1257589	1316548	48.69%	3.840%
14	7.989	853	861	868	rBV2	37434	45044	1.67%	0.131%
15	8.107	875	883	889	rVB	61611	64736	2.39%	0.189%
16	8.347	925	928	935	rBV2	26253	27131	1.00%	0.079%
17	8.416	935	941	951	rVV	1440443	1611340	59.60%	4.699%
18	8.513	951	959	966	rVV	1935864	1974870	73.04%	5.760%
19	9.463	1128	1137	1148	rBV	87049	114725	4.24%	0.335%
20	9.544	1148	1152	1155	rVV	125443	133191	4.93%	0.388%
21	9.581	1155	1159	1167	rVB	2678681	2703756	100.00%	7.885%
22	9.715	1179	1184	1191	rBV5	12987	33942	1.26%	0.099%
23	10.227	1273	1280	1285	rBV	31041	33403	1.24%	0.097%
24	10.318	1290	1297	1305	rBV	2013343	2169285	80.23%	6.327%
25	11.007	1421	1426	1434	rVB3	32476	47117	1.74%	0.137%
26	11.141	1444	1451	1466	rBV	2188582	2530326	93.59%	7.380%
27	11.916	1585	1596	1603	rBV	1957137	2394900	88.58%	6.985%
28	12.049	1609	1621	1638	rVB5	43027	180869	6.69%	0.528%
29	12.370	1672	1681	1687	rBV3	52226	64279	2.38%	0.187%
30	12.781	1748	1758	1768	rVB2	35711	69900	2.59%	0.204%
31	13.438	1859	1881	1902	rBV	83131	485335	17.95%	1.415%
32	13.812	1943	1951	1957	rBV5	19453	36953	1.37%	0.108%
33	13.951	1966	1977	1985	rBV	1784018	2477279	91.62%	7.225%
34	14.106	1996	2006	2011	rBV4	19238	32936	1.22%	0.096%
35	14.170	2011	2018	2037	rVB3	72141	201997	7.47%	0.589%
36	14.549	2082	2089	2102	rBV2	41121	79951	2.96%	0.233%
37	14.645	2102	2107	2114	rVV7	26772	45215	1.67%	0.132%
38	14.827	2114	2141	2165	rVV2	119460	818906	30.29%	2.388%
39	15.180	2200	2207	2217	rBV6	25521	68373	2.53%	0.199%
40	15.484	2257	2264	2266	rBV3	33674	51730	1.91%	0.151%
41	15.527	2266	2272	2279	rVV2	109561	282548	10.45%	0.824%
42	15.602	2279	2286	2299	rVB	1543058	2429645	89.86%	7.086%

43	16.136	2355	2386	2391	rBV3	63249	344276	12.73%	1.004%
44	16.569	2448	2467	2479	rBV8	27862	97180	3.59%	0.283%
45	16.691	2483	2490	2496	rVB7	19225	36621	1.35%	0.107%
46	16.991	2525	2546	2563	rBV4	81790	348362	12.88%	1.016%
47	18.326	2781	2796	2810	rBV2	873002	2308719	85.39%	6.733%
48	18.428	2812	2815	2834	rVB2	16144	51226	1.89%	0.149%
49	19.053	2912	2932	2946	rBV9	33209	184156	6.81%	0.537%
50	19.453	3003	3007	3020	rVB9	9912	30492	1.13%	0.089%

Sum of corrected areas: 34287932

File : I:\MSDCHEM\1\DATA\051212\4M60824.D
Operator : CAA
Acquired : 12 May 2012 15:27 using AcqMethod BNATEST
Instrument : HPMS4
Sample Name: L12050011-01
Misc Info : 1,1
Vial Number: 9
Quant File :MEGAMIX.RES (RTE Integrator)



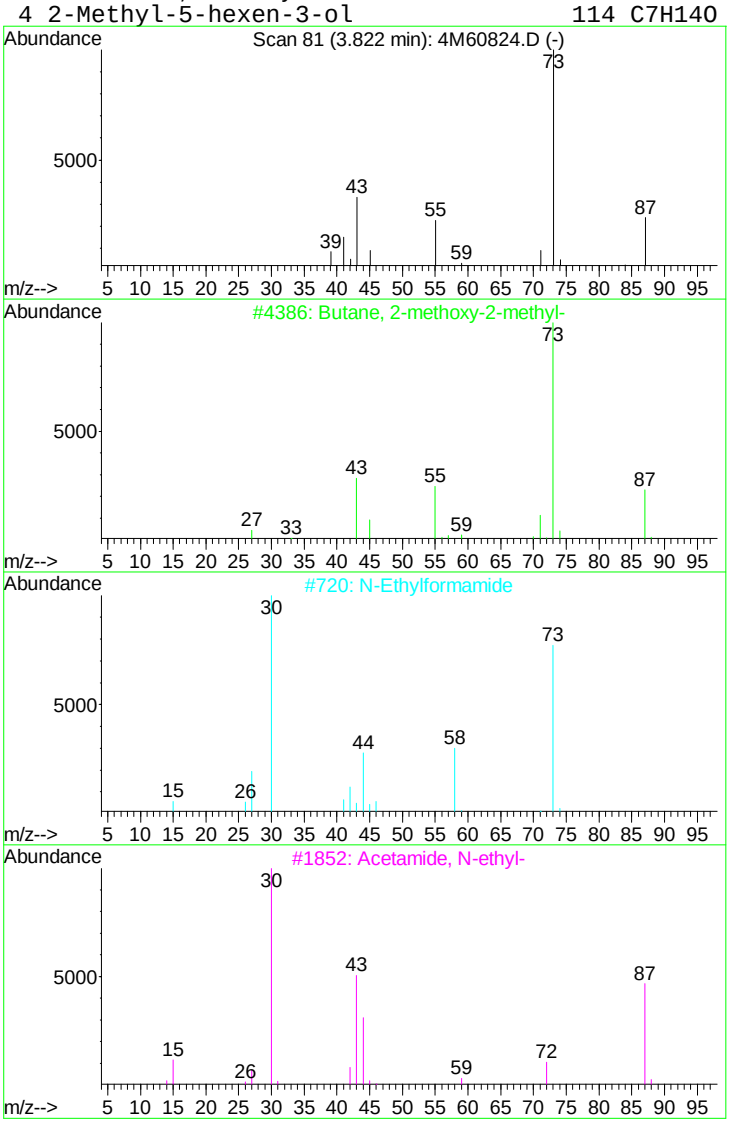
Library Search Compound Report

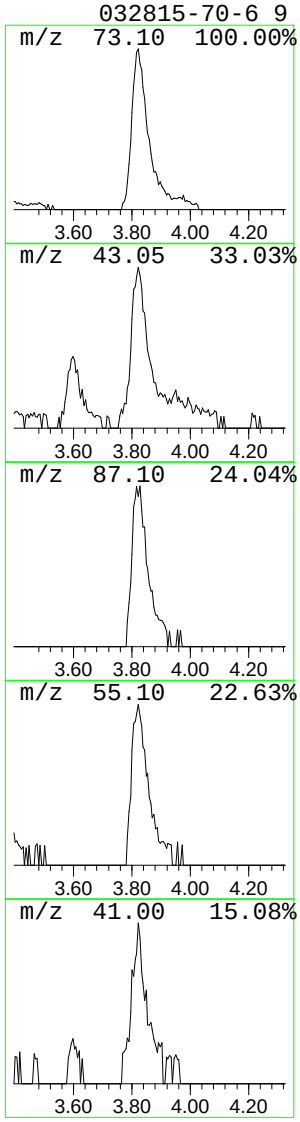
```
Data File : I:\MSDCHEM\1\DATA\051212\4M60824.D          Vial: 9
Acq On    : 12 May 2012  15:27                       Operator: CAA
Sample    : L12050011-01                             Inst    : HPMS4
Misc      : 1,1                                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title        : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library      : I:\DATABASE\NIST02.L
 ******************************************************************
 Peak Number  1  Butane, 2-methoxy-2-methyl-     Concentration Rank  7

   R.T.   EstConc           Area       Relative to ISTD         R.T.
 ------------------------------------------------------------------
   3.82    5.67 ug/ml      213236    1,4-Dichlorobenzene-d4      7.23

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------
  1 Butane, 2-methoxy-2-methyl-          102 C6H14O         000994-05-8 83
  2 N-Ethylformamide                      73 C3H7NO         000627-45-2 9
  3 Acetamide, N-ethyl-                   87 C4H9NO         000625-50-3 9
  4 2-Methyl-5-hexen-3-ol                114 C7H14O         032815-70-6 9
```





Library Search Compound Report

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Data File : I:\MSDCHEM\1\DATA\051212\4M60824.D          Vial: 9
Acq On    : 12 May 2012  15:27                       Operator: CAA
Sample    : L12050011-01                             Inst    : HPMS4
Misc      : 1,1                                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title        : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library      : I:\DATABASE\NIST02.L
 ******************************************************************
 Peak Number  2  Morpholine                      Concentration Rank 11

   R.T.   EstConc           Area       Relative to ISTD         R.T.
 ------------------------------------------------------------------
   5.26    4.30 ug/ml      161518    1,4-Dichlorobenzene-d4      7.23

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------
  1 Morpholine                            87 C4H9NO         000110-91-8 91
  2 Morpholine                            87 C4H9NO         000110-91-8 90
  3 Morpholine                            87 C4H9NO         000110-91-8 86
  4 Morpholine                            87 C4H9NO         000110-91-8 80
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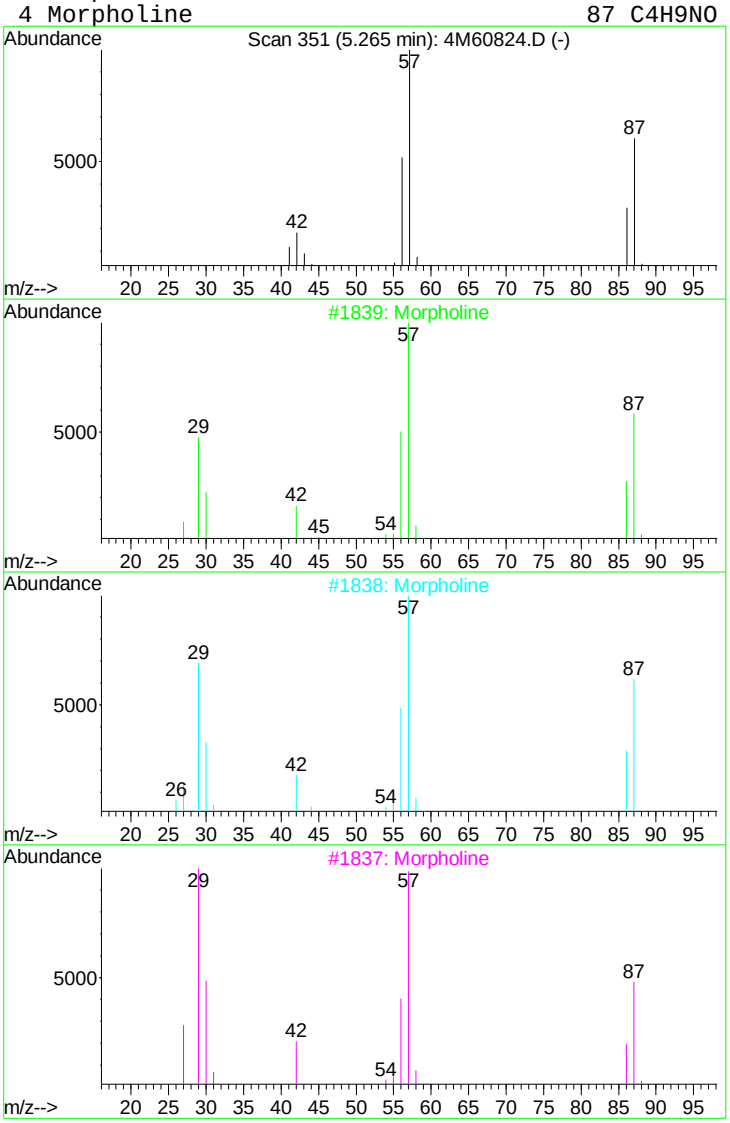

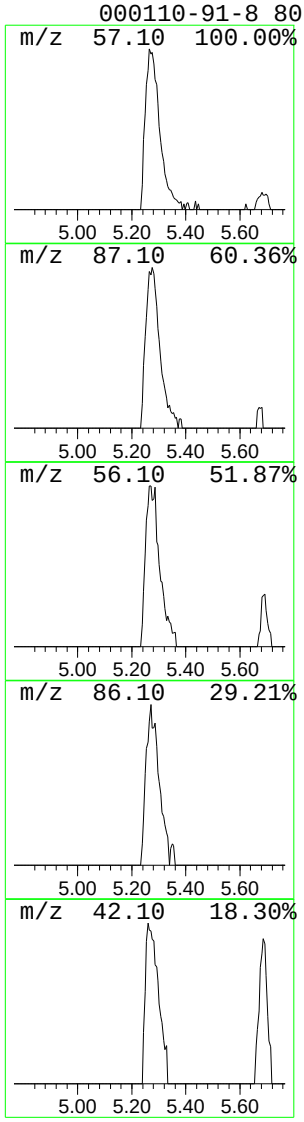

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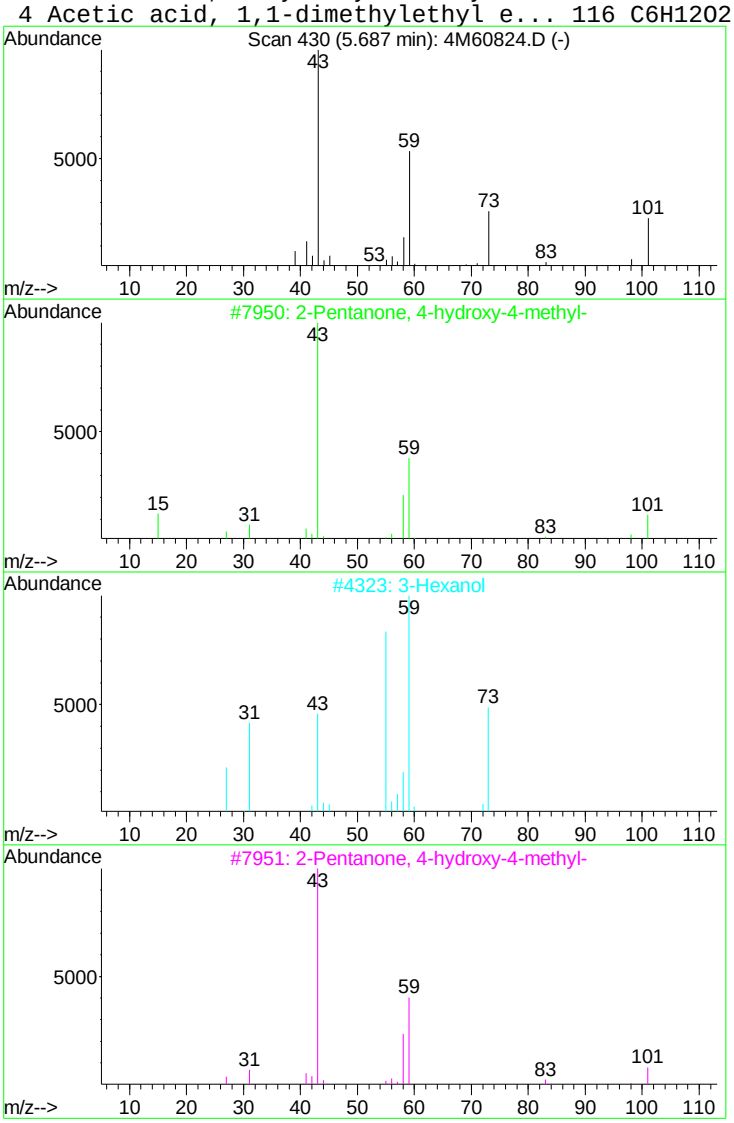
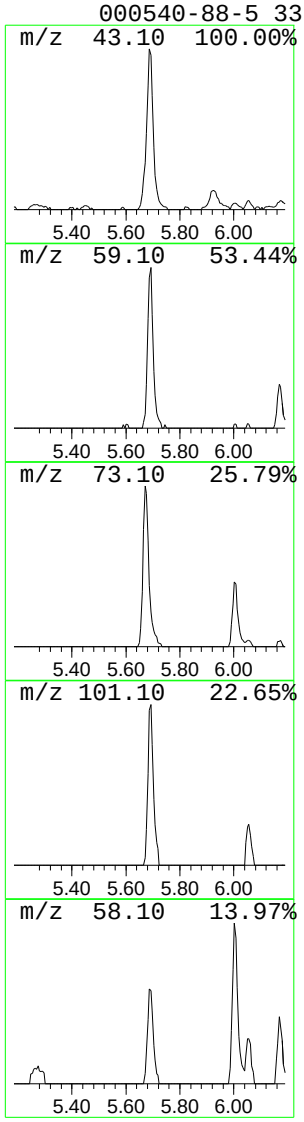
Data File : I:\MSDCHEM\1\DATA\051212\4M60824.D          Vial: 9
Acq On    : 12 May 2012  15:27                       Operator: CAA
Sample    : L12050011-01                             Inst    : HPMS4
Misc      : 1,1                                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title        : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library      : I:\DATABASE\NIST02.L
 ******************************************************************
 Peak Number  3  2-Pentanone, 4-hydroxy-4-me...  Concentration Rank  5

   R.T.   EstConc           Area       Relative to ISTD         R.T.
 ------------------------------------------------------------------
   5.69    7.05 ug/ml      265126    1,4-Dichlorobenzene-d4      7.23

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------
  1 2-Pentanone, 4-hydroxy-4-methyl-    116 C6H12O2        000123-42-2 50
  2 3-Hexanol                           102 C6H14O         000623-37-0 40
  3 2-Pentanone, 4-hydroxy-4-methyl-    116 C6H12O2        000123-42-2 36
  4 Acetic acid, 1,1-dimethylethyl e... 116 C6H12O2        000540-88-5 33
```





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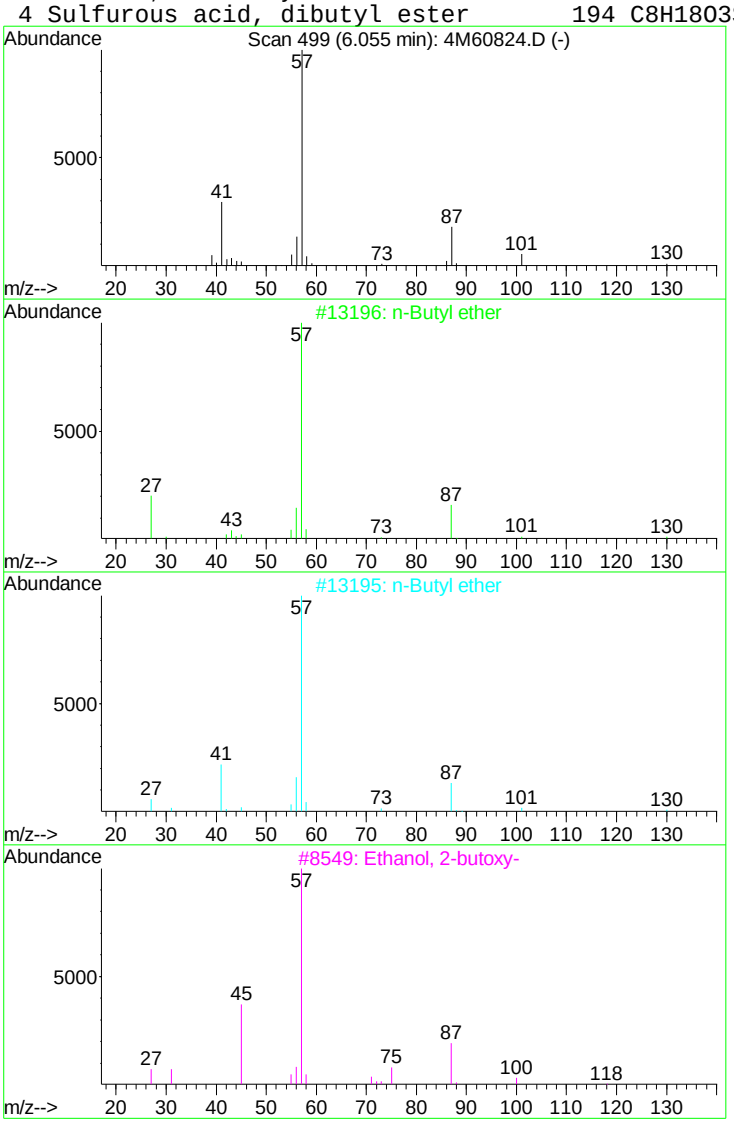
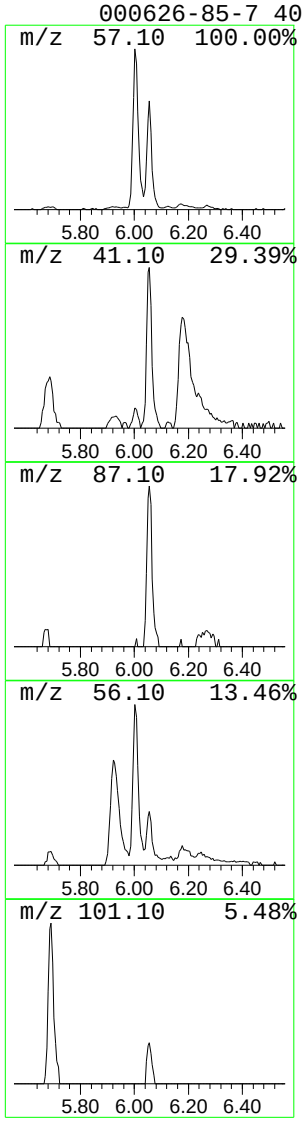
Data File : I:\MSDCHEM\1\DATA\051212\4M60824.D          Vial: 9
Acq On    : 12 May 2012  15:27                       Operator: CAA
Sample    : L12050011-01                             Inst    : HPMS4
Misc      : 1,1                                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title        : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library      : I:\DATABASE\NIST02.L
 ******************************************************************
 Peak Number  4  n-Butyl ether                   Concentration Rank  9

   R.T.   EstConc           Area       Relative to ISTD         R.T.
 ------------------------------------------------------------------
   6.06    4.94 ug/ml      185616    1,4-Dichlorobenzene-d4      7.23

  Hit# of  5    Tentative ID             MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------
  1 n-Butyl ether                        130 C8H18O        000142-96-1 72
  2 n-Butyl ether                        130 C8H18O        000142-96-1 72
  3 Ethanol, 2-butoxy-                   118 C6H14O2       000111-76-2 50
  4 Sulfurous acid, dibutyl ester        194 C8H18O3S      000626-85-7 40
```





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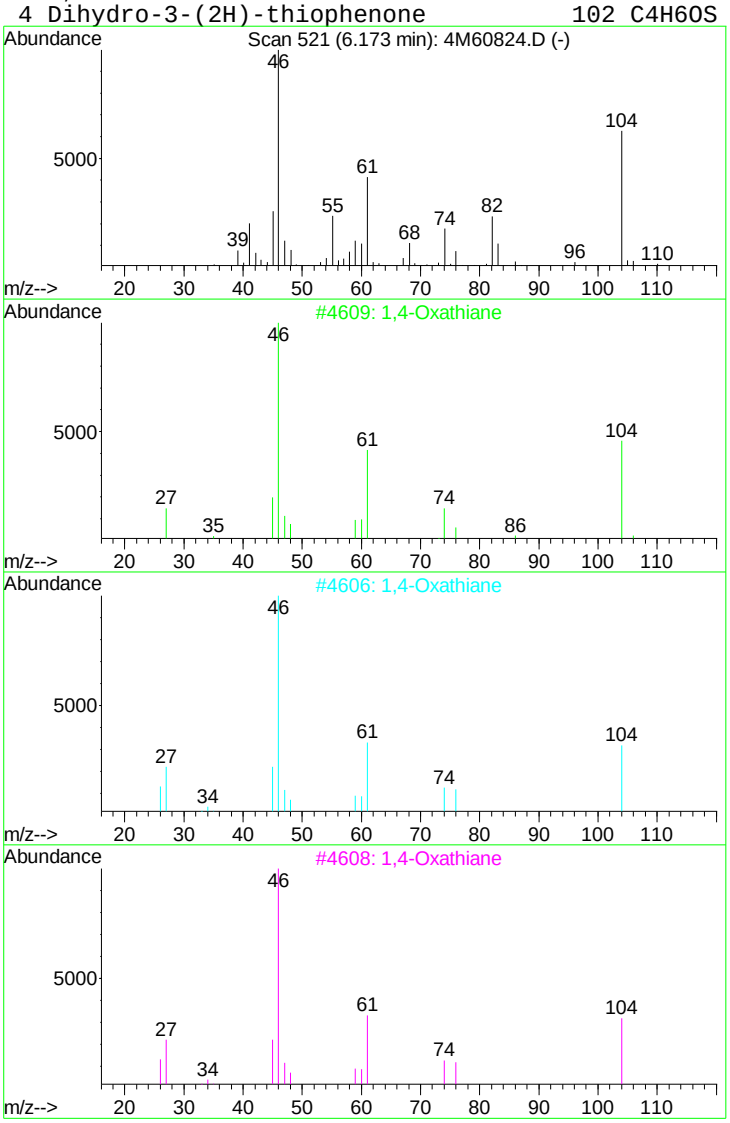
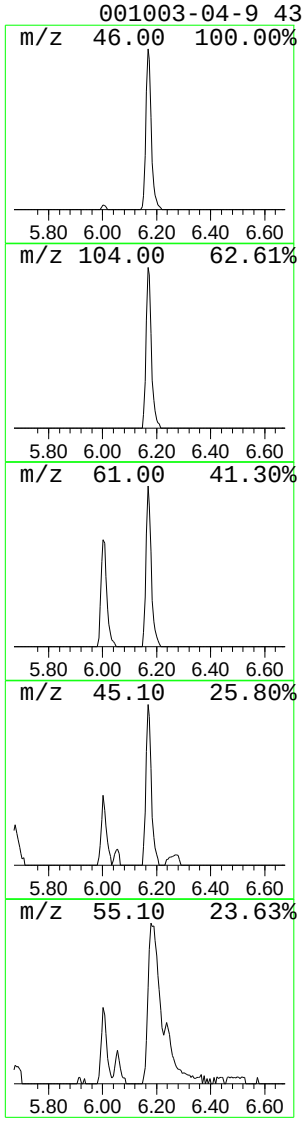
Data File : I:\MSDCHEM\1\DATA\051212\4M60824.D          Vial: 9
Acq On    : 12 May 2012  15:27                       Operator: CAA
Sample    : L12050011-01                             Inst    : HPMS4
Misc      : 1,1                                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title        : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library      : I:\DATABASE\NIST02.L
 ******************************************************************
 Peak Number  5  1,4-Oxathiane                   Concentration Rank  2

   R.T.   EstConc           Area       Relative to ISTD         R.T.
 ------------------------------------------------------------------
   6.17   14.32 ug/ml      538317    1,4-Dichlorobenzene-d4      7.23

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------
  1 1,4-Oxathiane                         104 C4H8OS        015980-15-1 93
  2 1,4-Oxathiane                         104 C4H8OS        015980-15-1 90
  3 1,4-Oxathiane                         104 C4H8OS        015980-15-1 90
  4 Dihydro-3-(2H)-thiophenone            102 C4H6OS        001003-04-9 43
```





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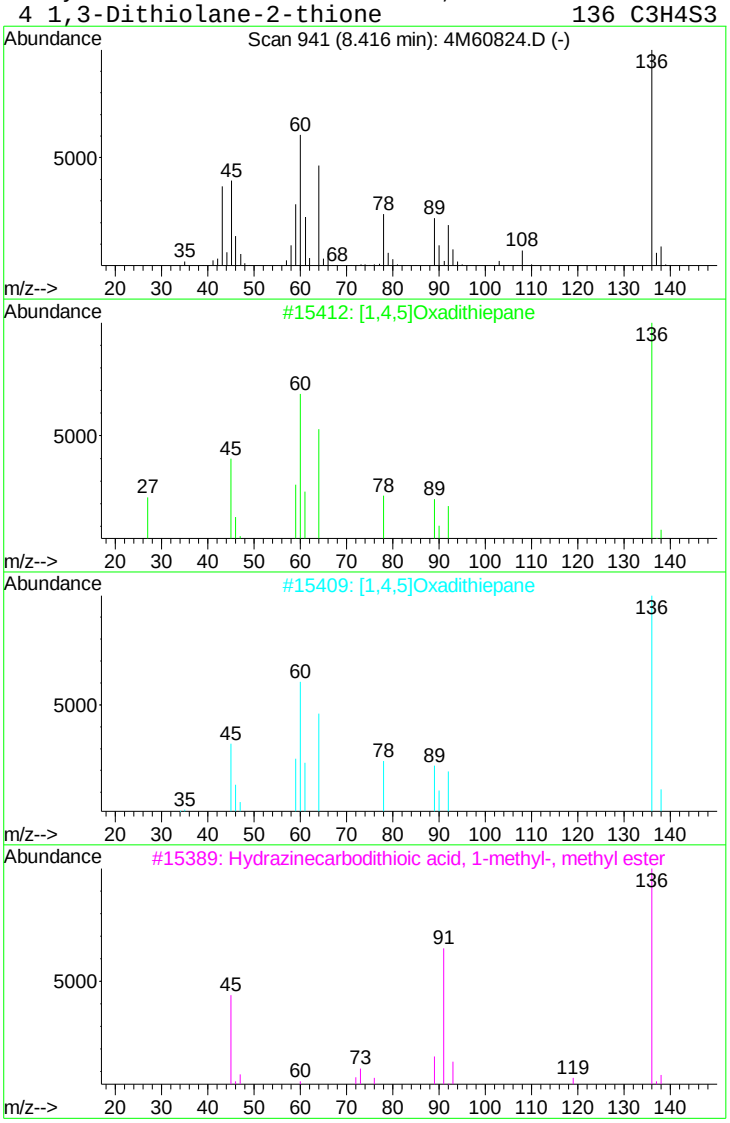
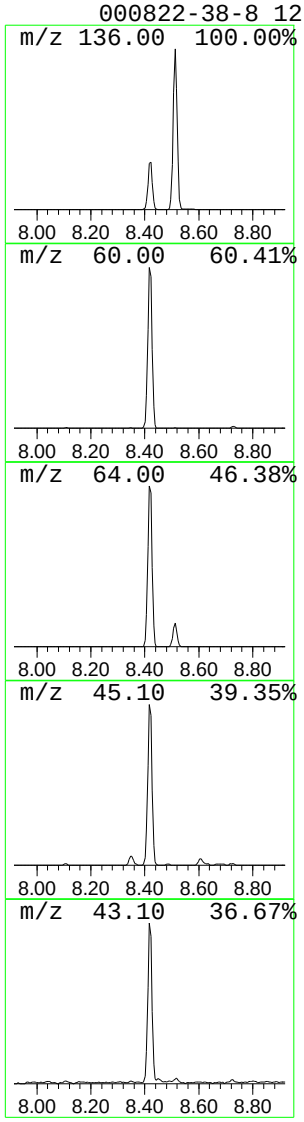
Data File : I:\MSDCHEM\1\DATA\051212\4M60824.D          Vial: 9
Acq On    : 12 May 2012  15:27                       Operator: CAA
Sample    : L12050011-01                             Inst    : HPMS4
Misc      : 1,1                                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title        : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library      : I:\DATABASE\NIST02.L
 ******************************************************************
 Peak Number  6  [1,4,5]Oxadithiepane            Concentration Rank  1

   R.T.   EstConc           Area       Relative to ISTD         R.T.
 ------------------------------------------------------------------
   8.42   32.64 ug/ml     1611340    Naphthalene-d8              8.51

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------
  1 [1,4,5]Oxadithiepane                 136 C4H8OS2        003886-40-6 98
  2 [1,4,5]Oxadithiepane                 136 C4H8OS2        003886-40-6 98
  3 Hydrazinecarbodithioic acid, 1-m... 136 C3H8N2S2        020184-94-5 16
  4 1,3-Dithiolane-2-thione              136 C3H4S3         000822-38-8 12
```



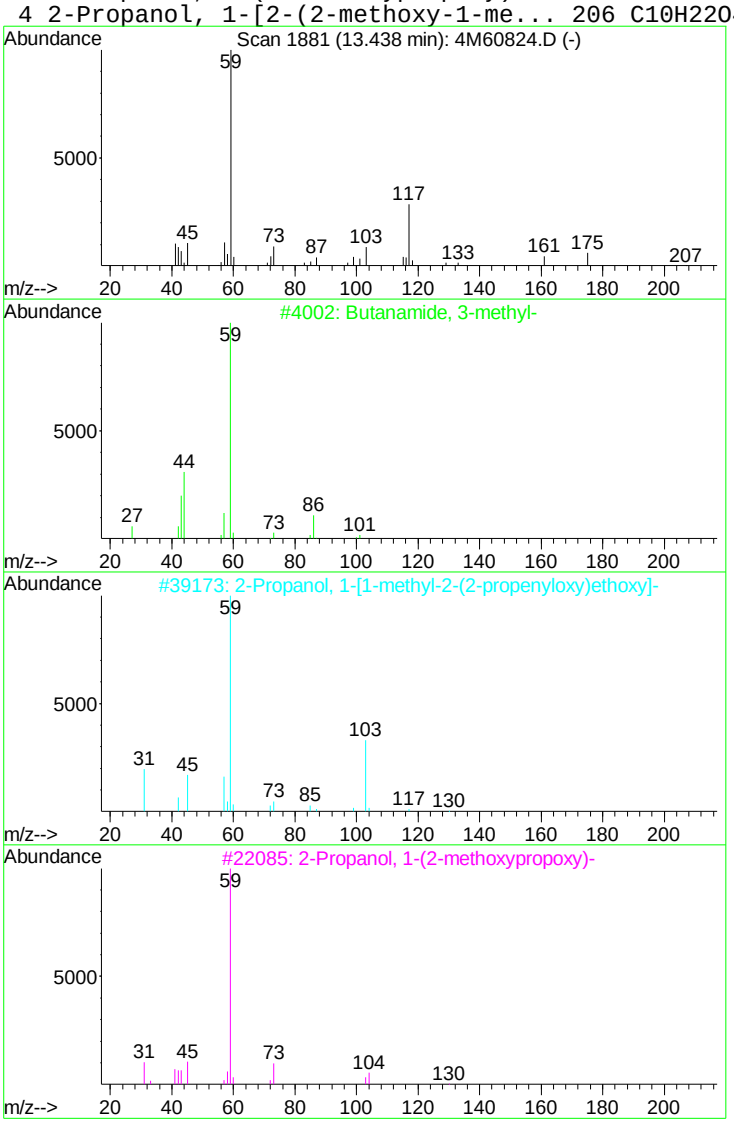


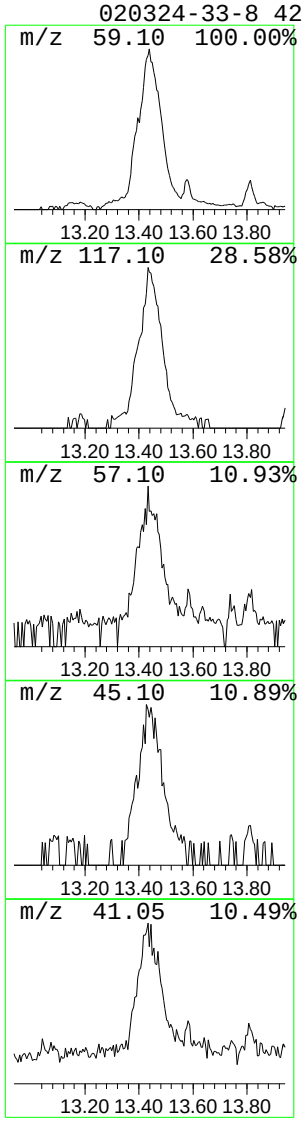
```
Data File : I:\MSDCHEM\1\DATA\051212\4M60824.D          Vial: 9
Acq On    : 12 May 2012  15:27                       Operator: CAA
Sample    : L12050011-01                             Inst    : HPMS4
Misc      : 1,1                                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title        : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library      : I:\DATABASE\NIST02.L
 ******************************************************************
 Peak Number  7  Butanamide, 3-methyl-          Concentration Rank  4

   R.T.   EstConc          Area       Relative to ISTD         R.T.
 ------------------------------------------------------------------
  13.44    8.11 ug/ml      485335    Phenanthrene-d10          11.92

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------
  1 Butanamide, 3-methyl-                101 C5H11NO        000541-46-8 47
  2 2-Propanol, 1-[1-methyl-2-(2-pro... 174 C9H18O3        055956-25-7 47
  3 2-Propanol, 1-(2-methoxypropoxy)-   148 C7H16O3        013429-07-7 47
  4 2-Propanol, 1-[2-(2-methoxy-1-me... 206 C10H22O4       020324-33-8 42
```



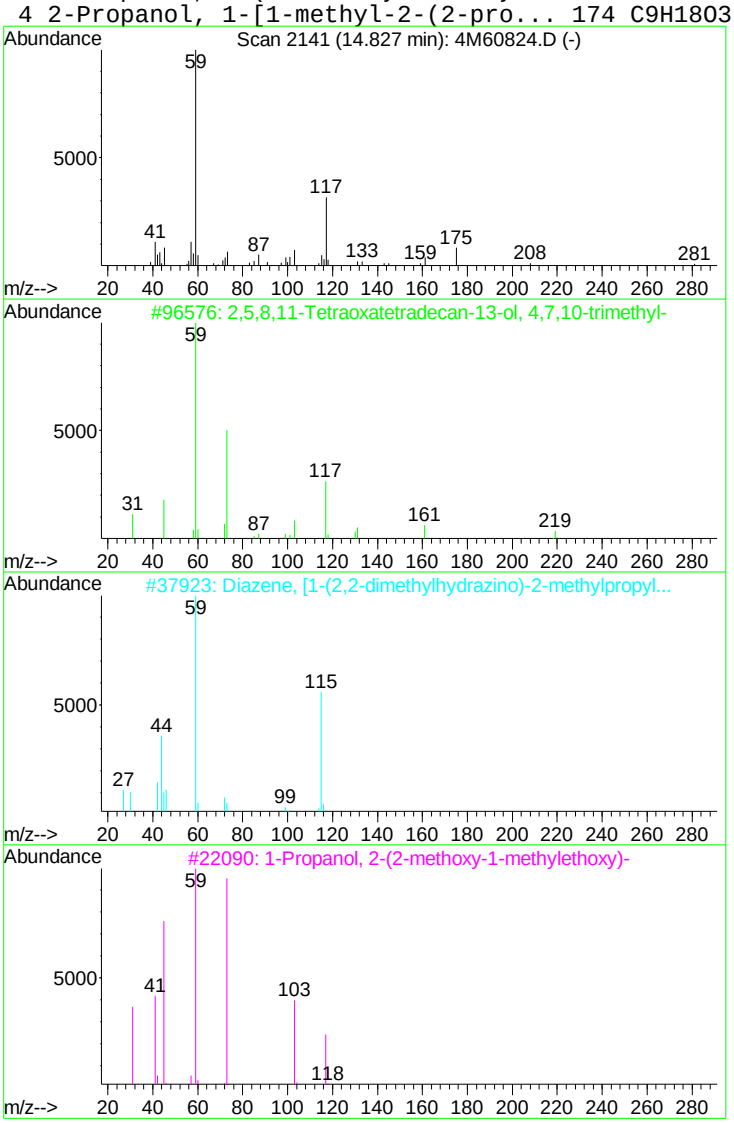


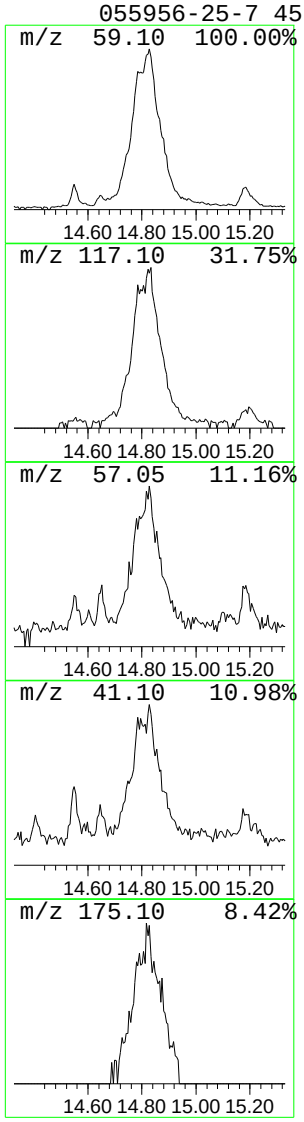
```
Data File : I:\MSDCHEM\1\DATA\051212\4M60824.D          Vial: 9
Acq On    : 12 May 2012  15:27                       Operator: CAA
Sample    : L12050011-01                             Inst    : HPMS4
Misc      : 1,1                                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title        : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library      : I:\DATABASE\NIST02.L
 ******************************************************************
 Peak Number  8  2,5,8,11-Tetraoxatetradecan...  Concentration Rank  3

   R.T.   EstConc           Area       Relative to ISTD         R.T.
 ------------------------------------------------------------------
  14.83   13.48 ug/ml      818906    Chrysene-d12               15.60

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------
  1 2,5,8,11-Tetraoxatetradecan-13-o... 264 C13H28O5       020324-34-9 50
  2 Diazene, [1-(2,2-dimethylhydrazi... 172 C8H20N4        061940-94-1 47
  3 1-Propanol, 2-(2-methoxy-1-methy... 148 C7H16O3        055956-21-3 45
  4 2-Propanol, 1-[1-methyl-2-(2-pro... 174 C9H18O3        055956-25-7 45
```



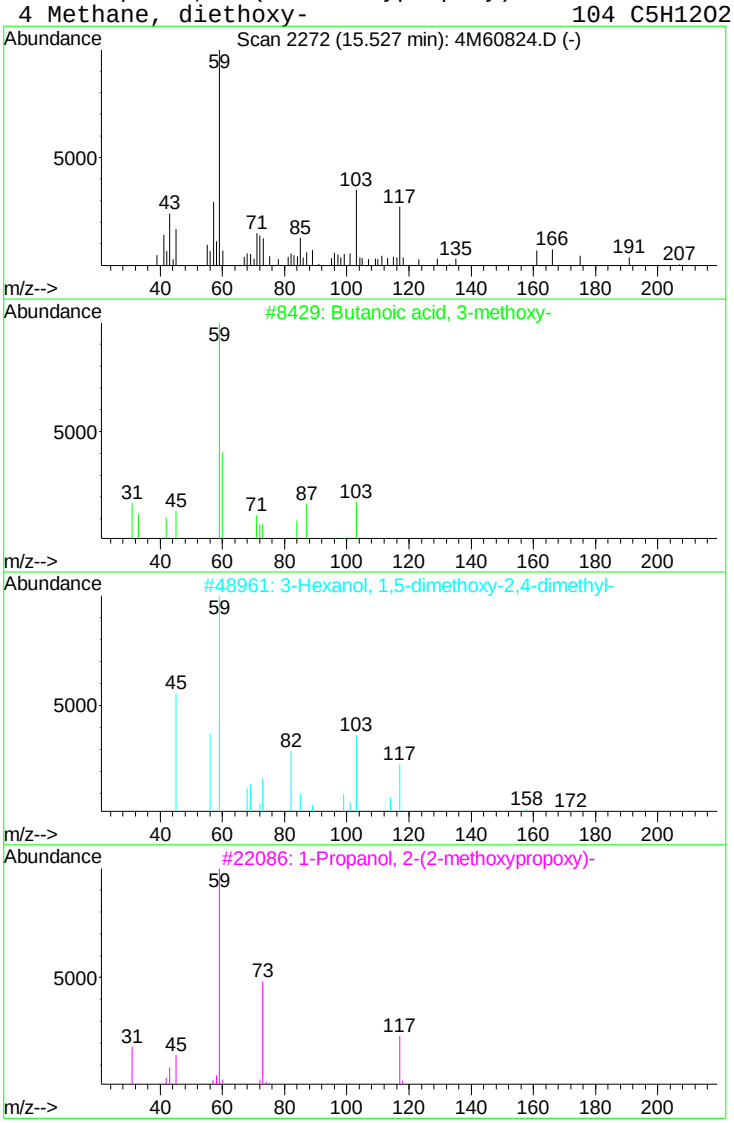


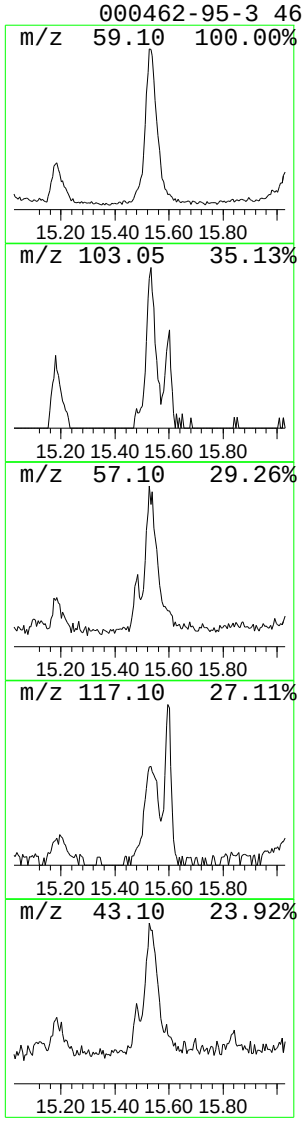
```
Data File : I:\MSDCHEM\1\DATA\051212\4M60824.D          Vial: 9
Acq On    : 12 May 2012  15:27                       Operator: CAA
Sample    : L12050011-01                             Inst    : HPMS4
Misc      : 1,1                                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title        : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library      : I:\DATABASE\NIST02.L
 ******************************************************************
 Peak Number  9  Butanoic acid, 3-methoxy-       Concentration Rank 10

   R.T.   EstConc           Area       Relative to ISTD         R.T.
 ------------------------------------------------------------------
  15.53    4.65 ug/ml      282548    Chrysene-d12               15.60

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------
  1 Butanoic acid, 3-methoxy-            118 C5H10O3        010024-70-1 53
  2 3-Hexanol, 1,5-dimethoxy-2,4-dim...  190 C10H22O3       013897-22-8 50
  3 1-Propanol, 2-(2-methoxypropoxy)-    148 C7H16O3        013588-28-8 47
  4 Methane, diethoxy-                   104 C5H12O2        000462-95-3 46
```



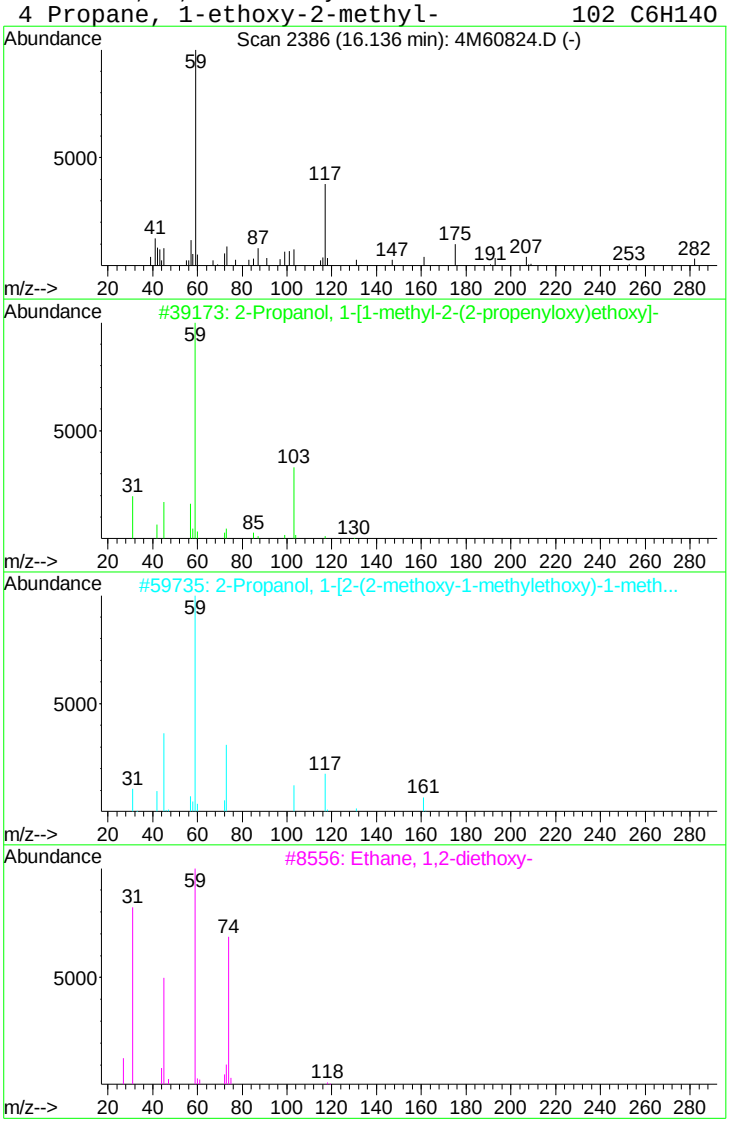


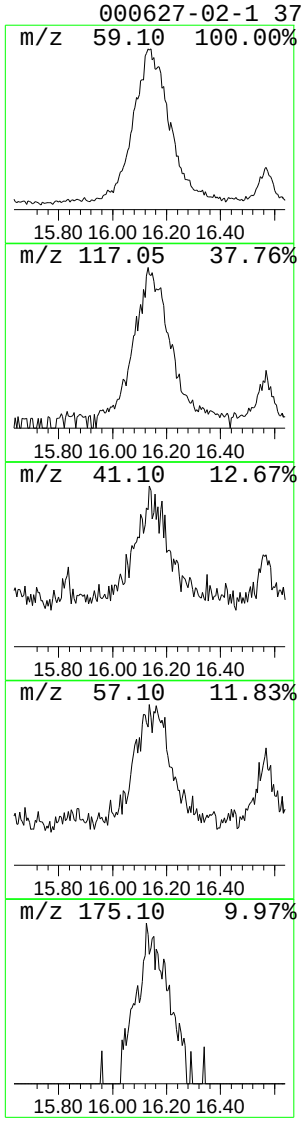
```
Data File : I:\MSDCHEM\1\DATA\051212\4M60824.D          Vial: 9
Acq On    : 12 May 2012  15:27                       Operator: CAA
Sample    : L12050011-01                             Inst    : HPMS4
Misc      : 1,1                                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title        : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library      : I:\DATABASE\NIST02.L
 ******************************************************************
 Peak Number 10  2-Propanol, 1-[1-methyl-2-(...  Concentration Rank  8

   R.T.   EstConc           Area       Relative to ISTD         R.T.
 ------------------------------------------------------------------
  16.14    5.67 ug/ml      344276    Chrysene-d12               15.60

  Hit# of  5    Tentative ID             MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------
  1 2-Propanol, 1-[1-methyl-2-(2-pro... 174 C9H18O3        055956-25-7 47
  2 2-Propanol, 1-[2-(2-methoxy-1-me... 206 C10H22O4       020324-33-8 42
  3 Ethane, 1,2-diethoxy-               118 C6H14O2        000629-14-1 38
  4 Propane, 1-ethoxy-2-methyl-         102 C6H14O         000627-02-1 37
```



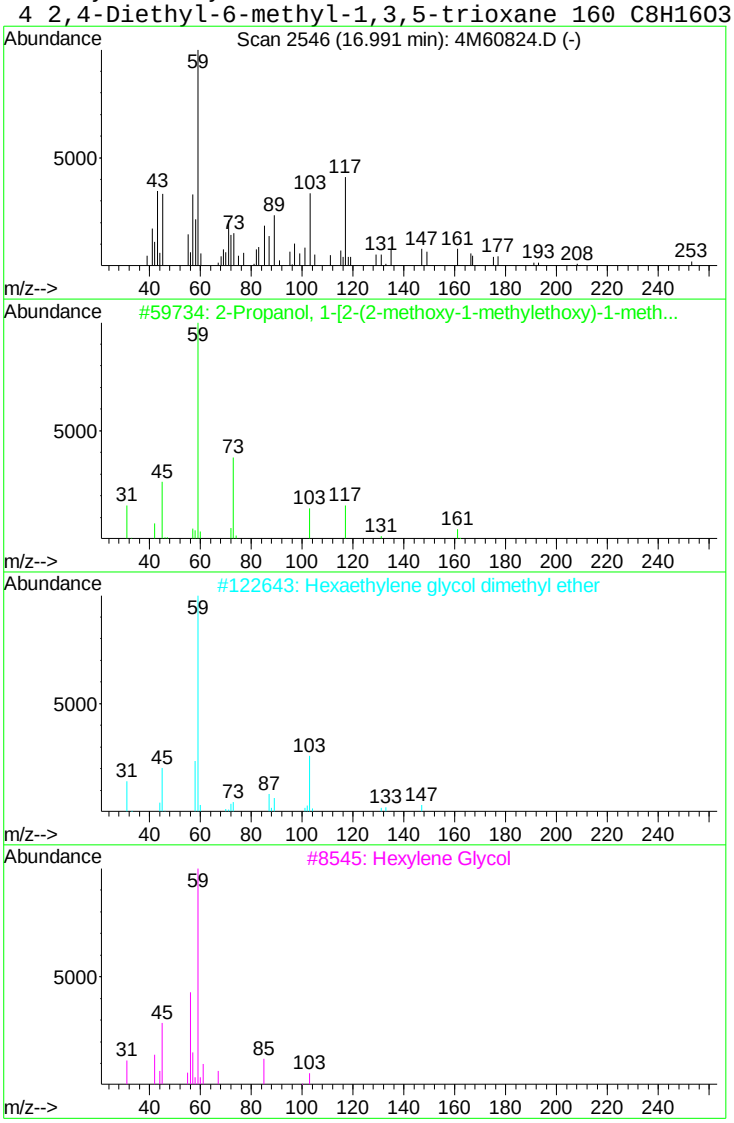


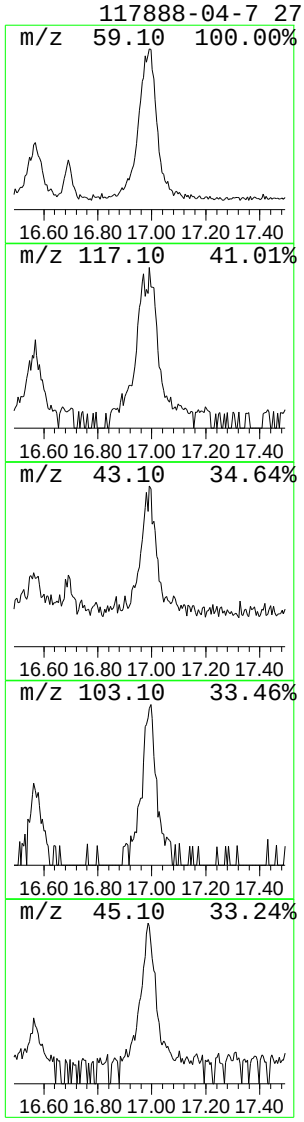
```
Data File : I:\MSDCHEM\1\DATA\051212\4M60824.D          Vial: 9
Acq On    : 12 May 2012  15:27                       Operator: CAA
Sample    : L12050011-01                             Inst    : HPMS4
Misc      : 1,1                                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title        : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library      : I:\DATABASE\NIST02.L
 ******************************************************************
 Peak Number 11  2-Propanol, 1-[2-(2-methoxy...  Concentration Rank  6

   R.T.   EstConc           Area       Relative to ISTD         R.T.
 ------------------------------------------------------------------
  16.99    6.04 ug/ml      348362    Perylene-d12               18.33

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------
  1 2-Propanol, 1-[2-(2-methoxy-1-me... 206 C10H22O4       020324-33-8 38
  2 Hexaethylene glycol dimethyl ether  310 C14H30O7       001072-40-8 37
  3 Hexylene Glycol                     118 C6H14O2        000107-41-5 27
  4 2,4-Diethyl-6-methyl-1,3,5-trioxane 160 C8H16O3        117888-04-7 27
```





Tentatively Identified Compound (LSC) summary

Operator ID: CAA Date Acquired: 12 May 2012 15:27
Data File: I:\MSDCHEM\1\DATA\051212\4M60824.D
Name: L12050011-01
Misc: 1,1
Method: I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title: OVD MSS01 8270/625 Initial Calibration 04/19/12
Library Searched: I:\DATABASE\NIST02.L

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	RT	Resp	Conc
Butane, 2-methoxy...	3.82	5.7	ug/ml	213236	1	7.23	1503410	40.0
Morpholine	5.26	4.3	ug/ml	161518	1	7.23	1503410	40.0
2-Pentanone, 4-hy...	5.69	7.1	ug/ml	265126	1	7.23	1503410	40.0
n-Butyl ether	6.06	4.9	ug/ml	185616	1	7.23	1503410	40.0
1,4-Oxathiane	6.17	14.3	ug/ml	538317	1	7.23	1503410	40.0
[1,4,5]Oxadithiepane	8.42	32.6	ug/ml	1611340	2	8.51	1974870	40.0
Butanamide, 3-met...	13.44	8.1	ug/ml	485335	4	11.92	2394900	40.0
2,5,8,11-Tetraoxa...	14.83	13.5	ug/ml	818906	5	15.60	2429650	40.0
Butanoic acid, 3-...	15.53	4.7	ug/ml	282548	5	15.60	2429650	40.0
2-Propanol, 1-[1-...	16.14	5.7	ug/ml	344276	5	15.60	2429650	40.0
2-Propanol, 1-[2-...	16.99	6.0	ug/ml	348362	6	18.33	2308720	40.0

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051212\4M60825.D Vial: 10
Acq On : 12 May 2012 16:01 Operator: CAA
Sample : L12050011-03 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 14 11:40:49 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Mon May 14 11:40:35 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.23	152	267143	40.00 ug/ml	0.00
30) Naphthalene-d8	8.51	136	996522	40.00 ug/ml	0.00
54) Acenaphthene-d10	10.32	164	555044	40.00 ug/ml	0.00
87) Phenanthrene-d10	11.91	188	989502	40.00 ug/ml	0.00
113) Chrysene-d12	15.60	240	950566	40.00 ug/ml	0.00
128) Perylene-d12	18.33	264	916739	40.00 ug/ml	-0.01

System Monitoring Compounds

8) 2-Fluorophenol	6.00	112	744806	91.9555 ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 91.96%		
12) Phenol-d5	6.83	99	938630	99.0167 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 99.02%#		
31) Nitrobenzene-d5	7.79	82	440487	52.2620 ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 104.52%		
59) 2-Fluorobiphenyl	9.58	172	959210	51.7535 ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 103.50%		
86) 2,4,6-Tribromophenol	11.14	330	306454	123.8128 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 123.81%#		
117) p-Terphenyl-d14	13.95	244	861421	49.1678 ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 98.34%		

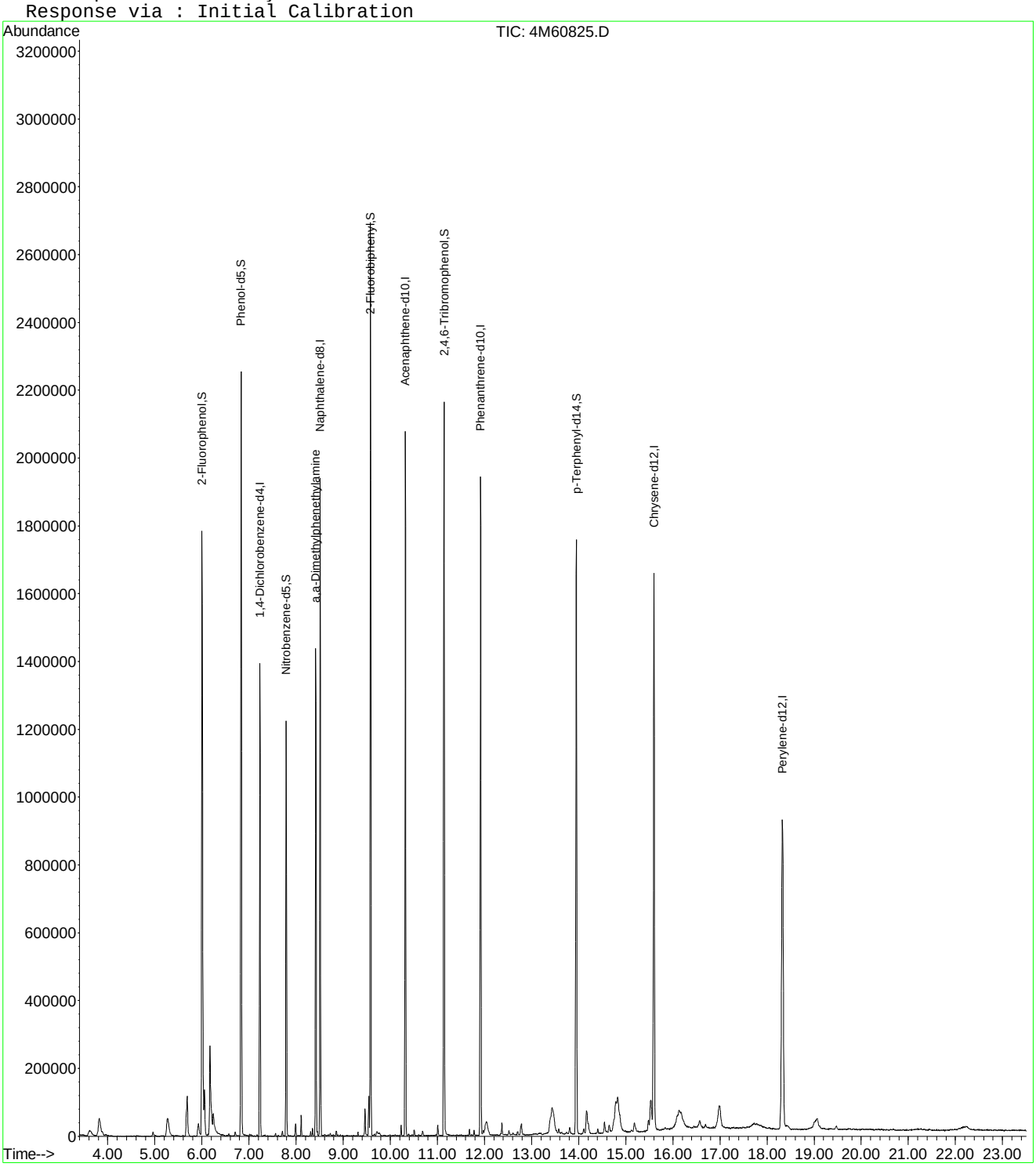
Target Compounds					Qvalue
41) a,a-Dimethylphenethylamine	8.42	58	28676	2.3828 ug/ml#	73

(#) = qualifier out of range (m) = manual integration
4M60825.D MEGAMIX.M Mon May 14 11:46:28 2012 Page 1

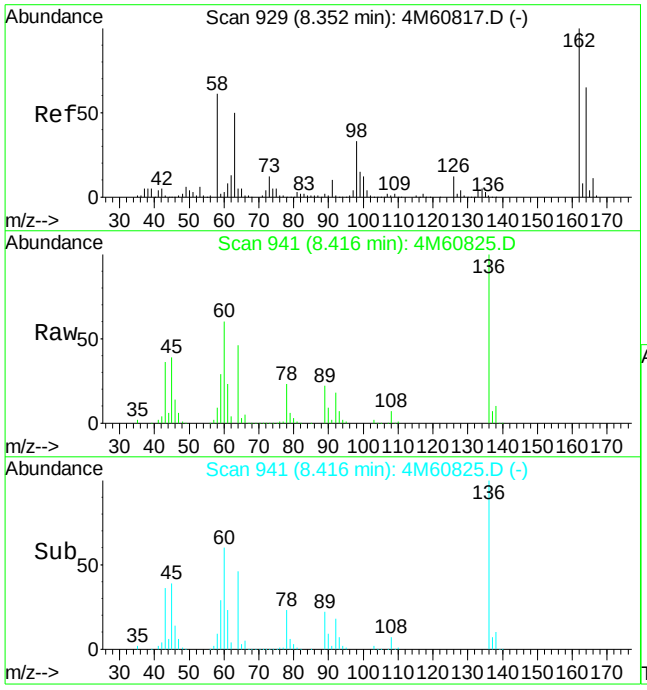
Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051212\4M60825.D Vial: 10
Acq On : 12 May 2012 16:01 Operator: CAA
Sample : L12050011-03 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 14 11:40 2012 Quant Results File: MEGAMIX.RES

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Mon May 14 11:40:35 2012
Response via : Initial Calibration



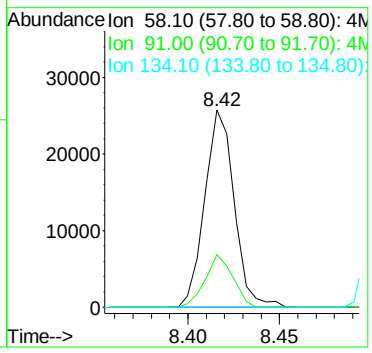
4M60825.D MEGAMIX.M Mon May 14 11:46:29 2012 Page 2



#41
a,a-Dimethylphenethylamine
Concen: 2.38 ug/ml
RT: 8.42 min Scan# 941
Delta R.T. 0.07 min
Lab File: 4M60825.D
Acq: 12 May 2012 16:01

Tgt Ion: 58 Resp: 28676

Ion	Ratio	Lower	Upper
58	100		
91	25.1	10.1	15.1#
134	0.0	5.0	7.4#



Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\051212\4M60825.D Vial: 10
Acq On : 12 May 2012 16:01 Operator: CAA
Sample : L12050011-03 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 14 11:54:26 2012 Quant Results File: TCL.RES

Quant Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Mon May 14 11:53:23 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.23	152	267143	40.00	ug/mL	0.00
3) Naphthalene-d8	8.51	136	996522	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.32	164	555044	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.91	188	989502	40.00	ug/mL	0.00

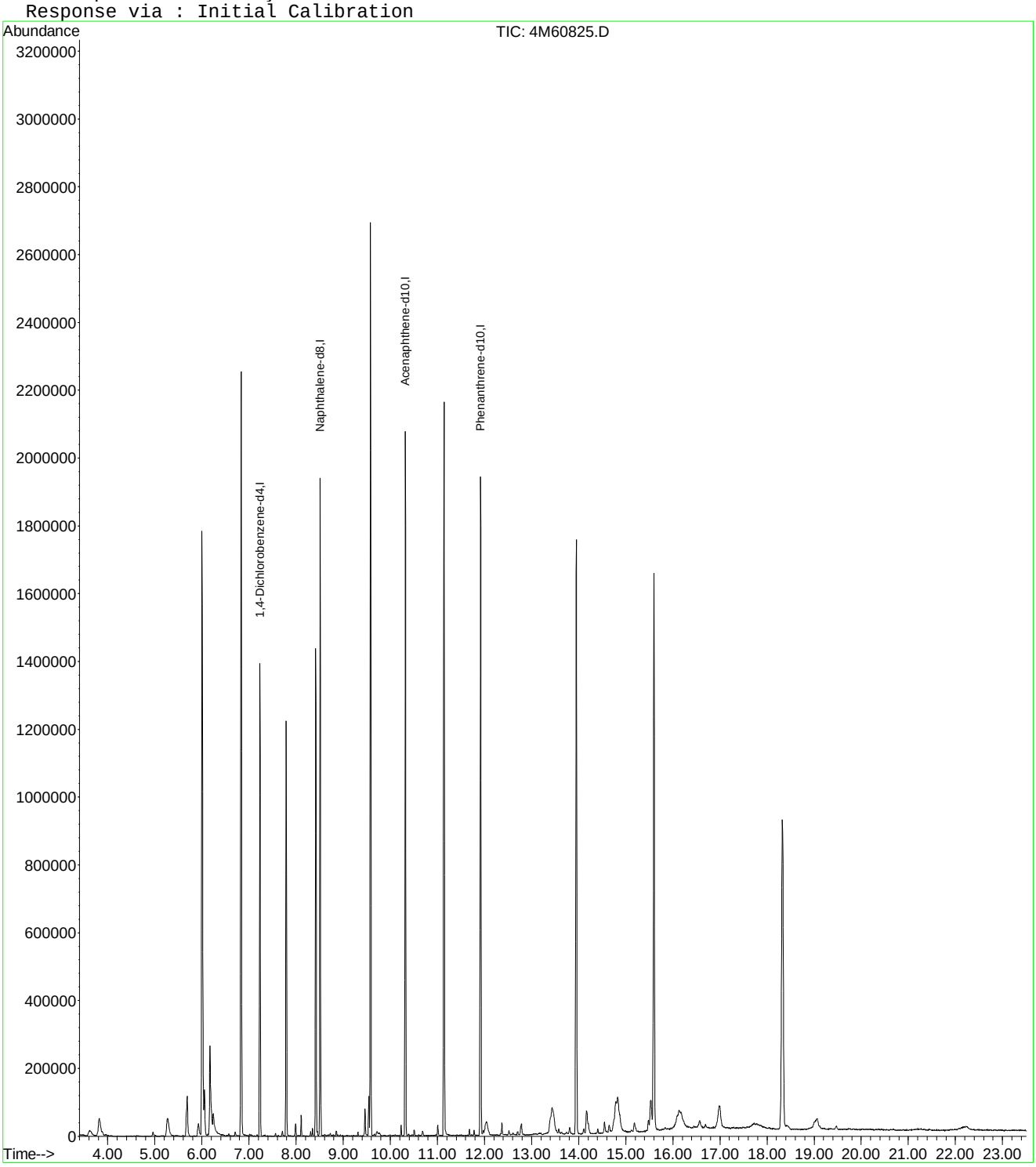
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
4M60825.D TCL.M Mon May 14 11:54:26 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\051212\4M60825.D Vial: 10
Acq On : 12 May 2012 16:01 Operator: CAA
Sample : L12050011-03 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 14 11:54 2012 Quant Results File: TCL.RES

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Mon May 14 11:53:23 2012
Response via : Initial Calibration



4M60825.D TCL.M Mon May 14 11:54:26 2012 Page 2

LSC Area Percent Report

Data File : I:\MSDCHEM\1\DATA\051212\4M60825.D Vial: 10
Acq On : 12 May 2012 16:01 Operator: CAA
Sample : L12050011-03 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.05 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	3.619	31	43	62	rBV5	16002	76292	2.82%	0.227%
2	3.822	69	81	101	rBV2	52058	193756	7.17%	0.577%
3	5.269	343	352	370	rBV	53378	190102	7.03%	0.566%
4	5.686	419	430	443	rBB2	118751	236394	8.74%	0.704%
5	5.926	462	475	483	rBV	37410	86515	3.20%	0.258%
6	6.001	483	489	496	rVV	1783566	2463105	91.11%	7.334%
7	6.055	496	499	509	rVB	134960	175801	6.50%	0.523%
8	6.167	514	520	531	rBV3	264049	538115	19.90%	1.602%
9	6.242	531	534	555	rVB3	60087	147646	5.46%	0.440%
10	6.829	637	644	656	rBV	2254442	2580147	95.44%	7.683%
11	7.230	712	719	727	rBB	1394300	1521603	56.28%	4.531%
12	7.791	816	824	837	rBV	1224796	1306234	48.32%	3.890%
13	7.988	852	861	868	rBV3	36226	41936	1.55%	0.125%
14	8.106	876	883	890	rBB	61713	61727	2.28%	0.184%
15	8.416	933	941	951	rBV	1438330	1561335	57.75%	4.649%
16	8.512	951	959	968	rVV	1940333	1981049	73.28%	5.899%
17	9.463	1128	1137	1147	rBV	80588	104146	3.85%	0.310%
18	9.543	1147	1152	1155	rVV	116793	127450	4.71%	0.380%
19	9.580	1155	1159	1168	rVB	2693365	2703437	100.00%	8.050%
20	9.719	1179	1185	1190	rBV6	12794	28686	1.06%	0.085%
21	10.227	1273	1280	1285	rBV	32118	33550	1.24%	0.100%
22	10.318	1291	1297	1305	rVB	2078811	2192639	81.11%	6.529%
23	11.007	1422	1426	1435	rVB2	31162	38744	1.43%	0.115%
24	11.140	1445	1451	1465	rBV	2165001	2516657	93.09%	7.494%
25	11.915	1588	1596	1603	rBV	1942393	2389857	88.40%	7.116%
26	12.043	1610	1620	1636	rVB3	40545	163460	6.05%	0.487%
27	12.369	1670	1681	1691	rBV3	38146	56797	2.10%	0.169%
28	12.786	1749	1759	1769	rBV3	33684	68349	2.53%	0.204%
29	13.437	1860	1881	1903	rBV2	75955	423782	15.68%	1.262%
30	13.806	1943	1950	1958	rBV4	18502	31696	1.17%	0.094%
31	13.950	1967	1977	1988	rBV	1753177	2493210	92.22%	7.424%
32	14.111	1998	2007	2012	rBV4	16570	31293	1.16%	0.093%
33	14.164	2012	2017	2035	rVB2	68300	194516	7.20%	0.579%
34	14.549	2080	2089	2095	rBV3	33551	57130	2.11%	0.170%
35	14.650	2102	2108	2116	rBV5	22251	43266	1.60%	0.129%
36	14.789	2116	2134	2136	rVV	90505	276689	10.23%	0.824%
37	14.826	2137	2141	2168	rVB	101610	397617	14.71%	1.184%
38	15.184	2202	2208	2219	rVB3	24912	55157	2.04%	0.164%
39	15.483	2257	2264	2267	rBV3	32208	55222	2.04%	0.164%
40	15.532	2267	2273	2279	rVV2	90013	232150	8.59%	0.691%
41	15.596	2279	2285	2299	rVB	1642691	2500198	92.48%	7.445%
42	16.130	2356	2385	2391	rBV4	56062	314113	11.62%	0.935%

43	16.573	2458	2468	2478	rVB9	22218	67572	2.50%	0.201%
44	16.985	2528	2545	2563	rBV4	65713	285275	10.55%	0.849%
45	18.326	2782	2796	2808	rBV	912410	2330176	86.19%	6.938%
46	18.432	2813	2816	2827	rVB10	11785	31405	1.16%	0.094%
47	19.057	2914	2933	2951	rVB9	29282	177385	6.56%	0.528%

Sum of corrected areas: 33583381

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File        : I:\MSDCHEM\1\DATA\051212\4M60825.D
Operator    : CAA
Acquired    : 12 May 2012  16:01     using AcqMethod BNATEST
Instrument :   HPMS4
Sample Name: L12050011-03
Misc Info   : 1,1
Vial Number: 10
Quant File :MEGAMIX.RES (RTE Integrator)
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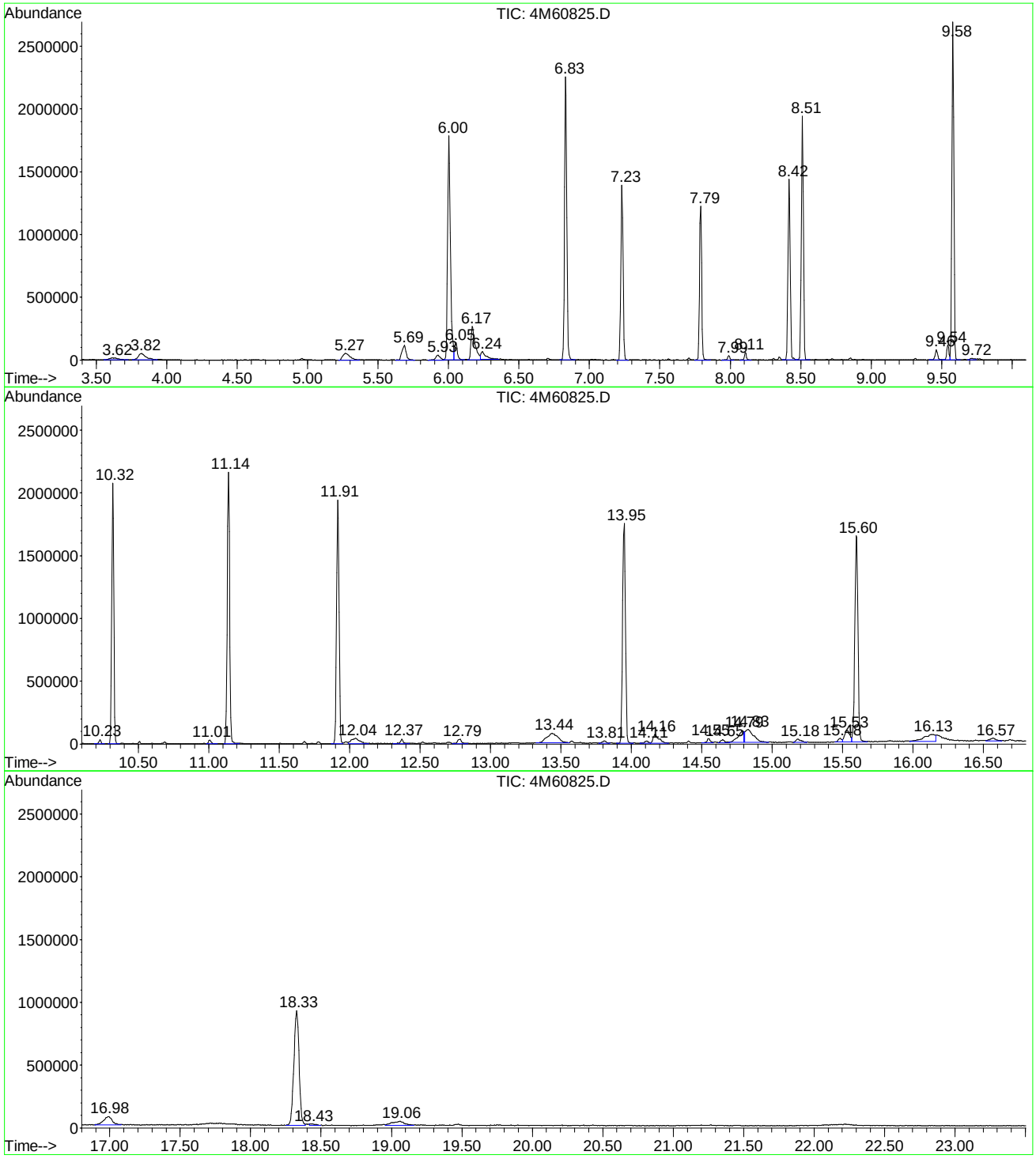

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Data File : I:\MSDCHEM\1\DATA\051212\4M60825.D          Vial: 10
Acq On    : 12 May 2012  16:01                       Operator: CAA
Sample    : L12050011-03                             Inst    : HPMS4
Misc      : 1,1                                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title        : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library      : I:\DATABASE\NIST02.L
 ******************************************************************
 Peak Number  1  Butane, 2-methoxy-2-methyl-     Concentration Rank  6

   R.T.   EstConc           Area       Relative to ISTD         R.T.
 ------------------------------------------------------------------
   3.82    5.09 ug/ml      193756    1,4-Dichlorobenzene-d4      7.23

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------
  1 Butane, 2-methoxy-2-methyl-          102 C6H14O         000994-05-8 74
  2 Butane, 2-methoxy-2-methyl-          102 C6H14O         000994-05-8 64
  3 N-Ethylformamide                      73 C3H7NO         000627-45-2 9
  4 2-Butanone, 3-methoxy-3-methyl-      116 C6H12O2        036687-98-6 9
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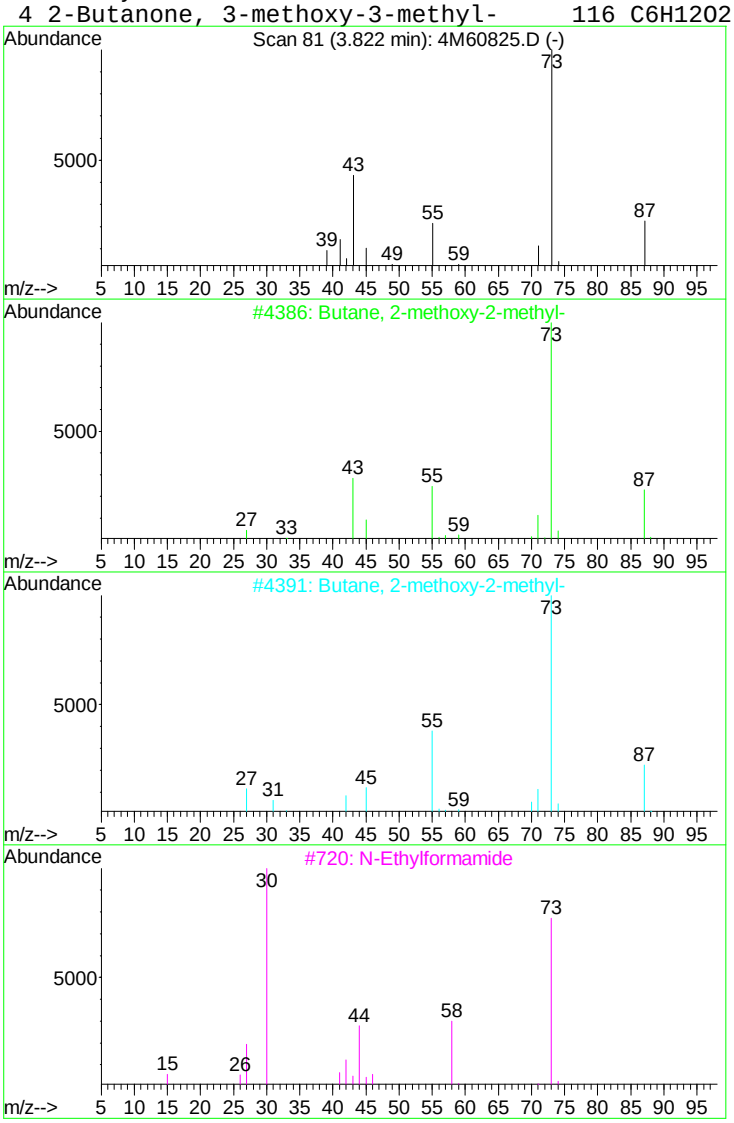

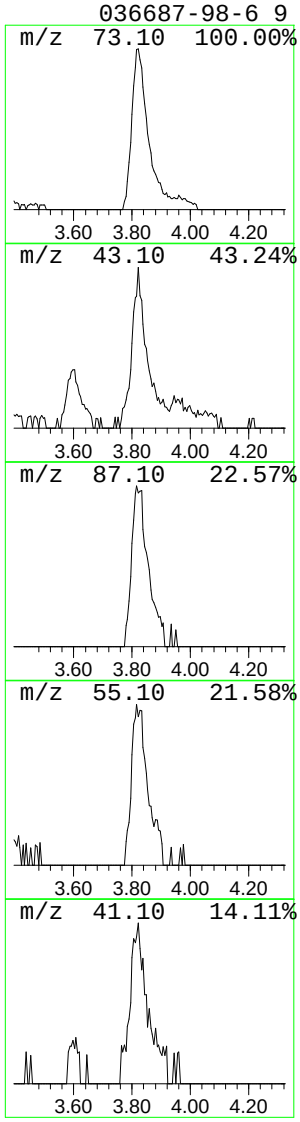

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Data File : I:\MSDCHEM\1\DATA\051212\4M60825.D          Vial: 10
Acq On    : 12 May 2012  16:01                       Operator: CAA
Sample    : L12050011-03                             Inst    : HPMS4
Misc      : 1,1                                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title        : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library      : I:\DATABASE\NIST02.L
 ******************************************************************
 Peak Number  2  Morpholine                      Concentration Rank  8

   R.T.   EstConc           Area       Relative to ISTD         R.T.
 ------------------------------------------------------------------
   5.27    5.00 ug/ml      190102    1,4-Dichlorobenzene-d4      7.23

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------
  1 Morpholine                             87 C4H9NO         000110-91-8 91
  2 Morpholine                             87 C4H9NO         000110-91-8 91
  3 Morpholine                             87 C4H9NO         000110-91-8 78
  4 Morpholine                             87 C4H9NO         000110-91-8 72
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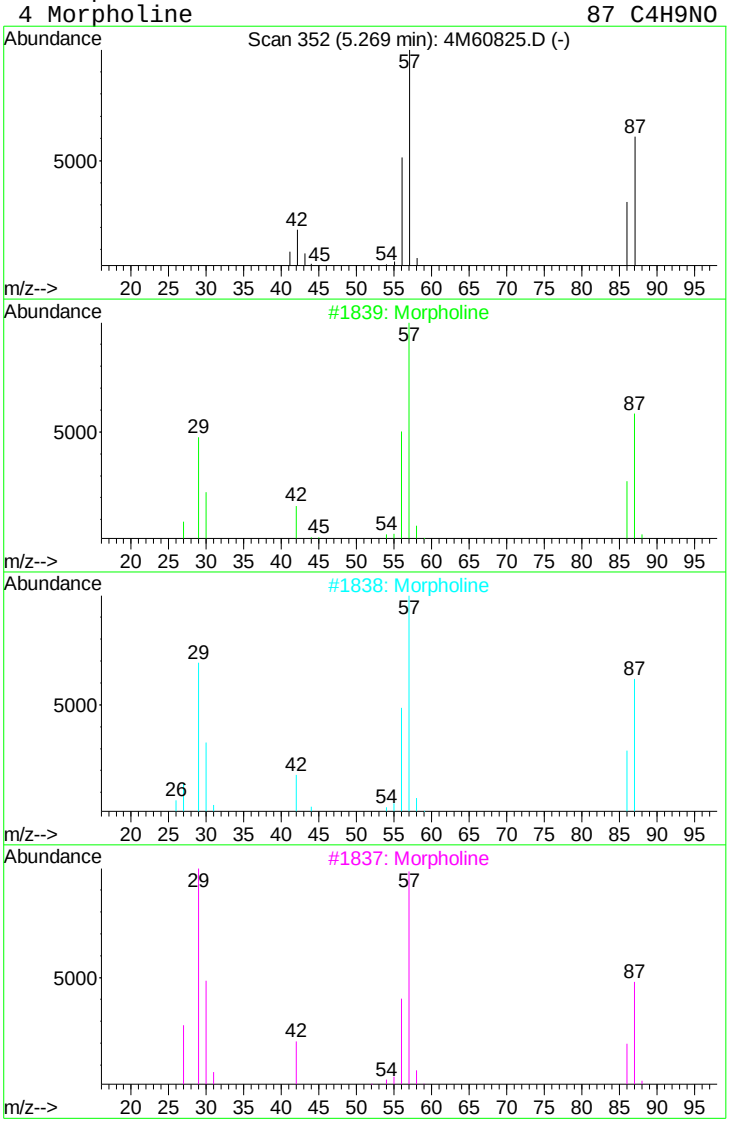

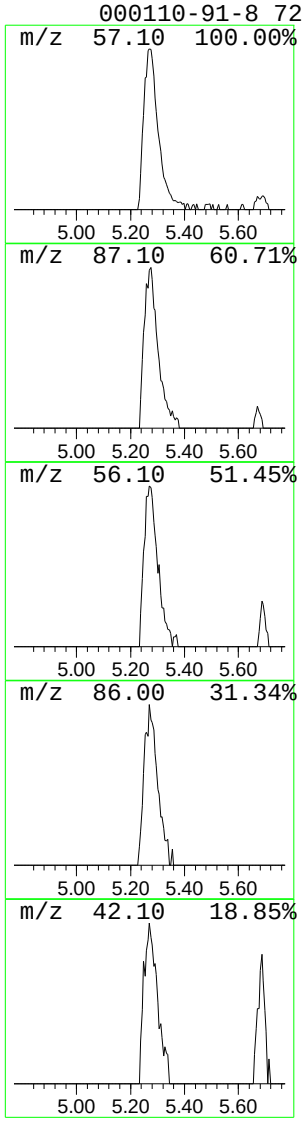

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Data File : I:\MSDCHEM\1\DATA\051212\4M60825.D          Vial: 10
Acq On    : 12 May 2012  16:01                       Operator: CAA
Sample    : L12050011-03                             Inst    : HPMS4
Misc      : 1,1                                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title        : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library      : I:\DATABASE\NIST02.L
 ******************************************************************
 Peak Number  3  2-Pentanone, 4-hydroxy-4-me...  Concentration Rank  5

   R.T.   EstConc           Area       Relative to ISTD         R.T.
 ------------------------------------------------------------------
   5.69    6.21 ug/ml      236394    1,4-Dichlorobenzene-d4      7.23

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------
  1 2-Pentanone, 4-hydroxy-4-methyl-    116 C6H12O2        000123-42-2 50
  2 2-Pentanone, 4-hydroxy-4-methyl-    116 C6H12O2        000123-42-2 38
  3 Silane, trimethyl-                   74 C3H10Si        000993-07-7 23
  4 3-Pentanol                           88 C5H12O         000584-02-1 12
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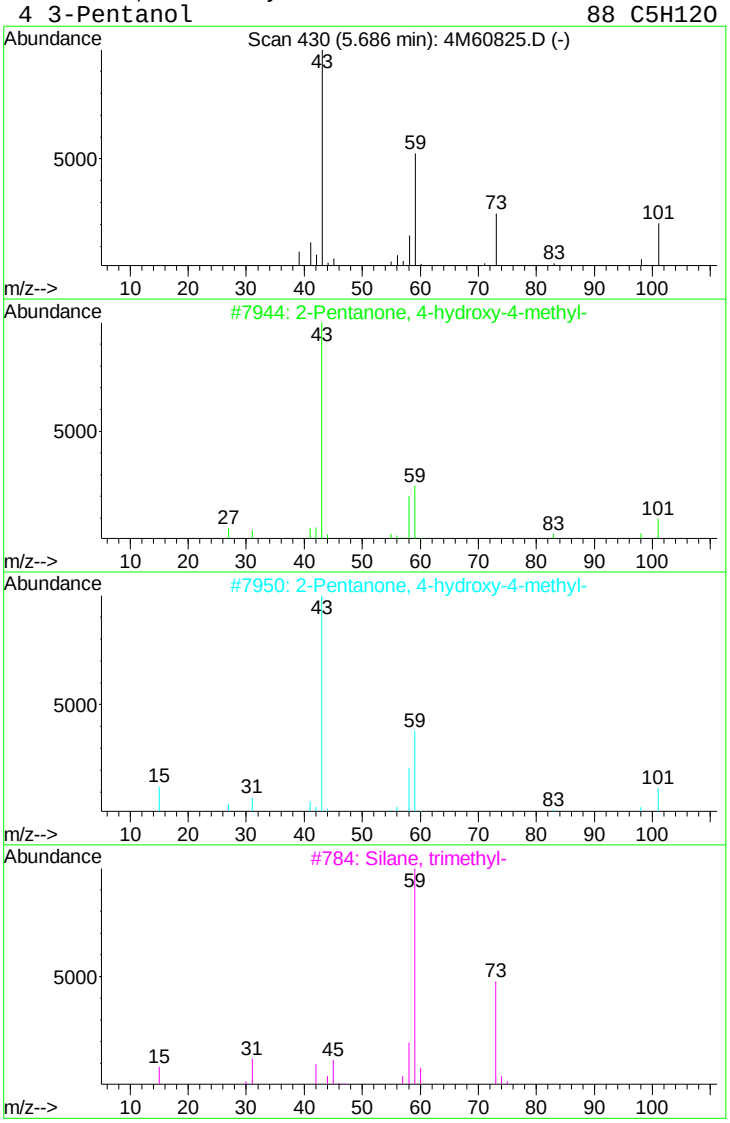

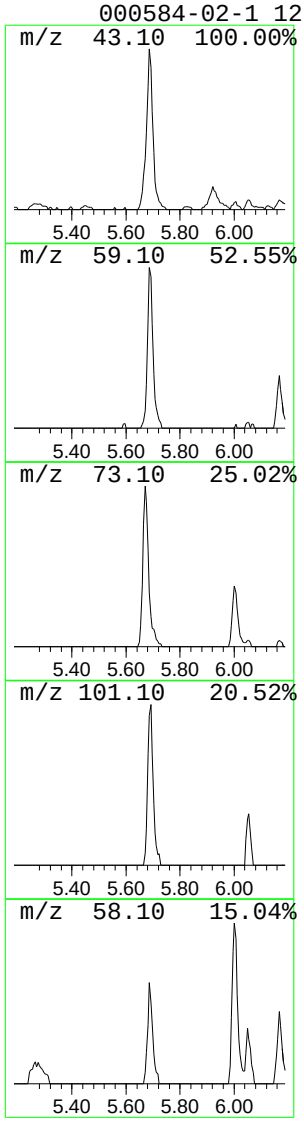

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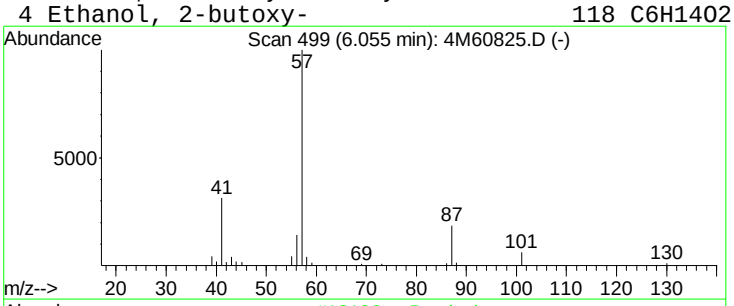
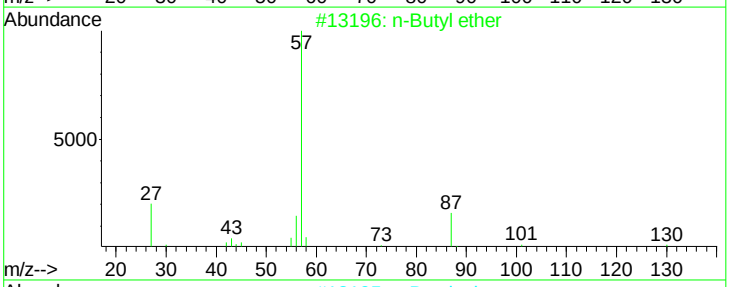
Data File : I:\MSDCHEM\1\DATA\051212\4M60825.D          Vial: 10
Acq On    : 12 May 2012  16:01                       Operator: CAA
Sample    : L12050011-03                             Inst    : HPMS4
Misc      : 1,1                                      Multiplr: 1.00
MS Integration Params: LSCINT.P

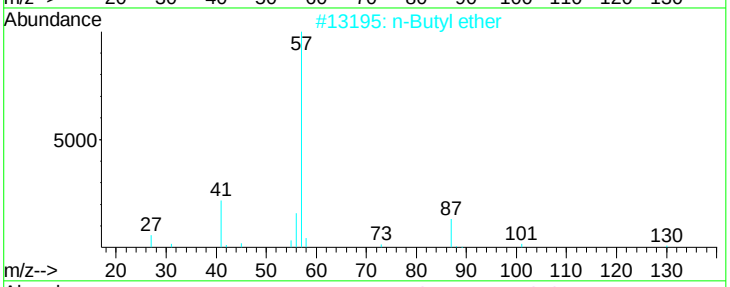
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title        : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library      : I:\DATABASE\NIST02.L
 ******************************************************************
 Peak Number  4  n-Butyl ether                   Concentration Rank 10

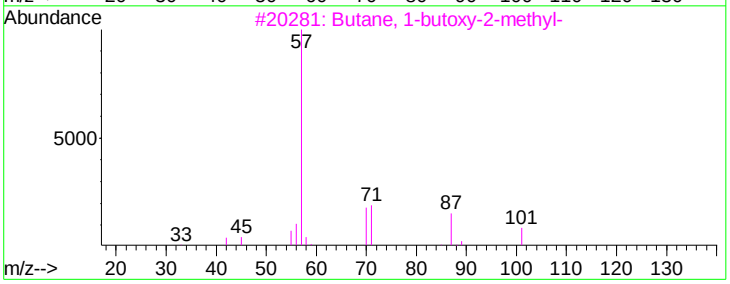
   R.T.   EstConc           Area       Relative to ISTD         R.T.
 ------------------------------------------------------------------
   6.05    4.62 ug/ml      175801    1,4-Dichlorobenzene-d4      7.23

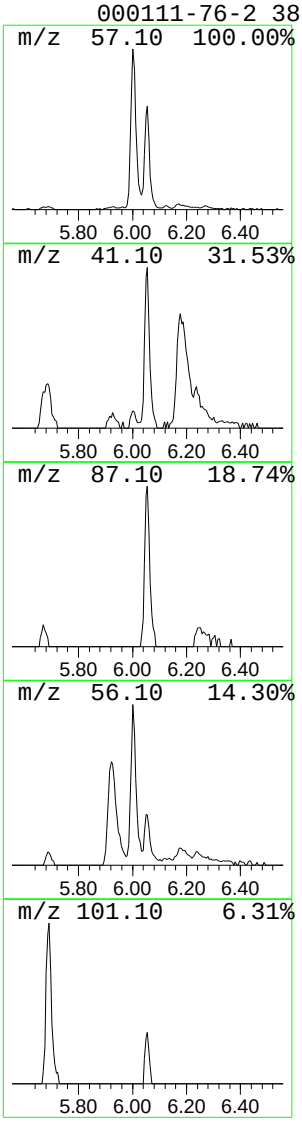
  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------
  1 n-Butyl ether                         130 C8H18O        000142-96-1 64
  2 n-Butyl ether                         130 C8H18O        000142-96-1 50
  3 Butane, 1-butoxy-2-methyl-            144 C9H20O        062238-03-3 39
  4 Ethanol, 2-butoxy-                    118 C6H14O2       000111-76-2 38
```











Library Search Compound Report

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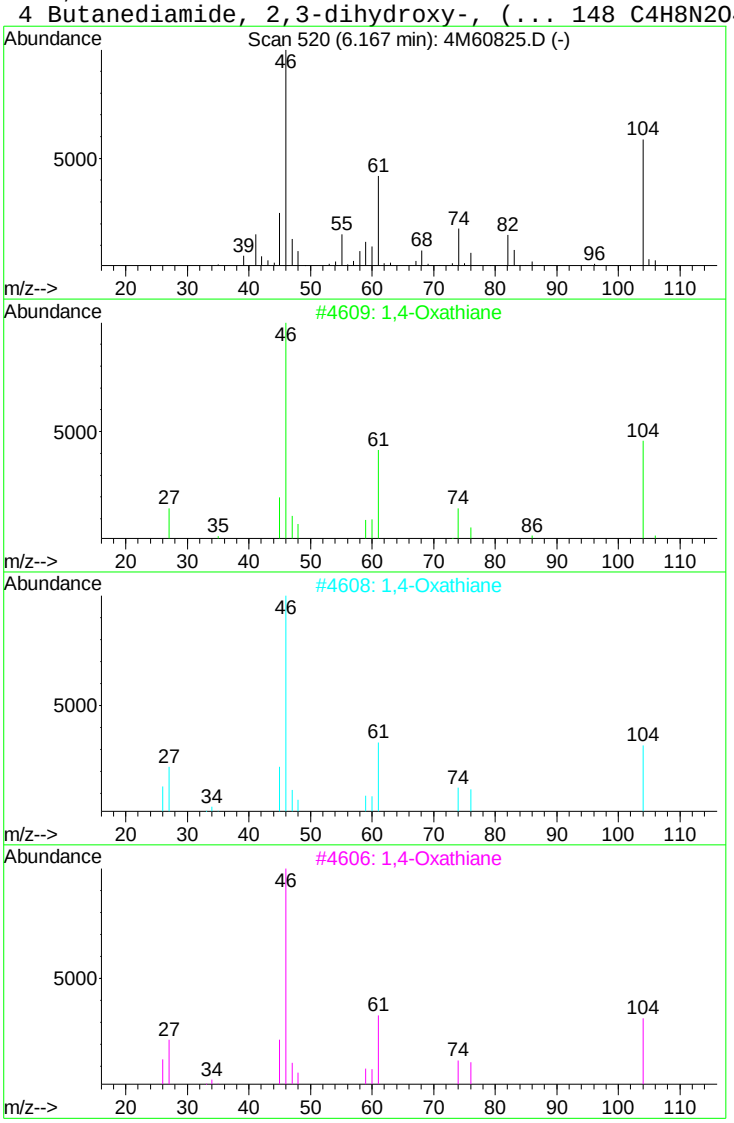
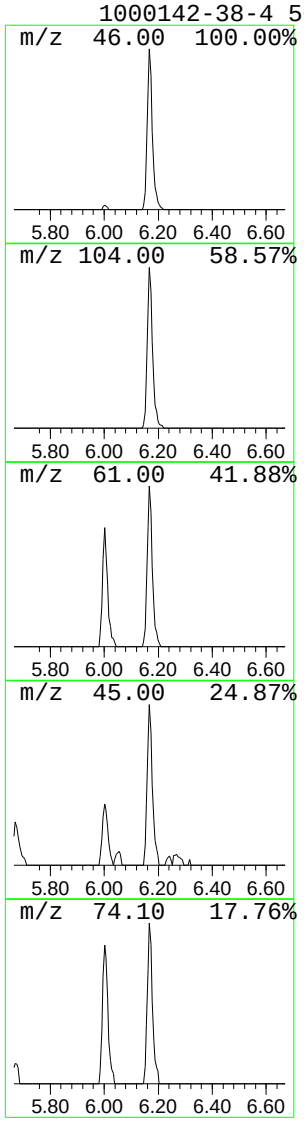
Data File : I:\MSDCHEM\1\DATA\051212\4M60825.D          Vial: 10
Acq On    : 12 May 2012  16:01                       Operator: CAA
Sample    : L12050011-03                             Inst    : HPMS4
Misc      : 1,1                                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title        : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library      : I:\DATABASE\NIST02.L
 ******************************************************************
 Peak Number  5  1,4-Oxathiane                   Concentration Rank  2

   R.T.   EstConc           Area       Relative to ISTD         R.T.
 ------------------------------------------------------------------
   6.17   14.15 ug/ml      538115    1,4-Dichlorobenzene-d4      7.23

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------
  1 1,4-Oxathiane                         104 C4H8OS        015980-15-1 95
  2 1,4-Oxathiane                         104 C4H8OS        015980-15-1 91
  3 1,4-Oxathiane                         104 C4H8OS        015980-15-1 91
  4 Butanediamide, 2,3-dihydroxy-, (... 148 C4H8N2O4       1000142-38-4 50
```





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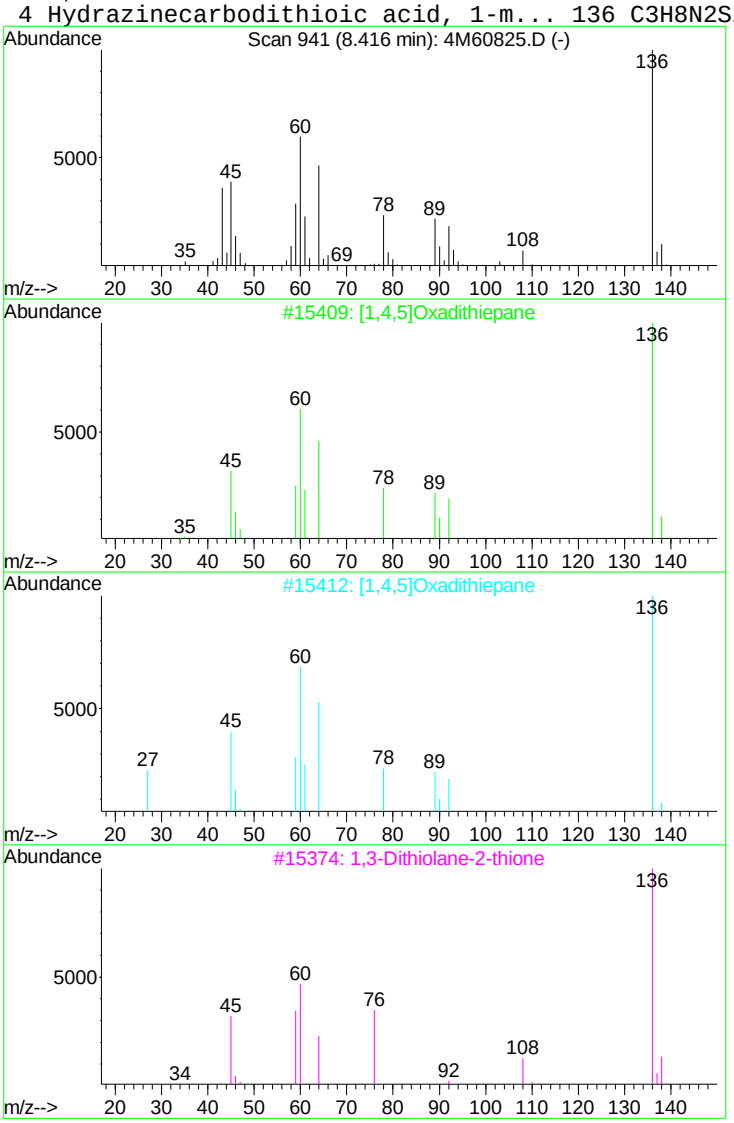
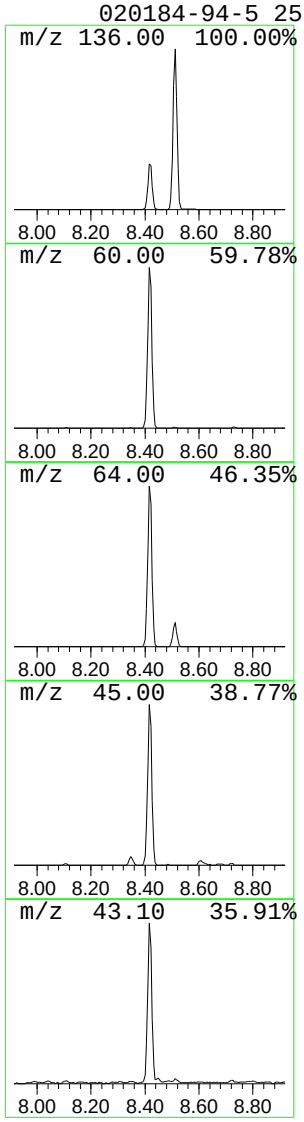
Data File : I:\MSDCHEM\1\DATA\051212\4M60825.D          Vial: 10
Acq On    : 12 May 2012  16:01                       Operator: CAA
Sample    : L12050011-03                             Inst    : HPMS4
Misc      : 1,1                                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title        : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library      : I:\DATABASE\NIST02.L
 ******************************************************************
 Peak Number  6  [1,4,5]Oxadithiepane            Concentration Rank  1

   R.T.   EstConc           Area       Relative to ISTD         R.T.
 ------------------------------------------------------------------
   8.42   31.53 ug/ml     1561340    Naphthalene-d8              8.51

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------
  1 [1,4,5]Oxadithiepane                 136 C4H8OS2        003886-40-6 98
  2 [1,4,5]Oxadithiepane                 136 C4H8OS2        003886-40-6 98
  3 1,3-Dithiolane-2-thione              136 C3H4S3         000822-38-8 38
  4 Hydrazinecarbodithioic acid, 1-m... 136 C3H8N2S2        020184-94-5 25
```





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Data File : I:\MSDCHEM\1\DATA\051212\4M60825.D          Vial: 10
Acq On    : 12 May 2012  16:01                       Operator: CAA
Sample    : L12050011-03                             Inst    : HPMS4
Misc      : 1,1                                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title        : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library      : I:\DATABASE\NIST02.L
 ******************************************************************
 Peak Number  7  1-Propanol, 2-(2-methoxy-1-...  Concentration Rank  3

   R.T.   EstConc           Area       Relative to ISTD         R.T.
 ------------------------------------------------------------------
  13.44    7.09 ug/ml      423782    Phenanthrene-d10           11.91

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------
  1 1-Propanol, 2-(2-methoxy-1-methy... 148 C7H16O3        055956-21-3 45
  2 Silane, triethyl-                   116 C6H16Si        000617-86-7 43
  3 2-Propanol, 1-[1-methyl-2-(2-pro... 174 C9H18O3        055956-25-7 42
  4 2,5,8,11-Tetraoxatetradecan-13-o... 264 C13H28O5       020324-34-9 39
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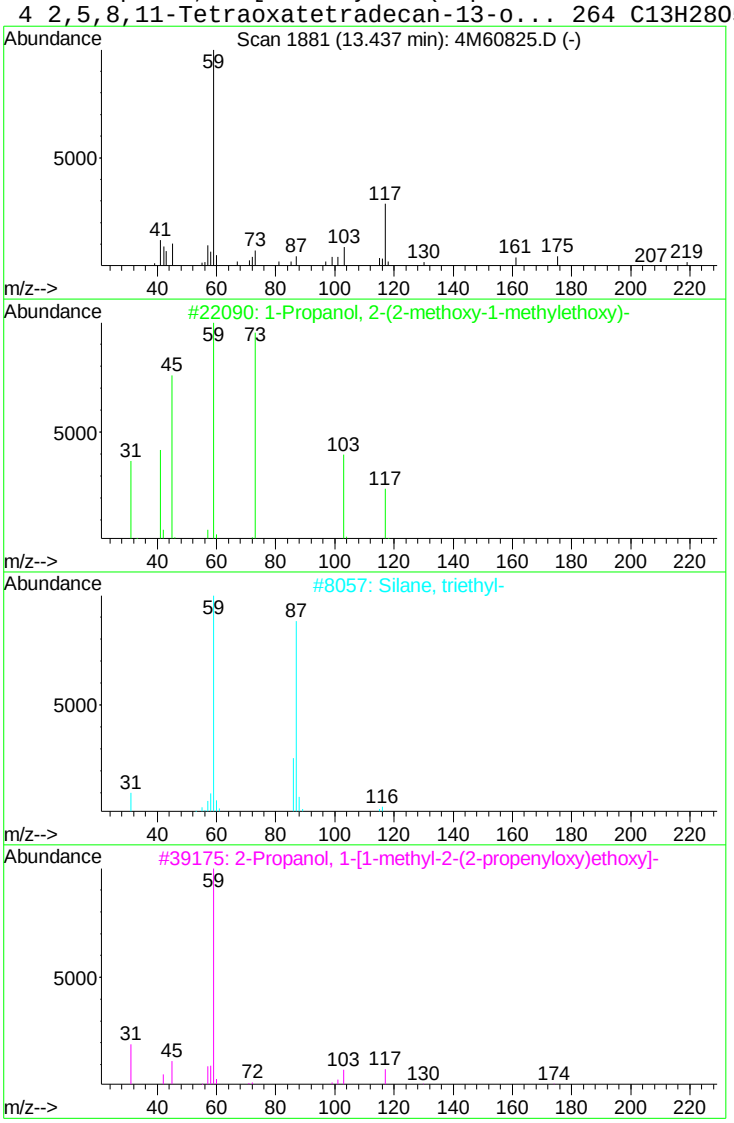

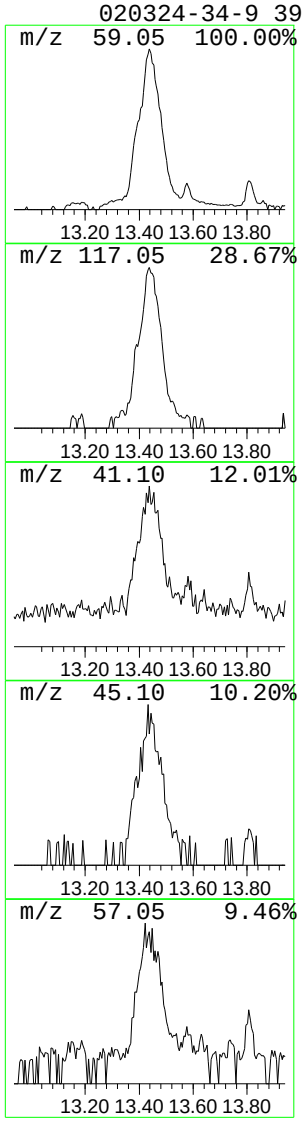

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Data File : I:\MSDCHEM\1\DATA\051212\4M60825.D          Vial: 10
Acq On    : 12 May 2012  16:01                       Operator: CAA
Sample    : L12050011-03                             Inst    : HPMS4
Misc      : 1,1                                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title        : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library      : I:\DATABASE\NIST02.L
 ******************************************************************
 Peak Number  8  1-Propanol, 2-(2-methoxy-1-...  Concentration Rank 11

   R.T.   EstConc           Area       Relative to ISTD         R.T.
 ------------------------------------------------------------------
  14.79    4.43 ug/ml      276689    Chrysene-d12               15.60

  Hit# of  5    Tentative ID             MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------
  1 1-Propanol, 2-(2-methoxy-1-methy... 148 C7H16O3        055956-21-3 53
  2 2-Propanol, 1-[2-(2-methoxy-1-me... 206 C10H22O4       020324-33-8 40
  3 Pentane, 2-methoxy-                 102 C6H14O         006795-88-6 38
  4 1-Butanol, 3-methoxy-               104 C5H12O2        002517-43-3 37
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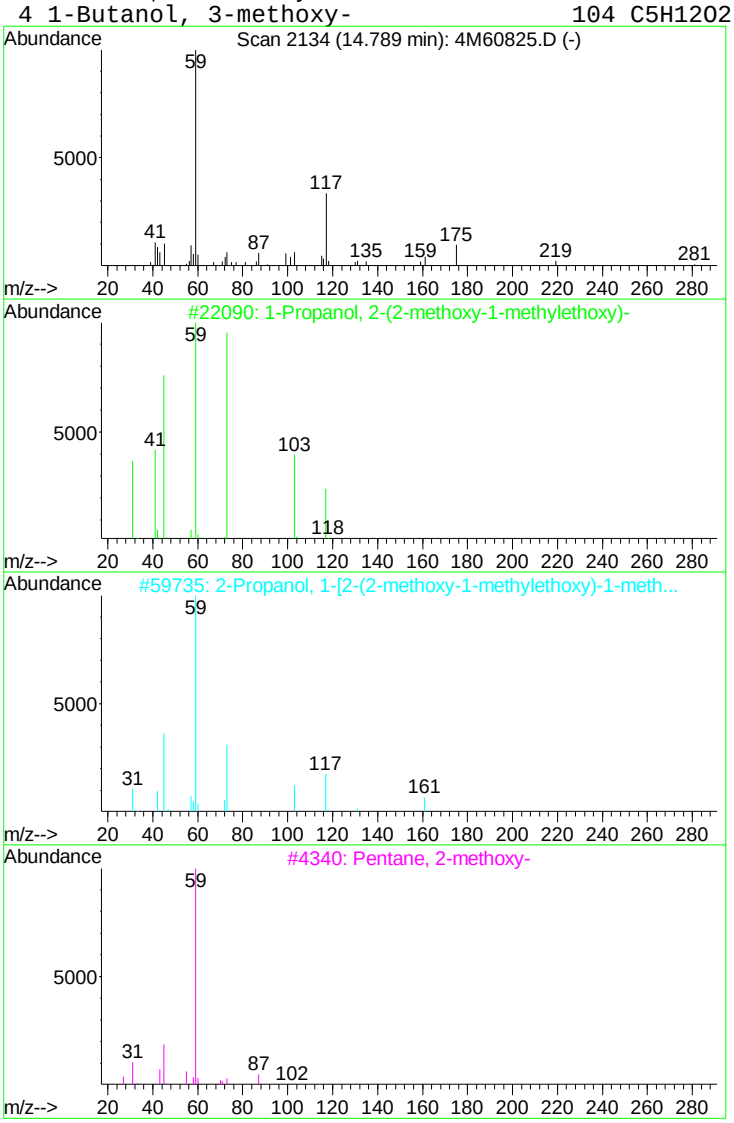

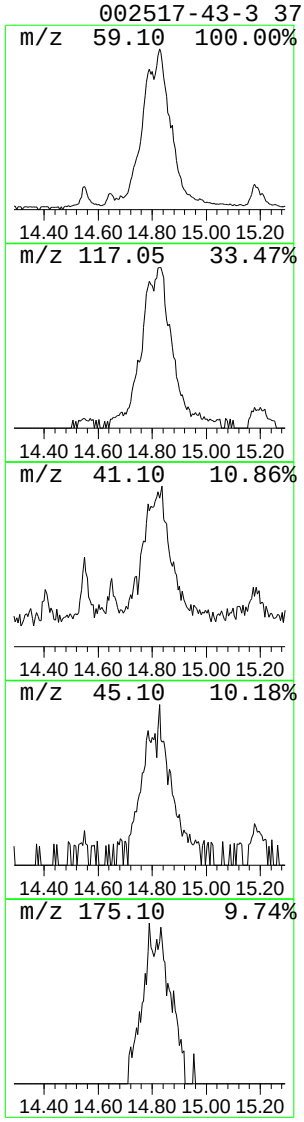

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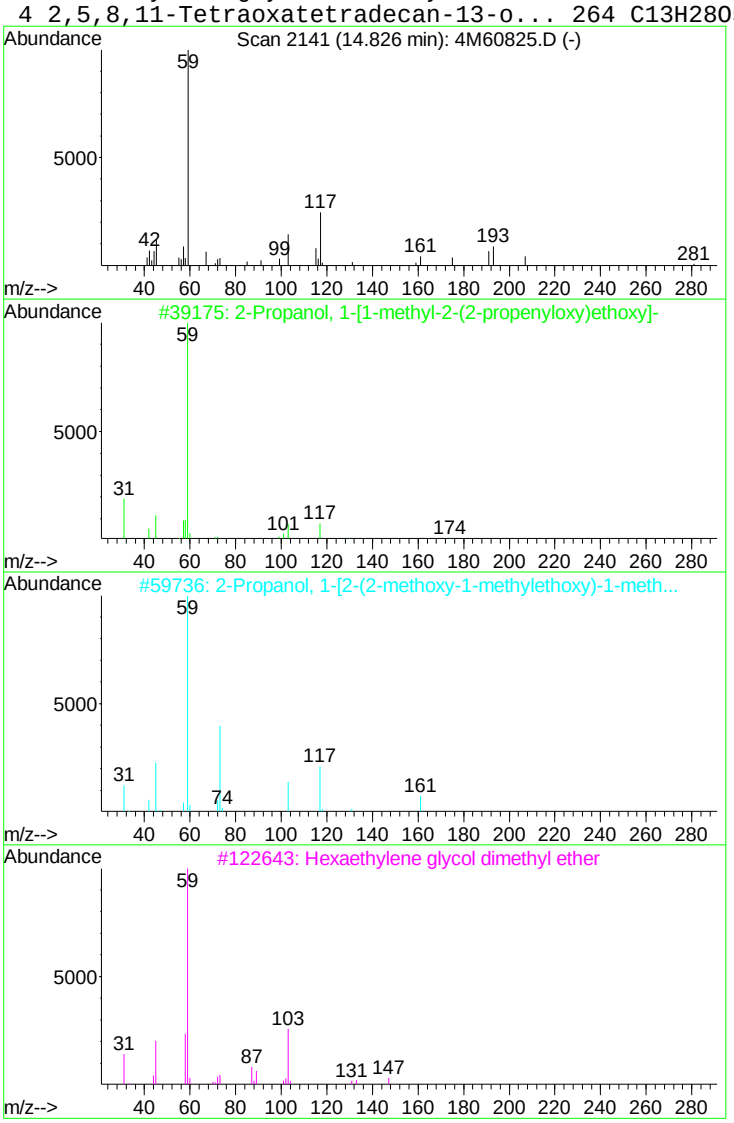
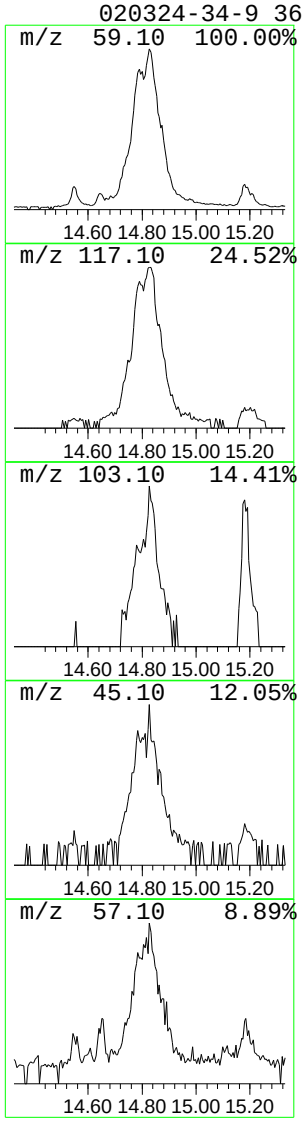
Data File : I:\MSDCHEM\1\DATA\051212\4M60825.D          Vial: 10
Acq On    : 12 May 2012  16:01                       Operator: CAA
Sample    : L12050011-03                             Inst    : HPMS4
Misc      : 1,1                                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title        : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library      : I:\DATABASE\NIST02.L
 ******************************************************************
 Peak Number  9  2-Propanol, 1-[1-methyl-2-(...  Concentration Rank  4

   R.T.   EstConc           Area       Relative to ISTD         R.T.
 ------------------------------------------------------------------
  14.83    6.36 ug/ml      397617    Chrysene-d12               15.60

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------
  1 2-Propanol, 1-[1-methyl-2-(2-pro... 174 C9H18O3        055956-25-7 42
  2 2-Propanol, 1-[2-(2-methoxy-1-me... 206 C10H22O4       020324-33-8 42
  3 Hexaethylene glycol dimethyl ether  310 C14H30O7       001072-40-8 42
  4 2,5,8,11-Tetraoxatetradecan-13-o... 264 C13H28O5       020324-34-9 36
```





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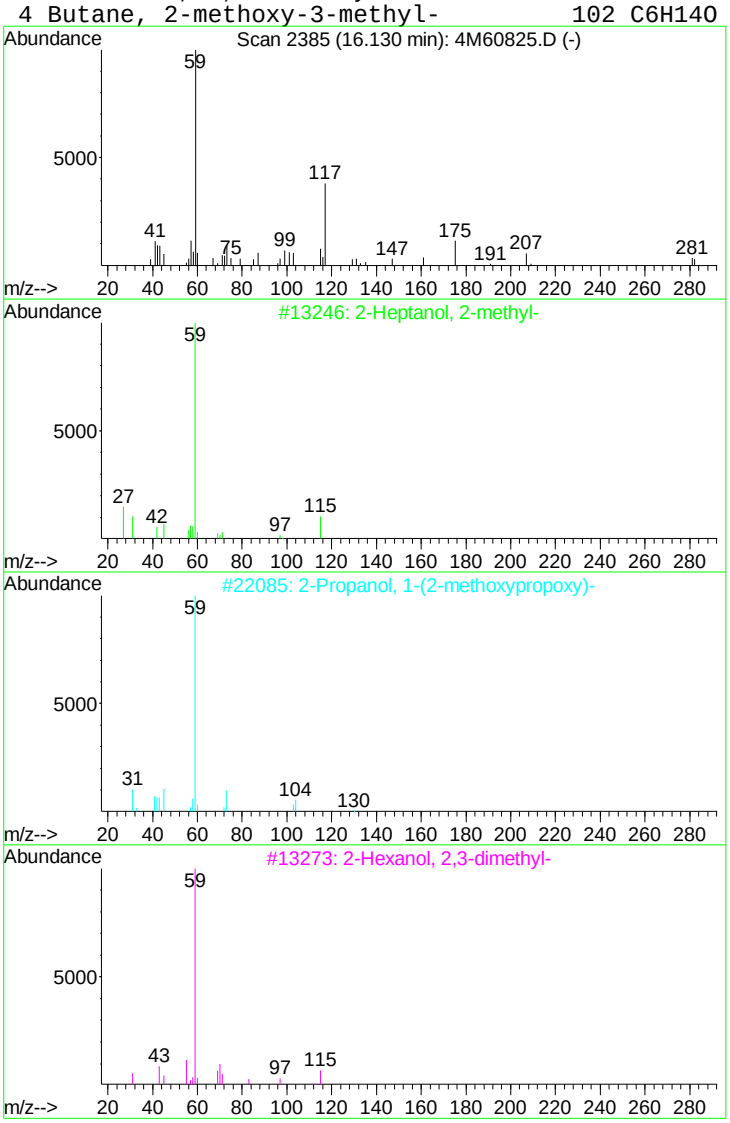
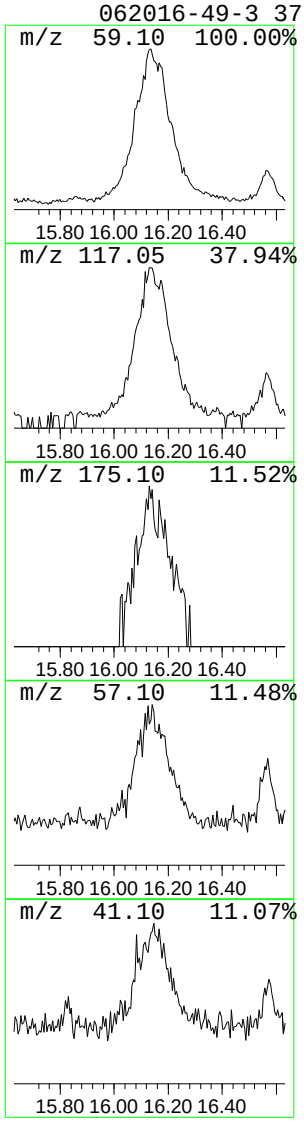
Data File : I:\MSDCHEM\1\DATA\051212\4M60825.D          Vial: 10
Acq On    : 12 May 2012  16:01                       Operator: CAA
Sample    : L12050011-03                             Inst    : HPMS4
Misc      : 1,1                                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title        : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library      : I:\DATABASE\NIST02.L
 ******************************************************************
 Peak Number 10  2-Heptanol, 2-methyl-          Concentration Rank  7

   R.T.   EstConc          Area       Relative to ISTD         R.T.
 ------------------------------------------------------------------
  16.13    5.03 ug/ml      314113    Chrysene-d12               15.60

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------
  1 2-Heptanol, 2-methyl-                130 C8H18O         000625-25-2 43
  2 2-Propanol, 1-(2-methoxypropoxy)-    148 C7H16O3        013429-07-7 40
  3 2-Hexanol, 2,3-dimethyl-             130 C8H18O         019550-03-9 37
  4 Butane, 2-methoxy-3-methyl-          102 C6H14O         062016-49-3 37
```



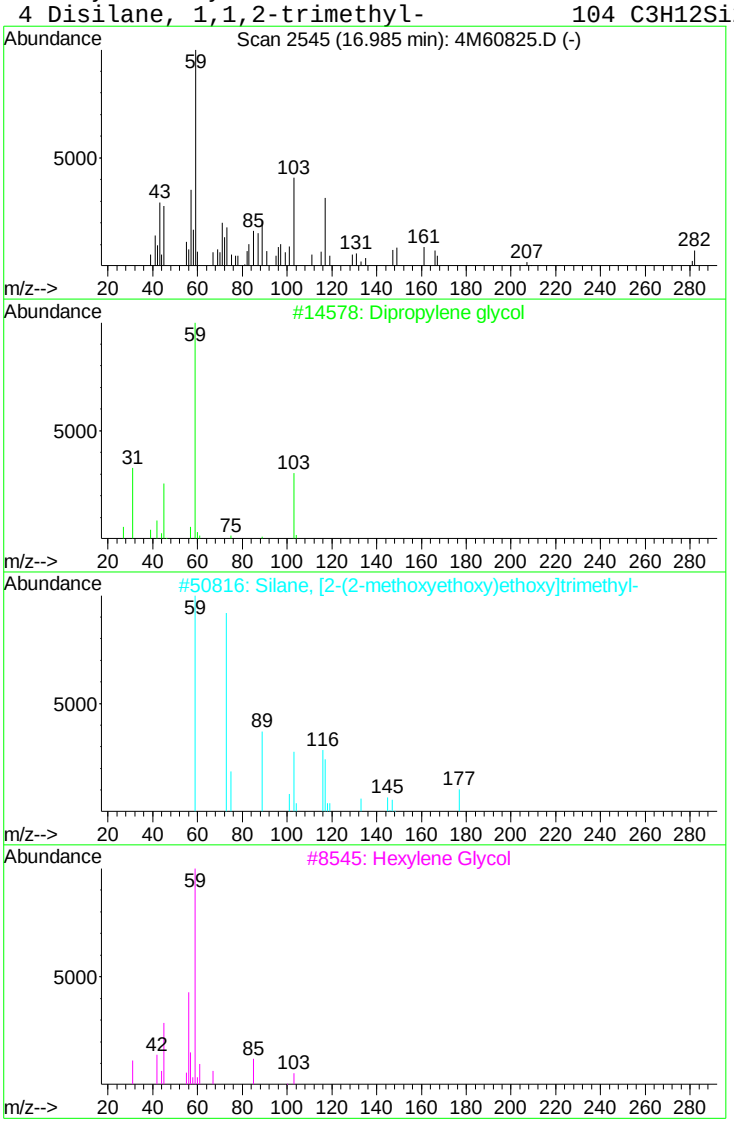


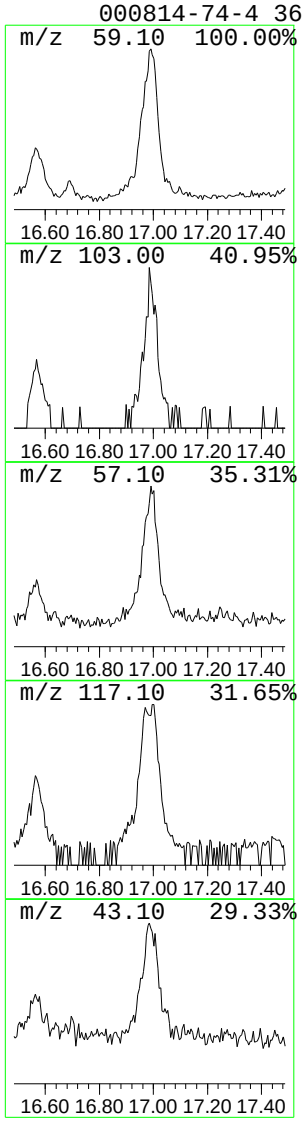
```
Data File : I:\MSDCHEM\1\DATA\051212\4M60825.D          Vial: 10
Acq On    : 12 May 2012  16:01                       Operator: CAA
Sample    : L12050011-03                             Inst    : HPMS4
Misc      : 1,1                                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title        : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library      : I:\DATABASE\NIST02.L
 ******************************************************************
 Peak Number 11  Dipropylene glycol              Concentration Rank  9

   R.T.   EstConc           Area       Relative to ISTD         R.T.
 ------------------------------------------------------------------
  16.98    4.90 ug/ml      285275    Perylene-d12                18.33

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------
  1 Dipropylene glycol                   134 C6H14O3        025265-71-8 43
  2 Silane, [2-(2-methoxyethoxy)etho...  192 C8H20O3Si      062199-57-9 42
  3 Hexylene Glycol                      118 C6H14O2        000107-41-5 37
  4 Disilane, 1,1,2-trimethyl-           104 C3H12Si2       000814-74-4 36
```





Tentatively Identified Compound (LSC) summary

Operator ID: CAA Date Acquired: 12 May 2012 16:01
Data File: I:\MSDCHEM\1\DATA\051212\4M60825.D
Name: L12050011-03
Misc: 1,1
Method: I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title: OVD MSS01 8270/625 Initial Calibration 04/19/12
Library Searched: I:\DATABASE\NIST02.L

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	RT	Resp	Conc
Butane, 2-methoxy...	3.82	5.1	ug/ml	193756	1	7.23	1521600	40.0
Morpholine	5.27	5.0	ug/ml	190102	1	7.23	1521600	40.0
2-Pentanone, 4-hy...	5.69	6.2	ug/ml	236394	1	7.23	1521600	40.0
n-Butyl ether	6.05	4.6	ug/ml	175801	1	7.23	1521600	40.0
1,4-Oxathiane	6.17	14.1	ug/ml	538115	1	7.23	1521600	40.0
[1,4,5]Oxadithiepane	8.42	31.5	ug/ml	1561340	2	8.51	1981050	40.0
1-Propanol, 2-(2-...	13.44	7.1	ug/ml	423782	4	11.91	2389860	40.0
1-Propanol, 2-(2-...	14.79	4.4	ug/ml	276689	5	15.60	2500200	40.0
2-Propanol, 1-[1-...	14.83	6.4	ug/ml	397617	5	15.60	2500200	40.0
2-Heptanol, 2-met...	16.13	5.0	ug/ml	314113	5	15.60	2500200	40.0
Dipropylene glycol	16.98	4.9	ug/ml	285275	6	18.33	2330180	40.0

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051212\4M60826.D Vial: 11
Acq On : 12 May 2012 16:36 Operator: CAA
Sample : L12050011-05 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 14 11:40:49 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Mon May 14 11:40:35 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.23	152	262514	40.00 ug/ml	0.00
30) Naphthalene-d8	8.51	136	988413	40.00 ug/ml	0.00
54) Acenaphthene-d10	10.32	164	547322	40.00 ug/ml	0.00
87) Phenanthrene-d10	11.92	188	986162	40.00 ug/ml	0.00
113) Chrysene-d12	15.60	240	946018	40.00 ug/ml	0.00
128) Perylene-d12	18.33	264	918453	40.00 ug/ml	-0.01

System Monitoring Compounds

8) 2-Fluorophenol	6.00	112	781877	98.2346 ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 98.23%		
12) Phenol-d5	6.83	99	994356	106.7449 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 106.74%#		
31) Nitrobenzene-d5	7.79	82	460058	55.0318 ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 110.06%		
59) 2-Fluorobiphenyl	9.58	172	1002171	54.8344 ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 109.66%		
86) 2,4,6-Tribromophenol	11.15	330	293336	120.1850 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 120.18%		
117) p-Terphenyl-d14	13.95	244	1209936	69.3922 ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 138.78%		

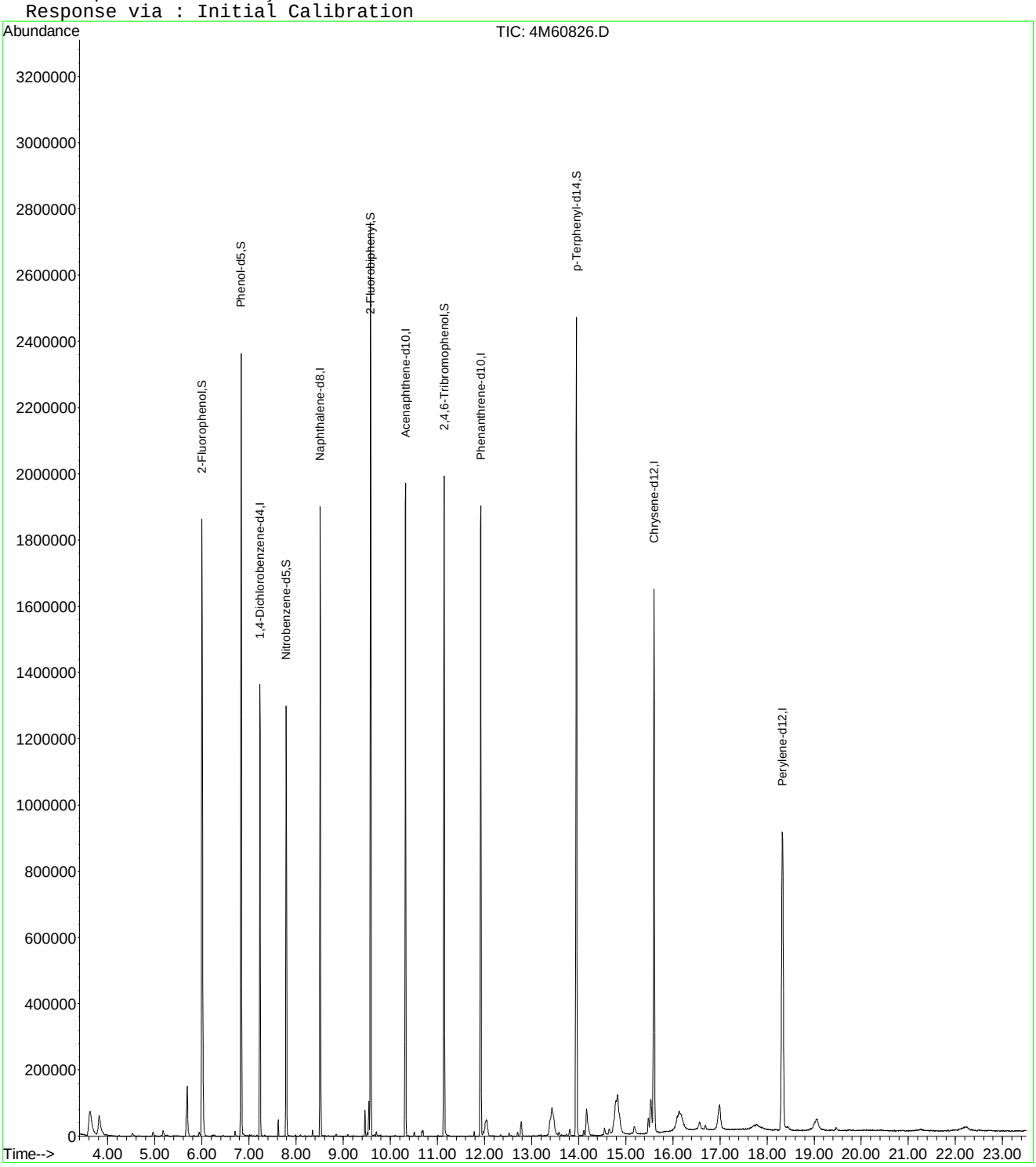
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
4M60826.D MEGAMIX.M Mon May 14 11:46:29 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051212\4M60826.D Vial: 11
Acq On : 12 May 2012 16:36 Operator: CAA
Sample : L12050011-05 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 14 11:40 2012 Quant Results File: MEGAMIX.RES

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Mon May 14 11:40:35 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\051212\4M60826.D Vial: 11
Acq On : 12 May 2012 16:36 Operator: CAA
Sample : L12050011-05 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 14 11:54:26 2012 Quant Results File: TCL.RES

Quant Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Mon May 14 11:53:23 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.23	152	262514	40.00	ug/mL	0.00
3) Naphthalene-d8	8.51	136	988413	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.32	164	547322	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.92	188	986162	40.00	ug/mL	0.00

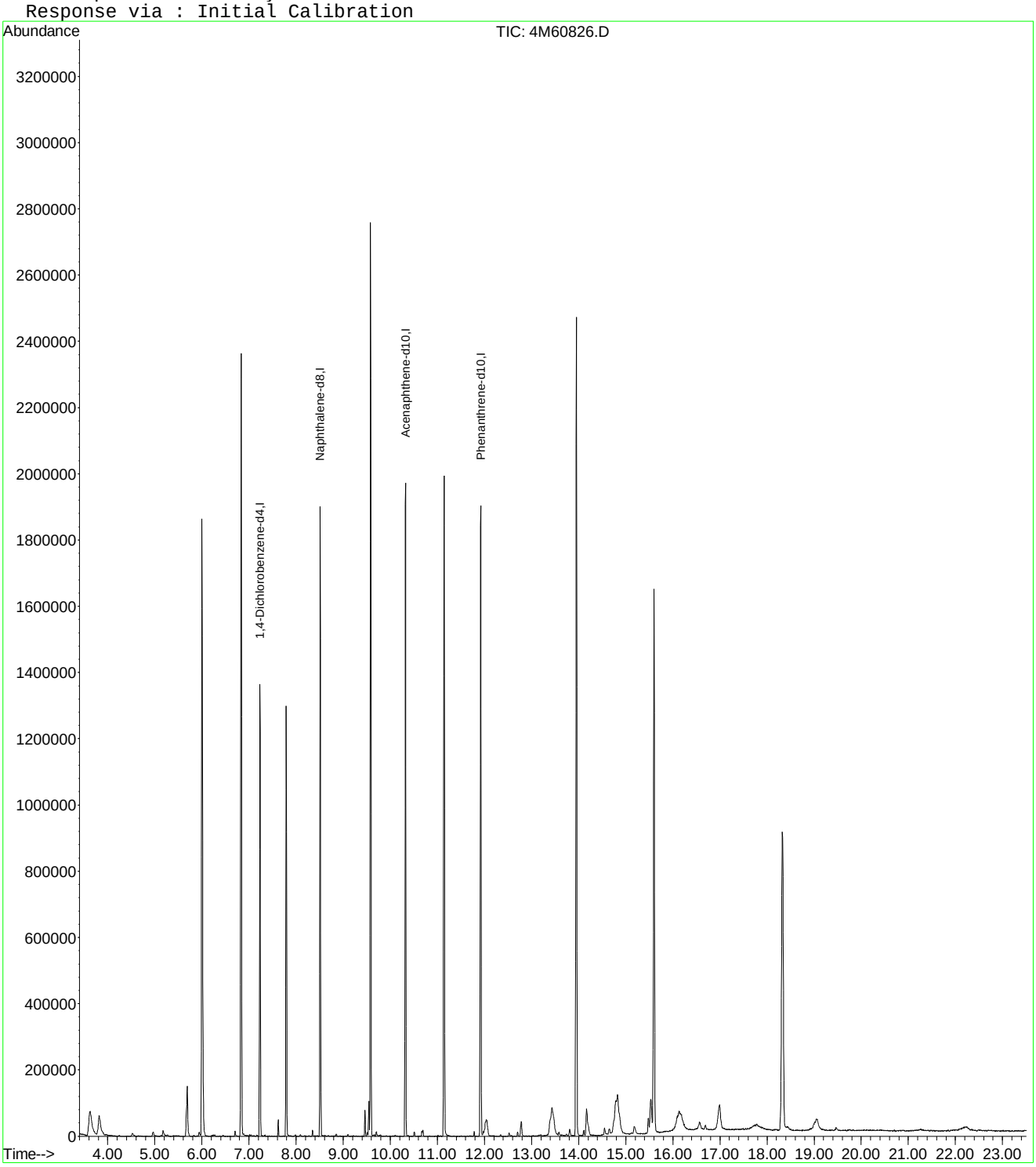
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
4M60826.D TCL.M Mon May 14 11:54:27 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\051212\4M60826.D Vial: 11
Acq On : 12 May 2012 16:36 Operator: CAA
Sample : L12050011-05 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 14 11:54 2012 Quant Results File: TCL.RES

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Mon May 14 11:53:23 2012
Response via : Initial Calibration



4M60826.D TCL.M Mon May 14 11:54:27 2012 Page 2

LSC Area Percent Report

Data File : I:\MSDCHEM\1\DATA\051212\4M60826.D Vial: 11
Acq On : 12 May 2012 16:36 Operator: CAA
Sample : L12050011-05 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

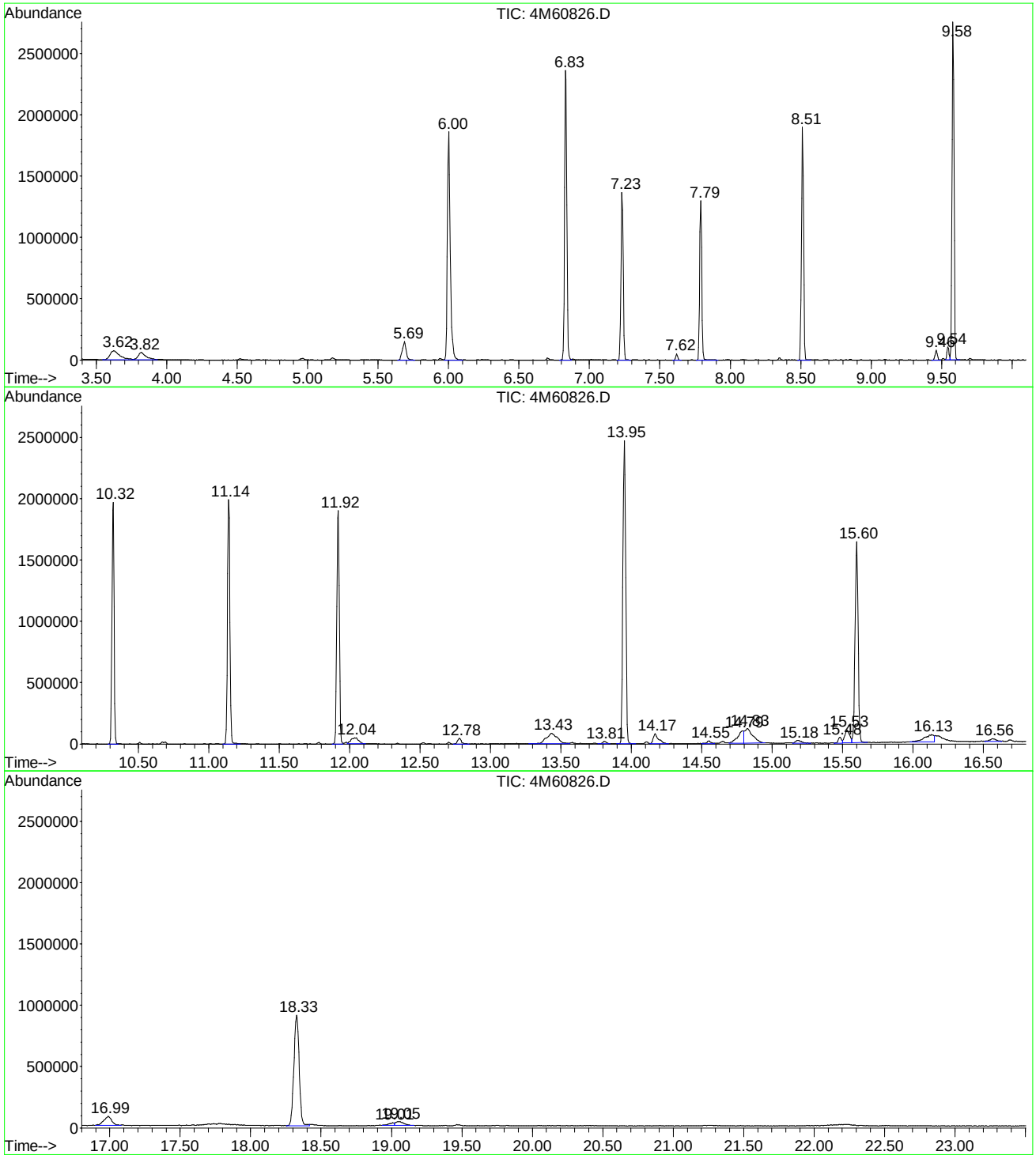
If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.624	29	44	70	rBV2	73758	362367	10.41%	1.126%
2	3.816	70	80	101	rVB2	58636	221106	6.35%	0.687%
3	5.686	421	430	443	rBB2	151219	276886	7.95%	0.860%
4	6.001	483	489	507	rVB	1864161	2606363	74.87%	8.098%
5	6.829	636	644	652	rBV	2363244	2708494	77.81%	8.415%
6	7.230	713	719	730	rBB	1365323	1505040	43.23%	4.676%
7	7.620	787	792	797	rBB	50023	46178	1.33%	0.143%
8	7.791	818	824	846	rBB	1299664	1363302	39.16%	4.236%
9	8.512	953	959	970	rBV	1901540	1950797	56.04%	6.061%
10	9.463	1131	1137	1142	rBB	78818	85408	2.45%	0.265%
11	9.543	1149	1152	1155	rBV	102365	104867	3.01%	0.326%
12	9.580	1155	1159	1167	rVB	2758080	2801599	80.48%	8.704%
13	10.323	1291	1298	1304	rBV	1972244	2150620	61.78%	6.682%
14	11.140	1444	1451	1466	rBV	1993849	2354953	67.65%	7.316%
15	11.920	1589	1597	1603	rBV	1903514	2365295	67.95%	7.349%
16	12.038	1609	1619	1632	rVB4	48681	186843	5.37%	0.580%
17	12.780	1750	1758	1770	rBB2	45064	79849	2.29%	0.248%
18	13.432	1850	1880	1904	rBV2	86027	486981	13.99%	1.513%
19	13.806	1942	1950	1957	rBV2	19612	34993	1.01%	0.109%
20	13.950	1967	1977	1991	rBV	2472402	3481091	100.00%	10.815%
21	14.169	2011	2018	2035	rVB2	80972	210551	6.05%	0.654%
22	14.549	2080	2089	2097	rBV2	22421	40973	1.18%	0.127%
23	14.789	2116	2134	2136	rVV3	101334	317313	9.12%	0.986%
24	14.826	2136	2141	2163	rVB2	116717	448122	12.87%	1.392%
25	15.179	2201	2207	2224	rVB5	23604	66188	1.90%	0.206%
26	15.483	2256	2264	2267	rBV2	46873	78739	2.26%	0.245%
27	15.532	2267	2273	2279	rVV3	103190	248400	7.14%	0.772%
28	15.601	2279	2286	2299	rVB	1640913	2457802	70.60%	7.636%
29	16.130	2357	2385	2389	rBV3	58765	278084	7.99%	0.864%
30	16.563	2456	2466	2478	rBV6	22294	67653	1.94%	0.210%
31	16.990	2529	2546	2562	rBV5	74519	288761	8.30%	0.897%
32	18.325	2783	2796	2813	rBV2	899815	2320757	66.67%	7.210%
33	19.009	2910	2924	2926	rBV7	22872	58569	1.68%	0.182%
34	19.052	2926	2932	2951	rVB10	31588	132135	3.80%	0.411%

Sum of corrected areas: 32187079

File : I:\MSDCHEM\1\DATA\051212\4M60826.D
Operator : CAA
Acquired : 12 May 2012 16:36 using AcqMethod BNATEST
Instrument : HPMS4
Sample Name: L12050011-05
Misc Info : 1,1
Vial Number: 11
Quant File :MEGAMIX.RES (RTE Integrator)



4M60826.D MEGAMIX.M Mon May 14 11:59:55 2012 Page 2

```
Data File : I:\MSDCHEM\1\DATA\051212\4M60826.D          Vial: 11
Acq On    : 12 May 2012  16:36                       Operator: CAA
Sample    : L12050011-05                             Inst    : HPMS4
Misc      : 1,1                                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title        : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library      : I:\DATABASE\NIST02.L
 ******************************************************************
 Peak Number  1  Benzene                          Concentration Rank  1

   R.T.   EstConc           Area       Relative to ISTD         R.T.
 ------------------------------------------------------------------
   3.62    9.63 ug/ml      362367    1,4-Dichlorobenzene-d4      7.23

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------
  1 Benzene                                78 C6H6          000071-43-2 94
  2 Benzene                                78 C6H6          000071-43-2 91
  3 Benzene                                78 C6H6          000071-43-2 91
  4 Benzene                                78 C6H6          000071-43-2 91
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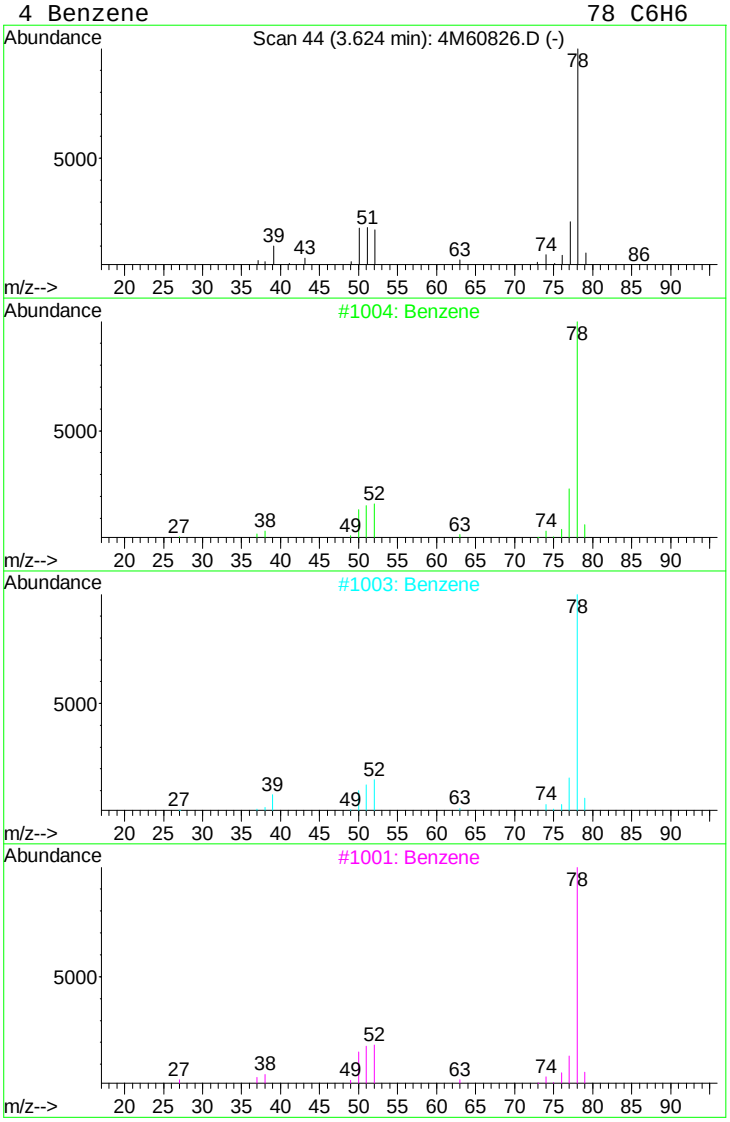

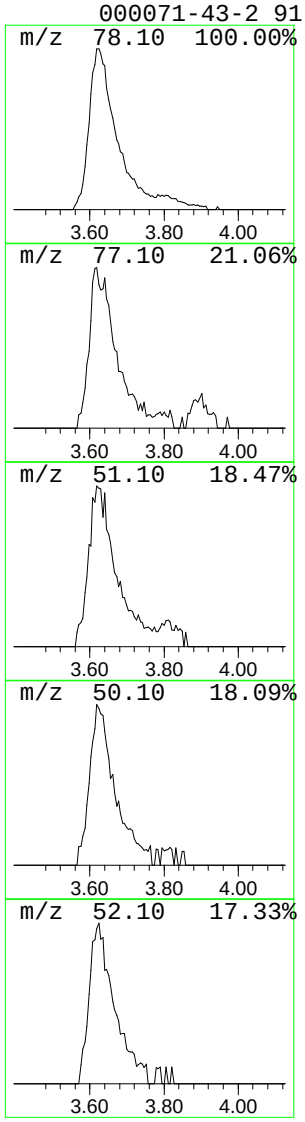

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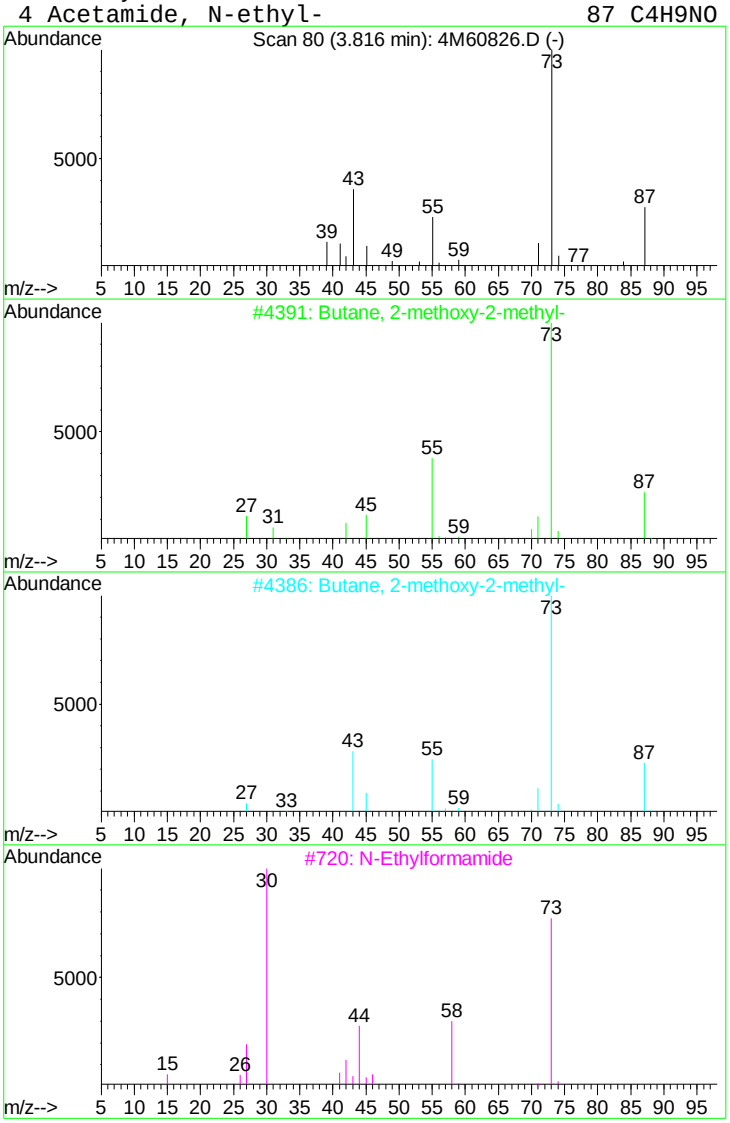
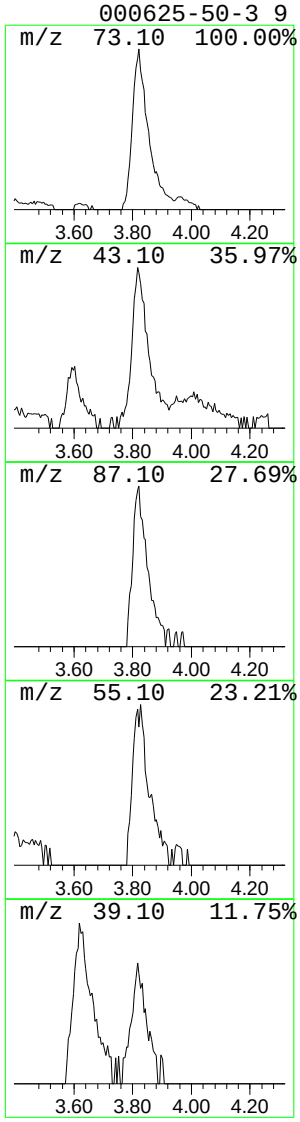
Data File : I:\MSDCHEM\1\DATA\051212\4M60826.D          Vial: 11
Acq On    : 12 May 2012  16:36                       Operator: CAA
Sample    : L12050011-05                             Inst    : HPMS4
Misc      : 1,1                                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title        : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library      : I:\DATABASE\NIST02.L
 ******************************************************************
 Peak Number  2  Butane, 2-methoxy-2-methyl-     Concentration Rank  5

   R.T.   EstConc           Area       Relative to ISTD         R.T.
 ------------------------------------------------------------------
   3.82    5.88 ug/ml      221106    1,4-Dichlorobenzene-d4      7.23

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------
  1 Butane, 2-methoxy-2-methyl-          102 C6H14O         000994-05-8 78
  2 Butane, 2-methoxy-2-methyl-          102 C6H14O         000994-05-8 56
  3 N-Ethylformamide                      73 C3H7NO         000627-45-2 9
  4 Acetamide, N-ethyl-                   87 C4H9NO         000625-50-3 9
```





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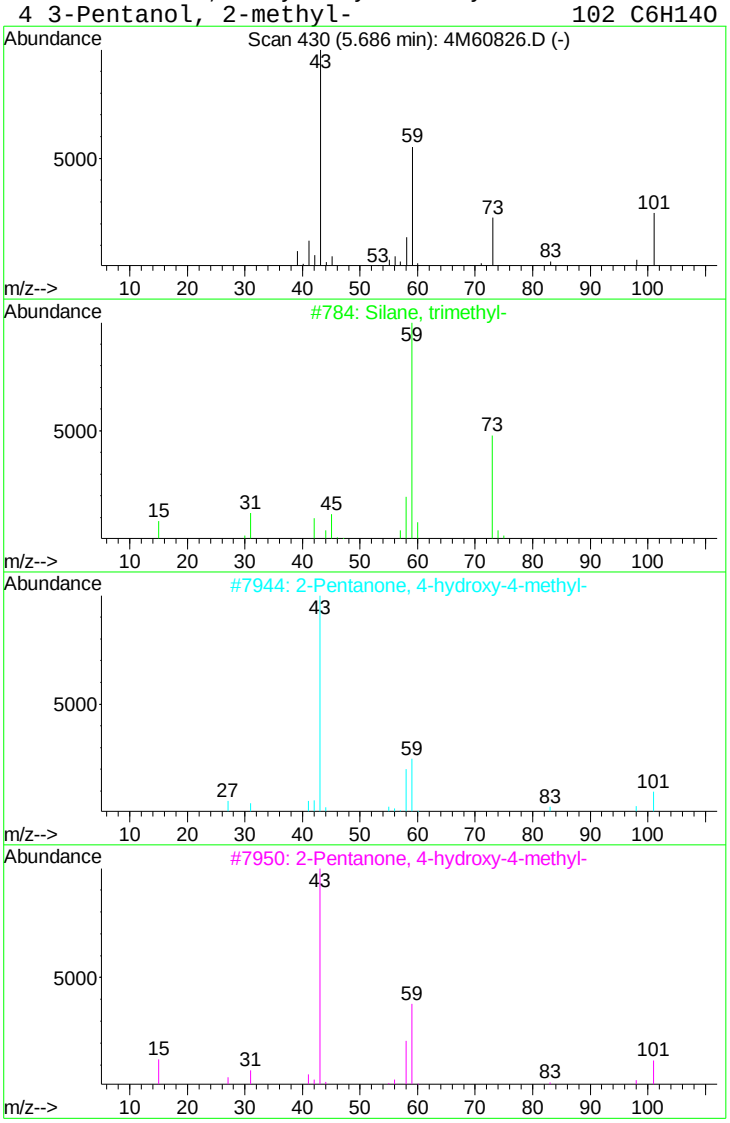
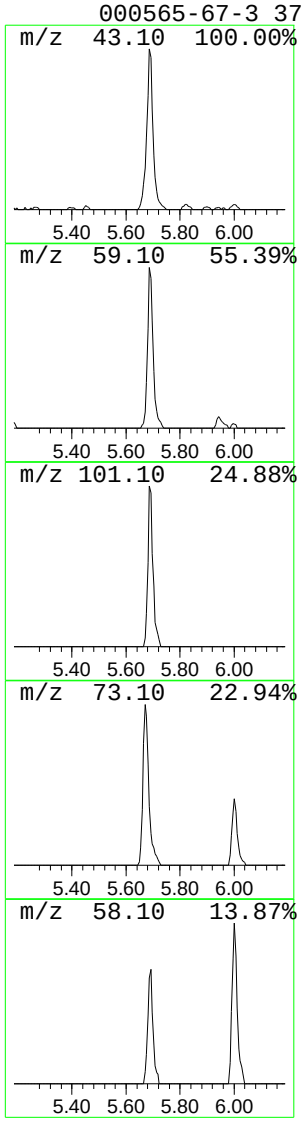
Data File : I:\MSDCHEM\1\DATA\051212\4M60826.D          Vial: 11
Acq On    : 12 May 2012  16:36                       Operator: CAA
Sample    : L12050011-05                             Inst    : HPMS4
Misc      : 1,1                                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title        : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library      : I:\DATABASE\NIST02.L
 ******************************************************************
 Peak Number  3  Silane, trimethyl-              Concentration Rank  3

   R.T.   EstConc           Area       Relative to ISTD         R.T.
 ------------------------------------------------------------------
   5.69    7.36 ug/ml      276886    1,4-Dichlorobenzene-d4      7.23

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------
  1 Silane, trimethyl-                     74 C3H10Si        000993-07-7 43
  2 2-Pentanone, 4-hydroxy-4-methyl-      116 C6H12O2        000123-42-2 40
  3 2-Pentanone, 4-hydroxy-4-methyl-      116 C6H12O2        000123-42-2 40
  4 3-Pentanol, 2-methyl-                 102 C6H14O         000565-67-3 37
```





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Data File : I:\MSDCHEM\1\DATA\051212\4M60826.D          Vial: 11
Acq On    : 12 May 2012  16:36                       Operator: CAA
Sample    : L12050011-05                             Inst    : HPMS4
Misc      : 1,1                                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title        : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library      : I:\DATABASE\NIST02.L
 ******************************************************************
 Peak Number  4  1-Propanol, 2-(2-methoxy-1-...  Concentration Rank  2

   R.T.   EstConc           Area       Relative to ISTD         R.T.
 ------------------------------------------------------------------
  13.43    8.24 ug/ml      486981    Phenanthrene-d10           11.92

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------
  1 1-Propanol, 2-(2-methoxy-1-methy... 148 C7H16O3        055956-21-3 59
  2 2,5,8,11-Tetraoxatetradecan-13-o... 264 C13H28O5       020324-34-9 45
  3 1-Propanol, 2-(2-methoxypropoxy)-   148 C7H16O3        013588-28-8 45
  4 2-Propanol, 1-[1-methyl-2-(2-pro... 174 C9H18O3        055956-25-7 42
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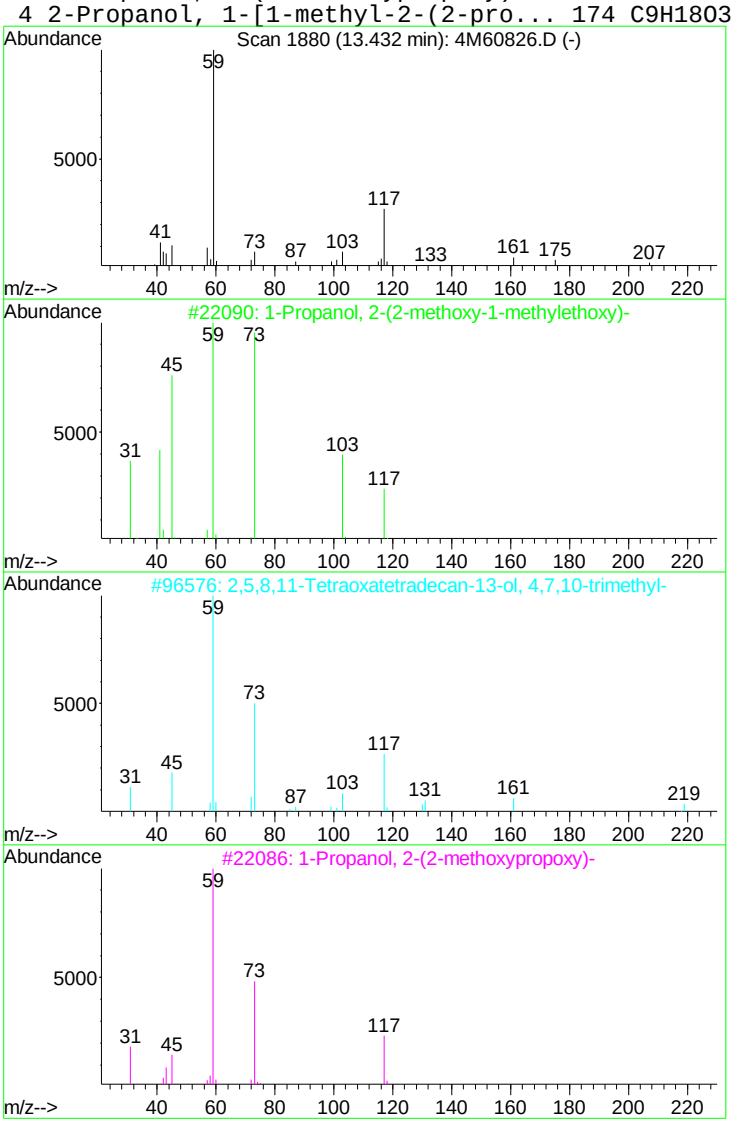
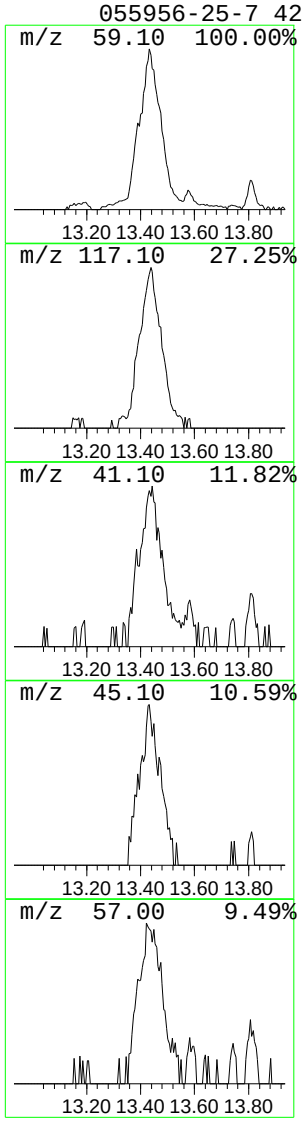


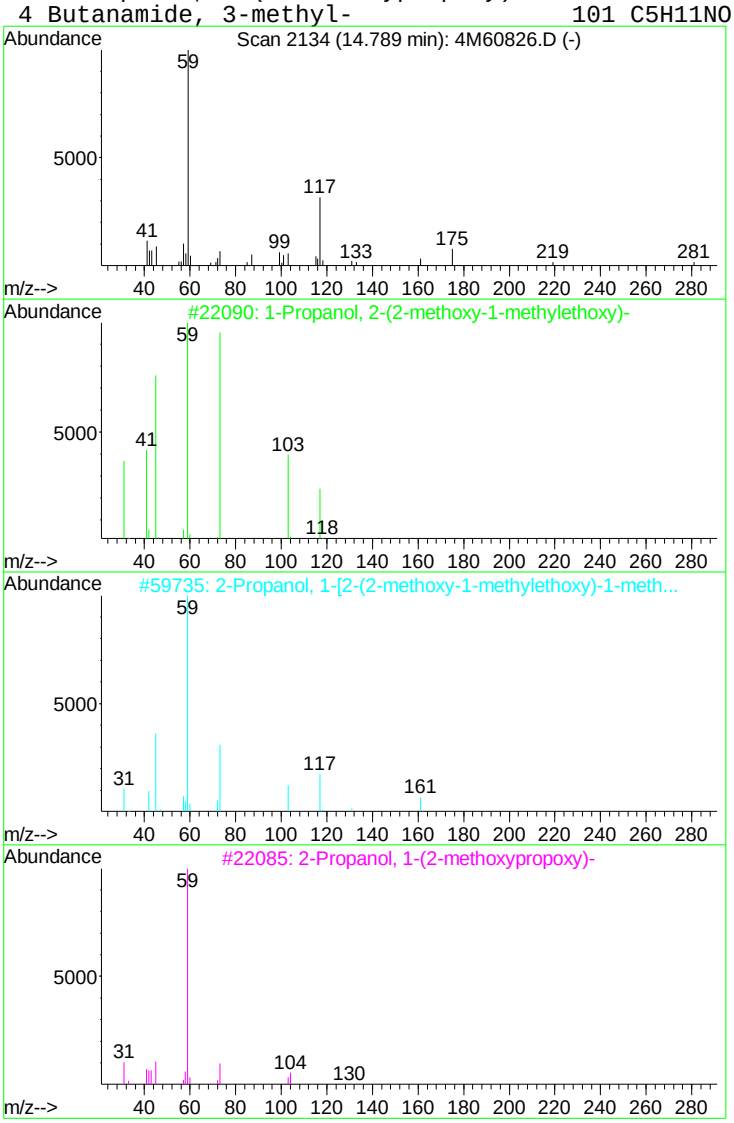


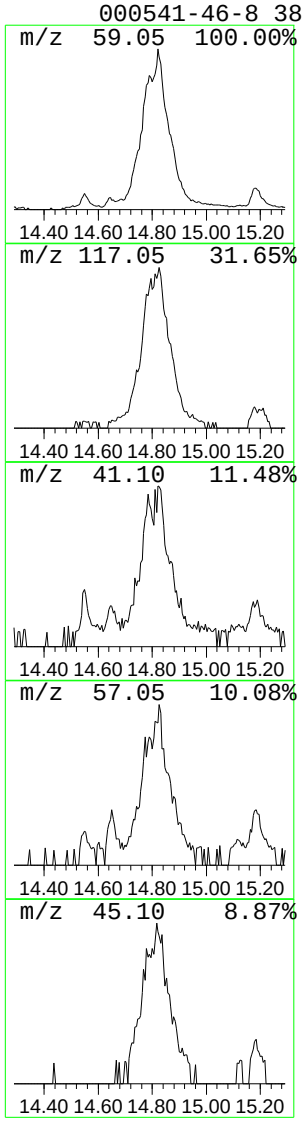
```
Data File : I:\MSDCHEM\1\DATA\051212\4M60826.D          Vial: 11
Acq On    : 12 May 2012  16:36                       Operator: CAA
Sample    : L12050011-05                             Inst    : HPMS4
Misc      : 1,1                                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title        : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library      : I:\DATABASE\NIST02.L
 ******************************************************************
 Peak Number  5  1-Propanol, 2-(2-methoxy-1-...  Concentration Rank  6

   R.T.   EstConc           Area       Relative to ISTD         R.T.
 ------------------------------------------------------------------
  14.79    5.16 ug/ml      317313    Chrysene-d12               15.60

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------
  1 1-Propanol, 2-(2-methoxy-1-methy... 148 C7H16O3        055956-21-3 59
  2 2-Propanol, 1-[2-(2-methoxy-1-me... 206 C10H22O4       020324-33-8 42
  3 2-Propanol, 1-(2-methoxypropoxy)-   148 C7H16O3        013429-07-7 40
  4 Butanamide, 3-methyl-               101 C5H11NO        000541-46-8 38
```





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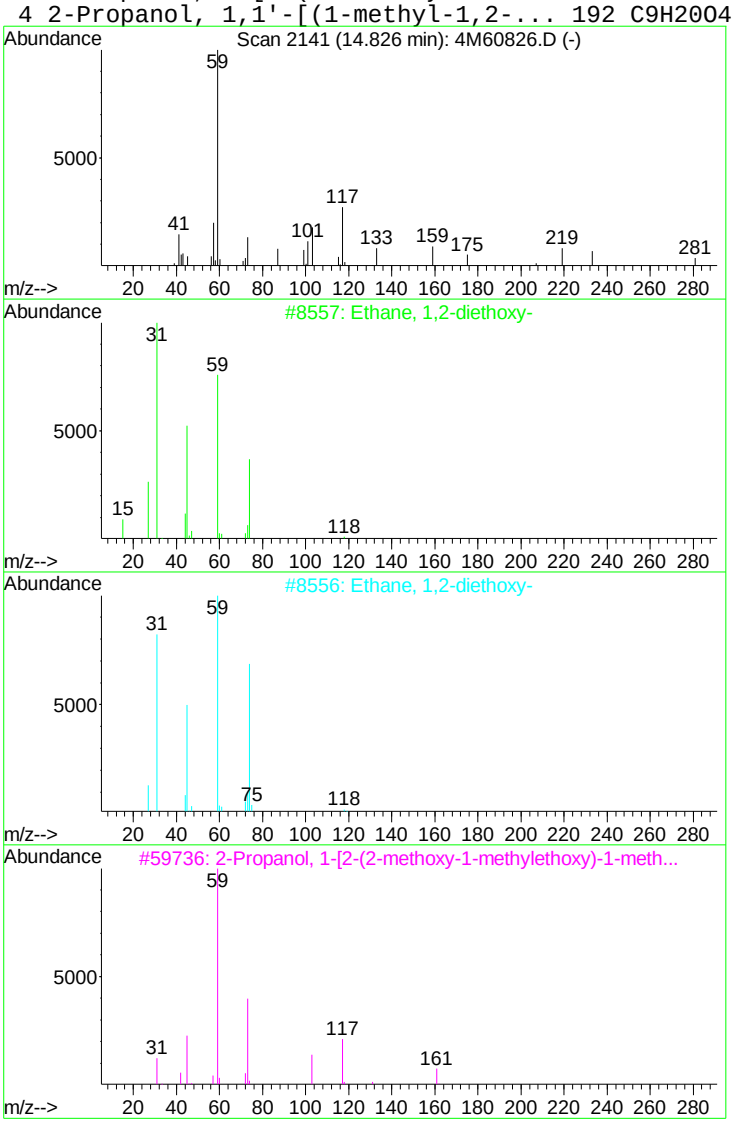
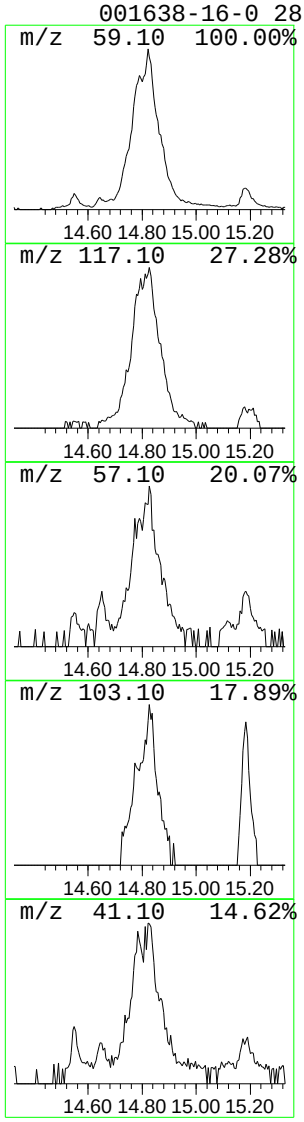
Data File : I:\MSDCHEM\1\DATA\051212\4M60826.D          Vial: 11
Acq On    : 12 May 2012  16:36                       Operator: CAA
Sample    : L12050011-05                             Inst    : HPMS4
Misc      : 1,1                                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title        : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library      : I:\DATABASE\NIST02.L
 ******************************************************************
 Peak Number  6  Ethane, 1,2-diethoxy-          Concentration Rank  4

   R.T.   EstConc           Area       Relative to ISTD         R.T.
 ------------------------------------------------------------------
  14.83    7.29 ug/ml      448122    Chrysene-d12               15.60

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------
  1 Ethane, 1,2-diethoxy-                118 C6H14O2        000629-14-1 37
  2 Ethane, 1,2-diethoxy-                118 C6H14O2        000629-14-1 37
  3 2-Propanol, 1-[2-(2-methoxy-1-me... 206 C10H22O4        020324-33-8 33
  4 2-Propanol, 1,1'-[(1-methyl-1,2-... 192 C9H20O4         001638-16-0 28
```





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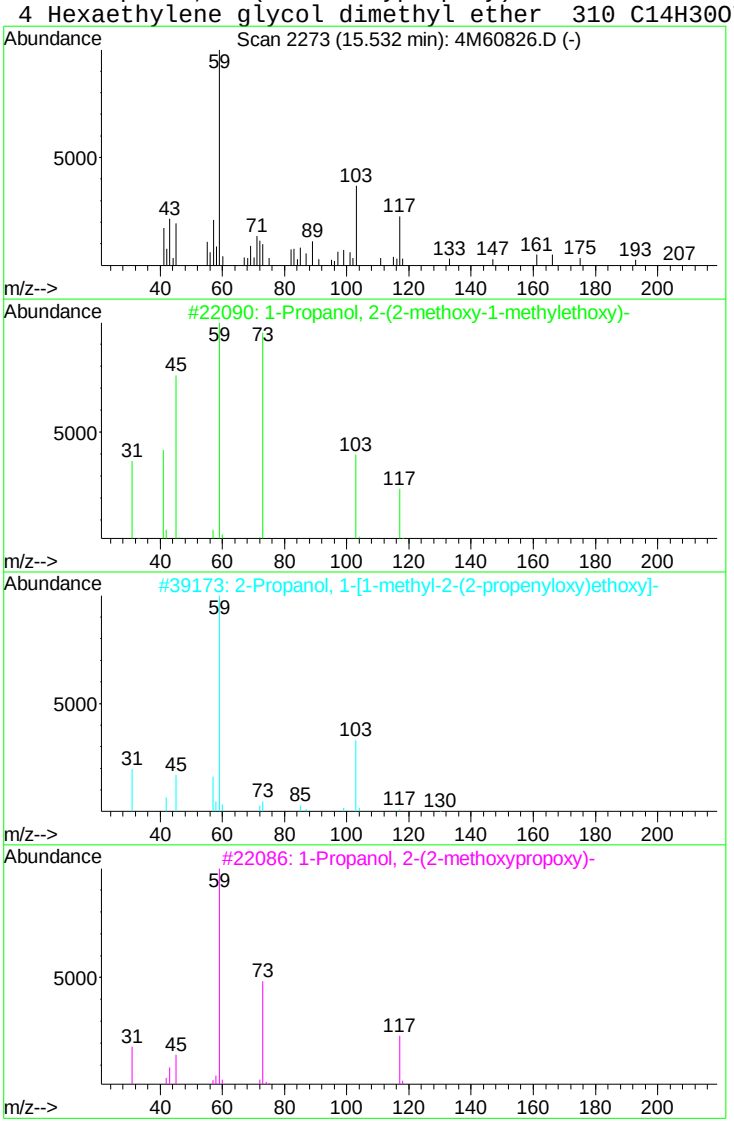
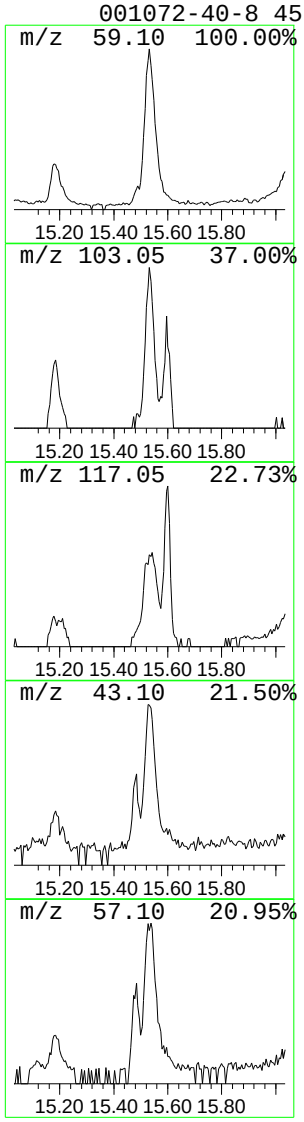
Data File : I:\MSDCHEM\1\DATA\051212\4M60826.D          Vial: 11
Acq On    : 12 May 2012  16:36                       Operator: CAA
Sample    : L12050011-05                             Inst    : HPMS4
Misc      : 1,1                                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title        : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library      : I:\DATABASE\NIST02.L
 ******************************************************************
 Peak Number  7  1-Propanol, 2-(2-methoxy-1-...  Concentration Rank  9

   R.T.   EstConc           Area       Relative to ISTD         R.T.
 ------------------------------------------------------------------
  15.53    4.04 ug/ml      248400    Chrysene-d12               15.60

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------
  1 1-Propanol, 2-(2-methoxy-1-methy... 148 C7H16O3        055956-21-3 50
  2 2-Propanol, 1-[1-methyl-2-(2-pro... 174 C9H18O3        055956-25-7 50
  3 1-Propanol, 2-(2-methoxypropoxy)-   148 C7H16O3        013588-28-8 50
  4 Hexaethylene glycol dimethyl ether  310 C14H30O7        001072-40-8 45
```





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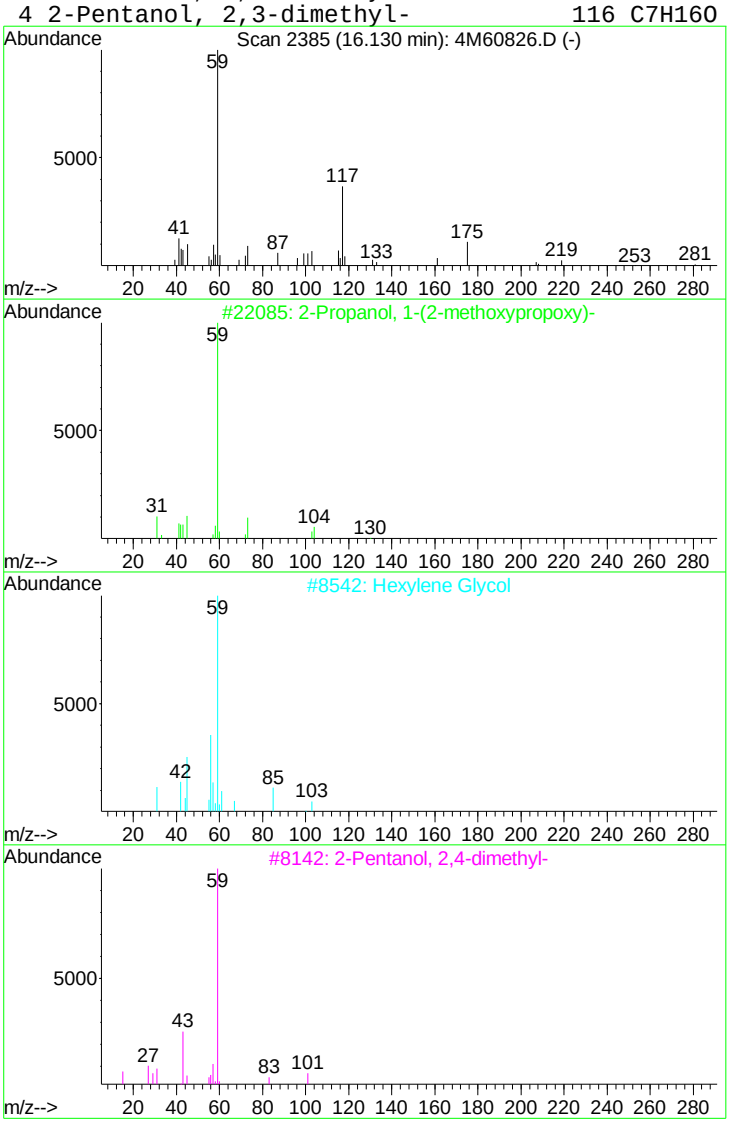
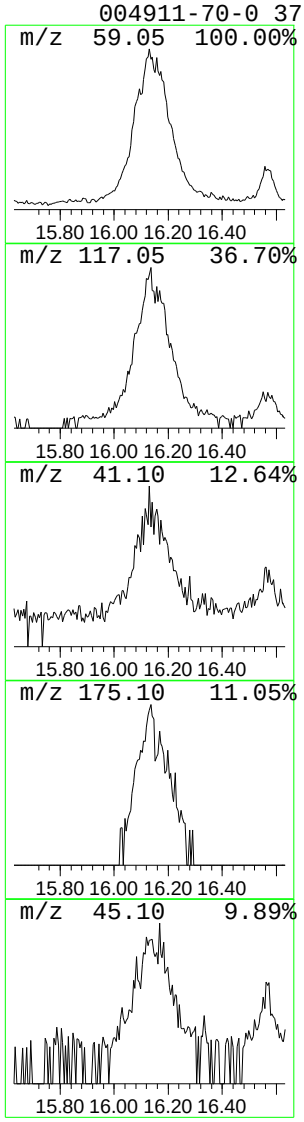
Data File : I:\MSDCHEM\1\DATA\051212\4M60826.D          Vial: 11
Acq On    : 12 May 2012  16:36                       Operator: CAA
Sample    : L12050011-05                             Inst    : HPMS4
Misc      : 1,1                                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title        : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library      : I:\DATABASE\NIST02.L
 ******************************************************************
 Peak Number  8  2-Propanol, 1-(2-methoxypro...  Concentration Rank  8

   R.T.   EstConc           Area       Relative to ISTD         R.T.
 ------------------------------------------------------------------
  16.13    4.53 ug/ml      278084    Chrysene-d12               15.60

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------
  1 2-Propanol, 1-(2-methoxypropoxy)-   148 C7H16O3        013429-07-7 47
  2 Hexylene Glycol                     118 C6H14O2        000107-41-5 38
  3 2-Pentanol, 2,4-dimethyl-           116 C7H16O         000625-06-9 37
  4 2-Pentanol, 2,3-dimethyl-           116 C7H16O         004911-70-0 37
```





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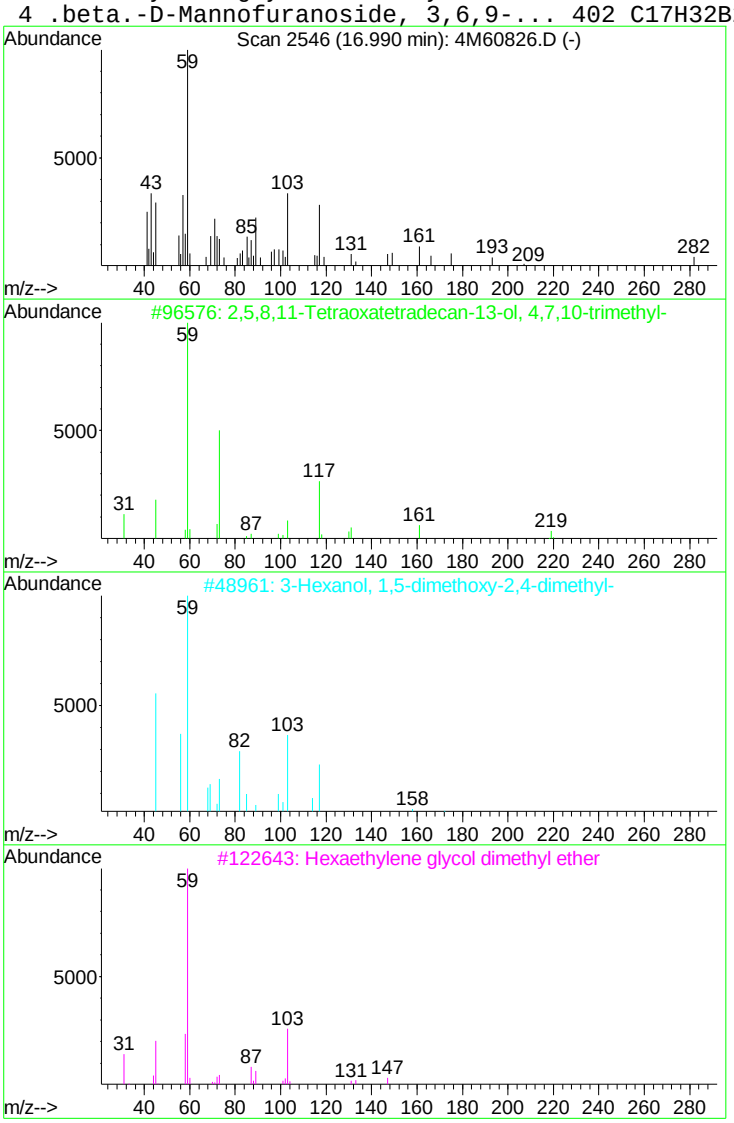
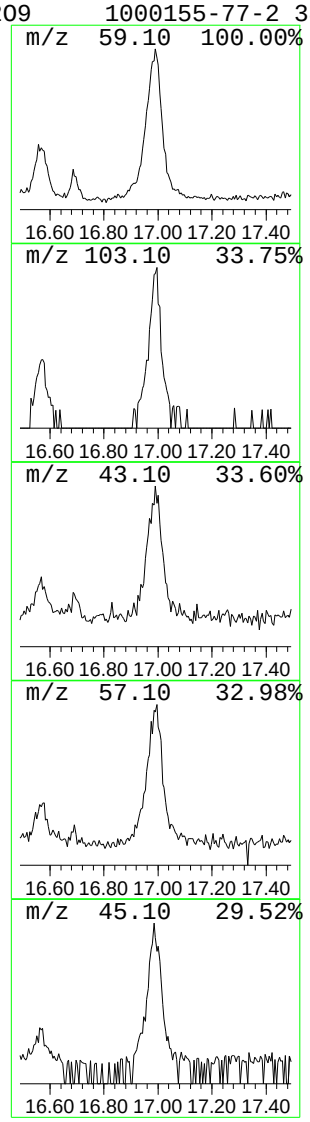
Data File : I:\MSDCHEM\1\DATA\051212\4M60826.D          Vial: 11
Acq On    : 12 May 2012  16:36                       Operator: CAA
Sample    : L12050011-05                             Inst    : HPMS4
Misc      : 1,1                                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title        : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library      : I:\DATABASE\NIST02.L
 ******************************************************************
 Peak Number  9  2,5,8,11-Tetraoxatetradecan...  Concentration Rank  7

   R.T.   EstConc           Area       Relative to ISTD         R.T.
 ------------------------------------------------------------------
  16.99    4.98 ug/ml      288761    Perylene-d12               18.33

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------
  1 2,5,8,11-Tetraoxatetradecan-13-o... 264 C13H28O5       020324-34-9 47
  2 3-Hexanol, 1,5-dimethoxy-2,4-dim... 190 C10H22O3       013897-22-8 40
  3 Hexaethylene glycol dimethyl ether  310 C14H30O7       001072-40-8 40
  4 .beta.-D-Mannofuranoside, 3,6,9-... 402 C17H32B2O9     1000155-77-2 38
```





Tentatively Identified Compound (LSC) summary

Operator ID: CAA Date Acquired: 12 May 2012 16:36
Data File: I:\MSDCHEM\1\DATA\051212\4M60826.D
Name: L12050011-05
Misc: 1,1
Method: I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title: OVD MSS01 8270/625 Initial Calibration 04/19/12
Library Searched: I:\DATABASE\NIST02.L

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	RT	Resp	Conc
Benzene	3.62	9.6	ug/ml	362367	1	7.23	1505040	40.0
Butane, 2-methoxy...	3.82	5.9	ug/ml	221106	1	7.23	1505040	40.0
Silane, trimethyl-	5.69	7.4	ug/ml	276886	1	7.23	1505040	40.0
1-Propanol, 2-(2-...	13.43	8.2	ug/ml	486981	4	11.92	2365300	40.0
1-Propanol, 2-(2-...	14.79	5.2	ug/ml	317313	5	15.60	2457800	40.0
Ethane, 1,2-dieth...	14.83	7.3	ug/ml	448122	5	15.60	2457800	40.0
1-Propanol, 2-(2-...	15.53	4.0	ug/ml	248400	5	15.60	2457800	40.0
2-Propanol, 1-(2-...	16.13	4.5	ug/ml	278084	5	15.60	2457800	40.0
2,5,8,11-Tetraoxa...	16.99	5.0	ug/ml	288761	6	18.33	2320760	40.0

2.2.1.4 Standards Data

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60439.D Vial: 2
Acq On : 19 Apr 2012 9:22 Operator: CAA
Sample : WG395394-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:19:43 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:19:39 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	296263	40.00 ug/ml	0.00
30) Naphthalene-d8	8.58	136	1142981	40.00 ug/ml	0.00
54) Acenaphthene-d10	10.39	164	655776	40.00 ug/ml	0.00
87) Phenanthrene-d10	11.99	188	1173140	40.00 ug/ml	0.00
113) Chrysene-d12	15.70	240	1109018	40.00 ug/ml	0.00
128) Perylene-d12	18.49	264	1083134	40.00 ug/ml	0.00

System Monitoring Compounds					
8) 2-Fluorophenol	6.05	112	443615	49.9857 ug/ml	0.02
Spiked Amount 100.000	Range 21 - 100		Recovery = 49.99%		
12) Phenol-d5	6.88	99	512467	51.0378 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 51.04%		
31) Nitrobenzene-d5	7.85	82	474197	50.7286 ug/ml	0.01
Spiked Amount 50.000	Range 35 - 114		Recovery = 101.46%		
59) 2-Fluorobiphenyl	9.64	172	1079454	55.4126 ug/ml	0.01
Spiked Amount 50.000	Range 43 - 116		Recovery = 110.82%		
86) 2,4,6-Tribromophenol	11.21	330	148910	57.2081 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 57.21%		
117) p-Terphenyl-d14	14.03	244	994996	52.9278 ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 105.86%		

Target Compounds					Qvalue
2) 1,4-Dioxane	4.27	88	185033	51.6833 ug/ml#	92
3) n-Nitrosodimethylamine	4.70	74	263504	47.4424 ug/ml	99
4) Pyridine	4.72	79	466167	47.5330 ug/ml	98
5) 2-Picoline	5.50	93	511992	48.6122 ug/ml	100
6) n-Nitrosomethylethylamine	5.62	88	220837	47.4416 ug/ml	99
7) Methyl Methanesulfonate	5.90	80	248543	48.2213 ug/ml	99
9) n-Nitrosodiethylamine	6.29	102	240287	50.0469 ug/ml	98
10) Ethyl Methanesulfonate	6.54	79	323582	48.8787 ug/ml	99
11) Aniline	6.98	93	793273m	58.6766 ug/ml	
13) Phenol	6.89	94	548117	51.6690 ug/ml	100
14) bis(2-Chloroethyl)ether	7.00	63	334727	52.9904 ug/ml#	1
15) Pentachloroethane	7.02	167	187038	54.0943 ug/ml	99
16) 2-Chlorophenol	7.11	128	497875	51.1341 ug/ml	100
17) 1,3-Dichlorobenzene	7.26	146	546516	52.0870 ug/ml	100
18) 1,4-Dichlorobenzene	7.30	146	561209	52.9415 ug/ml	99
19) Benzyl Alcohol	7.39	108	323130	51.4484 ug/ml	99
20) 1,2-Dichlorobenzene	7.50	146	521321	54.2387 ug/ml	99
21) 2-Methylphenol	7.49	107	380206	51.9649 ug/ml	100
22) bis(2-Chloroisopropyl)ethe	7.54	45	683034	50.3930 ug/ml	99
23) 3-,4-Methylphenol	7.62	107	494212	51.1333 ug/ml	100
24) n-Nitrosopyrrolidine	7.67	100	225885	55.1278 ug/ml	100
25) n-Nitrosodipropylamine	7.67	70	311009	59.5407 ug/ml	99
26) Acetophenone	7.68	105	610408	57.6225 ug/ml	99
27) n-Nitrosomorpholine	7.68	56	283563	56.4602 ug/ml	99
28) o-Toluidine	7.73	106	774939	53.5779 ug/ml	100
29) Hexachloroethane	7.81	117	207953	50.4010 ug/ml	99
32) Nitrobenzene	7.87	77	471369	51.3132 ug/ml	99
33) n-Nitrosopiperidine	8.01	114	252949	50.5594 ug/ml	98
34) Isophorone	8.08	82	857268	52.5914 ug/ml	99
35) 2-Nitrophenol	8.19	139	296019m	46.4787 ug/ml	
36) 2,4-Dimethylphenol	8.15	122	463322	52.6785 ug/ml	99
37) 0,0,0-Triethyl Phosphoroth	8.25	198	241610	57.3154 ug/ml	98
38) bis(2-Chloroethoxy)methane	8.25	93	654041	56.2488 ug/ml	99

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60439.D Vial: 2
Acq On : 19 Apr 2012 9:22 Operator: CAA
Sample : WG395394-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:19:43 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:19:39 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39)	Benzoic Acid	8.20	105	336174	73.2728	ug/ml	98
40)	2,4-Dichlorophenol	8.41	162	406146	52.5201	ug/ml	99
41)	a,a-Dimethylphenethylamine	8.41	58	352764	51.6751	ug/ml	99
42)	1,2,4-Trichlorobenzene	8.52	180	454080	53.5984	ug/ml	100
43)	Naphthalene	8.60	128	1478551	57.1286	ug/ml	100
44)	4-Chloroaniline	8.62	127	522329	52.6511	ug/ml	99
45)	2,6-Dichlorophenol	8.64	162	419189	53.0993	ug/ml	99
46)	Hexachloropropene	8.71	213	274106	51.7151	ug/ml	100
47)	Hexachlorobutadiene	8.74	225	236674	55.3981	ug/ml	99
48)	n-Nitrosodi-n-Butylamine	8.94	84	394852	52.2669	ug/ml	98
49)	p-Phenylenediamine	9.06	108	32834	52.7401	ug/ml	98
50)	4-Chloro-3-Methylphenol	9.06	107	409911	53.7336	ug/ml	100
51)	Safrole	9.16	162	391403	54.0904	ug/ml	99
52)	2-Methylnaphthalene	9.29	142	967916	55.2571	ug/ml	100
53)	1-Methylnaphthalene	9.40	142	914409	54.9794	ug/ml	100
55)	1,2,4,5-Tetrachlorobenzene	9.49	216	420466	54.1164	ug/ml	100
56)	Hexachlorocyclopentadiene	9.50	237	244269	59.3737	ug/ml	99
57)	2,4,6-Trichlorophenol	9.57	196	302655	52.9876	ug/ml	98
58)	2,4,5-Trichlorophenol	9.62	196	308844	53.9056	ug/ml	99
60)	Isosafrole	9.68	162	410694	52.1570	ug/ml	97
61)	2-Chloronaphthalene	9.79	162	906729	52.6084	ug/ml	99
62)	1-Chloronaphthalene	9.83	162	864129	53.6130	ug/ml	100
63)	2-Nitroaniline	9.89	65	261334	50.5913	ug/ml	98
64)	1,4-Naphthoquinone	9.95	158	378469	58.4376	ug/ml	99
65)	Dimethylphthalate	10.05	163	1022202	54.3128	ug/ml	100
66)	1,3-Dinitrobenzene	10.10	168	201353	50.3149	ug/ml	99
67)	2,6-Dinitrotoluene	10.15	165	256989	51.4076	ug/ml	100
68)	Acenaphthylene	10.24	152	1459231	55.8004	ug/ml	100
69)	3-Nitroaniline	10.31	138	174456	67.4649	ug/ml#	68
70)	2,4-Dinitrophenol	10.41	184	130897	51.1568	ug/ml	78
71)	Acenaphthene	10.42	154	959014	56.1434	ug/ml	99
72)	4-Nitrophenol	10.40	65	186191	50.9475	ug/ml	99
73)	2,4-Dinitrotoluene	10.56	165	332745	54.9652	ug/ml	98
74)	Pentachlorobenzene	10.60	250	385447	55.3704	ug/ml	99
75)	Dibenzofuran	10.57	168	1276287	57.1887	ug/ml	99
76)	2,3,4,6-Tetrachlorophenol	10.67	232	227393	59.5614	ug/ml	99
77)	1-Naphthylamine	10.65	143	73636	134.9308	ug/ml#	18
78)	2-Naphthylamine	10.72	143	24431	63.2418	ug/ml#	91
79)	Diethylphthalate	10.76	149	1020028	54.9216	ug/ml	100
80)	Thionazin	10.86	107	172379	55.2578	ug/ml	99
81)	Fluorene	10.94	166	1088180	55.7218	ug/ml	99
82)	4-Chlorophenyl Phenyl Ethe	10.88	204	515271	56.5666	ug/ml	100
83)	4-Nitroaniline	10.95	138	223285	53.1737	ug/ml	96
84)	5-Nitro-o-Toluidine	10.94	152	233161	57.0574	ug/ml	94
85)	1,2-Diphenylhydrazine	11.05	77	983010	53.6394	ug/ml	98
88)	4,6-Dinitro-2-Methylphenol	10.98	198	184821	44.9291	ug/ml	97
89)	n-Nitrosodiphenylamine	11.01	169	929531	53.8800	ug/ml	99
90)	Sulfotepp	11.20	322	169813	53.6919	ug/ml	97
91)	Sym-Trinitrobenzene	11.28	75	245626	47.8546	ug/ml	98
92)	Diallate	11.33	86	380783	55.9524	ug/ml	99
93)	Phenacetin	11.32	108	503393	55.1920	ug/ml	99
94)	Phorate	11.35	75	609588	53.7949	ug/ml#	99
95)	4-Bromophenyl Phenyl Ether	11.42	248	293263	53.0441	ug/ml	99
96)	Hexachlorobenzene	11.63	284	321319	54.1592	ug/ml	98

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60439.D Vial: 2
Acq On : 19 Apr 2012 9:22 Operator: CAA
Sample : WG395394-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:19:43 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:19:39 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

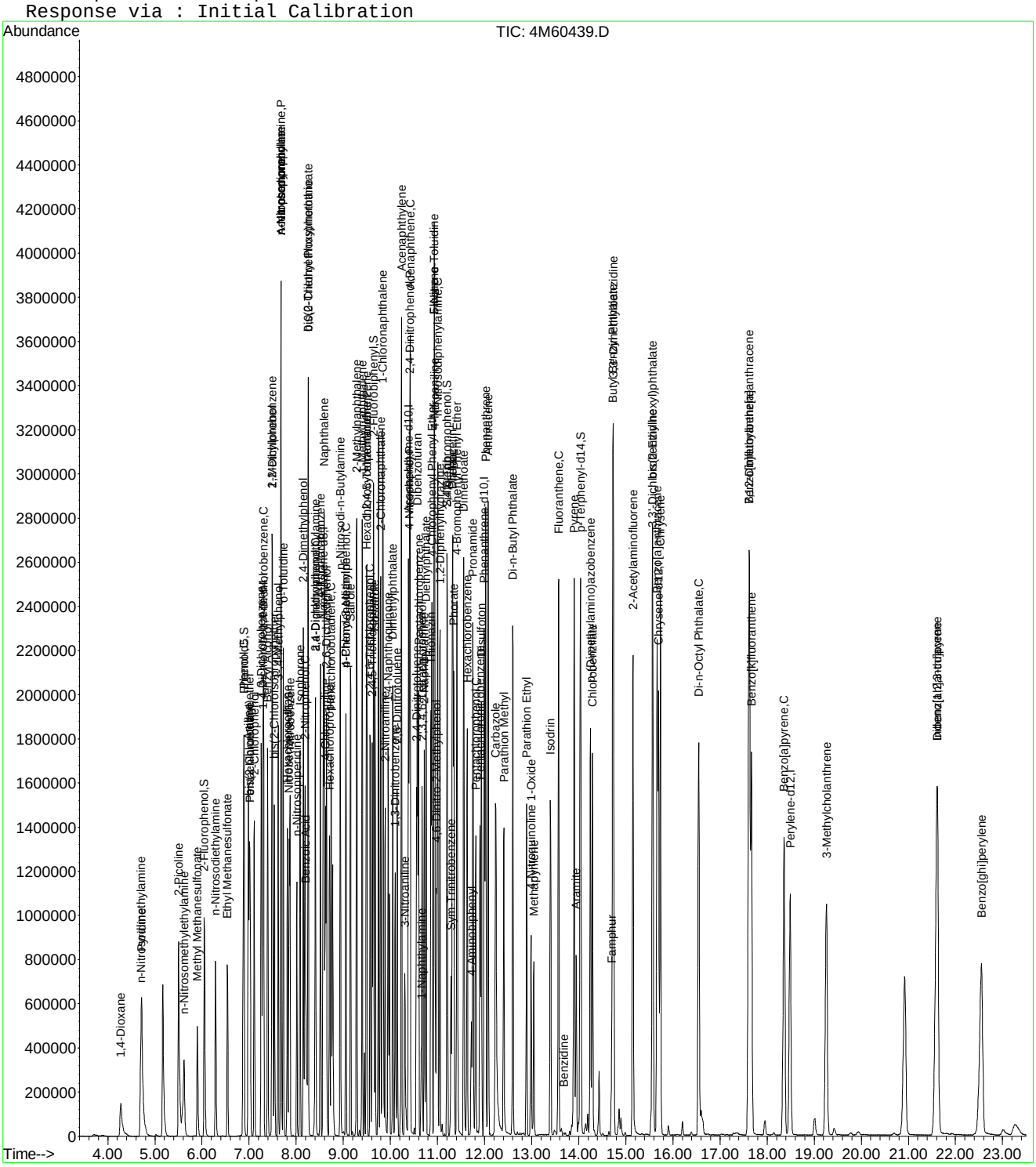
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
97)	Dimethoate	11.56	87	339058	61.7901 ug/ml	100
98)	4-Aminobiphenyl	11.72	169	362625	53.7158 ug/ml	100
99)	Pentachlorophenol	11.81	266	206843	60.4342 ug/ml	98
100)	Pronamide	11.75	173	474797	52.5004 ug/ml	99
101)	Pentachloronitrobenzene	11.90	237	112466	52.7533 ug/ml	98
102)	Disulfoton	11.94	88	525023	51.7079 ug/ml	99
103)	Phenanthrene	12.03	178	1519697	53.8500 ug/ml	100
104)	Anthracene	12.08	178	1564112	53.9305 ug/ml	100
105)	Carbazole	12.24	167	1383835	51.1066 ug/ml	100
106)	Parathion Methyl	12.41	109	332197	61.4956 ug/ml	98
107)	Di-n-Butyl Phthalate	12.60	149	1699050	53.3192 ug/ml	100
108)	Parathion Ethyl	12.89	97	202803	51.9363 ug/ml	97
109)	4-Nitroquinoline 1-Oxide	12.99	190	164563	87.9970 ug/ml	99
110)	Methapyrilene	13.05	58	313634	53.4102 ug/ml	99
111)	Isodrin	13.40	193	164002	52.0160 ug/ml	99
112)	Fluoranthene	13.58	202	1596911	54.0089 ug/ml	99
114)	Benzidine	13.69	184	13235	391.6902 ug/ml	100
115)	Pyrene	13.91	202	1618198	52.1353 ug/ml	100
116)	Aramite	13.94	185	96625	51.3784 ug/ml	99
118)	p-(Dimethylamino)azobenzen	14.25	225	344938	52.1731 ug/ml	96
119)	Chlorobenzilate	14.29	251	452662	52.1067 ug/ml	98
120)	Famphur	14.70	218	19662	24.2241 ug/ml#	52
121)	Butyl Benzyl Phthalate	14.72	149	736908	49.5460 ug/ml	99
122)	3,3'-Dimethylbenzidine	14.73	212	265248	88.0533 ug/ml	97
123)	2-Acetylaminofluorene	15.15	181	672726	50.6242 ug/ml	99
124)	bis(2-Ethylhexyl)phthalate	15.57	149	1020072	51.9755 ug/ml	100
125)	3,3'-Dichlorobenzidine	15.58	252	322552	62.1461 ug/ml	99
126)	Benzo[a]anthracene	15.66	228	1436678	52.4916 ug/ml	100
127)	Chrysene	15.73	228	1327816	51.8780 ug/ml	99
129)	Di-n-Octyl Phthalate	16.55	149	1737436	49.8326 ug/ml	99
130)	7,12-Dimethylbenz[a]anthra	17.62	256	693312	52.0347 ug/ml	99
131)	Benzo[b]fluoranthene	17.62	252	1510511	48.9916 ug/ml	99
132)	Benzo[k]fluoranthene	17.67	252	1477424	55.0736 ug/ml	96
133)	Benzo[a]pyrene	18.36	252	1420992	50.6605 ug/ml	100
134)	3-Methylcholanthrene	19.26	268	780637	51.2505 ug/ml	99
135)	Indeno[1,2,3-cd]pyrene	21.62	276	1616295	49.1334 ug/ml	99
136)	Dibenz[ah]anthracene	21.61	278	1352159	49.3321 ug/ml	100
137)	Benzo[ghi]perylene	22.55	276	1336874	49.0395 ug/ml	99

(#) = qualifier out of range (m) = manual integration
4M60439.D MEGAMIX.M Fri Apr 20 08:18:56 2012 Page 3

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60439.D Vial: 2
Acq On : 19 Apr 2012 9:22 Operator: CAA
Sample : WG395394-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:20 2012 Quant Results File: MEGAMIX.RES

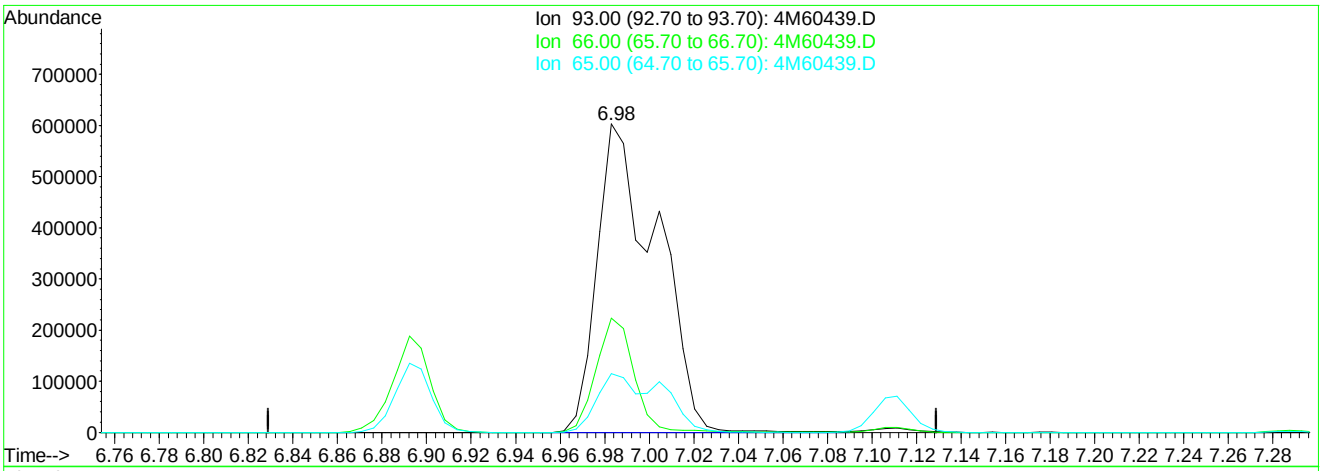
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration

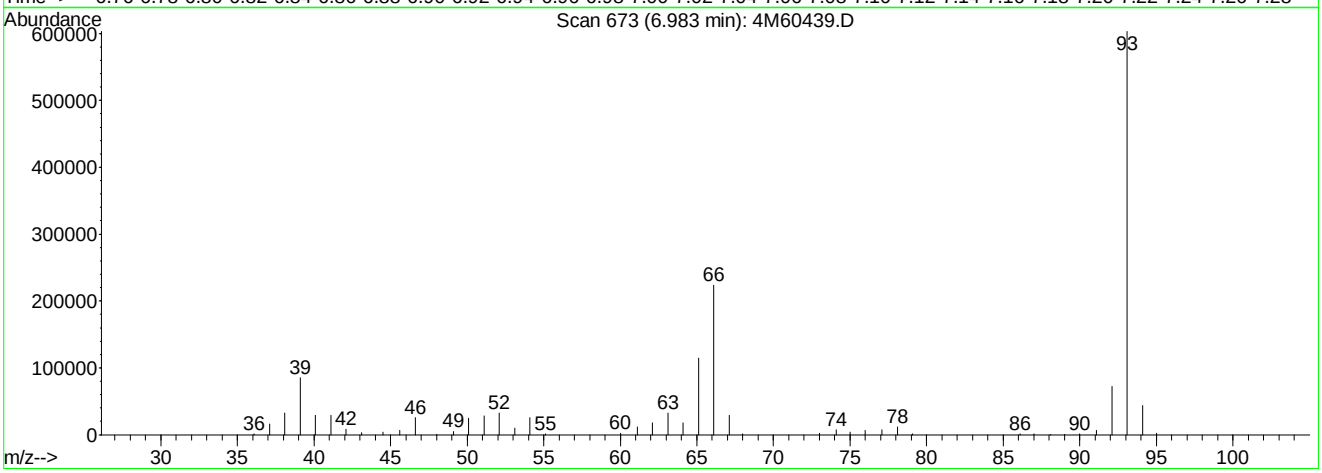


Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60439.D Vial: 2
Acq On : 19 Apr 2012 9:22 Operator: CAA
Sample : WG395394-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:19 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:19:39 2012
Response via : Multiple Level Calibration





TIC: 4M60439.D

(11) Aniline

6.98min 83.11ug/ml

response 1123623

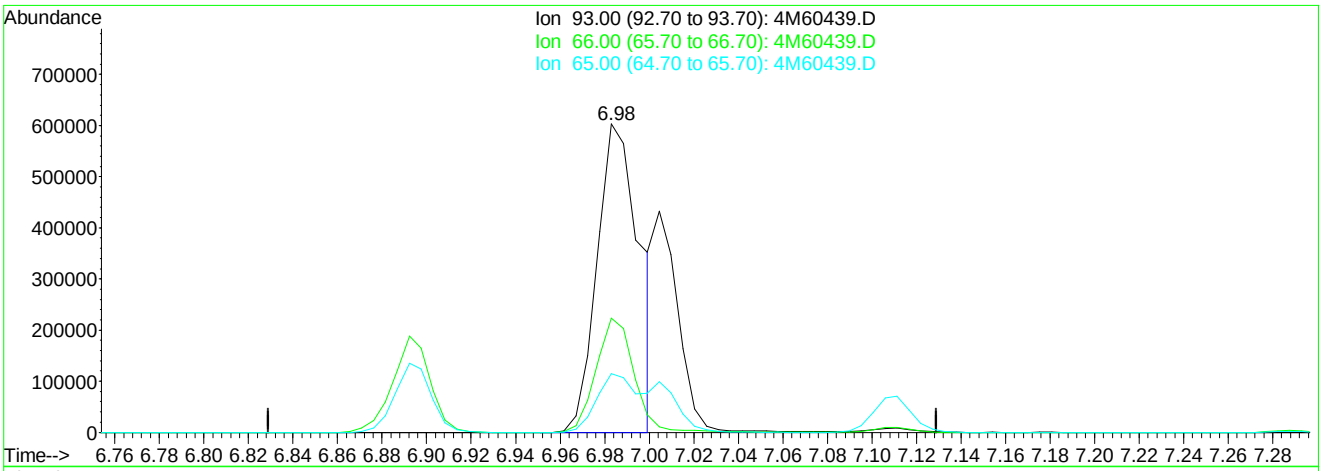
Ion	Exp%	Act%
93.00	100	100
66.00	42.70	23.58#
65.00	19.20	20.60
0.00	0.00	0.00

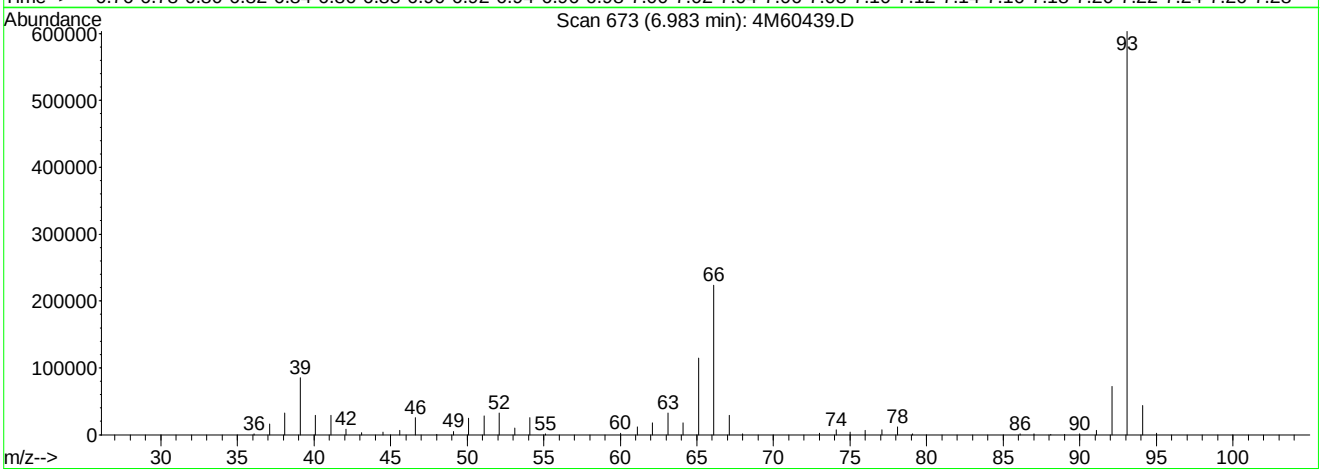
4M60439.D MEGAMIX.M Thu Apr 19 14:19:51 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60439.D Vial: 2
Acq On : 19 Apr 2012 9:22 Operator: CAA
Sample : WG395394-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:19 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:19:39 2012
Response via : Multiple Level Calibration





TIC: 4M60439.D

(11) Aniline

6.98min 58.68ug/ml mint

response 793273

Ion	Exp%	Act%
93.00	100	100
66.00	42.70	33.40
65.00	19.20	29.18#
0.00	0.00	0.00

4M60439.D MEGAMIX.M Thu Apr 19 14:19:39 2012

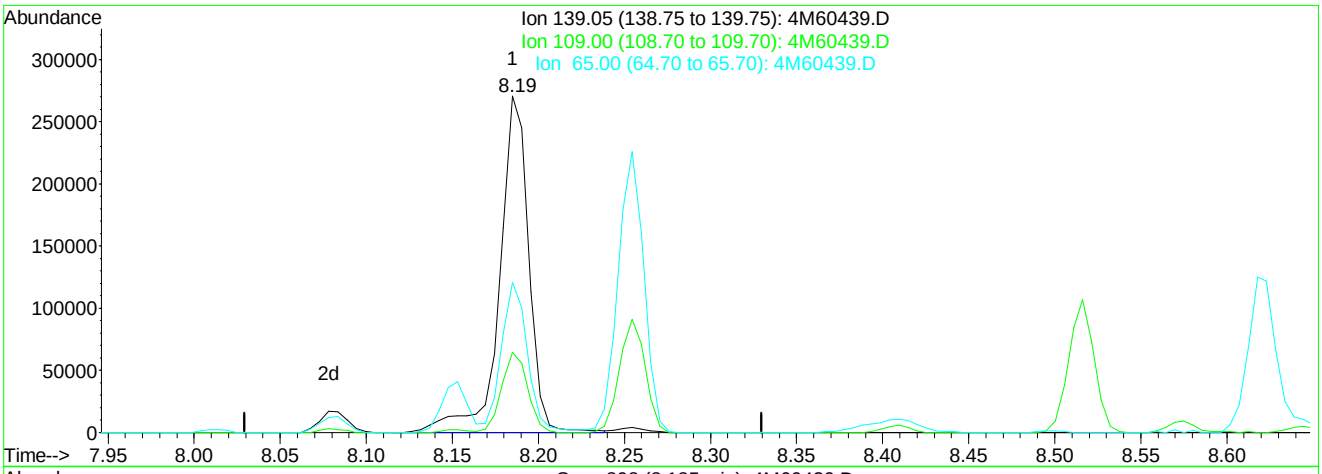
Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41

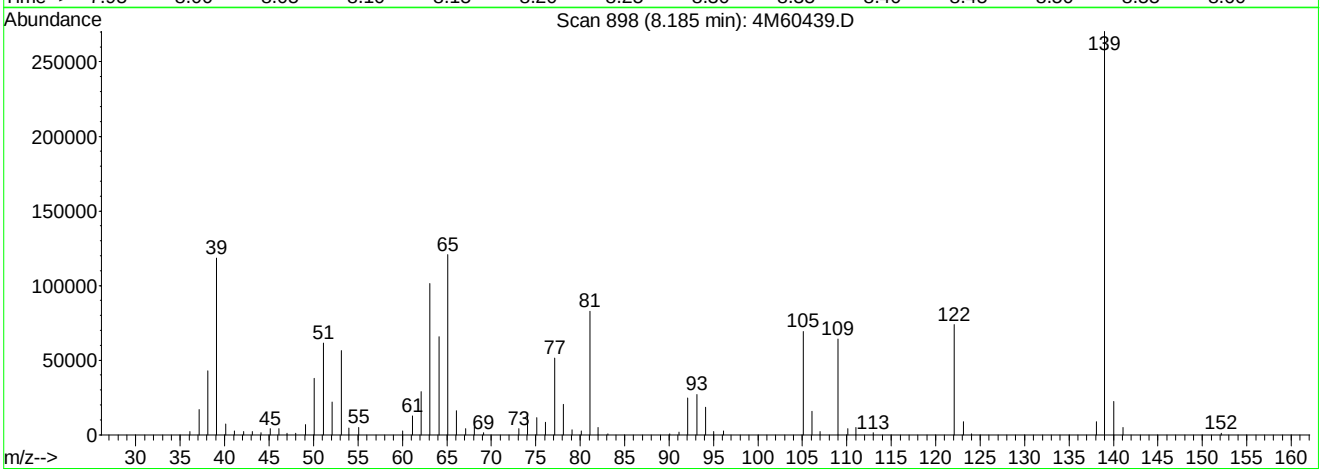
#3 - Improperly integrated isomers and/or coeluting compounds

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60439.D Vial: 2
Acq On : 19 Apr 2012 9:22 Operator: CAA
Sample : WG395394-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:19 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:19:39 2012
Response via : Multiple Level Calibration





TIC: 4M60439.D

(35) 2-Nitrophenol (C)

8.19min 50.19ug/ml

response 319686

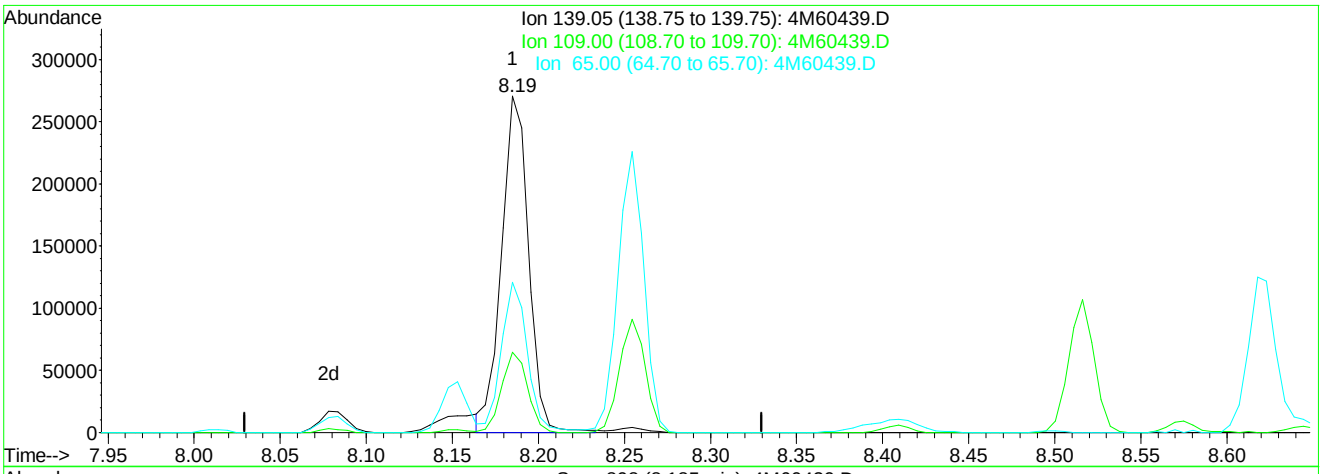
Ion	Exp%	Act%
139.05	100	100
109.00	16.10	21.09
65.00	37.90	40.29
0.00	0.00	0.00

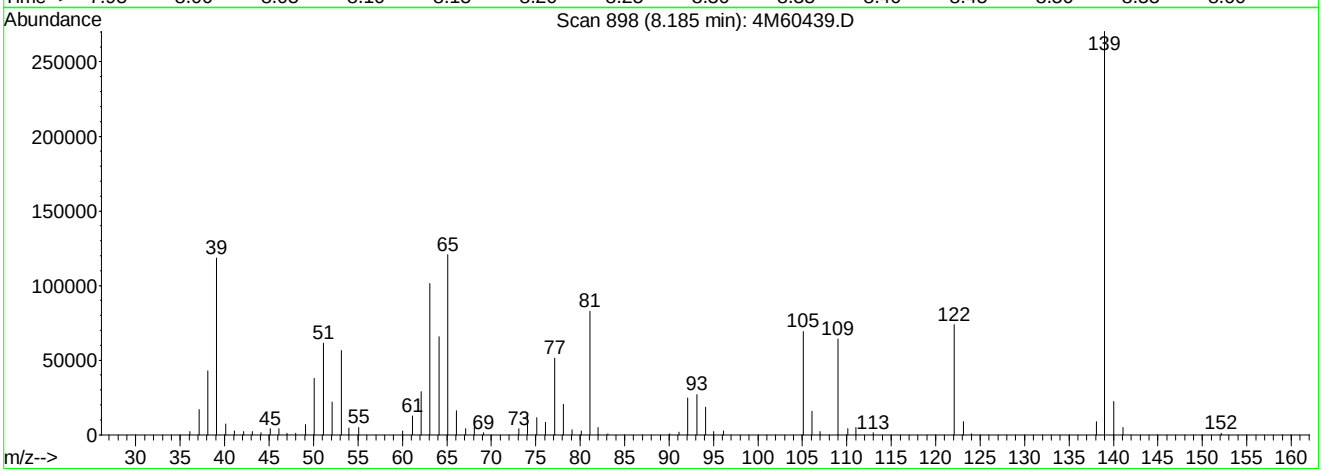
4M60439.D MEGAMIX.M Thu Apr 19 14:20:01 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60439.D Vial: 2
Acq On : 19 Apr 2012 9:22 Operator: CAA
Sample : WG395394-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:20 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:19:39 2012
Response via : Multiple Level Calibration





TIC: 4M60439.D

(35) 2-Nitrophenol (C)

8.19min 46.48ug/ml mint

response 296019

Ion	Exp%	Act%
139.05	100	100
109.00	16.10	22.78#
65.00	37.90	43.51
0.00	0.00	0.00

4M60439.D MEGAMIX.M Thu Apr 19 14:20:33 2012

Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41

#3 - Improperly integrated isomers and/or coeluting compounds

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60440.D Vial: 3
Acq On : 19 Apr 2012 9:56 Operator: CAA
Sample : WG395394-03 3PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:20:38 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:20:34 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	267420	40.00 ug/ml	0.00
30) Naphthalene-d8	8.57	136	1002832	40.00 ug/ml	0.00
54) Acenaphthene-d10	10.38	164	566848	40.00 ug/ml	0.00
87) Phenanthrene-d10	11.99	188	996557	40.00 ug/ml	0.00
113) Chrysene-d12	15.69	240	955111	40.00 ug/ml	0.00
128) Perylene-d12	18.48	264	933139	40.00 ug/ml	0.00

System Monitoring Compounds					
8) 2-Fluorophenol	6.05	112	25566	3.1943 ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery	=	3.19%#
12) Phenol-d5	6.88	99	30625	3.3848 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery	=	3.38%#
31) Nitrobenzene-d5	7.84	82	27396	3.3468 ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery	=	6.70%#
59) 2-Fluorobiphenyl	9.64	172	63455	3.7601 ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery	=	7.52%#
86) 2,4,6-Tribromophenol	11.20	330	7756	3.4260 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery	=	3.43%#
117) p-Terphenyl-d14	14.03	244	59375	3.6668 ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery	=	7.34%#

Target Compounds					Qvalue
2) 1,4-Dioxane	4.28	88	9565	2.9573 ug/ml#	96
3) n-Nitrosodimethylamine	4.70	74	15443	3.0935 ug/ml	99
4) Pyridine	4.72	79	28330	3.2140 ug/ml	98
5) 2-Picoline	5.51	93	30545	3.2216 ug/ml	98
6) n-Nitrosomethylethylamine	5.62	88	12711	3.0354 ug/ml	96
7) Methyl Methanesulfonate	5.90	80	15638	3.3789 ug/ml	99
9) n-Nitrosodiethylamine	6.29	102	13711	3.1676 ug/ml	91
10) Ethyl Methanesulfonate	6.54	79	19752	3.3165 ug/ml	99
11) Aniline	6.98	93	44787m	3.5962 ug/ml	
13) Phenol	6.89	94	33658	3.5179 ug/ml	98
14) bis(2-Chloroethyl)ether	7.01	63	21246	3.7316 ug/ml	93
15) Pentachloroethane	7.02	167	11139	3.5663 ug/ml	98
16) 2-Chlorophenol	7.11	128	29118	3.3159 ug/ml	99
17) 1,3-Dichlorobenzene	7.26	146	33383	3.5287 ug/ml	97
18) 1,4-Dichlorobenzene	7.30	146	33902	3.5447 ug/ml	93
19) Benzyl Alcohol	7.39	108	18359	3.2357 ug/ml	99
20) 1,2-Dichlorobenzene	7.50	146	31736	3.6527 ug/ml	99
21) 2-Methylphenol	7.48	107	22411	3.3934 ug/ml	96
22) bis(2-Chloroisopropyl)ethe	7.53	45	42714	3.5051 ug/ml	96
23) 3-,4-Methylphenol	7.61	107	29104	3.3376 ug/ml	98
24) n-Nitrosopyrrolidine	7.66	100	13086	3.5346 ug/ml	81
25) n-Nitrosodipropylamine	7.67	70	19190	4.0606 ug/ml	93
26) Acetophenone	7.68	105	38723	4.0393 ug/ml	99
27) n-Nitrosomorpholine	7.67	56	18655	4.1044 ug/ml	96
28) o-Toluidine	7.72	106	46596	3.5537 ug/ml	97
29) Hexachloroethane	7.81	117	11768	3.1652 ug/ml	97
32) Nitrobenzene	7.87	77	28033	3.4846 ug/ml	95
33) n-Nitrosopiperidine	8.01	114	14470	3.2997 ug/ml	96
34) Isophorone	8.08	82	51229	3.5834 ug/ml	98
35) 2-Nitrophenol	8.19	139	14686	2.7155 ug/ml	97
36) 2,4-Dimethylphenol	8.15	122	33490	4.3356 ug/ml	82
37) 0,0,0-Triethyl Phosphoroth	8.25	198	14464	3.8966 ug/ml	99
38) bis(2-Chloroethoxy)methane	8.25	93	39621	3.8831 ug/ml	97

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60440.D Vial: 3
Acq On : 19 Apr 2012 9:56 Operator: CAA
Sample : WG395394-03 3PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:20:38 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:20:34 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39)	Benzoic Acid	8.17	105	8942	2.1054	ug/ml#	1
40)	2,4-Dichlorophenol	8.40	162	23297	3.4366	ug/ml	98
41)	a,a-Dimethylphenethylamine	8.36	58	55768	9.3752	ug/ml#	90
42)	1,2,4-Trichlorobenzene	8.51	180	27461	3.6967	ug/ml	99
43)	Naphthalene	8.59	128	89968	3.9514	ug/ml	98
44)	4-Chloroaniline	8.62	127	34347	3.8389	ug/ml	97
45)	2,6-Dichlorophenol	8.64	162	23700	3.4202	ug/ml	99
46)	Hexachloropropene	8.71	213	13146	2.8310	ug/ml	99
47)	Hexachlorobutadiene	8.74	225	13857	3.6903	ug/ml	98
48)	n-Nitrosodi-n-Butylamine	8.93	84	23037	3.4699	ug/ml	97
49)	p-Phenylenediamine	9.05	108	1961	3.5847	ug/ml#	86
50)	4-Chloro-3-Methylphenol	9.05	107	23094	3.4473	ug/ml	100
51)	Safrole	9.15	162	22407	3.5239	ug/ml	99
52)	2-Methylnaphthalene	9.28	142	57527	3.7383	ug/ml	100
53)	1-Methylnaphthalene	9.40	142	54666	3.7433	ug/ml	99
55)	1,2,4,5-Tetrachlorobenzene	9.49	216	24923	3.7091	ug/ml	98
56)	Hexachlorocyclopentadiene	9.50	237	10305	2.8713	ug/ml	99
57)	2,4,6-Trichlorophenol	9.57	196	15865	3.2084	ug/ml	99
58)	2,4,5-Trichlorophenol	9.61	196	16640	3.3537	ug/ml	100
60)	Isosafrole	9.67	162	22170	3.2560	ug/ml	99
61)	2-Chloronaphthalene	9.79	162	52303	3.5118	ug/ml	100
62)	1-Chloronaphthalene	9.83	162	50840	3.6501	ug/ml	99
63)	2-Nitroaniline	9.88	65	13815	3.0889	ug/ml	97
64)	1,4-Naphthoquinone	9.95	158	20970	3.7456	ug/ml	99
65)	Dimethylphthalate	10.04	163	59595	3.6590	ug/ml	100
66)	1,3-Dinitrobenzene	10.10	168	9788	2.8306	ug/ml	95
67)	2,6-Dinitrotoluene	10.14	165	13905	3.2192	ug/ml	99
68)	Acenaphthylene	10.23	152	86364	3.8139	ug/ml	99
69)	3-Nitroaniline	10.30	138	13846	5.5954	ug/ml	97
70)	2,4-Dinitrophenol	10.40	184	1897	0.8479	ug/ml#	1
71)	Acenaphthene	10.41	154	54687	3.6907	ug/ml	97
72)	4-Nitrophenol	10.39	65	10863	3.4363	ug/ml	81
73)	2,4-Dinitrotoluene	10.55	165	17015	3.2414	ug/ml	95
74)	Pentachlorobenzene	10.60	250	21881	3.6269	ug/ml	99
75)	Dibenzofuran	10.57	168	75169	3.8854	ug/ml	99
76)	2,3,4,6-Tetrachlorophenol	10.67	232	13262	4.0116	ug/ml	99
77)	1-Naphthylamine	10.65	143	47479	86.5695	ug/ml#	66
78)	2-Naphthylamine	10.71	143	39183	118.9922	ug/ml#	57
79)	Diethylphthalate	10.75	149	58814	3.6587	ug/ml	99
80)	Thionazin	10.85	107	9631	3.5646	ug/ml	94
81)	Fluorene	10.93	166	64601	3.8179	ug/ml	100
82)	4-Chlorophenyl Phenyl Ethe	10.88	204	29324	3.7112	ug/ml	98
83)	4-Nitroaniline	10.93	138	13701	3.7580	ug/ml	94
84)	5-Nitro-o-Toluidine	10.93	152	16758	4.6699	ug/ml	99
85)	1,2-Diphenylhydrazine	11.04	77	57128	3.6092	ug/ml	97
88)	4,6-Dinitro-2-Methylphenol	10.97	198	4516	1.2952	ug/ml#	24
89)	n-Nitrosodiphenylamine	11.00	169	53933	3.6688	ug/ml	98
90)	Sulfotepp	11.20	322	9525	3.5392	ug/ml	97
91)	Sym-Trinitrobenzene	11.27	75	9014	2.0672	ug/ml	95
92)	Diallate	11.32	86	22249	3.8474	ug/ml	99
93)	Phenacetin	11.30	108	25981	3.3474	ug/ml	96
94)	Phorate	11.34	75	33359	3.4677	ug/ml#	99
95)	4-Bromophenyl Phenyl Ether	11.41	248	16506	3.5090	ug/ml	99
96)	Hexachlorobenzene	11.63	284	18694	3.7029	ug/ml	98

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60440.D Vial: 3
Acq On : 19 Apr 2012 9:56 Operator: CAA
Sample : WG395394-03 3PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:20:38 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:20:34 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

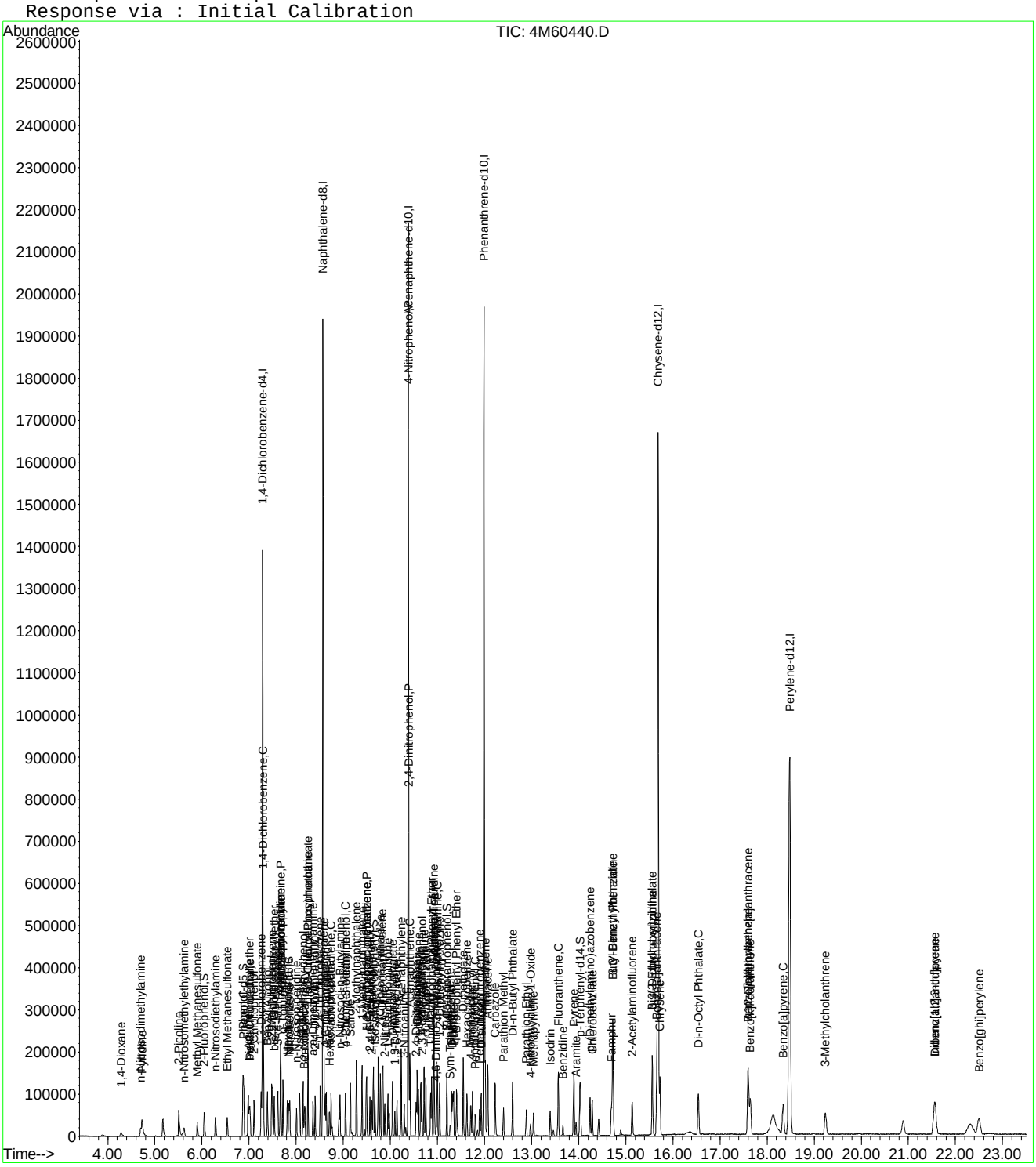
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.55	87	21420	4.5998	ug/ml	98
98)	4-Aminobiphenyl	11.71	169	41614	7.2373	ug/ml	97
99)	Pentachlorophenol	11.80	266	8880	3.0117	ug/ml	98
100)	Pronamide	11.74	173	25508	3.3192	ug/ml	97
101)	Pentachloronitrobenzene	11.90	237	5928	3.2762	ug/ml	97
102)	Disulfoton	11.93	88	28465	3.3040	ug/ml	99
103)	Phenanthrene	12.02	178	90590	3.7776	ug/ml	99
104)	Anthracene	12.07	178	91274	3.7046	ug/ml	98
105)	Carbazole	12.22	167	80012	3.4770	ug/ml	99
106)	Parathion Methyl	12.40	109	17383	3.7794	ug/ml	98
107)	Di-n-Butyl Phthalate	12.59	149	98435	3.6392	ug/ml	99
108)	Parathion Ethyl	12.89	97	9681	2.9175	ug/ml	96
109)	4-Nitroquinoline 1-Oxide	12.98	190	3299	1.9642	ug/ml#	85
110)	Methapyrilene	13.04	58	24373	5.0309	ug/ml	99
111)	Isodrin	13.40	193	9498	3.5484	ug/ml	91
112)	Fluoranthene	13.57	202	93933	3.7393	ug/ml	99
114)	Benzidine	13.67	184	21581	507.2340	ug/ml	100
115)	Pyrene	13.90	202	96680	3.6213	ug/ml	97
116)	Aramite	13.94	185	4927	3.0431	ug/ml	98
118)	p-(Dimethylamino)azobenzen	14.24	225	17540	3.0800	ug/ml	96
119)	Chlorobenzilate	14.29	251	24175	3.2299	ug/ml	100
120)	Famphur	14.69	218	29261	86.4005	ug/ml#	22
121)	Butyl Benzyl Phthalate	14.71	149	42313	3.3153	ug/ml	97
122)	3,3'-Dimethylbenzidine	14.72	212	63234	24.2278	ug/ml#	91
123)	2-Acetylaminofluorene	15.14	181	30635	2.6744	ug/ml	98
124)	bis(2-Ethylhexyl)phthalate	15.56	149	56427	3.3419	ug/ml	99
125)	3,3'-Dichlorobenzidine	15.56	252	25330	5.5922	ug/ml	98
126)	Benzo[a]anthracene	15.65	228	83823	3.5545	ug/ml	99
127)	Chrysene	15.72	228	81007	3.6768	ug/ml	97
129)	Di-n-Octyl Phthalate	16.54	149	92158	3.0712	ug/ml	98
130)	7,12-Dimethylbenz[a]anthra	17.60	256	36761	3.1959	ug/ml	99
131)	Benzo[b]fluoranthene	17.59	252	87582	3.3057	ug/ml	98
132)	Benzo[k]fluoranthene	17.64	252	80556	3.4657	ug/ml	96
133)	Benzo[a]pyrene	18.34	252	76197	3.1529	ug/ml	96
134)	3-Methylcholanthrene	19.24	268	40955	3.1188	ug/ml	96
135)	Indeno[1,2,3-cd]pyrene	21.56	276	82885	2.9287	ug/ml	98
136)	Dibenz[ah]anthracene	21.56	278	67905	2.8804	ug/ml	98
137)	Benzo[ghi]perylene	22.50	276	70328	3.0021	ug/ml	99

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60440.D Vial: 3
Acq On : 19 Apr 2012 9:56 Operator: CAA
Sample : WG395394-03 3PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:20 2012 Quant Results File: MEGAMIX.RES

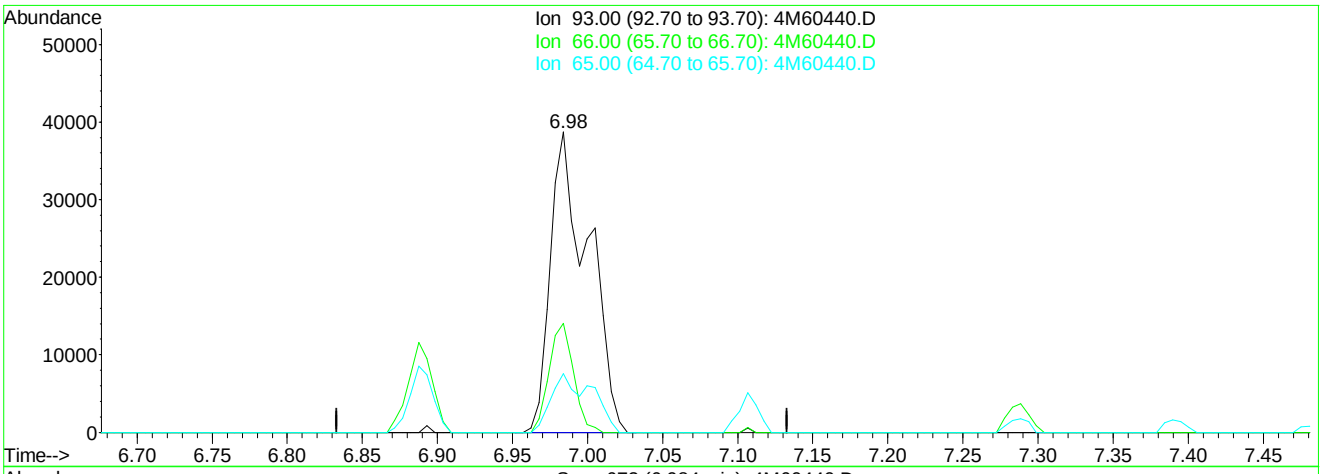
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration

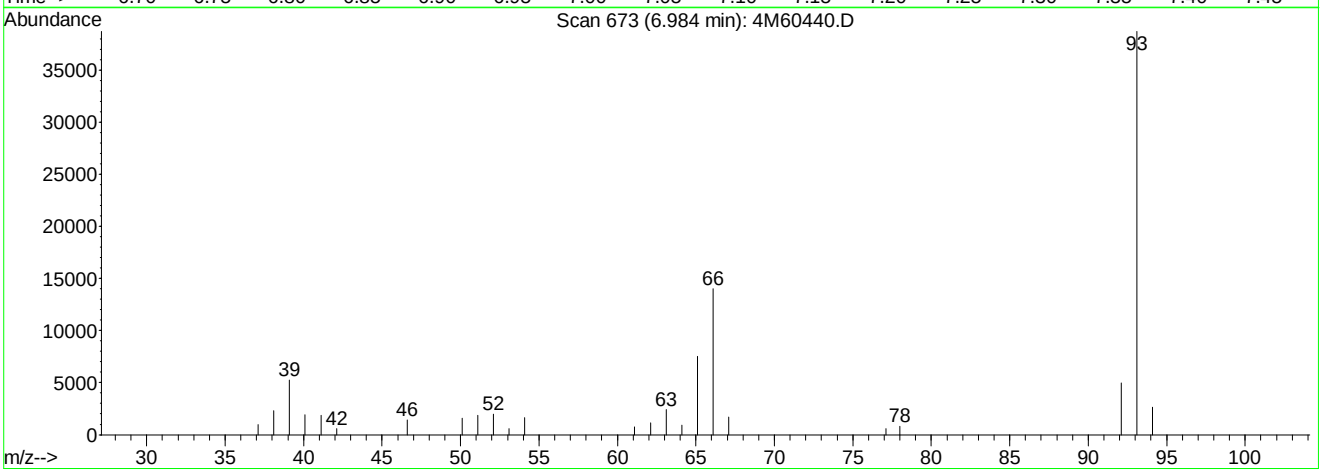


Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60440.D Vial: 3
Acq On : 19 Apr 2012 9:56 Operator: CAA
Sample : WG395394-03 3PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:20 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:20:34 2012
Response via : Multiple Level Calibration





TIC: 4M60440.D

(11) Aniline

6.98min 5.47ug/ml

response 68174

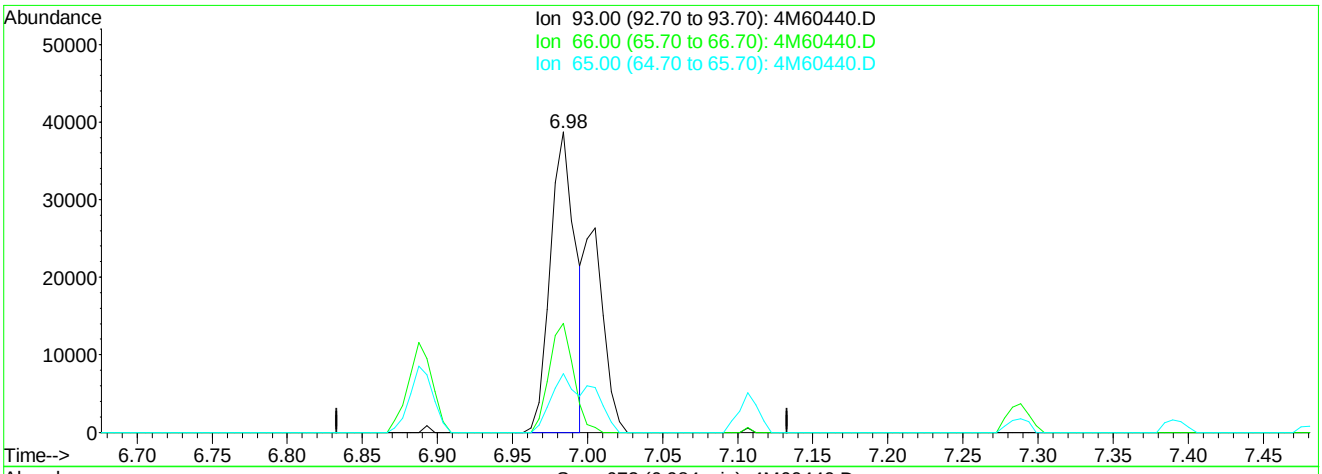
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.15
65.00	29.20	12.96#
0.00	0.00	0.00

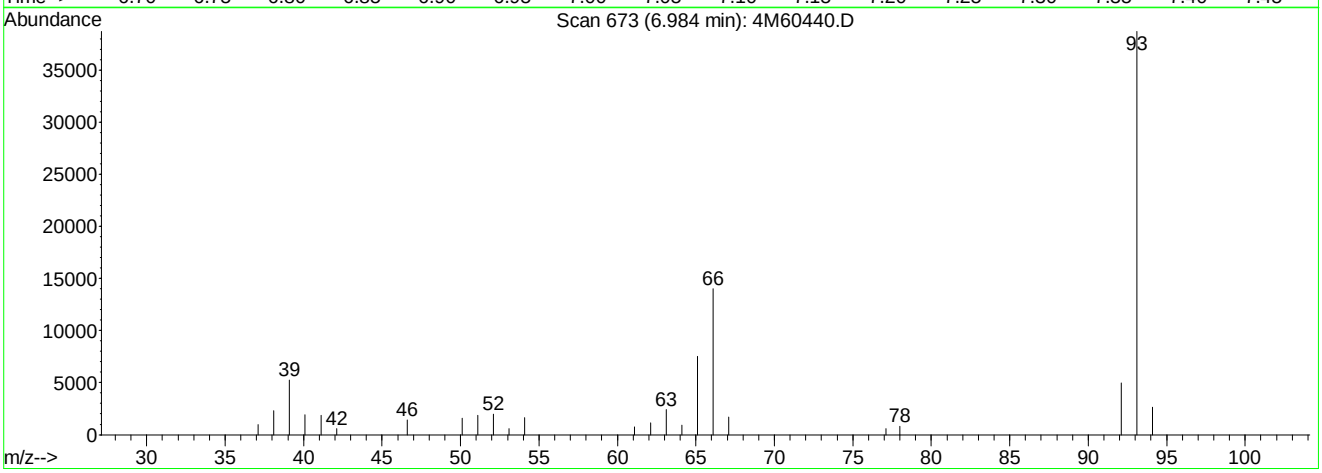
4M60440.D MEGAMIX.M Thu Apr 19 14:20:45 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60440.D Vial: 3
Acq On : 19 Apr 2012 9:56 Operator: CAA
Sample : WG395394-03 3PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:20 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:20:34 2012
Response via : Multiple Level Calibration





TIC: 4M60440.D

(11) Aniline

6.98min 3.60ug/ml mint

response 44787

Ion	Exp%	Act%
93.00	100	100
66.00	33.40	35.24
65.00	29.20	19.73
0.00	0.00	0.00

4M60440.D MEGAMIX.M Thu Apr 19 3 2012

Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41

#3 - Improperly integrated isomers and/or coeluting compounds

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60441.D Vial: 4
Acq On : 19 Apr 2012 10:30 Operator: CAA
Sample : WG395394-04 10PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:21:20 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:21:15 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	237916	40.00 ug/ml	0.00
30) Naphthalene-d8	8.57	136	893365	40.00 ug/ml	0.00
54) Acenaphthene-d10	10.38	164	510408	40.00 ug/ml	0.00
87) Phenanthrene-d10	11.99	188	907450	40.00 ug/ml	0.00
113) Chrysene-d12	15.69	240	880602	40.00 ug/ml	0.00
128) Perylene-d12	18.48	264	863619	40.00 ug/ml	0.00

System Monitoring Compounds					
8) 2-Fluorophenol	6.05	112	74839	10.5102 ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 10.51%#		
12) Phenol-d5	6.87	99	89308	11.0947 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 11.09%		
31) Nitrobenzene-d5	7.85	82	79268	10.8702 ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 21.74%#		
59) 2-Fluorobiphenyl	9.64	172	182928	12.0385 ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 24.08%#		
86) 2,4,6-Tribromophenol	11.21	330	24080	11.8125 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 11.81%		
117) p-Terphenyl-d14	14.03	244	174505	11.6887 ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 23.38%#		

Target Compounds					Qvalue
2) 1,4-Dioxane	4.27	88	31667	11.0052 ug/ml#	97
3) n-Nitrosodimethylamine	4.69	74	45531	10.2516 ug/ml	99
4) Pyridine	4.72	79	80103	10.2145 ug/ml	98
5) 2-Picoline	5.51	93	87458	10.3683 ug/ml	99
6) n-Nitrosomethylethylamine	5.62	88	37875	10.1662 ug/ml	99
7) Methyl Methanesulfonate	5.90	80	45007	10.9305 ug/ml	99
9) n-Nitrosodiethylamine	6.29	102	40366	10.4819 ug/ml	94
10) Ethyl Methanesulfonate	6.54	79	57135	10.7831 ug/ml	98
11) Aniline	6.98	93	121534m	10.9685 ug/ml	
13) Phenol	6.89	94	94119	11.0570 ug/ml	99
14) bis(2-Chloroethyl)ether	7.00	63	60185	11.8819 ug/ml	94
15) Pentachloroethane	7.02	167	31625	11.3809 ug/ml	99
16) 2-Chlorophenol	7.10	128	83952	10.7458 ug/ml	99
17) 1,3-Dichlorobenzene	7.26	146	94834	11.2675 ug/ml	99
18) 1,4-Dichlorobenzene	7.30	146	97326	11.4381 ug/ml	99
19) Benzyl Alcohol	7.39	108	52708	10.4415 ug/ml	98
20) 1,2-Dichlorobenzene	7.49	146	91150	11.7921 ug/ml	99
21) 2-Methylphenol	7.48	107	64478	10.9737 ug/ml	98
22) bis(2-Chloroisopropyl)ethe	7.53	45	123081	11.3525 ug/ml	98
23) 3-,4-Methylphenol	7.61	107	83719	10.7913 ug/ml	99
24) n-Nitrosopyrrolidine	7.66	100	38063	11.5559 ug/ml	82
25) n-Nitrosodipropylamine	7.67	70	56111	13.3456 ug/ml	94
26) Acetophenone	7.68	105	108025	12.6657 ug/ml	100
27) n-Nitrosomorpholine	7.67	56	52883	13.0781 ug/ml	98
28) o-Toluidine	7.72	106	128542	11.0191 ug/ml	100
29) Hexachloroethane	7.81	117	35410	10.7053 ug/ml	99
32) Nitrobenzene	7.86	77	78736	10.9863 ug/ml	98
33) n-Nitrosopiperidine	8.01	114	42184	10.7982 ug/ml	96
34) Isophorone	8.08	82	147532	11.5841 ug/ml	99
35) 2-Nitrophenol	8.18	139	44266	9.1879 ug/ml	95
36) 2,4-Dimethylphenol	8.15	122	81553	11.8506 ug/ml	96
37) 0,0,0-Triethyl Phosphoroth	8.25	198	41424	12.5273 ug/ml	98
38) bis(2-Chloroethoxy)methane	8.25	93	115030	12.6553 ug/ml	99

(#) = qualifier out of range (m) = manual integration
4M60441.D MEGAMIX.M Fri Apr 20 08:18:57 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60441.D Vial: 4
Acq On : 19 Apr 2012 10:30 Operator: CAA
Sample : WG395394-04 10PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:21:20 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:21:15 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39)	Benzoic Acid	8.18	105	38328	10.1302 ug/ml	84
40)	2,4-Dichlorophenol	8.40	162	68171	11.2881 ug/ml	99
41)	a,a-Dimethylphenethylamine	8.36	58	62751	11.8367 ug/ml#	95
42)	1,2,4-Trichlorobenzene	8.51	180	77810	11.7582 ug/ml	99
43)	Naphthalene	8.59	128	258782	12.7584 ug/ml	96
44)	4-Chloroaniline	8.62	127	88805	11.1416 ug/ml	96
45)	2,6-Dichlorophenol	8.64	162	69040	11.1842 ug/ml	98
46)	Hexachloropropene	8.71	213	41492	10.0305 ug/ml	99
47)	Hexachlorobutadiene	8.74	225	39698	11.8674 ug/ml	100
48)	n-Nitrosodi-n-Butylamine	8.93	84	67459	11.4059 ug/ml	97
49)	p-Phenylenediamine	9.05	108	5791	11.8831 ug/ml#	85
50)	4-Chloro-3-Methylphenol	9.05	107	67645	11.3347 ug/ml	99
51)	Safrole	9.15	162	65447	11.5540 ug/ml	99
52)	2-Methylnaphthalene	9.28	142	167733	12.2356 ug/ml	98
53)	1-Methylnaphthalene	9.40	142	156615	12.0384 ug/ml	99
55)	1,2,4,5-Tetrachlorobenzene	9.49	216	72062	11.9105 ug/ml	100
56)	Hexachlorocyclopentadiene	9.50	237	34278	10.6059 ug/ml	100
57)	2,4,6-Trichlorophenol	9.57	196	48642	10.9247 ug/ml	99
58)	2,4,5-Trichlorophenol	9.61	196	49310	11.0367 ug/ml	99
60)	Isosafrole	9.67	162	67366	10.9881 ug/ml	99
61)	2-Chloronaphthalene	9.79	162	153572	11.4518 ug/ml	99
62)	1-Chloronaphthalene	9.83	162	147201	11.7373 ug/ml	100
63)	2-Nitroaniline	9.88	65	42993	10.6758 ug/ml	97
64)	1,4-Naphthoquinone	9.95	158	64199	12.7348 ug/ml	97
65)	Dimethylphthalate	10.05	163	173033	11.7986 ug/ml	99
66)	1,3-Dinitrobenzene	10.10	168	31289	10.0491 ug/ml	97
67)	2,6-Dinitrotoluene	10.14	165	41342	10.6297 ug/ml	99
68)	Acenaphthylene	10.23	152	253419	12.4289 ug/ml	99
69)	3-Nitroaniline	10.30	138	29679	13.3200 ug/ml	99
70)	2,4-Dinitrophenol	10.40	184	11443	5.6802 ug/ml#	1
71)	Acenaphthene	10.42	154	164631	12.3393 ug/ml	99
72)	4-Nitrophenol	10.39	65	32506	11.4198 ug/ml	86
73)	2,4-Dinitrotoluene	10.55	165	53272	11.2705 ug/ml	97
74)	Pentachlorobenzene	10.59	250	64824	11.9333 ug/ml	100
75)	Dibenzofuran	10.57	168	219802	12.6180 ug/ml	99
76)	2,3,4,6-Tetrachlorophenol	10.67	232	41388	13.9028 ug/ml	99
77)	1-Naphthylamine	10.65	143	63582	128.5872 ug/ml#	71
78)	2-Naphthylamine	10.72	143	35313	119.1207 ug/ml#	57
79)	Diethylphthalate	10.75	149	172211	11.8976 ug/ml	99
80)	Thionazin	10.85	107	27611	11.3495 ug/ml	98
81)	Fluorene	10.93	166	186598	12.2474 ug/ml	100
82)	4-Chlorophenyl Phenyl Ethe	10.88	204	86184	12.1137 ug/ml	98
83)	4-Nitroaniline	10.93	138	38627	11.7665 ug/ml	95
84)	5-Nitro-o-Toluidine	10.93	152	41441	12.8248 ug/ml	96
85)	1,2-Diphenylhydrazine	11.05	77	166954	11.7142 ug/ml	98
88)	4,6-Dinitro-2-Methylphenol	10.98	198	20886	6.5785 ug/ml	71
89)	n-Nitrosodiphenylamine	11.00	169	156643	11.7021 ug/ml	99
90)	Sulfotepp	11.20	322	28246	11.5258 ug/ml	95
91)	Sym-Trinitrobenzene	11.27	75	33591	8.4597 ug/ml	98
92)	Diallate	11.32	86	63954	12.1454 ug/ml	95
93)	Phenacetin	11.30	108	80247	11.3541 ug/ml	97
94)	Phorate	11.34	75	102381	11.6879 ug/ml#	97
95)	4-Bromophenyl Phenyl Ether	11.41	248	49608	11.5817 ug/ml	100
96)	Hexachlorobenzene	11.62	284	54193	11.7885 ug/ml	99

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60441.D Vial: 4
Acq On : 19 Apr 2012 10:30 Operator: CAA
Sample : WG395394-04 10PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:21:20 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:21:15 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

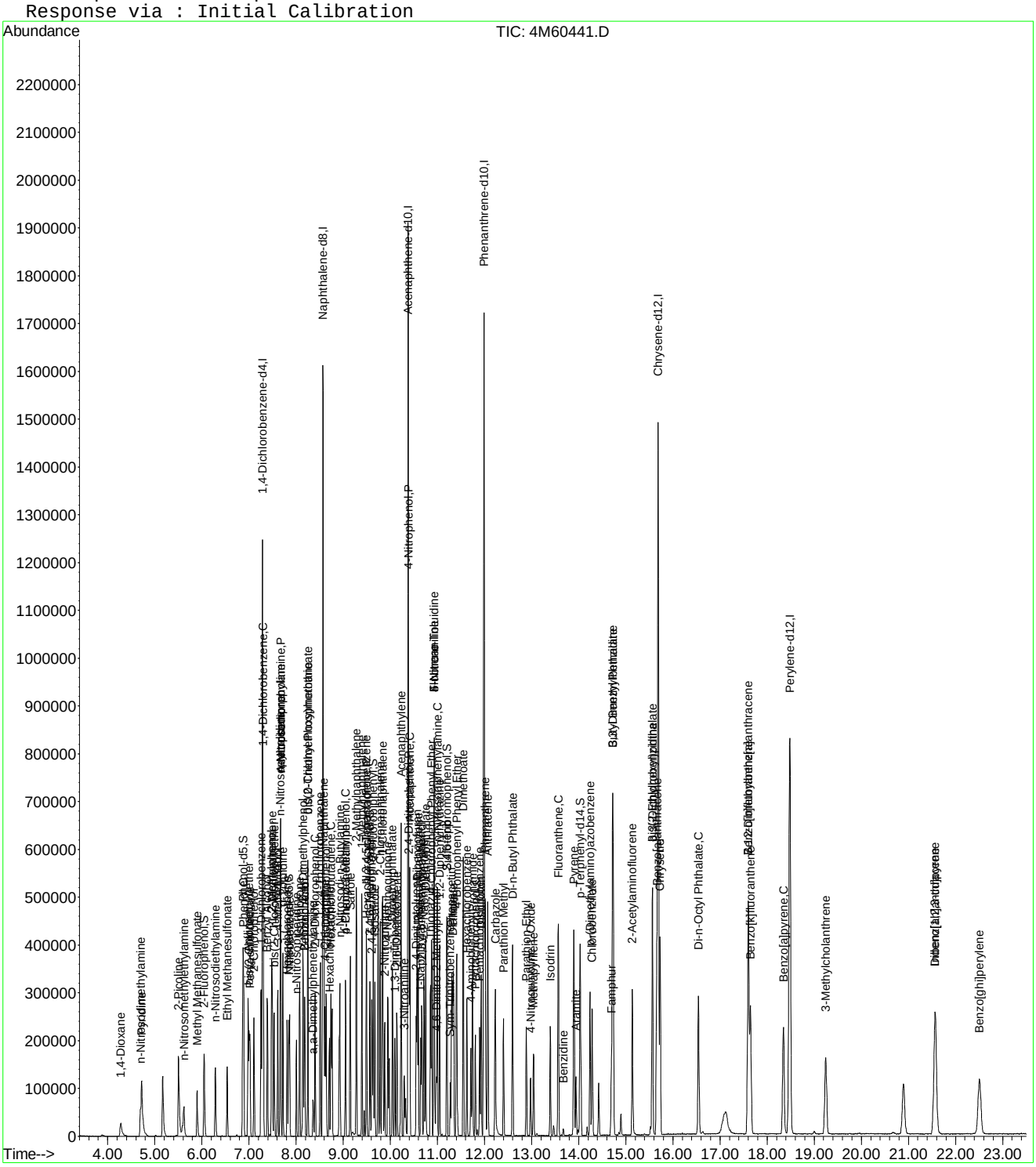
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.55	87	62939	14.8427	ug/ml	98
98)	4-Aminobiphenyl	11.71	169	98626	18.8359	ug/ml	97
99)	Pentachlorophenol	11.81	266	31968	11.9067	ug/ml	98
100)	Pronamide	11.75	173	78302	11.1894	ug/ml	99
101)	Pentachloronitrobenzene	11.90	237	18446	11.1953	ug/ml	99
102)	Disulfoton	11.93	88	86426	11.0169	ug/ml	99
103)	Phenanthrene	12.02	178	263680	12.0752	ug/ml	98
104)	Anthracene	12.07	178	268336	11.9607	ug/ml	98
105)	Carbazole	12.23	167	214134	10.2193	ug/ml	99
106)	Parathion Methyl	12.40	109	55579	13.2701	ug/ml	98
107)	Di-n-Butyl Phthalate	12.60	149	291024	11.8159	ug/ml	99
108)	Parathion Ethyl	12.89	97	31594	10.4558	ug/ml	98
109)	4-Nitroquinoline 1-Oxide	12.98	190	17706	11.5758	ug/ml	96
110)	Methapyrilene	13.04	58	76529	17.3496	ug/ml	98
111)	Isodrin	13.40	193	27779	11.3971	ug/ml	99
112)	Fluoranthene	13.57	202	276101	12.0704	ug/ml	99
114)	Benzidine	13.67	184	13210	330.6398	ug/ml	100
115)	Pyrene	13.90	202	278837	11.3279	ug/ml	98
116)	Aramite	13.94	185	14726	9.8644	ug/ml	98
118)	p-(Dimethylamino)azobenzen	14.24	225	56140	10.6923	ug/ml	98
119)	Chlorobenzilate	14.29	251	73396	10.6356	ug/ml	99
120)	Famphur	14.69	218	57425	183.9087	ug/ml#	24
121)	Butyl Benzyl Phthalate	14.72	149	126613	10.7599	ug/ml	98
122)	3,3'-Dimethylbenzidine	14.72	212	148095	61.5331	ug/ml#	91
123)	2-Acetylaminofluorene	15.14	181	99751	9.4447	ug/ml	98
124)	bis(2-Ethylhexyl)phthalate	15.57	149	171936	11.0447	ug/ml	100
125)	3,3'-Dichlorobenzidine	15.57	252	53915	12.9107	ug/ml	98
126)	Benzo[a]anthracene	15.66	228	248867	11.4461	ug/ml	98
127)	Chrysene	15.73	228	234491	11.5438	ug/ml	99
129)	Di-n-Octyl Phthalate	16.54	149	278406	10.0246	ug/ml	100
130)	7,12-Dimethylbenz[a]anthra	17.61	256	115574	10.8566	ug/ml	100
131)	Benzo[b]fluoranthene	17.60	252	261129	10.6494	ug/ml	98
132)	Benzo[k]fluoranthene	17.64	252	242271	11.2620	ug/ml	99
133)	Benzo[a]pyrene	18.34	252	230518	10.3063	ug/ml	99
134)	3-Methylcholanthrene	19.24	268	125354	10.3142	ug/ml	98
135)	Indeno[1,2,3-cd]pyrene	21.57	276	254952	9.7339	ug/ml	100
136)	Dibenz[ah]anthracene	21.57	278	213369	9.7794	ug/ml	100
137)	Benzo[ghi]perylene	22.51	276	213268	9.8367	ug/ml	99

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60441.D Vial: 4
Acq On : 19 Apr 2012 10:30 Operator: CAA
Sample : WG395394-04 10PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:21 2012 Quant Results File: MEGAMIX.RES

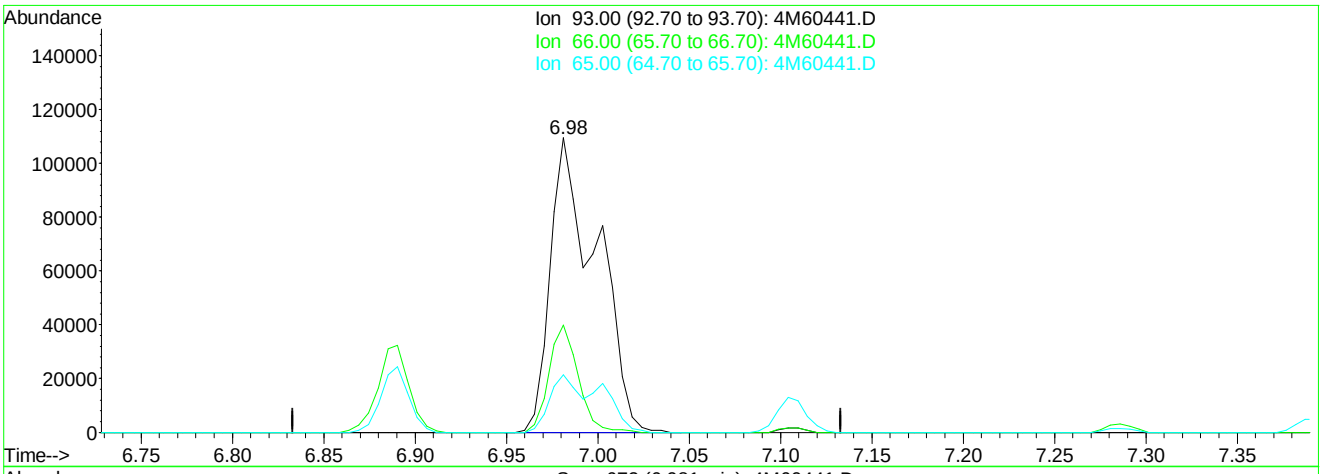
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration

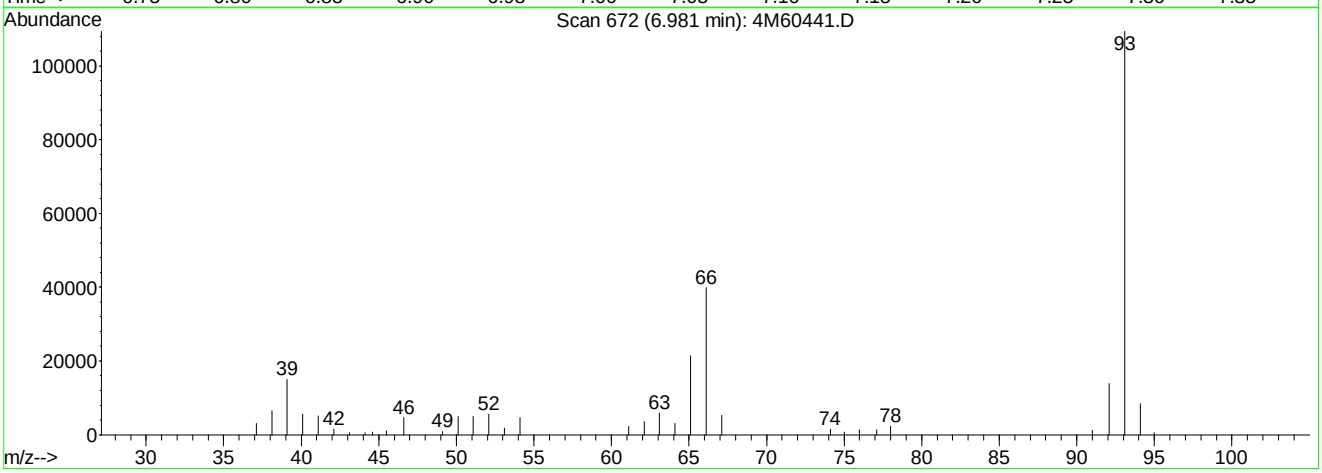


Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60441.D Vial: 4
Acq On : 19 Apr 2012 10:30 Operator: CAA
Sample : WG395394-04 10PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:21 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:21:15 2012
Response via : Multiple Level Calibration





TIC: 4M60441.D

(11) Aniline

6.98min 17.54ug/ml

response 194344

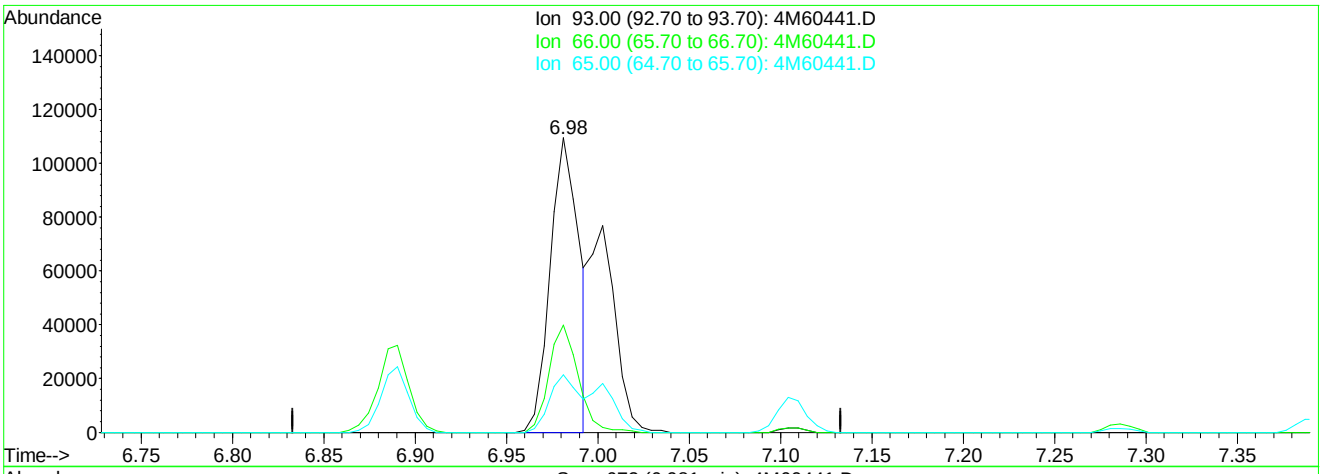
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.04
65.00	29.20	12.50#
0.00	0.00	0.00

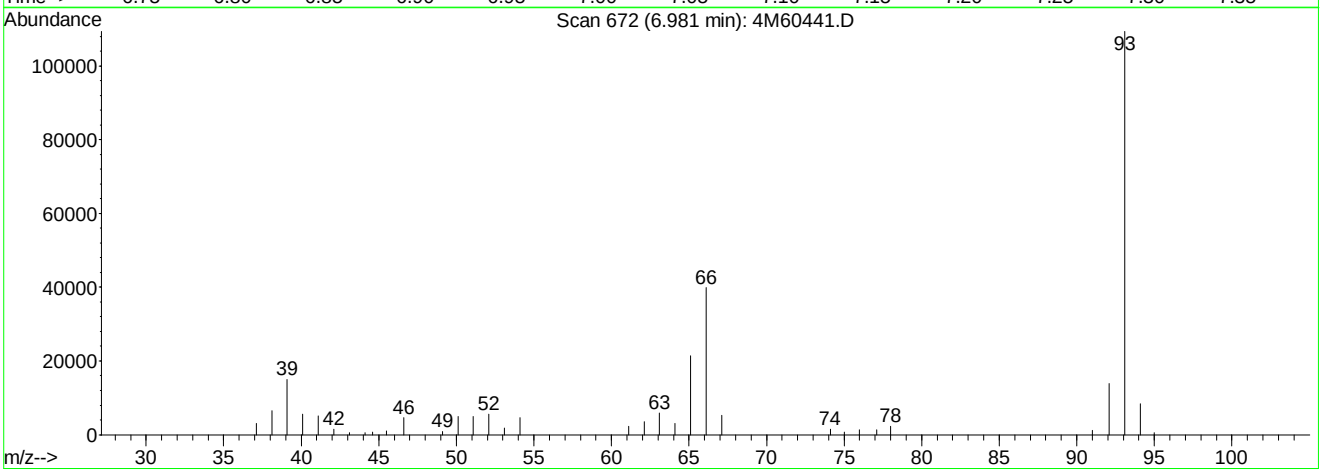
4M60441.D MEGAMIX.M Thu Apr 19 14:21:27 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60441.D Vial: 4
Acq On : 19 Apr 2012 10:30 Operator: CAA
Sample : WG395394-04 10PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:21 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:21:15 2012
Response via : Multiple Level Calibration





TIC: 4M60441.D

(11) Aniline

6.98min 10.97ug/ml mint

response 121534

Ion	Exp%	Act%
93.00	100	100
66.00	33.40	36.85
65.00	29.20	19.98
0.00	0.00	0.00

4M60441.D MEGAMIX.M Thu Apr 19) 2012

Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41

#3 - Improperly integrated isomers and/or coeluting compounds

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60442.D Vial: 5
Acq On : 19 Apr 2012 11:05 Operator: CAA
Sample : WG395394-05 15PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:21:57 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:21:52 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	252402	40.00 ug/ml	0.00
30) Naphthalene-d8	8.57	136	966303	40.00 ug/ml	0.00
54) Acenaphthene-d10	10.38	164	549854	40.00 ug/ml	0.00
87) Phenanthrene-d10	11.99	188	989287	40.00 ug/ml	0.00
113) Chrysene-d12	15.69	240	944089	40.00 ug/ml	0.00
128) Perylene-d12	18.49	264	930153	40.00 ug/ml	0.00

System Monitoring Compounds

8) 2-Fluorophenol	6.05	112	118944	15.7465 ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 15.75%#		
12) Phenol-d5	6.88	99	140595	16.4648 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 16.46%		
31) Nitrobenzene-d5	7.84	82	127406	16.1551 ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 32.32%#		
59) 2-Fluorobiphenyl	9.64	172	291596	17.8160 ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 35.64%#		
86) 2,4,6-Tribromophenol	11.20	330	38783	17.6561 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 17.66%		
117) p-Terphenyl-d14	14.03	244	275546	17.2170 ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 34.44%		

Target Compounds

					Qvalue
2) 1,4-Dioxane	4.28	88	48051	15.7424 ug/ml#	92
3) n-Nitrosodimethylamine	4.70	74	71932	15.2678 ug/ml	99
4) Pyridine	4.72	79	126437	15.1998 ug/ml	97
5) 2-Picoline	5.50	93	139778	15.6227 ug/ml	99
6) n-Nitrosomethylethylamine	5.62	88	58800	14.8778 ug/ml	97
7) Methyl Methanesulfonate	5.90	80	70448	16.1286 ug/ml	99
9) n-Nitrosodiethylamine	6.29	102	64773	15.8558 ug/ml	96
10) Ethyl Methanesulfonate	6.54	79	90293	16.0645 ug/ml	99
11) Aniline	6.98	93	195396m	16.6176 ug/ml	
13) Phenol	6.89	94	149867	16.5965 ug/ml	99
14) bis(2-Chloroethyl)ether	7.01	63	94566	17.5992 ug/ml	93
15) Pentachloroethane	7.02	167	50396	17.0967 ug/ml	99
16) 2-Chlorophenol	7.11	128	131982	15.9250 ug/ml	99
17) 1,3-Dichlorobenzene	7.26	146	149885	16.7875 ug/ml	99
18) 1,4-Dichlorobenzene	7.30	146	152167	16.8578 ug/ml	99
19) Benzyl Alcohol	7.39	108	85215	15.9128 ug/ml	99
20) 1,2-Dichlorobenzene	7.50	146	142731	17.4059 ug/ml	99
21) 2-Methylphenol	7.48	107	103944	16.6758 ug/ml	99
22) bis(2-Chloroisopropyl)ethe	7.53	45	194064	16.8751 ug/ml	97
23) 3-,4-Methylphenol	7.61	107	131799	16.0137 ug/ml	99
24) n-Nitrosopyrrolidine	7.66	100	61466	17.5913 ug/ml	87
25) n-Nitrosodipropylamine	7.67	70	89924	20.1613 ug/ml	96
26) Acetophenone	7.68	105	172180	19.0288 ug/ml	99
27) n-Nitrosomorpholine	7.67	56	83300	19.4199 ug/ml	97
28) o-Toluidine	7.72	106	205090	16.5720 ug/ml	98
29) Hexachloroethane	7.81	117	55844	15.9158 ug/ml	99
32) Nitrobenzene	7.87	77	126438	16.3131 ug/ml	98
33) n-Nitrosopiperidine	8.01	114	67685	16.0179 ug/ml	97
34) Isophorone	8.08	82	231590	16.8128 ug/ml	99
35) 2-Nitrophenol	8.19	139	73595	14.1257 ug/ml	96
36) 2,4-Dimethylphenol	8.15	122	122457	16.4488 ug/ml	100
37) 0,0,0-Triethyl Phosphoroth	8.25	198	64972	18.1660 ug/ml	99
38) bis(2-Chloroethoxy)methane	8.25	93	180101	18.3204 ug/ml	99

(#) = qualifier out of range (m) = manual integration
4M60442.D MEGAMIX.M Fri Apr 20 08:18:58 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60442.D Vial: 5
Acq On : 19 Apr 2012 11:05 Operator: CAA
Sample : WG395394-05 15PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:21:57 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:21:52 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39)	Benzoic Acid	8.18	105	73064	17.8534	ug/ml	90
40)	2,4-Dichlorophenol	8.40	162	106895	16.3636	ug/ml	99
41)	a,a-Dimethylphenethylamine	8.37	58	73395	12.7979	ug/ml#	96
42)	1,2,4-Trichlorobenzene	8.52	180	122401	17.1017	ug/ml	100
43)	Naphthalene	8.59	128	408896	18.6367	ug/ml	97
44)	4-Chloroaniline	8.62	127	129166	14.9764	ug/ml	96
45)	2,6-Dichlorophenol	8.64	162	109450	16.3930	ug/ml	100
46)	Hexachloropropene	8.71	213	66756	14.9227	ug/ml	99
47)	Hexachlorobutadiene	8.74	225	63330	17.5040	ug/ml	100
48)	n-Nitrosodi-n-Butylamine	8.93	84	106657	16.6717	ug/ml	95
49)	p-Phenylenediamine	9.05	108	8853	16.7908	ug/ml	96
50)	4-Chloro-3-Methylphenol	9.05	107	108882	16.8671	ug/ml	99
51)	Safrole	9.15	162	103443	16.8843	ug/ml	99
52)	2-Methylnaphthalene	9.28	142	262619	17.7117	ug/ml	99
53)	1-Methylnaphthalene	9.40	142	247209	17.5689	ug/ml	100
55)	1,2,4,5-Tetrachlorobenzene	9.49	216	114900	17.6324	ug/ml	100
56)	Hexachlorocyclopentadiene	9.50	237	57593	16.5303	ug/ml	99
57)	2,4,6-Trichlorophenol	9.57	196	77554	16.1689	ug/ml	99
58)	2,4,5-Trichlorophenol	9.61	196	80341	16.6924	ug/ml	99
60)	Isosafrole	9.67	162	107208	16.2343	ug/ml	99
61)	2-Chloronaphthalene	9.79	162	241377	16.7103	ug/ml	99
62)	1-Chloronaphthalene	9.83	162	230497	17.0641	ug/ml	100
63)	2-Nitroaniline	9.88	65	67899	15.6511	ug/ml	98
64)	1,4-Naphthoquinone	9.95	158	102741	18.9200	ug/ml	97
65)	Dimethylphthalate	10.04	163	275007	17.4083	ug/ml	99
66)	1,3-Dinitrobenzene	10.10	168	49953	14.8927	ug/ml	97
67)	2,6-Dinitrotoluene	10.14	165	66191	15.7994	ug/ml	99
68)	Acenaphthylene	10.23	152	404588	18.4211	ug/ml	98
69)	3-Nitroaniline	10.30	138	44675	18.4840	ug/ml	99
70)	2,4-Dinitrophenol	10.40	184	22655	10.4391	ug/ml#	1
71)	Acenaphthene	10.41	154	263554	18.3383	ug/ml	99
72)	4-Nitrophenol	10.39	65	53528	17.4427	ug/ml	87
73)	2,4-Dinitrotoluene	10.55	165	86594	17.0065	ug/ml	99
74)	Pentachlorobenzene	10.59	250	101642	17.3695	ug/ml	99
75)	Dibenzofuran	10.57	168	345492	18.4118	ug/ml	100
76)	2,3,4,6-Tetrachlorophenol	10.67	232	65906	20.5458	ug/ml	99
77)	1-Naphthylamine	10.65	143	62212	115.5239	ug/ml#	77
78)	2-Naphthylamine	10.72	143	27301	85.8289	ug/ml#	77
79)	Diethylphthalate	10.76	149	273892	17.5667	ug/ml	100
80)	Thionazin	10.85	107	44504	16.9829	ug/ml	99
81)	Fluorene	10.93	166	294134	17.9213	ug/ml	100
82)	4-Chlorophenyl Phenyl Ethe	10.88	204	136246	17.7779	ug/ml	100
83)	4-Nitroaniline	10.94	138	61583	17.4160	ug/ml	98
84)	5-Nitro-o-Toluidine	10.93	152	65039	18.6866	ug/ml	99
85)	1,2-Diphenylhydrazine	11.05	77	264481	17.2284	ug/ml	99
88)	4,6-Dinitro-2-Methylphenol	10.98	198	38138	11.0187	ug/ml	81
89)	n-Nitrosodiphenylamine	11.00	169	247141	16.9381	ug/ml	99
90)	Sulfotepp	11.20	322	44742	16.7478	ug/ml	96
91)	Sym-Trinitrobenzene	11.27	75	57944	13.3865	ug/ml	98
92)	Diallate	11.33	86	101940	17.7602	ug/ml	94
93)	Phenacetin	11.31	108	129651	16.8282	ug/ml	100
94)	Phorate	11.34	75	162275	16.9952	ug/ml#	99
95)	4-Bromophenyl Phenyl Ether	11.41	248	77958	16.6955	ug/ml	99
96)	Hexachlorobenzene	11.63	284	85076	16.9764	ug/ml	100

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60442.D Vial: 5
Acq On : 19 Apr 2012 11:05 Operator: CAA
Sample : WG395394-05 15PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:21:57 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:21:52 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

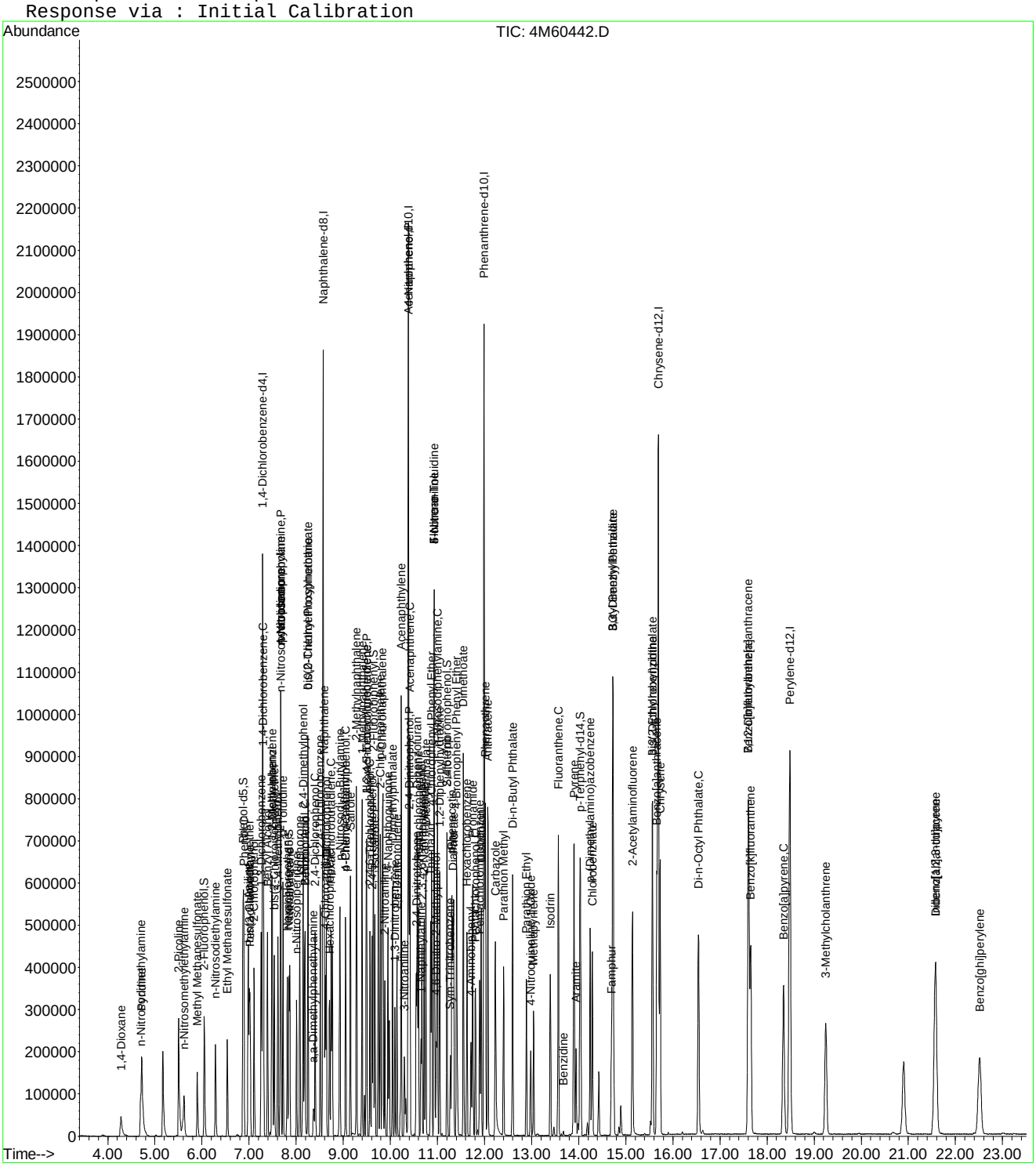
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.55	87	100546	21.7536	ug/ml	99
98)	4-Aminobiphenyl	11.71	169	125719	22.0160	ug/ml	99
99)	Pentachlorophenol	11.81	266	53277	18.1856	ug/ml	99
100)	Pronamide	11.75	173	123932	16.2463	ug/ml	99
101)	Pentachloronitrobenzene	11.90	237	29537	16.4436	ug/ml	98
102)	Disulfoton	11.93	88	138935	16.2473	ug/ml	99
103)	Phenanthrene	12.02	178	414064	17.3948	ug/ml	99
104)	Anthracene	12.07	178	425502	17.3986	ug/ml	98
105)	Carbazole	12.23	167	352808	15.4486	ug/ml	99
106)	Parathion Methyl	12.41	109	90258	19.7673	ug/ml	99
107)	Di-n-Butyl Phthalate	12.60	149	464423	17.2979	ug/ml	99
108)	Parathion Ethyl	12.89	97	50171	15.2292	ug/ml	98
109)	4-Nitroquinoline 1-Oxide	12.98	190	31003	18.5569	ug/ml	95
110)	Methapyrilene	13.04	58	121476	25.2884	ug/ml	99
111)	Isodrin	13.40	193	43714	16.4517	ug/ml	99
112)	Fluoranthene	13.57	202	437692	17.5532	ug/ml	99
114)	Benzidine	13.68	184	11666	263.6683	ug/ml	100
115)	Pyrene	13.90	202	443567	16.8109	ug/ml	98
116)	Aramite	13.94	185	24312	15.1911	ug/ml	98
118)	p-(Dimethylamino)azobenzen	14.24	225	89804	15.9546	ug/ml	99
119)	Chlorobenzilate	14.29	251	119126	16.1020	ug/ml	100
120)	Famphur	14.69	218	70075	209.3298	ug/ml#	26
121)	Butyl Benzyl Phthalate	14.72	149	199823	15.8416	ug/ml	99
122)	3,3'-Dimethylbenzidine	14.72	212	173622	67.2103	ug/ml#	92
123)	2-Acetylaminofluorene	15.14	181	165637	14.6291	ug/ml	99
124)	bis(2-Ethylhexyl)phthalate	15.56	149	273457	16.3862	ug/ml	100
125)	3,3'-Dichlorobenzidine	15.57	252	83197	18.6011	ug/ml	98
126)	Benzo[a]anthracene	15.66	228	392679	16.8472	ug/ml	99
127)	Chrysene	15.73	228	373919	17.1718	ug/ml	98
129)	Di-n-Octyl Phthalate	16.54	149	449194	15.0178	ug/ml	99
130)	7,12-Dimethylbenz[a]anthra	17.61	256	185164	16.1494	ug/ml	99
131)	Benzo[b]fluoranthene	17.60	252	406702	15.4009	ug/ml	97
132)	Benzo[k]fluoranthene	17.65	252	363539	15.6903	ug/ml	96
133)	Benzo[a]pyrene	18.35	252	370228	15.3691	ug/ml	100
134)	3-Methylcholanthrene	19.25	268	200144	15.2897	ug/ml	99
135)	Indeno[1,2,3-cd]pyrene	21.57	276	406105	14.3976	ug/ml	100
136)	Dibenz[ah]anthracene	21.58	278	340635	14.4981	ug/ml	100
137)	Benzo[ghi]perylene	22.51	276	337233	14.4441	ug/ml	100

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60442.D Vial: 5
Acq On : 19 Apr 2012 11:05 Operator: CAA
Sample : WG395394-05 15PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:22 2012 Quant Results File: MEGAMIX.RES

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration

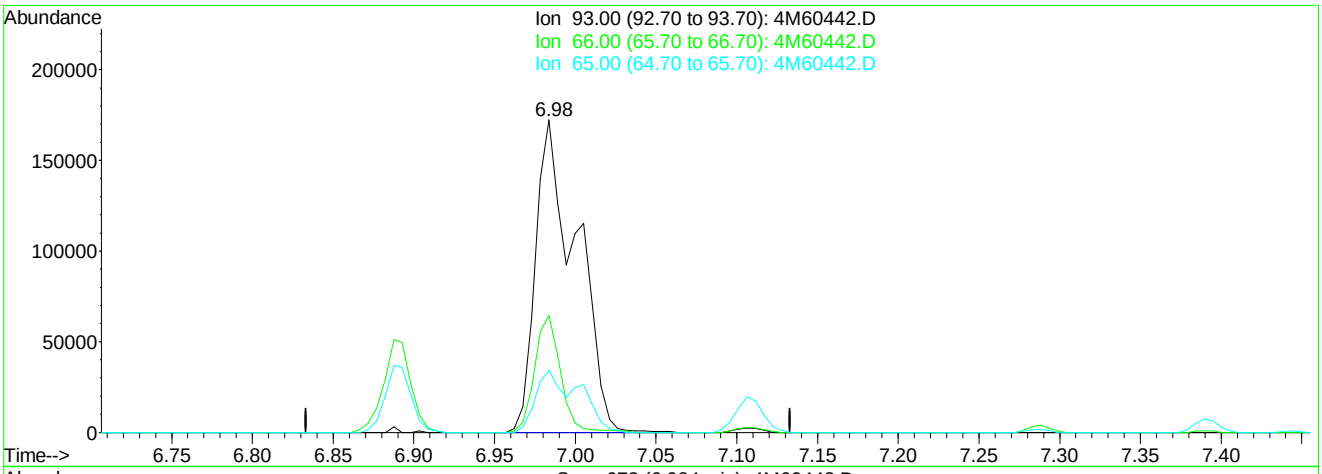


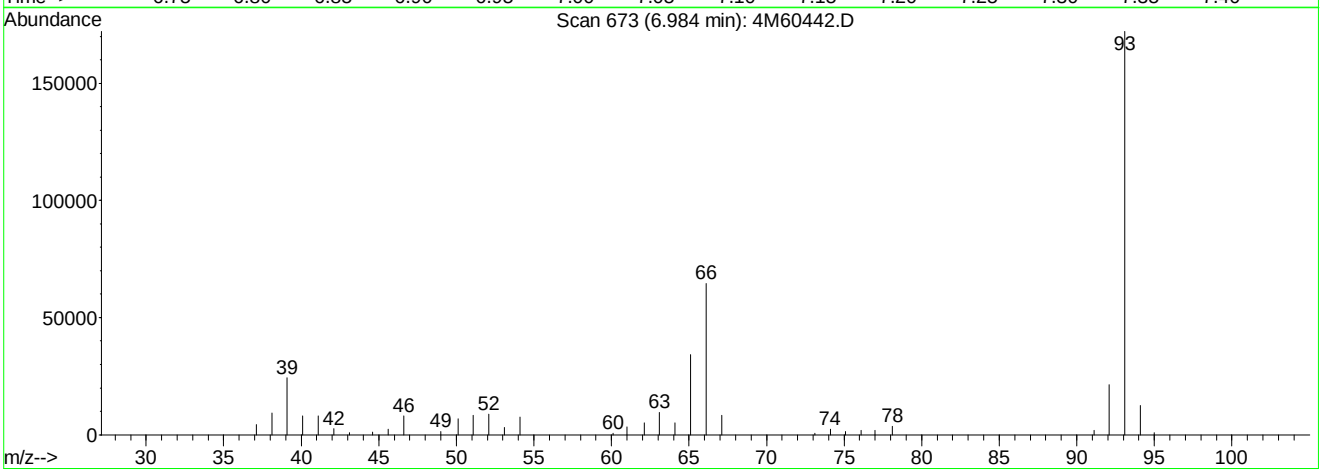
4M60442.D MEGAMIX.M Fri Apr 20 08:18:59 2012 Page 4

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60442.D Vial: 5
Acq On : 19 Apr 2012 11:05 Operator: CAA
Sample : WG395394-05 15PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:21 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:21:52 2012
Response via : Multiple Level Calibration





TIC: 4M60442.D

(11) Aniline

6.98min 25.75ug/ml

response 302824

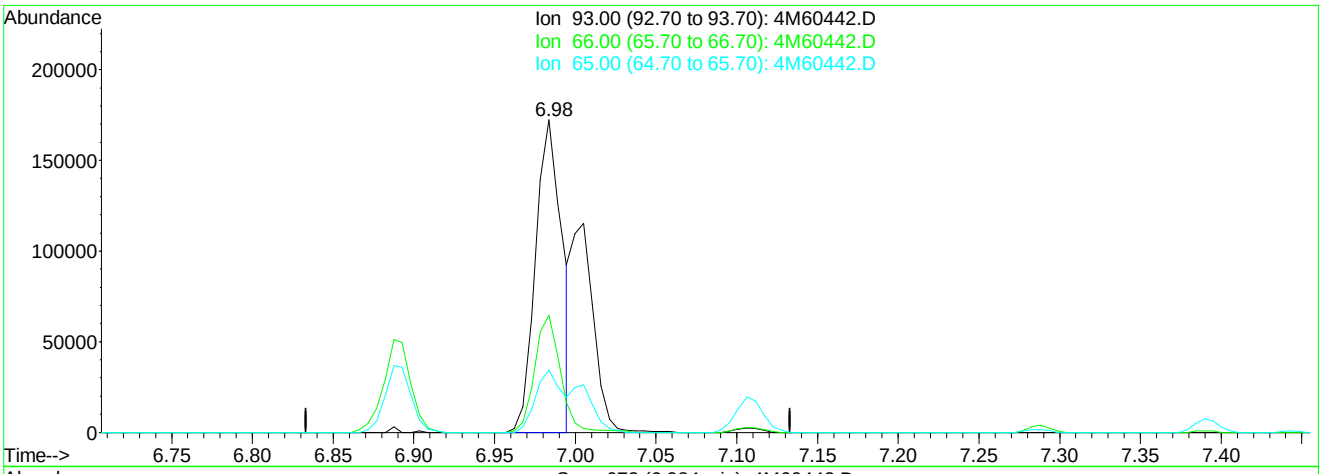
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.55
65.00	29.20	12.97#
0.00	0.00	0.00

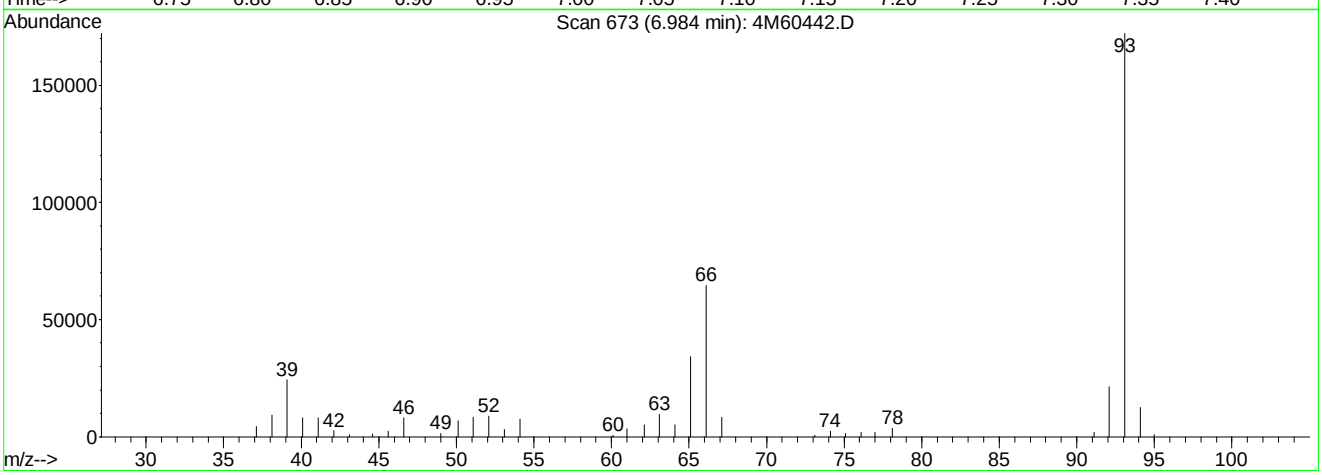
4M60442.D MEGAMIX.M Thu Apr 19 14:22:04 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60442.D Vial: 5
Acq On : 19 Apr 2012 11:05 Operator: CAA
Sample : WG395394-05 15PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:22 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:21:52 2012
Response via : Multiple Level Calibration





TIC: 4M60442.D

(11) Aniline

6.98min 16.62ug/ml mint

response 195396

Ion	Exp%	Act%
93.00	100	100
66.00	33.40	36.49
65.00	29.20	20.10
0.00	0.00	0.00

4M60442.D MEGAMIX.M Thu Apr 19) 2012

Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41

#3 - Improperly integrated isomers and/or coeluting compounds

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60443.D Vial: 6
Acq On : 19 Apr 2012 11:40 Operator: CAA
Sample : WG395394-06 25PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:22:35 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:22:30 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	251859	40.00 ug/ml	0.00
30) Naphthalene-d8	8.57	136	958408	40.00 ug/ml	0.00
54) Acenaphthene-d10	10.38	164	546360	40.00 ug/ml	0.00
87) Phenanthrene-d10	11.99	188	986327	40.00 ug/ml	0.00
113) Chrysene-d12	15.69	240	930598	40.00 ug/ml	0.00
128) Perylene-d12	18.49	264	911708	40.00 ug/ml	0.00

System Monitoring Compounds					
8) 2-Fluorophenol	6.05	112	187826	24.9204 ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 24.92%		
12) Phenol-d5	6.88	99	220672	25.8999 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 25.90%		
31) Nitrobenzene-d5	7.85	82	200637	25.6549 ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 51.30%		
59) 2-Fluorobiphenyl	9.64	172	454252	27.9314 ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 55.86%		
86) 2,4,6-Tribromophenol	11.20	330	62078	28.4293 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 28.43%		
117) p-Terphenyl-d14	14.03	244	431075	27.3274 ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 54.66%		

Target Compounds					Qvalue
2) 1,4-Dioxane	4.28	88	77889	25.5754 ug/ml#	95
3) n-Nitrosodimethylamine	4.70	74	114218	24.2984 ug/ml	99
4) Pyridine	4.72	79	203079	24.4719 ug/ml	98
5) 2-Picoline	5.50	93	219318	24.5677 ug/ml	99
6) n-Nitrosomethylethylamine	5.62	88	94375	23.9340 ug/ml	99
7) Methyl Methanesulfonate	5.90	80	108121	24.8109 ug/ml	98
9) n-Nitrosodiethylamine	6.29	102	101760	24.9614 ug/ml	96
10) Ethyl Methanesulfonate	6.54	79	142679	25.4450 ug/ml	99
11) Aniline	6.98	93	310572m	26.4470 ug/ml	
13) Phenol	6.89	94	235368	26.1219 ug/ml	100
14) bis(2-Chloroethyl)ether	7.01	63	149268	27.8377 ug/ml	95
15) Pentachloroethane	7.02	167	78501	26.6919 ug/ml	99
16) 2-Chlorophenol	7.11	128	209656	25.3543 ug/ml	99
17) 1,3-Dichlorobenzene	7.26	146	234893	26.3671 ug/ml	99
18) 1,4-Dichlorobenzene	7.30	146	239433	26.5850 ug/ml	100
19) Benzyl Alcohol	7.39	108	135966	25.4390 ug/ml	99
20) 1,2-Dichlorobenzene	7.50	146	225337	27.5383 ug/ml	100
21) 2-Methylphenol	7.48	107	163750	26.3224 ug/ml	99
22) bis(2-Chloroisopropyl)ethe	7.53	45	307427	26.7945 ug/ml	97
23) 3-,4-Methylphenol	7.61	107	210193	25.5926 ug/ml	99
24) n-Nitrosopyrrolidine	7.66	100	96394	27.6474 ug/ml	88
25) n-Nitrosodipropylamine	7.67	70	138764	31.1716 ug/ml	96
26) Acetophenone	7.68	105	268006	29.6774 ug/ml	100
27) n-Nitrosomorpholine	7.67	56	128746	30.0714 ug/ml	98
28) o-Toluidine	7.72	106	324491	26.2693 ug/ml	99
29) Hexachloroethane	7.81	117	87874	25.1004 ug/ml	98
32) Nitrobenzene	7.87	77	200659	26.1102 ug/ml	98
33) n-Nitrosopiperidine	8.01	114	106588	25.4309 ug/ml	96
34) Isophorone	8.08	82	370301	27.1074 ug/ml	99
35) 2-Nitrophenol	8.19	139	120323	23.2944 ug/ml	98
36) 2,4-Dimethylphenol	8.15	122	197889	26.8008 ug/ml	98
37) 0,0,0-Triethyl Phosphoroth	8.26	198	103085	29.0643 ug/ml	99
38) bis(2-Chloroethoxy)methane	8.25	93	285147	29.2502 ug/ml	99

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60443.D Vial: 6
Acq On : 19 Apr 2012 11:40 Operator: CAA
Sample : WG395394-06 25PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:22:35 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:22:30 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39)	Benzoic Acid	8.19	105	127036	31.1628	ug/ml	90
40)	2,4-Dichlorophenol	8.41	162	170393	26.3004	ug/ml	99
41)	a,a-Dimethylphenethylamine	8.38	58	97737	17.2142	ug/ml#	97
42)	1,2,4-Trichlorobenzene	8.52	180	192530	27.1248	ug/ml	99
43)	Naphthalene	8.59	128	637382	29.2863	ug/ml	97
44)	4-Chloroaniline	8.62	127	194712	22.7374	ug/ml	96
45)	2,6-Dichlorophenol	8.64	162	173593	26.2152	ug/ml	100
46)	Hexachloropropene	8.71	213	106935	24.1143	ug/ml	99
47)	Hexachlorobutadiene	8.74	225	100093	27.8939	ug/ml	100
48)	n-Nitrosodi-n-Butylamine	8.93	84	168379	26.5383	ug/ml	97
49)	p-Phenylenediamine	9.05	108	14125	27.0078	ug/ml	98
50)	4-Chloro-3-Methylphenol	9.05	107	175243	27.3693	ug/ml	97
51)	Safrole	9.15	162	166181	27.3506	ug/ml	100
52)	2-Methylnaphthalene	9.28	142	413423	28.1125	ug/ml	99
53)	1-Methylnaphthalene	9.40	142	390373	27.9738	ug/ml	100
55)	1,2,4,5-Tetrachlorobenzene	9.49	216	181138	27.9777	ug/ml	99
56)	Hexachlorocyclopentadiene	9.50	237	93776	27.0522	ug/ml	100
57)	2,4,6-Trichlorophenol	9.57	196	124477	26.1166	ug/ml	98
58)	2,4,5-Trichlorophenol	9.61	196	126653	26.4824	ug/ml	99
60)	Isosafrole	9.68	162	170282	25.9554	ug/ml	100
61)	2-Chloronaphthalene	9.79	162	384238	26.7768	ug/ml	99
62)	1-Chloronaphthalene	9.83	162	365802	27.2618	ug/ml	100
63)	2-Nitroaniline	9.89	65	110145	25.5516	ug/ml	96
64)	1,4-Naphthoquinone	9.95	158	165305	30.6431	ug/ml	99
65)	Dimethylphthalate	10.05	163	432481	27.5512	ug/ml	100
66)	1,3-Dinitrobenzene	10.10	168	82367	24.7157	ug/ml	98
67)	2,6-Dinitrotoluene	10.14	165	106277	25.5326	ug/ml	99
68)	Acenaphthylene	10.23	152	629983	28.8655	ug/ml	99
69)	3-Nitroaniline	10.30	138	69340	28.4118	ug/ml	99
70)	2,4-Dinitrophenol	10.40	184	42104	19.4953	ug/ml	39
71)	Acenaphthene	10.41	154	408883	28.6279	ug/ml	99
72)	4-Nitrophenol	10.40	65	85342	27.9403	ug/ml	89
73)	2,4-Dinitrotoluene	10.55	165	136727	27.0216	ug/ml	99
74)	Pentachlorobenzene	10.60	250	162118	27.8837	ug/ml	100
75)	Dibenzofuran	10.57	168	542792	29.1117	ug/ml	100
76)	2,3,4,6-Tetrachlorophenol	10.67	232	102501	32.1454	ug/ml	99
77)	1-Naphthylamine	10.65	143	55264	101.0285	ug/ml#	89
78)	2-Naphthylamine	10.72	143	38583	124.7686	ug/ml#	54
79)	Diethylphthalate	10.76	149	427533	27.5970	ug/ml	100
80)	Thionazin	10.85	107	71253	27.3692	ug/ml	99
81)	Fluorene	10.93	166	461256	28.2831	ug/ml	99
82)	4-Chlorophenyl Phenyl Ethe	10.88	204	215309	28.2731	ug/ml	99
83)	4-Nitroaniline	10.94	138	96685	27.5294	ug/ml	97
84)	5-Nitro-o-Toluidine	10.93	152	97405	28.1533	ug/ml	98
85)	1,2-Diphenylhydrazine	11.05	77	421079	27.6104	ug/ml	99
88)	4,6-Dinitro-2-Methylphenol	10.98	198	66527	19.2798	ug/ml	90
89)	n-Nitrosodiphenylamine	11.00	169	391279	26.9071	ug/ml	99
90)	Sulfotepp	11.20	322	70926	26.6304	ug/ml	96
91)	Sym-Trinitrobenzene	11.28	75	97026	22.4845	ug/ml	99
92)	Diallate	11.33	86	163182	28.5241	ug/ml	95
93)	Phenacetin	11.31	108	208486	27.1506	ug/ml	99
94)	Phorate	11.34	75	260404	27.3639	ug/ml#	98
95)	4-Bromophenyl Phenyl Ether	11.41	248	122053	26.2210	ug/ml	99
96)	Hexachlorobenzene	11.63	284	133370	26.6963	ug/ml	99

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60443.D Vial: 6
Acq On : 19 Apr 2012 11:40 Operator: CAA
Sample : WG395394-06 25PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:22:35 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:22:30 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

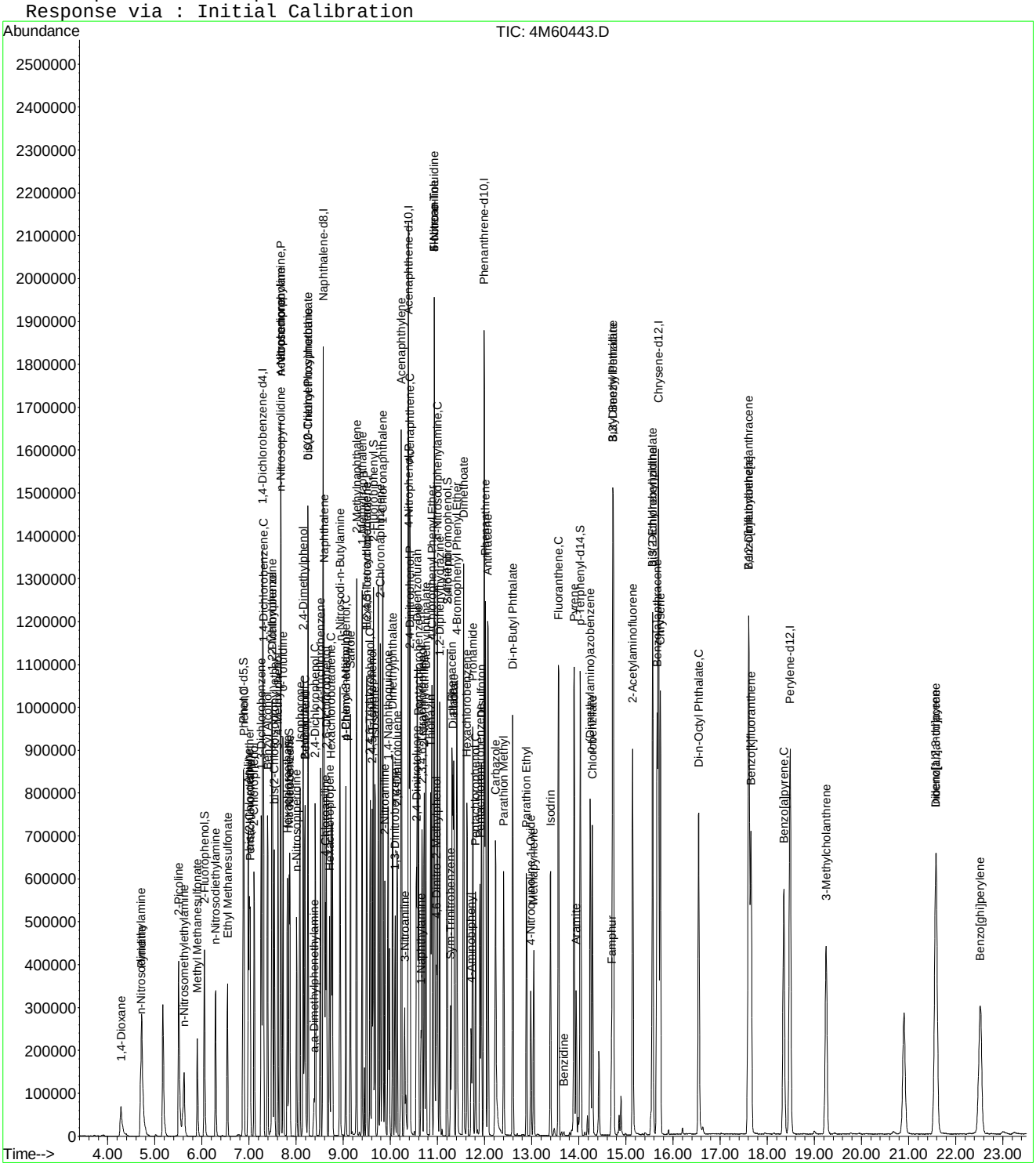
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.55	87	154209	33.4716	ug/ml	99
98)	4-Aminobiphenyl	11.71	169	167715	29.4842	ug/ml	99
99)	Pentachlorophenol	11.81	266	85623	29.2700	ug/ml	99
100)	Pronamide	11.75	173	198719	26.1362	ug/ml	99
101)	Pentachloronitrobenzene	11.90	237	47519	26.5373	ug/ml	99
102)	Disulfoton	11.93	88	220757	25.9018	ug/ml	99
103)	Phenanthrene	12.02	178	651360	27.4516	ug/ml	99
104)	Anthracene	12.08	178	667031	27.3617	ug/ml	99
105)	Carbazole	12.23	167	569024	24.9971	ug/ml	99
106)	Parathion Methyl	12.41	109	144012	31.6358	ug/ml	99
107)	Di-n-Butyl Phthalate	12.60	149	730780	27.3060	ug/ml	99
108)	Parathion Ethyl	12.89	97	82899	25.2432	ug/ml	99
109)	4-Nitroquinoline 1-Oxide	12.98	190	56861	33.9937	ug/ml	97
110)	Methapyrilene	13.04	58	182955	38.2863	ug/ml	99
111)	Isodrin	13.40	193	69419	26.2080	ug/ml	99
112)	Fluoranthene	13.57	202	683155	27.4859	ug/ml	99
114)	Benzidine	13.68	184	9929	216.8924	ug/ml	100
115)	Pyrene	13.90	202	695786	26.7571	ug/ml	99
116)	Aramite	13.95	185	39406	24.9824	ug/ml	99
118)	p-(Dimethylamino)azobenzen	14.24	225	144249	26.0011	ug/ml	99
119)	Chlorobenzilate	14.29	251	187083	25.6530	ug/ml	99
120)	Famphur	14.69	218	67775	205.3943	ug/ml#	30
121)	Butyl Benzyl Phthalate	14.72	149	316262	25.4441	ug/ml	99
122)	3,3'-Dimethylbenzidine	14.73	212	189128	74.3485	ug/ml#	95
123)	2-Acetylaminofluorene	15.14	181	269699	24.1635	ug/ml	99
124)	bis(2-Ethylhexyl)phthalate	15.56	149	431927	26.2614	ug/ml	100
125)	3,3'-Dichlorobenzidine	15.57	252	128645	29.2133	ug/ml	99
126)	Benzo[a]anthracene	15.66	228	614266	26.7373	ug/ml	99
127)	Chrysene	15.73	228	577331	26.8970	ug/ml	99
129)	Di-n-Octyl Phthalate	16.55	149	719604	24.5485	ug/ml	100
130)	7,12-Dimethylbenz[a]anthra	17.61	256	292522	26.0290	ug/ml	100
131)	Benzo[b]fluoranthene	17.60	252	655699	25.3338	ug/ml	100
132)	Benzo[k]fluoranthene	17.66	252	603465	26.5885	ug/ml	96
133)	Benzo[a]pyrene	18.35	252	586115	24.8256	ug/ml	100
134)	3-Methylcholanthrene	19.26	268	318636	24.8357	ug/ml	99
135)	Indeno[1,2,3-cd]pyrene	21.58	276	649328	23.4969	ug/ml	99
136)	Dibenz[ah]anthracene	21.58	278	543273	23.5997	ug/ml	100
137)	Benzo[ghi]perylene	22.52	276	544579	23.8089	ug/ml	99

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60443.D Vial: 6
Acq On : 19 Apr 2012 11:40 Operator: CAA
Sample : WG395394-06 25PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:22 2012 Quant Results File: MEGAMIX.RES

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration

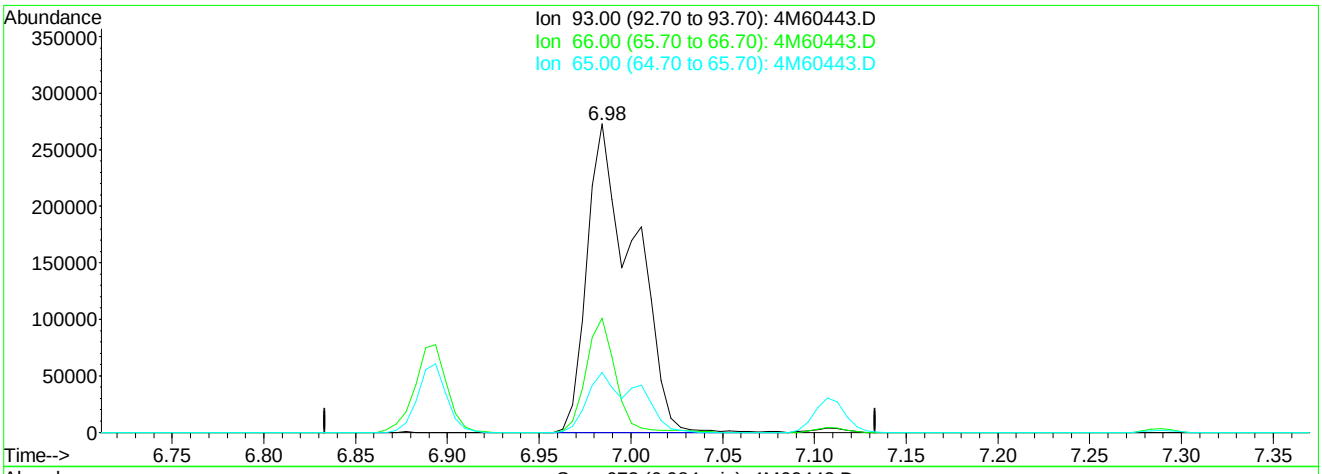


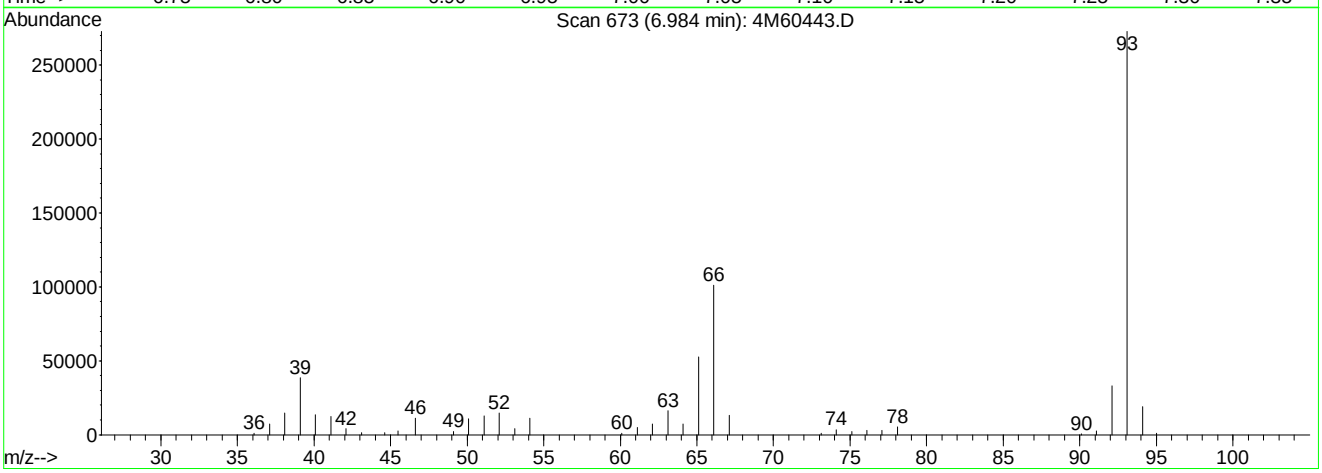
4M60443.D MEGAMIX.M Fri Apr 20 08:18:59 2012 Page 4

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60443.D Vial: 6
Acq On : 19 Apr 2012 11:40 Operator: CAA
Sample : WG395394-06 25PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:22 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:22:30 2012
Response via : Multiple Level Calibration





TIC: 4M60443.D

(11) Aniline

6.98min 41.26ug/ml

response 484578

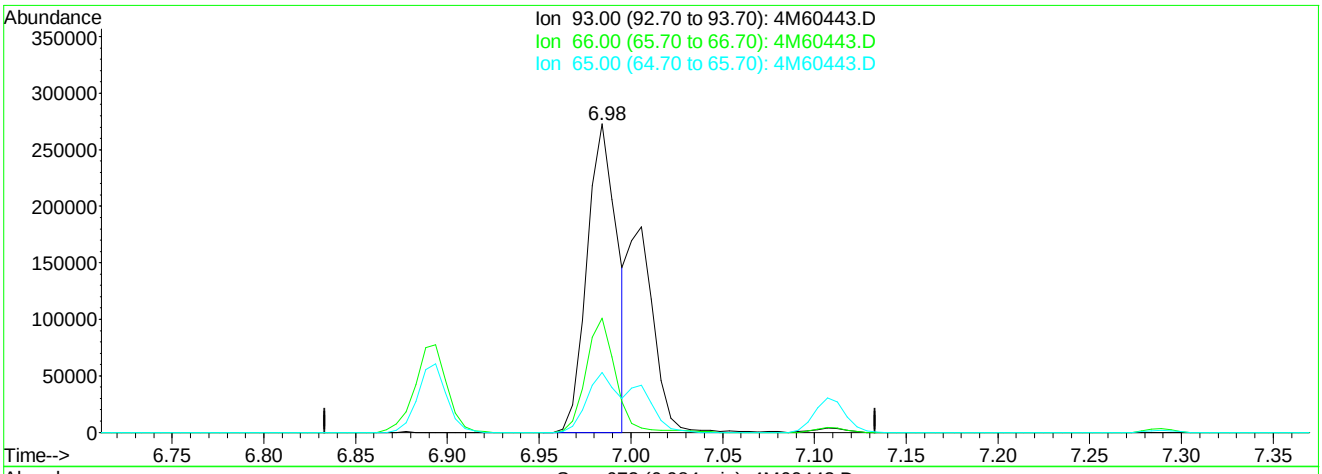
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.25
65.00	29.20	12.52#
0.00	0.00	0.00

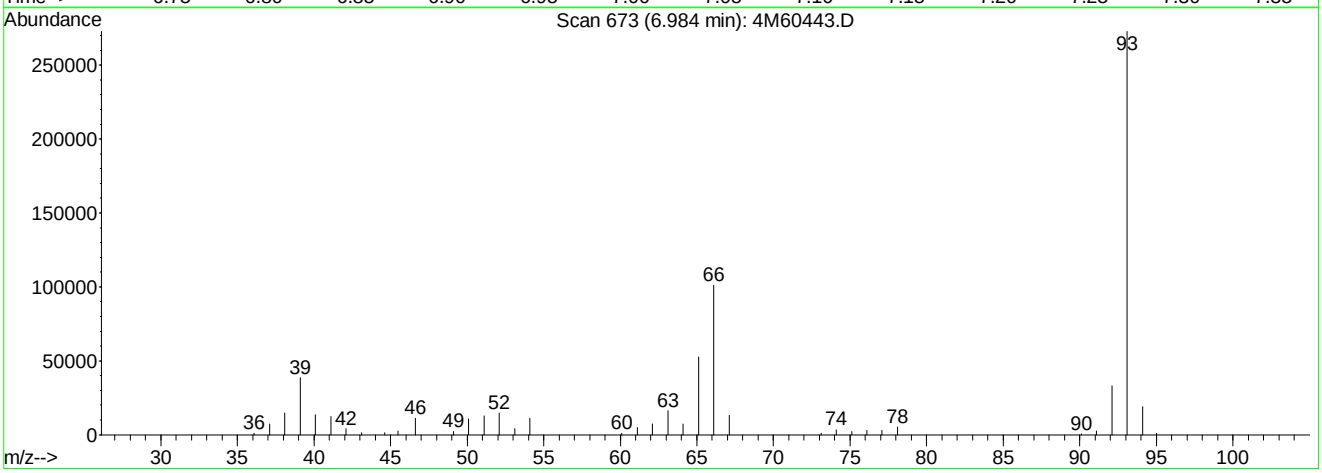
4M60443.D MEGAMIX.M Thu Apr 19 14:22:42 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60443.D Vial: 6
Acq On : 19 Apr 2012 11:40 Operator: CAA
Sample : WG395394-06 25PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:22 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:22:30 2012
Response via : Multiple Level Calibration





TIC: 4M60443.D

(11) Aniline

6.98min 26.45ug/ml mint

response 310572

Ion	Exp%	Act%
93.00	100	100
66.00	33.40	36.28
65.00	29.20	19.53
0.00	0.00	0.00

4M60443.D MEGAMIX.M Thu Apr 19 14:22:30 2012

Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41

#3 - Improperly integrated isomers and/or coeluting compounds

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60444.D Vial: 7
Acq On : 19 Apr 2012 12:14 Operator: CAA
Sample : WG395394-07 80PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:23:13 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:23:08 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	270164	40.00 ug/ml	0.00
30) Naphthalene-d8	8.57	136	1058817	40.00 ug/ml	0.00
54) Acenaphthene-d10	10.39	164	601708	40.00 ug/ml	0.00
87) Phenanthrene-d10	11.99	188	1071121	40.00 ug/ml	0.00
113) Chrysene-d12	15.70	240	1000898	40.00 ug/ml	0.00
128) Perylene-d12	18.49	264	956917	40.00 ug/ml	0.00

System Monitoring Compounds					
8) 2-Fluorophenol	6.05	112	651614	80.6215 ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 80.62%		
12) Phenol-d5	6.88	99	752005	82.3170 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 82.32%		
31) Nitrobenzene-d5	7.85	82	700987	81.1704 ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 162.34%#		
59) 2-Fluorobiphenyl	9.64	172	1529924	85.4454 ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 170.90%#		
86) 2,4,6-Tribromophenol	11.21	330	205907	85.5052 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 85.51%		
117) p-Terphenyl-d14	14.04	244	1400284	82.5257 ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 165.06%#		

Target Compounds					Qvalue
2) 1,4-Dioxane	4.28	88	257642	78.8478 ug/ml#	92
3) n-Nitrosodimethylamine	4.70	74	398328	79.0505 ug/ml	100
4) Pyridine	4.72	79	702917	79.0184 ug/ml	98
5) 2-Picoline	5.50	93	762562	79.6884 ug/ml	99
6) n-Nitrosomethylethylamine	5.62	88	335039	79.2579 ug/ml	99
7) Methyl Methanesulfonate	5.90	80	364051	77.9508 ug/ml	99
9) n-Nitrosodiethylamine	6.29	102	356938	81.6560 ug/ml	99
10) Ethyl Methanesulfonate	6.55	79	484164	80.5222 ug/ml	99
11) Aniline	6.98	93	1181846m	93.7545 ug/ml	
13) Phenol	6.90	94	801301	82.9291 ug/ml	100
14) bis(2-Chloroethyl)ether	7.00	63	497418	86.4828 ug/ml	100
15) Pentachloroethane	7.02	167	273643	86.7763 ug/ml	99
16) 2-Chlorophenol	7.11	128	725693	81.8315 ug/ml	99
17) 1,3-Dichlorobenzene	7.26	146	799543	83.6879 ug/ml	99
18) 1,4-Dichlorobenzene	7.30	146	813532	84.2171 ug/ml	100
19) Benzyl Alcohol	7.39	108	480683	83.8309 ug/ml	99
20) 1,2-Dichlorobenzene	7.50	146	750912	85.5217 ug/ml	100
21) 2-Methylphenol	7.49	107	561625	84.1364 ug/ml	99
22) bis(2-Chloroisopropyl)ethe	7.54	45	1032624	83.9235 ug/ml	99
23) 3-,4-Methylphenol	7.62	107	733181	83.2134 ug/ml	100
24) n-Nitrosopyrrolidine	7.68	100	327343	87.5230 ug/ml	95
25) n-Nitrosodipropylamine	7.68	70	435156	91.0943 ug/ml	99
26) Acetophenone	7.68	105	860801	88.8129 ug/ml	100
27) n-Nitrosomorpholine	7.68	56	397862	86.5753 ug/ml	99
28) o-Toluidine	7.73	106	1155789	87.1781 ug/ml	100
29) Hexachloroethane	7.81	117	310495	82.7247 ug/ml	98
32) Nitrobenzene	7.87	77	698206	82.2707 ug/ml	99
33) n-Nitrosopiperidine	8.01	114	377476	81.5355 ug/ml	99
34) Isophorone	8.08	82	1254518	83.1403 ug/ml	100
35) 2-Nitrophenol	8.19	139	428368	75.2069 ug/ml	98
36) 2,4-Dimethylphenol	8.15	122	674316	82.6362 ug/ml	100
37) 0,0,0-Triethyl Phosphoroth	8.26	198	341314	87.0588 ug/ml	100
38) bis(2-Chloroethoxy)methane	8.26	93	937865	87.0855 ug/ml	99

(#) = qualifier out of range (m) = manual integration
4M60444.D MEGAMIX.M Fri Apr 20 08:19:00 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60444.D Vial: 7
Acq On : 19 Apr 2012 12:14 Operator: CAA
Sample : WG395394-07 80PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:23:13 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:23:08 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39)	Benzoic Acid	8.21	105	518434	113.7758	ug/ml#	75
40)	2,4-Dichlorophenol	8.41	162	591204	82.5988	ug/ml	99
41)	a,a-Dimethylphenethylamine	8.43	58	961556	154.8459	ug/ml	98
42)	1,2,4-Trichlorobenzene	8.52	180	659109	84.0934	ug/ml	100
43)	Naphthalene	8.60	128	2143165	89.1050	ug/ml	98
44)	4-Chloroaniline	8.62	127	840914	88.5412	ug/ml	100
45)	2,6-Dichlorophenol	8.64	162	616497	84.2773	ug/ml	100
46)	Hexachloropropene	8.71	213	395486	80.8426	ug/ml	100
47)	Hexachlorobutadiene	8.74	225	335869	84.6848	ug/ml	99
48)	n-Nitrosodi-n-Butylamine	8.94	84	585181	83.4905	ug/ml	98
49)	p-Phenylenediamine	9.06	108	49839	86.2185	ug/ml	93
50)	4-Chloro-3-Methylphenol	9.06	107	603833	85.3273	ug/ml	100
51)	Safrole	9.15	162	568977	84.7565	ug/ml	100
52)	2-Methylnaphthalene	9.28	142	1399298	86.1316	ug/ml	100
53)	1-Methylnaphthalene	9.40	142	1329751	86.2523	ug/ml	100
55)	1,2,4,5-Tetrachlorobenzene	9.49	216	595962	83.6137	ug/ml	99
56)	Hexachlorocyclopentadiene	9.51	237	336327	87.8983	ug/ml	99
57)	2,4,6-Trichlorophenol	9.57	196	439102	83.6396	ug/ml	99
58)	2,4,5-Trichlorophenol	9.62	196	450522	85.5336	ug/ml	99
60)	Isosafrole	9.68	162	602738	83.4485	ug/ml	99
61)	2-Chloronaphthalene	9.79	162	1316383	83.3430	ug/ml	100
62)	1-Chloronaphthalene	9.83	162	1231825	83.3956	ug/ml	99
63)	2-Nitroaniline	9.89	65	389293	81.9939	ug/ml	100
64)	1,4-Naphthoquinone	9.95	158	517634	87.1575	ug/ml	99
65)	Dimethylphthalate	10.06	163	1452767	84.0445	ug/ml	100
66)	1,3-Dinitrobenzene	10.10	168	300061	81.7587	ug/ml	100
67)	2,6-Dinitrotoluene	10.15	165	380371	82.9628	ug/ml	99
68)	Acenaphthylene	10.24	152	2059422	85.6892	ug/ml	99
69)	3-Nitroaniline	10.31	138	283165	101.9547	ug/ml	100
70)	2,4-Dinitrophenol	10.41	184	201666	84.5715	ug/ml	85
71)	Acenaphthene	10.42	154	1355981	86.2034	ug/ml	100
72)	4-Nitrophenol	10.41	65	267741	79.4179	ug/ml	99
73)	2,4-Dinitrotoluene	10.56	165	484503	86.9438	ug/ml	100
74)	Pentachlorobenzene	10.60	250	543917	84.9318	ug/ml	99
75)	Dibenzofuran	10.57	168	1809858	88.1523	ug/ml	99
76)	2,3,4,6-Tetrachlorophenol	10.67	232	315686	89.7842	ug/ml	99
77)	1-Naphthylamine	10.65	143	106768	170.5477	ug/ml#	89
78)	2-Naphthylamine	10.72	143	31352	93.0336	ug/ml	95
79)	Diethylphthalate	10.76	149	1465764	85.9268	ug/ml	99
80)	Thionazin	10.86	107	247858	86.4534	ug/ml	99
81)	Fluorene	10.93	166	1524152	84.8688	ug/ml	99
82)	4-Chlorophenyl Phenyl Ethe	10.88	204	732168	87.2764	ug/ml	99
83)	4-Nitroaniline	10.95	138	344564	89.1086	ug/ml	98
84)	5-Nitro-o-Toluidine	10.94	152	359517	94.2582	ug/ml	99
85)	1,2-Diphenylhydrazine	11.05	77	1430564	85.2157	ug/ml	100
88)	4,6-Dinitro-2-Methylphenol	10.98	198	289337	77.2686	ug/ml	97
89)	n-Nitrosodiphenylamine	11.01	169	1335543	84.6041	ug/ml	99
90)	Sulfotepp	11.20	322	235004	81.2649	ug/ml	98
91)	Sym-Trinitrobenzene	11.29	75	374190	79.8745	ug/ml	99
92)	Diallate	11.33	86	544965	87.7632	ug/ml	99
93)	Phenacetin	11.32	108	721724	86.6007	ug/ml	100
94)	Phorate	11.35	75	880600	85.2698	ug/ml#	100
95)	4-Bromophenyl Phenyl Ether	11.41	248	414109	81.9579	ug/ml	99
96)	Hexachlorobenzene	11.63	284	454706	83.8308	ug/ml	99

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60444.D Vial: 7
Acq On : 19 Apr 2012 12:14 Operator: CAA
Sample : WG395394-07 80PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:23:13 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:23:08 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

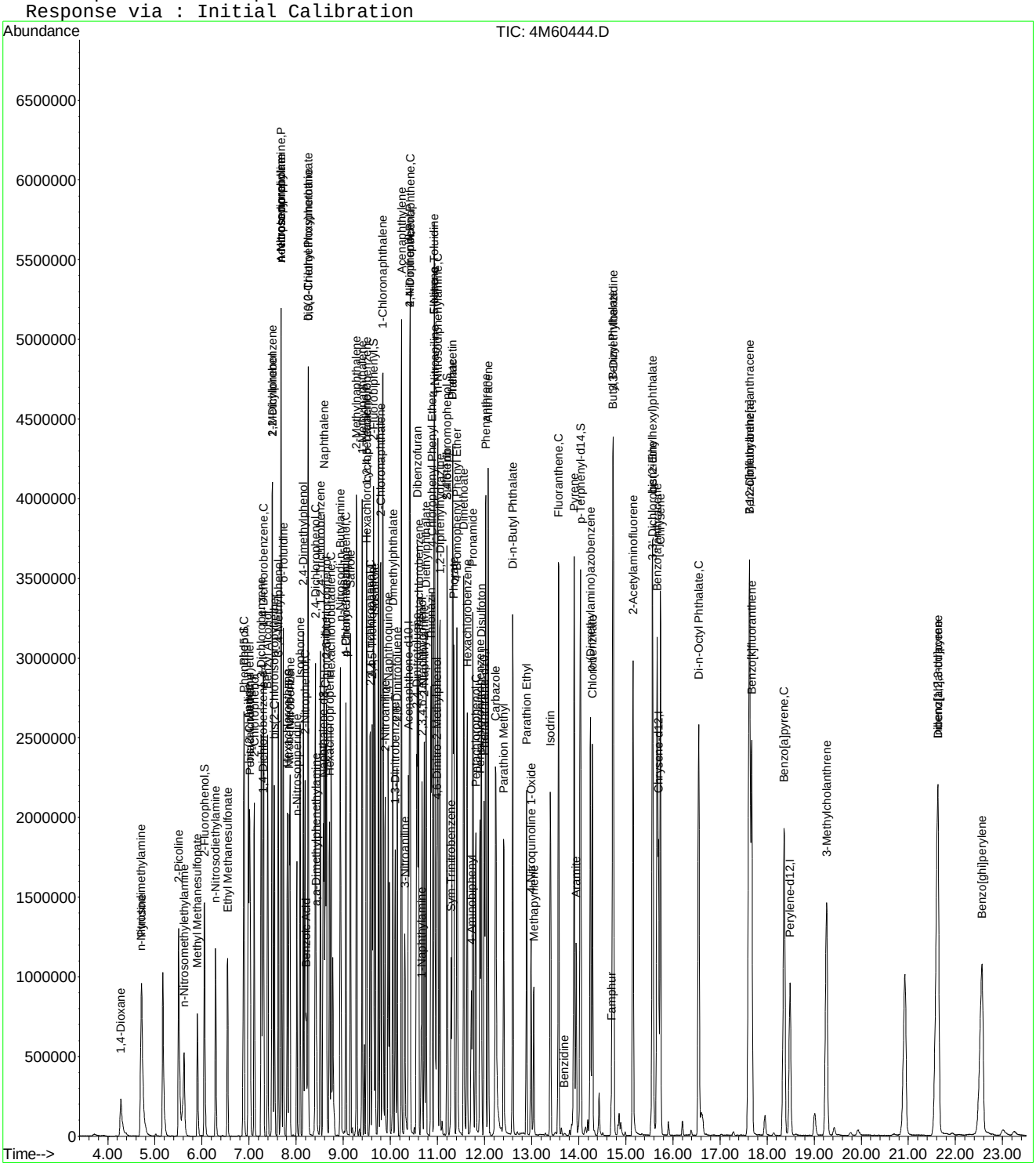
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.56	87	438351	87.6686	ug/ml	99
98)	4-Aminobiphenyl	11.72	169	583198	94.6458	ug/ml	100
99)	Pentachlorophenol	11.81	266	297153	93.2093	ug/ml	100
100)	Pronamide	11.75	173	682115	82.6482	ug/ml	99
101)	Pentachloronitrobenzene	11.90	237	162254	83.4353	ug/ml	99
102)	Disulfoton	11.93	88	763049	82.5061	ug/ml	99
103)	Phenanthrene	12.03	178	2157063	83.7416	ug/ml	99
104)	Anthracene	12.08	178	2228606	84.2260	ug/ml	100
105)	Carbazole	12.24	167	2025195	81.9628	ug/ml	99
106)	Parathion Methyl	12.41	109	447959	90.6288	ug/ml	98
107)	Di-n-Butyl Phthalate	12.60	149	2430902	83.7002	ug/ml	99
108)	Parathion Ethyl	12.89	97	293192	82.2551	ug/ml	99
109)	4-Nitroquinoline 1-Oxide	12.99	190	223202	121.5060	ug/ml	98
110)	Methapyrilene	13.05	58	381546	73.9269	ug/ml	98
111)	Isodrin	13.40	193	234719	81.6215	ug/ml	99
112)	Fluoranthene	13.58	202	2265098	83.9667	ug/ml	99
114)	Benzidine	13.70	184	13667	256.8055	ug/ml	100
115)	Pyrene	13.90	202	2297635	82.1817	ug/ml	100
116)	Aramite	13.94	185	138283	81.4971	ug/ml	99
118)	p-(Dimethylamino)azobenzen	14.25	225	497250	83.3444	ug/ml	98
119)	Chlorobenzilate	14.29	251	649202	82.7656	ug/ml	99
120)	Famphur	14.69	218	3581	10.0901	ug/ml#	4
121)	Butyl Benzyl Phthalate	14.72	149	1058648	79.2528	ug/ml	99
122)	3,3'-Dimethylbenzidine	14.73	212	292271	107.0859	ug/ml	97
123)	2-Acetylaminofluorene	15.16	181	966286	80.4830	ug/ml	99
124)	bis(2-Ethylhexyl)phthalate	15.57	149	1454801	82.2789	ug/ml	99
125)	3,3'-Dichlorobenzidine	15.58	252	433623	91.6318	ug/ml	100
126)	Benzo[a]anthracene	15.67	228	2052367	83.0550	ug/ml	100
127)	Chrysene	15.73	228	1906476	82.5964	ug/ml	100
129)	Di-n-Octyl Phthalate	16.55	149	2511032	81.6537	ug/ml	100
130)	7,12-Dimethylbenz[a]anthra	17.63	256	985135	83.4888	ug/ml	99
131)	Benzo[b]fluoranthene	17.63	252	2178762	80.1704	ug/ml	99
132)	Benzo[k]fluoranthene	17.67	252	2073723	87.0583	ug/ml	99
133)	Benzo[a]pyrene	18.36	252	2027472	81.8288	ug/ml	99
134)	3-Methylcholanthrene	19.27	268	1108175	82.2952	ug/ml	100
135)	Indeno[1,2,3-cd]pyrene	21.63	276	2284765	78.8399	ug/ml	98
136)	Dibenz[ah]anthracene	21.63	278	1911785	79.1941	ug/ml	99
137)	Benzo[ghi]perylene	22.57	276	1882226	78.4731	ug/ml	98

(#) = qualifier out of range (m) = manual integration
4M60444.D MEGAMIX.M Fri Apr 20 08:19:00 2012 Page 3

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60444.D Vial: 7
Acq On : 19 Apr 2012 12:14 Operator: CAA
Sample : WG395394-07 80PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:23 2012 Quant Results File: MEGAMIX.RES

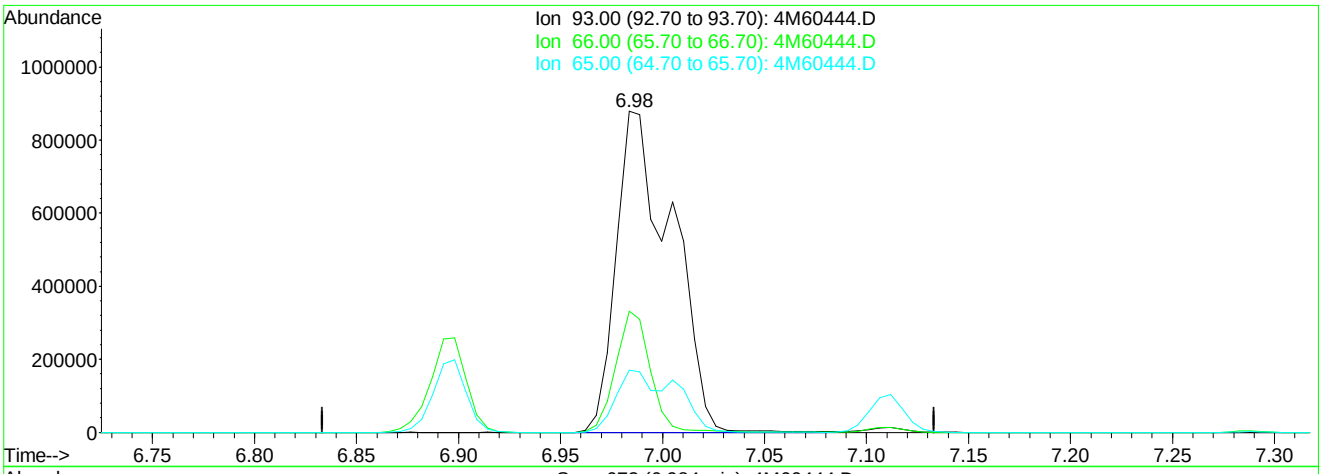
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration

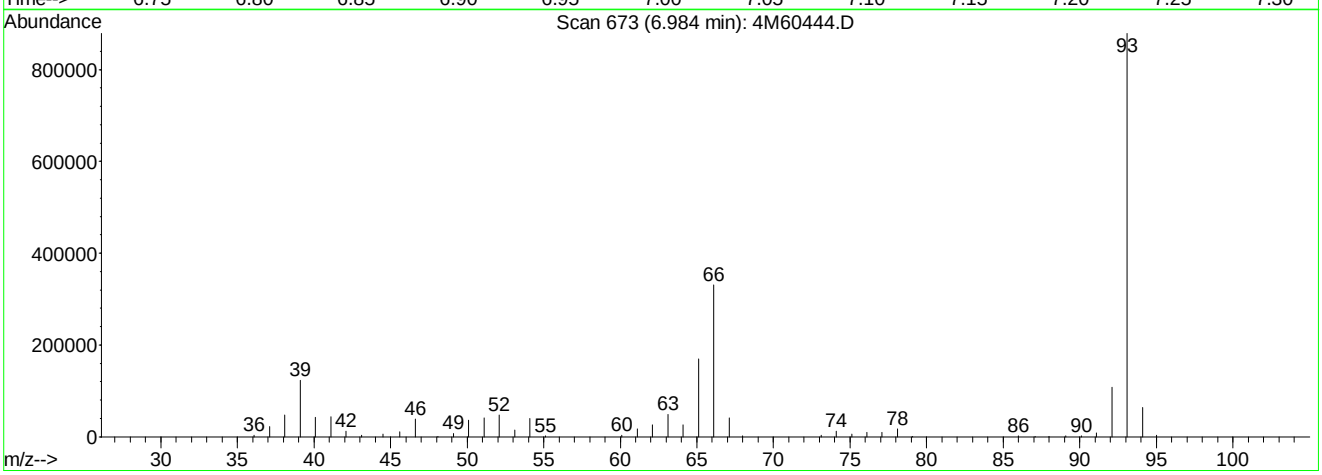


Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60444.D Vial: 7
Acq On : 19 Apr 2012 12:14 Operator: CAA
Sample : WG395394-07 80PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:23 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:23:08 2012
Response via : Multiple Level Calibration





TIC: 4M60444.D

(11) Aniline

6.98min 132.60ug/ml

response 1671557

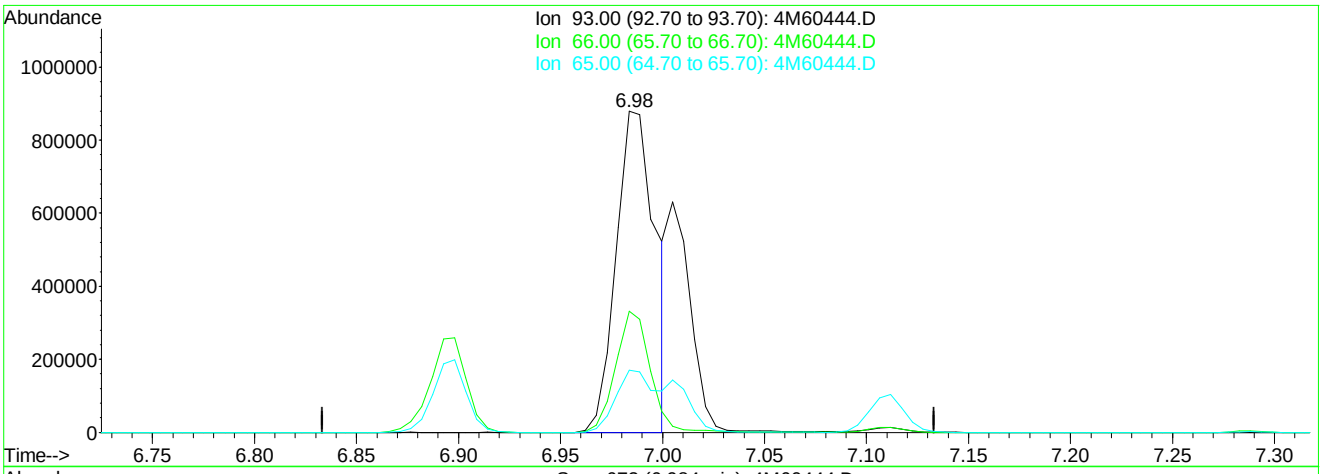
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.77
65.00	29.20	20.73
0.00	0.00	0.00

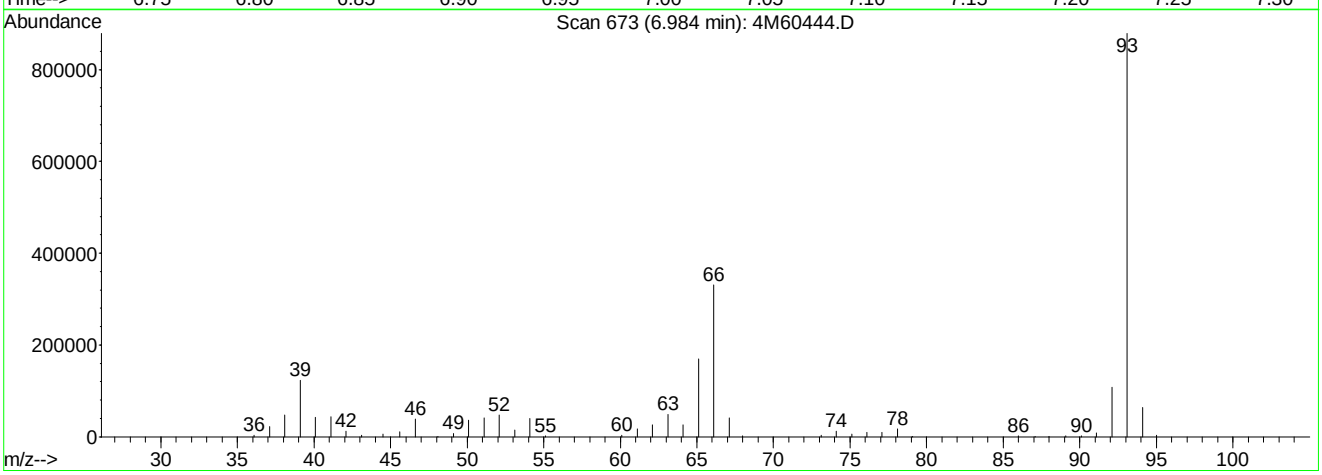
4M60444.D MEGAMIX.M Thu Apr 19 14:23:20 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60444.D Vial: 7
Acq On : 19 Apr 2012 12:14 Operator: CAA
Sample : WG395394-07 80PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:23 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:23:08 2012
Response via : Multiple Level Calibration





TIC: 4M60444.D

(11) Aniline

6.98min 93.75ug/ml mint

response 1181846

Ion	Exp%	Act%
93.00	100	100
66.00	33.40	33.62
65.00	29.20	29.32
0.00	0.00	0.00

4M60444.D MEGAMIX.M Thu Apr 19 14:23:08 2012

Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41

#3 - Improperly integrated isomers and/or coeluting compounds

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60445.D Vial: 8
Acq On : 19 Apr 2012 12:48 Operator: CAA
Sample : WG395394-08 100PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:23:50 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:23:45 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	277093	40.00 ug/ml	0.00
30) Naphthalene-d8	8.58	136	1078447	40.00 ug/ml	0.00
54) Acenaphthene-d10	10.39	164	600594	40.00 ug/ml	0.00
87) Phenanthrene-d10	11.99	188	1068325	40.00 ug/ml	0.00
113) Chrysene-d12	15.70	240	989532	40.00 ug/ml	0.00
128) Perylene-d12	18.49	264	928281	40.00 ug/ml	0.00

System Monitoring Compounds					
8) 2-Fluorophenol	6.05	112	808410	97.6350 ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 97.64%		
12) Phenol-d5	6.88	99	931008	99.2563 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 99.26%#		
31) Nitrobenzene-d5	7.85	82	869918	99.4444 ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 198.88%#		
59) 2-Fluorobiphenyl	9.64	172	1852192	103.1326 ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 206.26%#		
86) 2,4,6-Tribromophenol	11.21	330	252049	103.7522 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 103.75%		
117) p-Terphenyl-d14	14.04	244	1670972	99.7576 ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 199.52%#		

Target Compounds					Qvalue
2) 1,4-Dioxane	4.28	88	348759	104.6802 ug/ml#	98
3) n-Nitrosodimethylamine	4.70	74	499944	97.0836 ug/ml	100
4) Pyridine	4.72	79	880375	96.9922 ug/ml	99
5) 2-Picoline	5.50	93	952597	97.3185 ug/ml	99
6) n-Nitrosomethylethylamine	5.62	88	418420	96.7300 ug/ml	99
7) Methyl Methanesulfonate	5.90	80	448121	94.4502 ug/ml	98
9) n-Nitrosodiethylamine	6.29	102	441347	98.2623 ug/ml	98
10) Ethyl Methanesulfonate	6.55	79	604359	98.0919 ug/ml	100
11) Aniline	6.98	93	1502899m	111.4042 ug/ml	
13) Phenol	6.90	94	991961	99.7934 ug/ml	100
14) bis(2-Chloroethyl)ether	7.01	63	615863	103.3093 ug/ml	99
15) Pentachloroethane	7.02	167	336576	102.9292 ug/ml	99
16) 2-Chlorophenol	7.11	128	903123	99.2327 ug/ml	99
17) 1,3-Dichlorobenzene	7.26	146	980717	99.8635 ug/ml	100
18) 1,4-Dichlorobenzene	7.30	146	997434	100.2398 ug/ml	100
19) Benzyl Alcohol	7.40	108	594299	100.4024 ug/ml	99
20) 1,2-Dichlorobenzene	7.50	146	918764	101.0157 ug/ml	99
21) 2-Methylphenol	7.49	107	686225	99.5164 ug/ml	99
22) bis(2-Chloroisopropyl)ethe	7.53	45	1273668	100.6058 ug/ml	99
23) 3-,4-Methylphenol	7.62	107	905262	99.5585 ug/ml	100
24) n-Nitrosopyrrolidine	7.68	100	400577	103.3389 ug/ml	92
25) n-Nitrosodipropylamine	7.68	70	522498	104.9775 ug/ml	99
26) Acetophenone	7.68	105	1037851	102.8813 ug/ml	99
27) n-Nitrosomorpholine	7.69	56	482861	99.9546 ug/ml	98
28) o-Toluidine	7.73	106	1417866	102.5014 ug/ml	99
29) Hexachloroethane	7.81	117	384708	99.7029 ug/ml	96
32) Nitrobenzene	7.87	77	854248	99.1471 ug/ml	100
33) n-Nitrosopiperidine	8.01	114	464532	98.8152 ug/ml	99
34) Isophorone	8.08	82	1546209	100.7548 ug/ml	100
35) 2-Nitrophenol	8.19	139	514984	93.0486 ug/ml	96
36) 2,4-Dimethylphenol	8.15	122	831386	100.0156 ug/ml	100
37) 0,0,0-Triethyl Phosphoroth	8.26	198	412901	102.5849 ug/ml	99
38) bis(2-Chloroethoxy)methane	8.26	93	1134885	103.0111 ug/ml	99

(#) = qualifier out of range (m) = manual integration
4M60445.D MEGAMIX.M Fri Apr 20 08:19:00 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60445.D Vial: 8
Acq On : 19 Apr 2012 12:48 Operator: CAA
Sample : WG395394-08 100PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:23:50 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:23:45 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39)	Benzoic Acid	8.22	105	675656	132.0678	ug/ml#	79
40)	2,4-Dichlorophenol	8.41	162	715757	98.4931	ug/ml	100
41)	a,a-Dimethylphenethylamine	8.42	58	2329298m	277.3952	ug/ml	
42)	1,2,4-Trichlorobenzene	8.52	180	805702	100.8798	ug/ml	100
43)	Naphthalene	8.60	128	2577401	104.1802	ug/ml	97
44)	4-Chloroaniline	8.62	127	1131551	112.1001	ug/ml	97
45)	2,6-Dichlorophenol	8.65	162	757150	101.3496	ug/ml	100
46)	Hexachloropropene	8.71	213	480526	97.2421	ug/ml	100
47)	Hexachlorobutadiene	8.74	225	411451	101.6490	ug/ml	100
48)	n-Nitrosodi-n-Butylamine	8.94	84	730096	101.9649	ug/ml	98
49)	p-Phenylenediamine	9.06	108	69011	116.1156	ug/ml#	66
50)	4-Chloro-3-Methylphenol	9.06	107	739247	102.0278	ug/ml	98
51)	Safrole	9.15	162	691788	100.8683	ug/ml	100
52)	2-Methylnaphthalene	9.28	142	1696852	102.0818	ug/ml	100
53)	1-Methylnaphthalene	9.40	142	1602525	101.6631	ug/ml	99
55)	1,2,4,5-Tetrachlorobenzene	9.49	216	719693	100.9510	ug/ml	99
56)	Hexachlorocyclopentadiene	9.50	237	403426	104.4331	ug/ml	99
57)	2,4,6-Trichlorophenol	9.57	196	535987	101.9054	ug/ml	99
58)	2,4,5-Trichlorophenol	9.62	196	556900	105.1055	ug/ml	100
60)	Isosafrole	9.68	162	735707	101.7585	ug/ml	99
61)	2-Chloronaphthalene	9.79	162	1597789	101.2240	ug/ml	100
62)	1-Chloronaphthalene	9.83	162	1490493	101.3021	ug/ml	99
63)	2-Nitroaniline	9.89	65	478820	100.8695	ug/ml	100
64)	1,4-Naphthoquinone	9.95	158	566749	95.6915	ug/ml	99
65)	Dimethylphthalate	10.06	163	1760527	101.8244	ug/ml	99
66)	1,3-Dinitrobenzene	10.10	168	365872	99.8897	ug/ml	99
67)	2,6-Dinitrotoluene	10.15	165	466415	101.7222	ug/ml	99
68)	Acenaphthylene	10.24	152	2438377	101.2894	ug/ml	98
69)	3-Nitroaniline	10.31	138	384870	124.0693	ug/ml	99
70)	2,4-Dinitrophenol	10.41	184	256771	106.1183	ug/ml	74
71)	Acenaphthene	10.42	154	1612771	101.9313	ug/ml	100
72)	4-Nitrophenol	10.41	65	320939	95.7301	ug/ml	98
73)	2,4-Dinitrotoluene	10.56	165	583421	103.9974	ug/ml	100
74)	Pentachlorobenzene	10.60	250	653861	101.7974	ug/ml	99
75)	Dibenzofuran	10.57	168	2178444	105.3824	ug/ml	99
76)	2,3,4,6-Tetrachlorophenol	10.68	232	391859	110.4735	ug/ml	99
77)	1-Naphthylamine	10.65	143	204822	257.5666	ug/ml	94
78)	2-Naphthylamine	10.72	143	53289	152.3377	ug/ml	89
79)	Diethylphthalate	10.76	149	1756256	102.5694	ug/ml	99
80)	Thionazin	10.86	107	300709	104.5573	ug/ml	99
81)	Fluorene	10.93	166	1832624	101.8970	ug/ml	99
82)	4-Chlorophenyl Phenyl Ethe	10.88	204	885933	104.8310	ug/ml	99
83)	4-Nitroaniline	10.95	138	432847	109.9973	ug/ml	98
84)	5-Nitro-o-Toluidine	10.94	152	465662	118.2046	ug/ml	98
85)	1,2-Diphenylhydrazine	11.05	77	1719707	102.3736	ug/ml	100
88)	4,6-Dinitro-2-Methylphenol	10.99	198	361668	97.7089	ug/ml	95
89)	n-Nitrosodiphenylamine	11.01	169	1620487	102.3203	ug/ml	99
90)	Sulfotepp	11.20	322	282824	98.1810	ug/ml	99
91)	Sym-Trinitrobenzene	11.29	75	450708	96.7069	ug/ml	99
92)	Diallate	11.33	86	651475	104.3468	ug/ml	97
93)	Phenacetin	11.32	108	873920	104.4740	ug/ml	99
94)	Phorate	11.35	75	1057354	102.4913	ug/ml#	99
95)	4-Bromophenyl Phenyl Ether	11.41	248	505367	100.3772	ug/ml	100
96)	Hexachlorobenzene	11.63	284	543444	100.1408	ug/ml	99

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60445.D Vial: 8
Acq On : 19 Apr 2012 12:48 Operator: CAA
Sample : WG395394-08 100PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:23:50 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:23:45 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

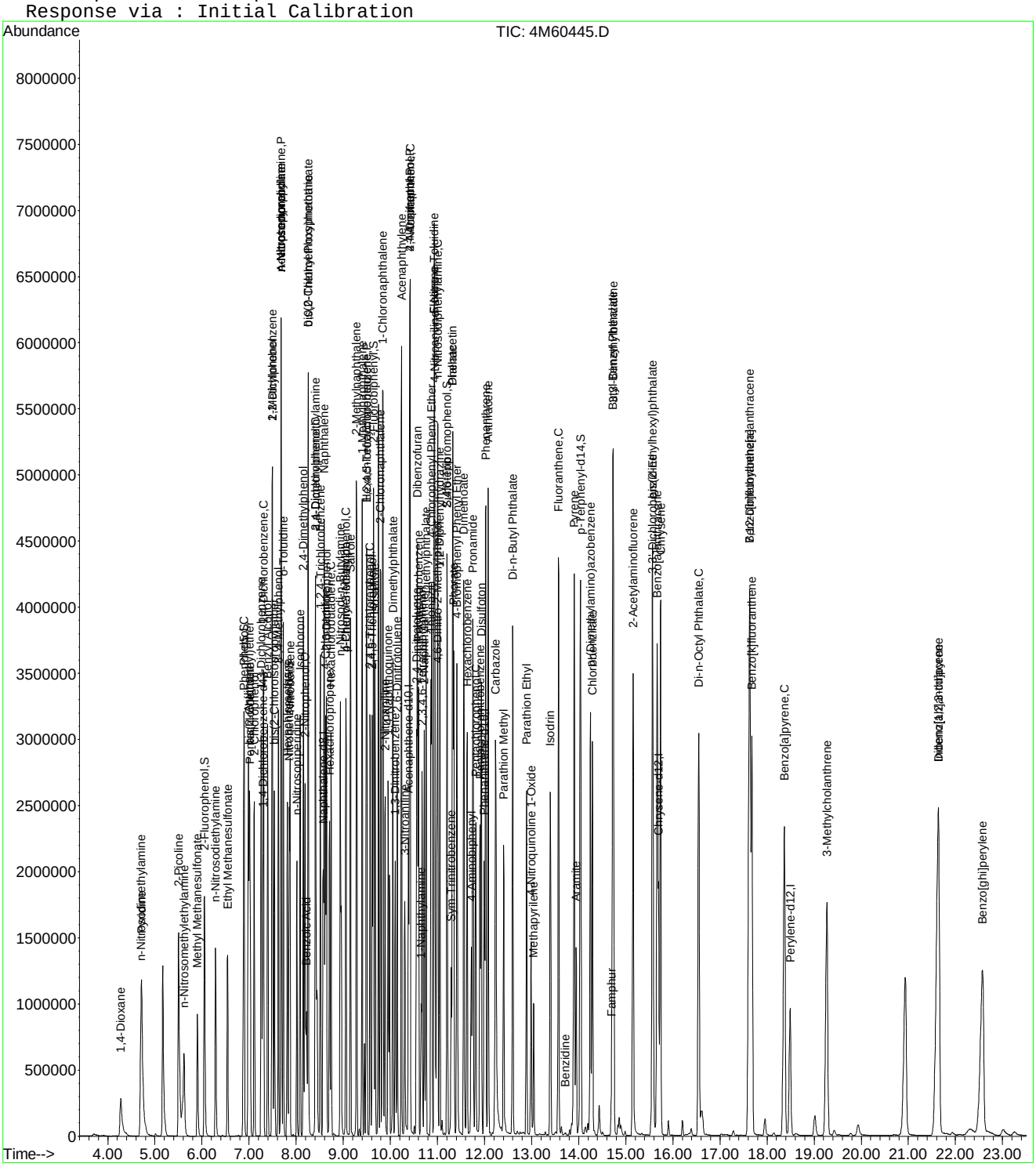
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.56	87	501935	100.9365	ug/ml	99
98)	4-Aminobiphenyl	11.72	169	862423	134.3000	ug/ml	100
99)	Pentachlorophenol	11.81	266	367513	111.8825	ug/ml	99
100)	Pronamide	11.75	173	823842	100.0678	ug/ml	100
101)	Pentachloronitrobenzene	11.90	237	193570	99.6174	ug/ml	99
102)	Disulfoton	11.93	88	922033	100.0754	ug/ml	100
103)	Phenanthrene	12.03	178	2552198	99.2497	ug/ml	99
104)	Anthracene	12.08	178	2652184	100.4170	ug/ml	99
105)	Carbazole	12.24	167	2461069	99.8497	ug/ml	99
106)	Parathion Methyl	12.41	109	520215	104.5338	ug/ml	98
107)	Di-n-Butyl Phthalate	12.60	149	2883140	99.5732	ug/ml	99
108)	Parathion Ethyl	12.89	97	355174	100.0641	ug/ml	99
109)	4-Nitroquinoline 1-Oxide	12.99	190	263646	131.3569	ug/ml	99
110)	Methapyrilene	13.04	58	422454	85.8738	ug/ml	97
111)	Isodrin	13.40	193	283018	98.8367	ug/ml	98
112)	Fluoranthene	13.57	202	2684844	99.6277	ug/ml	98
114)	Benzidine	13.71	184	19802	246.1112	ug/ml	100
115)	Pyrene	13.91	202	2734557	99.2391	ug/ml	99
116)	Aramite	13.94	185	163546	97.8929	ug/ml	100
118)	p-(Dimethylamino)azobenzen	14.25	225	595098	100.7242	ug/ml	97
119)	Chlorobenzilate	14.29	251	776046	99.9442	ug/ml	99
120)	Famphur	14.69	218	1795	5.1158	ug/ml#	1
121)	Butyl Benzyl Phthalate	14.72	149	1272202	97.2772	ug/ml	100
122)	3,3'-Dimethylbenzidine	14.73	212	375596	134.3617	ug/ml	98
123)	2-Acetylaminofluorene	15.16	181	1158799	97.9644	ug/ml	98
124)	bis(2-Ethylhexyl)phthalate	15.57	149	1738038	99.6497	ug/ml	99
125)	3,3'-Dichlorobenzidine	15.58	252	535244	112.0420	ug/ml	100
126)	Benzo[a]anthracene	15.67	228	2445804	100.0289	ug/ml	99
127)	Chrysene	15.74	228	2259995	99.1082	ug/ml	99
129)	Di-n-Octyl Phthalate	16.55	149	3002395	100.8005	ug/ml	99
130)	7,12-Dimethylbenz[a]anthra	17.63	256	1177849	102.3467	ug/ml	100
131)	Benzo[b]fluoranthene	17.63	252	2654859	100.7327	ug/ml	99
132)	Benzo[k]fluoranthene	17.68	252	2404348	102.9880	ug/ml	99
133)	Benzo[a]pyrene	18.37	252	2422076	100.8122	ug/ml	99
134)	3-Methylcholanthrene	19.27	268	1309867	100.1318	ug/ml	99
135)	Indeno[1,2,3-cd]pyrene	21.64	276	2721409	97.4416	ug/ml	98
136)	Dibenz[ah]anthracene	21.64	278	2261465	97.0489	ug/ml	98
137)	Benzo[ghi]perylene	22.58	276	2198670	95.3121	ug/ml	98

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60445.D Vial: 8
Acq On : 19 Apr 2012 12:48 Operator: CAA
Sample : WG395394-08 100PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:24 2012 Quant Results File: MEGAMIX.RES

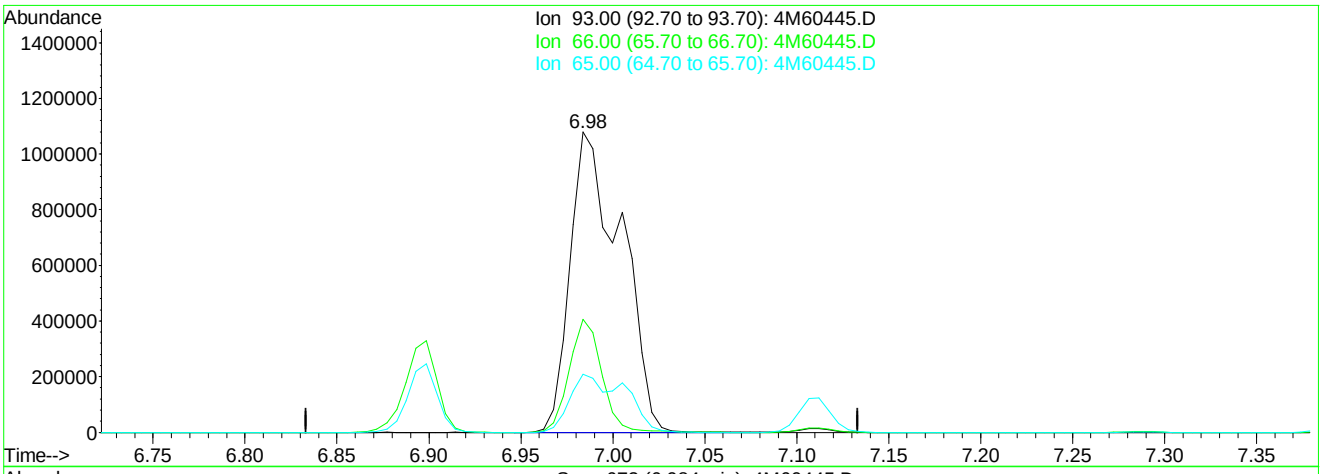
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration

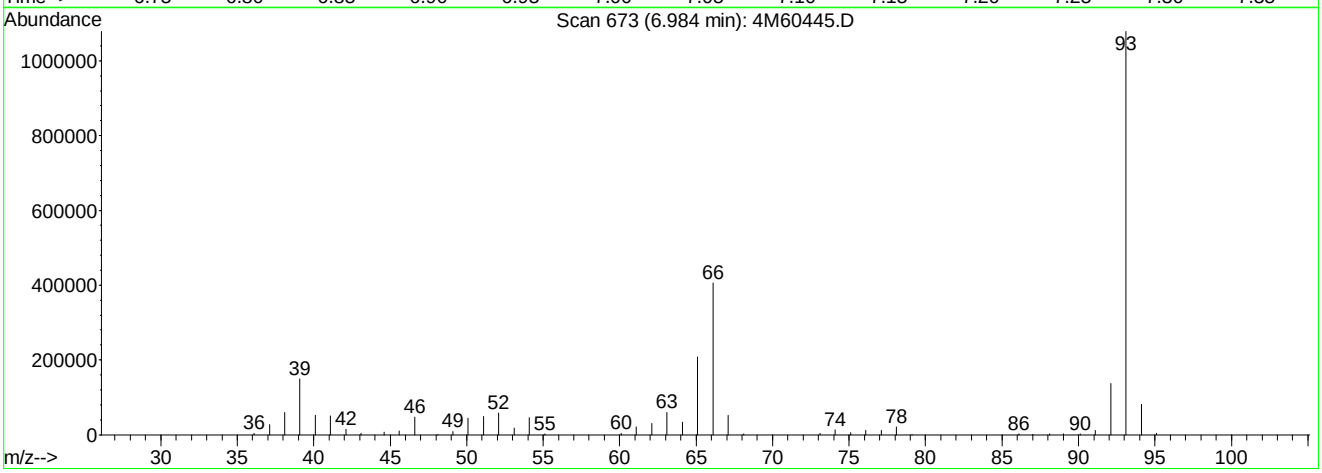


Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60445.D Vial: 8
Acq On : 19 Apr 2012 12:48 Operator: CAA
Sample : WG395394-08 100PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:23 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:23:45 2012
Response via : Multiple Level Calibration





TIC: 4M60445.D

(11) Aniline

6.98min 154.36ug/ml

response 2082404

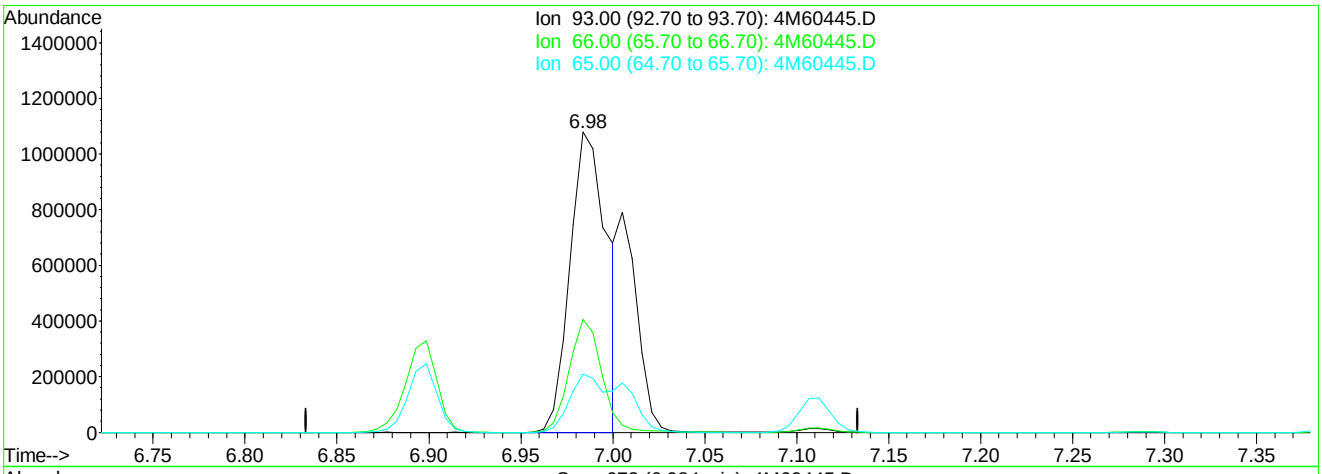
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.95
65.00	29.20	20.71
0.00	0.00	0.00

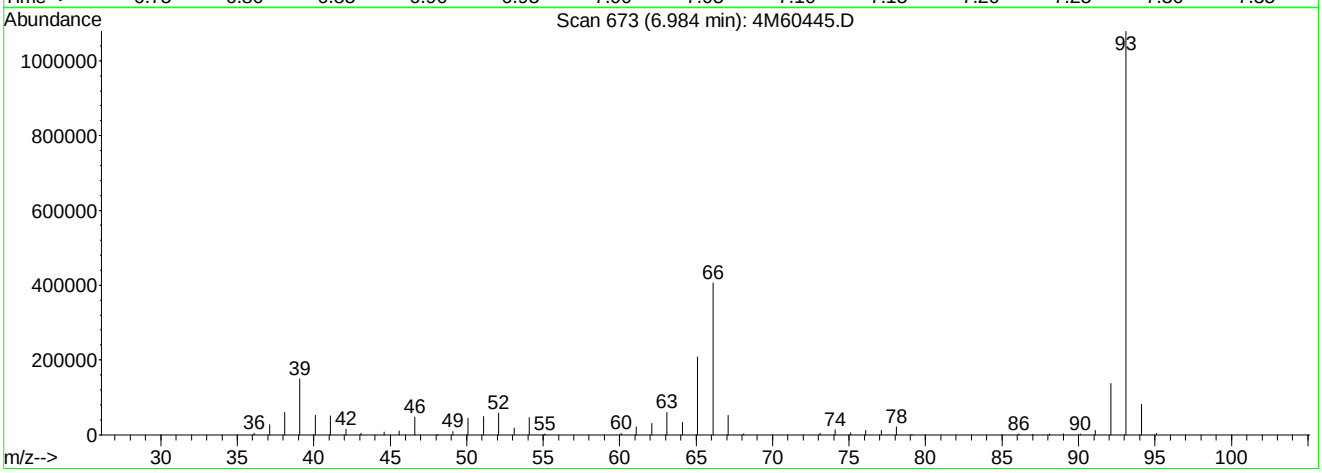
4M60445.D MEGAMIX.M Thu Apr 19 14:23:57 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60445.D Vial: 8
Acq On : 19 Apr 2012 12:48 Operator: CAA
Sample : WG395394-08 100PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:23 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:23:45 2012
Response via : Multiple Level Calibration





TIC: 4M60445.D

(11) Aniline

6.98min 111.40ug/ml mint

response 1502899

Ion	Exp%	Act%
93.00	100	100
66.00	33.40	33.18
65.00	29.20	28.70
0.00	0.00	0.00

4M60445.D MEGAMIX.M Thu Apr 19 2012

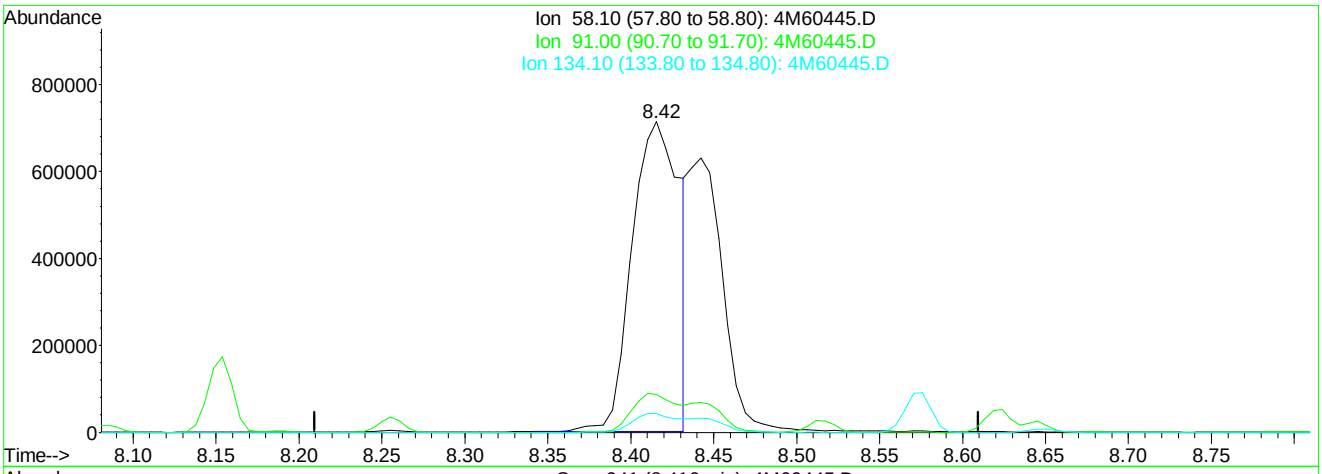
Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41

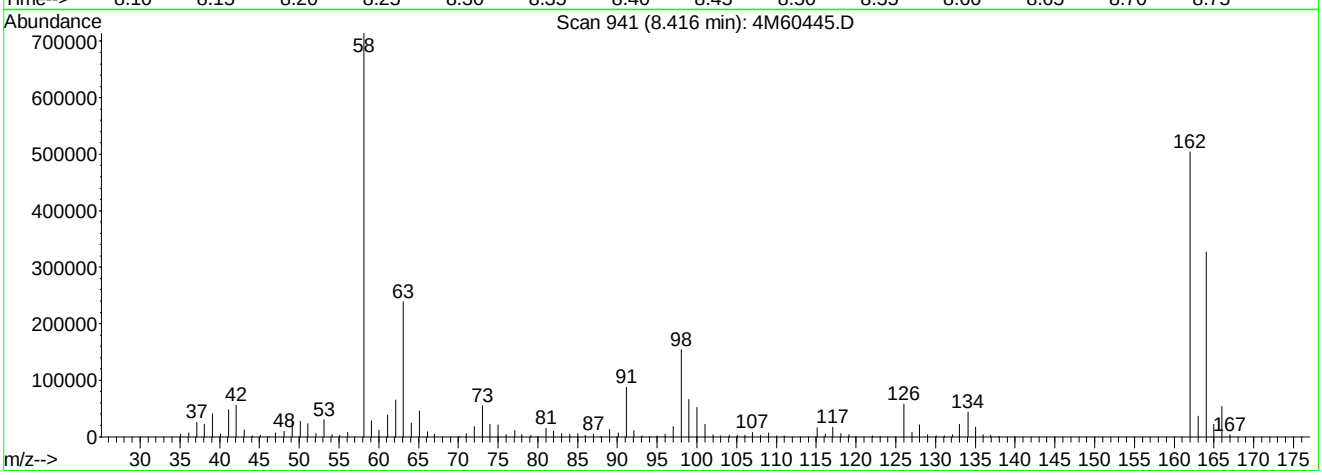
#3 - Improperly integrated isomers and/or coeluting compounds

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60445.D Vial: 8
Acq On : 19 Apr 2012 12:48 Operator: CAA
Sample : WG395394-08 100PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:23 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:23:45 2012
Response via : Multiple Level Calibration





TIC: 4M60445.D

(41) a,a-Dimethylphenethylamine

8.42min 169.94ug/ml

response 1426957

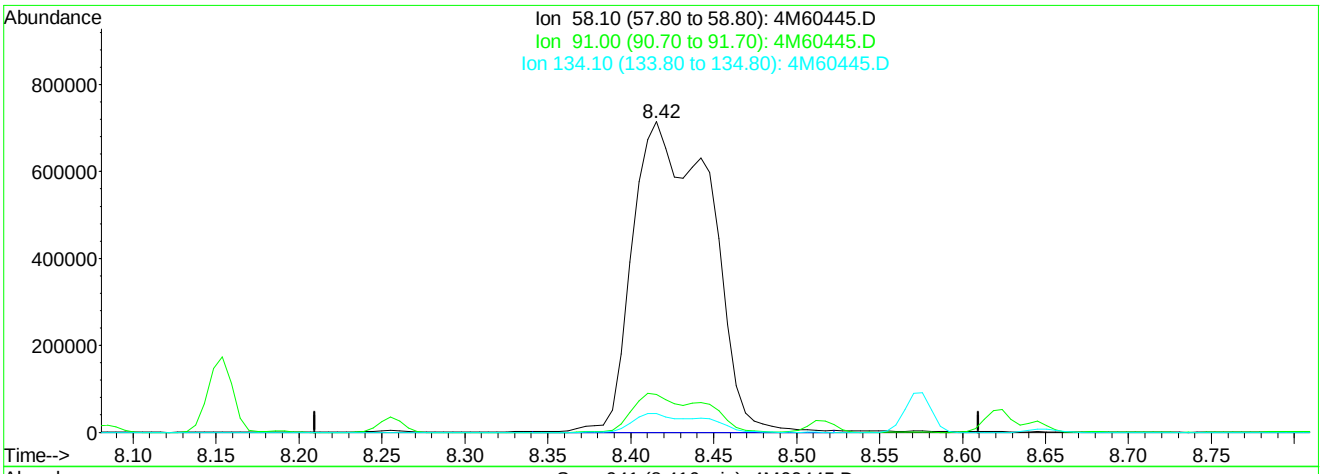
Ion	Exp%	Act%
58.10	100	100
91.00	12.60	11.82
134.10	6.20	5.67
0.00	0.00	0.00

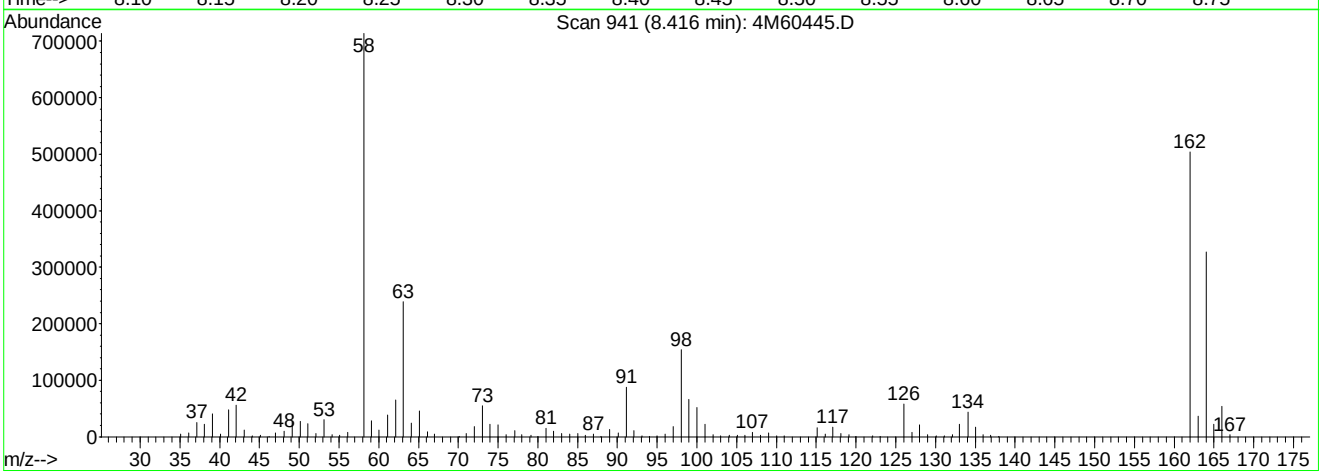
4M60445.D MEGAMIX.M Thu Apr 19 14:24:09 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60445.D Vial: 8
Acq On : 19 Apr 2012 12:48 Operator: CAA
Sample : WG395394-08 100PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:24 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:23:45 2012
Response via : Multiple Level Calibration





TIC: 4M60445.D

(41) a,a-Dimethylphenethylamine

8.42min 277.40ug/ml mint

response 2329298

Ion	Exp%	Act%
58.10	100	100
91.00	12.60	7.24#
134.10	6.20	3.48#
0.00	0.00	0.00

4M60445.D MEGAMIX.M Thu Apr 19 2012

Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41

#2 - Data system splits the peak incorrectly or integrates a false peak as a rider peak

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60446.D Vial: 9
Acq On : 19 Apr 2012 13:23 Operator: CAA
Sample : WG395394-09 120PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:24:33 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:24:28 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	295204	40.00 ug/ml	0.00
30) Naphthalene-d8	8.58	136	1143324	40.00 ug/ml	0.00
54) Acenaphthene-d10	10.39	164	633567	40.00 ug/ml	0.00
87) Phenanthrene-d10	12.00	188	1104340	40.00 ug/ml	0.00
113) Chrysene-d12	15.70	240	1023127	40.00 ug/ml	0.00
128) Perylene-d12	18.50	264	952814	40.00 ug/ml	0.00

System Monitoring Compounds					
8) 2-Fluorophenol	6.05	112	1017185	116.1120 ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 116.11%#		
12) Phenol-d5	6.89	99	1168891	116.9594 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 116.96%#		
31) Nitrobenzene-d5	7.85	82	1081184	116.7280 ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 233.46%#		
59) 2-Fluorobiphenyl	9.64	172	2267884	117.9312 ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 235.86%#		
86) 2,4,6-Tribromophenol	11.21	330	314255	120.1918 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 120.19%		
117) p-Terphenyl-d14	14.03	244	2038815	117.3604 ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 234.72%#		

Target Compounds					Qvalue
2) 1,4-Dioxane	4.27	88	439725	122.1350 ug/ml#	88
3) n-Nitrosodimethylamine	4.70	74	632381	116.4857 ug/ml	98
4) Pyridine	4.72	79	1110745	115.9641 ug/ml	98
5) 2-Picoline	5.50	93	1204707	116.4905 ug/ml	99
6) n-Nitrosomethylethylamine	5.62	88	533756	117.0434 ug/ml	99
7) Methyl Methanesulfonate	5.91	80	549270	110.8694 ug/ml	98
9) n-Nitrosodiethylamine	6.29	102	557116	116.8629 ug/ml	98
10) Ethyl Methanesulfonate	6.55	79	761495	116.8640 ug/ml	100
11) Aniline	6.99	93	1742391m	113.7271 ug/ml	
13) Phenol	6.90	94	1231425	116.1180 ug/ml	100
14) bis(2-Chloroethyl)ether	7.01	63	761552	118.2493 ug/ml	98
15) Pentachloroethane	7.02	167	419665	118.9879 ug/ml	99
16) 2-Chlorophenol	7.11	128	1130760	116.7897 ug/ml	99
17) 1,3-Dichlorobenzene	7.26	146	1221367	116.6035 ug/ml	99
18) 1,4-Dichlorobenzene	7.30	146	1248304	117.1596 ug/ml	100
19) Benzyl Alcohol	7.40	108	747792	118.0213 ug/ml	98
20) 1,2-Dichlorobenzene	7.50	146	1123630	114.9645 ug/ml	100
21) 2-Methylphenol	7.49	107	853772	115.8294 ug/ml	99
22) bis(2-Chloroisopropyl)ethe	7.54	45	1585443	117.1658 ug/ml	100
23) 3-,4-Methylphenol	7.62	107	1136454	117.1605 ug/ml	99
24) n-Nitrosopyrrolidine	7.69	100	494488	117.8479 ug/ml	88
25) n-Nitrosodipropylamine	7.68	70	624493	115.0549 ug/ml	98
26) Acetophenone	7.68	105	1272038	116.3509 ug/ml	99
27) n-Nitrosomorpholine	7.69	56	585852	109.4485 ug/ml	97
28) o-Toluidine	7.73	106	1776423	118.8174 ug/ml	100
29) Hexachloroethane	7.81	117	480318	116.8146 ug/ml	97
32) Nitrobenzene	7.88	77	1069745	117.5181 ug/ml	99
33) n-Nitrosopiperidine	8.02	114	584415	117.4946 ug/ml	100
34) Isophorone	8.08	82	1916721	117.3865 ug/ml	99
35) 2-Nitrophenol	8.19	139	659346	116.7203 ug/ml	98
36) 2,4-Dimethylphenol	8.15	122	1031288	116.6170 ug/ml	99
37) 0,0,0-Triethyl Phosphoroth	8.26	198	516466	119.4681 ug/ml	100
38) bis(2-Chloroethoxy)methane	8.25	93	1390586	117.4347 ug/ml	96

(#) = qualifier out of range (m) = manual integration
4M60446.D MEGAMIX.M Fri Apr 20 08:19:01 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60446.D Vial: 9
Acq On : 19 Apr 2012 13:23 Operator: CAA
Sample : WG395394-09 120PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:24:33 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:24:28 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39)	Benzoic Acid	8.23	105	915551m	149.2026 ug/ml	
40)	2,4-Dichlorophenol	8.41	162	900159	117.1034 ug/ml	100
41)	a,a-Dimethylphenethylamine	8.43	58	3126203m	175.9425 ug/ml	
42)	1,2,4-Trichlorobenzene	8.52	180	1011531	118.7749 ug/ml	99
43)	Naphthalene	8.60	128	3171066	118.6040 ug/ml	100
44)	4-Chloroaniline	8.62	127	1382212	123.0297 ug/ml	98
45)	2,6-Dichlorophenol	8.64	162	951046	119.1835 ug/ml	100
46)	Hexachloropropene	8.71	213	598624	115.0699 ug/ml	99
47)	Hexachlorobutadiene	8.74	225	507887	117.2560 ug/ml	99
48)	n-Nitrosodi-n-Butylamine	8.94	84	920957	120.0550 ug/ml#	88
49)	p-Phenylenediamine	9.06	108	85039	128.7343 ug/ml#	70
50)	4-Chloro-3-Methylphenol	9.06	107	927332	119.3638 ug/ml	98
51)	Safrole	9.16	162	867771	118.4686 ug/ml	100
52)	2-Methylnaphthalene	9.29	142	2083523	116.9852 ug/ml	100
53)	1-Methylnaphthalene	9.40	142	1993434	118.1192 ug/ml	100
55)	1,2,4,5-Tetrachlorobenzene	9.49	216	888172	117.3675 ug/ml	99
56)	Hexachlorocyclopentadiene	9.50	237	490221	118.0325 ug/ml	99
57)	2,4,6-Trichlorophenol	9.57	196	669686	119.8369 ug/ml	98
58)	2,4,5-Trichlorophenol	9.62	196	692553	121.1238 ug/ml	100
60)	Isosafrole	9.68	162	919807	119.5987 ug/ml	98
61)	2-Chloronaphthalene	9.79	162	1980928	118.3415 ug/ml	99
62)	1-Chloronaphthalene	9.84	162	1800099	115.1895 ug/ml	99
63)	2-Nitroaniline	9.89	65	598982	119.1975 ug/ml	99
64)	1,4-Naphthoquinone	9.96	158	608672	98.4253 ug/ml	99
65)	Dimethylphthalate	10.06	163	2165968	117.4868 ug/ml	99
66)	1,3-Dinitrobenzene	10.11	168	463456	119.9429 ug/ml	100
67)	2,6-Dinitrotoluene	10.15	165	580776	118.9713 ug/ml	99
68)	Acenaphthylene	10.24	152	2981097	116.5105 ug/ml	98
69)	3-Nitroaniline	10.31	138	523691	145.2699 ug/ml	100
70)	2,4-Dinitrophenol	10.41	184	327279	125.2754 ug/ml	66
71)	Acenaphthene	10.42	154	1951899	115.3402 ug/ml	99
72)	4-Nitrophenol	10.41	65	386132	110.2412 ug/ml	96
73)	2,4-Dinitrotoluene	10.56	165	727634	120.8692 ug/ml	98
74)	Pentachlorobenzene	10.60	250	812777	118.5532 ug/ml	100
75)	Dibenzofuran	10.58	168	2633898	118.1646 ug/ml	98
76)	2,3,4,6-Tetrachlorophenol	10.68	232	524408	134.7472 ug/ml	99
77)	1-Naphthylamine	10.65	143	622864	453.0629 ug/ml#	74
78)	2-Naphthylamine	10.72	143	230585	512.0727 ug/ml#	64
79)	Diethylphthalate	10.76	149	2162475	118.3166 ug/ml	99
80)	Thionazin	10.87	107	368362	119.2258 ug/ml	99
81)	Fluorene	10.94	166	2243623	117.1179 ug/ml	99
82)	4-Chlorophenyl Phenyl Ethe	10.88	204	1082920	119.0368 ug/ml	99
83)	4-Nitroaniline	10.95	138	549333	127.0437 ug/ml	97
84)	5-Nitro-o-Toluidine	10.94	152	619633	138.6193 ug/ml	97
85)	1,2-Diphenylhydrazine	11.05	77	2100584	117.4922 ug/ml	99
88)	4,6-Dinitro-2-Methylphenol	11.00	198	463462	122.4587 ug/ml	91
89)	n-Nitrosodiphenylamine	11.01	169	1990000	120.3593 ug/ml	98
90)	Sulfotepp	11.21	322	351340	118.2475 ug/ml	98
91)	Sym-Trinitrobenzene	11.30	75	571928	119.9420 ug/ml	99
92)	Diallate	11.33	86	776821	118.2900 ug/ml	96
93)	Phenacetin	11.33	108	1047444	118.9704 ug/ml	99
94)	Phorate	11.35	75	1287348	119.7104 ug/ml#	99
95)	4-Bromophenyl Phenyl Ether	11.42	248	625697	119.7732 ug/ml	99
96)	Hexachlorobenzene	11.64	284	663561	117.7232 ug/ml	98

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60446.D Vial: 9
Acq On : 19 Apr 2012 13:23 Operator: CAA
Sample : WG395394-09 120PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:24:33 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:24:28 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

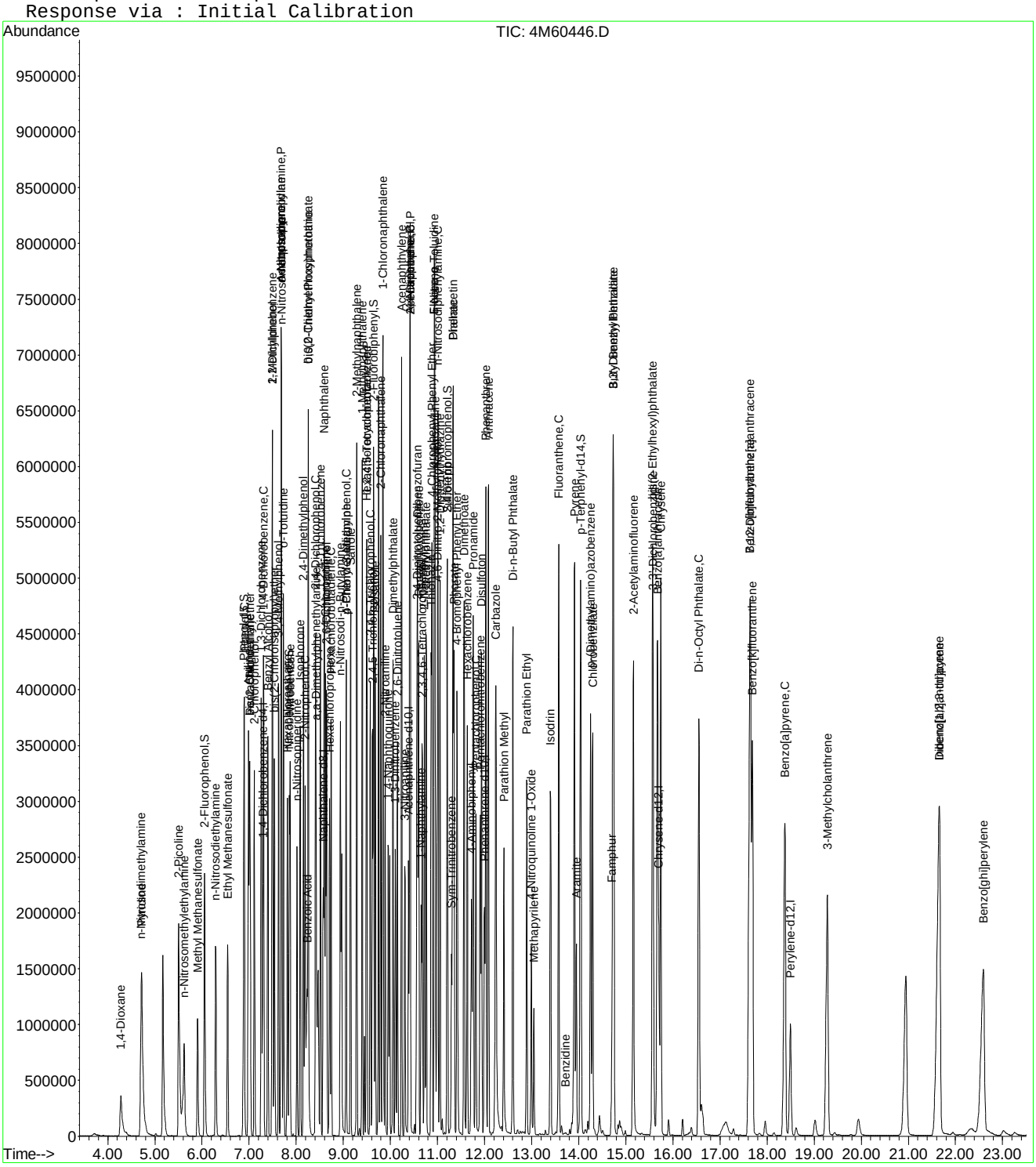
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
97)	Dimethoate	11.57	87	584529	113.1904 ug/ml	99
98)	4-Aminobiphenyl	11.72	169	1329903	179.9601 ug/ml	99
99)	Pentachlorophenol	11.82	266	458736	128.2299 ug/ml	99
100)	Pronamide	11.76	173	1019977	119.6949 ug/ml	99
101)	Pentachloronitrobenzene	11.91	237	235684	116.9232 ug/ml	100
102)	Disulfoton	11.94	88	1131291	118.6386 ug/ml	99
103)	Phenanthrene	12.03	178	3120483	117.2080 ug/ml	98
104)	Anthracene	12.08	178	3213859	117.2735 ug/ml	98
105)	Carbazole	12.24	167	3053064	119.6914 ug/ml	98
106)	Parathion Methyl	12.41	109	617507	117.7994 ug/ml	98
107)	Di-n-Butyl Phthalate	12.60	149	3504116	116.9376 ug/ml	99
108)	Parathion Ethyl	12.90	97	436504	118.9029 ug/ml	98
109)	4-Nitroquinoline 1-Oxide	12.99	190	313238	133.4652 ug/ml	99
110)	Methapyrilene	13.05	58	474669	98.5639 ug/ml	97
111)	Isodrin	13.40	193	345670	116.8596 ug/ml	95
112)	Fluoranthene	13.58	202	3249661	116.4558 ug/ml	98
114)	Benzidine	13.72	184	31724	228.4870 ug/ml	100
115)	Pyrene	13.91	202	3331157	116.9710 ug/ml	98
116)	Aramite	13.95	185	199458	116.3650 ug/ml	100
118)	p-(Dimethylamino)azobenzen	14.25	225	726842	118.4507 ug/ml	96
119)	Chlorobenzilate	14.30	251	954917	118.6141 ug/ml	99
120)	Famphur	14.70	218	2140	5.8988 ug/ml#	3
121)	Butyl Benzyl Phthalate	14.72	149	1549387	115.8308 ug/ml	100
122)	3,3'-Dimethylbenzidine	14.73	212	503849	152.9940 ug/ml	99
123)	2-Acetylaminofluorene	15.16	181	1459431	120.0732 ug/ml	99
124)	bis(2-Ethylhexyl)phthalate	15.57	149	2123921	117.7673 ug/ml	99
125)	3,3'-Dichlorobenzidine	15.58	252	679065	131.2368 ug/ml	99
126)	Benzo[a]anthracene	15.67	228	2986908	117.8500 ug/ml	98
127)	Chrysene	15.74	228	2763239	117.2485 ug/ml	99
129)	Di-n-Octyl Phthalate	16.55	149	3682000	120.1551 ug/ml	99
130)	7,12-Dimethylbenz[a]anthra	17.64	256	1443439	121.0144 ug/ml	99
131)	Benzo[b]fluoranthene	17.65	252	3081081	112.7355 ug/ml	96
132)	Benzo[k]fluoranthene	17.69	252	2836726	117.6277 ug/ml	98
133)	Benzo[a]pyrene	18.38	252	2982535	120.4719 ug/ml	98
134)	3-Methylcholanthrene	19.28	268	1615024	120.0160 ug/ml	99
135)	Indeno[1,2,3-cd]pyrene	21.66	276	3353339	117.9707 ug/ml	97
136)	Dibenz[ah]anthracene	21.65	278	2804015	118.2735 ug/ml	98
137)	Benzo[ghi]perylene	22.59	276	2700031	116.0476 ug/ml	97

(#) = qualifier out of range (m) = manual integration
4M60446.D MEGAMIX.M Fri Apr 20 08:19:01 2012 Page 3

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60446.D Vial: 9
Acq On : 19 Apr 2012 13:23 Operator: CAA
Sample : WG395394-09 120PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:25 2012 Quant Results File: MEGAMIX.RES

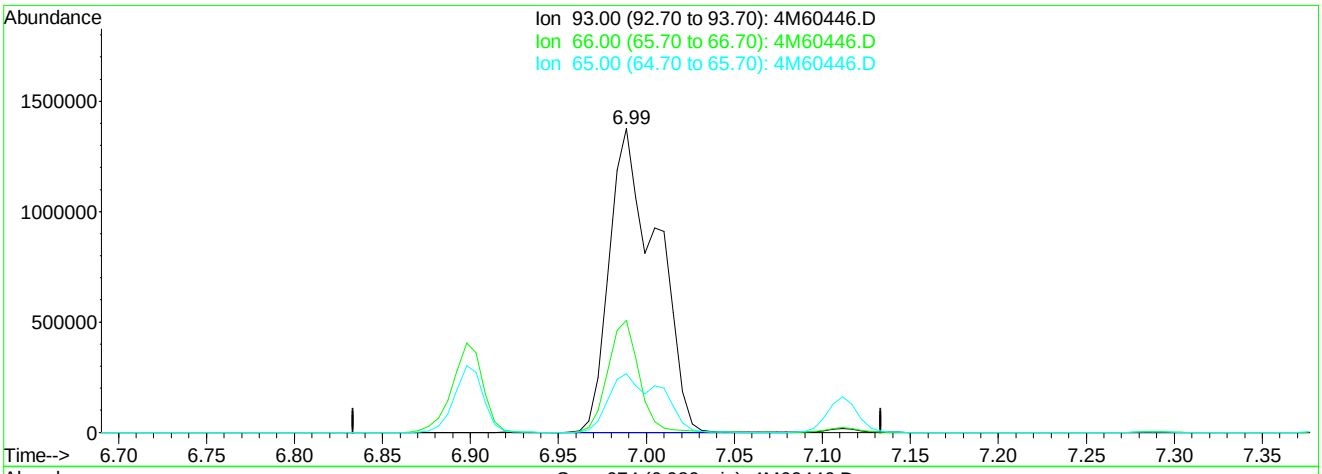
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration

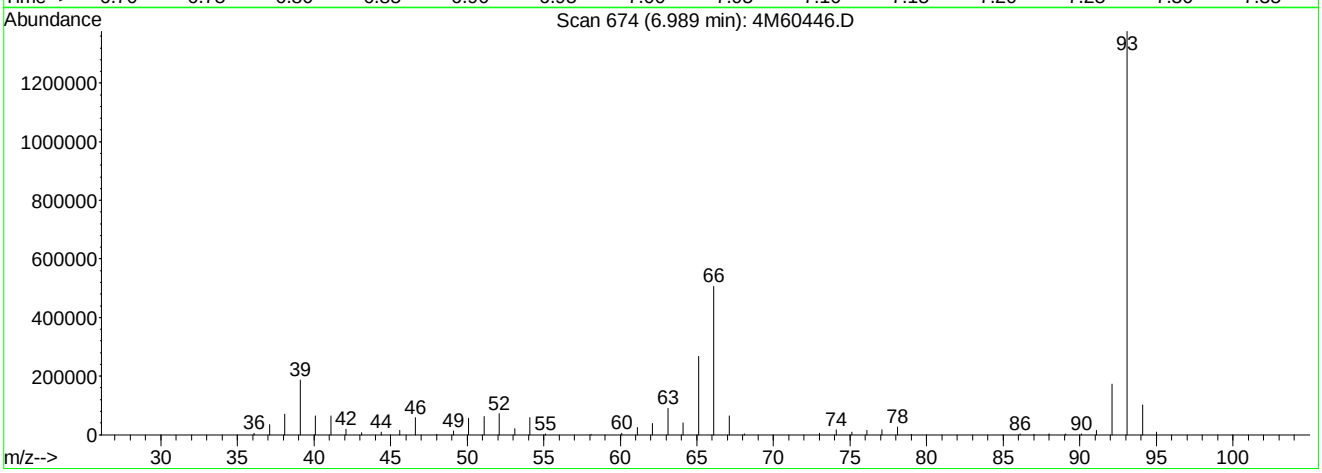


Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60446.D Vial: 9
Acq On : 19 Apr 2012 13:23 Operator: CAA
Sample : WG395394-09 120PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:24 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:24:28 2012
Response via : Multiple Level Calibration





TIC: 4M60446.D

(11) Aniline

6.99min 168.68ug/ml

response 2584301

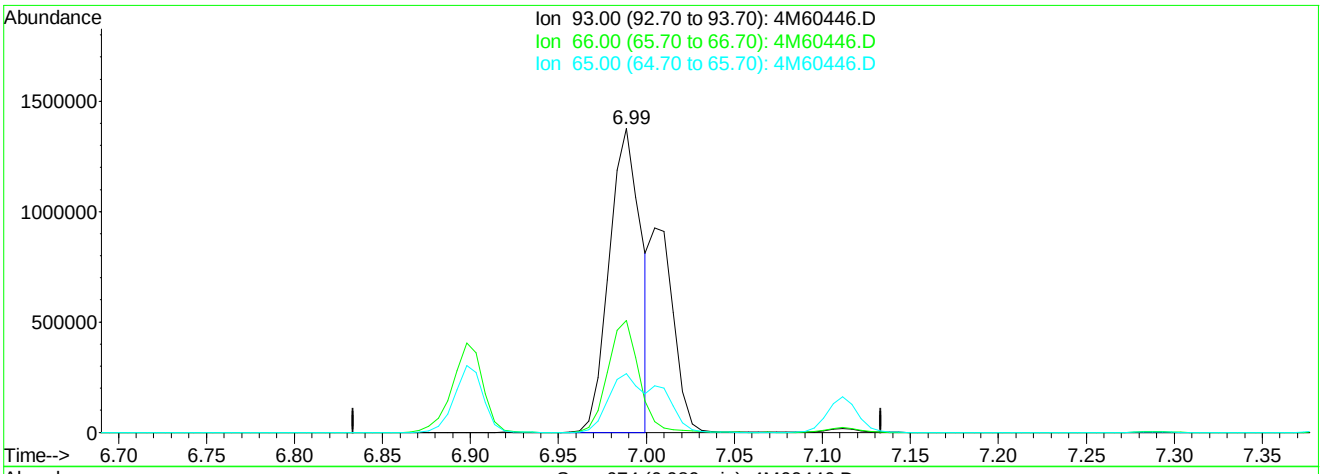
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	24.12
65.00	29.20	20.98
0.00	0.00	0.00

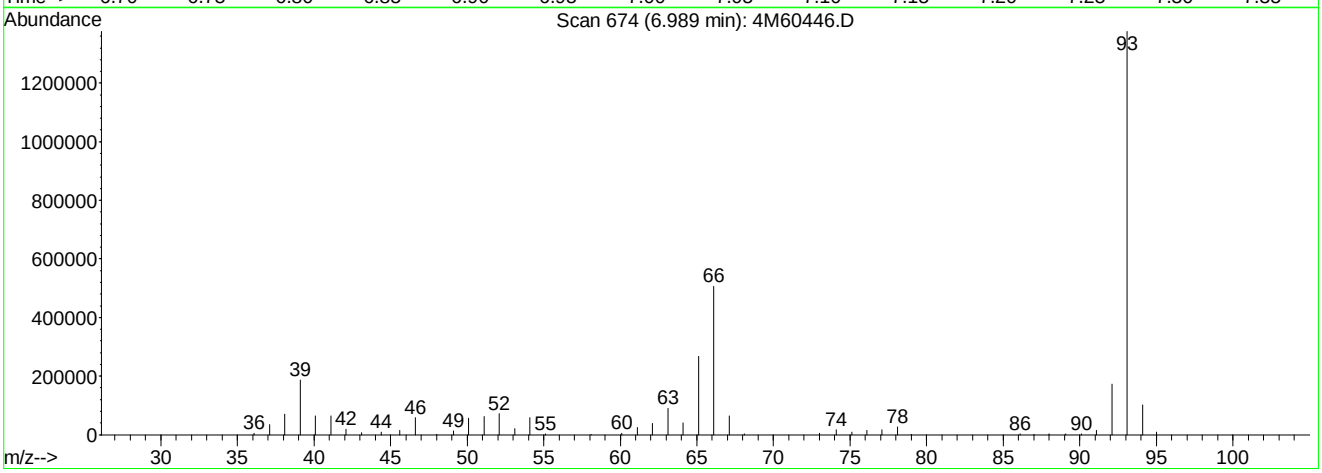
4M60446.D MEGAMIX.M Thu Apr 19 14:24:40 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60446.D Vial: 9
Acq On : 19 Apr 2012 13:23 Operator: CAA
Sample : WG395394-09 120PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:24 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:24:28 2012
Response via : Multiple Level Calibration





TIC: 4M60446.D

(11) Aniline

6.99min 113.73ug/ml mint

response 1742391

Ion	Exp%	Act%
93.00	100	100
66.00	33.40	35.78
65.00	29.20	31.12
0.00	0.00	0.00

4M60446.D MEGAMIX.M Thu Apr 19 14:24 2012

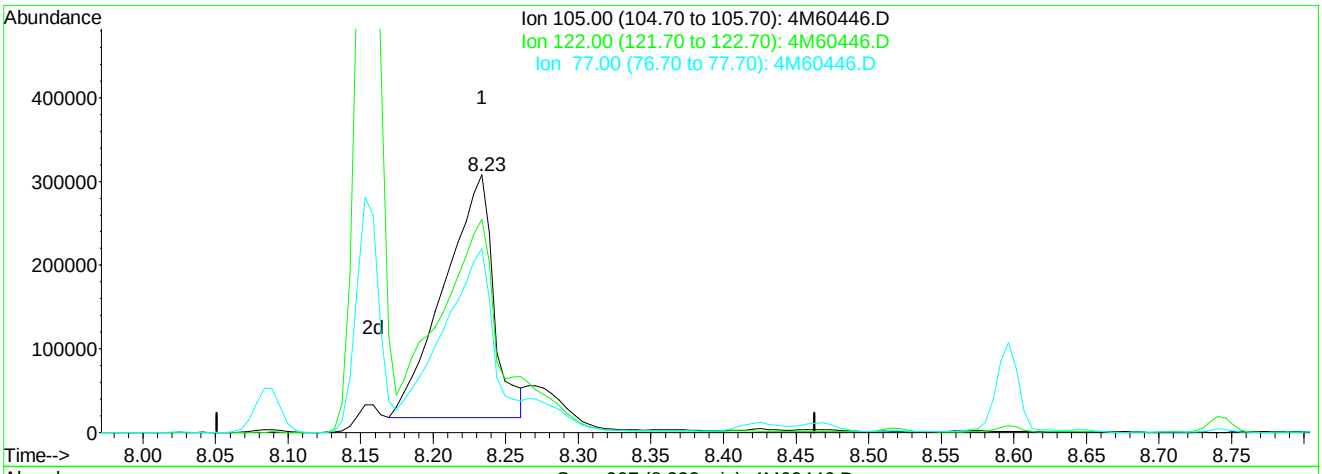
Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41

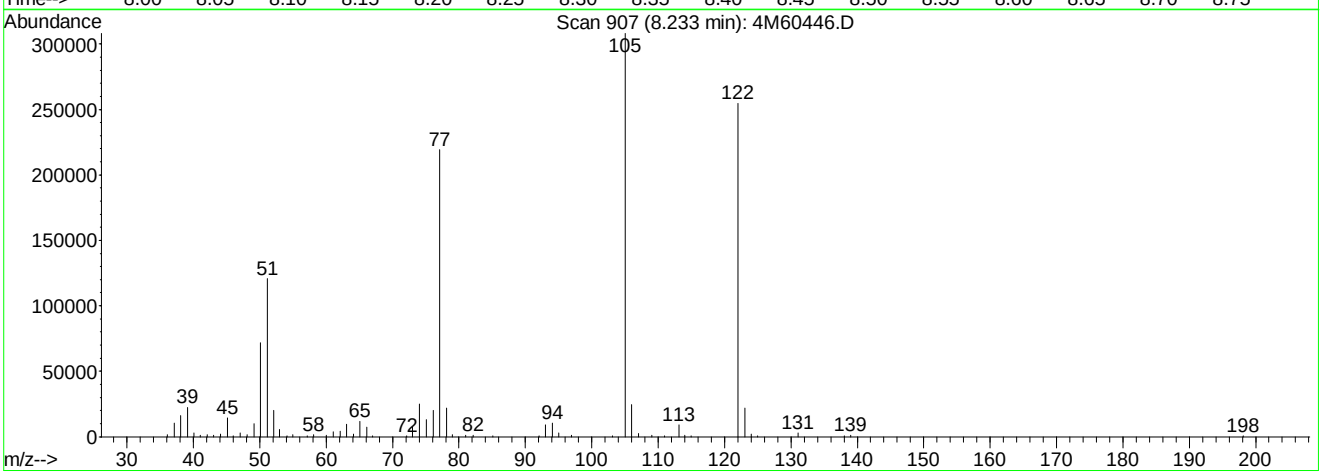
#3 - Improperly integrated isomers and/or coeluting compounds

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60446.D Vial: 9
Acq On : 19 Apr 2012 13:23 Operator: CAA
Sample : WG395394-09 120PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:24 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:24:28 2012
Response via : Single Level Calibration





TIC: 4M60446.D

(39) Benzoic Acid

8.23min 111.58ug/ml

response 684707

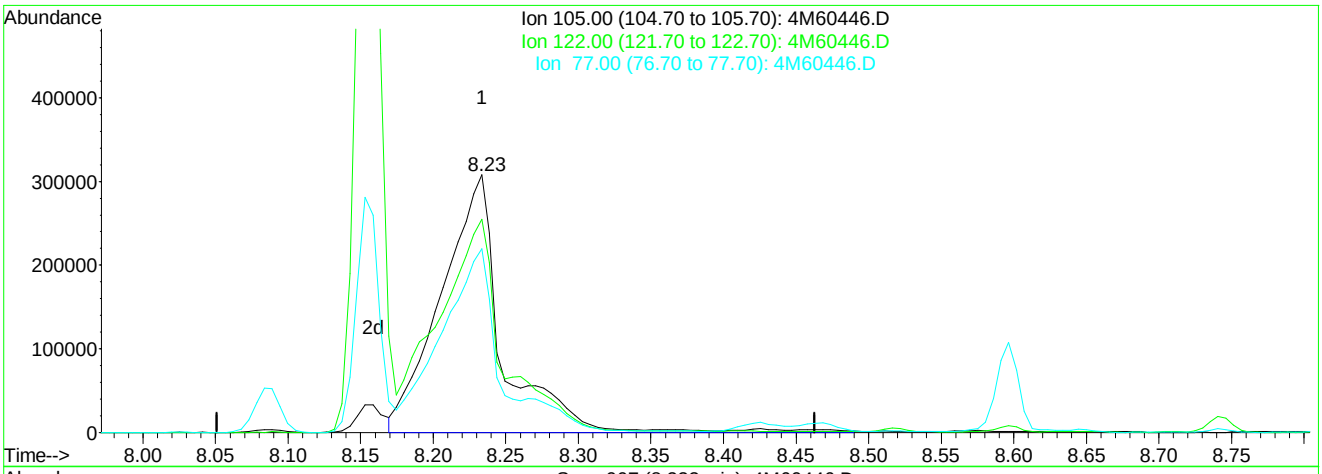
Ion	Exp%	Act%
105.00	100	100
122.00	87.10	111.94
77.00	70.40	62.20
0.00	0.00	0.00

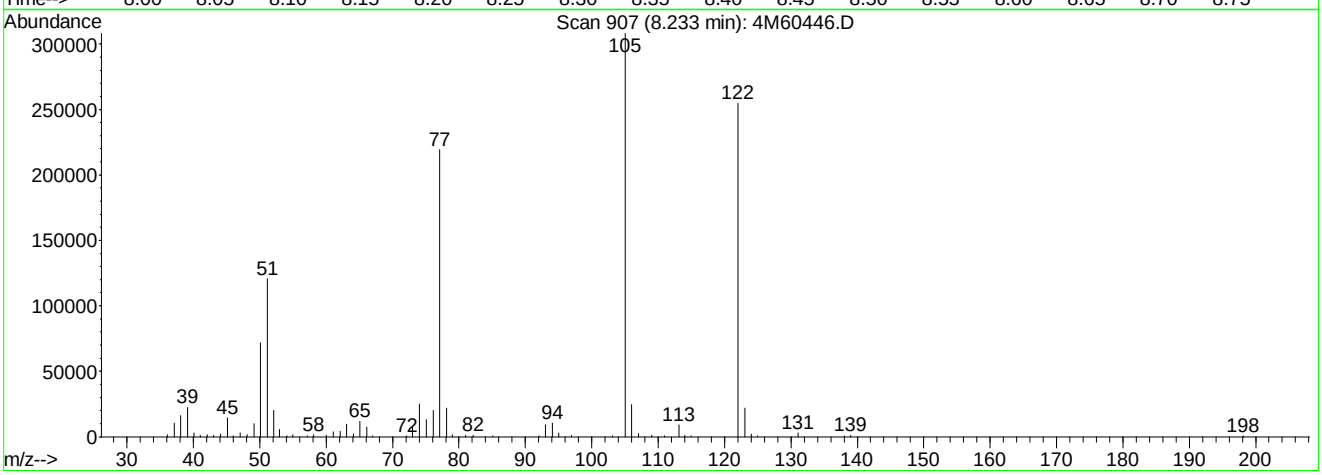
4M60446.D MEGAMIX.M Thu Apr 19 14:24:49 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60446.D Vial: 9
Acq On : 19 Apr 2012 13:23 Operator: CAA
Sample : WG395394-09 120PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:24 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:24:28 2012
Response via : Single Level Calibration





TIC: 4M60446.D

(39) Benzoic Acid

8.23min 149.20ug/ml mint

response 915551

Ion	Exp%	Act%
105.00	100	100
122.00	87.10	83.72
77.00	70.40	46.52
0.00	0.00	0.00

4M60446.D MEGAMIX.M Thu Apr 19 14:24 2012

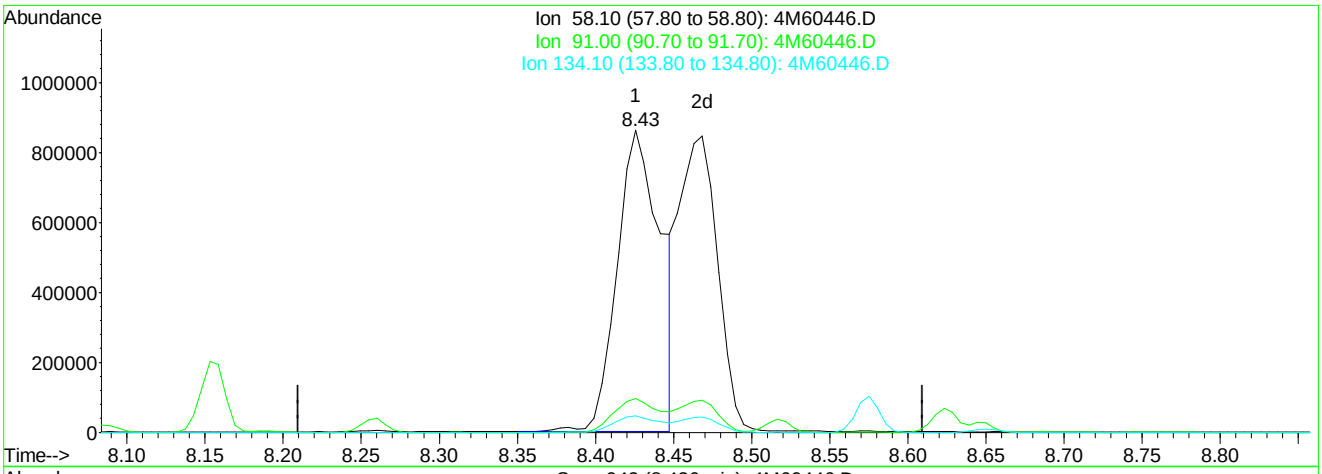
Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41

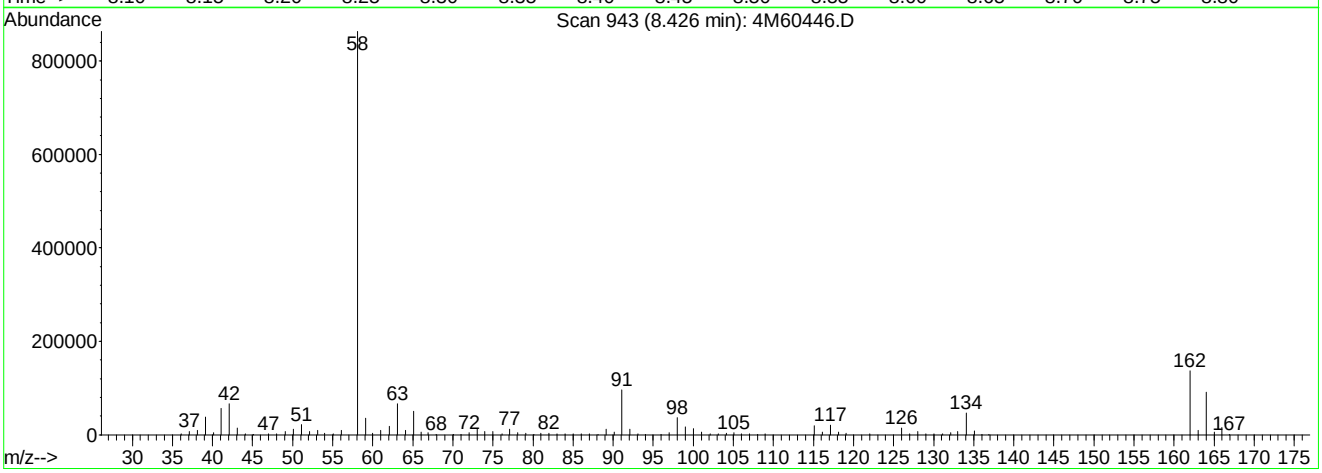
#2 - Data system splits the peak incorrectly or integrates a false peak as a rider peak

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60446.D Vial: 9
Acq On : 19 Apr 2012 13:23 Operator: CAA
Sample : WG395394-09 120PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:24 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:24:28 2012
Response via : Multiple Level Calibration





TIC: 4M60446.D

(41) a,a-Dimethylphenethylamine

8.43min 93.27ug/ml

response 1657316

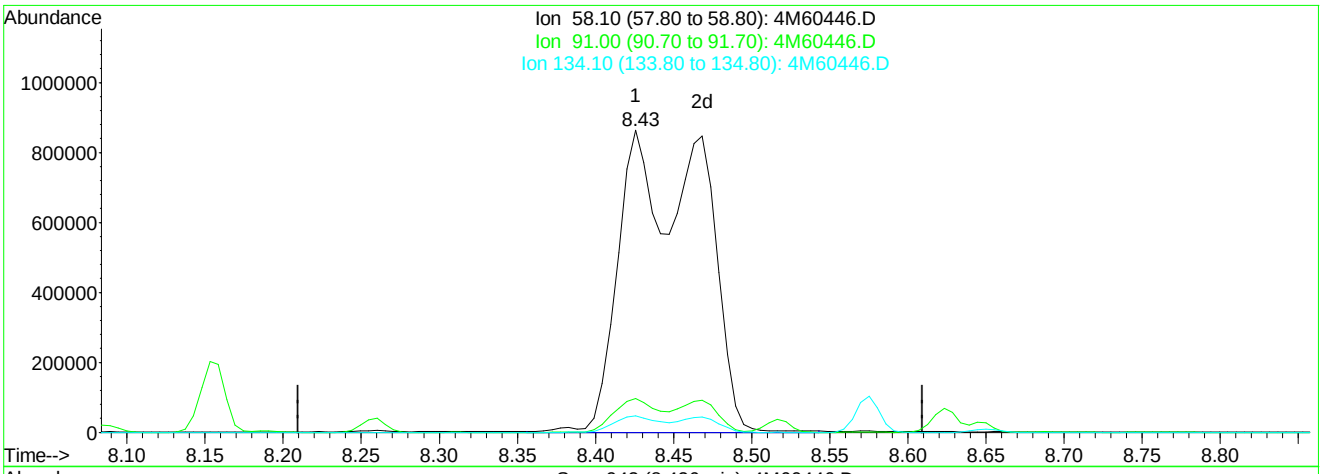
Ion	Exp%	Act%
58.10	100	100
91.00	12.60	11.80
134.10	6.20	5.71
0.00	0.00	0.00

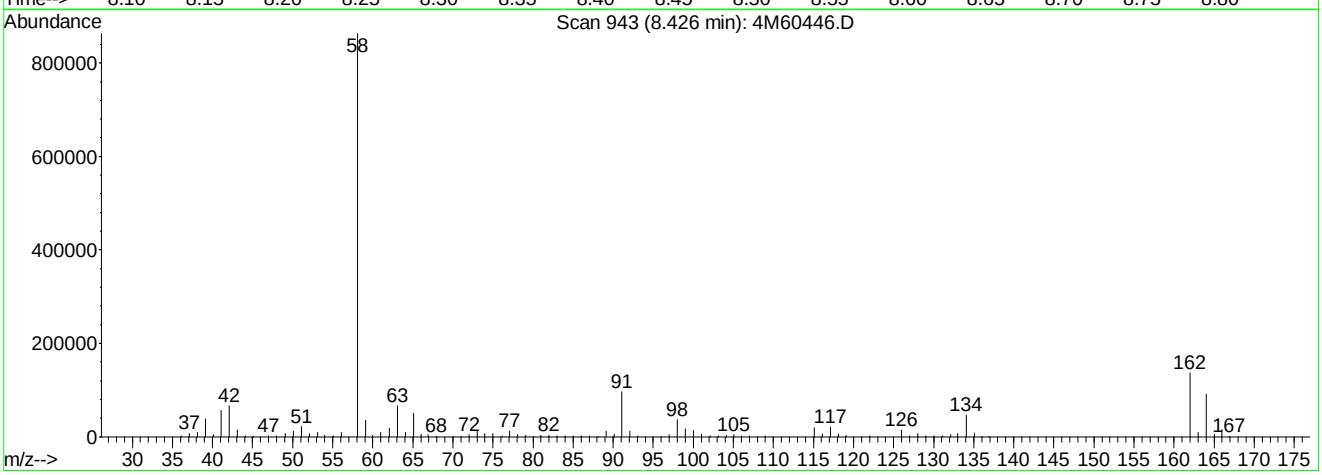
4M60446.D MEGAMIX.M Thu Apr 19 14:24:58 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60446.D Vial: 9
Acq On : 19 Apr 2012 13:23 Operator: CAA
Sample : WG395394-09 120PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:25 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:24:28 2012
Response via : Multiple Level Calibration





TIC: 4M60446.D

(41) a,a-Dimethylphenethylamine

8.43min 175.94ug/ml mint

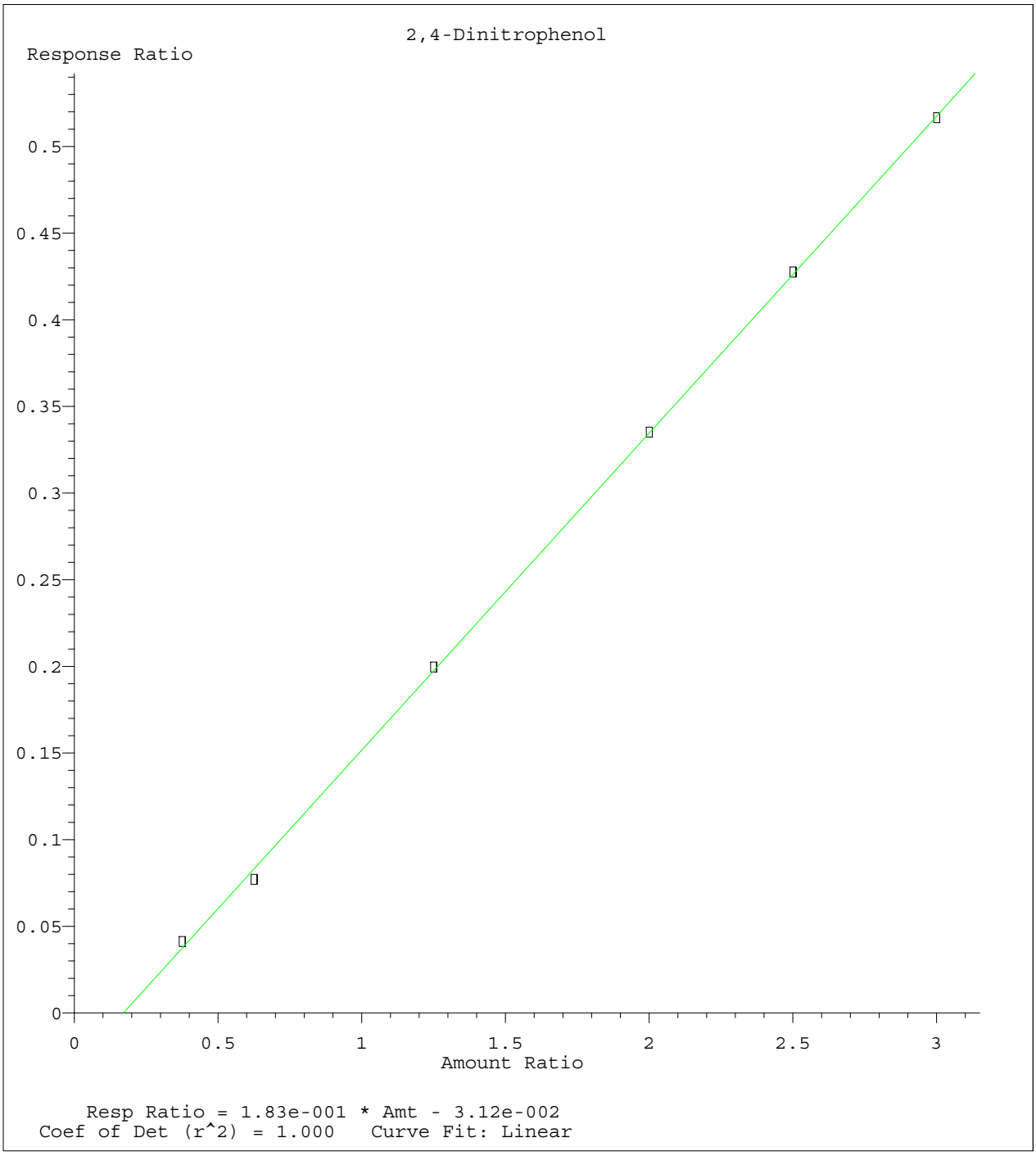
response 3126203

Ion	Exp%	Act%
58.10	100	100
91.00	12.60	6.25#
134.10	6.20	3.03#
0.00	0.00	0.00

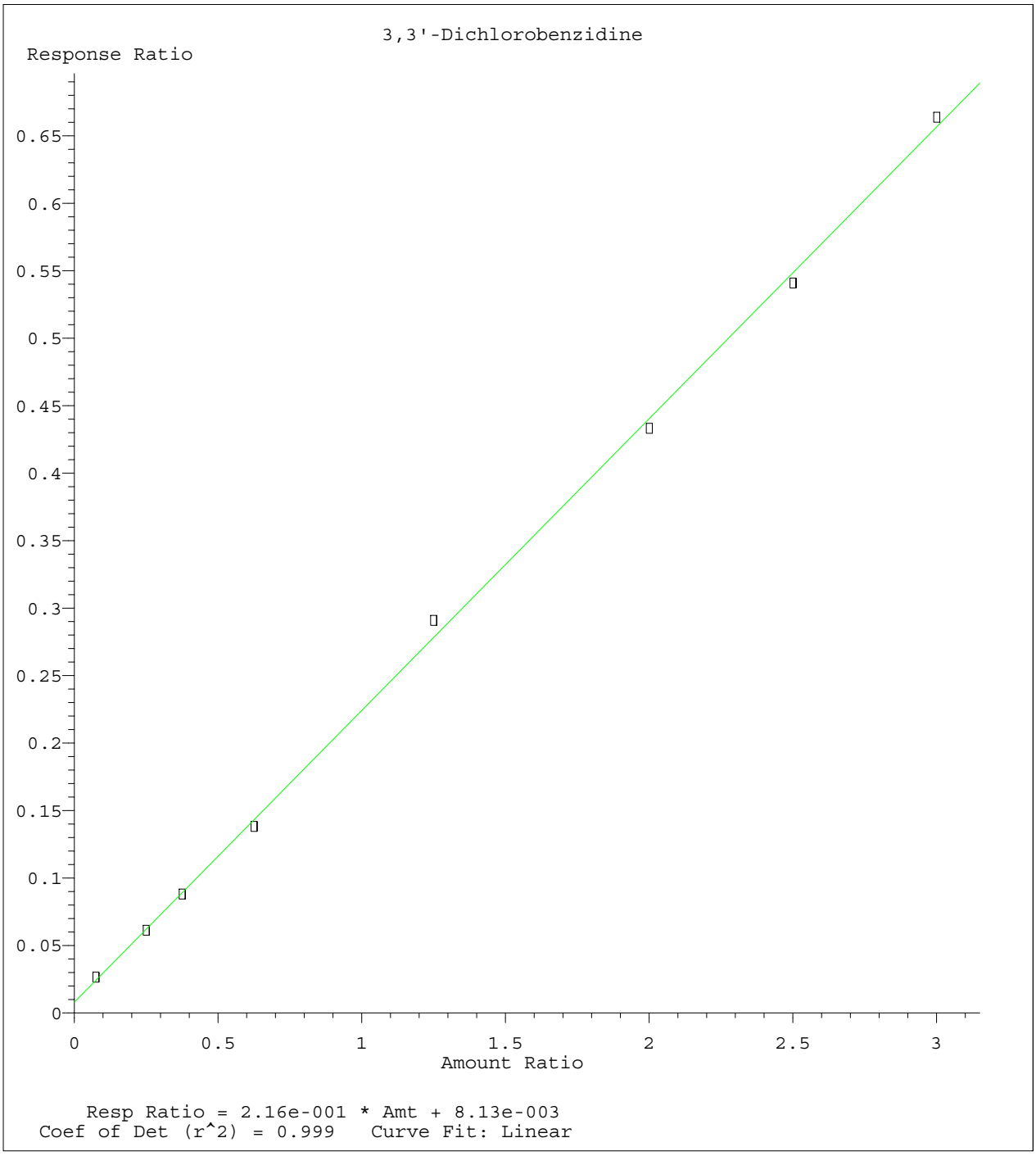
4M60446.D MEGAMIX.M Thu Apr 19 2012

Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41

#2 - Data system splits the peak incorrectly or integrates a false peak as a rider peak



Method Name: I:\MSDCHEM\1\METHODS\MEGAMIX.M
Calibration Table Last Updated: Fri Apr 20 08:27:42 2012



Method Name: I:\MSDCHEM\1\METHODS\MEGAMIX.M
Calibration Table Last Updated: Fri Apr 20 08:27:42 2012

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60447.D Vial: 10
Acq On : 19 Apr 2012 13:58 Operator: CAA
Sample : WG395394-10 50PPM Megamix Alt Src STD Inst : HPMS4
Misc : 1,1 STD50596 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:27:58 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	256286	40.00	ug/ml	0.00
30) Naphthalene-d8	8.57	136	986779	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.38	164	526241	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.99	188	955907	40.00	ug/ml	0.00
113) Chrysene-d12	15.69	240	888081	40.00	ug/ml	0.00
128) Perylene-d12	18.49	264	842099	40.00	ug/ml	0.00

System Monitoring Compounds

8) 2-Fluorophenol	0.00	112	0	0.0000	ug/ml	
Spiked Amount 100.000	Range 21 - 100		Recovery	=	0.00%#	
12) Phenol-d5	0.00	99	0	0.0000	ug/ml	
Spiked Amount 100.000	Range 10 - 94		Recovery	=	0.00%#	
31) Nitrobenzene-d5	7.81	82	39246	4.7024	ug/ml	-0.04
Spiked Amount 50.000	Range 35 - 114		Recovery	=	9.40%#	
59) 2-Fluorobiphenyl	9.62	172	163	0.0093	ug/ml	-0.03
Spiked Amount 50.000	Range 43 - 116		Recovery	=	0.02%#	
86) 2,4,6-Tribromophenol	0.00	330	0	0.0000	ug/ml	
Spiked Amount 100.000	Range 10 - 123		Recovery	=	0.00%#	
117) p-Terphenyl-d14	0.00	244	0	0.0000	ug/ml	
Spiked Amount 50.000	Range 33 - 141		Recovery	=	0.00%#	

Target Compounds						Qvalue
3) n-Nitrosodimethylamine	4.70	74	276126	58.3812	ug/ml	99
4) Pyridine	4.72	79	488797	58.2919	ug/ml	96
5) 2-Picoline	5.50	93	472924	51.8312	ug/ml	100
6) n-Nitrosomethylethylamine	5.62	88	213170	54.1601	ug/ml	96
7) Methyl Methanesulfonate	5.90	80	251495	56.2801	ug/ml	97
9) n-Nitrosodiethylamine	6.29	102	220952	52.3624	ug/ml	96
10) Ethyl Methanesulfonate	6.54	79	323437	55.2616	ug/ml	99
11) Aniline	6.99	93	722468m	53.7589	ug/ml	
13) Phenol	6.89	94	534518	55.0450	ug/ml	96
14) bis(2-Chloroethyl)ether	7.00	63	328519	54.0297	ug/ml	95
15) Pentachloroethane	7.02	167	179705	54.8681	ug/ml	99
16) 2-Chlorophenol	7.11	128	484796	55.7509	ug/ml	99
17) 1,3-Dichlorobenzene	7.26	146	516293	53.3428	ug/ml	100
18) 1,4-Dichlorobenzene	7.30	146	536363	54.3336	ug/ml	99
19) Benzyl Alcohol	7.39	108	330847	58.7617	ug/ml	99
20) 1,2-Dichlorobenzene	7.50	146	497579	54.2754	ug/ml	99
21) 2-Methylphenol	7.48	107	365939	54.6506	ug/ml	99
22) bis(2-Chloroisopropyl)ethe	7.54	45	675914	54.1456	ug/ml	97
23) 3-,4-Methylphenol	7.62	107	470754	54.0846	ug/ml	99
24) n-Nitrosopyrrolidine	7.67	100	208831	53.1426	ug/ml	91
25) n-Nitrosodipropylamine	7.67	70	307584	56.1778	ug/ml	99
26) Acetophenone	7.68	105	592221	55.0002	ug/ml	100
27) n-Nitrosomorpholine	7.68	56	276958	52.9339	ug/ml	98
28) o-Toluidine	7.72	106	697310	51.2251	ug/ml	100
29) Hexachloroethane	7.82	117	199783	54.6536	ug/ml	96
32) Nitrobenzene	7.87	77	450915	54.2075	ug/ml	99
33) n-Nitrosopiperidine	8.01	114	225543	50.6524	ug/ml	96
34) Isophorone	8.08	82	800833	52.7444	ug/ml	99
35) 2-Nitrophenol	8.18	139	287863m	58.7056	ug/ml	
36) 2,4-Dimethylphenol	8.15	122	437384	51.9463	ug/ml	99
37) 0,0,0-Triethyl Phosphoroth	8.25	198	205339	48.8480	ug/ml#	40
38) bis(2-Chloroethoxy)methane	8.25	93	654932	56.7589	ug/ml#	94
39) Benzoic Acid	8.21	105	346193	59.6587	ug/ml	98

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60447.D Vial: 10
Acq On : 19 Apr 2012 13:58 Operator: CAA
Sample : WG395394-10 50PPM Megamix Alt Src STD Inst : HPMS4
Misc : 1,1 STD50596 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:27:58 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
40) 2,4-Dichlorophenol	8.41	162	379014	53.7708 ug/ml	100
41) a,a-Dimethylphenethylamine	8.40	58	245419	20.5941 ug/ml	99
42) 1,2,4-Trichlorobenzene	8.52	180	417438	52.1552 ug/ml	100
43) Naphthalene	8.60	128	1415927	54.1805 ug/ml	99
44) 4-Chloroaniline	8.62	127	470468	48.8813 ug/ml	99
45) 2,6-Dichlorophenol	8.64	162	401989	55.2675 ug/ml	99
46) Hexachloropropene	8.71	213	247910	55.2660 ug/ml	99
47) Hexachlorobutadiene	8.74	225	227254	55.4605 ug/ml	99
48) n-Nitrosodi-n-Butylamine	8.94	84	294849	42.0146 ug/ml#	86
49) p-Phenylenediamine	9.05	108	30477	50.1895 ug/ml	97
50) 4-Chloro-3-Methylphenol	9.05	107	384557	53.7631 ug/ml	100
51) Safrole	9.16	162	374856	55.1030 ug/ml	99
52) 2-Methylnaphthalene	9.28	142	922336	54.3242 ug/ml	99
53) 1-Methylnaphthalene	9.40	142	844148	52.5880 ug/ml	100
55) 1,2,4,5-Tetrachlorobenzene	9.49	216	391219	56.7302 ug/ml	99
56) Hexachlorocyclopentadiene	9.50	237	197932	55.4902 ug/ml	100
57) 2,4,6-Trichlorophenol	9.57	196	279030	57.7433 ug/ml	99
58) 2,4,5-Trichlorophenol	9.62	196	290230	58.3464 ug/ml	100
60) Isosafrole	9.67	162	386331	58.0944 ug/ml	99
61) 2-Chloronaphthalene	9.79	162	960412	64.6318 ug/ml	100
62) 1-Chloronaphthalene	9.83	162	808109	57.4329 ug/ml	100
63) 2-Nitroaniline	9.89	65	246949	57.9777 ug/ml	99
64) 1,4-Naphthoquinone	9.95	158	378234	64.4567 ug/ml	99
65) Dimethylphthalate	10.05	163	920406	55.2812 ug/ml	100
66) 1,3-Dinitrobenzene	10.10	168	168742	52.8536 ug/ml	98
67) 2,6-Dinitrotoluene	10.14	165	239977	57.6995 ug/ml	99
68) Acenaphthylene	10.24	152	1360420	57.0190 ug/ml	100
69) 3-Nitroaniline	10.30	138	121424	39.5804 ug/ml	100
70) 2,4-Dinitrophenol	10.41	184	169659	77.2850 ug/ml	47
71) Acenaphthene	10.42	154	876985	56.4328 ug/ml	98
72) 4-Nitrophenol	10.40	65	179487	58.5610 ug/ml	96
73) 2,4-Dinitrotoluene	10.56	165	301594	56.9906 ug/ml	97
74) Pentachlorobenzene	10.60	250	337611	54.3733 ug/ml	99
75) Dibenzofuran	10.57	168	1179664	56.6917 ug/ml	99
76) 2,3,4,6-Tetrachlorophenol	10.67	232	214281	55.8583 ug/ml	99
77) 1-Naphthylamine	10.72	143	22712	5.0751 ug/ml	87
78) 2-Naphthylamine	10.72	143	24316	8.9264 ug/ml	87
79) Diethylphthalate	10.76	149	931578	56.1811 ug/ml	100
80) Thionazin	10.86	107	138070	50.0423 ug/ml	97
81) Fluorene	10.94	166	984153	55.6484 ug/ml	99
82) 4-Chlorophenyl Phenyl Ethe	10.88	204	450483	54.2093 ug/ml	99
83) 4-Nitroaniline	10.95	138	203824	53.6740 ug/ml	98
84) 5-Nitro-o-Toluidine	10.94	152	205250	49.1581 ug/ml	99
85) 1,2-Diphenylhydrazine	11.05	77	945859	58.6519 ug/ml	98
88) 4,6-Dinitro-2-Methylphenol	10.98	198	198538	66.7184 ug/ml#	54
89) n-Nitrosodiphenylamine	11.00	169	854618	55.2550 ug/ml	99
90) Sulfotepp	11.20	322	144797	52.3998 ug/ml	92
91) Sym-Trinitrobenzene	11.28	75	251346	66.4719 ug/ml	98
92) Diallate	11.33	86	357858	56.7344 ug/ml	93
93) Phenacetin	11.31	108	474657	58.5779 ug/ml	99
94) Phorate	11.35	75	562933	55.9411 ug/ml#	98
95) 4-Bromophenyl Phenyl Ether	11.42	248	257123	53.1649 ug/ml	99
96) Hexachlorobenzene	11.63	284	274708	51.9612 ug/ml	97
97) Dimethoate	11.56	87	306288	57.6192 ug/ml	96

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60447.D Vial: 10
Acq On : 19 Apr 2012 13:58 Operator: CAA
Sample : WG395394-10 50PPM Megamix Alt Src STD Inst : HPMS4
Misc : 1,1 STD50596 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:27:58 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

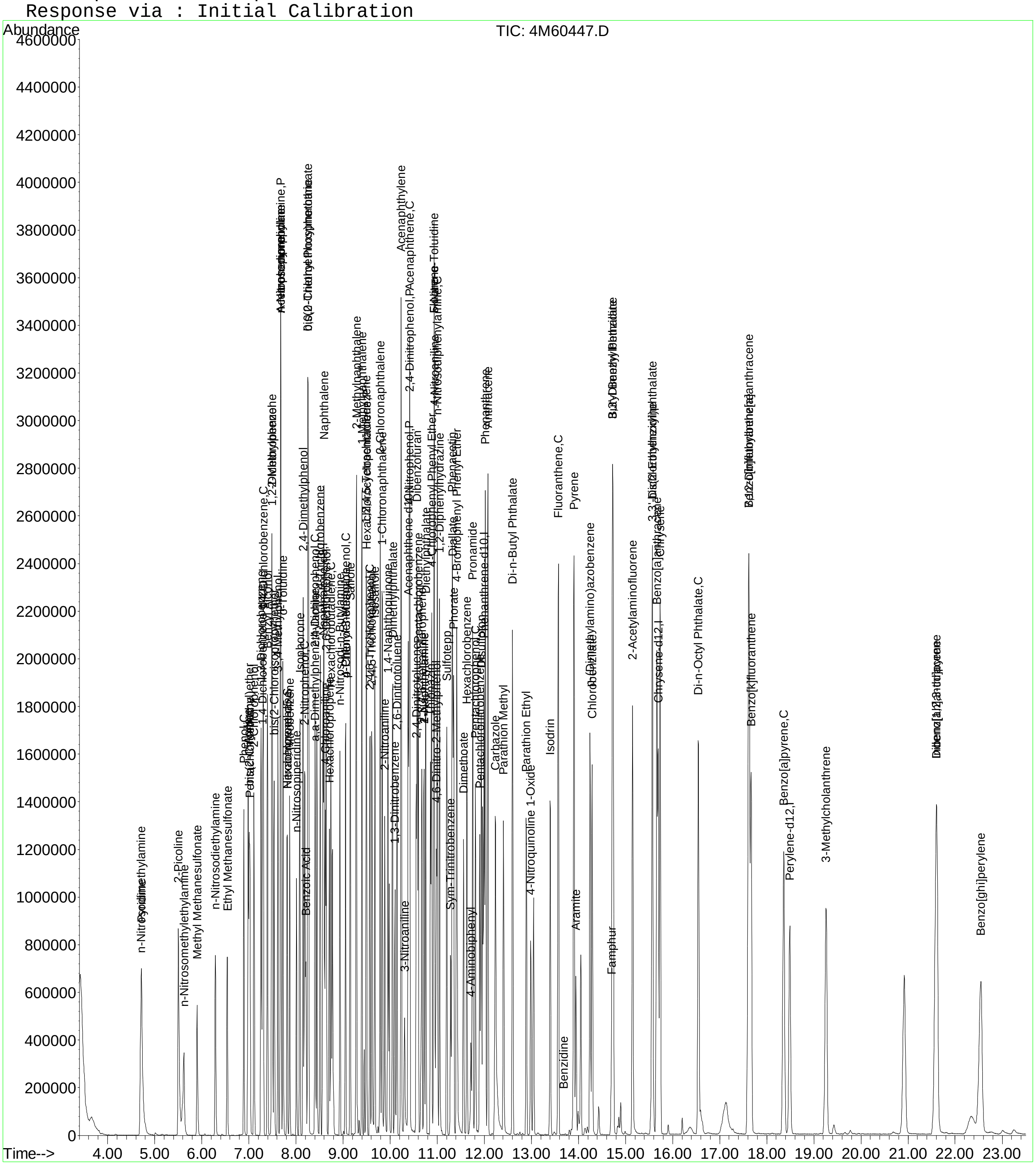
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
98)	4-Aminobiphenyl	11.72	169	299707	53.6701 ug/ml	100
99)	Pentachlorophenol	11.81	266	219981	65.8011 ug/ml	100
100)	Pronamide	11.75	173	435376	56.0268 ug/ml	100
101)	Pentachloronitrobenzene	11.90	237	100661	54.9377 ug/ml	99
102)	Disulfoton	11.93	88	465671	53.8412 ug/ml	99
103)	Phenanthrene	12.02	178	1403448	55.3523 ug/ml	100
104)	Anthracene	12.08	178	1431854	55.0760 ug/ml	100
105)	Carbazole	12.23	167	1222576	53.7063 ug/ml	99
106)	Parathion Methyl	12.41	109	309666	58.5249 ug/ml	98
107)	Di-n-Butyl Phthalate	12.60	149	1540149	54.4568 ug/ml	100
108)	Parathion Ethyl	12.89	97	176185	54.6918 ug/ml	98
109)	4-Nitroquinoline 1-Oxide	12.99	190	144361	61.3308 ug/ml	98
110)	Methapyrilene	13.05	58	407182	Below Cal	97
111)	Isodrin	13.40	193	153389	56.3232 ug/ml	98
112)	Fluoranthene	13.57	202	1432961	53.9334 ug/ml	99
114)	Benzidine	13.68	184	3158	2.5513 ug/ml	100
115)	Pyrene	13.91	202	1489985	56.0937 ug/ml	100
116)	Aramite	13.95	185	79710	52.9951 ug/ml	99
118)	p-(Dimethylamino)azobenzen	14.25	225	308031	56.1665 ug/ml	95
119)	Chlorobenzilate	14.29	251	405945	56.1581 ug/ml	97
120)	Famphur	14.70	218	32734	103.9507 ug/ml#	65
121)	Butyl Benzyl Phthalate	14.72	149	707095	58.5249 ug/ml	99
122)	3,3'-Dimethylbenzidine	14.73	212	122499	14.5948 ug/ml#	90
123)	2-Acetylaminofluorene	15.15	181	590016	57.0856 ug/ml	99
124)	bis(2-Ethylhexyl)phthalate	15.57	149	934893	56.7035 ug/ml	100
125)	3,3'-Dichlorobenzidine	15.58	252	256765	51.9984 ug/ml	99
126)	Benzo[a]anthracene	15.67	228	1277312	54.2153 ug/ml	100
127)	Chrysene	15.73	228	1248555	56.4561 ug/ml	99
129)	Di-n-Octyl Phthalate	16.54	149	1590286	58.4774 ug/ml	99
130)	7,12-Dimethylbenz[a]anthra	17.62	256	644600	59.1079 ug/ml	99
131)	Benzo[b]fluoranthene	17.62	252	1328651	54.5618 ug/ml	98
132)	Benzo[k]fluoranthene	17.67	252	1162236	51.4888 ug/ml	95
133)	Benzo[a]pyrene	18.36	252	1248294	56.1868 ug/ml	99
134)	3-Methylcholanthrene	19.26	268	701245	58.1339 ug/ml	99
135)	Indeno[1,2,3-cd]pyrene	21.60	276	1375274	55.5825 ug/ml	97
136)	Dibenz[ah]anthracene	21.60	278	1145050	55.4891 ug/ml	98
137)	Benzo[ghi]perylene	22.55	276	1116722	54.5580 ug/ml	98

(#) = qualifier out of range (m) = manual integration
4M60447.D MEGAMIX.M Fri Apr 20 08:39:54 2012 Page 3

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60447.D Vial: 10
Acq On : 19 Apr 2012 13:58 Operator: CAA
Sample : WG395394-10 50PPM Megamix Alt Src STD Inst : HPMS4
Misc : 1,1 STD50596 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:28 2012 Quant Results File: MEGAMIX.RES

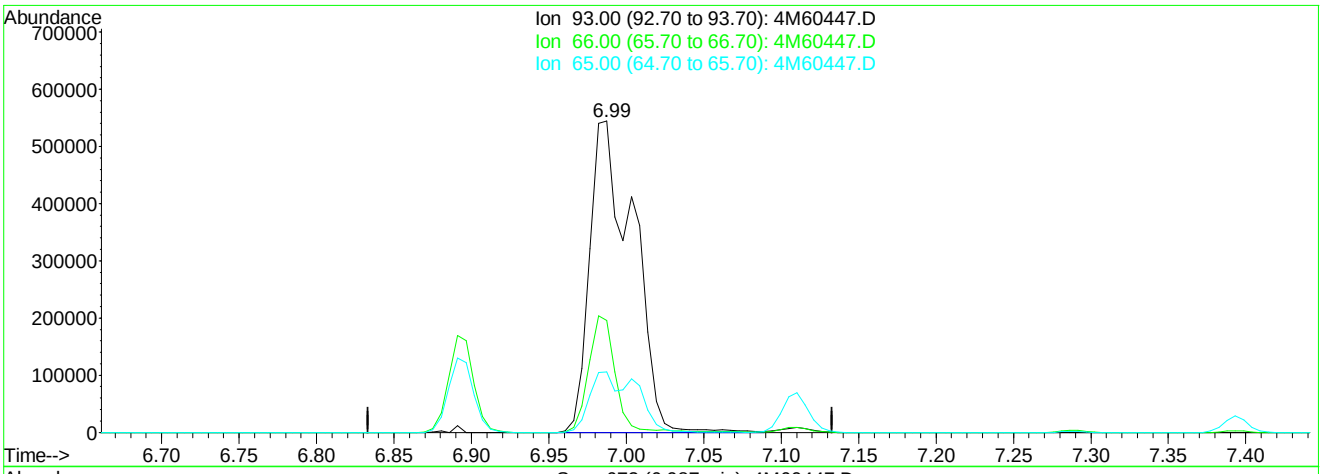
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Fri Apr 20 08:27:42 2012
Response via : Initial Calibration

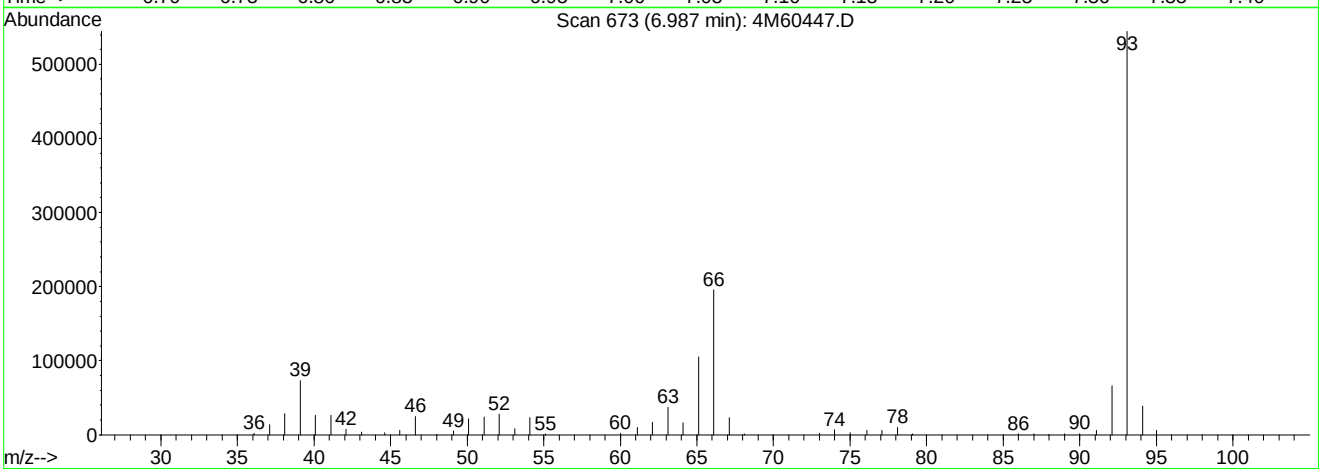


Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60447.D Vial: 10
Acq On : 19 Apr 2012 13:58 Operator: CAA
Sample : WG395394-10 50PPM Megamix Alt Src STD Inst : HPMS4
Misc : 1,1 STD50596 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:27 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Multiple Level Calibration





TIC: 4M60447.D

(11) Aniline

6.99min 79.16ug/ml

response 1063901

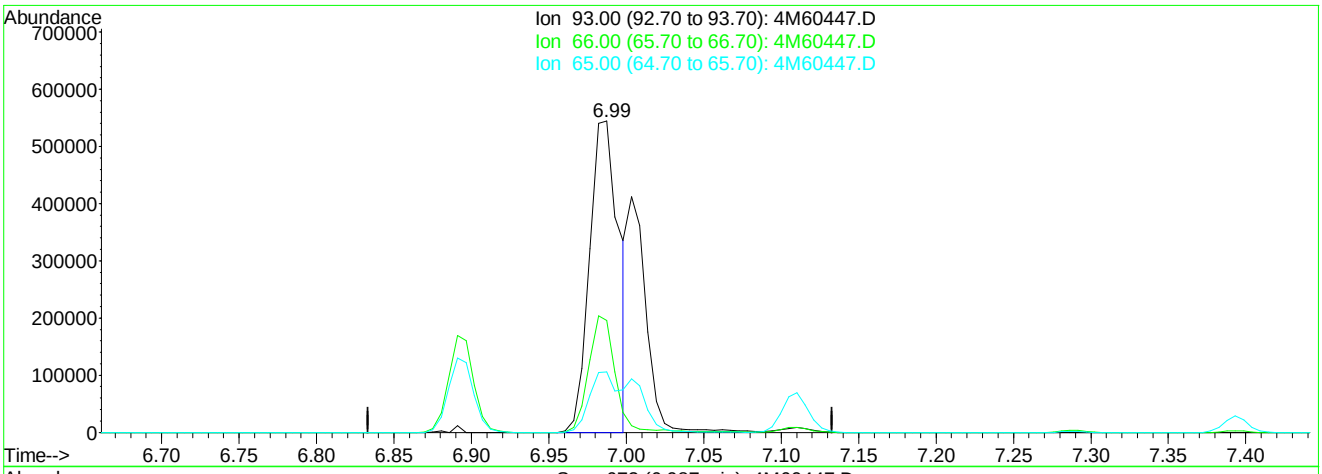
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.26
65.00	29.20	13.53#
0.00	0.00	0.00

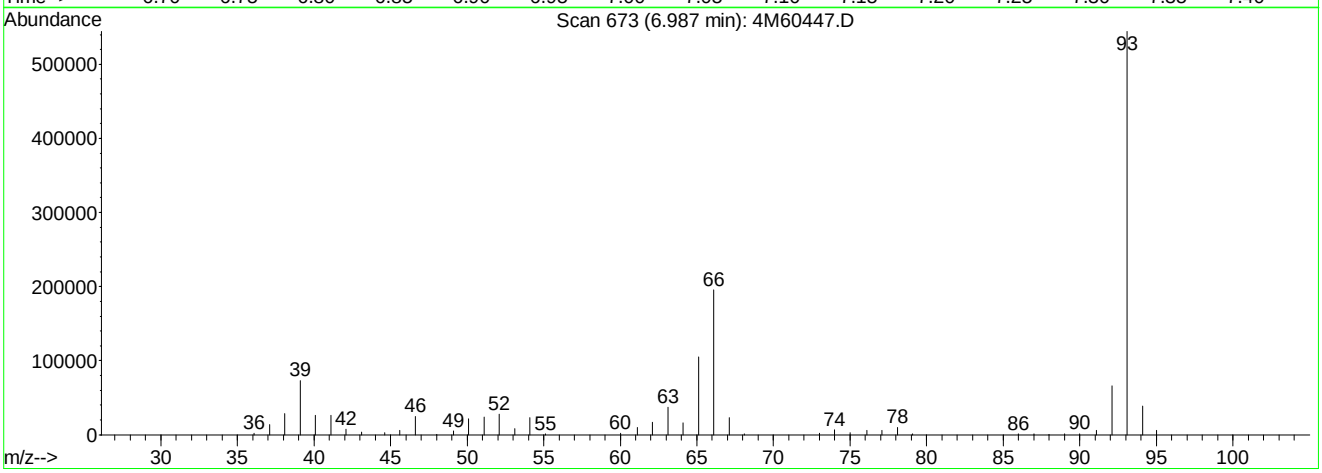
4M60447.D MEGAMIX.M Thu Apr 19 14:28:17 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60447.D Vial: 10
Acq On : 19 Apr 2012 13:58 Operator: CAA
Sample : WG395394-10 50PPM Megamix Alt Src STD Inst : HPMS4
Misc : 1,1 STD50596 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:28 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Multiple Level Calibration





TIC: 4M60447.D

(11) Aniline

6.99min 53.76ug/ml mint

response 722468

Ion	Exp%	Act%
93.00	100	100
66.00	33.40	34.25
65.00	29.20	19.93
0.00	0.00	0.00

4M60447.D MEGAMIX.M Thu Apr 19) 2012

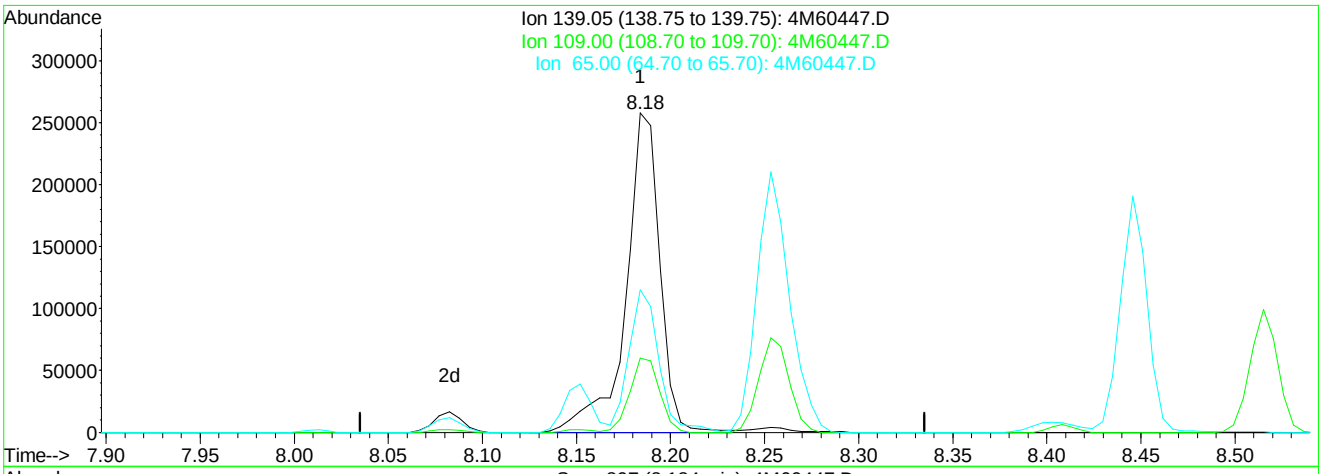
Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41

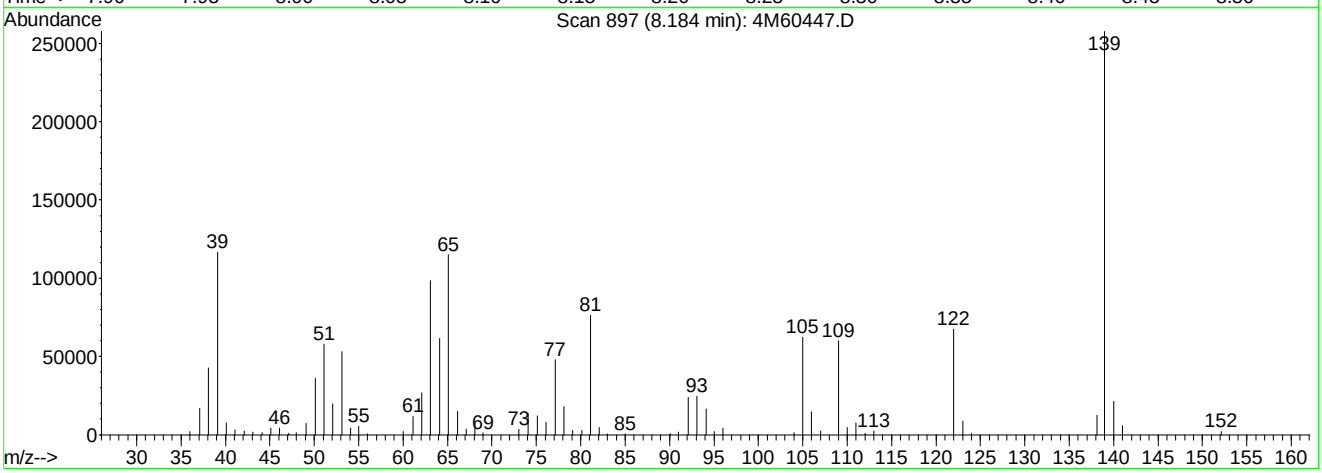
#3 - Improperly integrated isomers and/or coeluting compounds

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60447.D Vial: 10
Acq On : 19 Apr 2012 13:58 Operator: CAA
Sample : WG395394-10 50PPM Megamix Alt Src STD Inst : HPMS4
Misc : 1,1 STD50596 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:28 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Multiple Level Calibration





TIC: 4M60447.D

(35) 2-Nitrophenol (C)

8.18min 65.94ug/ml

response 323358

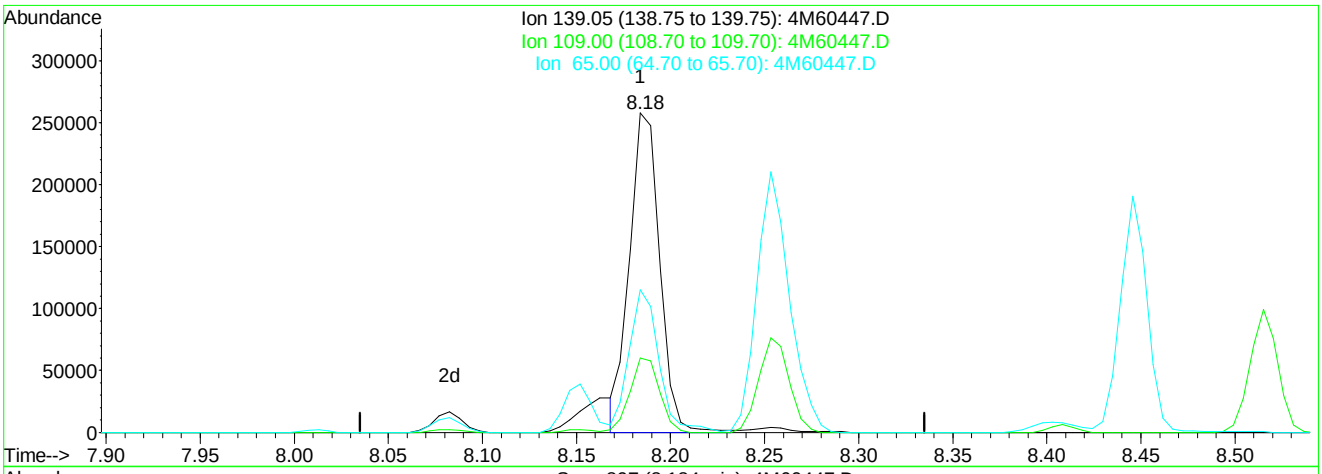
Ion	Exp%	Act%
139.05	100	100
109.00	22.80	20.32
65.00	43.50	39.41
0.00	0.00	0.00

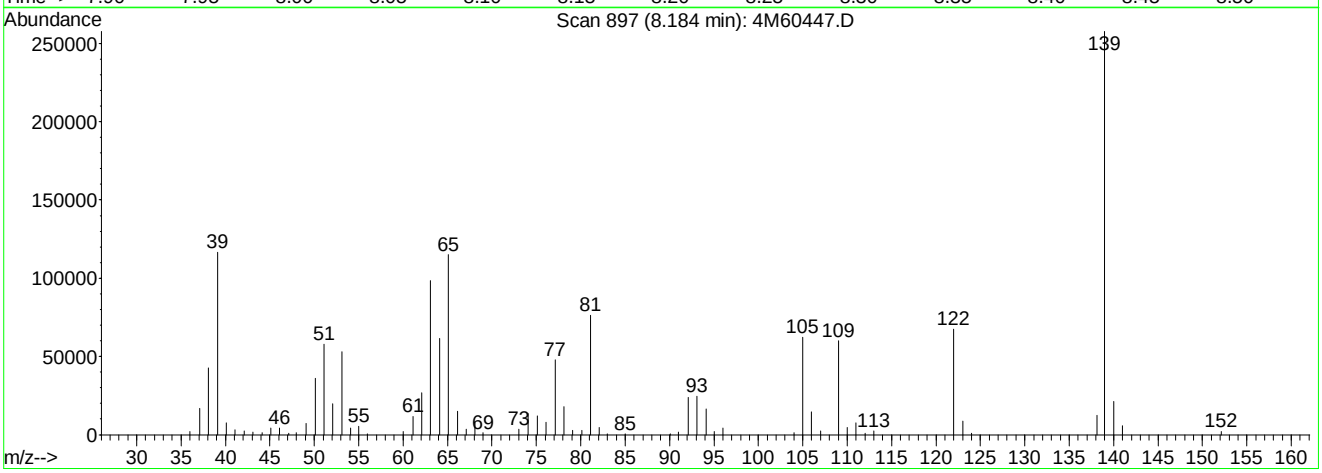
4M60447.D MEGAMIX.M Thu Apr 19 14:28:25 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60447.D Vial: 10
Acq On : 19 Apr 2012 13:58 Operator: CAA
Sample : WG395394-10 50PPM Megamix Alt Src STD Inst : HPMS4
Misc : 1,1 STD50596 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:28 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Multiple Level Calibration





TIC: 4M60447.D

(35) 2-Nitrophenol (C)

8.18min 58.71ug/ml mint

response 287863

Ion	Exp%	Act%
139.05	100	100
109.00	22.80	22.82
65.00	43.50	44.27
0.00	0.00	0.00

4M60447.D MEGAMIX.M Thu Apr 19 3 2012

Analyst: 04/20/2012 09:31 Supervisor: 04/20/2012 11:41

#3 - Improperly integrated isomers and/or coeluting compounds

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60448.D Vial: 11
Acq On : 19 Apr 2012 14:33 Operator: CAA
Sample : WG395394-11 50PPM 1,4-Dioxane Alt Src ST Inst : HPMS4
Misc : 1,1 STD50848 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:57:16 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	241408	40.00 ug/ml	0.00
30) Naphthalene-d8	8.57	136	908072	40.00 ug/ml	0.00
54) Acenaphthene-d10	10.38	164	500473	40.00 ug/ml	0.00
87) Phenanthrene-d10	11.99	188	872547	40.00 ug/ml	0.00
113) Chrysene-d12	15.68	240	832225	40.00 ug/ml	-0.01
128) Perylene-d12	18.48	264	818814	40.00 ug/ml	-0.01

System Monitoring Compounds

8) 2-Fluorophenol	0.00	112	0	0.0000 ug/ml	
Spiked Amount 100.000	Range 21 - 100		Recovery	=	0.00%#
12) Phenol-d5	0.00	99	0	0.0000 ug/ml	
Spiked Amount 100.000	Range 10 - 94		Recovery	=	0.00%#
31) Nitrobenzene-d5	0.00	82	0	0.0000 ug/ml	
Spiked Amount 50.000	Range 35 - 114		Recovery	=	0.00%#
59) 2-Fluorobiphenyl	0.00	172	0	0.0000 ug/ml	
Spiked Amount 50.000	Range 43 - 116		Recovery	=	0.00%#
86) 2,4,6-Tribromophenol	0.00	330	0	0.0000 ug/ml	
Spiked Amount 100.000	Range 10 - 123		Recovery	=	0.00%#
117) p-Terphenyl-d14	0.00	244	0	0.0000 ug/ml	
Spiked Amount 50.000	Range 33 - 141		Recovery	=	0.00%#

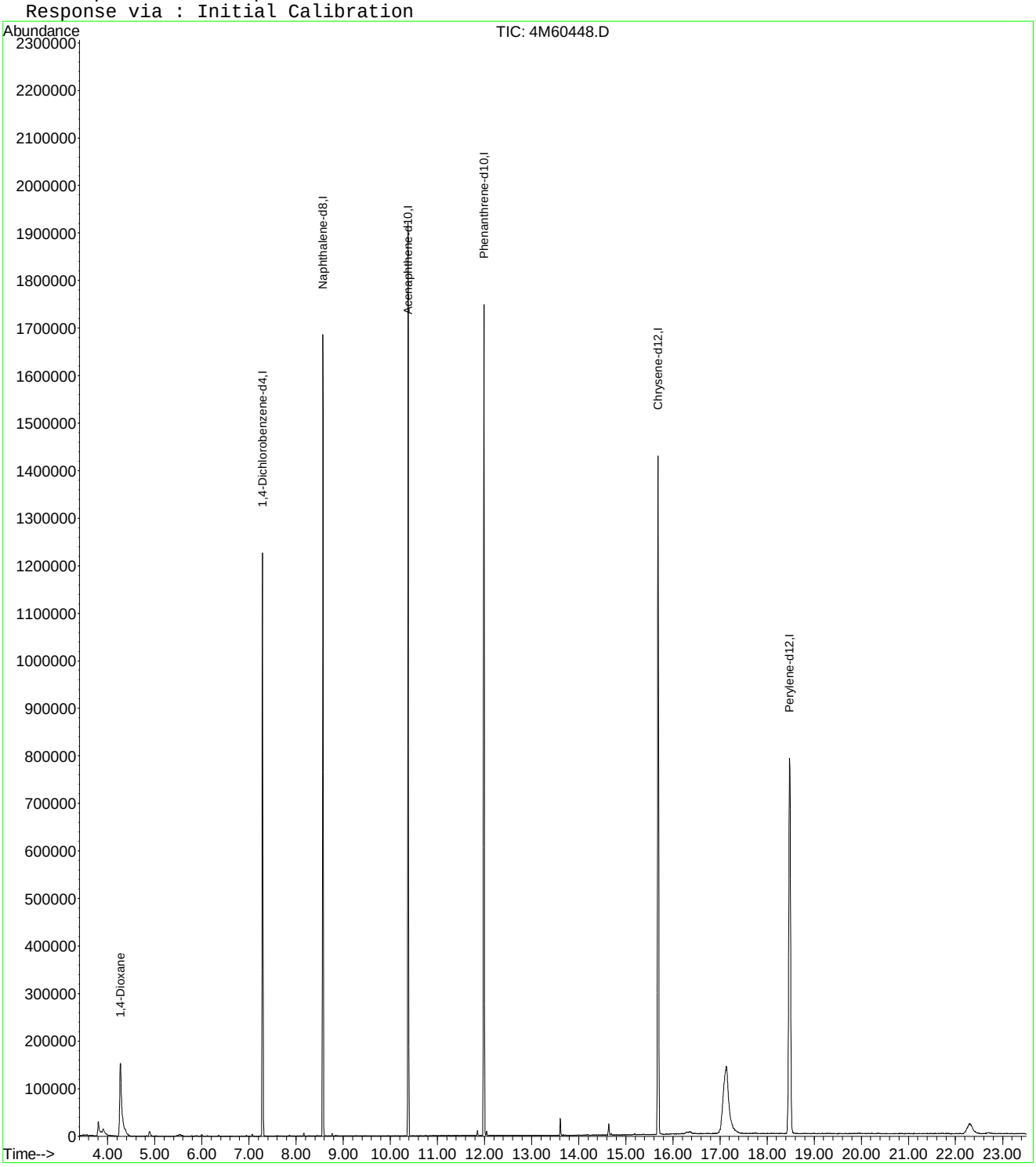
Target Compounds					Qvalue
2) 1,4-Dioxane	4.27	88	180346	59.9411 ug/ml#	91

(#) = qualifier out of range (m) = manual integration
4M60448.D MEGAMIX.M Fri Apr 20 08:40:02 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60448.D Vial: 11
Acq On : 19 Apr 2012 14:33 Operator: CAA
Sample : WG395394-11 50PPM 1,4-Dioxane Alt Src ST Inst : HPMS4
Misc : 1,1 STD50848 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:57 2012 Quant Results File: MEGAMIX.RES

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Fri Apr 20 08:27:42 2012
Response via : Initial Calibration



4M60448.D MEGAMIX.M Fri Apr 20 08:40:02 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60602.D Vial: 3
Acq On : 1 May 2012 14:05 Operator: CAA
Sample : WG396709-01 50PPM TCL STD Inst : HPMS4
Misc : 1,1 STD51428 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 02 13:30:27 2012 Quant Results File: TCL.RES

Quant Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Wed May 02 13:30:22 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	198785	40.00 ug/mL	0.00
3) Naphthalene-d8	8.57	136	762076	40.00 ug/mL	0.00
5) Acenaphthene-d10	10.38	164	425534	40.00 ug/mL	0.00
7) Phenanthrene-d10	11.99	188	753240	40.00 ug/mL	0.00

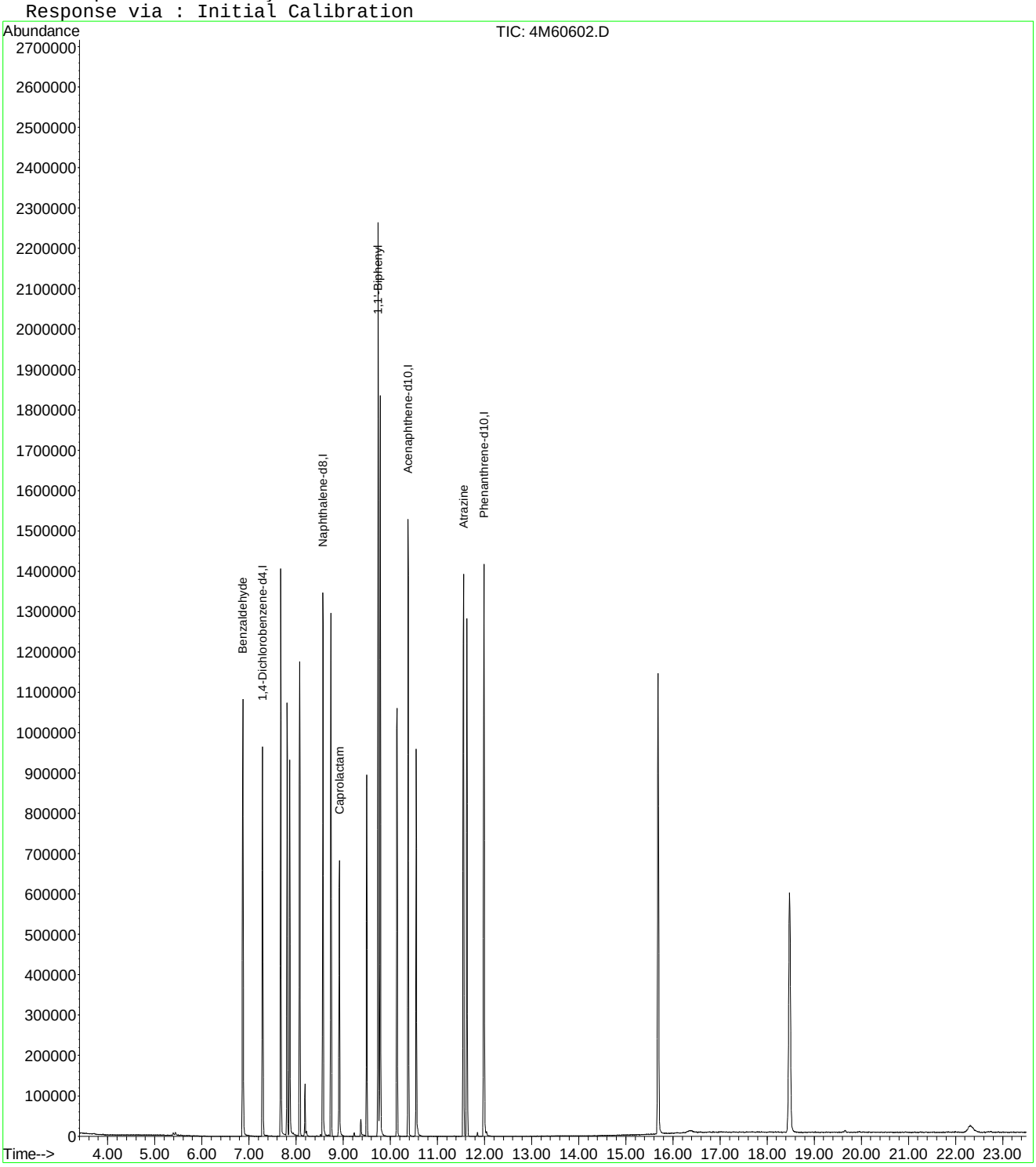
Target Compounds					Qvalue
2) Benzaldehyde	6.87	105	268493	42.7758 ug/L	98
4) Caprolactam	8.92	55	133062	37.9131 ug/L	91
6) 1,1'-Biphenyl	9.74	154	861006	45.0609 ug/L	99
8) Atrazine	11.55	200	212957	46.6791 ug/L	99

(#) = qualifier out of range (m) = manual integration
4M60602.D TCL.M Wed May 02 13:54:27 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60602.D Vial: 3
Acq On : 1 May 2012 14:05 Operator: CAA
Sample : WG396709-01 50PPM TCL STD Inst : HPMS4
Misc : 1,1 STD51428 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 13:30 2012 Quant Results File: TCL.RES

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Wed May 02 13:31:17 2012
Response via : Initial Calibration



4M60602.D TCL.M Wed May 02 13:54:27 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60603.D Vial: 4
Acq On : 1 May 2012 14:39 Operator: CAA
Sample : WG396709-02 3PPM TCL STD Inst : HPMS4
Misc : 1,1 STD51428 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 02 13:30:40 2012 Quant Results File: TCL.RES

Quant Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Wed May 02 13:30:35 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	184318	40.00 ug/mL	0.00
3) Naphthalene-d8	8.57	136	711419	40.00 ug/mL	0.00
5) Acenaphthene-d10	10.38	164	396131	40.00 ug/mL	0.00
7) Phenanthrene-d10	11.99	188	705172	40.00 ug/mL	0.00

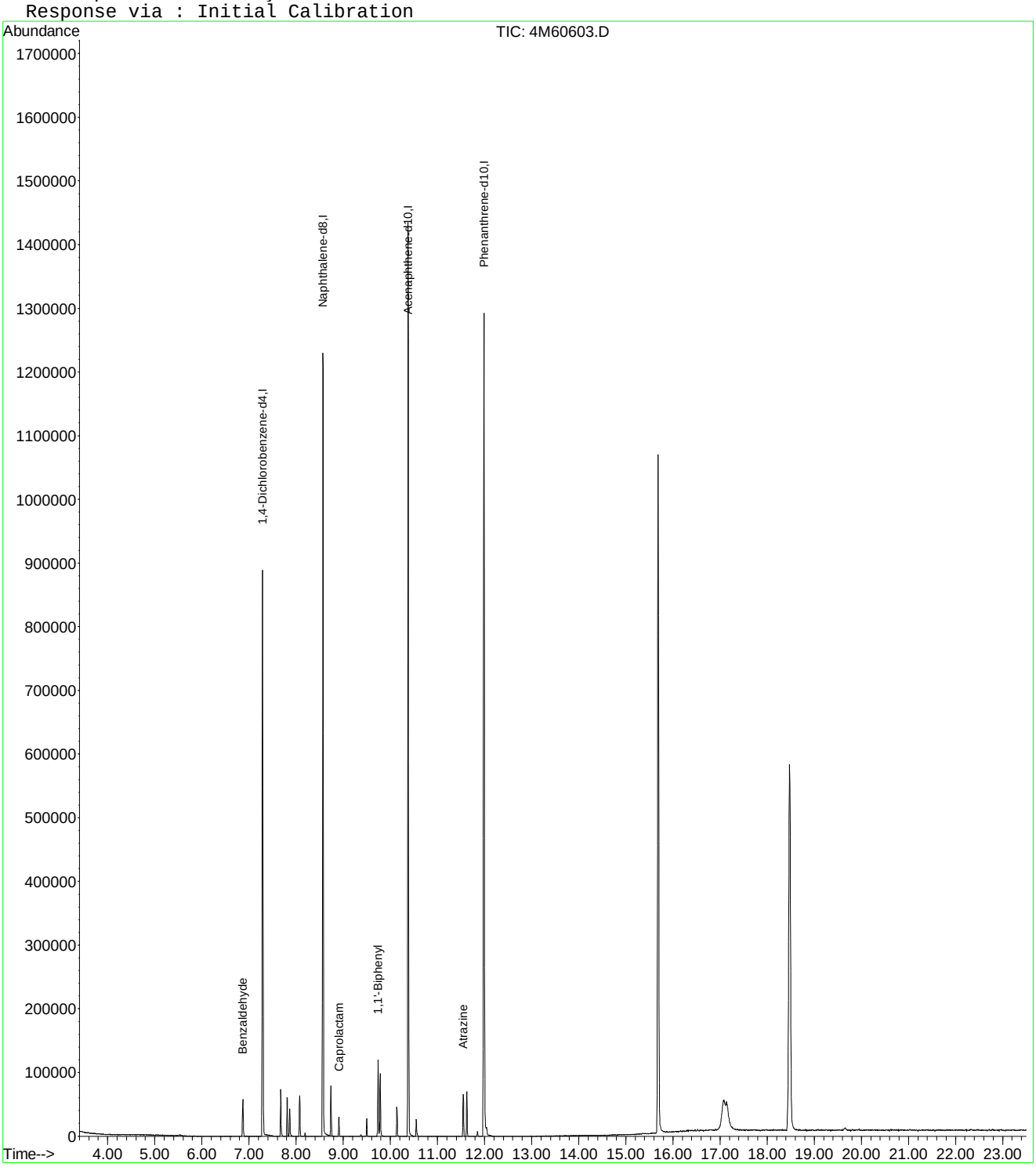
Target Compounds					Qvalue
2) Benzaldehyde	6.87	105	14982	2.6370 ug/L	99
4) Caprolactam	8.90	55	5902	1.8906 ug/L	95
6) 1,1'-Biphenyl	9.74	154	52218	2.9644 ug/L	97
8) Atrazine	11.55	200	11811	2.7850 ug/L	96

(#) = qualifier out of range (m) = manual integration
4M60603.D TCL.M Wed May 02 13:54:27 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60603.D Vial: 4
Acq On : 1 May 2012 14:39 Operator: CAA
Sample : WG396709-02 3PPM TCL STD Inst : HPMS4
Misc : 1,1 STD51428 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 13:30 2012 Quant Results File: TCL.RES

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Wed May 02 13:31:17 2012
Response via : Initial Calibration



4M60603.D TCL.M Wed May 02 13:54:27 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60604.D Vial: 5
Acq On : 1 May 2012 15:13 Operator: CAA
Sample : WG396709-03 10PPM TCL STD Inst : HPMS4
Misc : 1,1 STD51428 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 02 13:30:50 2012 Quant Results File: TCL.RES

Quant Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Wed May 02 13:30:46 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	191577	40.00 ug/mL	0.00
3) Naphthalene-d8	8.57	136	738266	40.00 ug/mL	0.00
5) Acenaphthene-d10	10.38	164	412816	40.00 ug/mL	0.00
7) Phenanthrene-d10	11.99	188	727410	40.00 ug/mL	0.00

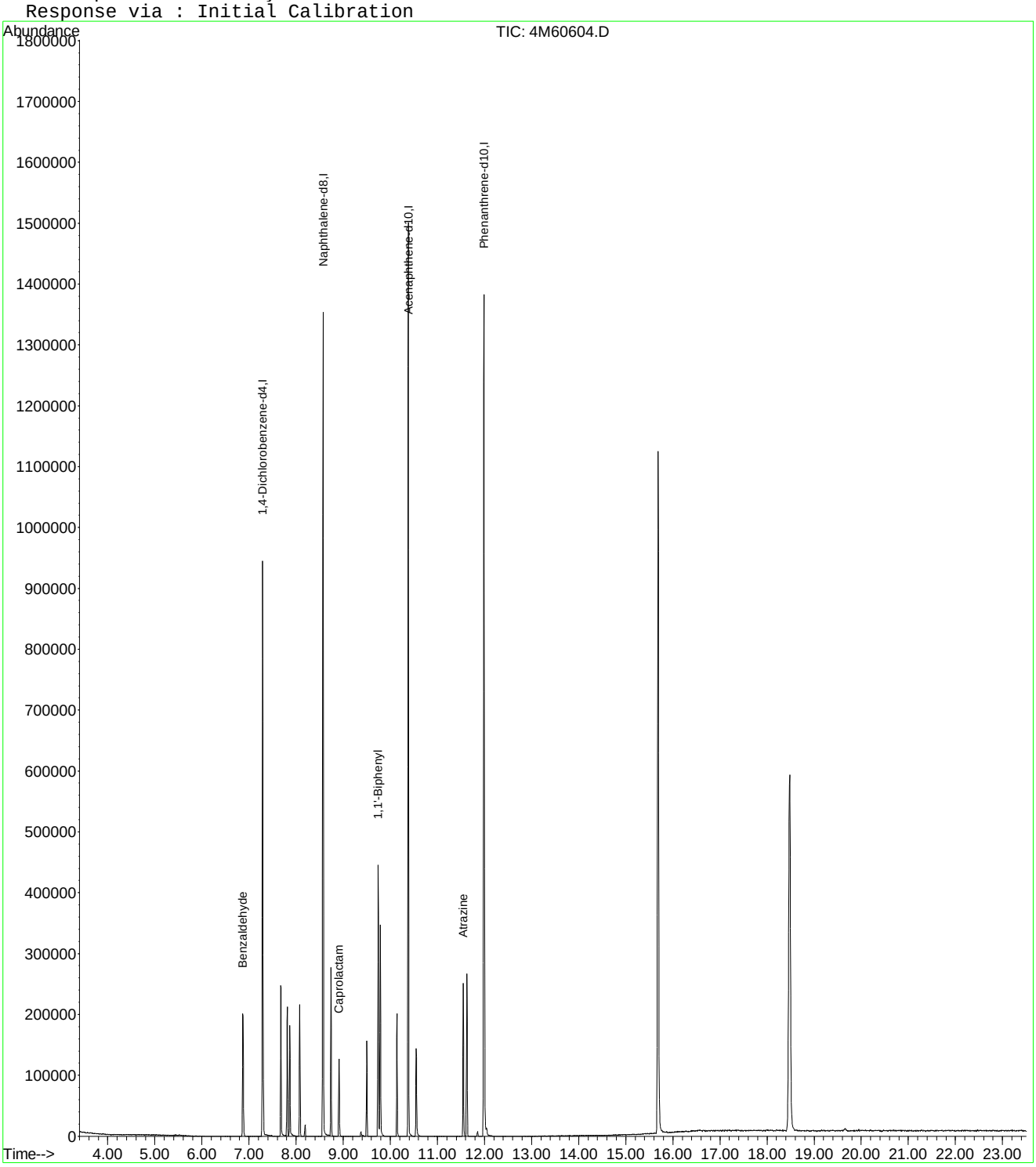
Target Compounds					Qvalue
2) Benzaldehyde	6.87	105	50350	8.7940 ug/L	97
4) Caprolactam	8.91	55	22867	7.4092 ug/L	98
6) 1,1'-Biphenyl	9.74	154	178056	9.9808 ug/L	98
8) Atrazine	11.55	200	40993	9.5590 ug/L	99

(#) = qualifier out of range (m) = manual integration
4M60604.D TCL.M Wed May 02 13:54:27 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60604.D Vial: 5
Acq On : 1 May 2012 15:13 Operator: CAA
Sample : WG396709-03 10PPM TCL STD Inst : HPMS4
Misc : 1,1 STD51428 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 13:30 2012 Quant Results File: TCL.RES

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Wed May 02 13:31:17 2012
Response via : Initial Calibration



4M60604.D TCL.M Wed May 02 13:54:28 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60605.D Vial: 6
Acq On : 1 May 2012 15:47 Operator: CAA
Sample : WG396709-04 25PPM TCL STD Inst : HPMS4
Misc : 1,1 STD51428 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 02 13:30:57 2012 Quant Results File: TCL.RES

Quant Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Wed May 02 13:30:53 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	188543	40.00 ug/mL	0.00
3) Naphthalene-d8	8.57	136	712737	40.00 ug/mL	0.00
5) Acenaphthene-d10	10.38	164	395022	40.00 ug/mL	0.00
7) Phenanthrene-d10	11.99	188	719816	40.00 ug/mL	0.00

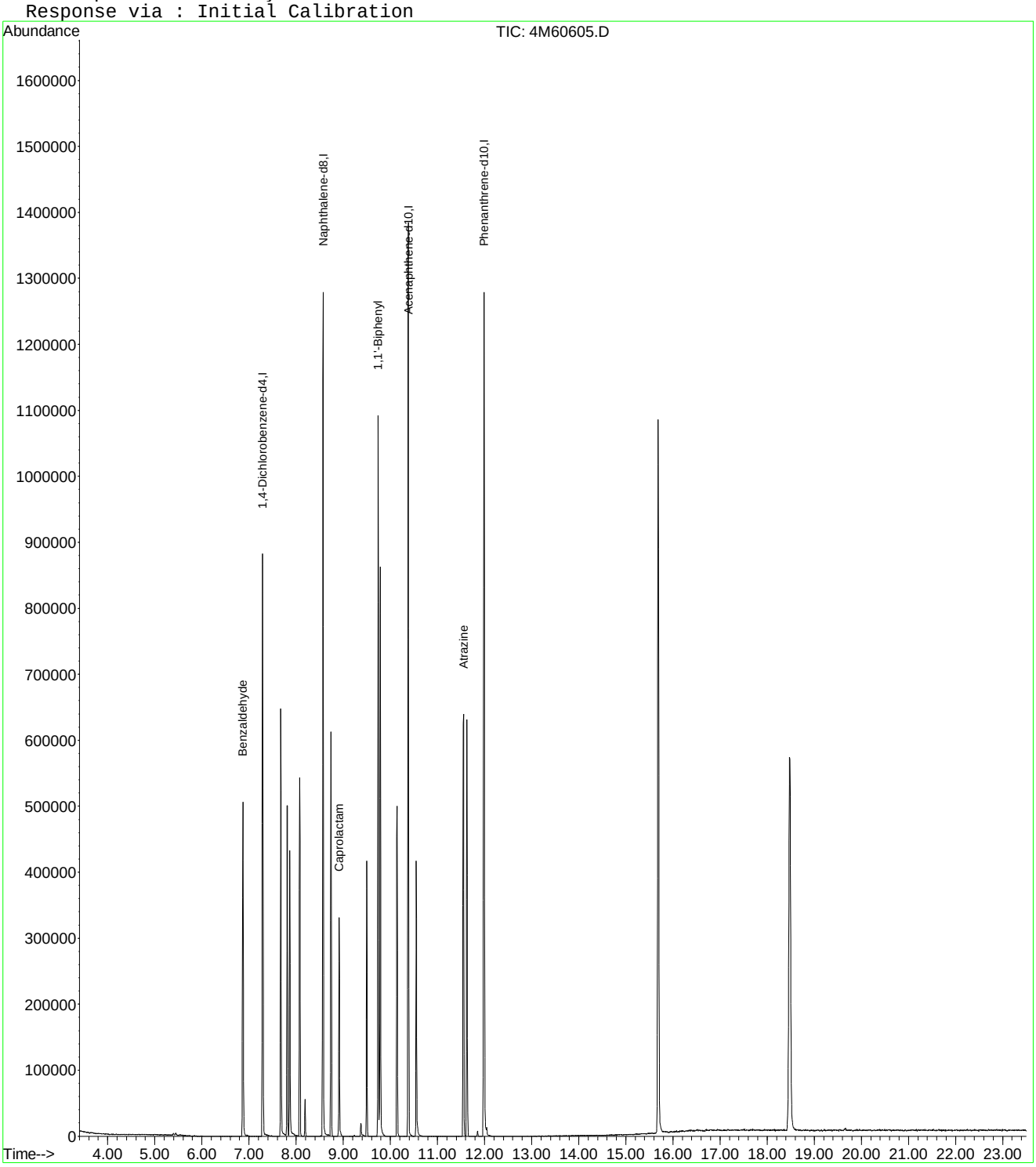
Target Compounds					Qvalue
2) Benzaldehyde	6.87	105	124002	22.8836 ug/L	99
4) Caprolactam	8.91	55	58452	20.9951 ug/L	99
6) 1,1'-Biphenyl	9.74	154	424267	25.6276 ug/L	99
8) Atrazine	11.55	200	100051	24.1908 ug/L	100

(#) = qualifier out of range (m) = manual integration
4M60605.D TCL.M Wed May 02 13:54:28 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60605.D Vial: 6
Acq On : 1 May 2012 15:47 Operator: CAA
Sample : WG396709-04 25PPM TCL STD Inst : HPMS4
Misc : 1,1 STD51428 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 13:30 2012 Quant Results File: TCL.RES

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Wed May 02 13:31:17 2012
Response via : Initial Calibration



4M60605.D TCL.M Wed May 02 13:54:28 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60606.D Vial: 7
Acq On : 1 May 2012 16:22 Operator: CAA
Sample : WG396709-05 80PPM TCL STD Inst : HPMS4
Misc : 1,1 STD51428 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 02 13:31:06 2012 Quant Results File: TCL.RES

Quant Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Wed May 02 13:31:01 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	195973	40.00 ug/mL	0.00
3) Naphthalene-d8	8.57	136	750611	40.00 ug/mL	0.00
5) Acenaphthene-d10	10.38	164	425817	40.00 ug/mL	0.00
7) Phenanthrene-d10	11.99	188	761381	40.00 ug/mL	0.00

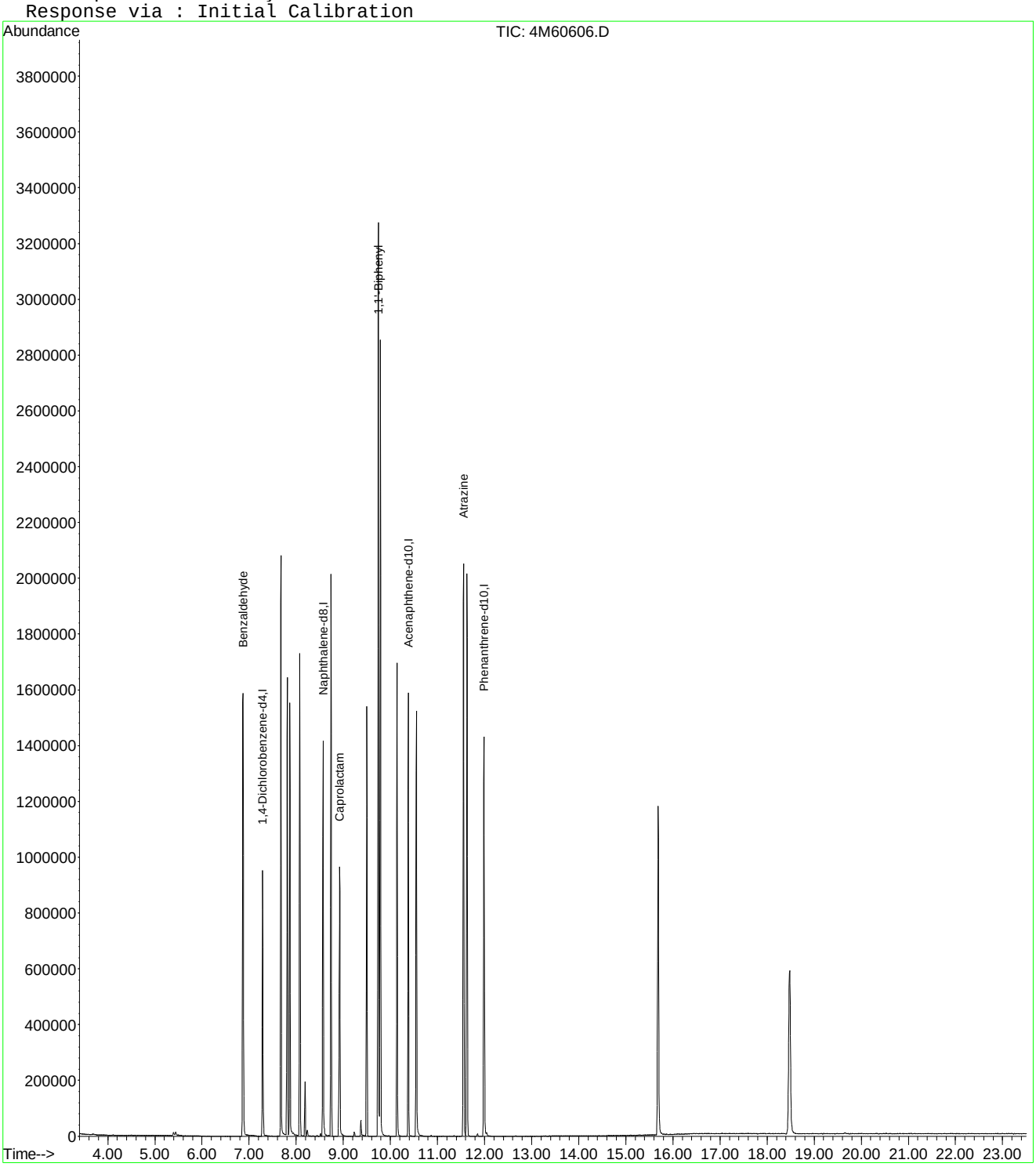
Target Compounds					Qvalue
2) Benzaldehyde	6.87	105	417733	76.8196 ug/L	98
4) Caprolactam	8.92	55	207764	75.5069 ug/L	100
6) 1,1'-Biphenyl	9.75	154	1307719	74.3741 ug/L	99
8) Atrazine	11.56	200	333290	77.7524 ug/L	100

(#) = qualifier out of range (m) = manual integration
4M60606.D TCL.M Wed May 02 13:54:28 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60606.D Vial: 7
Acq On : 1 May 2012 16:22 Operator: CAA
Sample : WG396709-05 80PPM TCL STD Inst : HPMS4
Misc : 1,1 STD51428 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 13:31 2012 Quant Results File: TCL.RES

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Wed May 02 13:31:17 2012
Response via : Initial Calibration



4M60606.D TCL.M Wed May 02 13:54:28 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60607.D Vial: 8
Acq On : 1 May 2012 16:57 Operator: CAA
Sample : WG396709-06 100PPM TCL STD Inst : HPMS4
Misc : 1,1 STD51428 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 02 13:31:13 2012 Quant Results File: TCL.RES

Quant Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Wed May 02 13:31:09 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	191003	40.00 ug/mL	0.00
3) Naphthalene-d8	8.57	136	734165	40.00 ug/mL	0.00
5) Acenaphthene-d10	10.38	164	416593	40.00 ug/mL	0.00
7) Phenanthrene-d10	11.99	188	754784	40.00 ug/mL	0.00

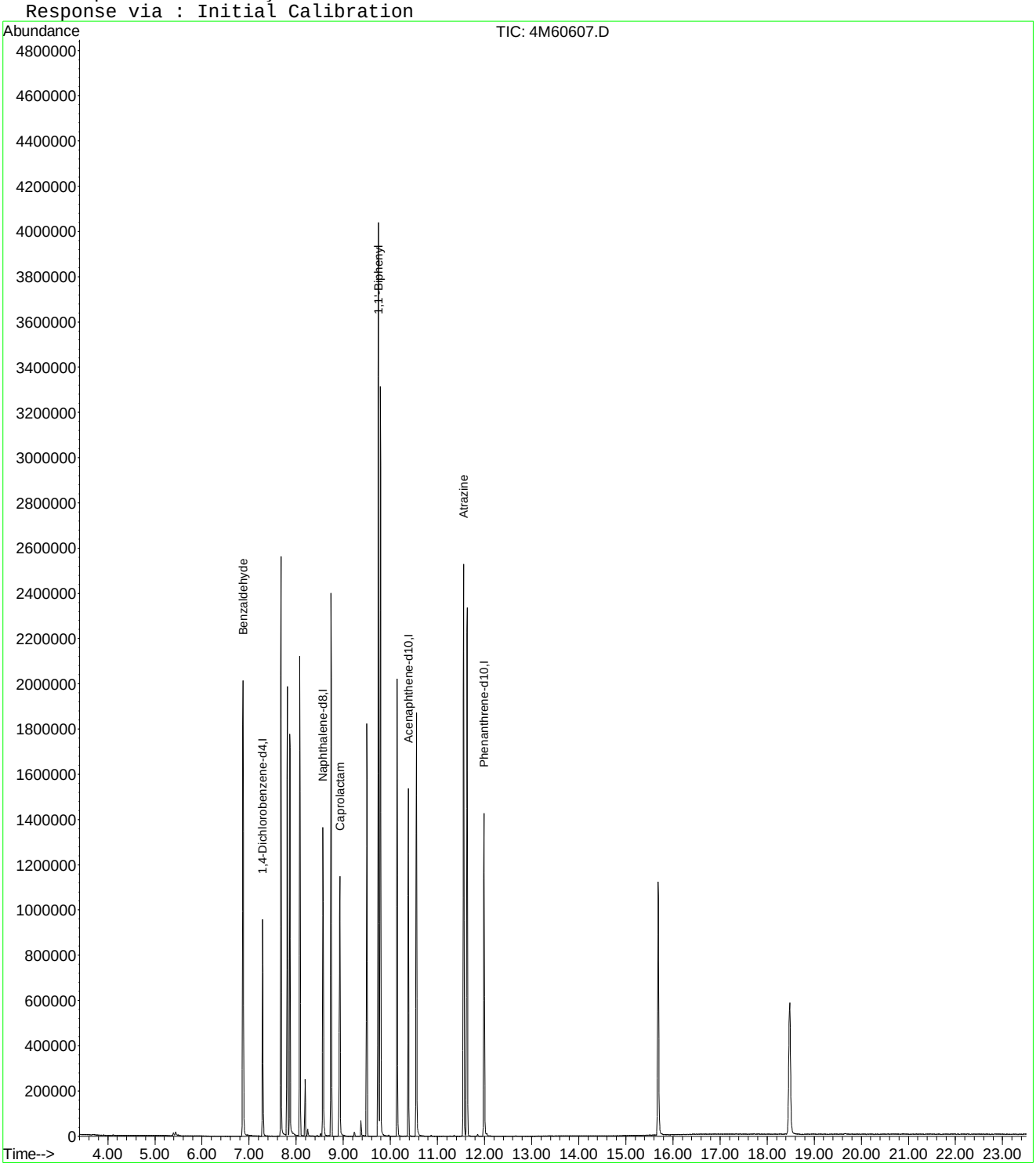
Target Compounds					Qvalue
2) Benzaldehyde	6.87	105	505674	97.6192 ug/L	100
4) Caprolactam	8.93	55	256887	101.2638 ug/L	100
6) 1,1'-Biphenyl	9.75	154	1556681	90.9597 ug/L	99
8) Atrazine	11.56	200	400523	95.1187 ug/L	99

(#) = qualifier out of range (m) = manual integration
4M60607.D TCL.M Wed May 02 13:54:29 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60607.D Vial: 8
Acq On : 1 May 2012 16:57 Operator: CAA
Sample : WG396709-06 100PPM TCL STD Inst : HPMS4
Misc : 1,1 STD51428 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 13:31 2012 Quant Results File: TCL.RES

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Wed May 02 13:31:17 2012
Response via : Initial Calibration



4M60607.D TCL.M Wed May 02 13:54:29 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60608.D Vial: 9
Acq On : 1 May 2012 17:31 Operator: CAA
Sample : WG396709-07 50PPM TCL Alt Src STD Inst : HPMS4
Misc : 1,1 STD51166 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 02 13:31:31 2012 Quant Results File: TCL.RES

Quant Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Wed May 02 13:31:17 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	209920	40.00 ug/mL	0.00
3) Naphthalene-d8	8.57	136	790964	40.00 ug/mL	0.00
5) Acenaphthene-d10	10.38	164	444492	40.00 ug/mL	0.00
7) Phenanthrene-d10	11.99	188	786510	40.00 ug/mL	0.00

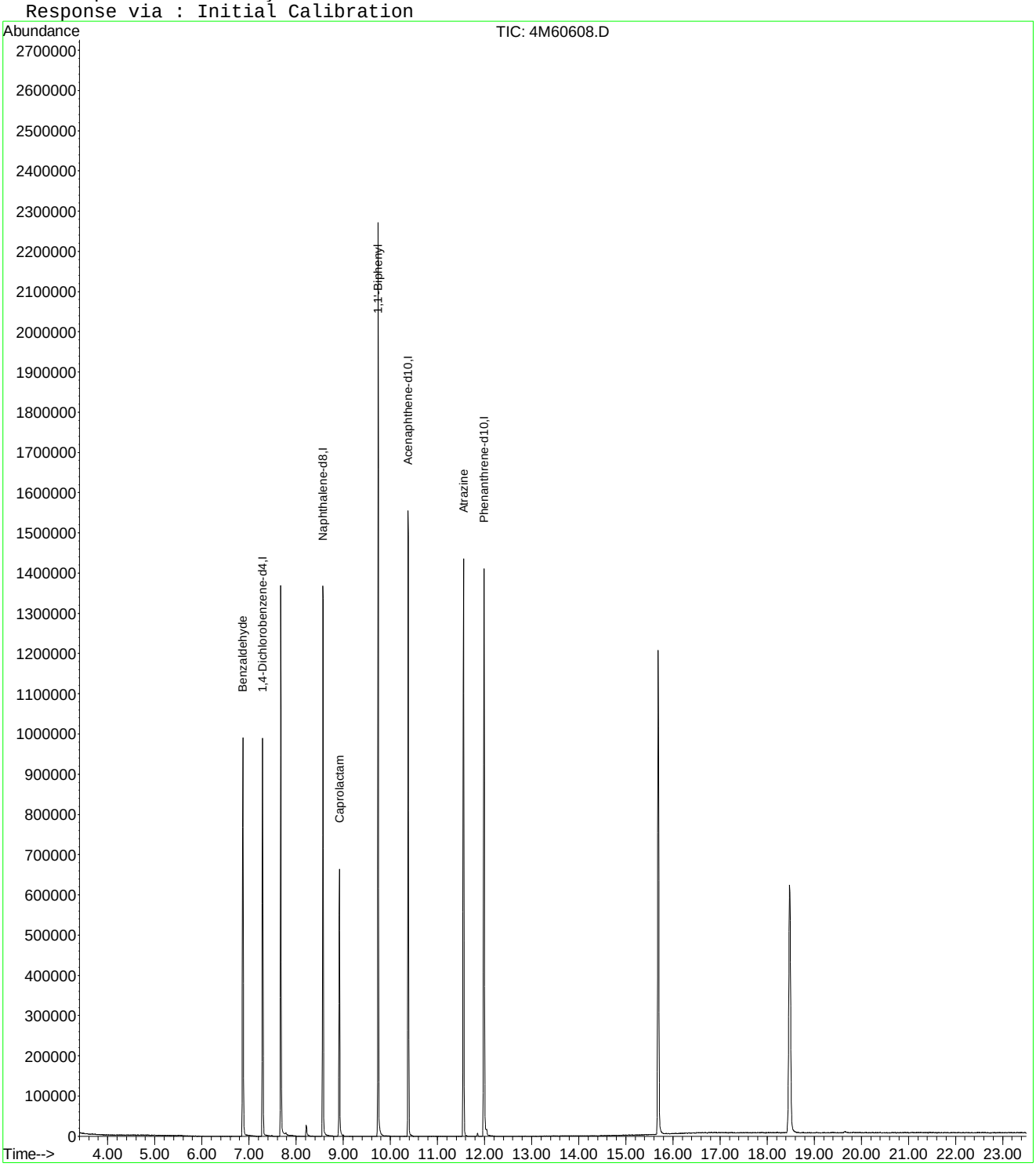
Target Compounds					Qvalue
2) Benzaldehyde	6.87	105	244497	43.7269 ug/L	99
4) Caprolactam	8.92	55	129633	50.1859 ug/L	99
6) 1,1'-Biphenyl	9.74	154	864997	47.4149 ug/L	100
8) Atrazine	11.55	200	219418	50.4008 ug/L	100

(#) = qualifier out of range (m) = manual integration
4M60608.D TCL.M Wed May 02 13:54:37 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60608.D Vial: 9
Acq On : 1 May 2012 17:31 Operator: CAA
Sample : WG396709-07 50PPM TCL Alt Src STD Inst : HPMS4
Misc : 1,1 STD51166 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 13:31 2012 Quant Results File: TCL.RES

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Wed May 02 13:31:17 2012
Response via : Initial Calibration



4M60608.D TCL.M Wed May 02 13:54:37 2012 Page 2

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051212\4M60817.D Vial: 2
Acq On : 12 May 2012 11:22 Operator: CAA
Sample : WG397824-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 12 11:49:23 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Fri May 11 08:14:43 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.23	152	379992	40.00 ug/ml	0.00
30) Naphthalene-d8	8.51	136	1412784	40.00 ug/ml	0.00
54) Acenaphthene-d10	10.32	164	798531	40.00 ug/ml	0.00
87) Phenanthrene-d10	11.92	188	1443768	40.00 ug/ml	0.00
113) Chrysene-d12	15.60	240	1334202	40.00 ug/ml	0.00
128) Perylene-d12	18.33	264	1243573	40.00 ug/ml	0.00

System Monitoring Compounds					
8) 2-Fluorophenol	6.00	112	555748	48.2372 ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 48.24%		
12) Phenol-d5	6.84	99	668726	49.5943 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 49.59%		
31) Nitrobenzene-d5	7.79	82	619359	51.8330 ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 103.66%		
59) 2-Fluorobiphenyl	9.58	172	1335874	50.0988 ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 100.20%		
86) 2,4,6-Tribromophenol	11.14	330	191250	53.7078 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 53.71%		
117) p-Terphenyl-d14	13.95	244	1255295	51.0472 ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 102.10%		

Target Compounds					Qvalue
2) 1,4-Dioxane	4.22	88	215082	45.4150 ug/ml#	93
3) n-Nitrosodimethylamine	4.64	74	332264	47.3804 ug/ml	95
4) Pyridine	4.66	79	576188	46.3440 ug/ml	89
5) 2-Picoline	5.45	93	643585	47.5725 ug/ml	98
6) n-Nitrosomethylethylamine	5.56	88	277896	47.6196 ug/ml	92
7) Methyl Methanesulfonate	5.85	80	331000	49.9579 ug/ml	96
9) n-Nitrosodiethylamine	6.23	102	290633	46.4533 ug/ml	94
10) Ethyl Methanesulfonate	6.49	79	418765	48.2564 ug/ml	98
11) Aniline	6.93	93	988079m	49.5877 ug/ml	
13) Phenol	6.85	94	703723	48.8774 ug/ml	99
14) bis(2-Chloroethyl)ether	6.95	63	421298	46.7317 ug/ml	96
15) Pentachloroethane	6.96	167	245273	50.5079 ug/ml	97
16) 2-Chlorophenol	7.05	128	632231	49.0365 ug/ml	98
17) 1,3-Dichlorobenzene	7.20	146	691533	48.1884 ug/ml	99
18) 1,4-Dichlorobenzene	7.25	146	716308	48.9395 ug/ml	100
19) Benzyl Alcohol	7.34	108	404925	48.5056 ug/ml	96
20) 1,2-Dichlorobenzene	7.44	146	652795	48.0251 ug/ml	100
21) 2-Methylphenol	7.43	107	468291	47.1685 ug/ml	97
22) bis(2-Chloroisopropyl)ethe	7.48	45	734110	39.6628 ug/ml	92
23) 3-,4-Methylphenol	7.57	107	612726	47.4784 ug/ml	99
24) n-Nitrosopyrrolidine	7.61	100	290168	49.8022 ug/ml	92
25) n-Nitrosodipropylamine	7.62	70	402666	49.6016 ug/ml	95
26) Acetophenone	7.63	105	764448	47.8827 ug/ml	98
27) n-Nitrosomorpholine	7.63	56	328854	43.4218 ug/ml	93
28) o-Toluidine	7.67	106	956544	47.3927 ug/ml	99
29) Hexachloroethane	7.75	117	268639	49.5655 ug/ml	99
32) Nitrobenzene	7.81	77	612162	51.4014 ug/ml	98
33) n-Nitrosopiperidine	7.96	114	311881	48.9219 ug/ml	94
34) Isophorone	8.02	82	1080625	49.7112 ug/ml	100
35) 2-Nitrophenol	8.13	139	372198	53.0166 ug/ml	96
36) 2,4-Dimethylphenol	8.10	122	559250	46.3918 ug/ml	98
37) 0,0,0-Triethyl Phosphoroth	8.20	198	303821	50.4821 ug/ml	98
38) bis(2-Chloroethoxy)methane	8.20	93	846228	51.2235 ug/ml	99

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051212\4M60817.D Vial: 2
Acq On : 12 May 2012 11:22 Operator: CAA
Sample : WG397824-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 12 11:49:23 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Fri May 11 08:14:43 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39) Benzoic Acid	8.13	105	92948m	11.1877 ug/ml	
40) 2,4-Dichlorophenol	8.35	162	518862	51.4147 ug/ml	100
41) a,a-Dimethylphenethylamine	8.35	58	811053	47.5367 ug/ml	97
42) 1,2,4-Trichlorobenzene	8.45	180	594488	51.8791 ug/ml	99
43) Naphthalene	8.53	128	1833150	48.9942 ug/ml	97
44) 4-Chloroaniline	8.56	127	758246	55.0259 ug/ml	97
45) 2,6-Dichlorophenol	8.59	162	531803	51.0682 ug/ml	99
46) Hexachloropropene	8.65	213	362616	56.4618 ug/ml	99
47) Hexachlorobutadiene	8.68	225	308283	52.5492 ug/ml	100
48) n-Nitrosodi-n-Butylamine	8.88	84	503834	50.1456 ug/ml	94
49) p-Phenylenediamine	9.00	108	41408	47.6288 ug/ml	99
50) 4-Chloro-3-Methylphenol	9.00	107	514466	50.2371 ug/ml	98
51) Safrole	9.09	162	493322	50.6507 ug/ml	99
52) 2-Methylnaphthalene	9.22	142	1203293	49.5017 ug/ml	99
53) 1-Methylnaphthalene	9.34	142	1137074	49.4767 ug/ml	99
55) 1,2,4,5-Tetrachlorobenzene	9.43	216	541257	51.7239 ug/ml	100
56) Hexachlorocyclopentadiene	9.44	237	275977	50.9878 ug/ml	99
57) 2,4,6-Trichlorophenol	9.51	196	381818	52.0715 ug/ml	99
58) 2,4,5-Trichlorophenol	9.56	196	392581	52.0108 ug/ml	100
60) Isosafrole	9.62	162	507901	50.3323 ug/ml	100
61) 2-Chloronaphthalene	9.73	162	1156497	51.2892 ug/ml	99
62) 1-Chloronaphthalene	9.77	162	1077410	50.4620 ug/ml	99
63) 2-Nitroaniline	9.83	65	327994	50.7473 ug/ml	99
64) 1,4-Naphthoquinone	9.89	158	427631	48.0252 ug/ml	98
65) Dimethylphthalate	9.99	163	1275112	50.4707 ug/ml	100
66) 1,3-Dinitrobenzene	10.05	168	258644	53.3884 ug/ml	98
67) 2,6-Dinitrotoluene	10.09	165	328321	52.0228 ug/ml	99
68) Acenaphthylene	10.17	152	1791733	49.4895 ug/ml	100
69) 3-Nitroaniline	10.24	138	219101	47.0666 ug/ml	99
70) 2,4-Dinitrophenol	10.34	184	146582	46.9428 ug/ml	86
71) Acenaphthene	10.36	154	1158185	49.1146 ug/ml	100
72) 4-Nitrophenol	10.35	65	226740	48.7525 ug/ml	95
73) 2,4-Dinitrotoluene	10.49	165	420938	52.4193 ug/ml	97
74) Pentachlorobenzene	10.53	250	492718	52.2950 ug/ml	99
75) Dibenzofuran	10.51	168	1571815	49.7801 ug/ml	99
76) 2,3,4,6-Tetrachlorophenol	10.61	232	279476	48.0111 ug/ml	98
77) 1-Naphthylamine	10.59	143	130968	19.2862 ug/ml	97
78) 2-Naphthylamine	10.66	143	51181	12.3819 ug/ml#	75
79) Diethylphthalate	10.70	149	1282150	50.9568 ug/ml	100
80) Thionazin	10.79	107	208975	49.9144 ug/ml	94
81) Fluorene	10.87	166	1332546	49.6553 ug/ml	100
82) 4-Chlorophenyl Phenyl Ethe	10.82	204	645654	51.2021 ug/ml	99
83) 4-Nitroaniline	10.88	138	300782	52.1980 ug/ml	99
84) 5-Nitro-o-Toluidine	10.87	152	318955	50.3425 ug/ml	99
85) 1,2-Diphenylhydrazine	10.99	77	1241940	50.7515 ug/ml	99
88) 4,6-Dinitro-2-Methylphenol	10.92	198	227714	50.6652 ug/ml	92
89) n-Nitrosodiphenylamine	10.94	169	1163164	49.7919 ug/ml	99
90) Sulfotepp	11.14	322	223065	53.4466 ug/ml	99
91) Sym-Trinitrobenzene	11.23	75	320717	56.1573 ug/ml	97
92) Diallate	11.26	86	479895	50.3733 ug/ml	91
93) Phenacetin	11.25	108	633582	51.7696 ug/ml	99
94) Phorate	11.28	75	769905	50.6559 ug/ml#	98
95) 4-Bromophenyl Phenyl Ether	11.34	248	374163	51.2228 ug/ml	99
96) Hexachlorobenzene	11.56	284	419691	52.5600 ug/ml	99

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051212\4M60817.D Vial: 2
Acq On : 12 May 2012 11:22 Operator: CAA
Sample : WG397824-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 12 11:49:23 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Fri May 11 08:14:43 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

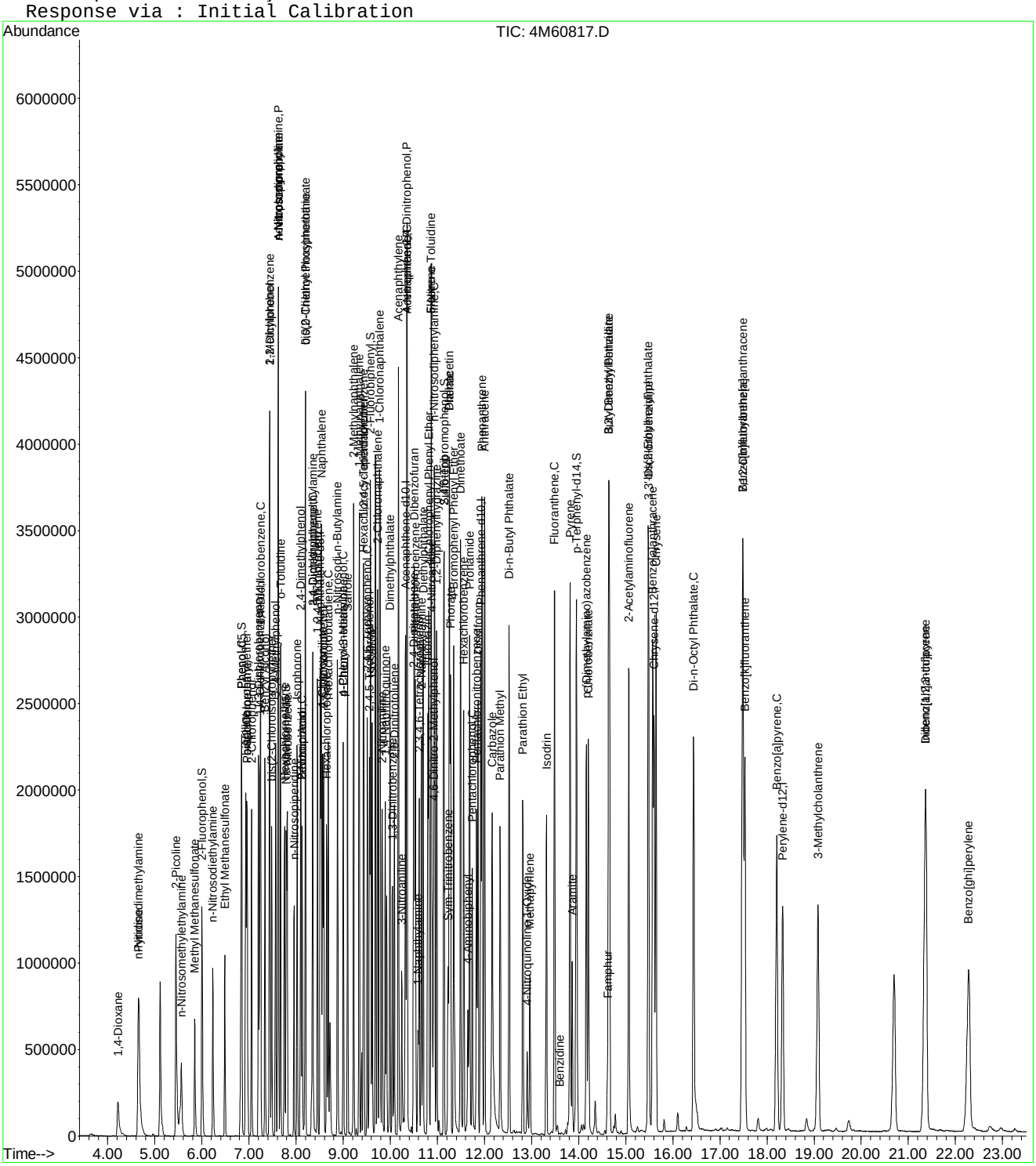
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
97)	Dimethoate	11.49	87	437047	53.6795 ug/ml	98
98)	4-Aminobiphenyl	11.65	169	511029	58.4551 ug/ml	99
99)	Pentachlorophenol	11.74	266	237796	47.0946 ug/ml	99
100)	Pronamide	11.69	173	592669	50.4965 ug/ml	99
101)	Pentachloronitrobenzene	11.83	237	153211	55.3627 ug/ml	97
102)	Disulfoton	11.86	88	657063	50.2992 ug/ml	99
103)	Phenanthrene	11.95	178	1848204	48.2622 ug/ml	99
104)	Anthracene	12.00	178	1911460	48.6796 ug/ml	100
105)	Carbazole	12.16	167	1714980	49.8801 ug/ml	98
106)	Parathion Methyl	12.33	109	406561	50.8734 ug/ml	100
107)	Di-n-Butyl Phthalate	12.52	149	2148058	50.2867 ug/ml	99
108)	Parathion Ethyl	12.81	97	261632	53.7727 ug/ml	97
109)	4-Nitroquinoline 1-Oxide	12.91	190	76847	21.8802 ug/ml	93
110)	Methapyrilene	12.96	58	337328	40.1830 ug/ml	88
111)	Isodrin	13.32	193	198332	48.2174 ug/ml	99
112)	Fluoranthene	13.49	202	1980305	49.3484 ug/ml	99
114)	Benzidine	13.60	184	6067	3.2625 ug/ml	100
115)	Pyrene	13.82	202	2014432	50.4796 ug/ml	100
116)	Aramite	13.87	185	125542	55.5575 ug/ml	98
118)	p-(Dimethylamino)azobenzen	14.16	225	426079	51.7136 ug/ml	97
119)	Chlorobenzilate	14.21	251	580235	53.4294 ug/ml	99
120)	Famphur	14.61	218	42802	90.4739 ug/ml#	68
121)	Butyl Benzyl Phthalate	14.63	149	936083	51.5713 ug/ml	98
122)	3,3'-Dimethylbenzidine	14.65	212	415119	32.9207 ug/ml#	95
123)	2-Acetylaminofluorene	15.07	181	844119	54.3622 ug/ml	98
124)	bis(2-Ethylhexyl)phthalate	15.48	149	1279905	51.6721 ug/ml	99
125)	3,3'-Dichlorobenzidine	15.49	252	424455	57.3669 ug/ml	99
126)	Benzo[a]anthracene	15.57	228	1766595	49.9106 ug/ml	99
127)	Chrysene	15.64	228	1638495	49.3151 ug/ml	100
129)	Di-n-Octyl Phthalate	16.44	149	2160680	53.8016 ug/ml	97
130)	7,12-Dimethylbenz[a]anthra	17.49	256	865707	53.7549 ug/ml	99
131)	Benzo[b]fluoranthene	17.49	252	1966827	54.6936 ug/ml	98
132)	Benzo[k]fluoranthene	17.53	252	1662165	49.8637 ug/ml	97
133)	Benzo[a]pyrene	18.21	252	1699125	51.7887 ug/ml	98
134)	3-Methylcholanthrene	19.08	268	922876	51.8078 ug/ml	99
135)	Indeno[1,2,3-cd]pyrene	21.37	276	1992764	54.5377 ug/ml	97
136)	Dibenz[ah]anthracene	21.37	278	1682296	55.2049 ug/ml	98
137)	Benzo[ghi]perylene	22.28	276	1607558	53.1829 ug/ml	99

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051212\4M60817.D Vial: 2
Acq On : 12 May 2012 11:22 Operator: CAA
Sample : WG397824-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 13 11:44 2012 Quant Results File: MEGAMIX.RES

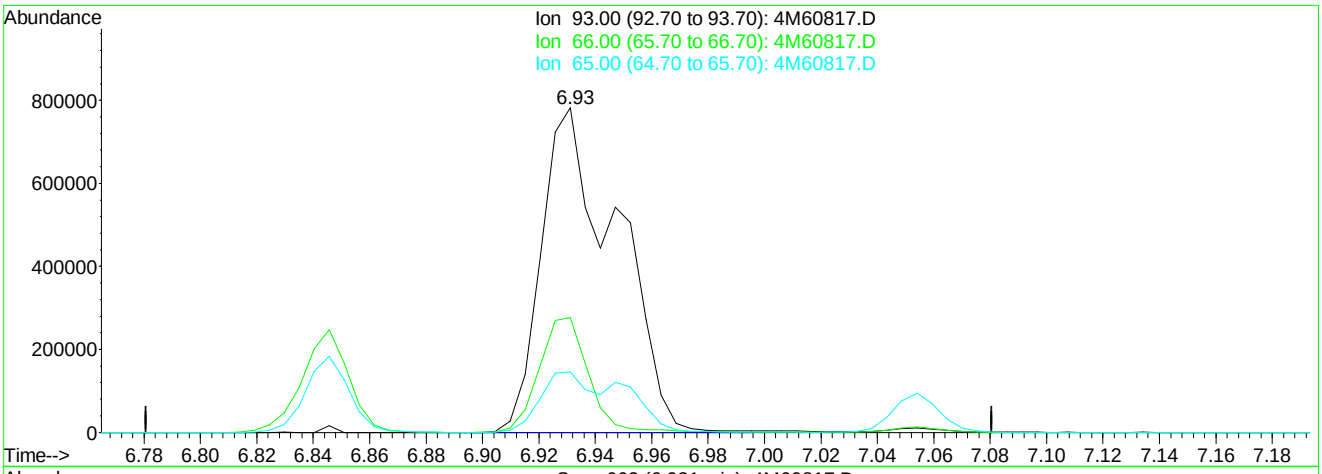
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Mon May 14 11:40:21 2012
Response via : Initial Calibration

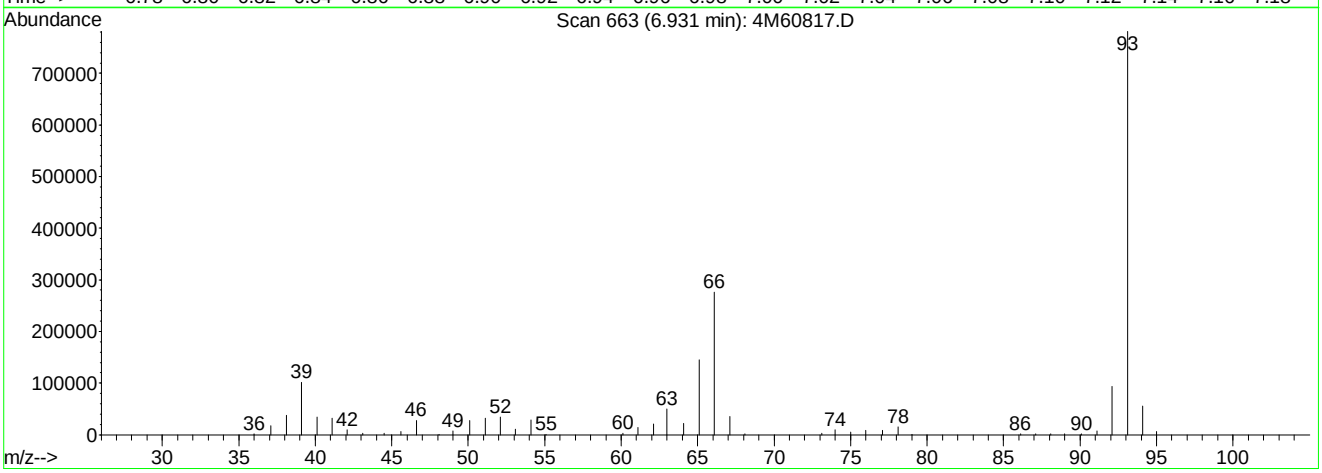


Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\051212\4M60817.D Vial: 2
Acq On : 12 May 2012 11:22 Operator: CAA
Sample : WG397824-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 12 11:49 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Fri May 11 08:14:43 2012
Response via : Multiple Level Calibration





TIC: 4M60817.D

(11) Aniline

6.93min 73.00ug/ml

response 1454568

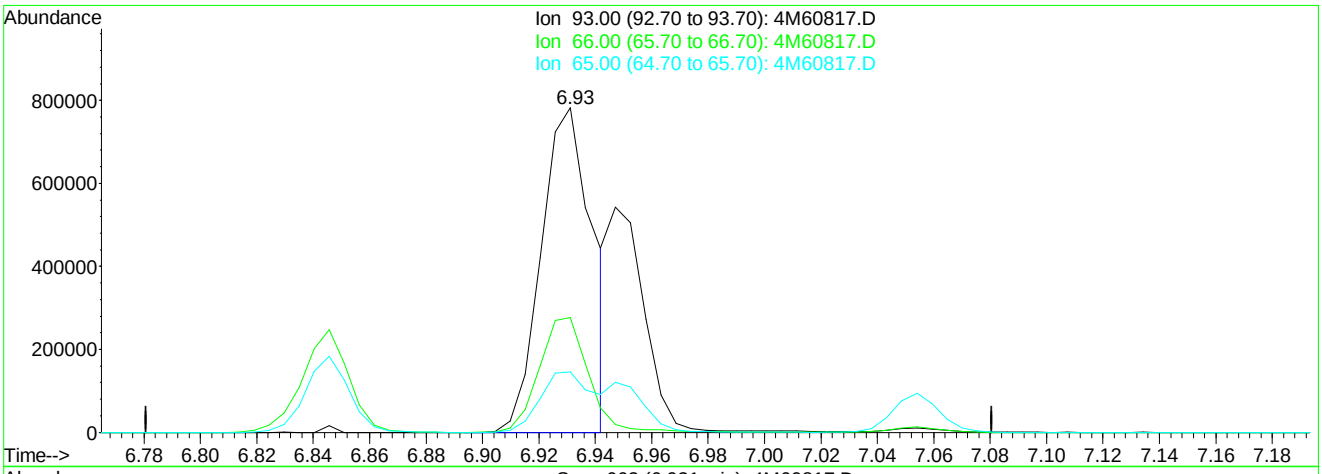
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.27
65.00	29.20	13.17#
0.00	0.00	0.00

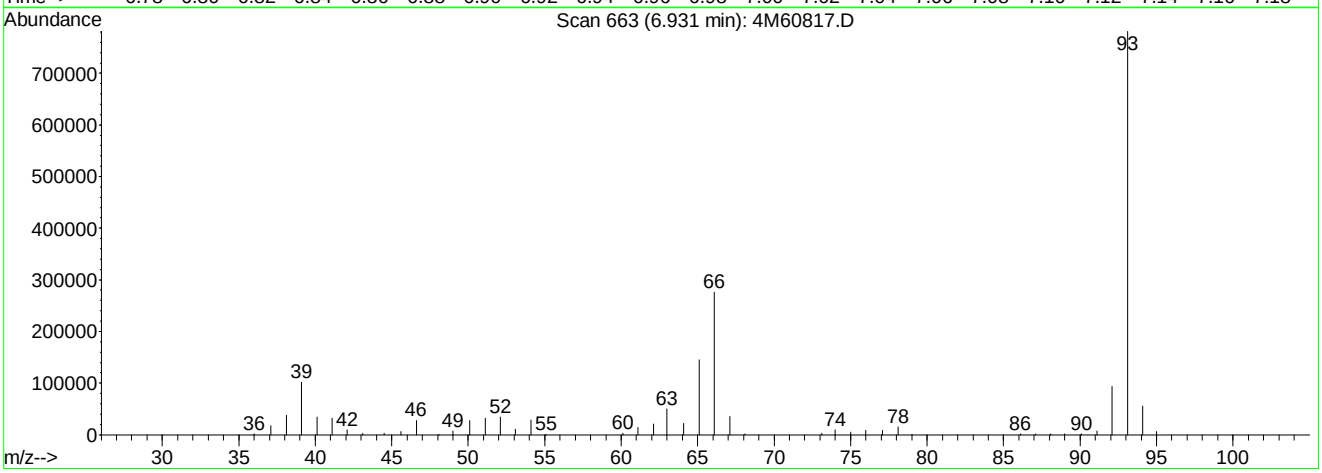
4M60817.D MEGAMIX.M Sun May 13 11:43:55 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\051212\4M60817.D Vial: 2
Acq On : 12 May 2012 11:22 Operator: CAA
Sample : WG397824-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 13 11:43 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Fri May 11 08:14:43 2012
Response via : Multiple Level Calibration





TIC: 4M60817.D

(11) Aniline

6.93min 49.59ug/ml mint

response 988079

Ion	Exp%	Act%
93.00	100	100
66.00	33.40	34.26
65.00	29.20	19.39
0.00	0.00	0.00

4M60817.D MEGAMIX.M Sun May 13 11:43:43 2012

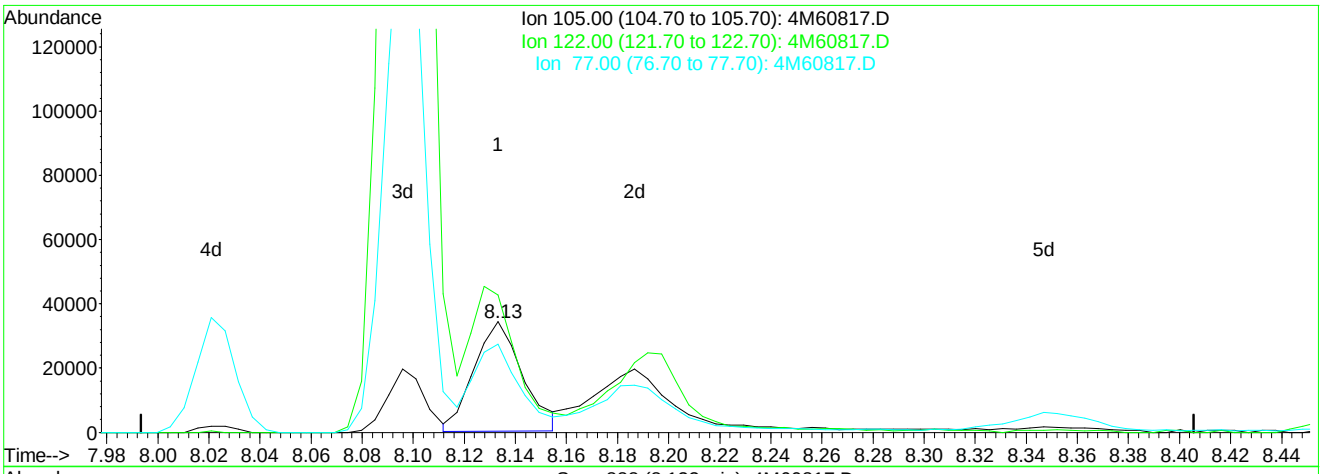
Analyst: 05/14/2012 13:56 Supervisor: 05/14/2012 15:22

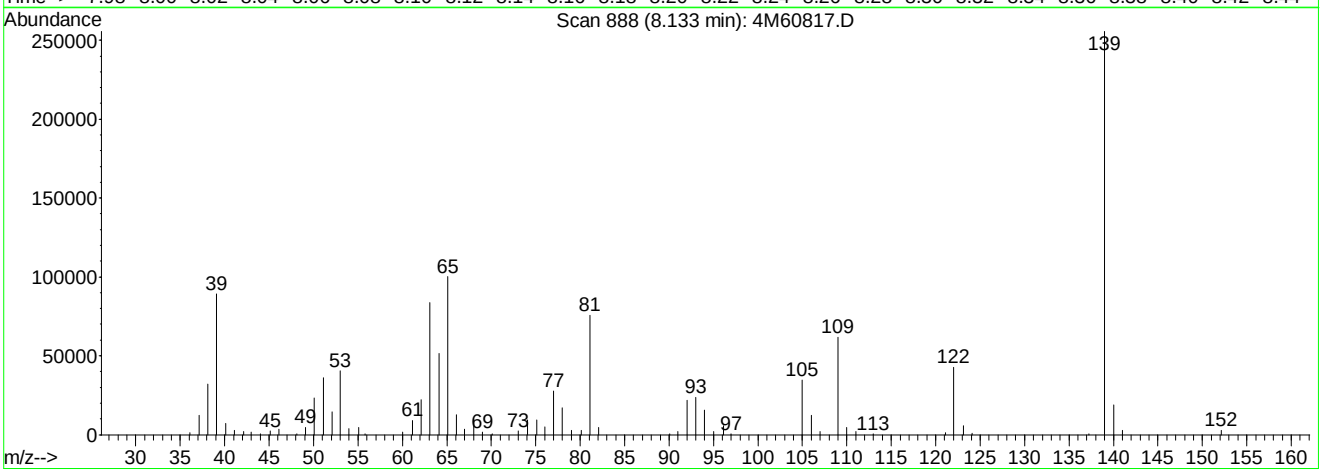
#3 - Improperly integrated isomers and/or coeluting compounds

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\051212\4M60817.D Vial: 2
Acq On : 12 May 2012 11:22 Operator: CAA
Sample : WG397824-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 13 11:43 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Fri May 11 08:14:43 2012
Response via : Single Level Calibration





TIC: 4M60817.D

(39) Benzoic Acid

8.13min 5.40ug/ml

response 44882

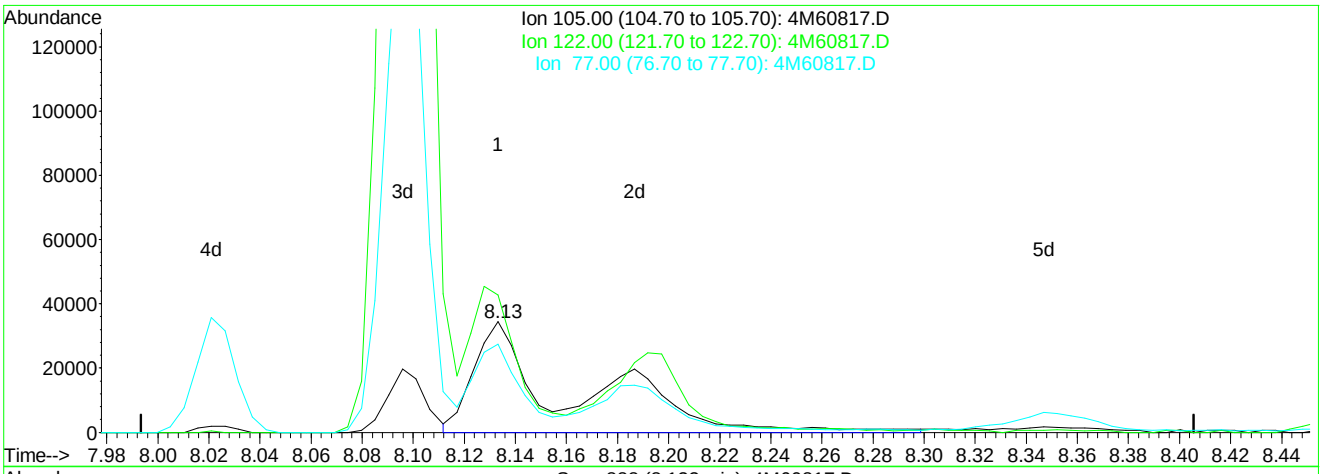
Ion	Exp%	Act%
105.00	100	100
122.00	87.10	126.40#
77.00	70.40	76.39
0.00	0.00	0.00

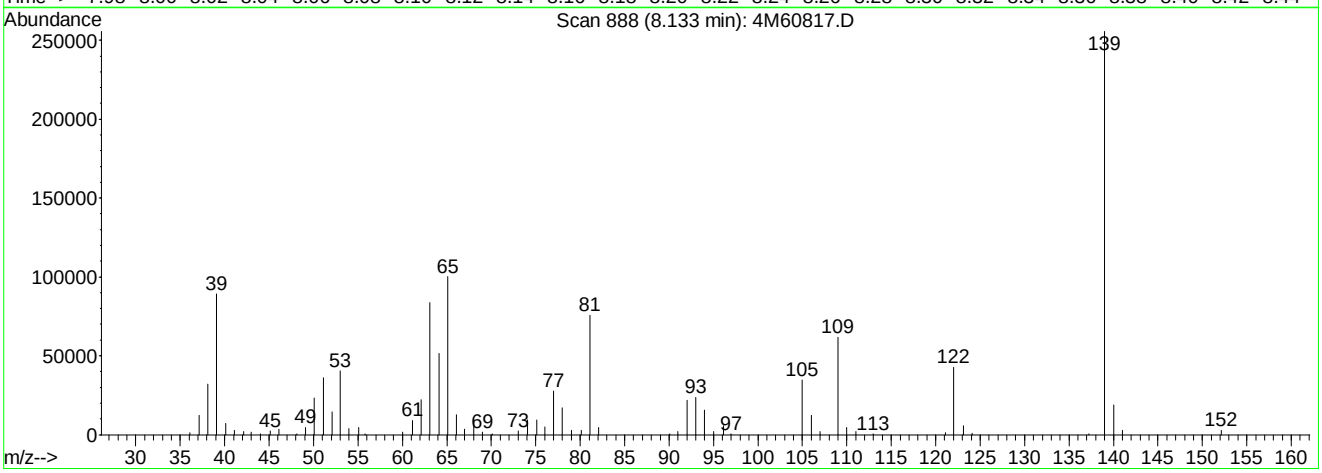
4M60817.D MEGAMIX.M Sun May 13 11:44:08 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\051212\4M60817.D Vial: 2
Acq On : 12 May 2012 11:22 Operator: CAA
Sample : WG397824-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 13 11:44 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Fri May 11 08:14:43 2012
Response via : Single Level Calibration





TIC: 4M60817.D

(39) Benzoic Acid

8.13min 11.19ug/ml mint

response 92948

Ion	Exp%	Act%
105.00	100	100
122.00	87.10	61.04
77.00	70.40	36.89#
0.00	0.00	0.00

4M60817.D MEGAMIX.M Sun May 13 11:44 2012

Analyst: 05/14/2012 13:56 Supervisor: 05/14/2012 15:22

#2 - Data system splits the peak incorrectly or integrates a false peak as a rider peak

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\051212\4M60818.D Vial: 3
Acq On : 12 May 2012 11:57 Operator: CAA
Sample : WG397825-01 50PPM TCL STD Inst : HPMS4
Misc : 1,1 STD51428 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 12 12:23:31 2012 Quant Results File: TCL.RES

Quant Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Fri May 11 09:00:11 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.23	152	309271	40.00 ug/mL	0.00
3) Naphthalene-d8	8.51	136	1134960	40.00 ug/mL	0.00
5) Acenaphthene-d10	10.32	164	640791	40.00 ug/mL	0.00
7) Phenanthrene-d10	11.92	188	1155753	40.00 ug/mL	0.00

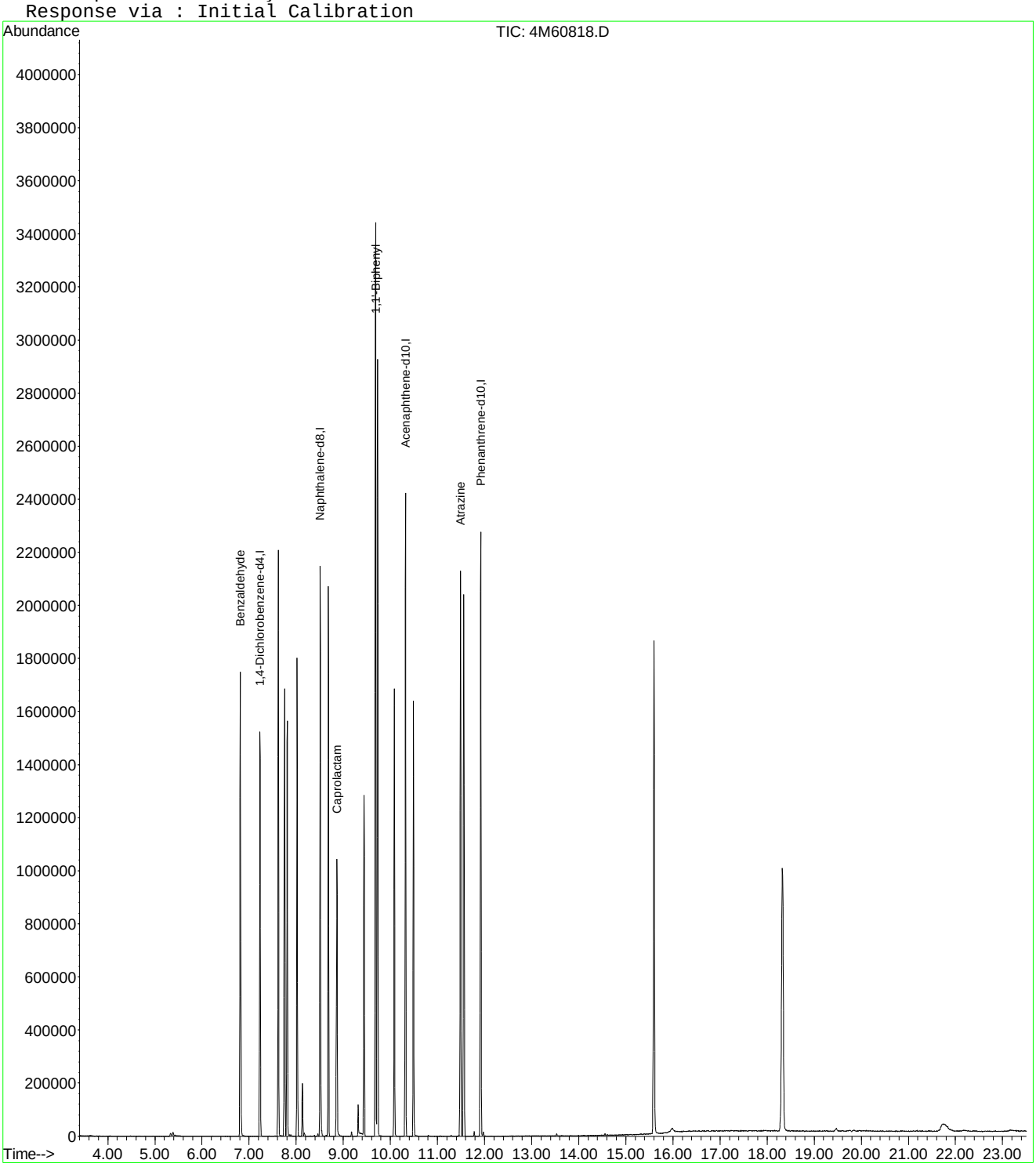
Target Compounds					Qvalue
2) Benzaldehyde	6.81	105	419864	50.9681 ug/L	99
4) Caprolactam	8.86	55	203636	54.9411 ug/L	99
6) 1,1'-Biphenyl	9.69	154	1301607	49.4912 ug/L	99
8) Atrazine	11.49	200	329914	51.5709 ug/L	99

(#) = qualifier out of range (m) = manual integration
4M60818.D TCL.M Mon May 14 11:53:22 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\051212\4M60818.D Vial: 3
Acq On : 12 May 2012 11:57 Operator: CAA
Sample : WG397825-01 50PPM TCL STD Inst : HPMS4
Misc : 1,1 STD51428 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 12 12:23 2012 Quant Results File: TCL.RES

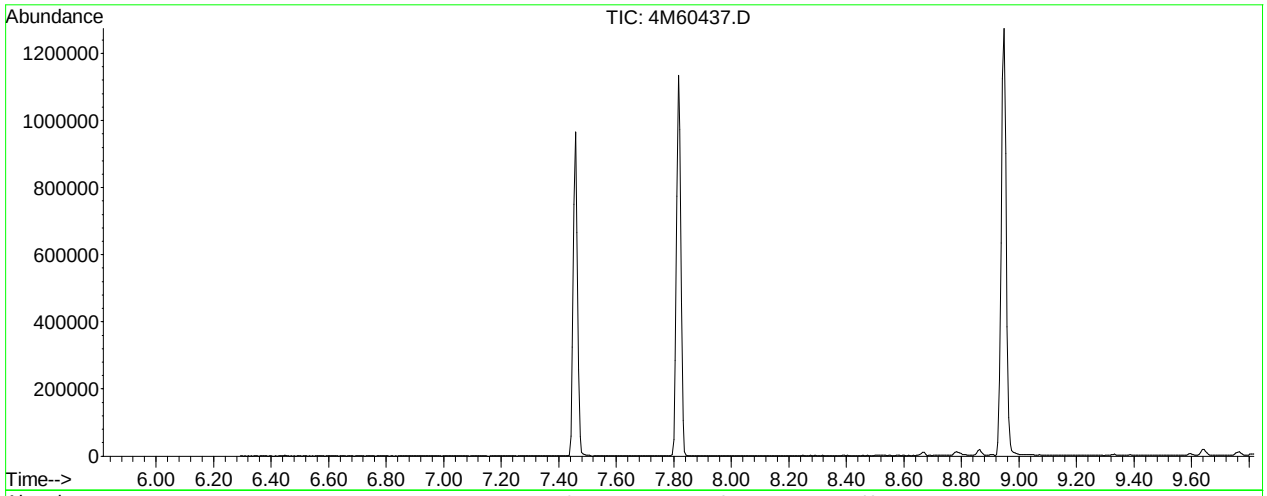
Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Mon May 14 11:14:52 2012
Response via : Initial Calibration

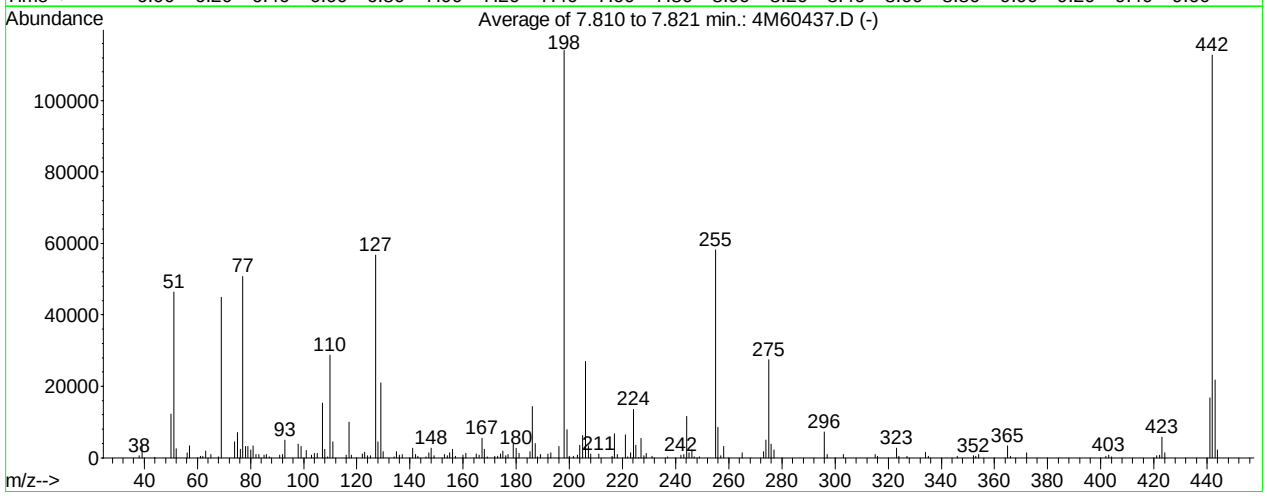


4M60818.D TCL.M Mon May 14 11:53:22 2012 Page 2

2.2.1.5 Raw QC Data

```
Data File : I:\MSDCHEM\1\DATA\041912\4M60437.D          Vial: 1
Acq On    : 19 Apr 2012   8:26                       Operator: CAA
Sample    : WG395394-01 50PPM DFTPP STD              Inst    : HPMS4
Misc      : 1,1 STD50659                             Multiplr: 1.00
MS Integration Params: RTEINT.P
Method    : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title     : DFTPP
```





AutoFind: Scans 285, 286, 287; Background Corrected with Scan 279

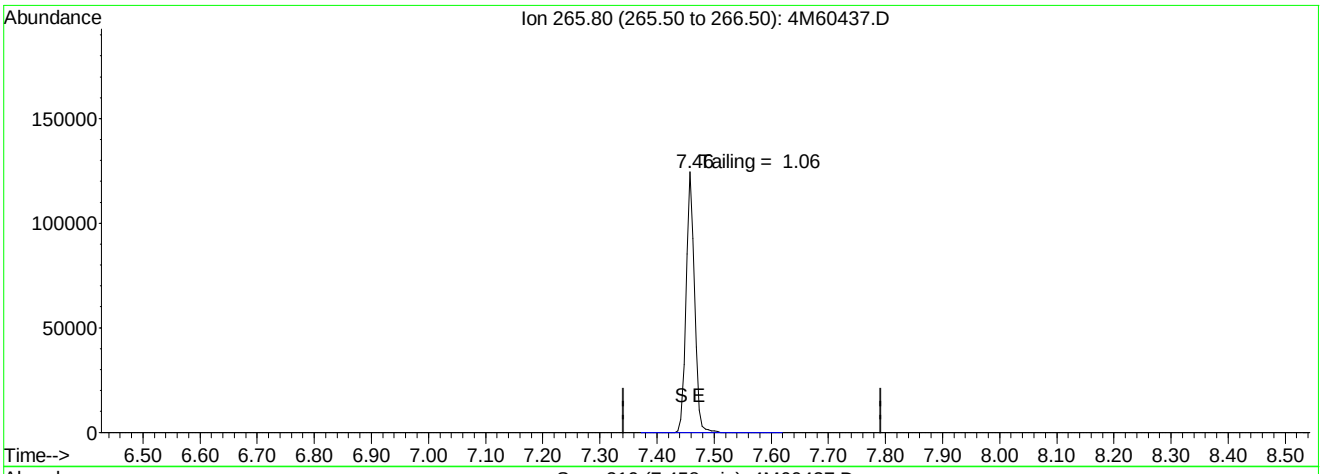
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	40.7	46389	PASS
68	69	0.00	2	0.7	296	PASS
69	198	0.00	100	39.4	44901	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	49.8	56768	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	114077	PASS
199	198	5	9	6.8	7794	PASS
275	198	10	30	24.0	27400	PASS
365	198	1	100	2.9	3319	PASS
441	443	0.01	100	76.9	16803	PASS
442	198	40	100	98.8	112693	PASS
443	442	17	23	19.4	21851	PASS

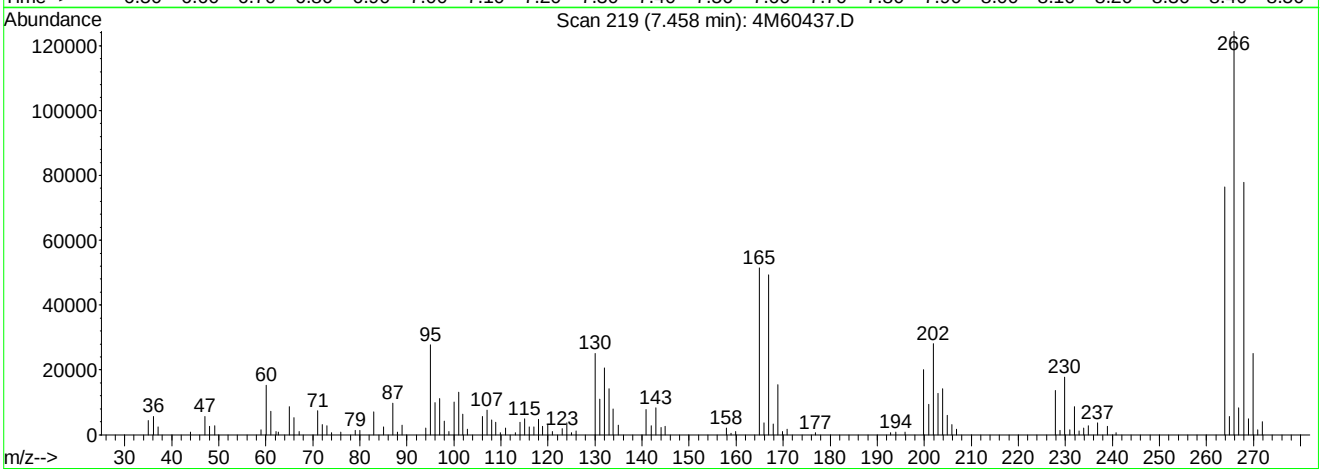
4M60437.D DFTPP.M Fri Apr 20 08:17:55 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60437.D Vial: 1
Acq On : 19 Apr 2012 8:26 Operator: CAA
Sample : WG395394-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 20 8:18 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Fri Apr 20 08:18:06 2012
Response via : Single Level Calibration





TIC: 4M60437.D

(1) Pentachlorophenol

7.46min 0.00ug/ml

response 128509

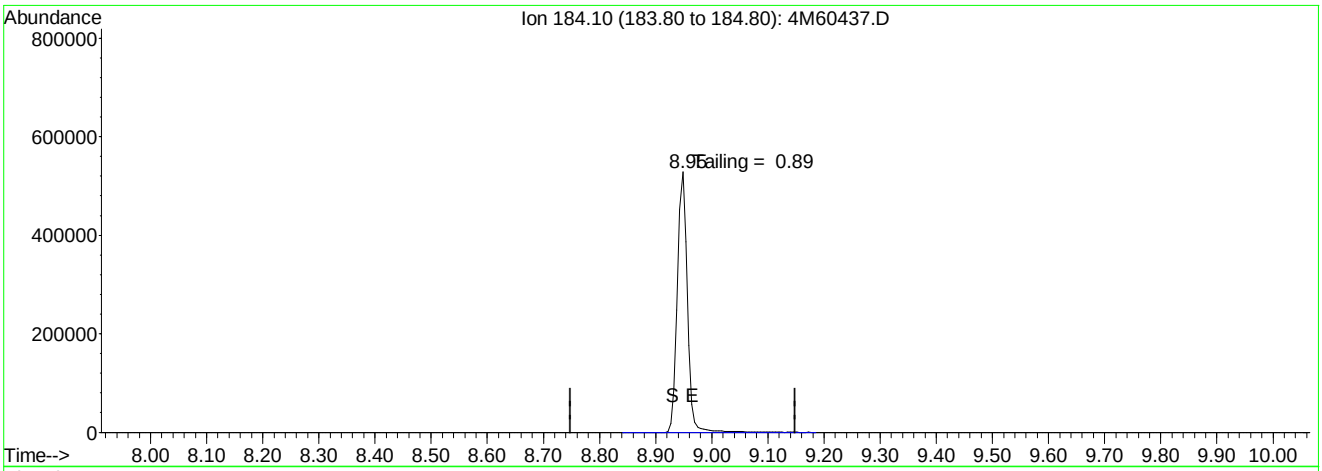
Ion	Exp%	Act%
265.80	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

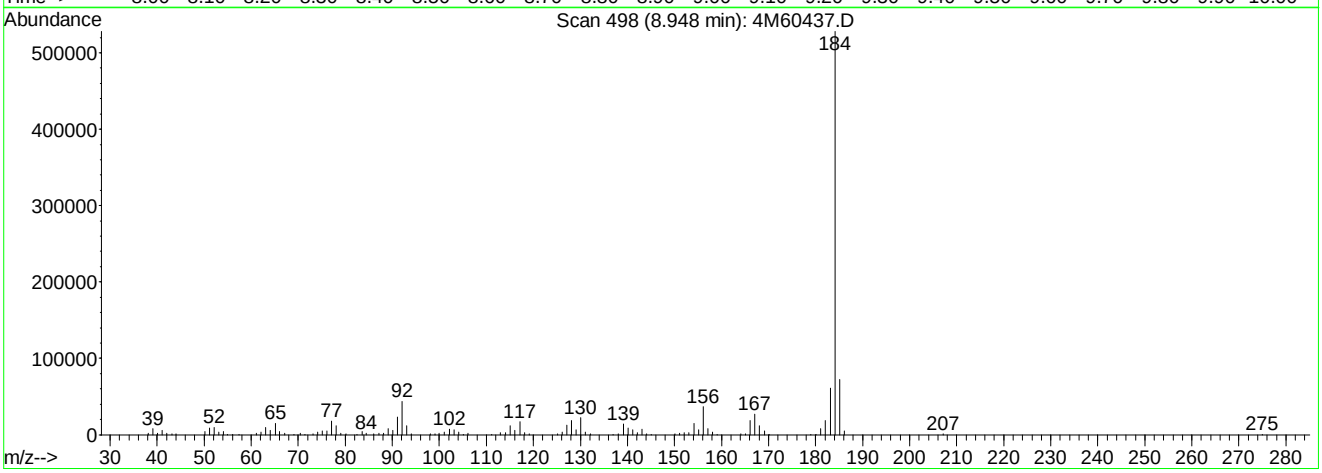
4M60437.D DFTPP.M Fri Apr 20 08:18:15 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60437.D Vial: 1
Acq On : 19 Apr 2012 8:26 Operator: CAA
Sample : WG395394-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 20 8:18 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Fri Apr 20 08:18:06 2012
Response via : Single Level Calibration





TIC: 4M60437.D

(2) Benzidine

8.95min 0.00ug/ml

response 651083

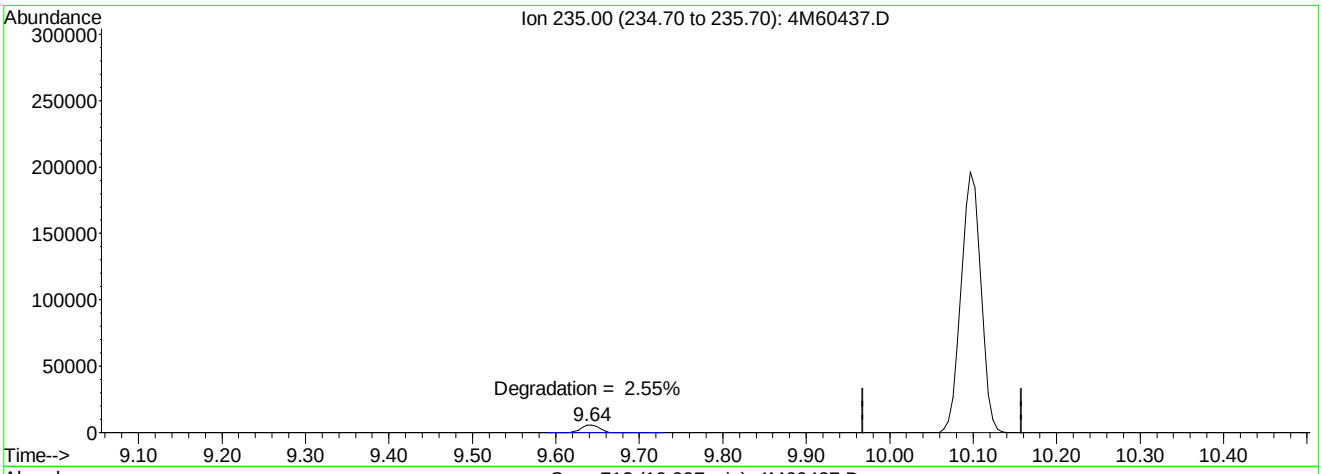
Ion	Exp%	Act%
184.10	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

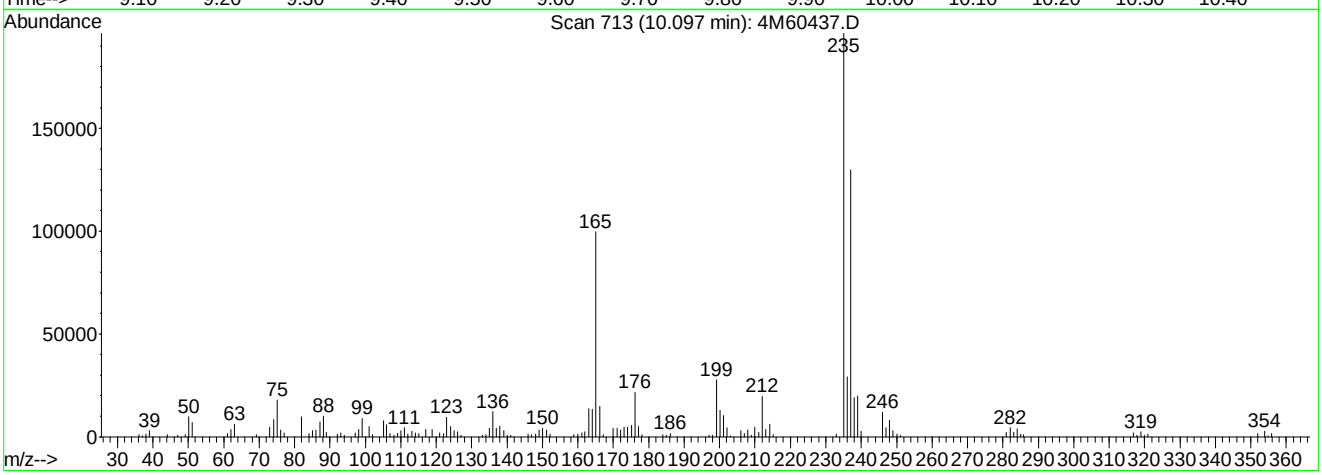
4M60437.D DFTPP.M Fri Apr 20 08:18:21 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60437.D Vial: 1
Acq On : 19 Apr 2012 8:26 Operator: CAA
Sample : WG395394-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 20 8:18 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Fri Apr 20 08:18:06 2012
Response via : Single Level Calibration





TIC: 4M60437.D

(3) DDT

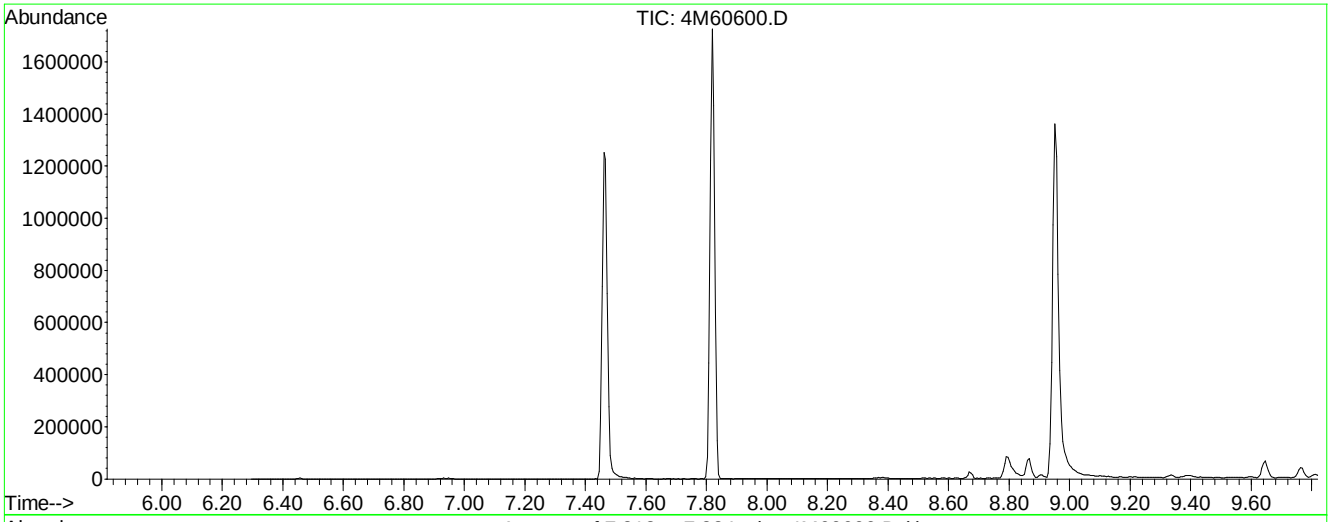
10.10min 0.00ug/ml

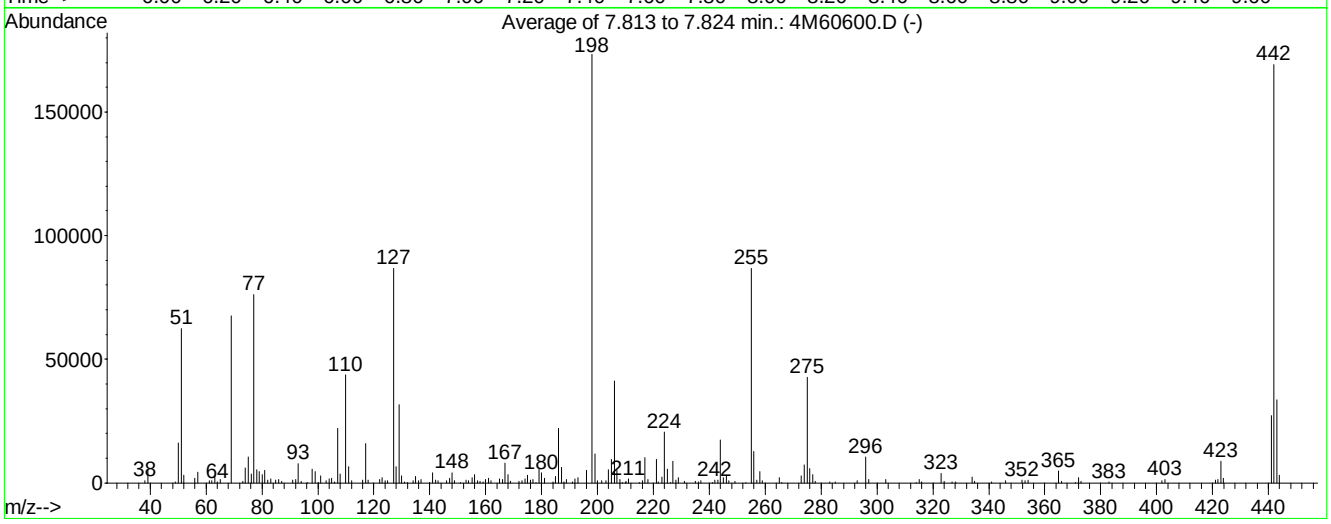
response 324289

Ion	Exp%	Act%
235.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

4M60437.D DFTPP.M Fri Apr 20 08:18:28 2012

```
Data File : I:\MSDCHEM\1\DATA\050112\4M60600.D          Vial: 1
Acq On    :  1 May 2012  13:11                       Operator: CAA
Sample    : WG396671-01 50PPM DFTPP STD              Inst    : HPMS4
Misc      : 1,1 STD50659                             Multiplr: 1.00
MS Integration Params: RTEINT.P
Method    : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title     : DFTPP
```





AutoFind: Scans 285, 286, 287; Background Corrected with Scan 279

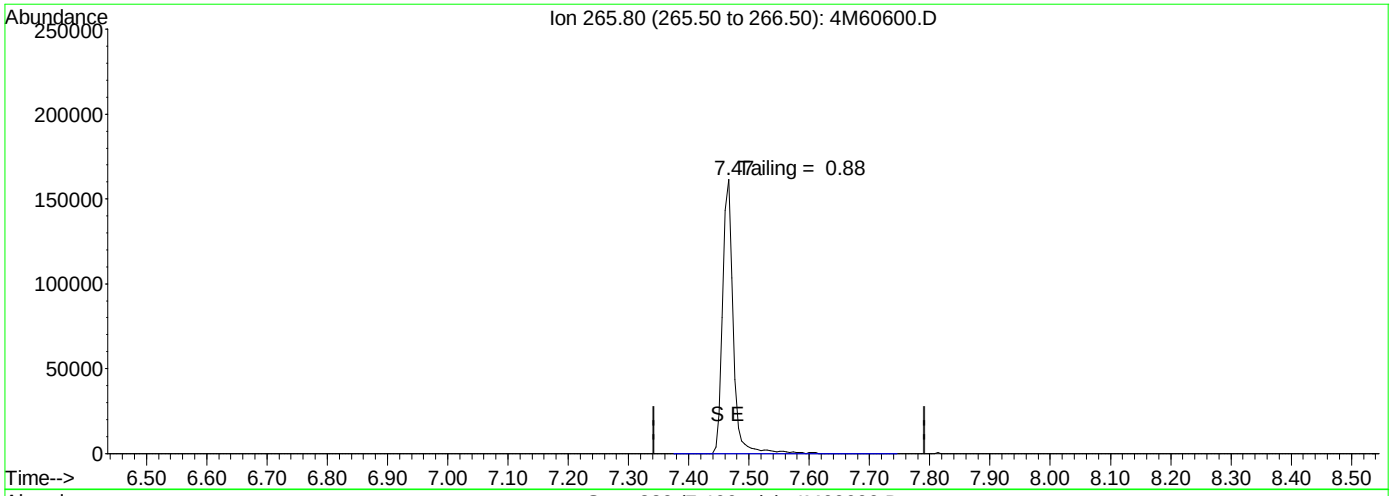
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	36.0	62456	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	39.0	67664	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	50.1	86805	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	173418	PASS
199	198	5	9	6.7	11620	PASS
275	198	10	30	24.6	42746	PASS
365	198	1	100	2.8	4791	PASS
441	443	0.01	100	80.8	27090	PASS
442	198	40	100	97.5	169160	PASS
443	442	17	23	19.8	33546	PASS

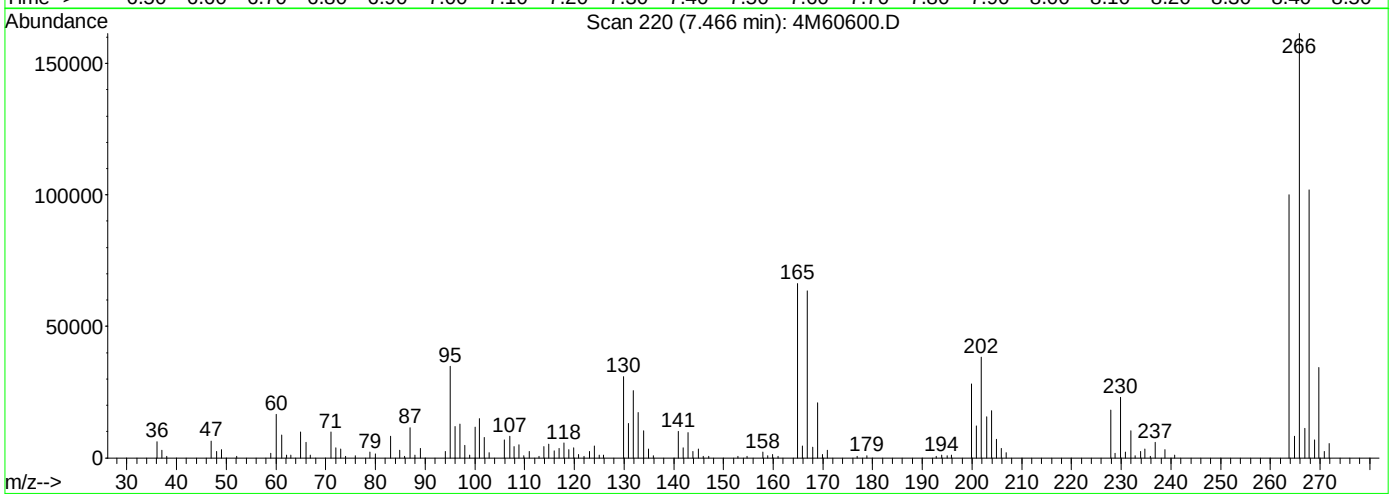
4M60600.D DFTPP.M Wed May 02 13:32:01 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\050112\4M60600.D Vial: 1
Acq On : 1 May 2012 13:11 Operator: CAA
Sample : WG396671-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 13:24 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Fri Apr 20 08:18:06 2012
Response via : Single Level Calibration





TIC: 4M60600.D

(1) Pentachlorophenol

7.47min 0.00ug/ml

response 195050

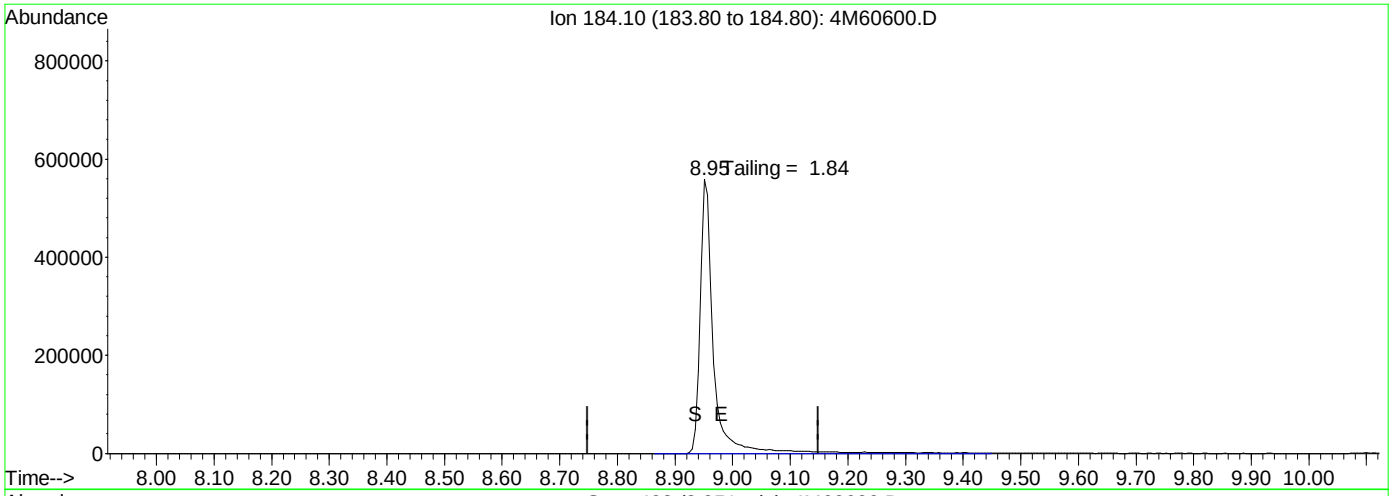
Ion	Exp%	Act%
265.80	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

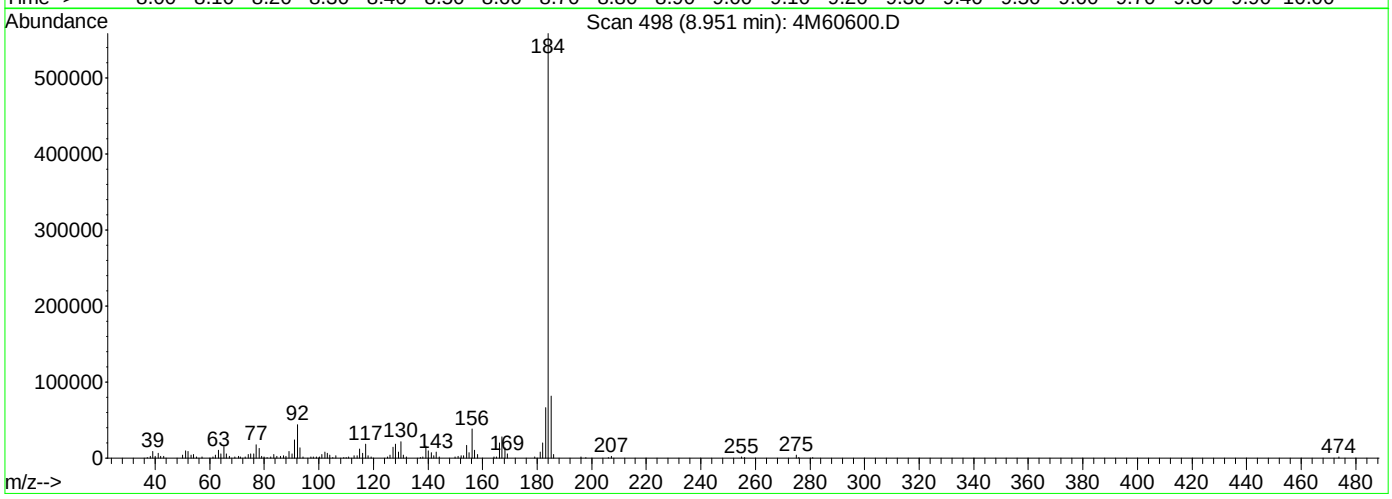
4M60600.D DFTPP.M Wed May 02 13:32:06 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\050112\4M60600.D Vial: 1
Acq On : 1 May 2012 13:11 Operator: CAA
Sample : WG396671-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 13:24 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Fri Apr 20 08:18:06 2012
Response via : Single Level Calibration





TIC: 4M60600.D

(2) Benzidine

8.95min 0.00ug/ml

response 874364

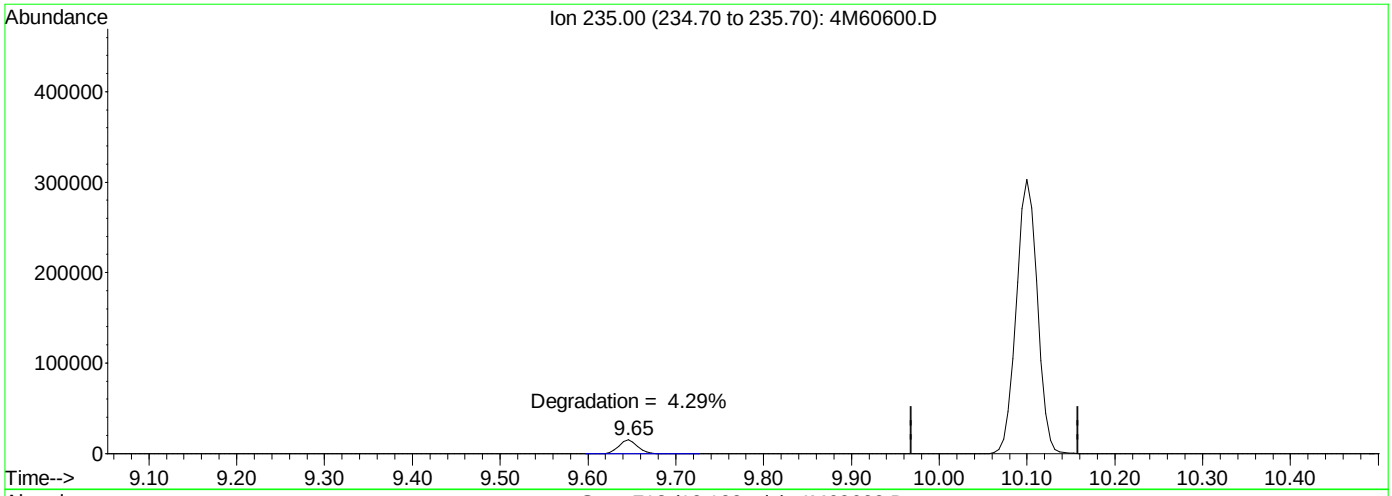
Ion	Exp%	Act%
184.10	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

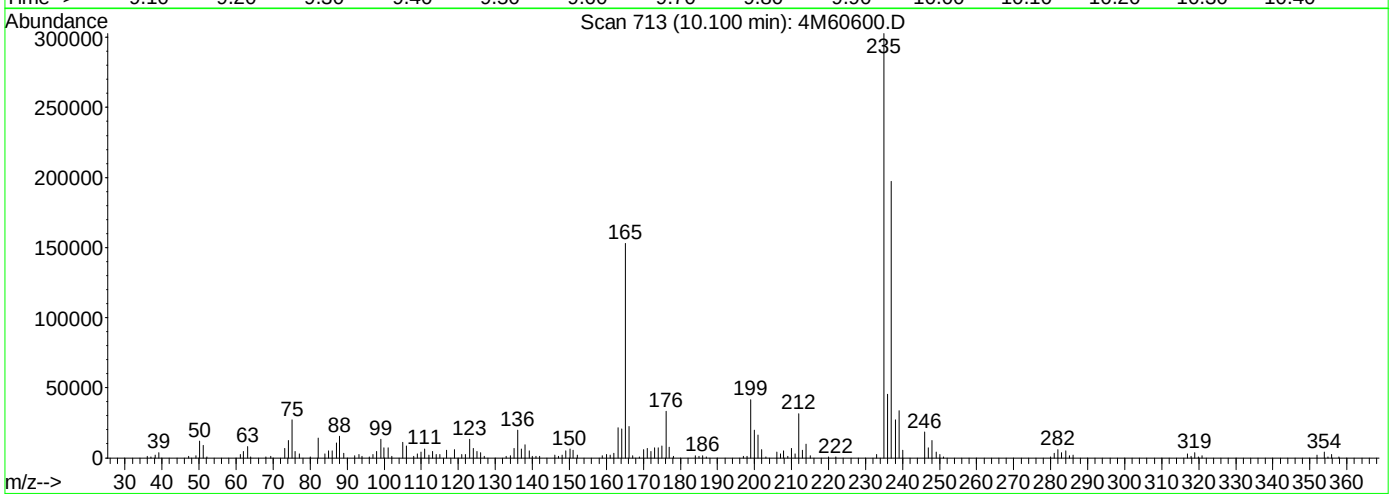
4M60600.D DFTPP.M Wed May 02 13:32:11 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\050112\4M60600.D Vial: 1
Acq On : 1 May 2012 13:11 Operator: CAA
Sample : WG396671-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 1 13:24 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Fri Apr 20 08:18:06 2012
Response via : Single Level Calibration





TIC: 4M60600.D

(3) DDT

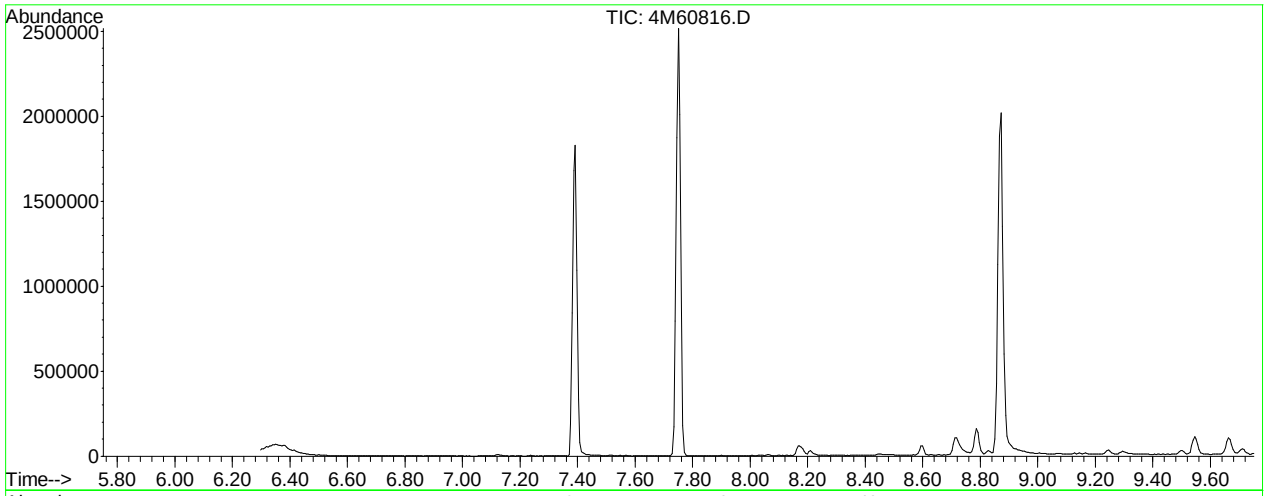
10.10min 0.00ug/ml

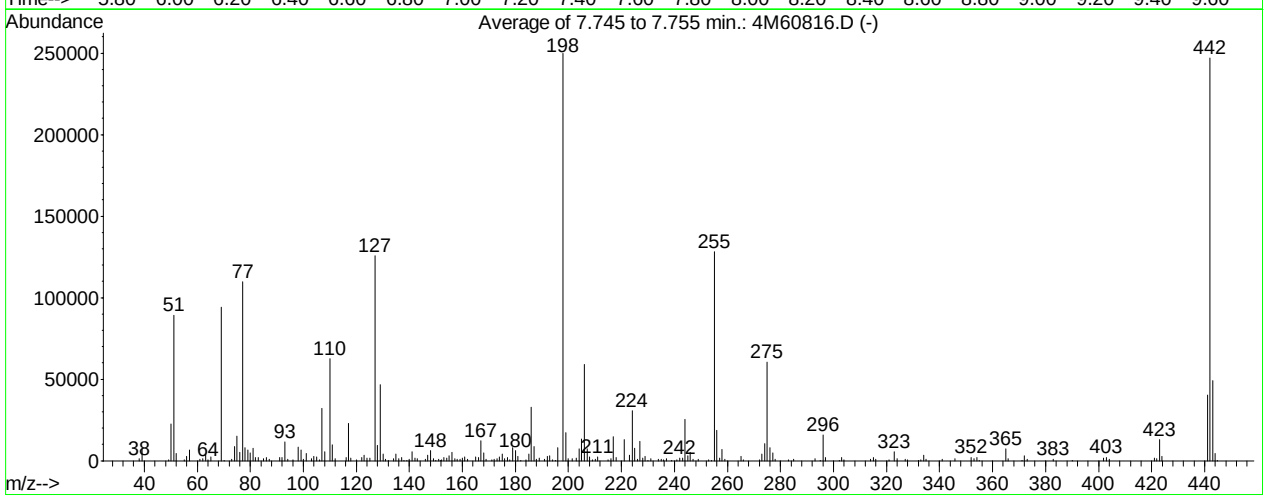
response 501767

Ion	Exp%	Act%
235.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

4M60600.D DFTPP.M Wed May 02 13:32:18 2012

Data File : I:\MSDCHEM\1\DATA\051212\4M60816.D Vial: 1
Acq On : 12 May 2012 11:02 Operator: CAA
Sample : WG397824-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP





AutoFind: Scans 272, 273, 274; Background Corrected with Scan 266

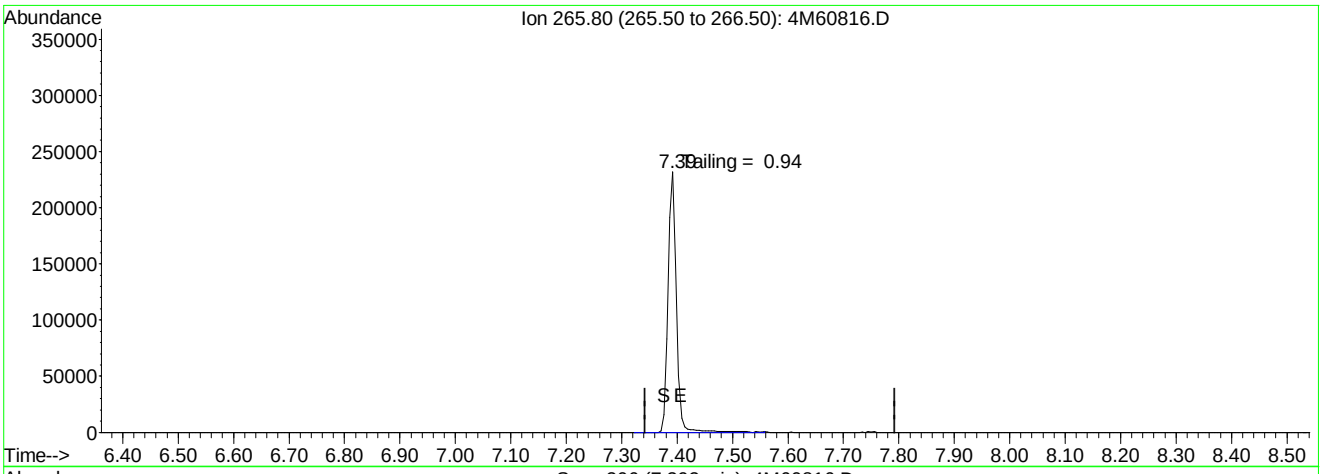
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	35.7	89354	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	37.7	94325	PASS
70	69	0.00	2	0.4	367	PASS
127	198	40	60	50.3	125853	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	249962	PASS
199	198	5	9	6.8	17080	PASS
275	198	10	30	24.1	60320	PASS
365	198	1	100	2.9	7186	PASS
441	443	0.01	100	81.4	40104	PASS
442	198	40	100	98.9	247146	PASS
443	442	17	23	19.9	49288	PASS

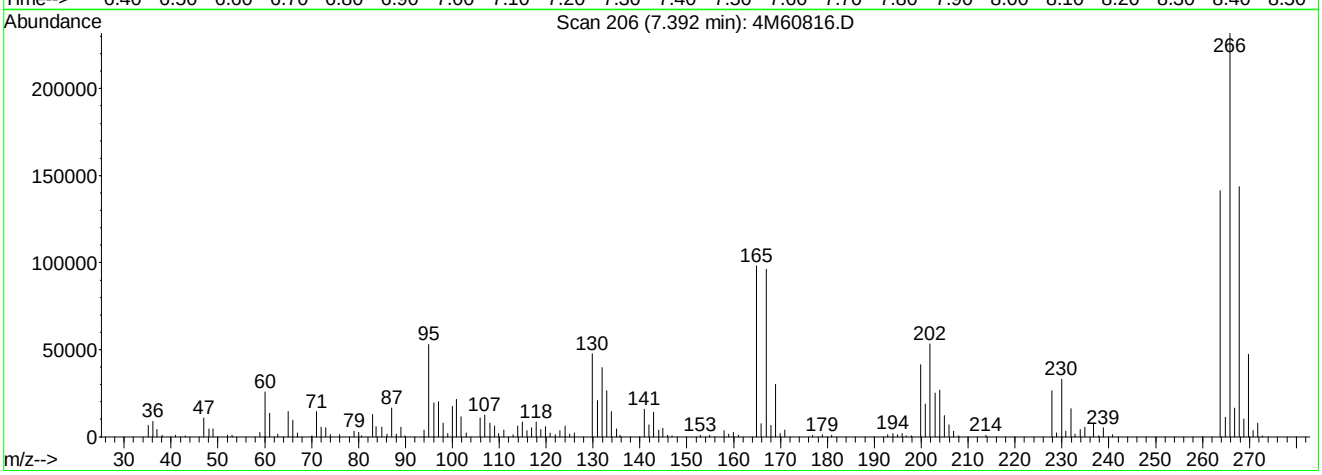
4M60816.D DFTPP.M Mon May 14 11:39:55 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\051212\4M60816.D Vial: 1
Acq On : 12 May 2012 11:02 Operator: CAA
Sample : WG397824-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 12 11:21 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Fri Apr 20 08:18:06 2012
Response via : Single Level Calibration





TIC: 4M60816.D

(1) Pentachlorophenol

7.39min 0.00ug/ml

response 243616

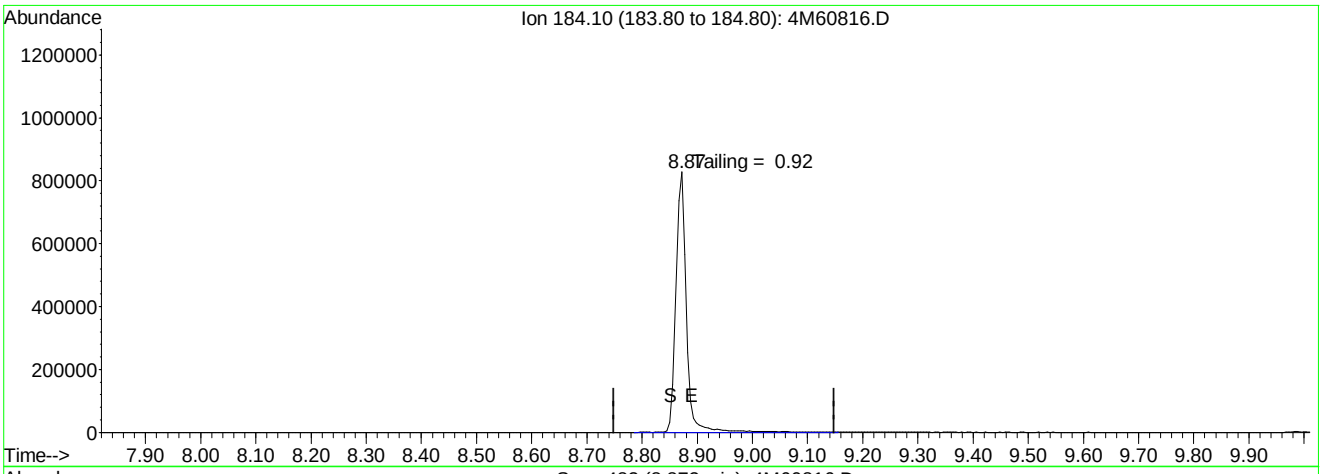
Ion	Exp%	Act%
265.80	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

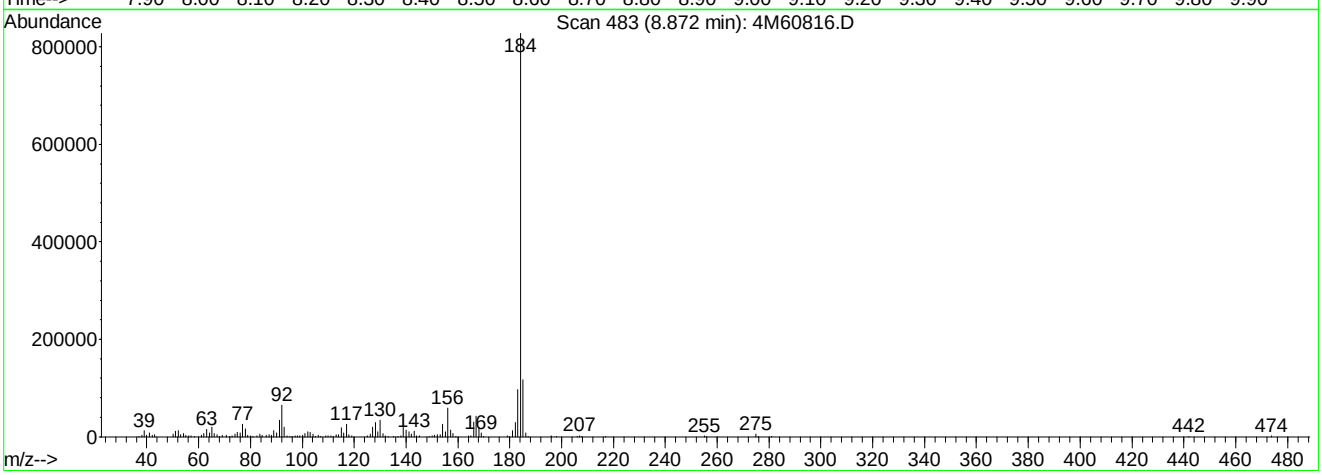
4M60816.D DFTPP.M Mon May 14 11:40:01 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\051212\4M60816.D Vial: 1
Acq On : 12 May 2012 11:02 Operator: CAA
Sample : WG397824-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 12 11:21 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Fri Apr 20 08:18:06 2012
Response via : Single Level Calibration





TIC: 4M60816.D

(2) Benzidine

8.87min 0.00ug/ml

response 1070077

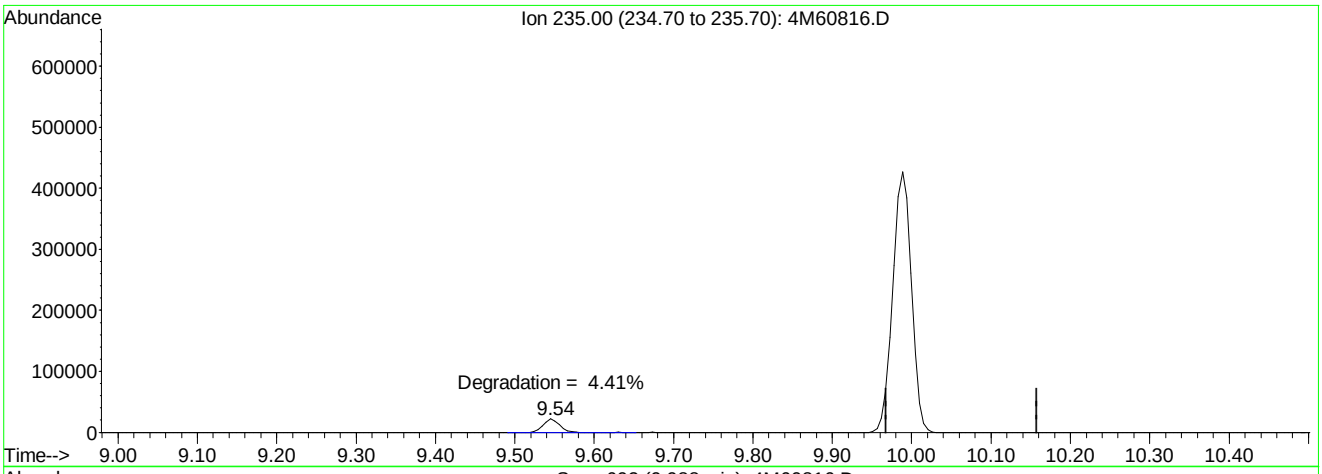
Ion	Exp%	Act%
184.10	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

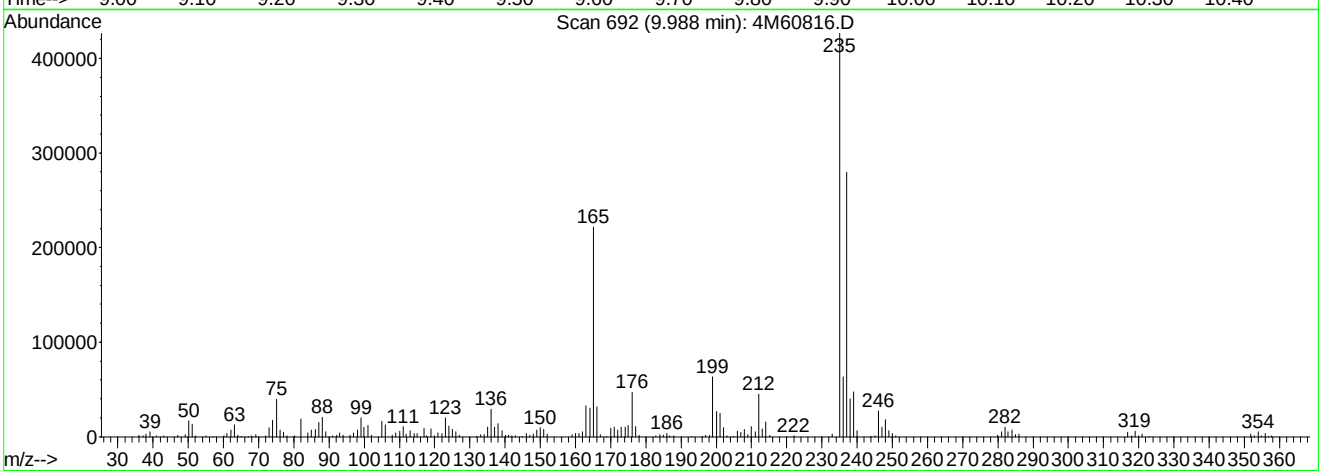
4M60816.D DFTPP.M Mon May 14 11:40:06 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\051212\4M60816.D Vial: 1
Acq On : 12 May 2012 11:02 Operator: CAA
Sample : WG397824-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 12 11:21 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title : DFTPP
Last Update : Fri Apr 20 08:18:06 2012
Response via : Single Level Calibration





TIC: 4M60816.D

(3) DDT

9.99min 0.00ug/ml

response 530088

Ion	Exp%	Act%
235.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

4M60816.D DFTPP.M Mon May 14 11:40:13 2012

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051212\4M60821.D Vial: 6
Acq On : 12 May 2012 13:42 Operator: CAA
Sample : WG397140-02 BLK 05/07 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 14 11:40:47 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Mon May 14 11:40:35 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.23	152	270729	40.00 ug/ml	0.00
30) Naphthalene-d8	8.51	136	1008897	40.00 ug/ml	0.00
54) Acenaphthene-d10	10.32	164	559392	40.00 ug/ml	0.00
87) Phenanthrene-d10	11.92	188	1005180	40.00 ug/ml	0.00
113) Chrysene-d12	15.60	240	951577	40.00 ug/ml	-0.01
128) Perylene-d12	18.33	264	919790	40.00 ug/ml	-0.01

System Monitoring Compounds

8) 2-Fluorophenol	6.00	112	700315	85.3173 ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 85.32%		
12) Phenol-d5	6.83	99	872250	90.7954 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 90.80%		
31) Nitrobenzene-d5	7.79	82	413147	48.4170 ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 96.84%		
59) 2-Fluorobiphenyl	9.58	172	856811	45.8693 ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 91.74%		
86) 2,4,6-Tribromophenol	11.14	330	264800	106.1523 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 106.15%		
117) p-Terphenyl-d14	13.95	244	1096770	62.5345 ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 125.06%		

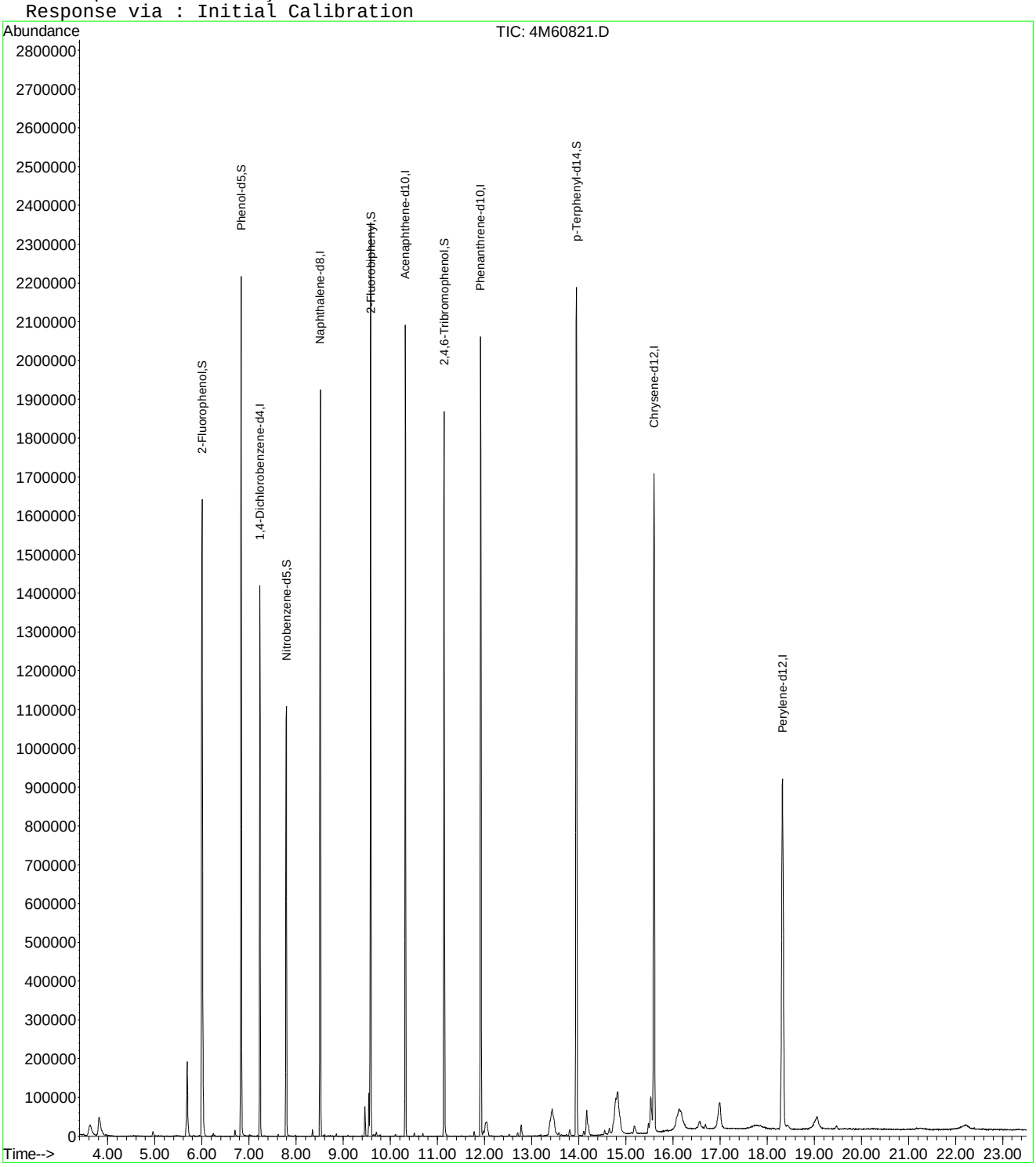
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
4M60821.D MEGAMIX.M Mon May 14 11:46:26 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051212\4M60821.D Vial: 6
Acq On : 12 May 2012 13:42 Operator: CAA
Sample : WG397140-02 BLK 05/07 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 14 11:40 2012 Quant Results File: MEGAMIX.RES

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Mon May 14 11:40:35 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\051212\4M60821.D Vial: 6
Acq On : 12 May 2012 13:42 Operator: CAA
Sample : WG397140-02 BLK 05/07 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 14 11:53:47 2012 Quant Results File: TCL.RES

Quant Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Mon May 14 11:53:23 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.23	152	270729	40.00	ug/mL	0.00
3) Naphthalene-d8	8.51	136	1008897	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.32	164	559392	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.92	188	1005180	40.00	ug/mL	0.00

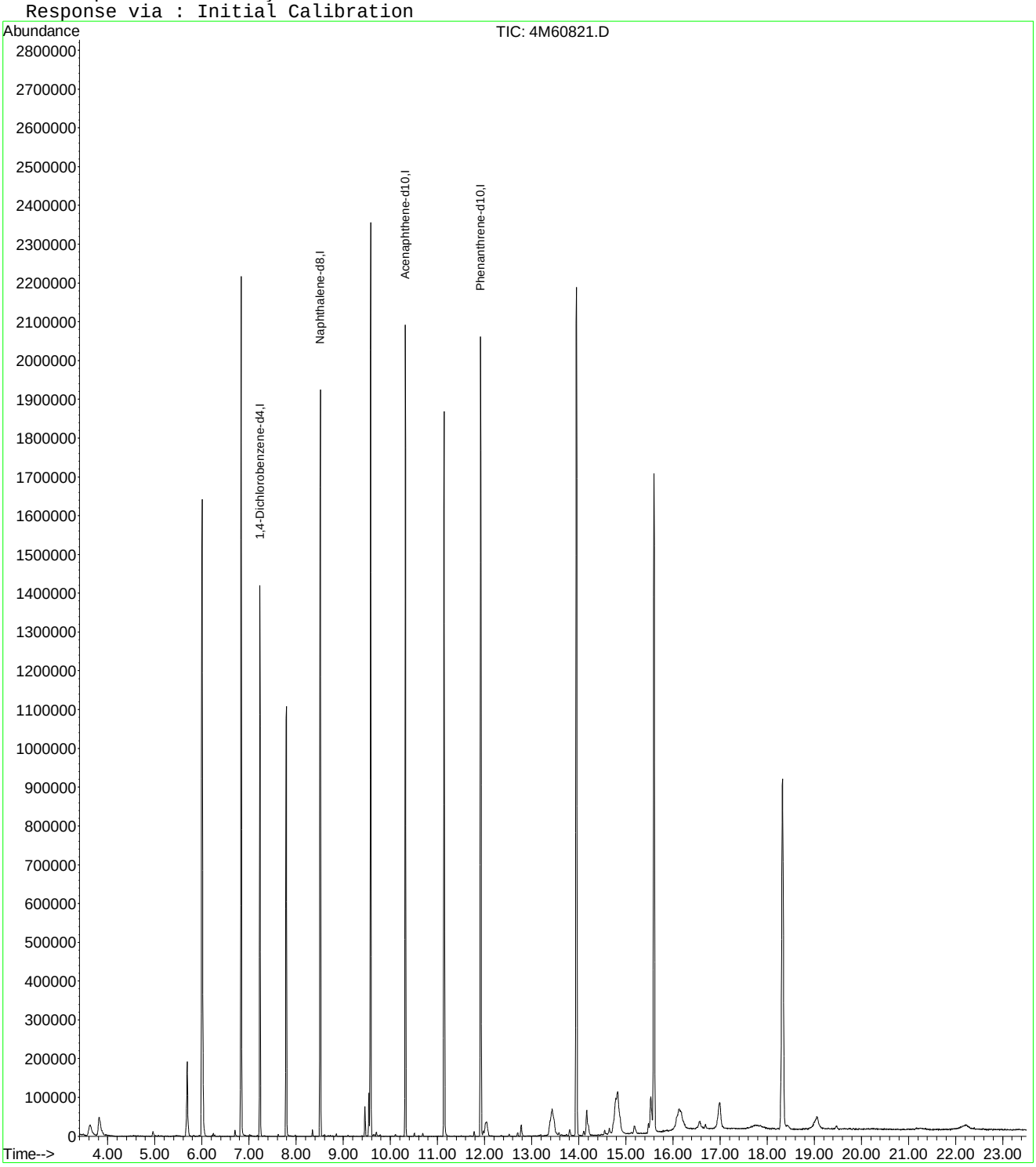
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
4M60821.D TCL.M Mon May 14 11:53:47 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\051212\4M60821.D Vial: 6
Acq On : 12 May 2012 13:42 Operator: CAA
Sample : WG397140-02 BLK 05/07 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 14 11:53 2012 Quant Results File: TCL.RES

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Mon May 14 11:53:23 2012
Response via : Initial Calibration



4M60821.D TCL.M Mon May 14 11:53:47 2012 Page 2

LSC Area Percent Report

Data File : I:\MSDCHEM\1\DATA\051212\4M60821.D Vial: 6
Acq On : 12 May 2012 13:42 Operator: CAA
Sample : WG397140-02 BLK 05/07 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.05 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

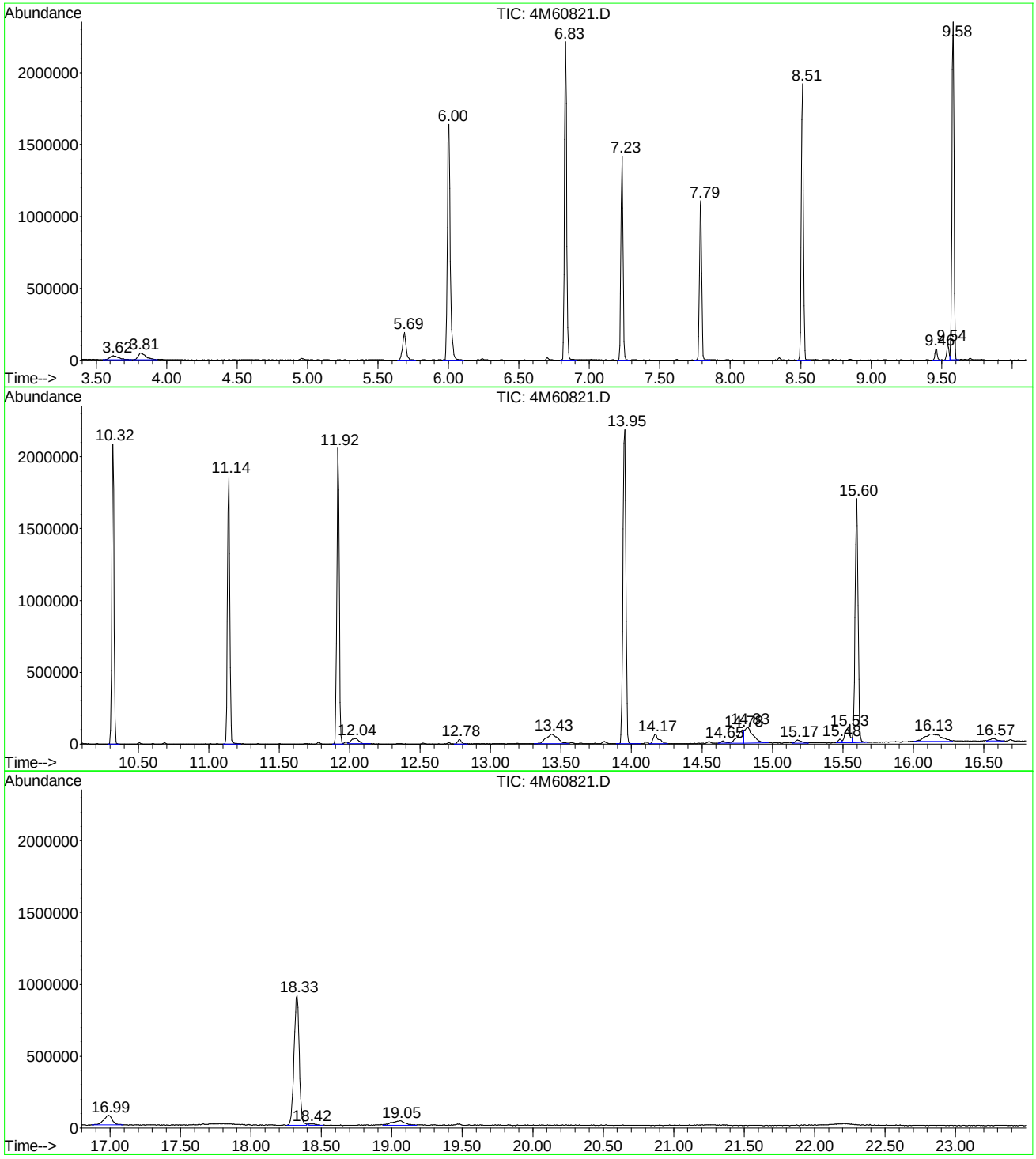
If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.620	30	43	67	rBV4	28394	135908	4.31%	0.449%
2	3.812	70	79	101	rVV3	46339	176958	5.61%	0.585%
3	5.687	421	430	444	rBB2	191783	320520	10.17%	1.060%
4	6.002	481	489	508	rBB	1642481	2314010	73.40%	7.651%
5	6.830	637	644	659	rBV	2217083	2372285	75.25%	7.844%
6	7.231	713	719	728	rBB	1420476	1530003	48.53%	5.059%
7	7.792	816	824	836	rBV	1108486	1215823	38.57%	4.020%
8	8.513	952	959	970	rBV	1925398	2001396	63.48%	6.617%
9	9.459	1131	1136	1142	rBB	77052	84924	2.69%	0.281%
10	9.544	1147	1152	1155	rBV	111113	121028	3.84%	0.400%
11	9.582	1155	1159	1166	rVB	2355696	2404394	76.27%	7.950%
12	10.319	1291	1297	1305	rBB	2092005	2198715	69.74%	7.270%
13	11.142	1444	1451	1466	rBB	1868865	2139855	67.88%	7.075%
14	11.916	1589	1596	1603	rBV	2061713	2409635	76.43%	7.967%
15	12.039	1609	1619	1638	rVB3	36549	141945	4.50%	0.469%
16	12.776	1751	1757	1767	rBB3	28925	52032	1.65%	0.172%
17	13.433	1857	1880	1903	rBV	68365	376699	11.95%	1.246%
18	13.952	1966	1977	1997	rBV2	2188012	3152634	100.00%	10.424%
19	14.171	2010	2018	2033	rVB3	64953	173392	5.50%	0.573%
20	14.646	2101	2107	2113	rBV4	16993	32523	1.03%	0.108%
21	14.785	2114	2133	2135	rVV2	92687	278747	8.84%	0.922%
22	14.828	2135	2141	2167	rVB2	107876	439646	13.95%	1.454%
23	15.175	2200	2206	2220	rVB2	19752	56665	1.80%	0.187%
24	15.479	2258	2263	2266	rBV3	26366	42488	1.35%	0.140%
25	15.533	2266	2273	2279	rVV3	94226	241488	7.66%	0.798%
26	15.597	2279	2285	2300	rVB	1698765	2478124	78.60%	8.194%
27	16.131	2362	2385	2412	rBV3	52128	421618	13.37%	1.394%
28	16.569	2458	2467	2480	rVB6	17664	55281	1.75%	0.183%
29	16.991	2524	2546	2564	rBV5	67234	292519	9.28%	0.967%
30	18.327	2783	2796	2809	rBV	904718	2342842	74.31%	7.746%
31	18.418	2812	2813	2830	rVB10	10721	34606	1.10%	0.114%
32	19.053	2910	2932	2954	rVB9	32458	205724	6.53%	0.680%

Sum of corrected areas: 30244427

```
File        : I:\MSDCHEM\1\DATA\051212\4M60821.D
Operator    : CAA
Acquired    : 12 May 2012  13:42     using AcqMethod BNATEST
Instrument :   HPMS4
Sample Name: WG397140-02 BLK 05/07
Misc Info   : 1,1
Vial Number: 6
Quant File :MEGAMIX.RES (RTE Integrator)
```



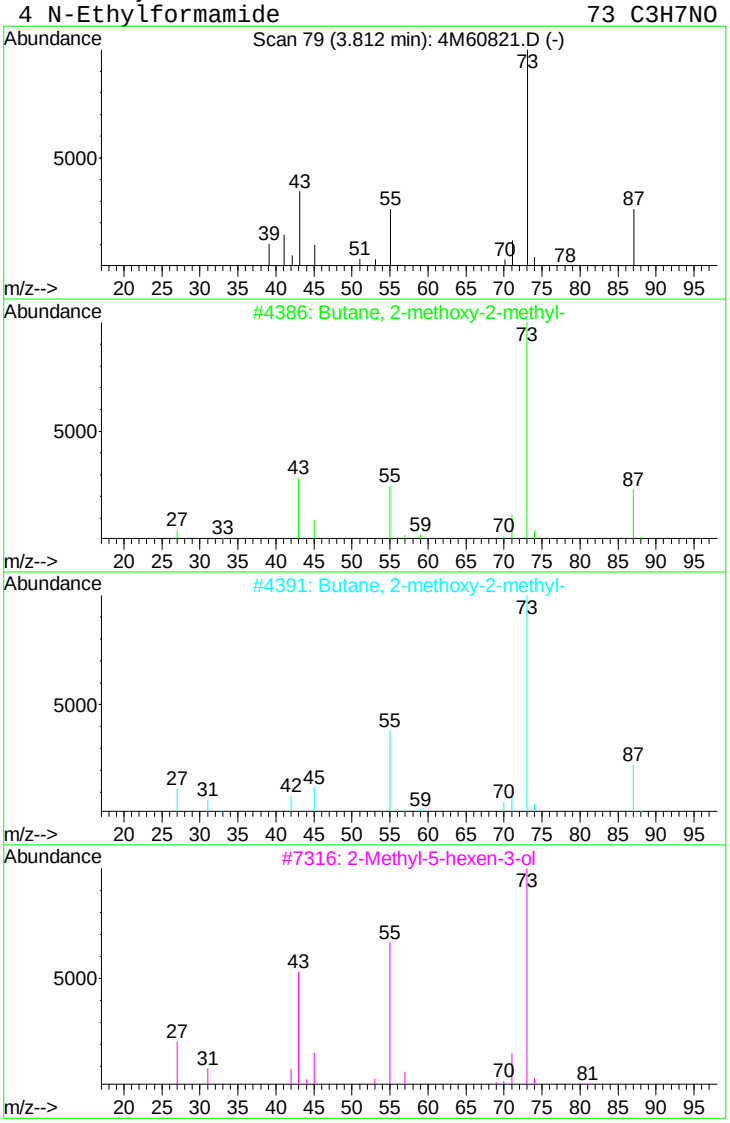
Library Search Compound Report

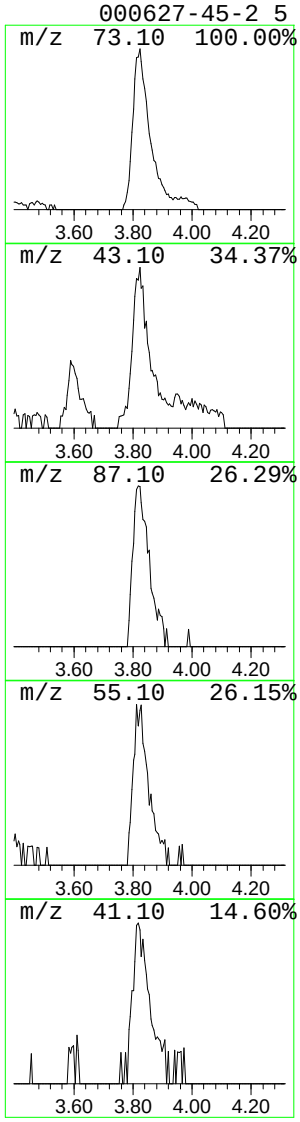
```
Data File : I:\MSDCHEM\1\DATA\051212\4M60821.D          Vial: 6
Acq On    : 12 May 2012  13:42                       Operator: CAA
Sample    : WG397140-02 BLK 05/07                    Inst    : HPMS4
Misc      : 1,1                                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title        : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library      : I:\DATABASE\NIST02.L
 ******************************************************************
 Peak Number  1  Butane, 2-methoxy-2-methyl-     Concentration Rank  6

   R.T.   EstConc           Area       Relative to ISTD         R.T.
 ------------------------------------------------------------------
   3.81    4.63 ug/ml      176958    1,4-Dichlorobenzene-d4      7.23

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------
  1 Butane, 2-methoxy-2-methyl-          102 C6H14O         000994-05-8 64
  2 Butane, 2-methoxy-2-methyl-          102 C6H14O         000994-05-8 9
  3 2-Methyl-5-hexen-3-ol                114 C7H14O         032815-70-6 9
  4 N-Ethylformamide                      73 C3H7NO         000627-45-2 5
```



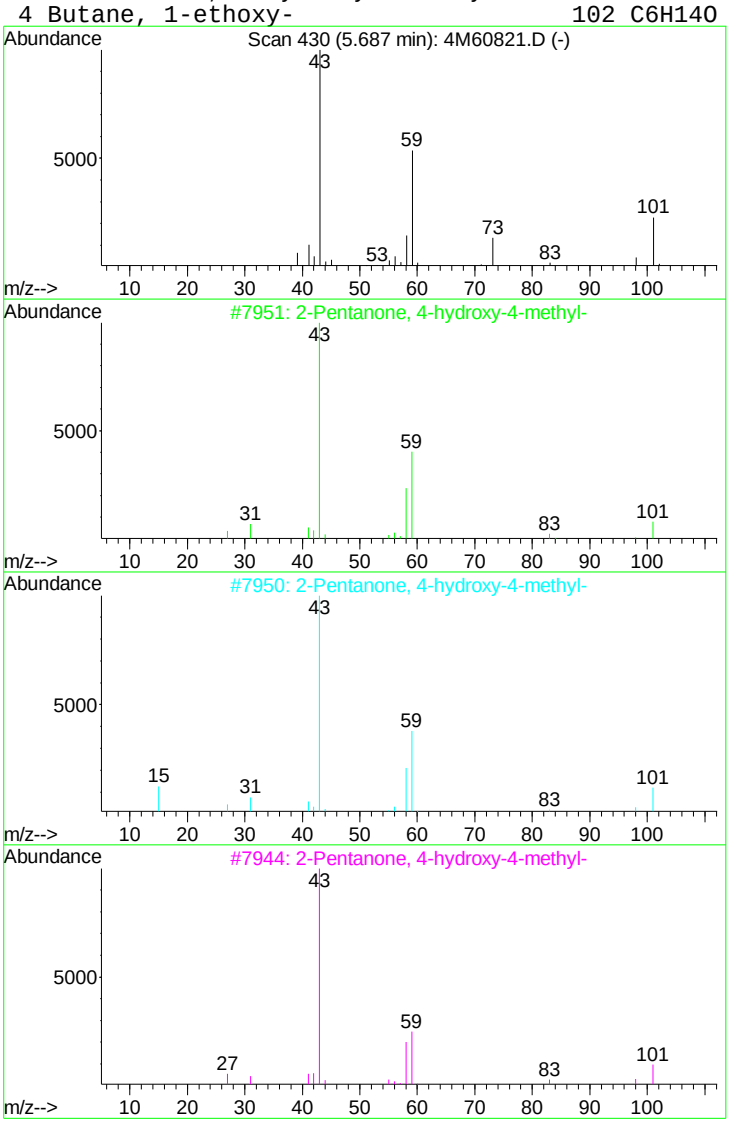


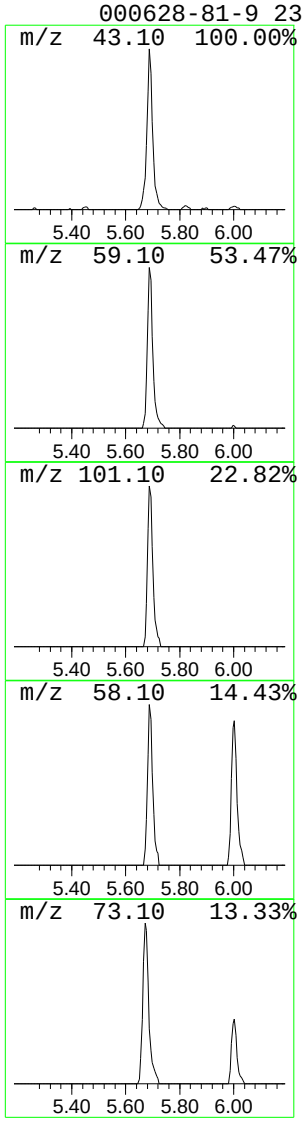
```
Data File : I:\MSDCHEM\1\DATA\051212\4M60821.D          Vial: 6
Acq On    : 12 May 2012  13:42                       Operator: CAA
Sample    : WG397140-02 BLK 05/07                    Inst    : HPMS4
Misc      : 1,1                                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title        : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library      : I:\DATABASE\NIST02.L
 ******************************************************************
 Peak Number  2  2-Pentanone, 4-hydroxy-4-me...  Concentration Rank  1

   R.T.   EstConc          Area       Relative to ISTD         R.T.
 ------------------------------------------------------------------
   5.69    8.38 ug/ml      320520    1,4-Dichlorobenzene-d4      7.23

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------
  1 2-Pentanone, 4-hydroxy-4-methyl-    116 C6H12O2        000123-42-2 50
  2 2-Pentanone, 4-hydroxy-4-methyl-    116 C6H12O2        000123-42-2 42
  3 2-Pentanone, 4-hydroxy-4-methyl-    116 C6H12O2        000123-42-2 36
  4 Butane, 1-ethoxy-                   102 C6H14O         000628-81-9 23
```





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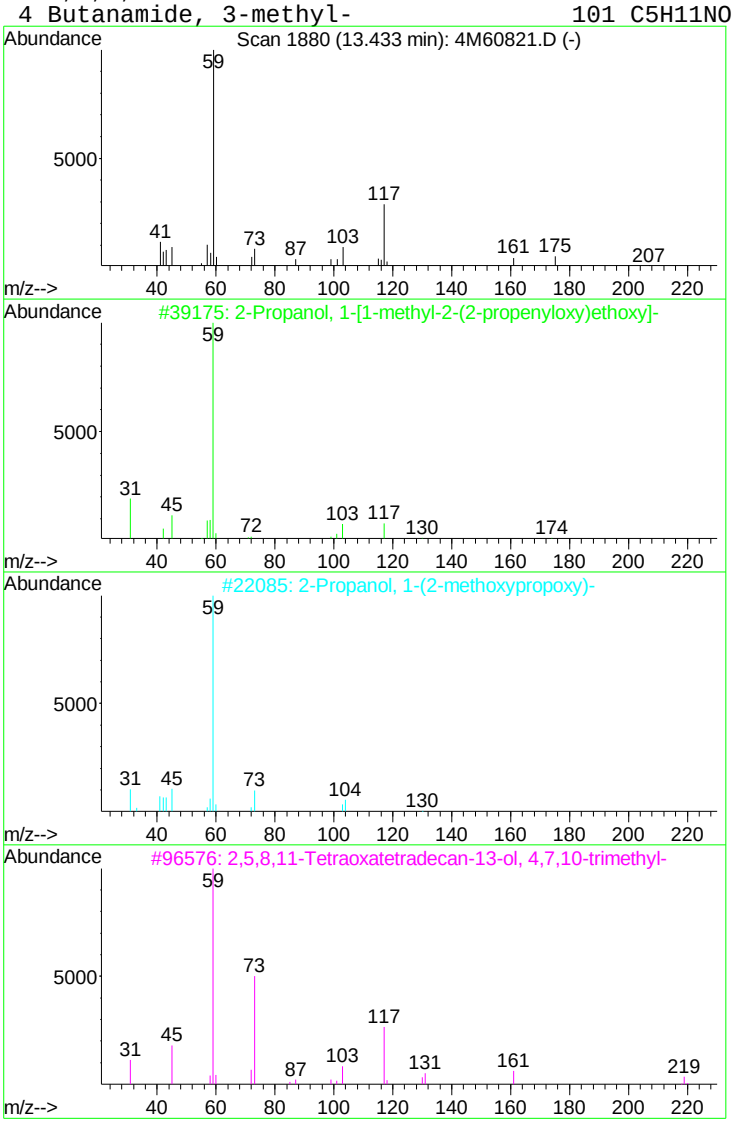
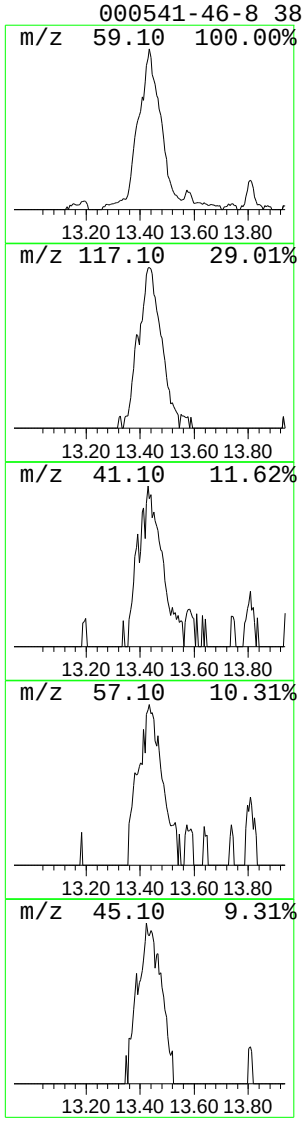
Data File : I:\MSDCHEM\1\DATA\051212\4M60821.D          Vial: 6
Acq On    : 12 May 2012  13:42                       Operator: CAA
Sample    : WG397140-02 BLK 05/07                    Inst    : HPMS4
Misc      : 1,1                                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title        : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library      : I:\DATABASE\NIST02.L
 ******************************************************************
 Peak Number  3  2-Propanol, 1-[1-methyl-2-(...  Concentration Rank  4

   R.T.   EstConc          Area       Relative to ISTD         R.T.
 ------------------------------------------------------------------
  13.43    6.25 ug/ml      376699    Phenanthrene-d10          11.92

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------
  1 2-Propanol, 1-[1-methyl-2-(2-pro... 174 C9H18O3        055956-25-7 53
  2 2-Propanol, 1-(2-methoxypropoxy)-   148 C7H16O3        013429-07-7 47
  3 2,5,8,11-Tetraoxatetradecan-13-o... 264 C13H28O5       020324-34-9 39
  4 Butanamide, 3-methyl-               101 C5H11NO        000541-46-8 38
```



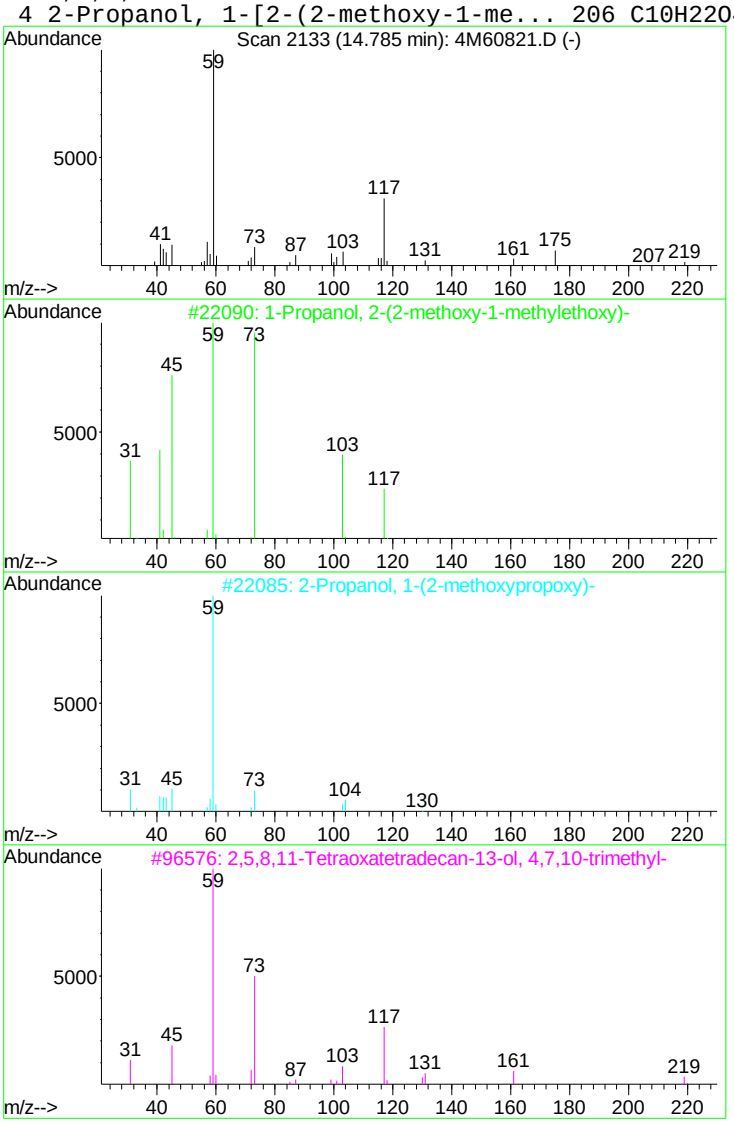


```
Data File : I:\MSDCHEM\1\DATA\051212\4M60821.D          Vial: 6
Acq On    : 12 May 2012  13:42                       Operator: CAA
Sample    : WG397140-02 BLK 05/07                    Inst    : HPMS4
Misc      : 1,1                                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title        : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library      : I:\DATABASE\NIST02.L
 ******************************************************************
 Peak Number  4  1-Propanol, 2-(2-methoxy-1-...  Concentration Rank  7

   R.T.   EstConc           Area       Relative to ISTD         R.T.
 ------------------------------------------------------------------
  14.78    4.50 ug/ml      278747    Chrysene-d12               15.60

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------
  1 1-Propanol, 2-(2-methoxy-1-methy... 148 C7H16O3        055956-21-3 59
  2 2-Propanol, 1-(2-methoxypropoxy)-   148 C7H16O3        013429-07-7 50
  3 2,5,8,11-Tetraoxatetradecan-13-o... 264 C13H28O5       020324-34-9 45
  4 2-Propanol, 1-[2-(2-methoxy-1-me... 206 C10H22O4       020324-33-8 42
```



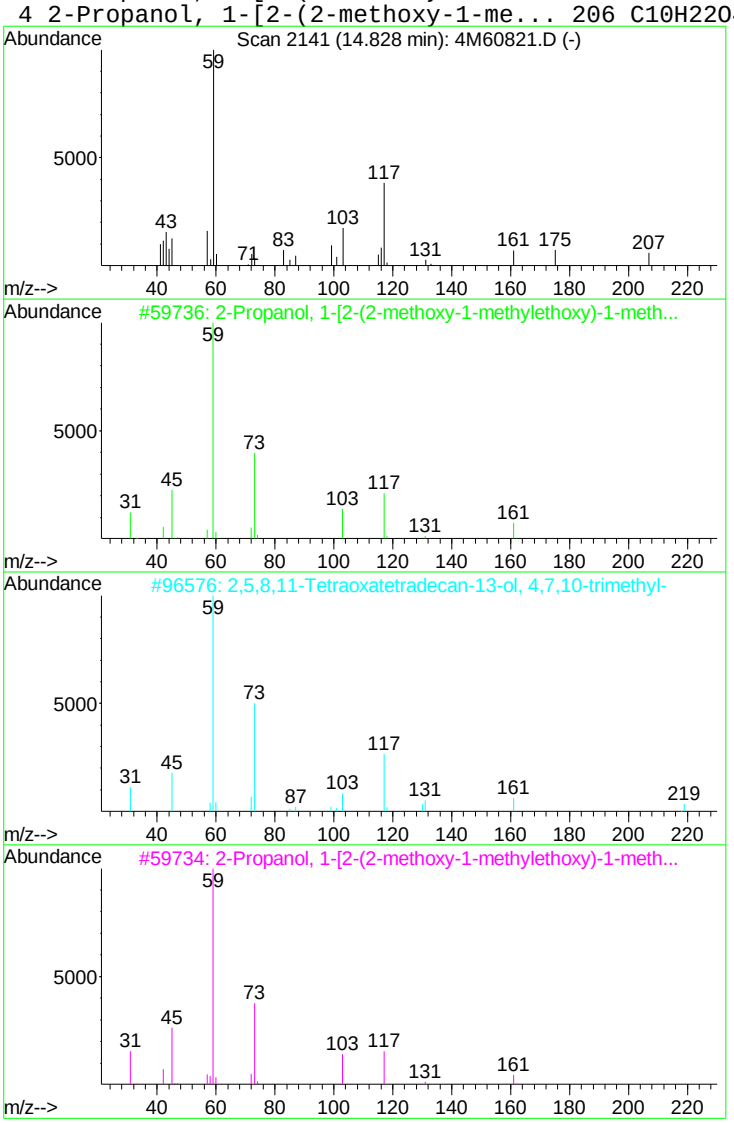
Library Search Compound Report

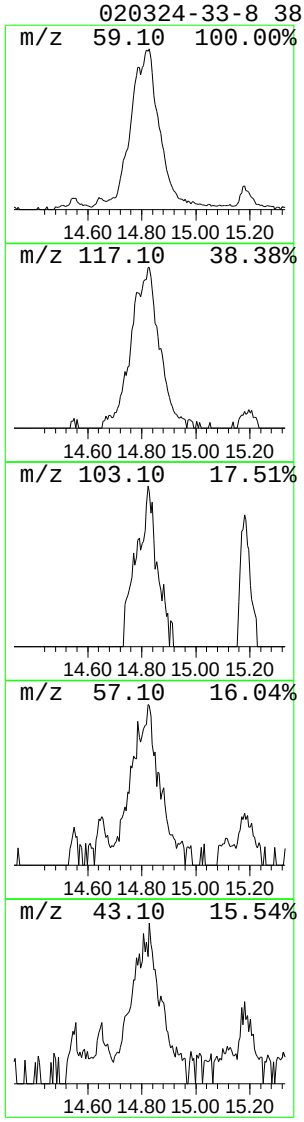
```
Data File : I:\MSDCHEM\1\DATA\051212\4M60821.D          Vial: 6
Acq On    : 12 May 2012  13:42                       Operator: CAA
Sample    : WG397140-02 BLK 05/07                    Inst    : HPMS4
Misc      : 1,1                                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title        : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library      : I:\DATABASE\NIST02.L
 ******************************************************************
 Peak Number  5  2-Propanol, 1-[2-(2-methoxy...  Concentration Rank  2

   R.T.   EstConc           Area       Relative to ISTD         R.T.
 ------------------------------------------------------------------
  14.83    7.10 ug/ml      439646    Chrysene-d12               15.60

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------
  1 2-Propanol, 1-[2-(2-methoxy-1-me... 206 C10H22O4       020324-33-8 40
  2 2,5,8,11-Tetraoxatetradecan-13-o... 264 C13H28O5       020324-34-9 40
  3 2-Propanol, 1-[2-(2-methoxy-1-me... 206 C10H22O4       020324-33-8 38
  4 2-Propanol, 1-[2-(2-methoxy-1-me... 206 C10H22O4       020324-33-8 38
```





Library Search Compound Report

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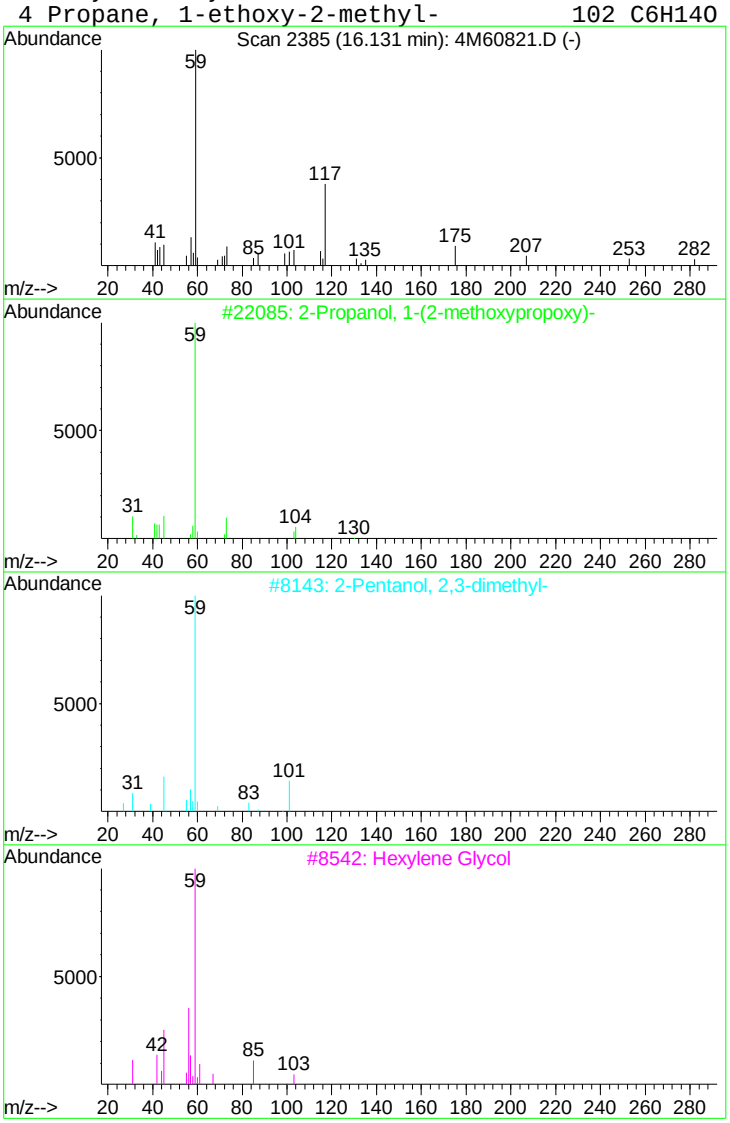
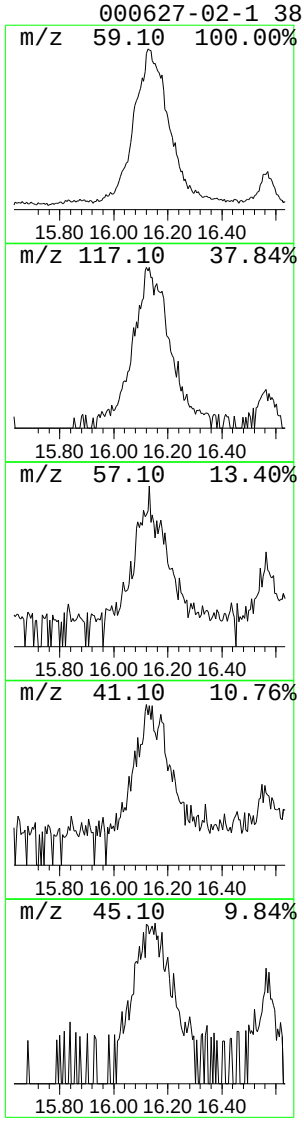
Data File : I:\MSDCHEM\1\DATA\051212\4M60821.D          Vial: 6
Acq On    : 12 May 2012  13:42                       Operator: CAA
Sample    : WG397140-02 BLK 05/07                    Inst    : HPMS4
Misc      : 1,1                                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title        : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library      : I:\DATABASE\NIST02.L
 ******************************************************************
 Peak Number  6  2-Propanol, 1-(2-methoxypro...  Concentration Rank  3

   R.T.   EstConc          Area       Relative to ISTD         R.T.
 ------------------------------------------------------------------
  16.13    6.81 ug/ml      421618    Chrysene-d12               15.60

  Hit# of  5    Tentative ID             MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------
  1 2-Propanol, 1-(2-methoxypropoxy)-   148 C7H16O3        013429-07-7 47
  2 2-Pentanol, 2,3-dimethyl-           116 C7H16O         004911-70-0 43
  3 Hexylene Glycol                     118 C6H14O2        000107-41-5 43
  4 Propane, 1-ethoxy-2-methyl-         102 C6H14O         000627-02-1 38
```





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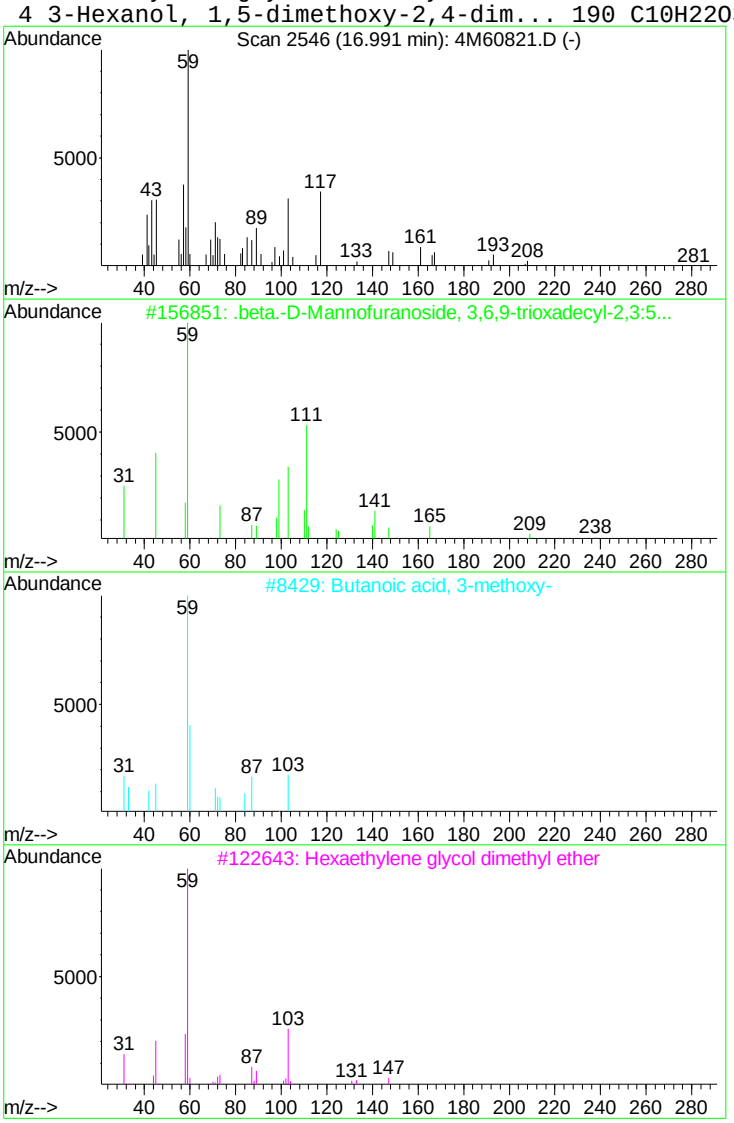
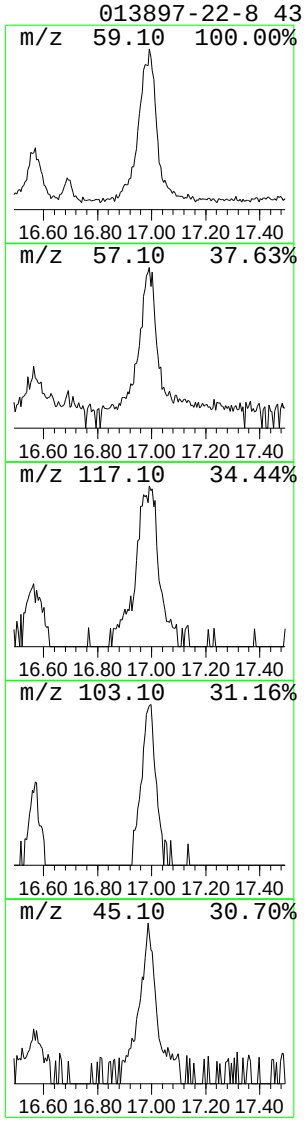
Data File : I:\MSDCHEM\1\DATA\051212\4M60821.D          Vial: 6
Acq On    : 12 May 2012  13:42                       Operator: CAA
Sample    : WG397140-02 BLK 05/07                    Inst    : HPMS4
Misc      : 1,1                                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title        : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library      : I:\DATABASE\NIST02.L
 ******************************************************************
 Peak Number  7  .beta.-D-Mannofuranoside, 3...  Concentration Rank  5

   R.T.   EstConc           Area       Relative to ISTD         R.T.
 ------------------------------------------------------------------
  16.99    4.99 ug/ml      292519    Perylene-d12               18.33

  Hit# of  5    Tentative ID              MW  MolForm       CAS#       Qual
 ------------------------------------------------------------------
  1 .beta.-D-Mannofuranoside, 3,6,9-... 402 C17H32B2O9     1000155-77-2 53
  2 Butanoic acid, 3-methoxy-           118 C5H10O3        010024-70-1 53
  3 Hexaethylene glycol dimethyl ether  310 C14H30O7       001072-40-8 47
  4 3-Hexanol, 1,5-dimethoxy-2,4-dim... 190 C10H22O3       013897-22-8 43
```





Tentatively Identified Compound (LSC) summary

Operator ID: CAA Date Acquired: 12 May 2012 13:42
Data File: I:\MSDCHEM\1\DATA\051212\4M60821.D
Name: WG397140-02 BLK 05/07
Misc: 1,1
Method: I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title: OVD MSS01 8270/625 Initial Calibration 04/19/12
Library Searched: I:\DATABASE\NIST02.L

TIC Top Hit name	RT	EstConc	Units	Response	Internal Standard #	RT	Resp	Conc
Butane, 2-methoxy...	3.81	4.6	ug/ml	176958	1	7.23	1530000	40.0
2-Pentanone, 4-hy...	5.69	8.4	ug/ml	320520	1	7.23	1530000	40.0
2-Propanol, 1-[1-...	13.43	6.3	ug/ml	376699	4	11.92	2409640	40.0
1-Propanol, 2-(2-...	14.78	4.5	ug/ml	278747	5	15.60	2478120	40.0
2-Propanol, 1-[2-...	14.83	7.1	ug/ml	439646	5	15.60	2478120	40.0
2-Propanol, 1-(2-...	16.13	6.8	ug/ml	421618	5	15.60	2478120	40.0
.beta.-D-Mannofur...	16.99	5.0	ug/ml	292519	6	18.33	2342840	40.0

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051212\4M60822.D Vial: 7
Acq On : 12 May 2012 14:17 Operator: CAA
Sample : WG397140-03 LCS 05/07 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 14 11:40:47 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Mon May 14 11:40:35 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.23	152	262198	40.00 ug/ml	0.00
30) Naphthalene-d8	8.51	136	999831	40.00 ug/ml	0.00
54) Acenaphthene-d10	10.32	164	562715	40.00 ug/ml	0.00
87) Phenanthrene-d10	11.92	188	1021385	40.00 ug/ml	0.00
113) Chrysene-d12	15.61	240	959585	40.00 ug/ml	0.00
128) Perylene-d12	18.34	264	885225	40.00 ug/ml	0.00

System Monitoring Compounds					
8) 2-Fluorophenol	6.01	112	781447	98.2989 ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 98.30%		
12) Phenol-d5	6.83	99	961393	103.3307 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 103.33%#		
31) Nitrobenzene-d5	7.79	82	446357	52.7832 ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 105.56%		
59) 2-Fluorobiphenyl	9.58	172	999516	53.1931 ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 106.38%		
86) 2,4,6-Tribromophenol	11.15	330	310740	123.8330 ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 123.83%#		
117) p-Terphenyl-d14	13.95	244	1184471	66.9713 ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 133.94%		

Target Compounds					Qvalue
2) 1,4-Dioxane	4.22	88	122177	37.3878 ug/ml#	97
3) n-Nitrosodimethylamine	4.64	74	233748	48.3069 ug/ml	96
4) Pyridine	4.66	79	311040	36.2569 ug/ml	88
5) 2-Picoline	5.45	93	380573	40.7693 ug/ml	99
6) n-Nitrosomethylethylamine	5.56	88	179595	44.6008 ug/ml	93
7) Methyl Methanesulfonate	5.85	80	214398	46.8967 ug/ml	96
9) n-Nitrosodiethylamine	6.24	102	195041	45.1797 ug/ml	97
10) Ethyl Methanesulfonate	6.49	79	266242	44.4637 ug/ml	98
11) Aniline	6.93	93	558354	40.6104 ug/ml	90
13) Phenol	6.85	94	493205	49.6453 ug/ml	93
14) bis(2-Chloroethyl)ether	6.95	63	301133	48.4090 ug/ml#	38
15) Pentachloroethane	6.96	167	118968	35.5046 ug/ml	98
16) 2-Chlorophenol	7.05	128	428905	48.2114 ug/ml	98
17) 1,3-Dichlorobenzene	7.20	146	340556	34.3925 ug/ml	100
18) 1,4-Dichlorobenzene	7.25	146	365107	36.1514 ug/ml	99
19) Benzyl Alcohol	7.34	108	293563	50.9641 ug/ml	93
20) 1,2-Dichlorobenzene	7.44	146	355063	37.8566 ug/ml	100
21) 2-Methylphenol	7.44	107	337550	49.2742 ug/ml	97
22) bis(2-Chloroisopropyl)ethe	7.48	45	529550	41.4643 ug/ml	92
23) 3-,4-Methylphenol	7.56	107	504484	56.6529 ug/ml	91
24) n-Nitrosopyrrolidine	7.61	100	212857	52.9458 ug/ml	97
25) n-Nitrosodipropylamine	7.62	70	312672	55.8194 ug/ml	94
26) Acetophenone	7.63	105	1060545	96.2731 ug/ml	98
27) n-Nitrosomorpholine	7.63	56	238434	45.6266 ug/ml	94
28) o-Toluidine	7.67	106	549410	39.4501 ug/ml	99
29) Hexachloroethane	7.75	117	112250	30.0152 ug/ml	98
32) Nitrobenzene	7.81	77	457842	54.3217 ug/ml	97
33) n-Nitrosopiperidine	7.96	114	214716	47.5914 ug/ml	98
34) Isophorone	8.02	82	829814	53.9397 ug/ml	99
35) 2-Nitrophenol	8.13	139	249970	50.3123 ug/ml	95
36) 2,4-Dimethylphenol	8.10	122	430743	50.4897 ug/ml	99
37) 0,0,0-Triethyl Phosphoroth	8.20	198	228651	53.6837 ug/ml	98
38) bis(2-Chloroethoxy)methane	8.20	93	678139	58.0029 ug/ml	99

(#) = qualifier out of range (m) = manual integration
4M60822.D MEGAMIX.M Mon May 14 11:43:32 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051212\4M60822.D Vial: 7
Acq On : 12 May 2012 14:17 Operator: CAA
Sample : WG397140-03 LCS 05/07 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 14 11:40:47 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Mon May 14 11:40:35 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
40) 2,4-Dichlorophenol	8.35	162	377474	52.8532 ug/ml	100
41) a,a-Dimethylphenethylamine	8.36	58	1009158	83.5773 ug/ml	98
42) 1,2,4-Trichlorobenzene	8.46	180	345566	42.6118 ug/ml	99
43) Naphthalene	8.53	128	1285360	48.5423 ug/ml	97
44) 4-Chloroaniline	8.56	127	537961	55.1642 ug/ml	97
45) 2,6-Dichlorophenol	8.59	162	380460	51.6248 ug/ml	99
46) Hexachloropropene	8.65	213	112648	24.7845 ug/ml	100
47) Hexachlorobutadiene	8.68	225	172124	41.4579 ug/ml	100
48) n-Nitrosodi-n-Butylamine	8.88	84	381110	53.5975 ug/ml	94
49) p-Phenylenediamine	9.00	108	38808	63.0747 ug/ml#	65
50) 4-Chloro-3-Methylphenol	9.00	107	413732	57.0868 ug/ml	99
51) Safrole	9.09	162	336425	48.8082 ug/ml	99
52) 2-Methylnaphthalene	9.22	142	864863	50.2742 ug/ml	99
53) 1-Methylnaphthalene	9.34	142	763206	46.9249 ug/ml	99
55) 1,2,4,5-Tetrachlorobenzene	9.43	216	374222	50.7481 ug/ml	100
56) Hexachlorocyclopentadiene	9.44	237	115480	30.2763 ug/ml	100
57) 2,4,6-Trichlorophenol	9.51	196	296420	57.3659 ug/ml	100
58) 2,4,5-Trichlorophenol	9.56	196	325821	61.2558 ug/ml	99
60) Isosafrole	9.62	162	622170	87.4943 ug/ml	100
61) 2-Chloronaphthalene	9.73	162	983580	61.9006 ug/ml	99
62) 1-Chloronaphthalene	9.77	162	759999	50.5126 ug/ml	99
63) 2-Nitroaniline	9.83	65	264886	58.1579 ug/ml	99
64) 1,4-Naphthoquinone	9.90	158	311774	49.6871 ug/ml	97
65) Dimethylphthalate	9.99	163	1123592	63.1107 ug/ml	100
66) 1,3-Dinitrobenzene	10.05	168	203715	59.6720 ug/ml	95
67) 2,6-Dinitrotoluene	10.09	165	273591	61.5177 ug/ml	97
68) Acenaphthylene	10.17	152	1471532	57.6783 ug/ml	100
69) 3-Nitroaniline	10.24	138	277931	84.7245 ug/ml	98
70) 2,4-Dinitrophenol	10.35	184	129496	57.1191 ug/ml	91
71) Acenaphthene	10.36	154	903573	54.3749 ug/ml	100
72) 4-Nitrophenol	10.36	65	188476	57.5079 ug/ml	97
73) 2,4-Dinitrotoluene	10.49	165	369248	65.2521 ug/ml	98
74) Pentachlorobenzene	10.54	250	368895	55.5607 ug/ml	99
75) Dibenzofuran	10.51	168	1278416	57.4552 ug/ml	99
76) 2,3,4,6-Tetrachlorophenol	10.66	232	233829	57.0031 ug/ml	96
77) 1-Naphthylamine	10.59	143	703642	147.0405 ug/ml#	66
78) 2-Naphthylamine	10.66	143	616273	211.5701 ug/ml#	58
79) Diethylphthalate	10.70	149	1148749	64.7876 ug/ml	100
80) Thionazin	10.80	107	187185	63.4462 ug/ml	93
81) Fluorene	10.87	166	1100317	58.1841 ug/ml	99
82) 4-Chlorophenyl Phenyl Ethe	10.82	204	532636	59.9407 ug/ml	100
83) 4-Nitroaniline	10.88	138	292523	72.0386 ug/ml	97
84) 5-Nitro-o-Toluidine	10.87	152	310617	69.5719 ug/ml	95
85) 1,2-Diphenylhydrazine	10.99	77	1028323	59.6323 ug/ml	98
88) 4,6-Dinitro-2-Methylphenol	10.92	198	209559	65.9075 ug/ml	79
89) n-Nitrosodiphenylamine	10.94	169	1743117	105.4756 ug/ml	99
90) Sulfotepp	11.14	322	178457	60.4407 ug/ml	96
91) Sym-Trinitrobenzene	11.23	75	274180	67.8622 ug/ml	97
92) Diallate	11.26	86	751016	111.4323 ug/ml#	80
93) Phenacetin	11.25	108	533536	61.6231 ug/ml	94
94) Phorate	11.28	75	668895	62.2097 ug/ml#	100
95) 4-Bromophenyl Phenyl Ether	11.35	248	323495	62.6006 ug/ml	99
96) Hexachlorobenzene	11.56	284	347930	61.5922 ug/ml	99
97) Dimethoate	11.49	87	418833	79.9348 ug/ml	98

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051212\4M60822.D Vial: 7
Acq On : 12 May 2012 14:17 Operator: CAA
Sample : WG397140-03 LCS 05/07 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 14 11:40:47 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Mon May 14 11:40:35 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

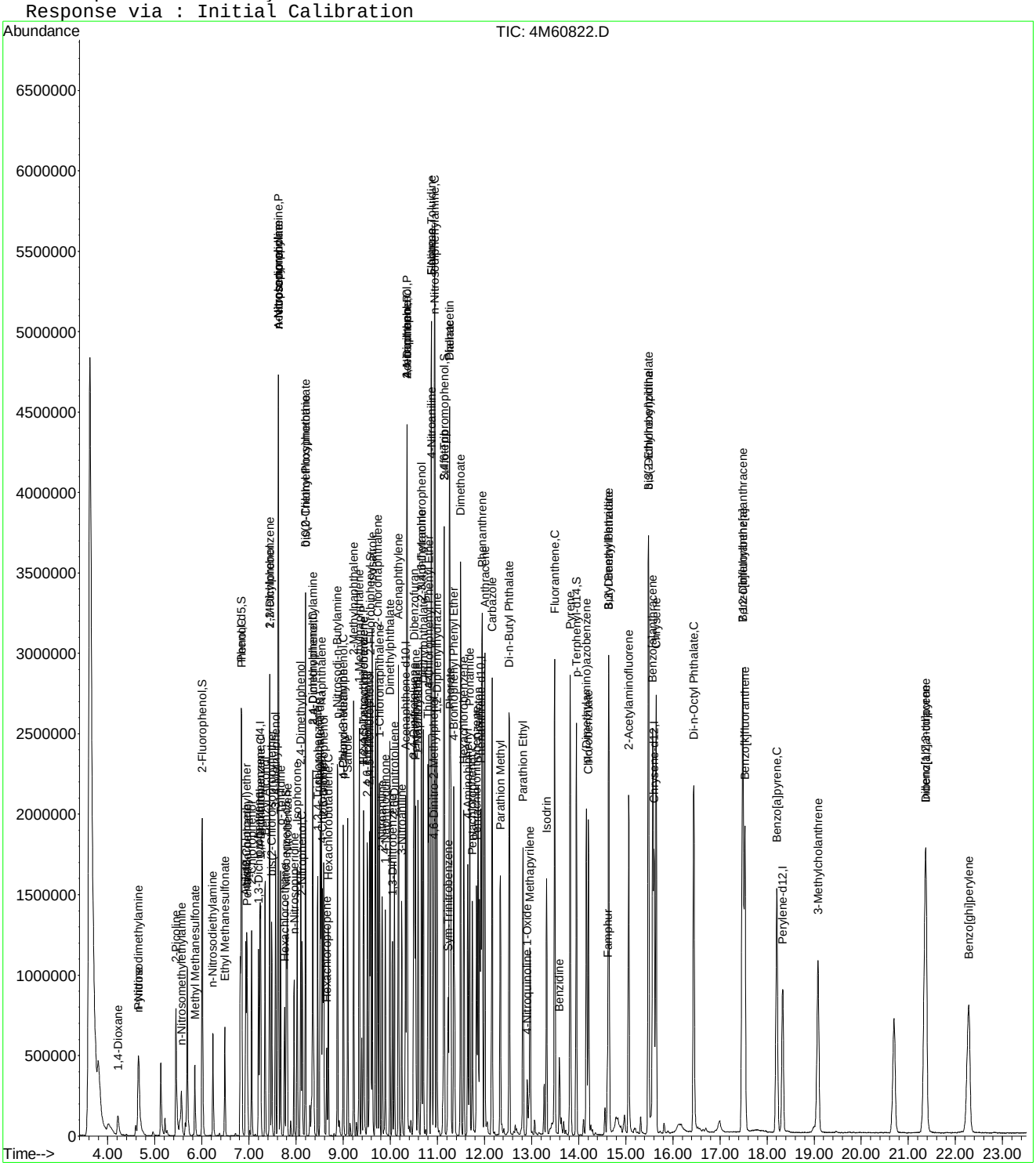
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	4-Aminobiphenyl	11.64	169	803295	96.0106	ug/ml	100
99)	Pentachlorophenol	11.74	266	219941	61.5716	ug/ml	99
100)	Pronamide	11.69	173	500977	60.3358	ug/ml	100
101)	Pentachloronitrobenzene	11.83	237	124379	63.5305	ug/ml	98
102)	Disulfoton	11.86	88	570201	61.7006	ug/ml	98
103)	Phenanthrene	11.95	178	1672748	61.7442	ug/ml	100
104)	Anthracene	12.01	178	1554870	55.9737	ug/ml	100
105)	Carbazole	12.16	167	1532512	63.0057	ug/ml	100
106)	Parathion Methyl	12.34	109	383140	67.7689	ug/ml	99
107)	Di-n-Butyl Phthalate	12.53	149	1956174	64.7326	ug/ml	100
108)	Parathion Ethyl	12.82	97	237178	68.9055	ug/ml	96
109)	4-Nitroquinoline 1-Oxide	12.91	190	54995	22.1291	ug/ml	90
110)	Methapyrilene	12.97	58	409635	99.0417	ug/ml	88
111)	Isodrin	13.31	193	171258	58.8532	ug/ml	99
112)	Fluoranthene	13.49	202	1750902	61.6753	ug/ml	99
114)	Benzidine	13.59	184	298307	223.0401	ug/ml	100
115)	Pyrene	13.82	202	1825422	63.6011	ug/ml	100
118)	p-(Dimethylamino)azobenzen	14.16	225	362102	61.1059	ug/ml	98
119)	Chlorobenzilate	14.21	251	488320	62.5200	ug/ml	96
120)	Famphur	14.61	218	163719	481.1678	ug/ml#	32
121)	Butyl Benzyl Phthalate	14.63	149	914517	70.0525	ug/ml	98
122)	3,3'-Dimethylbenzidine	14.65	212	459349	50.6497	ug/ml#	94
123)	2-Acetylaminofluorene	15.06	181	698716	62.5651	ug/ml	99
124)	bis(2-Ethylhexyl)phthalate	15.48	149	1210773	67.9641	ug/ml	99
125)	3,3'-Dichlorobenzidine	15.49	252	470631	89.2553	ug/ml	100
126)	Benzo[a]anthracene	15.57	228	1565479	61.4952	ug/ml	100
127)	Chrysene	15.64	228	1518274	63.5364	ug/ml	100
129)	Di-n-Octyl Phthalate	16.45	149	2041261	71.4037	ug/ml	97
130)	7,12-Dimethylbenz[a]anthra	17.49	256	693741	60.5149	ug/ml	99
131)	Benzo[b]fluoranthene	17.48	252	1747524	68.2670	ug/ml	97
132)	Benzo[k]fluoranthene	17.53	252	1502428	63.3172	ug/ml	97
133)	Benzo[a]pyrene	18.21	252	1520893	65.1217	ug/ml	99
134)	3-Methylcholanthrene	19.08	268	746157	58.8436	ug/ml	99
135)	Indeno[1,2,3-cd]pyrene	21.37	276	1758897	67.6237	ug/ml	98
136)	Dibenz[ah]anthracene	21.37	278	1475632	68.0254	ug/ml	99
137)	Benzo[ghi]perylene	22.28	276	1424989	66.2269	ug/ml	99

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051212\4M60822.D Vial: 7
Acq On : 12 May 2012 14:17 Operator: CAA
Sample : WG397140-03 LCS 05/07 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 14 11:40 2012 Quant Results File: MEGAMIX.RES

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Mon May 14 11:40:35 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\051212\4M60822.D Vial: 7
Acq On : 12 May 2012 14:17 Operator: CAA
Sample : WG397140-03 LCS 05/07 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 14 11:53:51 2012 Quant Results File: TCL.RES

Quant Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Mon May 14 11:53:23 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.23	152	262198	40.00 ug/mL	0.00
3) Naphthalene-d8	8.51	136	999831	40.00 ug/mL	0.00
5) Acenaphthene-d10	10.32	164	562715	40.00 ug/mL	0.00
7) Phenanthrene-d10	11.92	188	1021385	40.00 ug/mL	0.00

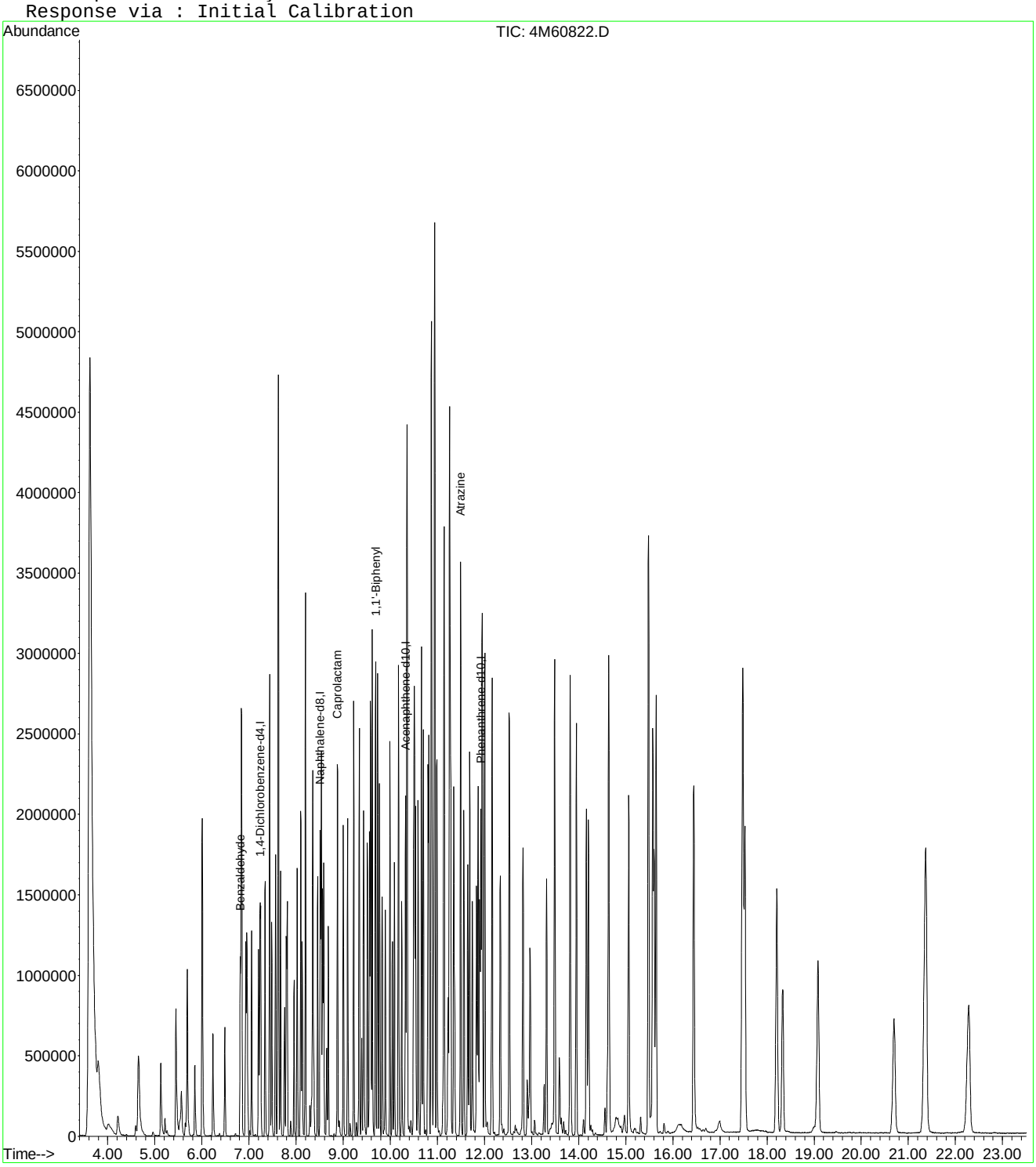
Target Compounds					Qvalue
2) Benzaldehyde	6.81	105	257318	36.8443 ug/L	98
4) Caprolactam	8.88	55	216871	66.4199 ug/L	90
6) 1,1'-Biphenyl	9.69	154	1083638	46.9202 ug/L	99
8) Atrazine	11.49	200	294810	52.1461 ug/L	99

(#) = qualifier out of range (m) = manual integration
4M60822.D TCL.M Mon May 14 11:53:51 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\051212\4M60822.D Vial: 7
Acq On : 12 May 2012 14:17 Operator: CAA
Sample : WG397140-03 LCS 05/07 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 14 11:53 2012 Quant Results File: TCL.RES

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Mon May 14 11:53:23 2012
Response via : Initial Calibration



4M60822.D TCL.M Mon May 14 11:53:51 2012 Page 2

2.2.2 Semivolatiles GC/MS Data (827-PAHL)

2.2.2.1 Summary Data

Login Number: L12050011
Department: Semivolatiles
Analyst: Cassie A. Augenstein

METHOD

Preparation 3510C

Analysis SW-846 8270C

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: All acceptance criteria were met.

Continuing Calibration and Tune: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: The MS/MSD results were not associated with this sample delivery group.

SAMPLES

Samples: All acceptance criteria were met.

Internal Standards: All acceptance criteria were met.

Surrogates: All acceptance criteria were met.

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: 45940
Approved By: Mike Cochran

Microbac

Lab Report #: L12050011
Lab Project #: 2736.061
Project Name: DOW WATERLOO GW
Lab Contact: Kathy Albertson

Certificate of Analysis

Sample #:	L12050011-01	**PrePrep Method:**	N/A	**Instrument:**	HPMS7
Client ID:	MW-29-043012	**Prep Method:**	3510C	**Prep Date:**	05/03/2012 09:30
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/04/2012 12:53
Workgroup #:	WG397013	**Analyst:**	CAA	**Run Date:**	05/04/2012 15:04
Collect Date:	04/30/2012 13:07	**Dilution:**	1	**File ID:**	7M54896
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
2-Methylnaphthalene	91-57-6		U	0.0500	0.0250
Acenaphthene	83-32-9		U	0.0500	0.0250
Acenaphthylene	208-96-8		U	0.0500	0.0250
Anthracene	120-12-7		U	0.0500	0.0250
Benzo(a)anthracene	56-55-3		U	0.0500	0.0250
Benzo(a)pyrene	50-32-8		U	0.0500	0.0250
Benzo(b)fluoranthene	205-99-2		U	0.0500	0.0250
Benzo(g,h,i)perylene	191-24-2		U	0.0500	0.0250
Benzo(k)fluoranthene	207-08-9		U	0.0500	0.0250
Chrysene	218-01-9		U	0.0500	0.0250
Dibenzo(a,h)anthracene	53-70-3		U	0.0500	0.0250
Fluoranthene	206-44-0		U	0.0500	0.0250
Fluorene	86-73-7		U	0.0500	0.0250
Indeno(1,2,3-cd)pyrene	193-39-5		U	0.0500	0.0250
Naphthalene	91-20-3		U	0.0500	0.0250
Phenanthrene	85-01-8		U	0.0500	0.0250
Pyrene	129-00-0		U	0.0500	0.0250

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2-Fluorobiphenyl	66.0	43	116	
Nitrobenzene-d5	68.4	35	114	
p-Terphenyl-d14	79.9	33	141	

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12050011-03	**PrePrep Method:**	N/A	**Instrument:**	HPMS7
Client ID:	DUP-GW-043012	**Prep Method:**	3510C	**Prep Date:**	05/03/2012 09:30
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/04/2012 12:53
Workgroup #:	WG397013	**Analyst:**	CAA	**Run Date:**	05/04/2012 15:32
Collect Date:	04/30/2012 14:00	**Dilution:**	1	**File ID:**	7M54897
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
2-Methylnaphthalene	91-57-6		U	0.0529	0.0265
Acenaphthene	83-32-9		U	0.0529	0.0265
Acenaphthylene	208-96-8		U	0.0529	0.0265
Anthracene	120-12-7		U	0.0529	0.0265
Benzo(a)anthracene	56-55-3		U	0.0529	0.0265
Benzo(a)pyrene	50-32-8		U	0.0529	0.0265
Benzo(b)fluoranthene	205-99-2		U	0.0529	0.0265
Benzo(g,h,i)perylene	191-24-2		U	0.0529	0.0265
Benzo(k)fluoranthene	207-08-9		U	0.0529	0.0265
Chrysene	218-01-9		U	0.0529	0.0265
Dibenzo(a,h)anthracene	53-70-3		U	0.0529	0.0265
Fluoranthene	206-44-0		U	0.0529	0.0265
Fluorene	86-73-7		U	0.0529	0.0265
Indeno(1,2,3-cd)pyrene	193-39-5		U	0.0529	0.0265
Naphthalene	91-20-3		U	0.0529	0.0265
Phenanthrene	85-01-8		U	0.0529	0.0265
Pyrene	129-00-0		U	0.0529	0.0265

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2-Fluorobiphenyl	65.0	43	116	
Nitrobenzene-d5	69.9	35	114	
p-Terphenyl-d14	83.7	33	141	

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12050011-05	**PrePrep Method:**	N/A	**Instrument:**	HPMS7
Client ID:	EB-043012-GW	**Prep Method:**	3510C	**Prep Date:**	05/03/2012 09:30
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/04/2012 12:53
Workgroup #:	WG397013	**Analyst:**	CAA	**Run Date:**	05/04/2012 15:59
Collect Date:	04/30/2012 14:15	**Dilution:**	1	**File ID:**	7M54898
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
2-Methylnaphthalene	91-57-6		U	0.0543	0.0272
Acenaphthene	83-32-9		U	0.0543	0.0272
Acenaphthylene	208-96-8		U	0.0543	0.0272
Anthracene	120-12-7		U	0.0543	0.0272
Benzo(a)anthracene	56-55-3		U	0.0543	0.0272
Benzo(a)pyrene	50-32-8		U	0.0543	0.0272
Benzo(b)fluoranthene	205-99-2		U	0.0543	0.0272
Benzo(g,h,i)perylene	191-24-2		U	0.0543	0.0272
Benzo(k)fluoranthene	207-08-9		U	0.0543	0.0272
Chrysene	218-01-9		U	0.0543	0.0272
Dibenzo(a,h)anthracene	53-70-3		U	0.0543	0.0272
Fluoranthene	206-44-0		U	0.0543	0.0272
Fluorene	86-73-7		U	0.0543	0.0272
Indeno(1,2,3-cd)pyrene	193-39-5		U	0.0543	0.0272
Naphthalene	91-20-3		U	0.0543	0.0272
Phenanthrene	85-01-8		U	0.0543	0.0272
Pyrene	129-00-0		U	0.0543	0.0272

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2-Fluorobiphenyl	54.2	43	116	
Nitrobenzene-d5	57.3	35	114	
p-Terphenyl-d14	72.0	33	141	

U	Not detected at or above adjusted sample detection limit.

2.2.2.2 QC Summary Data

Example 8270 Calculations

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

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

where:

	Example
Ax = Area of the characteristic ion for the compound being measured:	1261197
Cis = Concentration of the specific internal standard (ug/mL)	40
Ais = Area of the characteristic ion of the specific internal standard	608044
Cx = Concentration of the compound in the standard being measured (ug/mL)	50
RF = Calculated Response Factor	**1.65935**

2.0 Calculating the concentration (C) of a compound in water using the data from the prep log and quantitation report: *

Cx = [(Ax) (Cis) (Vf) (D)] / [(Ais) (RF) (Vi)]

where:

	Example
Ax = Area of the characteristic ion for the compound being measured	367250
Cis = Concentration of the specific internal standard (ug/mL)	40
Vf = Final volume of sample extract from prep log (mL)	1
D = Dilution factor for sample as a multiplier (10x = 10)	1
Ais = Area of the characteristic ion of the specific internal standard	511641
RF = Average RF from the ICAL	1.65935
Vi = Initial volume of sample extracted from prep log (mL)	1021
Cx = Concentration of the compound in the sample being measured (ug/mL)	0.016947
Cx = Concentration of the compound in the sample being measured (ug/L)	**16.947**

3.0 Calculating the concentration (C) of a compound in soil using the data from the prep log and quantitation report: *

Cx = [(Ax) (Cis) (Vf) (D)] / [(Ais) (RF) (Wi)]

where:

	Example
Ax = Area of the characteristic ion for the compound being measured	367250
Cis = Concentration of the specific internal standard (ug/mL)	40
Vf = Final volume of sample extract from prep log (mL)	1
D = Dilution factor for sample as a multiplier (10x = 10)	1
Ais = Area of the characteristic ion of the specific internal standard	511641
RF = Average RF from the ICAL	1.65935
Wi = Initial weight of sample extracted (g) from prep log	30
Cx = Concentration of the compound in the sample being measured (ug/g)	0.576763
Cx = Concentration of the compound in the sample being measured (ug/kg)	**576.7627**

Dry weight correction:

Percent solids (PCT_S)	50
Cd = (Cx) (100)/PCT_S	**1153.525** ug/kg

* 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 plot

b = intercept from curve plot

Step 2: Calculate y from Quantitation Report

y = 16790/784838 = 0.02139

Step 3: Solve for x

x = (y - b)/m = [(0.02139 -(- 0.0435)]/ 0.0783 = 0.829

Step 4: Solve for analyte concentration Cx

Cx = Cis (x) = (25.0)(0.829) = 20.72 ug/L

Example Spreadsheet Calculation:

Slope from curve, m:	0.0783	
Intercept from curve, b:	-0.0435	
Area of analyte, Ax:	16790	
Area of Internal Standard , Ais:	784484	
Concentration of IS, Cis	25.00	ug/L
Response Ratio (y) :	0.021403	
Amount Ratio:	0.828897	
Concentration (Cx):	20.72241	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

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

Step 4: Solve for analyte concentration Cx

Cx = (Cis)(Amount ratio)

Example Spreadsheet Calculation:

Value of A from plot:	**0.0259**	
Value of B from plot:	**0.0596**	
Value of C from plot:	**-0.0165**	
Area of analyte from quantitation report:	**203233**	
Area of IS from quantiation report:	**1425653**	
Response ratio, y:	**0.142554**	
C - y:	**-0.15905**	
Root 1 - Computed amount ratio , X1:	**-3.88278**	
Root 2 - Computed amount ratio , X2:	**1.581623**	use this solution
Concentration of IS, Cis:	**40.00**	
Concentration of analyte, Cx:	**63.26**	ug/L

Microbac Laboratories Inc.
Sample Extract Log

Workgroup: WG396861
Analyst: CAF
Spike Analyst: CAF
Method: 3510C
Run Date: 05/03/2012 09:30
SOP: EXA01 Revison 15
Spike Witness: CPD
Surr Solution: STD50786

Methylene Chloride Lot #: COA16058
Sodium Sulfate,Anhydrous,Granular (Lot #COA16124

	SAMPLE #	Type	Reference	pH	Prod	Init Amnt	Surr Amnt	Spike Amnt	Spike Sol	Final Vol	Color
1	L12040891-08	SAMP		N	827-PAHL-SPE	1000 mL	.25 mL			1 mL	Transparent
2	L12040928-01	RS01		N	827-PAHL	1000 mL	.25 mL			1 mL	Transparent
3	L12040928-03	SAMP		N	827-PAHL	910 mL	.25 mL			1 mL	Transparent
4	L12040928-08	MS01	L12040928-01	N	827-PAHL	1000 mL	.25 mL	1 mL	STD50386	1 mL	Transparent
5	L12040928-10	SD01	L12040928-01	N	827-PAHL	1000 mL	.25 mL	1 mL	STD50386	1 mL	Transparent
6	L12040963-01	SAMP		N	827-PAHL	940 mL	.25 mL			1 mL	Transparent
7	L12040963-03	SAMP		N	827-PAHL	1000 mL	.25 mL			1 mL	Transparent
8	L12040963-07	SAMP		N	827-PAHL	920 mL	.25 mL			1 mL	Colored
9	L12050011-01	SAMP		N	827-PAHL	1000 mL	.25 mL			1 mL	Transparent
10	L12050011-03	SAMP		N	827-PAHL	945 mL	.25 mL			1 mL	Transparent
11	L12050011-05	SAMP		N	827-PAHL	920 mL	.25 mL			1 mL	Transparent
12	L12050013-01	SAMP		N	827-PAHL	1000 mL	.25 mL			1 mL	Transparent
13	L12050013-02	SAMP		N	827-PAHL	1000 mL	.25 mL			1 mL	Transparent
14	L12050047-03	SAMP		N	827-PAHL	1000 mL	.25 mL			1 mL	Colored
15	L12050050-01	SAMP		N	827-PAHL	910 mL	.25 mL			1 mL	Colored
16	L12050050-03	SAMP		N	827-PAHL	930 mL	.25 mL			1 mL	Transparent
17	L12050050-05	SAMP		N	827-PAHL	900 mL	.25 mL			1 mL	Colored
18	L12050050-07	SAMP		N	827-PAHL	915 mL	.25 mL			1 mL	Transparent
19	WG396861-01	REF	L12040928-01	N	827-PAHL	1000 mL	.25 mL			1 mL	Transparent
20	WG396861-02	BLANK		N	827-PAHL	1000 mL	.25 mL			1 mL	Transparent
21	WG396861-03	LCS		N	827-PAHL	1000 mL	.25 mL	1 mL	STD50386	1 mL	Transparent
22	WG396861-04	MS	L12040928-01	N	827-PAHL	1000 mL	.25 mL	1 mL	STD50386	1 mL	Transparent
23	WG396861-05	MSD	L12040928-01	N	827-PAHL	1000 mL	.25 mL	1 mL	STD50386	1 mL	Transparent

L12040891-08	REEXT OUT OF HOLD

Analyst: Cheryl A. Flowers

Reviewer:

EXTRACT - Modified 10/22/2008
PDF ID: 2401697
Report generated: 05/03/2012 16:21

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS7 Dataset: 040412
Analyst1: CAA Analyst2: NA
Method: 8270L SOP: MSS03 Rev: 10

Maintenance Log ID: 41246 Syringe Filter Lot#:

Column 1 ID: RXI-5MS Column 2 ID: NA
Workgroups: WG394108
Internal STD: STD50749 Surrogate STD: NA Calibration STD
CCV STD: LCS STD: MS/MSD STD:

Comments:

Seq.	File ID	Sample Information	Mat	Dil	Reference	Date/Time
1	7M54726	WG394111-01 5PPM DFTPP STD	1	1	STD50659	04/04/12 08:53
2	7M54727	WG394111-02 1PPM PAHL STD	1	1	STD49560	04/04/12 09:10
3	7M54728	WG394111-02 1PPM PAHL STD	1	1	STD49560	04/04/12 09:39
4	7M54729	WG394111-03 10PPM PAHL STD	1	1	STD49560	04/04/12 10:35
5	7M54730	WG394111-04 5PPM PAHL STD	1	1	STD49560	04/04/12 11:03
6	7M54731	WG394111-05 2.5PPM PAHL STD	1	1	STD49560	04/04/12 11:30
7	7M54732	WG394111-06 0.5PPM PAHL STD	1	1	STD49560	04/04/12 11:58
8	7M54733	WG394111-07 0.1PPM PAHL STD	1	1	STD49560	04/04/12 12:26
9	7M54734	WG394111-08 0.05PPM PAHL STD	1	1	STD49560	04/04/12 12:53
10	7M54735	WG394111-09 1PPM PAHL Alt Src STD	1	1	STD49584	04/04/12 13:21
11	7M54736	WG393926-01 BLK 04/03	7	1	SOIL	04/04/12 13:49
12	7M54737	WG393926-02 LCS 04/03	7	1	SOIL	04/04/12 14:17
13	7M54738	WG393926-03 LCS DUP 04/03	7	1	SOIL	04/04/12 14:45
14	7M54739	L12040002-01 LOD	7	1	SOIL	04/04/12 15:12
15	7M54740	L12040004-01 LOQ	7	1	SOIL	04/04/12 15:40
16	7M54741	L12040039-04	7	1	SOIL	04/04/12 16:08
17	7M54742	L12040039-08	7	1	SOIL	04/04/12 16:36

Comments

Seq.	Rerun	Dil.	Reason	Analytes
2	X			
	WG394111-02 1PPM PAHL STD - Pyrene fails high.			
3				
	WG394111-02 1PPM PAHL STD - Pyrene fails high, run ICAL.			
17	X	10	Over Calibration Range	#3, 4, 5
	L12040039-08 - SS NBZ high - SMI.			

Page: 1 Approved: 09-APR-12

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS7 Dataset: 050412
Analyst1: CAA Analyst2: NA
Method: 8270L SOP: MSS03 Rev: 19

Maintenance Log ID: 41607 Syringe Filter Lot#:

Column 1 ID: RXI-5MS Column 2 ID: NA
Workgroups: WG396780, WG397013
Internal STD: STD51409 Surrogate STD: NA Calibration STD
CCV STD: LCS STD: MS/MSD STD:

Comments:

Seq.	File ID	Sample Information	Mat	Dil	Reference	Date/Time
1	7M54883	WG397019-01 5PPM DFTPP STD	1	1	STD50659	05/04/12 09:16
2	7M54884	WG397019-02 1PPM PAHL STD	1	1	STD49560	05/04/12 09:33
3	7M54885	WG396861-02 BLK 05/03	1	1		05/04/12 10:01
4	7M54886	WG396861-03 LCS 05/03	1	1		05/04/12 10:28
5	7M54887	L12040891-08 RE	1	1		05/04/12 10:56
6	7M54888	L12040891-05 10X RE	7	10	SOIL	05/04/12 11:24
7	7M54889	L12040928-01 REF	1	1		05/04/12 11:51
8	7M54890	L12040928-03	1	1		05/04/12 12:19
9	7M54891	L12040928-08 MS	1	1		05/04/12 12:46
10	7M54892	L12040928-10 MSD	1	1		05/04/12 13:14
11	7M54893	L12040963-01	1	1		05/04/12 13:41
12	7M54894	L12040963-03	1	1		05/04/12 14:09
13	7M54895	L12040963-07	1	1		05/04/12 14:36
14	7M54896	L12050011-01	1	1		05/04/12 15:04
15	7M54897	L12050011-03	1	1		05/04/12 15:32
16	7M54898	L12050011-05	1	1		05/04/12 15:59
17	7M54899	L12050013-01	1	1		05/04/12 16:27
18	7M54900	L12050013-02	1	1		05/04/12 16:55
19	7M54901	L12050047-03	1	1		05/04/12 17:22
20	7M54902	L12050050-01	1	1		05/04/12 17:50
21	7M54903	L12050050-03	1	1		05/04/12 18:18
22	7M54904	L12050050-05	1	1		05/04/12 18:46
23	7M54905	L12050050-07	1	1		05/04/12 19:13

Comments

Seq.	Rerun	Dil.	Reason	Analytes
9				
	L12040928-08 MS - SS FBP low.			
19				
	L12050047-03 - SS FBP low, needs re-extracted.			

Page: 1 Approved: 07-MAY-12

Microbac Laboratories Inc.

Data Checklist

Date: 04-APR-2012
Analyst: CAA
Analyst: NA
Method: 8270L
Instrument: HPMS7
Curve Workgroup: NA
Runlog ID: 46039
Analytical Workgroups: L12040002, L12040004, L12040039

ANALYTICAL	
System Performance Check	X
DFTPP (MS)	X
Endrin/DDT breakdown (8081/MS)	NA
Pentachlorophenol/benzidine tailing (MS)	NA
Eluent check (IC)/system pressure (HPLC)	NA
Window standard (FID)	NA
Initial Calibration	X
Average RF	X
Linear regression or higher order curve	NA
Alternate source standard (ICV) % Difference	X
Continuing Calibration (CCV)	NA
% D/% Drift	NA
Minimum response factors (MS)	NA
Continuing calibration blank (CCB) (IC)	NA
Special standards	NA
Blanks	X
TCL hits	X
Surrogate recoveries	X
LCS/LCSD (Laboratory Control Sample)	X
Recoveries	X
Surrogate recoveries	X
MS/MSD/Sample duplicates	NA
Recoveries	NA
%RPD	NA
Samples	X
TCL hits	X
Mass spectra (MS/HPLC)/2nd column confirmations (ECD/FID/HPLC)	X
Surrogate recoveries	X
Internal standard areas (MS)	X
Library searches (MS)	NA
Calculations & correct factors	X
Compounds above calibration range	X
Reruns	NA
Manual integrations	X
Project/client specific requirements	X
REPORTING	
Upload batch form	X
KOBRA workgroup data/forms/bench sheets	X
Case narratives	NA
Check for completeness	X
Primary Reviewer	CAA
SUPERVISORY/SECONDARY REVIEW	
Check for compliance with method and project specific requirements	X
Check the completeness/accuracy of reported information	X
Data qualifiers	X
Secondary Reviewer	MDC

Primary Reviewer: 05-APR-2012

Secondary Reviewer: 09-APR-2012

CHECKLIST1 - Modified 03/05/2008

Generated: APR-09-2012 12:24:01

Microbac Laboratories Inc.

Data Checklist

Date: 04-MAY-2012
Analyst: CAA
Analyst: NA
Method: 8270L
Instrument: HPMS7
Curve Workgroup: NA
Runlog ID: 46571
Analytical Workgroups: L12040891, 040928, 040963, 050011, 050013, 050047, 050050

ANALYTICAL	
System Performance Check	X
DFTPP (MS)	X
Endrin/DDT breakdown (8081/MS)	NA
Pentachlorophenol/benzidine tailing (MS)	NA
Eluent check (IC)/system pressure (HPLC)	NA
Window standard (FID)	NA
Initial Calibration	NA
Average RF	NA
Linear regression or higher order curve	NA
Alternate source standard (ICV) % Difference	NA
Continuing Calibration (CCV)	X
% D/% Drift	X
Minimum response factors (MS)	X
Continuing calibration blank (CCB) (IC)	NA
Special standards	NA
Blanks	X
TCL hits	X
Surrogate recoveries	X
LCS/LCSD (Laboratory Control Sample)	X
Recoveries	X
Surrogate recoveries	X
MS/MSD/Sample duplicates	X
Recoveries	X
%RPD	X
Samples	X
TCL hits	X
Mass spectra (MS/HPLC)/2nd column confirmations (ECD/FID/HPLC)	X
Surrogate recoveries	X
Internal standard areas (MS)	X
Library searches (MS)	NA
Calculations & correct factors	X
Compounds above calibration range	NA
Reruns	X
Manual integrations	X
Project/client specific requirements	X
REPORTING	
Upload batch form	X
KOBRA workgroup data/forms/bench sheets	X
Case narratives	NA
Check for completeness	X
Primary Reviewer	CAA
SUPERVISORY/SECONDARY REVIEW	
Check for compliance with method and project specific requirements	X
Check the completeness/accuracy of reported information	X
Data qualifiers	X
Secondary Reviewer	MDC

Primary Reviewer: 07-MAY-2012

Secondary Reviewer: 07-MAY-2012

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-07-2012 13:16:55

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 8270C

AAB#: WG397013

Login Number: L12050011

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
MW-29-043012	01	04/30/12					05/03/12	2.8	7		05/04/12	1.2	40	
DUP-GW-043012	03	04/30/12					05/03/12	2.8	7		05/04/12	1.3	40	
EB-043012-GW	05	04/30/12					05/03/12	2.8	7		05/04/12	1.3	40	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2403531
Report generated 05/07/2012 15:34

Microbac Laboratories Inc.
SURROGATE STANDARDS

Login Number: L12050011
Instrument Id: HPMS7
Workgroup (AAB#): WG397013

Method: 8270L
CAL ID: HPMS7-04-APR-12
Matrix: Water

Sample Number	Dilution	Tag	1	2	3
L12050011-01	1.00	01	66.0	68.4	79.9
L12050011-03	1.00	01	65.0	69.9	83.7
L12050011-05	1.00	01	54.2	57.3	72.0
WG396861-02	1.00	01	70.9	73.5	89.0
WG396861-03	1.00	01	64.7	67.2	86.7

Surrogates	Surrogate Limits		
1 - 2-Fluorobiphenyl	43	-	116
2 - Nitrobenzene-d5	35	-	114
3 - p-Terphenyl-d14	33	-	141

Underline = Result out of surrogate limits

DL = surrogate diluted out
ND = surrogate not detected

SURROGATES - Modified 03/06/2008
PDF File ID: 2403541
Report generated: 05/07/2012 15:34

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12050011
Blank File ID: 7M54885
Prep Date: 05/03/12 09:30
Analyzed Date: 05/04/12 10:01
Analyst: CAA

Work Group: WG397013
Blank Sample ID: WG396861-02
Instrument ID: HPMS7
Method: 8270C

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG396861-03	7M54886	05/04/12 10:28	01
MW-29-043012	L12050011-01	7M54896	05/04/12 15:04	01
DUP-GW-043012	L12050011-03	7M54897	05/04/12 15:32	01
EB-043012-GW	L12050011-05	7M54898	05/04/12 15:59	01

Report Name: BLANK_SUMMARY
PDF File ID: 2403532
Report generated 05/07/2012 15:34

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050011 Prep Date: 05/03/12 09:30 Sample ID: WG396861-02
Instrument ID: HPMS7 Run Date: 05/04/12 10:01 Prep Method: 3510C
File ID: 7M54885 Analyst: CAA Method: 8270C
Workgroup (AAB#): WG397013 Matrix: Water Units: ug/L
Contract #: Cal ID: HPMS7-04-APR-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
2-Methylnaphthalene	0.0250	0.0500	0.0250	1	U
Acenaphthene	0.0250	0.0500	0.0250	1	U
Acenaphthylene	0.0250	0.0500	0.0250	1	U
Anthracene	0.0250	0.0500	0.0250	1	U
Benzo(a)anthracene	0.0250	0.0500	0.0250	1	U
Benzo(a)pyrene	0.0250	0.0500	0.0250	1	U
Benzo(b)fluoranthene	0.0250	0.0500	0.0250	1	U
Benzo(g,h,i)perylene	0.0250	0.0500	0.0250	1	U
Benzo(k)fluoranthene	0.0250	0.0500	0.0250	1	U
Chrysene	0.0250	0.0500	0.0250	1	U
Dibenzo(a,h)anthracene	0.0250	0.0500	0.0250	1	U
Fluoranthene	0.0250	0.0500	0.0250	1	U
Fluorene	0.0250	0.0500	0.0250	1	U
Indeno(1,2,3-cd)pyrene	0.0250	0.0500	0.0250	1	U
Naphthalene	0.0250	0.0500	0.0250	1	U
Phenanthrene	0.0250	0.0500	0.0250	1	U
Pyrene	0.0250	0.0500	0.0250	1	U

Surrogates	% Recovery	Surrogate Limits	Qualifier
2-Fluorobiphenyl	70.9	43 - 116	PASS
Nitrobenzene-d5	73.5	35 - 114	PASS
p-Terphenyl-d14	89.0	33 - 141	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: 2403533
07-MAY-2012 15:34

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050011 Run Date: 05/04/2012 Sample ID: WG396861-03
Instrument ID: HPMS7 Run Time: 10:28 Prep Method: 3510C
File ID: 7M54886 Analyst: CAA Method: 8270C
Workgroup (AAB#): WG397013 Matrix: Water Units: ug/L
QC Key: WATERLOO Lot#: STD50386 Cal ID: HPMS7-04-APR-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
2-Methylnaphthalene	1.00	0.771	77.1	30 - 105	
Acenaphthene	1.00	0.731	73.1	30 - 110	
Acenaphthylene	1.00	0.715	71.5	30 - 115	
Anthracene	1.00	0.787	78.7	30 - 130	
Benzo(a)anthracene	1.00	0.781	78.1	50 - 150	
Benzo(a)pyrene	1.00	0.877	87.7	50 - 140	
Benzo(b)fluoranthene	1.00	0.846	84.6	40 - 150	
Benzo(g,h,i)perylene	1.00	0.815	81.5	30 - 150	
Benzo(k)fluoranthene	1.00	0.862	86.2	40 - 150	
Chrysene	1.00	0.860	86.0	45 - 145	
Dibenzo(a,h)anthracene	1.00	0.775	77.5	25 - 155	
Fluoranthene	1.00	0.893	89.3	40 - 150	
Fluorene	1.00	0.696	69.6	30 - 120	
Indeno(1,2,3-cd)pyrene	1.00	0.837	83.7	35 - 150	
Naphthalene	1.00	0.699	69.9	30 - 100	
Phenanthrene	1.00	0.764	76.4	30 - 130	
Pyrene	1.00	0.840	84.0	50 - 150	

Surrogates	% Recovery	Surrogate Limits	Qualifier
2-Fluorobiphenyl	64.7	43 - 116	PASS
Nitrobenzene-d5	67.2	35 - 114	PASS
p-Terphenyl-d14	86.7	33 - 141	PASS

* EXCEEDS %REC LIMIT

LCS - Modified 03/06/2008
PDF File ID: 2403534
Report generated: 05/07/2012 15:34

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

DFTPP

Login Number: L12050011
Instrument: HPMS7
Analyst: CAA
Workgroup: WG394111

Tune ID: WG394111-01
Run Date: 04/04/2012
Run Time: 08:53
File ID: 7M54726
Cal ID: HPMS7 - 04-APR-12

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51.0	198	30.0	60.0	50.9	302042	PASS
68.0	69.0	0	2.00	0	0	PASS
69.0	198	0	100	49.9	296108	PASS
70.0	69.0	0	2.00	0.173	512	PASS
127	198	40.0	60.0	59.2	351488	PASS
197	198	0	1.00	0	0	PASS
198	198	100	100	100	593642	PASS
199	198	5.00	9.00	7.09	42109	PASS
275	198	10.0	30.0	23.3	138533	PASS
365	198	1.00	100	2.46	14602	PASS
441	443	0.0100	100	72.5	60485	PASS
442	198	40.0	100	70.5	418261	PASS
443	442	17.0	23.0	20.0	83453	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG394111-02	STD-CCV	01	04/04/2012 09:39	
WG394111-03	STD	01	04/04/2012 10:35	
WG394111-04	STD	01	04/04/2012 11:03	
WG394111-05	STD	01	04/04/2012 11:30	
WG394111-06	STD	01	04/04/2012 11:58	
WG394111-07	STD	01	04/04/2012 12:26	
WG394111-08	STD	01	04/04/2012 12:53	
WG394111-09	SSCV	01	04/04/2012 13:21	

* Sample past 12 hour tune limit

TUNE - Modified 03/06/2008
PDF File ID: 2403538
Report generated 05/07/2012 15:34

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

DFTPP

Login Number: L12050011
Instrument: HPMS7
Analyst: CAA
Workgroup: WG397019

Tune ID: WG397019-01
Run Date: 05/04/2012
Run Time: 09:16
File ID: 7M54883
Cal ID: HPMS7 - 04-APR-12

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51.0	198	30.0	60.0	45.8	127689	PASS
68.0	69.0	0	2.00	1.51	1929	PASS
69.0	198	0	100	46.0	128140	PASS
70.0	69.0	0	2.00	0.900	1153	PASS
127	198	40.0	60.0	58.7	163690	PASS
197	198	0	1.00	0	0	PASS
198	198	100	100	100	278826	PASS
199	198	5.00	9.00	6.72	18729	PASS
275	198	10.0	30.0	24.4	67989	PASS
365	198	1.00	100	2.81	7827	PASS
441	443	0.0100	100	80.9	31421	PASS
442	198	40.0	100	71.4	199200	PASS
443	442	17.0	23.0	19.5	38842	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG397019-02	CCV	01	05/04/2012 09:33	
WG396861-02	BLANK	01	05/04/2012 10:01	
WG396861-03	LCS	01	05/04/2012 10:28	
L12050011-01	MW-29-043012	01	05/04/2012 15:04	
L12050011-03	DUP-GW-043012	01	05/04/2012 15:32	
L12050011-05	EB-043012-GW	01	05/04/2012 15:59	

* Sample past 12 hour tune limit

TUNE - Modified 03/06/2008
PDF File ID: 2403538
Report generated 05/07/2012 15:34

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L12050011
Analytical Method: 8270C
ICAL Workgroup: WG394111

Instrument ID: HPMS7
Initial Calibration Date: 04-APR-12 12:53
Column ID: F

Analyte		AVG RF	% RSD	LINEAR (R)	QUAD (R^2)
Acenaphthene	CCC	1.265	8.40		
Benzo[a]pyrene	CCC	1.284	7.43		
Fluoranthene	CCC	1.303	11.3		
2-Methylnaphthalene		0.7214	6.62		
Acenaphthylene		2.211	7.32		
Anthracene		1.249	3.76		
Benzo[a]anthracene		1.297	7.77		
Benzo[b]fluoranthene		1.380	7.88		
Benzo[ghi]perylene		1.240	5.94		
Benzo[k]fluoranthene		1.305	10.2		
Chrysene		1.291	10.9		
Dibenz[ah]anthracene		1.190	4.82		
Fluorene		1.503	12.2		
Indeno[1,2,3-cd]pyrene		1.406	4.98		
Naphthalene		1.184	11.0		
Phenanthrene		1.244	7.24		
Pyrene		1.607	11.0		

R = Correlation coefficient; 0.995 minimum
R^2 = Coefficient of determination; 0.99 minimum

If the %RSD is greater than the limit specified by the method or project QAP, then linear or quadratic equations will be used.

INT_CAL - Modified 03/06/2008
PDF File ID: 2403535
Report generated 05/07/2012 15:34

Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L12050011

Analytical Method: 8270C

Instrument ID: HPMS7

Initial Calibration Date: 04-APR-12 12:53

Column ID: F

Analyte	WG394111-02			WG394111-03			WG394111-04		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Acenaphthene	1.00	101608.000	1.193	10.0	743637.000	1.162	5.00	356386.000	1.212
Benzo[a]pyrene	1.00	148527.000	1.275	10.0	1081378.00	1.179	5.00	525392.000	1.241
Fluoranthene	1.00	183927.000	1.284	10.0	1136279.00	1.081	5.00	627208.000	1.292
2-Methylnaphthalene	1.00	112240.000	0.7314	10.0	851242.000	0.6603	5.00	396960.000	0.7307
Acenaphthylene	1.00	169525.000	1.991	10.0	1359329.00	2.123	5.00	644671.000	2.192
Anthracene	1.00	177663.000	1.240	10.0	1226008.00	1.166	5.00	603655.000	1.244
Benzo[a]anthracene	1.00	151964.000	1.287	10.0	1071059.00	1.159	5.00	597051.000	1.276
Benzo[b]fluoranthene	1.00	153733.000	1.320	10.0	1150949.00	1.254	5.00	633809.000	1.496
Benzo[ghi]perylene	1.00	144004.000	1.236	10.0	1226855.00	1.337	5.00	511152.000	1.207
Benzo[k]fluoranthene	1.00	143781.000	1.234	10.0	1050437.00	1.145	5.00	559677.000	1.321
Chrysene	1.00	148985.000	1.261	10.0	1017304.00	1.101	5.00	566428.000	1.210
Dibenz[ah]anthracene	1.00	142338.000	1.222	10.0	1055300.00	1.150	5.00	503437.000	1.189
Fluorene	1.00	126450.000	1.485	10.0	903709.000	1.412	5.00	440591.000	1.498
Indeno[1,2,3-cd]pyrene	1.00	167498.000	1.438	10.0	1239153.00	1.351	5.00	591189.000	1.396
Naphthalene	1.00	174314.000	1.136	10.0	1299479.00	1.008	5.00	598766.000	1.102
Phenanthrene	1.00	174346.000	1.217	10.0	1204227.00	1.145	5.00	578333.000	1.192
Pyrene	1.00	208192.000	1.763	10.0	1269832.00	1.374	5.00	697024.000	1.489

INT_CAL - Modified 03/06/2008
PDF File ID: 2403535
Report generated 05/07/2012 15:34

Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L12050011

Analytical Method: 8270C

Instrument ID: HPMS7

Initial Calibration Date: 04-APR-12 12:53

Column ID: F

Analyte	WG394111-05			WG394111-06			WG394111-07		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Acenaphthene	2.50	175018.000	1.349	0.500	43592.0000	1.197	0.100	8476.00000	1.458
Benzo[a]pyrene	2.50	260806.000	1.271	0.500	65422.0000	1.279	0.100	13356.0000	1.486
Fluoranthene	2.50	284981.000	1.161	0.500	66304.0000	1.367	0.100	13816.0000	1.494
2-Methylnaphthalene	2.50	175530.000	0.6506	0.500	48164.0000	0.7742	0.100	8513.00000	0.7607
Acenaphthylene	2.50	301490.000	2.323	0.500	77288.0000	2.122	0.100	14501.0000	2.494
Anthracene	2.50	307296.000	1.252	0.500	61358.0000	1.265	0.100	12272.0000	1.327
Benzo[a]anthracene	2.50	266063.000	1.267	0.500	59958.0000	1.285	0.100	12524.0000	1.497
Benzo[b]fluoranthene	2.50	285961.000	1.394	0.500	68495.0000	1.340	0.100	13954.0000	1.552
Benzo[ghi]perylene	2.50	255121.000	1.244	0.500	56433.0000	1.104	0.100	11654.0000	1.297
Benzo[k]fluoranthene	2.50	257800.000	1.257	0.500	66287.0000	1.296	0.100	14143.0000	1.573
Chrysene	2.50	258320.000	1.230	0.500	61514.0000	1.318	0.100	12906.0000	1.543
Dibenz[ah]anthracene	2.50	256480.000	1.250	0.500	55466.0000	1.085	0.100	11135.0000	1.239
Fluorene	2.50	216247.000	1.666	0.500	46685.0000	1.282	0.100	10569.0000	1.817
Indeno[1,2,3-cd]pyrene	2.50	302188.000	1.473	0.500	65450.0000	1.280	0.100	13218.0000	1.471
Naphthalene	2.50	307088.000	1.138	0.500	75307.0000	1.211	0.100	15669.0000	1.400
Phenanthrene	2.50	309124.000	1.260	0.500	59636.0000	1.230	0.100	13238.0000	1.431
Pyrene	2.50	314739.000	1.499	0.500	74252.0000	1.591	0.100	15836.0000	1.893

INT_CAL - Modified 03/06/2008
PDF File ID: 2403535
Report generated 05/07/2012 15:34

Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L12050011

Analytical Method: 8270C

Instrument ID: HPMS7

Initial Calibration Date: 04-APR-12 12:53

Column ID: F

Analyte	WG394111-08		
	CONC	RESP	RF
Acenaphthene	0.0500	3814.00000	1.286
Benzo[a]pyrene	0.0500	5055.00000	1.260
Fluoranthene	0.0500	6400.00000	1.443
2-Methylnaphthalene	0.0500	4045.00000	0.7420
Acenaphthylene	0.0500	6622.00000	2.232
Anthracene	0.0500	5552.00000	1.252
Benzo[a]anthracene	0.0500	6304.00000	1.312
Benzo[b]fluoranthene	0.0500	5216.00000	1.301
Benzo[ghi]perylene	0.0500	5026.00000	1.253
Benzo[k]fluoranthene	0.0500	5257.00000	1.311
Chrysene	0.0500	6585.00000	1.371
Dibenz[ah]anthracene	0.0500	4789.00000	1.194
Fluorene	0.0500	4039.00000	1.361
Indeno[1,2,3-cd]pyrene	0.0500	5744.00000	1.432
Naphthalene	0.0500	7045.00000	1.292
Phenanthrene	0.0500	5467.00000	1.233
Pyrene	0.0500	7890.00000	1.643

INT_CAL - Modified 03/06/2008
PDF File ID: 2403535
Report generated 05/07/2012 15:34

Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12050011 Run Date: 04/04/2012 Sample ID: WG394111-09
Instrument ID: HPMS7 Run Time: 13:21 Method: 8270C
File ID: 7M54735 Analyst: CAA QC Key: WATERLOO
ICal Workgroup: WG394111 Cal ID: HPMS7 - 04-APR-12

Analyte		Expected	Found	Units	RF	%D	UCL	Q
Acenaphthene	CCC	1000	983	ug/L	1.24	1.70	30	
Benzo[a]pyrene	CCC	1000	944	ug/L	1.21	5.60	30	
Fluoranthene	CCC	1000	887	ug/L	1.16	11.4	30	
2-Methylnaphthalene		1000	1020	ug/L	0.737	2.20	30	
Acenaphthylene		1000	1060	ug/L	2.34	6.00	30	
Anthracene		1000	981	ug/L	1.23	1.90	30	
Benzo[a]anthracene		1000	921	ug/L	1.19	7.90	30	
Benzo[b]fluoranthene		1000	863	ug/L	1.19	13.8	30	
Benzo[ghi]perylene		1000	986	ug/L	1.22	1.40	30	
Benzo[k]fluoranthene		1000	887	ug/L	1.16	11.3	30	
Chrysene		1000	935	ug/L	1.21	6.50	30	
Dibenz[ah]anthracene		1000	978	ug/L	1.16	2.20	30	
Fluorene		1000	973	ug/L	1.46	2.70	30	
Indeno[1,2,3-cd]pyrene		1000	995	ug/L	1.40	0.500	30	
Naphthalene		1000	944	ug/L	1.12	5.60	30	
Phenanthrene		1000	936	ug/L	1.16	6.40	30	
Pyrene		1000	940	ug/L	1.51	6.10	30	

* Exceeds %D Limit

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

ALT - Modified 09/06/2007
Version 1.5 PDF File ID: 2403536
Report generated 05/07/2012 15:34

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050011 Run Date: 05/04/2012 Sample ID: WG397019-02
Instrument ID: HPMS7 Run Time: 09:33 Method: 8270C
File ID: 7M54884 Analyst: CAA QC Key: WATERLOO
Workgroup (AAB#): WG397013 Cal ID: HPMS7 - 04-APR-12
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Acenaphthene	CCC	1000	1000	ug/L	1.27	0.190	20	
Benzo[a]pyrene	CCC	1000	970	ug/L	1.25	3.04	20	
Fluoranthene	CCC	1000	981	ug/L	1.28	1.94	20	
2-Methylnaphthalene		1000	1030	ug/L	0.740	2.54	20	
Acenaphthylene		1000	967	ug/L	2.14	3.30	20	
Anthracene		1000	945	ug/L	1.18	5.53	20	
Benzo[a]anthracene		1000	939	ug/L	1.22	6.06	20	
Benzo[b]fluoranthene		1000	889	ug/L	1.23	11.2	20	
Benzo[ghi]perylene		1000	975	ug/L	1.21	2.49	20	
Benzo[k]fluoranthene		1000	962	ug/L	1.26	3.83	20	
Chrysene		1000	966	ug/L	1.25	3.45	20	
Dibenz[ah]anthracene		1000	1010	ug/L	1.20	0.840	20	
Fluorene		1000	925	ug/L	1.39	7.52	20	
Indeno[1,2,3-cd]pyrene		1000	1000	ug/L	1.41	0.390	20	
Naphthalene		1000	969	ug/L	1.15	3.13	20	
Phenanthrene		1000	898	ug/L	1.12	10.2	20	
Pyrene		1000	940	ug/L	1.51	6.03	20	

* Exceeds %D Criteria

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

CCV - Modified 03/05/2008
PDF File ID: 2403539
Report generated 05/07/2012 15:34

Microbac Laboratories Inc.

INTERNAL STANDARD AREA SUMMARY
(COMPARED TO CCV)

Login Number: L12050011
Instrument ID: HPMS7
Workgroup (AAB#): WG397013

CCV Number: WG397019-02
CAL ID: HPMS7-04-APR-12
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3	IS-4	IS-5
WG397019-02	NA	NA	57510	90937	97284	90339	95286
Upper Limit	NA	NA	115020	181874	194568	180678	190572
Lower Limit	NA	NA	28755	45469	48642	45170	47643
L12050011-01	1.00	01	63534	98215	103489	95171	105426
L12050011-03	1.00	01	69302	109162	114292	105889	116842
L12050011-05	1.00	01	65295	103117	105704	99796	109957
WG396861-02	1.00	01	60234	93901	98769	92437	99121
WG396861-03	1.00	01	59985	95903	99929	93096	96353

IS-1 - Acenaphthene-d10
IS-2 - Chrysene-d12
IS-3 - Naphthalene-d8
IS-4 - Perylene-d12
IS-5 - Phenanthrene-d10

Underline = Response outside limits

INTERNAL_STD - Modified 03/06/2008
PDF File ID: 2403540
Report generated 05/07/2012 15:34

Microbac Laboratories Inc.

INTERNAL STANDARD RETENTION TIME SUMMARY
(COMPARED TO CCV)

Login Number: L12050011
Instrument ID: HPMS7
Workgroup (AAB#): WG397013

CCV Number: WG397019-02
CAL ID: HPMS7-04-APR-12
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3	IS-4	IS-5
WG397019-02	NA	NA	8.22	13.47	6.03	15.7	10.09
Upper Limit	NA	NA	8.72	13.97	6.53	16.2	10.59
Lower Limit	NA	NA	7.72	12.97	5.53	15.2	9.59
L12050011-01	1.00	01	8.22	13.47	6.02	15.7	10.09
L12050011-03	1.00	01	8.22	13.47	6.03	15.7	10.09
L12050011-05	1.00	01	8.22	13.47	6.03	15.7	10.09
WG396861-02	1.00	01	8.22	13.47	6.02	15.7	10.09
WG396861-03	1.00	01	8.22	13.47	6.02	15.7	10.08

IS-1 - Acenaphthene-d10
IS-2 - Chrysene-d12
IS-3 - Naphthalene-d8
IS-4 - Perylene-d12
IS-5 - Phenanthrene-d10

Underline = Response outside limits

INTERNAL_STD_RT - Modified 03/06/2008
PDF File ID: 2403543
Report generated 05/07/2012 15:34

2.2.2.3 Sample Data

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\7M54896.D Vial: 14
Acq On : 4 May 2012 3:04 pm Operator: CAA
Sample : L12050011-01 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 07 08:46:32 2012 Quant Results File: SIMPAHL.RES

Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Mon May 07 08:46:11 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Naphthalene-d8	6.02	136	103489	1.00 ug/ml	-0.01
6) Acenaphthene-d10	8.22	164	63534	1.00 ug/ml	-0.01
11) Phenanthrene-d10	10.09	188	105426	1.00 ug/ml	0.00
15) Chrysene-d12	13.47	240	98215	1.00 ug/ml	-0.01
20) Perylene-d12	15.70	264	95171	1.00 ug/ml	-0.02

System Monitoring Compounds

2) Nitrobenzene-d5	5.18	82	73943	1.7108 ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery = 68.40%		
7) 2-Fluorobiphenyl	7.33	172	173284	1.6490 ug/ml	-0.02
Spiked Amount 2.500	Range 43 - 116		Recovery = 66.00%		
17) p-Terphenyl-d14	12.07	244	182005	1.9974 ug/ml	-0.02
Spiked Amount 2.500	Range 33 - 141		Recovery = 80.00%		

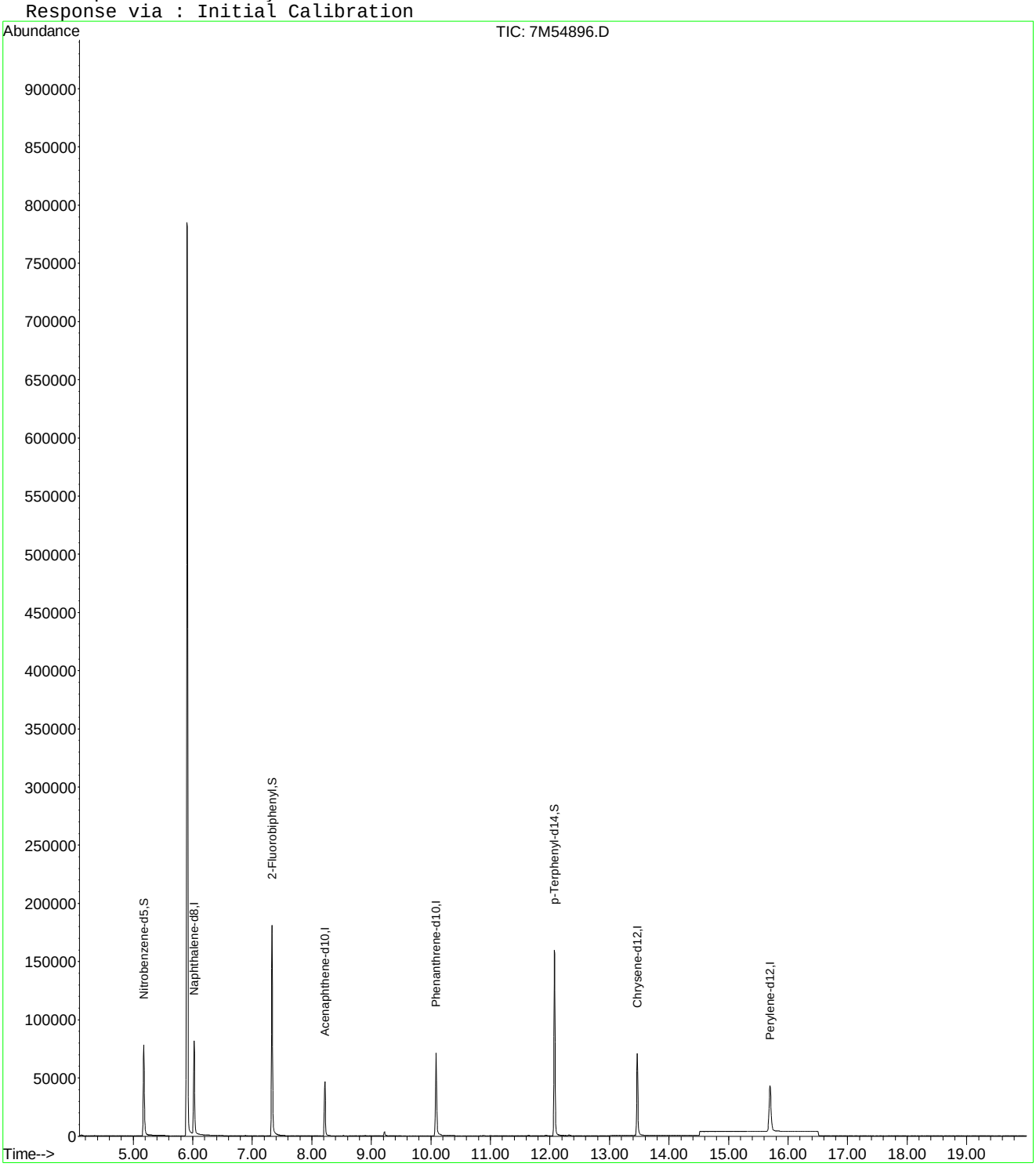
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
7M54896.D SIMPAHL.M Mon May 07 08:55:29 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\7M54896.D Vial: 14
Acq On : 4 May 2012 3:04 pm Operator: CAA
Sample : L12050011-01 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 7 8:46 2012 Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Mon May 07 08:46:11 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\7M54897.D Vial: 15
Acq On : 4 May 2012 3:32 pm Operator: CAA
Sample : L12050011-03 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 07 08:46:33 2012 Quant Results File: SIMPAHL.RES

Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Mon May 07 08:46:11 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Naphthalene-d8	6.03	136	114292	1.00 ug/ml	0.00
6) Acenaphthene-d10	8.22	164	69302	1.00 ug/ml	-0.01
11) Phenanthrene-d10	10.09	188	116842	1.00 ug/ml	0.00
15) Chrysene-d12	13.47	240	109162	1.00 ug/ml	-0.01
20) Perylene-d12	15.70	264	105889	1.00 ug/ml	-0.01

System Monitoring Compounds

2) Nitrobenzene-d5	5.18	82	83417	1.7476 ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery = 70.00%		
7) 2-Fluorobiphenyl	7.33	172	186289	1.6252 ug/ml	-0.01
Spiked Amount 2.500	Range 43 - 116		Recovery = 65.20%		
17) p-Terphenyl-d14	12.08	244	211862	2.0919 ug/ml	-0.01
Spiked Amount 2.500	Range 33 - 141		Recovery = 83.60%		

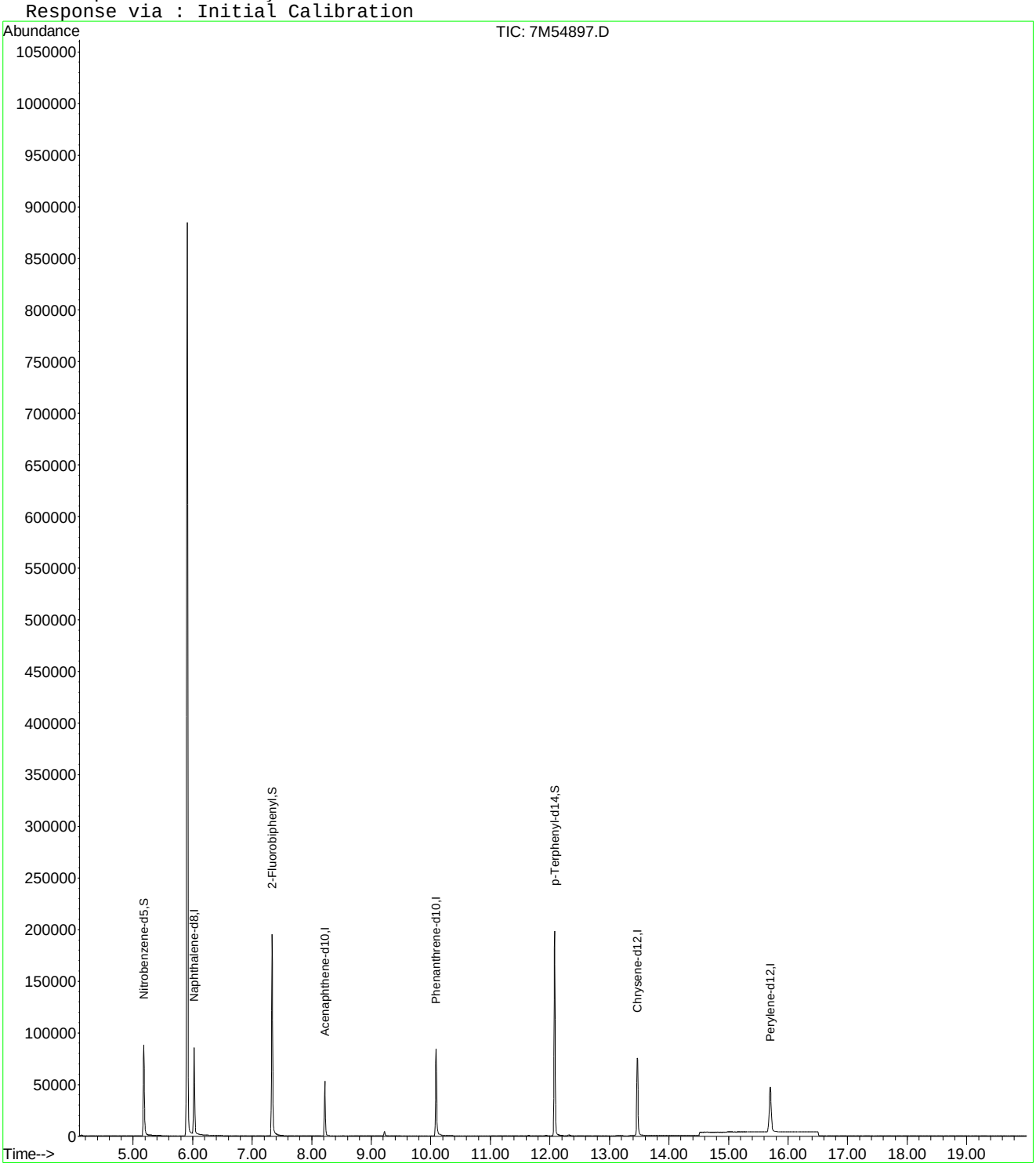
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
7M54897.D SIMPAHL.M Mon May 07 08:55:30 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\7M54897.D Vial: 15
Acq On : 4 May 2012 3:32 pm Operator: CAA
Sample : L12050011-03 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 7 8:46 2012 Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Mon May 07 08:46:11 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\7M54898.D Vial: 16
Acq On : 4 May 2012 3:59 pm Operator: CAA
Sample : L12050011-05 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 07 08:46:33 2012 Quant Results File: SIMPAHL.RES

Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Mon May 07 08:46:11 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Naphthalene-d8	6.03	136	105704	1.00 ug/ml	0.00
6) Acenaphthene-d10	8.22	164	65295	1.00 ug/ml	-0.01
11) Phenanthrene-d10	10.09	188	109957	1.00 ug/ml	0.00
15) Chrysene-d12	13.47	240	103117	1.00 ug/ml	-0.01
20) Perylene-d12	15.70	264	99796	1.00 ug/ml	-0.02

System Monitoring Compounds

2) Nitrobenzene-d5	5.18	82	63278	1.4334 ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery	= 57.20%	
7) 2-Fluorobiphenyl	7.33	172	146343	1.3551 ug/ml	-0.01
Spiked Amount 2.500	Range 43 - 116		Recovery	= 54.40%	
17) p-Terphenyl-d14	12.08	244	172173	1.7997 ug/ml	-0.01
Spiked Amount 2.500	Range 33 - 141		Recovery	= 72.00%	

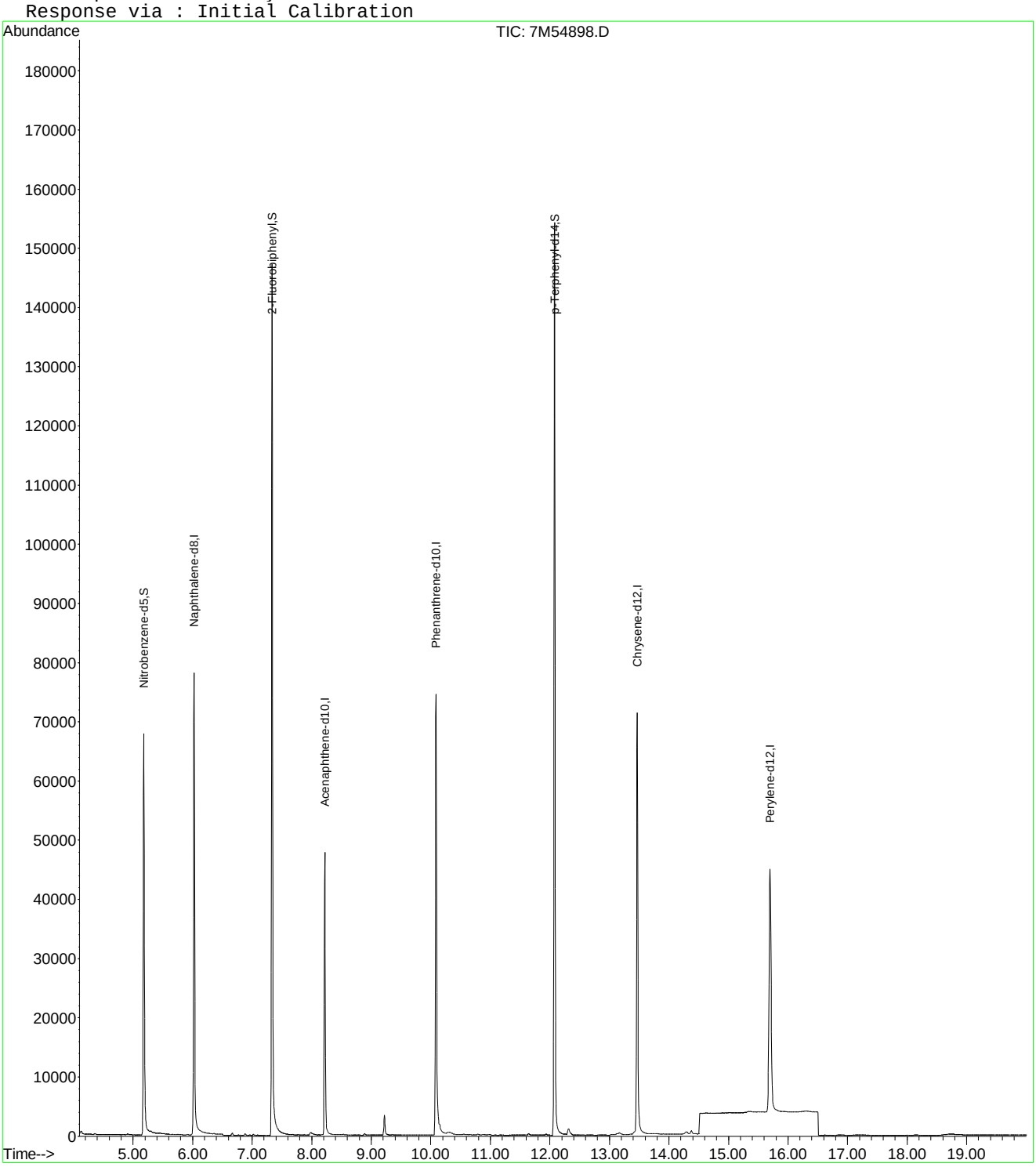
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
7M54898.D SIMPAHL.M Mon May 07 08:55:31 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\7M54898.D Vial: 16
Acq On : 4 May 2012 3:59 pm Operator: CAA
Sample : L12050011-05 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 7 8:46 2012 Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Mon May 07 08:46:11 2012
Response via : Initial Calibration



7M54898.D SIMPAHL.M Mon May 07 08:55:31 2012 Page 2

2.2.2.4 Standards Data

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\040412\7M54728.D Vial: 2
Acq On : 4 Apr 2012 9:39 am Operator: CAA
Sample : WG394111-02 1PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 05 10:56:38 2012 Quant Results File: SIMPAHL.RES

Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu Apr 05 10:56:28 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Naphthalene-d8	6.03	136	153463	1.00 ug/ml	0.00
6) Acenaphthene-d10	8.23	164	85143	1.00 ug/ml	0.00
11) Phenanthrene-d10	10.10	188	143225	1.00 ug/ml	0.00
15) Chrysene-d12	13.48	240	118114	1.00 ug/ml	0.00
20) Perylene-d12	15.71	264	116508	1.00 ug/ml	0.00

System Monitoring Compounds					
2) Nitrobenzene-d5	5.18	82	63871	0.9809 ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery	= 39.20%	
7) 2-Fluorobiphenyl	7.35	172	137427	1.0163 ug/ml	0.00
Spiked Amount 2.500	Range 43 - 116		Recovery	= 40.80%#	
17) p-Terphenyl-d14	12.09	244	118698	1.1101 ug/ml	0.00
Spiked Amount 2.500	Range 33 - 141		Recovery	= 44.40%	

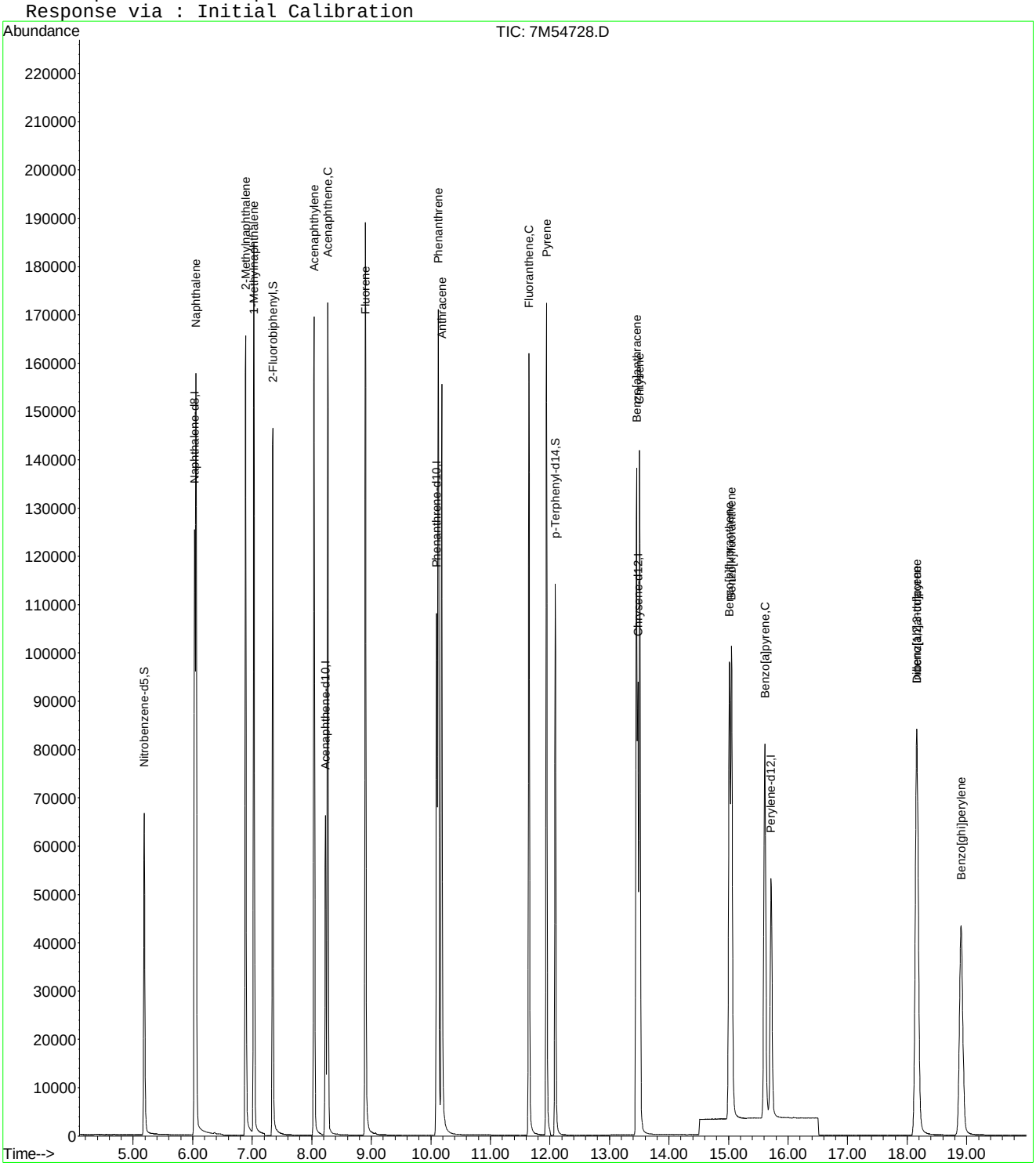
Target Compounds					Qvalue
3) Naphthalene	6.05	128	174314	0.9550 ug/ml	100
4) 2-Methylnaphthalene	6.89	142	112240	1.0173 ug/ml	100
5) 1-Methylnaphthalene	7.03	142	119453	1.0871 ug/ml	99
8) Acenaphthylene	8.04	152	169525	0.9990 ug/ml	100
9) Acenaphthene	8.27	154	101608	0.9584 ug/ml	100
10) Fluorene	8.90	166	126450	1.0464 ug/ml	100
12) Phenanthrene	10.13	178	174346	0.9841 ug/ml	100
13) Anthracene	10.18	178	177663	1.0067 ug/ml	100
14) Fluoranthene	11.65	202	183927	0.9372 ug/ml	100
16) Pyrene	11.94	202	208192	1.1119 ug/ml	100
18) Benzo[a]anthracene	13.46	228	151964	0.9952 ug/ml	100
19) Chrysene	13.51	228	148985	0.9748 ug/ml	100
21) Benzo[b]fluoranthene	15.01	252	153733	0.9700 ug/ml	96
22) Benzo[k]fluoranthene	15.05	252	143781	0.9822 ug/ml	96
23) Benzo[a]pyrene	15.61	252	148527	0.9919 ug/ml	100
24) Indeno[1,2,3-cd]pyrene	18.16	276	167498	0.9689 ug/ml	100
25) Dibenz[ah]anthracene	18.16	278	142338	0.9814 ug/ml	100
26) Benzo[ghi]perylene	18.91	276	144004	0.9548 ug/ml	100

(#) = qualifier out of range (m) = manual integration
7M54728.D SIMPAHL.M Thu Apr 05 13:50:13 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\040412\7M54728.D Vial: 2
Acq On : 4 Apr 2012 9:39 am Operator: CAA
Sample : WG394111-02 1PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 5 10:56 2012 Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu Apr 05 10:58:29 2012
Response via : Initial Calibration



7M54728.D SIMPAHL.M Thu Apr 05 13:50:14 2012 Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\040412\7M54729.D Vial: 3
Acq On : 4 Apr 2012 10:35 am Operator: CAA
Sample : WG394111-03 10PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 05 10:56:53 2012 Quant Results File: SIMPAHL.RES

Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu Apr 05 10:56:49 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Naphthalene-d8	6.04	136	128908	1.00 ug/ml	0.00
6) Acenaphthene-d10	8.24	164	64023	1.00 ug/ml	0.00
11) Phenanthrene-d10	10.10	188	105133	1.00 ug/ml	0.00
15) Chrysene-d12	13.49	240	92409	1.00 ug/ml	0.00
20) Perylene-d12	15.73	264	91750	1.00 ug/ml	0.01

System Monitoring Compounds					
2) Nitrobenzene-d5	5.19	82	514649	10.5523 ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery = 422.00%#		
7) 2-Fluorobiphenyl	7.35	172	982495	10.8849 ug/ml	0.00
Spiked Amount 2.500	Range 43 - 116		Recovery = 435.20%#		
17) p-Terphenyl-d14	12.09	244	752352	9.8300 ug/ml	0.00
Spiked Amount 2.500	Range 33 - 141		Recovery = 393.20%#		

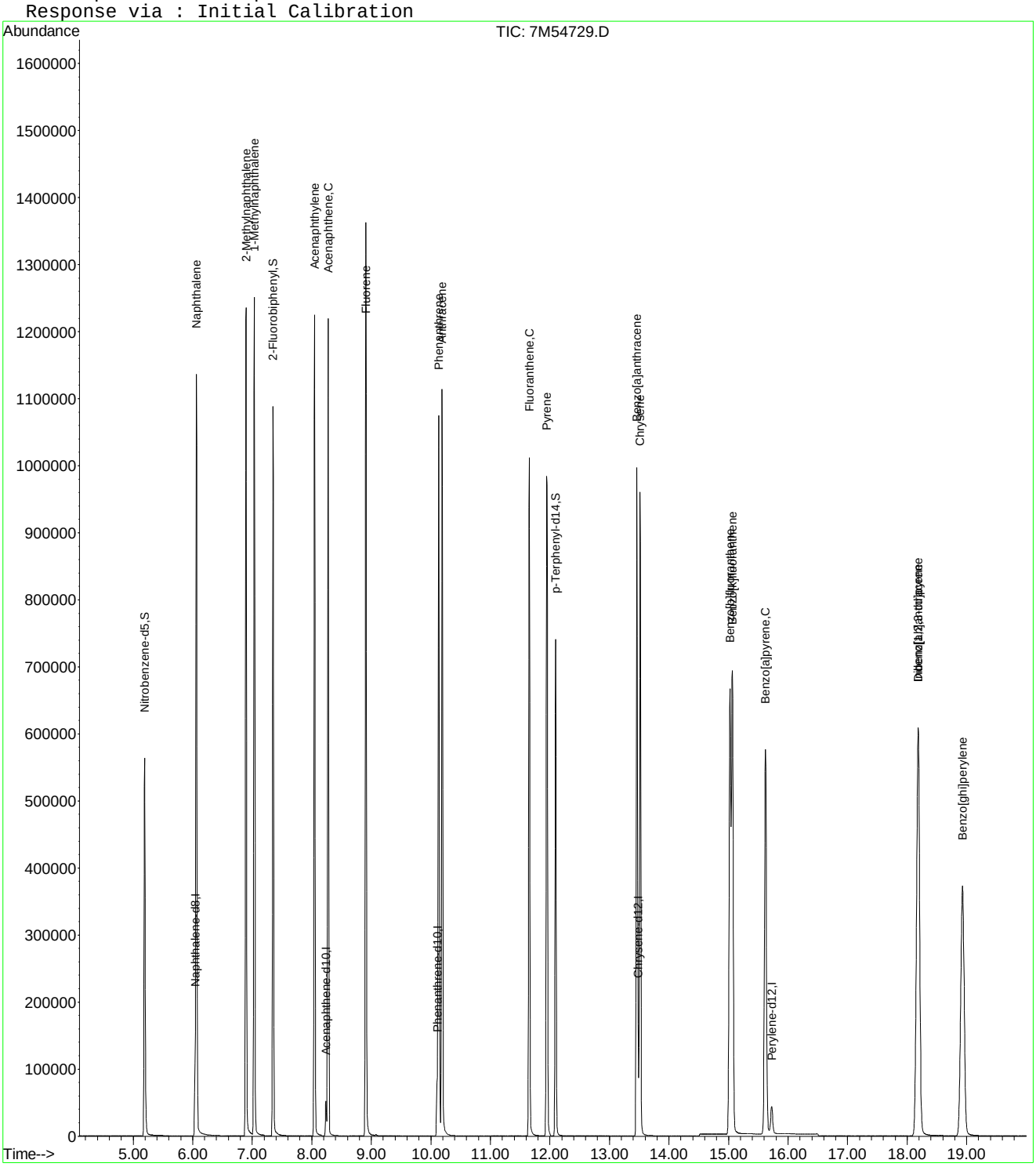
Target Compounds					Qvalue
3) Naphthalene	6.06	128	1299479	9.4803 ug/ml	98
4) 2-Methylnaphthalene	6.90	142	851242	10.1225 ug/ml	100
5) 1-Methylnaphthalene	7.03	142	819176	9.7675 ug/ml	100
8) Acenaphthylene	8.04	152	1359329	12.0426 ug/ml	98
9) Acenaphthene	8.27	154	743637	10.6172 ug/ml	99
10) Fluorene	8.91	166	903709	11.2386 ug/ml	99
12) Phenanthrene	10.13	178	1204227	10.3551 ug/ml	98
13) Anthracene	10.19	178	1226008	10.6044 ug/ml	98
14) Fluoranthene	11.65	202	1136279	8.8360 ug/ml	98
16) Pyrene	11.95	202	1269832	9.4356 ug/ml	99
18) Benzo[a]anthracene	13.46	228	1071059	10.0680 ug/ml	98
19) Chrysene	13.51	228	1017304	9.5093 ug/ml	98
21) Benzo[b]fluoranthene	15.03	252	1150949	10.3919 ug/ml	98
22) Benzo[k]fluoranthene	15.06	252	1050437	10.2151 ug/ml	98
23) Benzo[a]pyrene	15.62	252	1081378	10.2910 ug/ml	98
24) Indeno[1,2,3-cd]pyrene	18.19	276	1239153	10.1969 ug/ml	100
25) Dibenz[ah]anthracene	18.19	278	1055300	10.3692 ug/ml	100
26) Benzo[ghi]perylene	18.93	276	1226855	11.5835 ug/ml	99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\040412\7M54729.D Vial: 3
Acq On : 4 Apr 2012 10:35 am Operator: CAA
Sample : WG394111-03 10PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 5 10:56 2012 Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu Apr 05 10:58:29 2012
Response via : Initial Calibration



7M54729.D SIMPAHL.M Thu Apr 05 13:50:24 2012 Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\040412\7M54730.D Vial: 4
Acq On : 4 Apr 2012 11:03 am Operator: CAA
Sample : WG394111-04 5PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 05 10:57:08 2012 Quant Results File: SIMPAHL.RES

Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu Apr 05 10:57:04 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Naphthalene-d8	6.03	136	108655	1.00 ug/ml	0.00
6) Acenaphthene-d10	8.23	164	58819	1.00 ug/ml	0.00
11) Phenanthrene-d10	10.10	188	97058	1.00 ug/ml	0.00
15) Chrysene-d12	13.48	240	93620	1.00 ug/ml	0.00
20) Perylene-d12	15.71	264	84709	1.00 ug/ml	0.00

System Monitoring Compounds					
2) Nitrobenzene-d5	5.18	82	227669	5.6709 ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery	= 226.80%#	
7) 2-Fluorobiphenyl	7.34	172	476716	5.7218 ug/ml	0.00
Spiked Amount 2.500	Range 43 - 116		Recovery	= 228.80%#	
17) p-Terphenyl-d14	12.09	244	401697	5.1543 ug/ml	0.00
Spiked Amount 2.500	Range 33 - 141		Recovery	= 206.00%#	

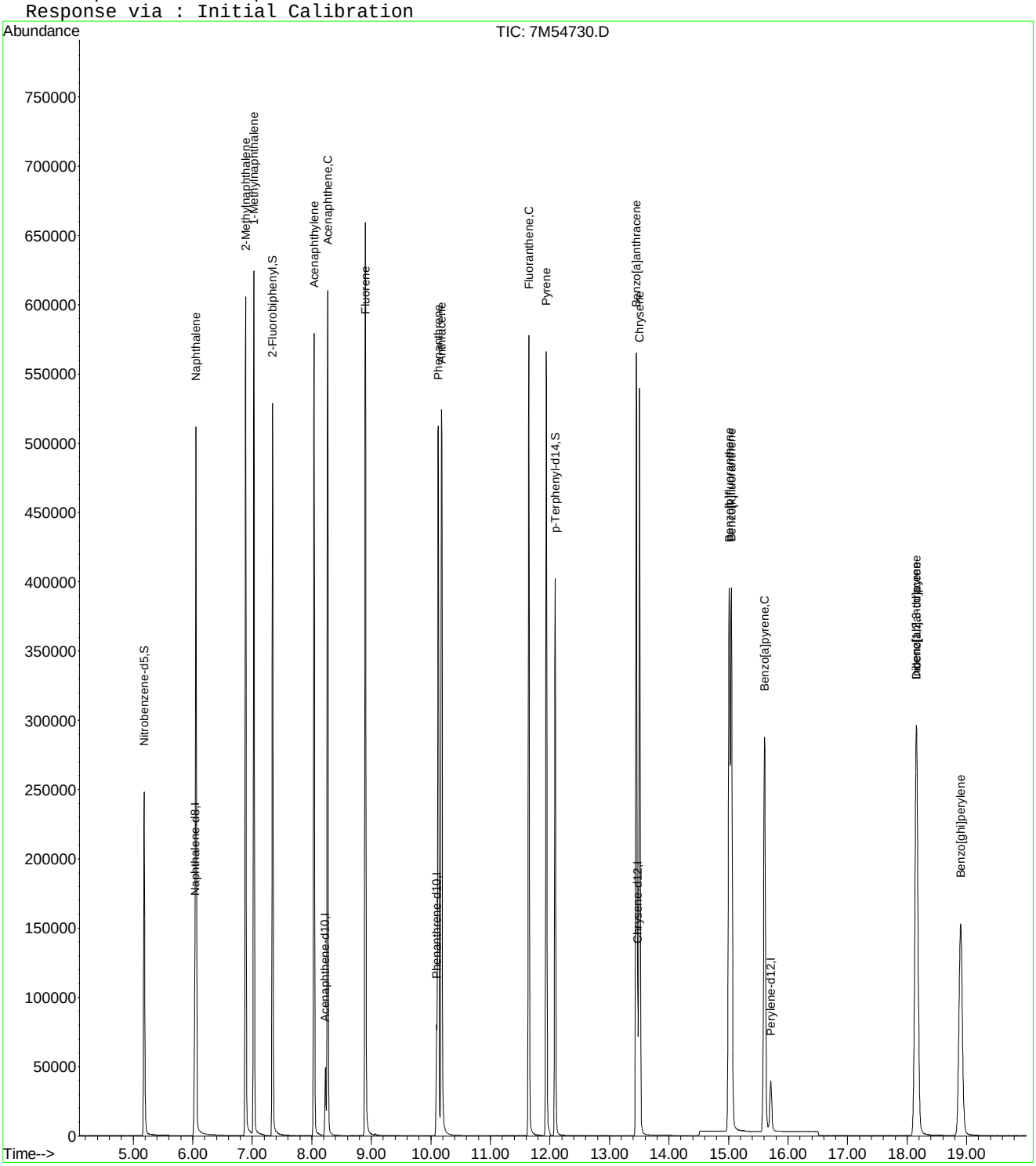
Target Compounds					Qvalue
3) Naphthalene	6.06	128	598766	5.2004 ug/ml	99
4) 2-Methylnaphthalene	6.89	142	396960	5.6167 ug/ml	100
5) 1-Methylnaphthalene	7.03	142	401769	5.7396 ug/ml	100
8) Acenaphthylene	8.04	152	644671	6.1053 ug/ml	99
9) Acenaphthene	8.27	154	356386	5.5560 ug/ml	100
10) Fluorene	8.90	166	440591	5.9040 ug/ml	100
12) Phenanthrene	10.13	178	578333	5.3513 ug/ml	100
13) Anthracene	10.18	178	603655	5.6342 ug/ml	99
14) Fluoranthene	11.64	202	627208	5.3565 ug/ml	99
16) Pyrene	11.94	202	697024	5.0790 ug/ml	100
18) Benzo[a]anthracene	13.45	228	597051	5.5085 ug/ml	98
19) Chrysene	13.51	228	566428	5.2679 ug/ml	99
21) Benzo[b]fluoranthene	15.01	252	633809	6.1547 ug/ml	99
22) Benzo[k]fluoranthene	15.05	252	559677	5.8368 ug/ml	99
23) Benzo[a]pyrene	15.60	252	525392	5.3975 ug/ml	99
24) Indeno[1,2,3-cd]pyrene	18.16	276	591189	5.3721 ug/ml	100
25) Dibenz[ah]anthracene	18.16	278	503437	5.4570 ug/ml	100
26) Benzo[ghi]perylene	18.90	276	511152	5.2233 ug/ml	100

(#) = qualifier out of range (m) = manual integration
7M54730.D SIMPAHL.M Thu Apr 05 13:50:25 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\040412\7M54730.D Vial: 4
Acq On : 4 Apr 2012 11:03 am Operator: CAA
Sample : WG394111-04 5PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 5 10:57 2012 Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu Apr 05 10:58:29 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\040412\7M54731.D Vial: 5
Acq On : 4 Apr 2012 11:30 am Operator: CAA
Sample : WG394111-05 2.5PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 05 10:57:22 2012 Quant Results File: SIMPAHL.RES

Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu Apr 05 10:57:18 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Naphthalene-d8	6.03	136	107923	1.00 ug/ml	0.00
6) Acenaphthene-d10	8.23	164	51916	1.00 ug/ml	0.00
11) Phenanthrene-d10	10.10	188	98158	1.00 ug/ml	0.00
15) Chrysene-d12	13.48	240	84003	1.00 ug/ml	0.00
20) Perylene-d12	15.71	264	82066	1.00 ug/ml	0.00

System Monitoring Compounds					
2) Nitrobenzene-d5	5.18	82	112962	2.5073 ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery	= 100.40%	
7) 2-Fluorobiphenyl	7.34	172	212151	2.5509 ug/ml	0.00
Spiked Amount 2.500	Range 43 - 116		Recovery	= 102.00%	
17) p-Terphenyl-d14	12.09	244	187122	2.4047 ug/ml	0.00
Spiked Amount 2.500	Range 33 - 141		Recovery	= 96.00%	

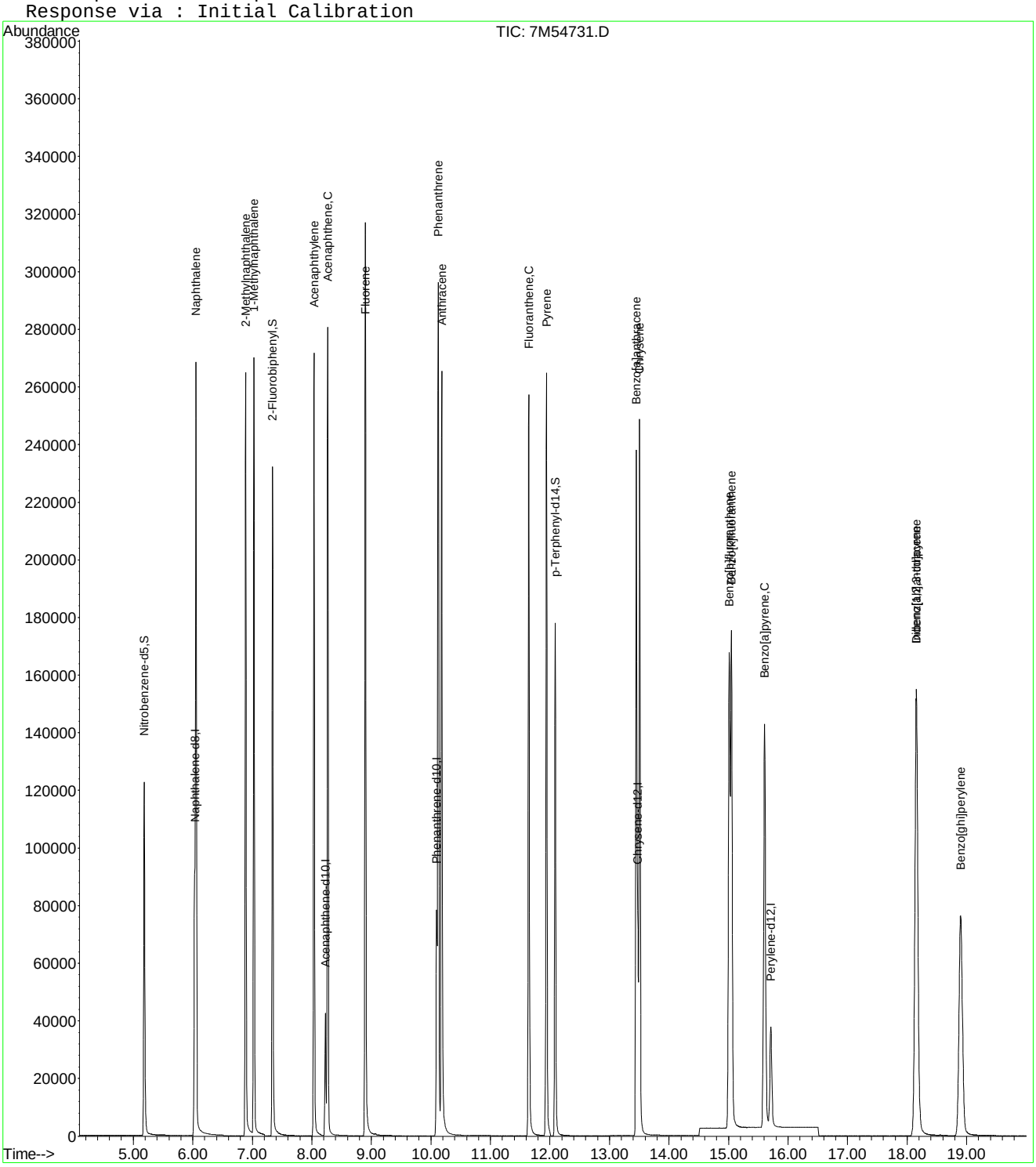
Target Compounds					Qvalue
3) Naphthalene	6.05	128	307088	2.4019 ug/ml	100
4) 2-Methylnaphthalene	6.89	142	175530	2.2161 ug/ml	100
5) 1-Methylnaphthalene	7.03	142	176814	2.2516 ug/ml	100
8) Acenaphthylene	8.04	152	301490	2.8308 ug/ml	99
9) Acenaphthene	8.27	154	175018	2.7418 ug/ml	94
10) Fluorene	8.90	166	216247	2.8919 ug/ml	100
12) Phenanthrene	10.12	178	309124	2.5215 ug/ml	100
13) Anthracene	10.18	178	307296	2.5122 ug/ml	100
14) Fluoranthene	11.65	202	284981	2.1436 ug/ml	100
16) Pyrene	11.94	202	314739	2.3011 ug/ml	100
18) Benzo[a]anthracene	13.45	228	266063	2.4304 ug/ml	100
19) Chrysene	13.51	228	258320	2.3925 ug/ml	99
21) Benzo[b]fluoranthene	15.01	252	285961	2.5037 ug/ml	96
22) Benzo[k]fluoranthene	15.05	252	257800	2.4437 ug/ml	96
23) Benzo[a]pyrene	15.60	252	260806	2.4638 ug/ml	100
24) Indeno[1,2,3-cd]pyrene	18.16	276	302188	2.5265 ug/ml	100
25) Dibenz[ah]anthracene	18.16	278	256480	2.5534 ug/ml	100
26) Benzo[ghi]perylene	18.89	276	255121	2.4055 ug/ml	100

(#) = qualifier out of range (m) = manual integration
7M54731.D SIMPAHL.M Thu Apr 05 13:50:26 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\040412\7M54731.D Vial: 5
Acq On : 4 Apr 2012 11:30 am Operator: CAA
Sample : WG394111-05 2.5PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 5 10:57 2012 Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu Apr 05 10:58:29 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\040412\7M54732.D Vial: 6
Acq On : 4 Apr 2012 11:58 am Operator: CAA
Sample : WG394111-06 0.5PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 05 10:57:36 2012 Quant Results File: SIMPAHL.RES

Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu Apr 05 10:57:31 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Naphthalene-d8	6.03	136	124416	1.00 ug/ml	0.00
6) Acenaphthene-d10	8.23	164	72846	1.00 ug/ml	0.00
11) Phenanthrene-d10	10.09	188	97007	1.00 ug/ml	0.00
15) Chrysene-d12	13.48	240	93356	1.00 ug/ml	0.00
20) Perylene-d12	15.71	264	102269	1.00 ug/ml	0.00

System Monitoring Compounds					
2) Nitrobenzene-d5	5.18	82	25264	0.4849 ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery	= 19.20%#	
7) 2-Fluorobiphenyl	7.34	172	59769	0.5074 ug/ml	0.00
Spiked Amount 2.500	Range 43 - 116		Recovery	= 20.40%#	
17) p-Terphenyl-d14	12.09	244	43554	0.5033 ug/ml	0.00
Spiked Amount 2.500	Range 33 - 141		Recovery	= 20.00%#	

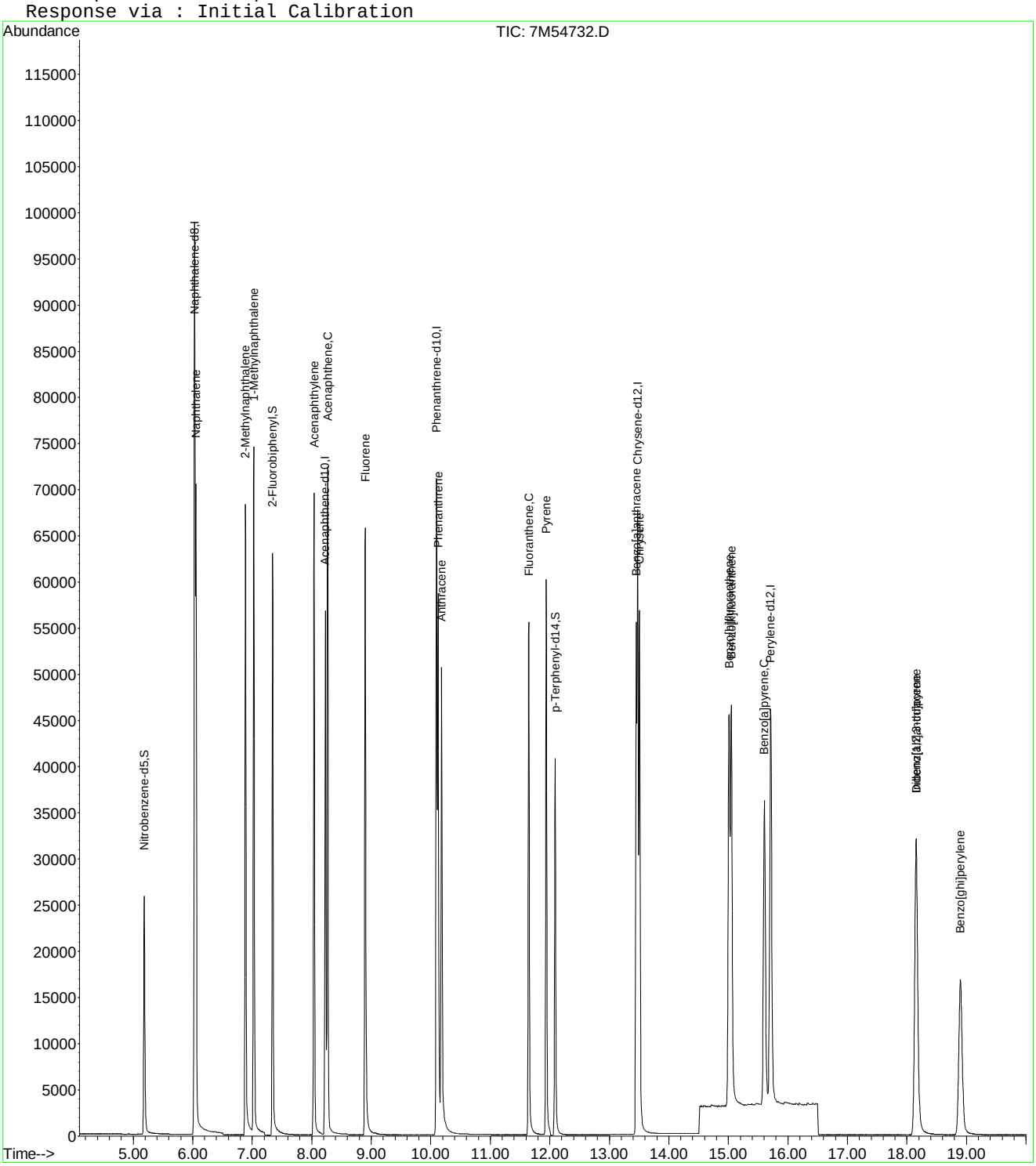
Target Compounds					Qvalue
3) Naphthalene	6.05	128	75307	0.5106 ug/ml	100
4) 2-Methylnaphthalene	6.89	142	48164	0.5252 ug/ml	100
5) 1-Methylnaphthalene	7.03	142	49560	0.5450 ug/ml	100
8) Acenaphthylene	8.04	152	77288	0.5039 ug/ml	99
9) Acenaphthene	8.27	154	43592	0.4783 ug/ml	100
10) Fluorene	8.90	166	46685	0.4326 ug/ml	99
12) Phenanthrene	10.12	178	59636	0.4896 ug/ml	99
13) Anthracene	10.18	178	61358	0.5065 ug/ml	99
14) Fluoranthene	11.65	202	66304	0.5157 ug/ml	100
16) Pyrene	11.94	202	74252	0.4885 ug/ml	100
18) Benzo[a]anthracene	13.45	228	59958	0.4920 ug/ml	100
19) Chrysene	13.51	228	61514	0.5123 ug/ml	99
21) Benzo[b]fluoranthene	15.01	252	68495	0.4786 ug/ml	100
22) Benzo[k]fluoranthene	15.05	252	66287	0.5040 ug/ml	99
23) Benzo[a]pyrene	15.60	252	65422	0.4974 ug/ml	99
24) Indeno[1,2,3-cd]pyrene	18.16	276	65450	0.4291 ug/ml	100
25) Dibenz[ah]anthracene	18.16	278	55466	0.4329 ug/ml	100
26) Benzo[ghi]perylene	18.90	276	56433	0.4188 ug/ml	100

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\040412\7M54732.D Vial: 6
Acq On : 4 Apr 2012 11:58 am Operator: CAA
Sample : WG394111-06 0.5PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 5 10:57 2012 Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu Apr 05 10:58:29 2012
Response via : Initial Calibration



7M54732.D SIMPAHL.M Thu Apr 05 13:50:26 2012 Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\040412\7M54733.D Vial: 7
Acq On : 4 Apr 2012 12:26 pm Operator: CAA
Sample : WG394111-07 0.1PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 05 10:57:49 2012 Quant Results File: SIMPAHL.RES

Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu Apr 05 10:57:45 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

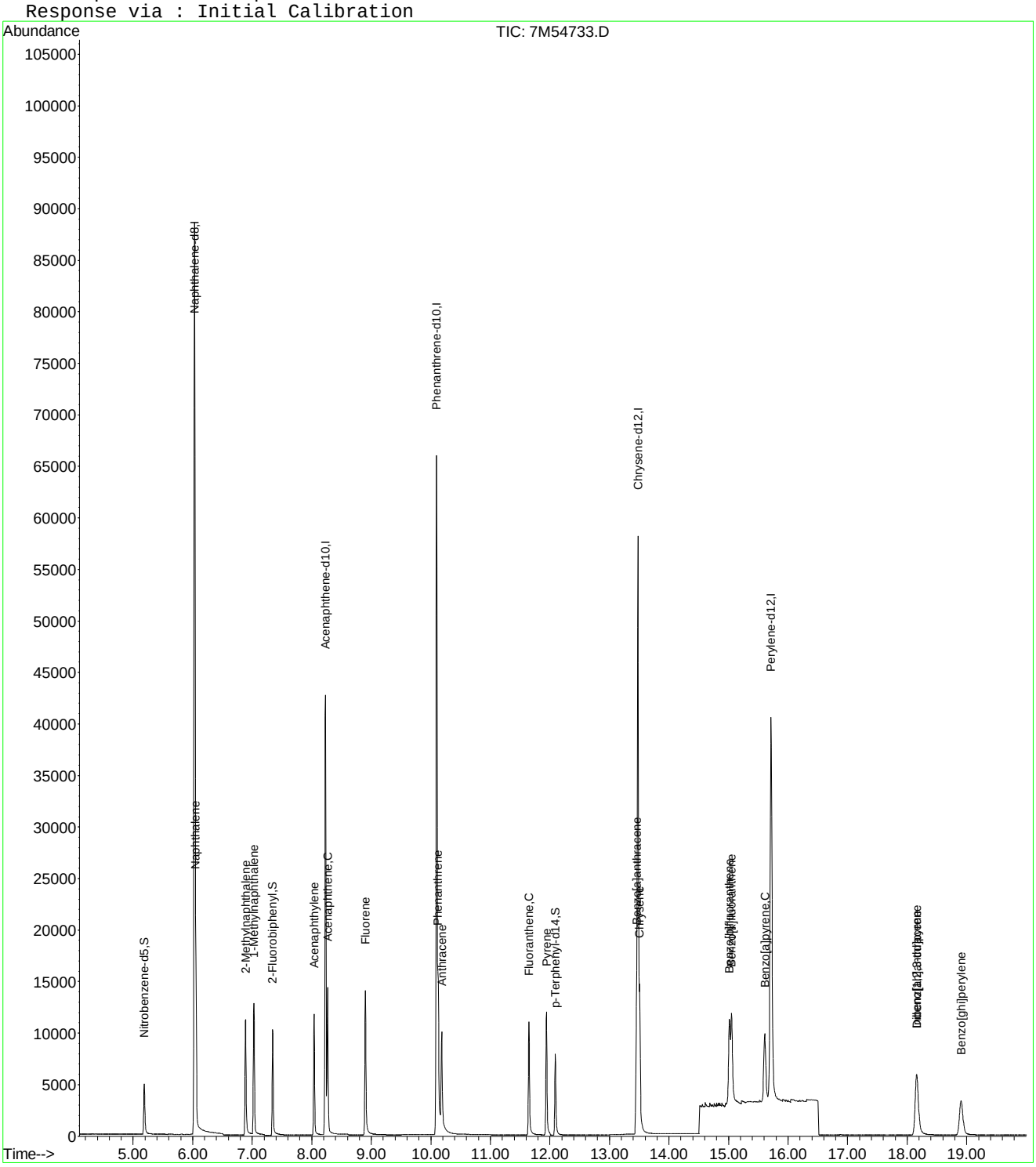
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Naphthalene-d8	6.03	136	111904	1.00 ug/ml	0.00
6) Acenaphthene-d10	8.23	164	58154	1.00 ug/ml	0.00
11) Phenanthrene-d10	10.10	188	92508	1.00 ug/ml	0.00
15) Chrysene-d12	13.48	240	83643	1.00 ug/ml	0.00
20) Perylene-d12	15.71	264	89887	1.00 ug/ml	0.00
System Monitoring Compounds					
2) Nitrobenzene-d5	5.18	82	5189	0.1113 ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery	= 4.40%#	
7) 2-Fluorobiphenyl	7.35	172	10392	0.1100 ug/ml	0.00
Spiked Amount 2.500	Range 43 - 116		Recovery	= 4.40%#	
17) p-Terphenyl-d14	12.09	244	9041	0.1167 ug/ml	0.00
Spiked Amount 2.500	Range 33 - 141		Recovery	= 4.80%#	
Target Compounds					Qvalue
3) Naphthalene	6.05	128	15669	0.1186 ug/ml	99
4) 2-Methylnaphthalene	6.89	142	8513	0.1029 ug/ml	100
5) 1-Methylnaphthalene	7.03	142	8710	0.1041 ug/ml	100
8) Acenaphthylene	8.04	152	14501	0.1174 ug/ml	93
9) Acenaphthene	8.27	154	8476	0.1173 ug/ml	99
10) Fluorene	8.90	166	10569	0.1243 ug/ml	100
12) Phenanthrene	10.13	178	13238	0.1141 ug/ml	99
13) Anthracene	10.18	178	12272	0.1062 ug/ml	99
14) Fluoranthene	11.64	202	13816	0.1127 ug/ml	99
16) Pyrene	11.94	202	15836	0.1165 ug/ml	96
18) Benzo[a]anthracene	13.45	228	12524	0.1149 ug/ml	99
19) Chrysene	13.51	228	12906	0.1199 ug/ml	100
21) Benzo[b]fluoranthene	15.01	252	13954	0.1108 ug/ml#	80
22) Benzo[k]fluoranthene	15.05	252	14143	0.1224 ug/ml#	53
23) Benzo[a]pyrene	15.61	252	13356	0.1158 ug/ml	89
24) Indeno[1,2,3-cd]pyrene	18.16	276	13218	0.1025 ug/ml	100
25) Dibenz[ah]anthracene	18.16	278	11135	0.1026 ug/ml	100
26) Benzo[ghi]perylene	18.91	276	11654	0.1023 ug/ml	99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\040412\7M54733.D Vial: 7
Acq On : 4 Apr 2012 12:26 pm Operator: CAA
Sample : WG394111-07 0.1PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 5 10:57 2012 Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu Apr 05 10:58:29 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\040412\7M54734.D Vial: 8
Acq On : 4 Apr 2012 12:53 pm Operator: CAA
Sample : WG394111-08 0.05PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 05 10:58:18 2012 Quant Results File: SIMPAHL.RES

Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu Apr 05 10:58:13 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Naphthalene-d8	6.03	136	109028	1.00 ug/ml	0.00
6) Acenaphthene-d10	8.23	164	59339	1.00 ug/ml	0.00
11) Phenanthrene-d10	10.09	188	88697	1.00 ug/ml	0.00
15) Chrysene-d12	13.48	240	96074	1.00 ug/ml	0.00
20) Perylene-d12	15.71	264	80216	1.00 ug/ml	0.00

System Monitoring Compounds					
2) Nitrobenzene-d5	5.18	82	2183	0.0475 ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery =	2.00%#	
7) 2-Fluorobiphenyl	7.34	172	5179	0.0537 ug/ml	0.00
Spiked Amount 2.500	Range 43 - 116		Recovery =	2.00%#	
17) p-Terphenyl-d14	12.09	244	4381	0.0489 ug/ml	0.00
Spiked Amount 2.500	Range 33 - 141		Recovery =	2.00%#	

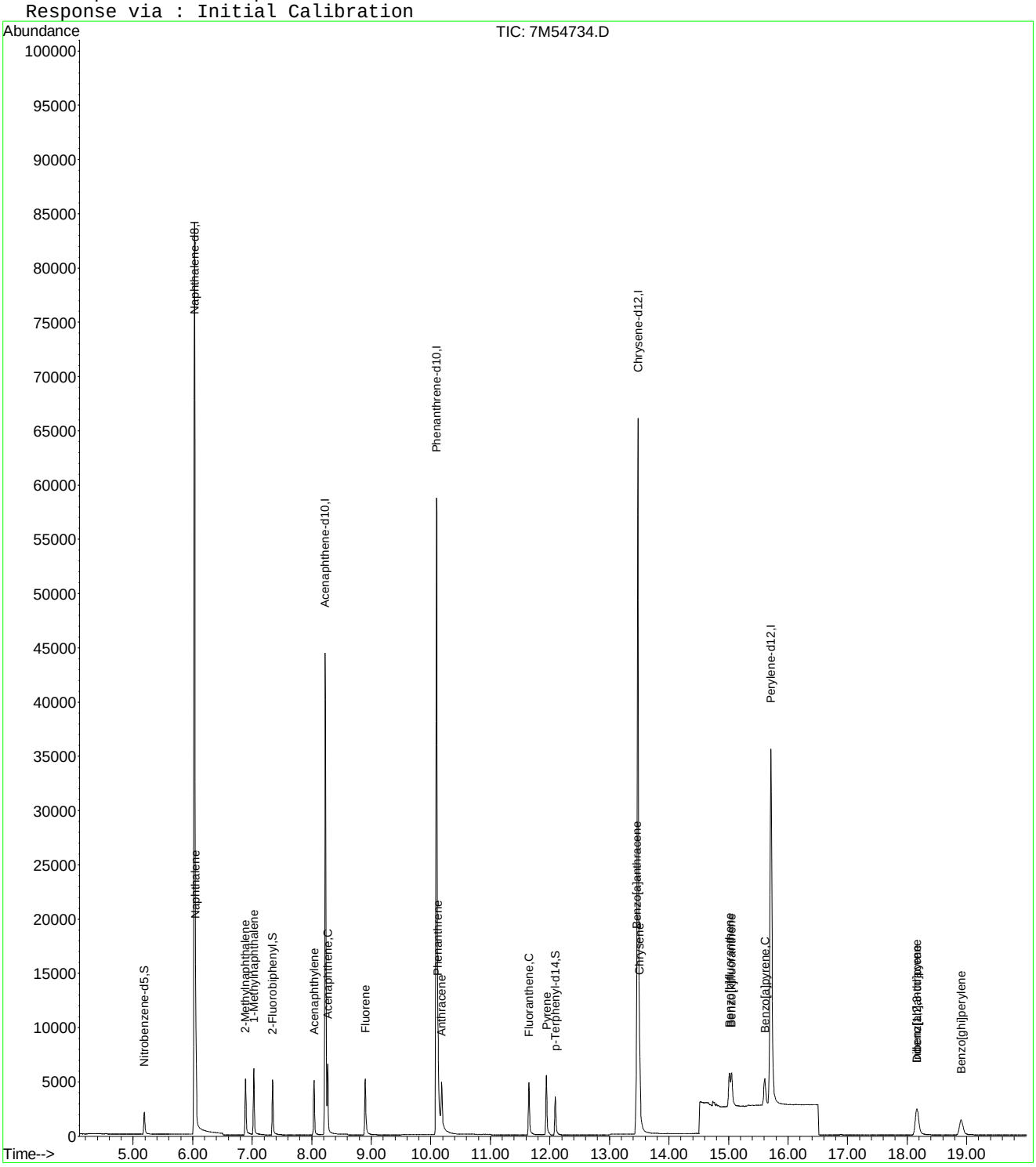
Target Compounds					Qvalue
3) Naphthalene	6.05	128	7045	0.0548 ug/ml	99
4) 2-Methylnaphthalene	6.89	142	4045	0.0513 ug/ml	100
5) 1-Methylnaphthalene	7.03	142	4209	0.0527 ug/ml	98
8) Acenaphthylene	8.04	152	6622	0.0516 ug/ml	92
9) Acenaphthene	8.27	154	3814	0.0512 ug/ml	100
10) Fluorene	8.90	166	4039	0.0455 ug/ml	100
12) Phenanthrene	10.12	178	5467	0.0492 ug/ml	99
13) Anthracene	10.18	178	5552	0.0505 ug/ml	98
14) Fluoranthene	11.65	202	6400	0.0549 ug/ml	98
16) Pyrene	11.94	202	7890	0.0504 ug/ml	91
18) Benzo[a]anthracene	13.46	228	6304	0.0506 ug/ml	100
19) Chrysene	13.51	228	6585	0.0532 ug/ml	99
21) Benzo[b]fluoranthene	15.01	252	5216	0.0465 ug/ml	96
22) Benzo[k]fluoranthene	15.05	252	5257	0.0502 ug/ml#	53
23) Benzo[a]pyrene	15.61	252	5055	0.0490 ug/ml	99
24) Indeno[1,2,3-cd]pyrene	18.16	276	5744	0.0508 ug/ml	100
25) Dibenz[ah]anthracene	18.16	278	4789	0.0501 ug/ml	100
26) Benzo[ghi]perylene	18.91	276	5026	0.0503 ug/ml	100

(#) = qualifier out of range (m) = manual integration
7M54734.D SIMPAHL.M Thu Apr 05 13:50:28 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\040412\7M54734.D Vial: 8
Acq On : 4 Apr 2012 12:53 pm Operator: CAA
Sample : WG394111-08 0.05PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 5 10:58 2012 Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu Apr 05 10:58:29 2012
Response via : Initial Calibration



7M54734.D SIMPAHL.M Thu Apr 05 13:50:28 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\040412\7M54735.D Vial: 9
Acq On : 4 Apr 2012 1:21 pm Operator: CAA
Sample : WG394111-09 1PPM PAHL Alt Src STD Inst : HPMS7
Misc : 1,1 STD49584 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 05 14:06:24 2012 Quant Results File: SIMPAHL.RES

Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu Apr 05 13:51:14 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

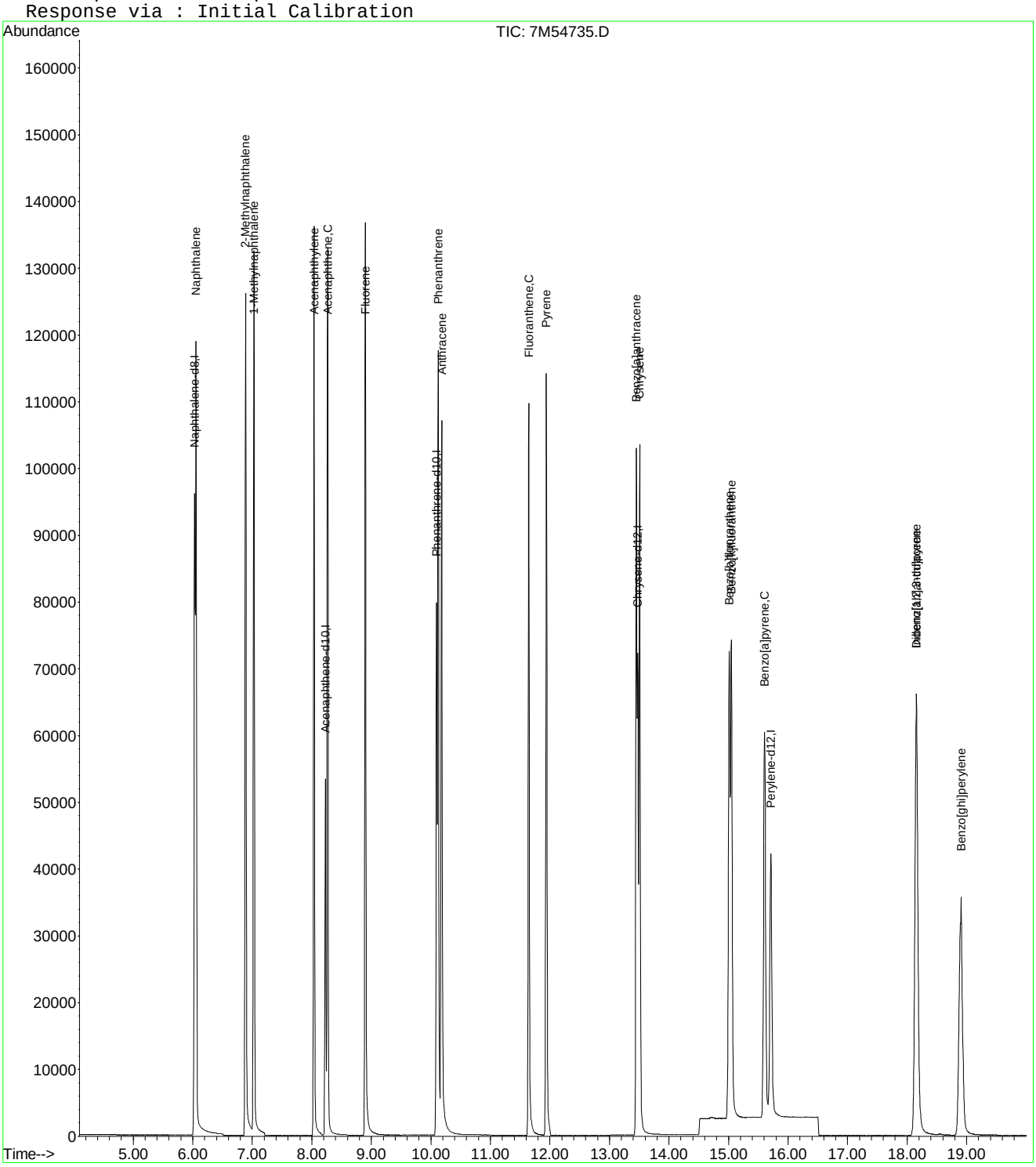
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Naphthalene-d8	6.03	136	120214	1.00 ug/ml	0.00
6) Acenaphthene-d10	8.23	164	64322	1.00 ug/ml	0.00
11) Phenanthrene-d10	10.09	188	106999	1.00 ug/ml	0.00
15) Chrysene-d12	13.48	240	92251	1.00 ug/ml	0.00
20) Perylene-d12	15.71	264	93409	1.00 ug/ml	0.00
System Monitoring Compounds					
2) Nitrobenzene-d5	5.20	82	39	0.0008 ug/ml	0.01
Spiked Amount 2.500	Range 35 - 114		Recovery	= 0.00%#	
7) 2-Fluorobiphenyl	7.34	172	27	0.0003 ug/ml	0.00
Spiked Amount 2.500	Range 43 - 116		Recovery	= 0.00%#	
17) p-Terphenyl-d14	12.09	244	82	0.0010 ug/ml	0.00
Spiked Amount 2.500	Range 33 - 141		Recovery	= 0.00%#	
Target Compounds					Qvalue
3) Naphthalene	6.06	128	134414	0.9444 ug/ml	100
4) 2-Methylnaphthalene	6.89	142	88598	1.0216 ug/ml	100
5) 1-Methylnaphthalene	7.03	142	87630	0.9897 ug/ml	100
8) Acenaphthylene	8.04	152	150796	1.0604 ug/ml	99
9) Acenaphthene	8.27	154	80009	0.9833 ug/ml	100
10) Fluorene	8.90	166	94027	0.9726 ug/ml	100
12) Phenanthrene	10.12	178	124612	0.9362 ug/ml	100
13) Anthracene	10.18	178	131148	0.9810 ug/ml	100
14) Fluoranthene	11.65	202	123616	0.8865 ug/ml	100
16) Pyrene	11.94	202	139306	0.9395 ug/ml	99
18) Benzo[a]anthracene	13.45	228	110200	0.9207 ug/ml	99
19) Chrysene	13.51	228	111347	0.9352 ug/ml	100
21) Benzo[b]fluoranthene	15.01	252	111147	0.8625 ug/ml	100
22) Benzo[k]fluoranthene	15.05	252	108157	0.8870 ug/ml	99
23) Benzo[a]pyrene	15.60	252	113304	0.9444 ug/ml	99
24) Indeno[1,2,3-cd]pyrene	18.16	276	130669	0.9952 ug/ml	100
25) Dibenz[ah]anthracene	18.16	278	108696	0.9781 ug/ml	100
26) Benzo[ghi]perylene	18.91	276	114195	0.9863 ug/ml	100

(#) = qualifier out of range (m) = manual integration
7M54735.D SIMPAHL.M Thu Apr 05 14:06:31 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\040412\7M54735.D Vial: 9
Acq On : 4 Apr 2012 1:21 pm Operator: CAA
Sample : WG394111-09 1PPM PAHL Alt Src STD Inst : HPMS7
Misc : 1,1 STD49584 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 5 14:06 2012 Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu Apr 05 13:51:14 2012
Response via : Initial Calibration



7M54735.D SIMPAHL.M Thu Apr 05 14:06:31 2012 Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\7M54884.D Vial: 2
Acq On : 4 May 2012 9:33 am Operator: CAA
Sample : WG397019-02 1PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 04 09:53:37 2012 Quant Results File: SIMPAHL.RES

Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu May 03 09:35:04 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Naphthalene-d8	6.03	136	97284	1.00 ug/ml	0.00
6) Acenaphthene-d10	8.22	164	57510	1.00 ug/ml	-0.01
11) Phenanthrene-d10	10.09	188	95286	1.00 ug/ml	0.00
15) Chrysene-d12	13.47	240	90937	1.00 ug/ml	-0.01
20) Perylene-d12	15.70	264	90339	1.00 ug/ml	-0.01

System Monitoring Compounds

2) Nitrobenzene-d5	5.18	82	38224	0.9408 ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery = 37.60%		
7) 2-Fluorobiphenyl	7.33	172	88845	0.9340 ug/ml	-0.01
Spiked Amount 2.500	Range 43 - 116		Recovery = 37.20%#		
17) p-Terphenyl-d14	12.08	244	78147	0.9263 ug/ml	-0.01
Spiked Amount 2.500	Range 33 - 141		Recovery = 37.20%		

Target Compounds

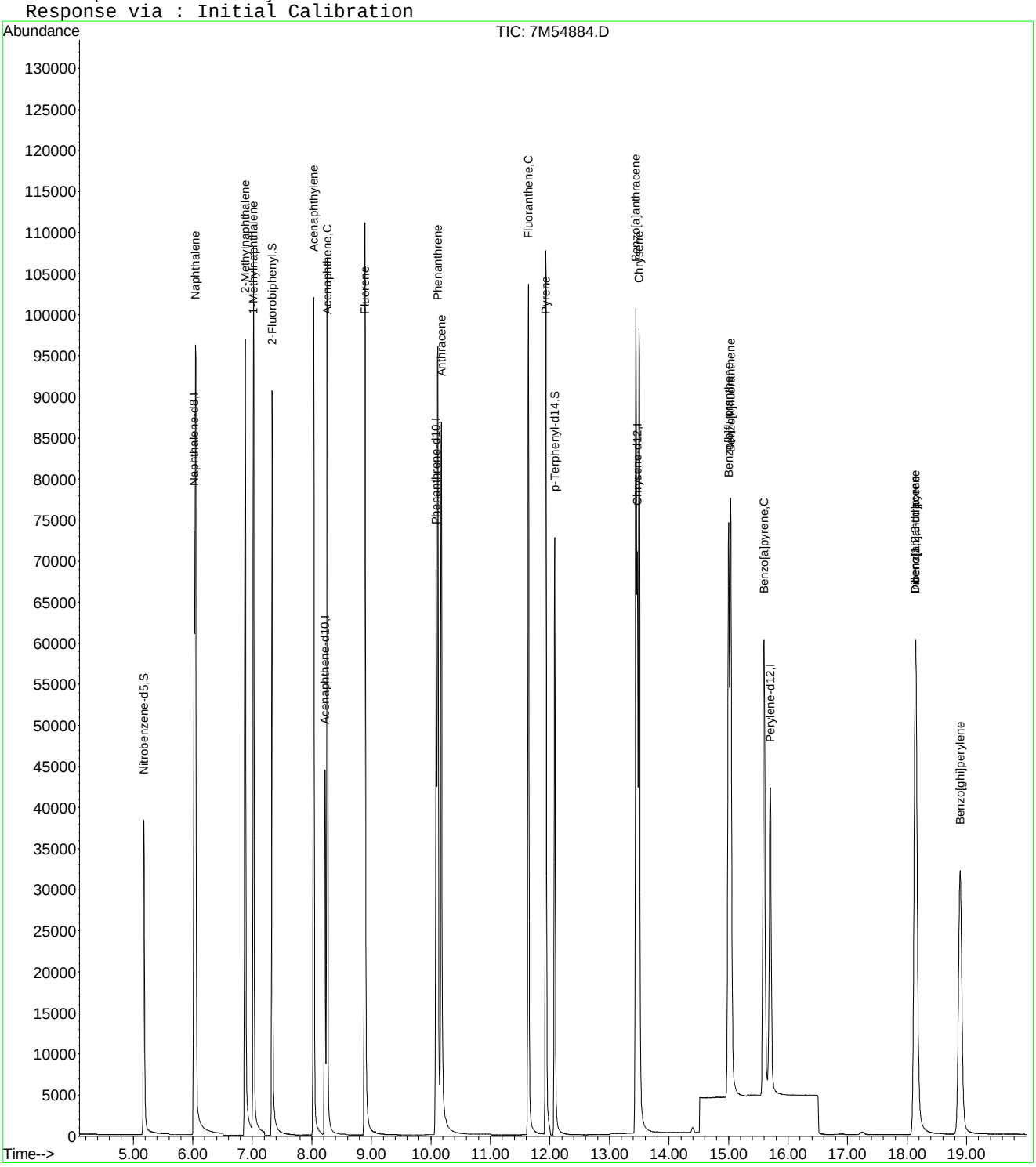
					Qvalue
3) Naphthalene	6.05	128	111576	0.9687 ug/ml	100
4) 2-Methylnaphthalene	6.88	142	71968	1.0254 ug/ml	99
5) 1-Methylnaphthalene	7.02	142	73700	1.0285 ug/ml	100
8) Acenaphthylene	8.03	152	122961	0.9670 ug/ml	100
9) Acenaphthene	8.26	154	72886	1.0019 ug/ml	94
10) Fluorene	8.89	166	79944	0.9248 ug/ml	100
12) Phenanthrene	10.12	178	106412	0.8978 ug/ml	99
13) Anthracene	10.18	178	112468	0.9447 ug/ml	99
14) Fluoranthene	11.64	202	121771	0.9806 ug/ml	100
16) Pyrene	11.93	202	137346	0.9397 ug/ml	100
18) Benzo[a]anthracene	13.44	228	110842	0.9394 ug/ml	99
19) Chrysene	13.50	228	113309	0.9655 ug/ml	100
21) Benzo[b]fluoranthene	15.00	252	110724	0.8885 ug/ml	100
22) Benzo[k]fluoranthene	15.04	252	113401	0.9617 ug/ml	95
23) Benzo[a]pyrene	15.60	252	112499	0.9696 ug/ml	100
24) Indeno[1,2,3-cd]pyrene	18.14	276	127479	1.0039 ug/ml	100
25) Dibenz[ah]anthracene	18.15	278	108383	1.0084 ug/ml	100
26) Benzo[ghi]perylene	18.89	276	109193	0.9751 ug/ml	100

(#) = qualifier out of range (m) = manual integration
7M54884.D SIMPAHL.M Mon May 07 08:46:09 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\7M54884.D Vial: 2
Acq On : 4 May 2012 9:33 am Operator: CAA
Sample : WG397019-02 1PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 4 9:53 2012 Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu May 03 09:35:04 2012
Response via : Initial Calibration



7M54884.D SIMPAHL.M Mon May 07 08:46:09 2012 Page 2

2.2.2.5 Raw QC Data

```
Data File : C:\MSDCHEM\1\DATA\040412\7M54726.D          Vial: 1
Acq On    :  4 Apr 2012   8:53 am                   Operator: CAA
Sample    : WG394111-01 5PPM DFTPP STD              Inst    : HPMS7
Misc      : 1,1 STD50659                            Multiplr: 1.00
MS Integration Params: rteint.p
Method    : C:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title     : DFTPP
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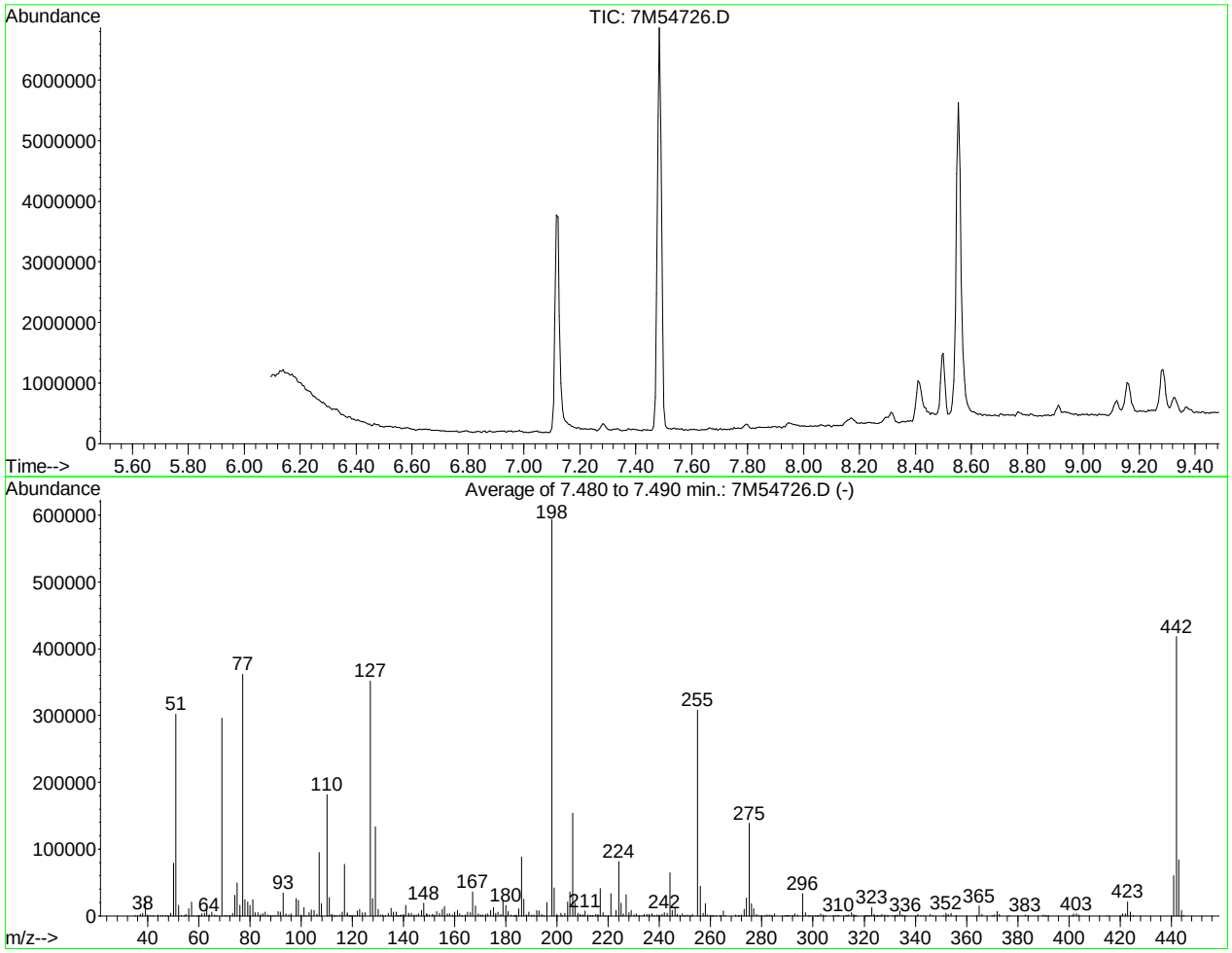

AutoFind: Scans 260, 261, 262; Background Corrected with Scan 254

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	50.9	302042	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	49.9	296108	PASS
70	69	0.00	2	0.2	512	PASS
127	198	40	60	59.2	351488	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	593642	PASS
199	198	5	9	7.1	42109	PASS
275	198	10	30	23.3	138533	PASS
365	198	1	100	2.5	14602	PASS
441	443	0.01	100	72.5	60485	PASS
442	198	40	100	70.5	418261	PASS
443	442	17	23	20.0	83453	PASS

7M54726.D DFTPP.M Thu Apr 05 13:50:01 2012

```
Data File : C:\MSDCHEM\1\DATA\050412\7M54883.D          Vial: 1
Acq On    :  4 May 2012   9:16 am                   Operator: CAA
Sample    : WG397019-01 5PPM DFTPP STD              Inst    : HPMS7
Misc      : 1,1 STD50659                            Multiplr: 1.00
MS Integration Params: rteint.p
Method    : C:\MSDCHEM\1\METHODS\DFTPP.M (RTE Integrator)
Title     : DFTPP
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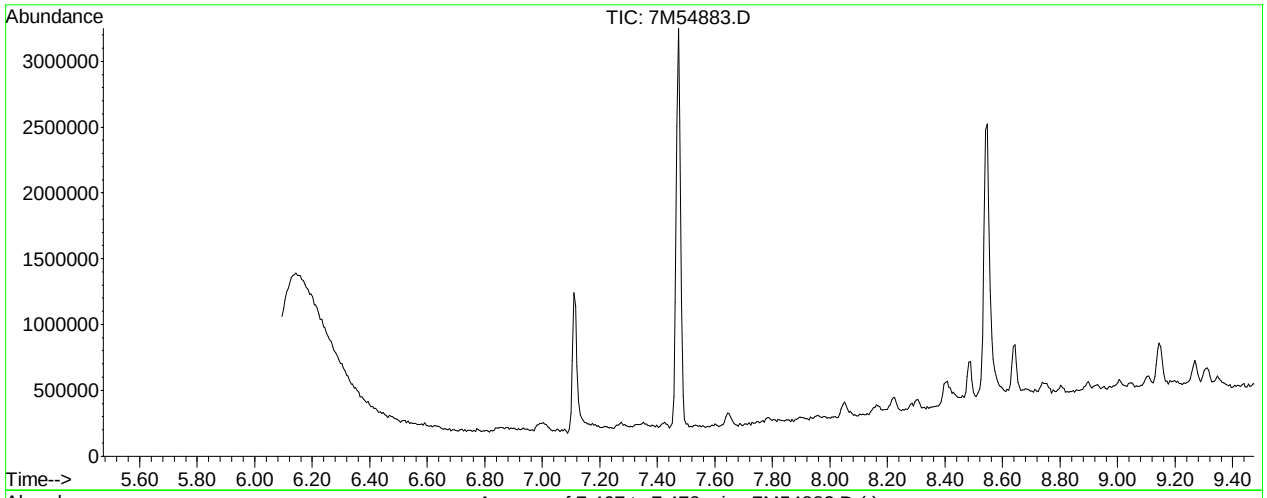
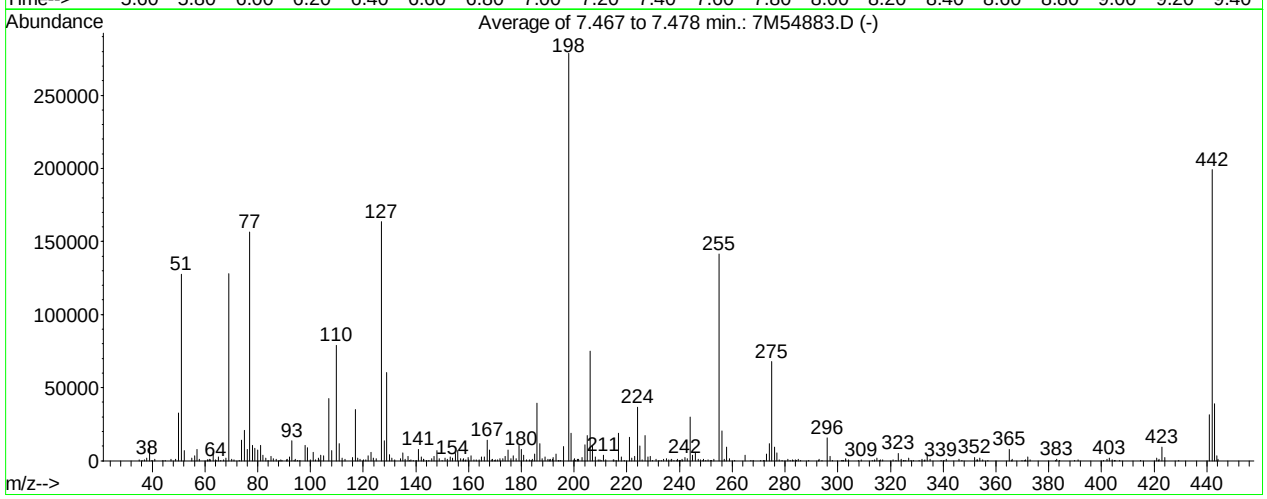




AutoFind: Scans 258, 259, 260; Background Corrected with Scan 250

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	45.8	127689	PASS
68	69	0.00	2	1.5	1929	PASS
69	198	0.00	100	46.0	128140	PASS
70	69	0.00	2	0.9	1153	PASS
127	198	40	60	58.7	163690	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	278826	PASS
199	198	5	9	6.7	18729	PASS
275	198	10	30	24.4	67989	PASS
365	198	1	100	2.8	7827	PASS
441	443	0.01	100	80.9	31421	PASS
442	198	40	100	71.4	199200	PASS
443	442	17	23	19.5	38842	PASS

7M54883.D DFTPP.M Mon May 07 08:45:51 2012

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\7M54885.D Vial: 3
Acq On : 4 May 2012 10:01 am Operator: CAA
Sample : WG396861-02 BLK 05/03 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 07 08:46:28 2012 Quant Results File: SIMPAHL.RES

Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Mon May 07 08:46:11 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Naphthalene-d8	6.02	136	98769	1.00 ug/ml	-0.01
6) Acenaphthene-d10	8.22	164	60234	1.00 ug/ml	-0.01
11) Phenanthrene-d10	10.09	188	99121	1.00 ug/ml	0.00
15) Chrysene-d12	13.47	240	93901	1.00 ug/ml	-0.01
20) Perylene-d12	15.70	264	92437	1.00 ug/ml	-0.02

System Monitoring Compounds

2) Nitrobenzene-d5	5.17	82	75826	1.8382 ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery = 73.60%		
7) 2-Fluorobiphenyl	7.33	172	176488	1.7715 ug/ml	-0.01
Spiked Amount 2.500	Range 43 - 116		Recovery = 70.80%		
17) p-Terphenyl-d14	12.08	244	193768	2.2242 ug/ml	-0.01
Spiked Amount 2.500	Range 33 - 141		Recovery = 88.80%		

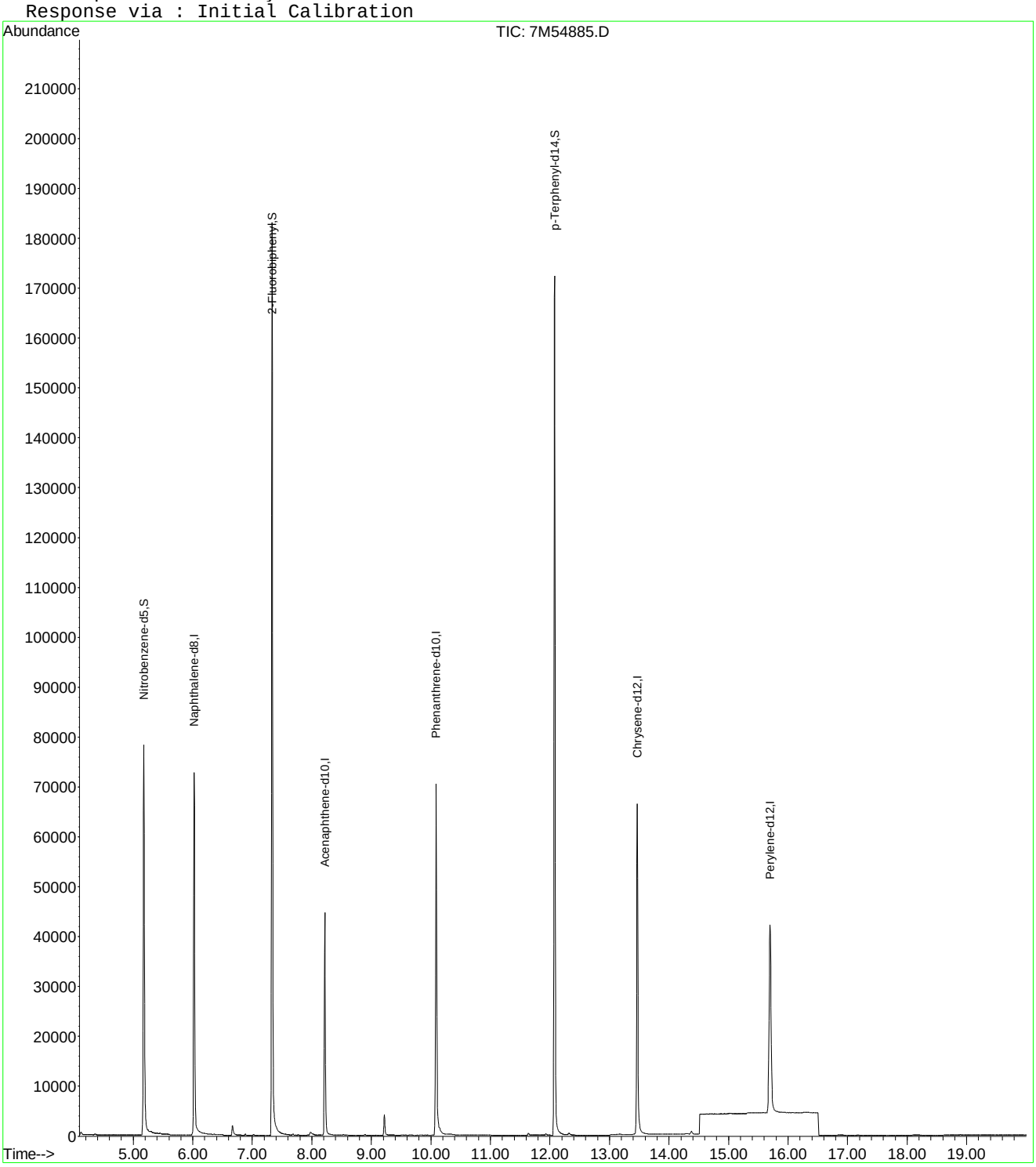
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
7M54885.D SIMPAHL.M Mon May 07 08:55:21 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\7M54885.D Vial: 3
Acq On : 4 May 2012 10:01 am Operator: CAA
Sample : WG396861-02 BLK 05/03 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 7 8:46 2012 Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Mon May 07 08:46:11 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\7M54886.D Vial: 4
Acq On : 4 May 2012 10:28 am Operator: CAA
Sample : WG396861-03 LCS 05/03 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 07 08:46:29 2012 Quant Results File: SIMPAHL.RES

Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Mon May 07 08:46:11 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Naphthalene-d8	6.02	136	99929	1.00 ug/ml	-0.01
6) Acenaphthene-d10	8.22	164	59985	1.00 ug/ml	-0.02
11) Phenanthrene-d10	10.08	188	96353	1.00 ug/ml	-0.01
15) Chrysene-d12	13.47	240	95903	1.00 ug/ml	-0.01
20) Perylene-d12	15.70	264	93096	1.00 ug/ml	-0.02

System Monitoring Compounds

2) Nitrobenzene-d5	5.18	82	70128	1.6804 ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery = 67.20%		
7) 2-Fluorobiphenyl	7.33	172	160374	1.6165 ug/ml	-0.01
Spiked Amount 2.500	Range 43 - 116		Recovery = 64.80%		
17) p-Terphenyl-d14	12.07	244	192938	2.1685 ug/ml	-0.02
Spiked Amount 2.500	Range 33 - 141		Recovery = 86.80%		

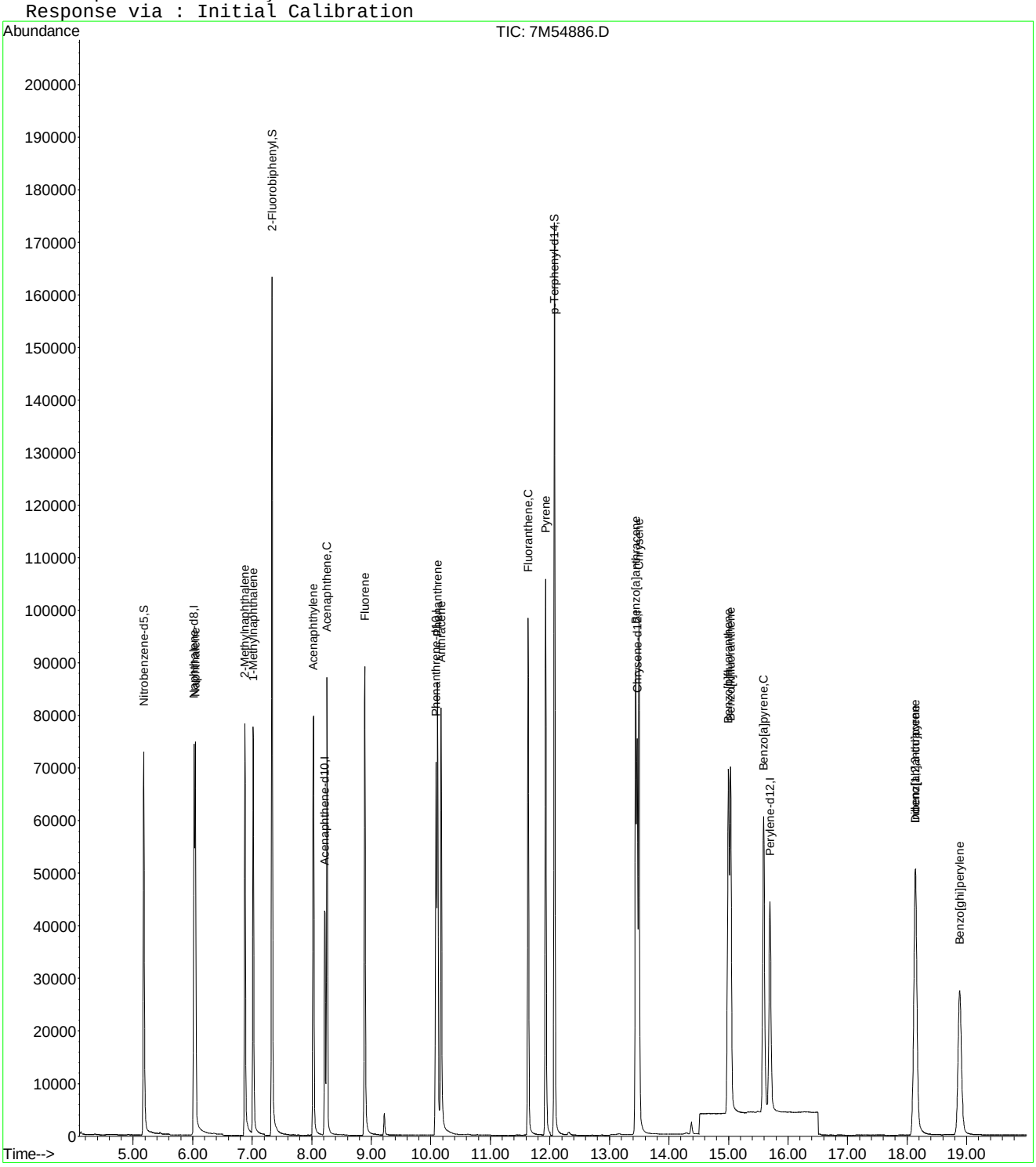
Target Compounds					Qvalue
3) Naphthalene	6.04	128	82754	0.6995 ug/ml	100
4) 2-Methylnaphthalene	6.88	142	55557	0.7706 ug/ml	100
5) 1-Methylnaphthalene	7.02	142	52491	0.7132 ug/ml	99
8) Acenaphthylene	8.03	152	94886	0.7155 ug/ml	95
9) Acenaphthene	8.26	154	55443	0.7307 ug/ml	93
10) Fluorene	8.89	166	62719	0.6956 ug/ml	100
12) Phenanthrene	10.11	178	91537	0.7637 ug/ml	99
13) Anthracene	10.17	178	94763	0.7871 ug/ml	99
14) Fluoranthene	11.63	202	112176	0.8934 ug/ml	99
16) Pyrene	11.93	202	129482	0.8400 ug/ml	99
18) Benzo[a]anthracene	13.44	228	97215	0.7813 ug/ml	99
19) Chrysene	13.50	228	106429	0.8599 ug/ml	99
21) Benzo[b]fluoranthene	15.00	252	108590	0.8455 ug/ml	96
22) Benzo[k]fluoranthene	15.03	252	104777	0.8622 ug/ml	95
23) Benzo[a]pyrene	15.59	252	104894	0.8772 ug/ml	100
24) Indeno[1,2,3-cd]pyrene	18.14	276	109561	0.8372 ug/ml	100
25) Dibenz[ah]anthracene	18.14	278	85860	0.7752 ug/ml	100
26) Benzo[ghi]perylene	18.88	276	94018	0.8147 ug/ml	100

(#) = qualifier out of range (m) = manual integration
7M54886.D SIMPAHL.M Mon May 07 08:49:09 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\050412\7M54886.D Vial: 4
Acq On : 4 May 2012 10:28 am Operator: CAA
Sample : WG396861-03 LCS 05/03 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 7 8:46 2012 Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Mon May 07 08:46:11 2012
Response via : Initial Calibration



7M54886.D SIMPAHL.M Mon May 07 08:49:09 2012 Page 2

2.3 Metals Data

2.3.1 Metals I C P Data

2.3.1.1 Summary Data

Login Number: L12050011
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: WG396793 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: WG396793 - Client samples 01 through 04 required dilution analyses in order to obtain results for sodium within the linear range.

Narrative ID: 45919
Approved By: Sheri Pfalzgraf

Certificate of Analysis

Sample #:	L12050011-01	**PrePrep Method:**	N/A	**Instrument:**	PE-ICP2
Client ID:	MW-29-043012	**Prep Method:**	3005A	**Prep Date:**	05/02/2012 10:11
Matrix:	Water	**Analytical Method:**	6010B	**Cal Date:**	05/04/2012 09:37
Workgroup #:	WG396793	**Analyst:**	KHR	**Run Date:**	05/04/2012 13:45
Collect Date:	04/30/2012 13:07	**Dilution:**	1	**File ID:**	P2.050412.134505
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	0.253		0.100	0.0500
Barium, Total	7440-39-3	0.104		0.0100	0.00250
Beryllium, Total	7440-41-7	0.000508		0.00200	0.000500
Cadmium, Total	7440-43-9	0.000699		0.000500	0.000250
Calcium, Total	7440-70-2	268		0.200	0.100
Chromium, Total	7440-47-3		U	0.00500	0.00250
Cobalt, Total	7440-48-4		U	0.0200	0.00250
Copper, Total	7440-50-8		U	0.0200	0.00500
Iron, Total	7439-89-6	1.58		0.100	0.0250
Magnesium, Total	7439-95-4	44.1		0.500	0.250
Manganese, Total	7439-96-5	0.327		0.0100	0.00500
Nickel, Total	7440-02-0		U	0.0400	0.00500
Potassium, Total	7440-09-7	14.0		1.00	0.250
Silver, Total	7440-22-4	0.00547		0.0100	0.00500
Vanadium, Total	7440-62-2	0.0231		0.0100	0.00500
Zinc, Total	7440-66-6	0.0128		0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Sample #:	L12050011-01	**PrePrep Method:**	N/A	**Instrument:**	PE-ICP2
Client ID:	MW-29-043012	**Prep Method:**	3005A	**Prep Date:**	05/02/2012 10:11
Matrix:	Water	**Analytical Method:**	6010B	**Cal Date:**	05/04/2012 09:37
Workgroup #:	WG396793	**Analyst:**	KHR	**Run Date:**	05/04/2012 15:09
Collect Date:	04/30/2012 13:07	**Dilution:**	100	**File ID:**	P2.050412.150915
Sample Tag:	DL01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Sodium, Total	7440-23-5	1090		50.0	25.0

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12050011-02	**PrePrep Method:**	N/A	**Instrument:**	PE-ICP2
Client ID:	MW-29-043012	**Prep Method:**	3005A	**Prep Date:**	05/02/2012 06:55
Matrix:	Water	**Analytical Method:**	6010B	**Cal Date:**	05/04/2012 09:37
Workgroup #:	WG396793	**Analyst:**	KHR	**Run Date:**	05/04/2012 14:03
Collect Date:	04/30/2012 13:07	**Dilution:**	1	**File ID:**	P2.050412.140302
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	0.101		0.0100	0.00250
Beryllium, Dissolved	7440-41-7		U	0.00200	0.000500
Cadmium, Dissolved	7440-43-9	0.000667		0.000500	0.000250
Calcium, Dissolved	7440-70-2	270		0.200	0.100
Chromium, Dissolved	7440-47-3		U	0.00500	0.00250
Cobalt, Dissolved	7440-48-4		U	0.0200	0.00250
Copper, Dissolved	7440-50-8		U	0.0200	0.00500
Iron, Dissolved	7439-89-6	1.19		0.100	0.0250
Magnesium, Dissolved	7439-95-4	43.8		0.500	0.250
Manganese, Dissolved	7439-96-5	0.307		0.0100	0.00500
Nickel, Dissolved	7440-02-0		U	0.0400	0.00500
Potassium, Dissolved	7440-09-7	13.9		1.00	0.250
Silver, Dissolved	7440-22-4	0.00537		0.0100	0.00500
Vanadium, Dissolved	7440-62-2	0.0220		0.0100	0.00500
Zinc, Dissolved	7440-66-6		U	0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Sample #:	L12050011-02	**PrePrep Method:**	N/A	**Instrument:**	PE-ICP2
Client ID:	MW-29-043012	**Prep Method:**	3005A	**Prep Date:**	05/02/2012 06:55
Matrix:	Water	**Analytical Method:**	6010B	**Cal Date:**	05/04/2012 09:37
Workgroup #:	WG396793	**Analyst:**	KHR	**Run Date:**	05/04/2012 15:30
Collect Date:	04/30/2012 13:07	**Dilution:**	100	**File ID:**	P2.050412.153003
Sample Tag:	DL01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Sodium, Dissolved	7440-23-5	1110		50.0	25.0

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12050011-03	**PrePrep Method:**	N/A	**Instrument:**	PE-ICP2
Client ID:	DUP-GW-043012	**Prep Method:**	3005A	**Prep Date:**	05/02/2012 10:11
Matrix:	Water	**Analytical Method:**	6010B	**Cal Date:**	05/04/2012 09:37
Workgroup #:	WG396793	**Analyst:**	KHR	**Run Date:**	05/04/2012 14:21
Collect Date:	04/30/2012 14:00	**Dilution:**	1	**File ID:**	P2.050412.142159
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	0.274		0.100	0.0500
Barium, Total	7440-39-3	0.106		0.0100	0.00250
Beryllium, Total	7440-41-7	0.000503		0.00200	0.000500
Cadmium, Total	7440-43-9	0.000619		0.000500	0.000250
Calcium, Total	7440-70-2	274		0.200	0.100
Chromium, Total	7440-47-3		U	0.00500	0.00250
Cobalt, Total	7440-48-4		U	0.0200	0.00250
Copper, Total	7440-50-8		U	0.0200	0.00500
Iron, Total	7439-89-6	1.60		0.100	0.0250
Magnesium, Total	7439-95-4	44.8		0.500	0.250
Manganese, Total	7439-96-5	0.329		0.0100	0.00500
Nickel, Total	7440-02-0		U	0.0400	0.00500
Potassium, Total	7440-09-7	14.4		1.00	0.250
Silver, Total	7440-22-4	0.00526		0.0100	0.00500
Vanadium, Total	7440-62-2	0.0251		0.0100	0.00500
Zinc, Total	7440-66-6	0.0199		0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Sample #:	L12050011-03	**PrePrep Method:**	N/A	**Instrument:**	PE-ICP2
Client ID:	DUP-GW-043012	**Prep Method:**	3005A	**Prep Date:**	05/02/2012 10:11
Matrix:	Water	**Analytical Method:**	6010B	**Cal Date:**	05/04/2012 09:37
Workgroup #:	WG396793	**Analyst:**	KHR	**Run Date:**	05/04/2012 15:36
Collect Date:	04/30/2012 14:00	**Dilution:**	100	**File ID:**	P2.050412.153658
Sample Tag:	DL01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Sodium, Total	7440-23-5	1120		50.0	25.0

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12050011-04	**PrePrep Method:**	N/A	**Instrument:**	PE-ICP2
Client ID:	DUP-GW-043012	**Prep Method:**	3005A	**Prep Date:**	05/02/2012 06:55
Matrix:	Water	**Analytical Method:**	6010B	**Cal Date:**	05/04/2012 09:37
Workgroup #:	WG396793	**Analyst:**	KHR	**Run Date:**	05/04/2012 14:27
Collect Date:	04/30/2012 14:00	**Dilution:**	1	**File ID:**	P2.050412.142759
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	0.104		0.0100	0.00250
Beryllium, Dissolved	7440-41-7	0.000508		0.00200	0.000500
Cadmium, Dissolved	7440-43-9	0.000597		0.000500	0.000250
Calcium, Dissolved	7440-70-2	280		0.200	0.100
Chromium, Dissolved	7440-47-3		U	0.00500	0.00250
Cobalt, Dissolved	7440-48-4		U	0.0200	0.00250
Copper, Dissolved	7440-50-8		U	0.0200	0.00500
Iron, Dissolved	7439-89-6	1.23		0.100	0.0250
Magnesium, Dissolved	7439-95-4	45.3		0.500	0.250
Manganese, Dissolved	7439-96-5	0.316		0.0100	0.00500
Nickel, Dissolved	7440-02-0		U	0.0400	0.00500
Potassium, Dissolved	7440-09-7	14.7		1.00	0.250
Silver, Dissolved	7440-22-4	0.00557		0.0100	0.00500
Vanadium, Dissolved	7440-62-2	0.0214		0.0100	0.00500
Zinc, Dissolved	7440-66-6		U	0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Sample #:	L12050011-04	**PrePrep Method:**	N/A	**Instrument:**	PE-ICP2
Client ID:	DUP-GW-043012	**Prep Method:**	3005A	**Prep Date:**	05/02/2012 06:55
Matrix:	Water	**Analytical Method:**	6010B	**Cal Date:**	05/04/2012 09:37
Workgroup #:	WG396793	**Analyst:**	KHR	**Run Date:**	05/04/2012 15:43
Collect Date:	04/30/2012 14:00	**Dilution:**	100	**File ID:**	P2.050412.154353
Sample Tag:	DL01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Sodium, Dissolved	7440-23-5	1140		50.0	25.0

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12050011-05	**PrePrep Method:**	N/A	**Instrument:**	PE-ICP2
Client ID:	EB-043012-GW	**Prep Method:**	3005A	**Prep Date:**	05/02/2012 06:55
Matrix:	Water	**Analytical Method:**	6010B	**Cal Date:**	05/04/2012 09:37
Workgroup #:	WG396793	**Analyst:**	KHR	**Run Date:**	05/04/2012 14:34
Collect Date:	04/30/2012 14:15	**Dilution:**	1	**File ID:**	P2.050412.143402
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		U	0.0100	0.00250
Beryllium, Total	7440-41-7		U	0.00200	0.000500
Cadmium, Total	7440-43-9	0.000325		0.000500	0.000250
Calcium, Total	7440-70-2	0.263		0.200	0.100
Chromium, Total	7440-47-3		U	0.00500	0.00250
Cobalt, Total	7440-48-4		U	0.0200	0.00250
Copper, Total	7440-50-8		U	0.0200	0.00500
Iron, Total	7439-89-6		U	0.100	0.0250
Magnesium, Total	7439-95-4		U	0.500	0.250
Manganese, Total	7439-96-5		U	0.0100	0.00500
Nickel, Total	7440-02-0		U	0.0400	0.00500
Potassium, Total	7440-09-7		U	1.00	0.250
Silver, Total	7440-22-4		U	0.0100	0.00500
Sodium, Total	7440-23-5	0.753		0.500	0.250
Vanadium, Total	7440-62-2	0.00845		0.0100	0.00500
Zinc, Total	7440-66-6	0.00680		0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

2.3.1.2 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:	**Example:**
Cs = Concentration computed by the data system in ug/mL (ppm)	0.1
Vf = Final volume (mL)	50
Vi = Initial volume (mL)	50
D = Dilution factor as a multiplier (10X = 10)	1
Cx = Concentration of element in ug/mL (mg/L)	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:	**Example:**
Cs = Concentration computed by the data system (mg/L) (ppm)	0.1
Vf = Final volume (mL)	50
Vi = Initial weight (g)	1
D = Dilution factor as a multiplier (10X = 10)	1
Cx = Concentration of element in ug/g (mg/kg)	5

4.0 Adjusting the concentration to dry weight:

$$Cdry = \frac{Cx \times 100}{Px}$$

Where:	**Example:**
Cx = Concentration calculated as received (wet basis)	5
Px = Percent solids of sample (%wt)	80
$Cdry$ = Concentration calculated as dry weight (mg/kg)	6.25

Microbac Laboratories Inc.
Metals Digest Log

Workgroup: WG396754
Analyst: REK
Spike Analyst: REK
Method: 3005A
Run Date: 05/02/2012 06:55
Hotblock Start Temp: 93.8 @ 05:40
Hotblock End Temp: 96 @ 09:40

SOP: ME401 Revison 14
Spike Solution: STD51357
Spike Witness: VC
ICP;WG377974 Filter Lot COA15714
HNO3 Lot #: COA16033
Digestion Tubes Lot #: COA16053
HCL Lot #: COA16113

	SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Spike Amount	Due Date
1	WG396754-02	BLANK	1	50 mL	50 mL		
2	WG396754-03	LCS	1	50 mL	50 mL	5 mL	
3	L12040898-01	SAMP	1	50 mL	50 mL		05/10/12
4	L12040898-02	SAMP	1	50 mL	50 mL		05/10/12
5	L12040977-01	SAMP	1	50 mL	50 mL		05/11/12
6	L12040977-02	SAMP	1	50 mL	50 mL		05/11/12
7	L12040977-03	SAMP	1	50 mL	50 mL		05/11/12
8	L12040977-04	SAMP	1	50 mL	50 mL		05/11/12
9	L12040977-05	SAMP	1	50 mL	50 mL		05/11/12
10	L12040977-06	SAMP	1	50 mL	50 mL		05/11/12
11	L12040977-07	SAMP	1	50 mL	50 mL		05/11/12
12	L12040977-08	SAMP	1	50 mL	50 mL		05/11/12
13	WG396754-01	REF	1	50 mL	50 mL		
14	L12050011-01	SAMP	1	50 mL	50 mL		05/15/12
15	L12050011-02	SAMP	1	50 mL	50 mL		05/15/12
16	L12050011-03	SAMP	1	50 mL	50 mL		05/15/12
17	L12050011-04	SAMP	1	50 mL	50 mL		05/15/12
18	L12050011-05	SAMP	1	50 mL	50 mL		05/15/12
19	L12050013-01	SAMP	1	50 mL	50 mL		05/11/12
20	L12050013-02	SAMP	1	50 mL	50 mL		05/11/12
21	WG396754-04	MS	1	50 mL	50 mL	5 mL	
22	WG396754-05	MSD	1	50 mL	50 mL	5 mL	

L12050011-01	filtered digestate
L12050011-03	filtered digestate
WG396754-04	filtered digestate
WG396754-05	filtered digestate
L12040898-01	filtered digestate
L12040898-02	filtered digestate
WG396754-01	filtered digestate

Analyst: [signature]

Reviewer: Brenda Gregory

HB_DIG - Modified 09/30/2009
PDF ID: 2399526
Report generated: 05/02/2012 10:11

Microbac

Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 050412H.CSV
Analyst1: KHR Analyst2: N/A
Method: 6010 SOP: ME600E Rev: 12
Maintenance Log ID: 41599

Calibration Std: STD51199 ICV Std: STD51200 Post Spike: STD50254
ICSA: STD51272 ICSAB: STD51413 Int. Std: RGT17106
CCV: STD51198 LLCCV: STD51199

Workgroups: 396791, 396793, 396931, 397061

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	P2.050412.091057	WG397050-01	Calibration Point		1		05/04/12 09:10
2	P2.050412.091751	WG397050-02	Calibration Point		1		05/04/12 09:17
3	P2.050412.092445	WG397050-03	Calibration Point		1		05/04/12 09:24
4	P2.050412.093140	WG397050-04	Calibration Point		1		05/04/12 09:31
5	P2.050412.093738	WG397050-05	Calibration Point		1		05/04/12 09:37
6	P2.050412.094339	WG397050-06	Initial Calibration Verification		1		05/04/12 09:43
7	P2.050412.094935	WG397050-07	Initial Calib Blank		1		05/04/12 09:49
8	P2.050412.095628	WG397050-08	Low Level Initial Calibration V		1		05/04/12 09:56
9	P2.050412.100226	WG397050-09	Interference Check		1		05/04/12 10:02
10	P2.050412.100822	WG397050-10	Interference Check		1		05/04/12 10:08
11	P2.050412.101419	WG397050-11	CCV		1		05/04/12 10:14
12	P2.050412.102018	WG397050-12	CCB		1		05/04/12 10:20
13	P2.050412.102711	WG396769-02	Method/Prep Blank	5/50	1		05/04/12 10:27
14	P2.050412.103406	WG396769-03	Laboratory Control S	5/50	1		05/04/12 10:34
15	P2.050412.104005	WG396758-01	Fluid Blank		1		05/04/12 10:40
16	P2.050412.104704	WG396769-01	Reference Sample		1	L12040989-01	05/04/12 10:47
17	P2.050412.105406	WG396769-04	Matrix Spike	5/50	1	L12040989-01	05/04/12 10:54
18	P2.050412.110011	WG396769-05	Matrix Spike Duplica	5/50	1	L12040989-01	05/04/12 11:00
19	P2.050412.110620	L12040924-03	1204-01491-002	5/50	1		05/04/12 11:06
20	P2.050412.111219	WG396791-03	Post Digestion Spike		1	L12040924-03	05/04/12 11:12
21	P2.050412.111819	WG396791-04	Serial Dilution		5	L12040924-03	05/04/12 11:18
22	P2.050412.112512	WG397050-13	CCV		1		05/04/12 11:25
23	P2.050412.113113	WG397050-14	CCB		1		05/04/12 11:31
24	P2.050412.113806	WG397050-15	Low Level Continuing Calibra		1		05/04/12 11:38
25	P2.050412.115834	WG396754-02	Method/Prep Blank	50/50	1		05/04/12 11:58
26	P2.050412.120528	WG396754-03	Laboratory Control S	50/50	1		05/04/12 12:05
27	P2.050412.121126	L12040898-01	MW-21-042512	50/50	1		05/04/12 12:11
28	P2.050412.121724	L12040898-02	MW-21-042512	50/50	1		05/04/12 12:17
29	P2.050412.122323	L12040977-01	12207-W0001	50/50	1		05/04/12 12:23
30	P2.050412.123018	L12040977-02	12207-W0002	50/50	1		05/04/12 12:30
31	P2.050412.123713	L12040977-03	13554-W0001	50/50	1		05/04/12 12:37
32	P2.050412.124408	L12040977-04	13554-W0002	50/50	1		05/04/12 12:44
33	P2.050412.125104	WG396793-01	Post Digestion Spike		1	L12040977-04	05/04/12 12:51
34	P2.050412.125704	WG396793-02	Serial Dilution		5	L12040977-04	05/04/12 12:57

Page: 1 Approved: May 07, 2012

Maren Berry

Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 050412H.CSV
Analyst1: KHR Analyst2: N/A
Method: 6010 SOP: ME600E Rev: 12
Maintenance Log ID: 41599

Calibration Std: STD51199 ICV Std: STD51200 Post Spike: STD50254
ICSA: STD51272 ICSAB: STD51413 Int. Std: RGT17106
CCV: STD51198 LLCCV: STD51199

Workgroups: 396791, 396793, 396931, 397061

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
35	P2.050412.130436	WG397050-16	CCV		1		05/04/12 13:04
36	P2.050412.131037	WG397050-17	CCB		1		05/04/12 13:10
37	P2.050412.131730	L12040977-05	13554-W0004	50/50	1		05/04/12 13:17
38	P2.050412.132423	L12040977-06	30989-W0001	50/50	1		05/04/12 13:24
39	P2.050412.133116	L12040977-07	30989-W0002	50/50	1		05/04/12 13:31
40	P2.050412.133810	L12040977-08	8468-W0001	50/50	1		05/04/12 13:38
41	P2.050412.134505	WG396754-01	Reference Sample		1	L12050011-01	05/04/12 13:45
42	P2.050412.135103	WG396754-04	Matrix Spike	50/50	1	L12050011-01	05/04/12 13:51
43	P2.050412.135702	WG396754-05	Matrix Spike Duplica	50/50	1	L12050011-01	05/04/12 13:57
44	P2.050412.140302	L12050011-02	MW-29-043012	50/50	1		05/04/12 14:03
45	P2.050412.140905	WG397050-18	CCV		1		05/04/12 14:09
46	P2.050412.141506	WG397050-19	CCB		1		05/04/12 14:15
47	P2.050412.142159	L12050011-03	DUP-GW-043012	50/50	1		05/04/12 14:21
48	P2.050412.142759	L12050011-04	DUP-GW-043012	50/50	1		05/04/12 14:27
49	P2.050412.143402	L12050011-05	EB-043012-GW	50/50	1		05/04/12 14:34
50	P2.050412.144059	L12040898-01	MW-21-042512	50/50	100		05/04/12 14:40
51	P2.050412.144759	L12040898-02	MW-21-042512	50/50	100		05/04/12 14:47
52	P2.050412.145456	WG397050-20	CCV		1		05/04/12 14:54
53	P2.050412.150053	WG397050-21	CCB		1		05/04/12 15:00
54	P2.050412.150915	WG396754-01	Reference Sample		100	L12050011-01	05/04/12 15:09
55	P2.050412.151610	WG396754-04	Matrix Spike	50/50	100	L12050011-01	05/04/12 15:16
56	P2.050412.152308	WG396754-05	Matrix Spike Duplica	50/50	100	L12050011-01	05/04/12 15:23
57	P2.050412.153003	L12050011-02	MW-29-043012	50/50	100		05/04/12 15:30
58	P2.050412.153658	L12050011-03	DUP-GW-043012	50/50	100		05/04/12 15:36
59	P2.050412.154353	L12050011-04	DUP-GW-043012	50/50	100		05/04/12 15:43
60	P2.050412.155049	WG397050-22	CCV		1		05/04/12 15:50
61	P2.050412.155649	WG397050-23	CCB		1		05/04/12 15:56
62	P2.050412.160342	WG397050-24	Interference Check		1		05/04/12 16:03
63	P2.050412.160939	WG397050-25	Interference Check		1		05/04/12 16:09
64	P2.050412.161535	WG397050-26	CCV		1		05/04/12 16:15
65	P2.050412.162136	WG397050-27	CCB		1		05/04/12 16:21
66	P2.050412.162829	WG396863-02	Method/Prep Blank	50/50	1		05/04/12 16:28
67	P2.050412.163524	WG396863-03	Laboratory Control S	50/50	1		05/04/12 16:35
68	P2.050412.164123	WG396863-01	Reference Sample		1	L12050028-01	05/04/12 16:41

Page: 2 Approved: May 07, 2012

Maren Berry

Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 050412H.CSV
Analyst1: KHR Analyst2: N/A
Method: 6010 SOP: ME600E Rev: 12
Maintenance Log ID: 41599

Calibration Std: STD51199 ICV Std: STD51200 Post Spike: STD50254
ICSA: STD51272 ICSAB: STD51413 Int. Std: RGT17106
CCV: STD51198 LLCCV: STD51199

Workgroups: 396791, 396793, 396931, 397061

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
69	P2.050412.164823	WG396863-04	Duplicate	50/50	1	L12050028-01	05/04/12 16:48
70	P2.050412.165523	WG396863-05	Matrix Spike	50/50	1	L12050028-01	05/04/12 16:55
71	P2.050412.170126	WG396931-03	Post Digestion Spike		1	L12050028-01	05/04/12 17:01
72	P2.050412.170729	WG396931-04	Serial Dilution		5	L12050028-01	05/04/12 17:07
73	P2.050412.171427	WG397050-28	CCV		1		05/04/12 17:14
74	P2.050412.172028	WG397050-29	CCB		1		05/04/12 17:20
75	P2.050412.172721	WG396995-02	Method/Prep Blank		1		05/04/12 17:27
76	P2.050412.173416	WG396995-03	Laboratory Control S		1		05/04/12 17:34
77	P2.050412.174015	L12050083-01	LCL-Z-OUTLET 005		1	WG396995-01	05/04/12 17:40
78	P2.050412.174614	WG396995-04	Duplicate		1	L12050083-01	05/04/12 17:46
79	P2.050412.175215	WG396995-05	Matrix Spike		1	L12050083-01	05/04/12 17:52
80	P2.050412.175816	WG397061-03	Post Digestion Spike		1	L12050083-01	05/04/12 17:58
81	P2.050412.180415	WG397061-04	Serial Dilution		5	L12050083-01	05/04/12 18:04
82	P2.050412.181110	WG397050-30	CCV		1		05/04/12 18:11
83	P2.050412.181709	WG397050-31	CCB		1		05/04/12 18:17

Page: 3 Approved: May 07, 2012

Maren Berry

Microbac Laboratories Inc.

Data Checklist

Date: 04-MAY-2012
Analyst: KHR
Analyst: NA
Method: 6010
Instrument: PE-ICP2
Curve Workgroup: 397050
Runlog ID: 46545
Analytical Workgroups: 396791, 396793, 396931, 397061

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	
Case Narrative	X
Client Forms	X
Level X	
Level 3	
Level 4	898, 977, 011
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:
07-MAY-2012

Secondary Reviewer:
07-MAY-2012

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-07-2012 16:09:46

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 6010B AAB#: WG396793

Login Number: L12050011

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
MW-29-043012	01	04/30/12					05/02/12	1.9	180		05/04/12	4.1	180	
MW-29-043012	01	04/30/12					05/02/12	1.9	180		05/04/12	4	180	
MW-29-043012	02	04/30/12					05/02/12	1.7	180		05/04/12	4	180	
MW-29-043012	02	04/30/12					05/02/12	1.7	180		05/04/12	4.1	180	
DUP-GW-043012	03	04/30/12					05/02/12	1.8	180		05/04/12	4	180	
DUP-GW-043012	03	04/30/12					05/02/12	1.8	180		05/04/12	4.1	180	
DUP-GW-043012	04	04/30/12					05/02/12	1.7	180		05/04/12	4	180	
DUP-GW-043012	04	04/30/12					05/02/12	1.7	180		05/04/12	4.1	180	
EB-043012-GW	05	04/30/12					05/02/12	1.7	180		05/04/12	4	180	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2403908
Report generated 05/07/2012 11:25

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12050011
Blank File ID: P2.050412.115834
Prep Date: 05/02/12 06:55
Analyzed Date: 05/04/12 11:58
Analyst: KHR

Work Group: WG396793
Blank Sample ID: WG396754-02
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	WG396754-03	P2.050412.120528	05/04/12 12:05	01
MW-29-043012	L12050011-01	P2.050412.134505	05/04/12 13:45	01
MW-29-043012	L12050011-02	P2.050412.140302	05/04/12 14:03	01
DUP-GW-043012	L12050011-03	P2.050412.142159	05/04/12 14:21	01
DUP-GW-043012	L12050011-04	P2.050412.142759	05/04/12 14:27	01
EB-043012-GW	L12050011-05	P2.050412.143402	05/04/12 14:34	01
MW-29-043012	L12050011-01	P2.050412.150915	05/04/12 15:09	DL01
MW-29-043012	L12050011-02	P2.050412.153003	05/04/12 15:30	DL01
DUP-GW-043012	L12050011-03	P2.050412.153658	05/04/12 15:36	DL01
DUP-GW-043012	L12050011-04	P2.050412.154353	05/04/12 15:43	DL01

Report Name: BLANK_SUMMARY
PDF File ID: 2403909
Report generated 05/07/2012 11:26

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050011 Prep Date: 05/02/12 06:55 Sample ID: WG396754-02
Instrument ID: PE-ICP2 Run Date: 05/04/12 11:58 Prep Method: 3005A
File ID: P2.050412.115834 Analyst: KHR Method: 6010B
Workgroup (AAB#): WG396793 Matrix: Water Units: mg/L
Contract #: Cal ID: PE-ICP-04-MAY-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Aluminum, Total	0.0500	0.100	0.0500	1	U
Barium, Total	0.00250	0.0100	-0.00330	1	U
Beryllium, Total	0.000500	0.00200	0.000500	1	U
Cadmium, Total	0.000250	0.000500	0.000250	1	U
Calcium, Total	0.100	0.200	0.116	1	J
Chromium, Total	0.00250	0.00500	0.00250	1	U
Cobalt, Total	0.00250	0.0200	0.00250	1	U
Copper, Total	0.00500	0.0200	0.00500	1	U
Iron, Total	0.0250	0.100	0.0250	1	U
Magnesium, Total	0.250	0.500	0.250	1	U
Manganese, Total	0.00500	0.0100	0.00500	1	U
Nickel, Total	0.00500	0.0400	0.00500	1	U
Potassium, Total	0.250	1.00	0.250	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	0.00758	1	J
Zinc, Total	0.00500	0.0200	0.00500	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: 2403910
07-MAY-2012 11:26

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050011 Run Date: 05/04/2012 Sample ID: WG396754-03
Instrument ID: PE-ICP2 Run Time: 12:05 Prep Method: 3005A
File ID: P2.050412.120528 Analyst: KHR Method: 6010B
Workgroup (AAB#): WG396793 Matrix: Water Units: mg/L
QC Key: WATERLOO Lot#: STD51357 Cal ID: PE-ICP-04-MAY-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Aluminum, Total	5.00	4.94	98.8	85 - 115	
Barium, Total	0.500	0.492	98.3	85 - 115	
Beryllium, Total	0.0250	0.0233	93.3	85 - 115	
Cadmium, Total	0.0250	0.0229	91.5	85 - 115	
Calcium, Total	5.00	4.97	99.4	85 - 115	
Chromium, Total	0.250	0.249	99.6	85 - 115	
Cobalt, Total	0.100	0.0990	99.0	85 - 115	
Copper, Total	0.250	0.250	99.8	85 - 115	
Iron, Total	2.00	1.90	95.1	85 - 115	
Magnesium, Total	5.00	4.89	97.7	85 - 115	
Manganese, Total	0.250	0.251	100	85 - 115	
Nickel, Total	0.250	0.248	99.2	85 - 115	
Potassium, Total	25.0	25.1	100	85 - 115	
Silver, Total	0.200	0.201	101	85 - 115	
Sodium, Total	25.0	25.2	101	85 - 115	
Vanadium, Total	0.500	0.512	102	85 - 115	
Zinc, Total	0.500	0.491	98.1	85 - 115	

LCS - Modified 03/06/2008
PDF File ID: 2403911
Report generated: 05/07/2012 11:26

Microbac Laboratories Inc.
MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

Loginnum: L12050011 Cal ID: PE-ICP2- Worknum: WG396793
Instrument ID: PE-ICP2 Contract #: Method: 6010B
Parent ID: WG396754-01 File ID: P2.050412.134505 Dil: 1 Matrix: WATER
Sample ID: WG396754-04 MS File ID: P2.050412.135103 Dil: 1 Units: mg/L
Sample ID: WG396754-05 MSD File ID: P2.050412.135702 Dil: 1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Aluminum, Total	0.253	5.00	5.30	101	5.00	5.17	98.3	2.56	85 - 115	20	
Barium, Total	0.104	0.500	0.593	97.7	0.500	0.571	93.4	3.72	85 - 115	20	
Beryllium, Total	0.000508	0.0250	0.0231	90.6	0.0250	0.0227	88.9	1.77	85 - 115	20	
Cadmium, Total	0.000699	0.0250	0.0224	86.9	0.0250	0.0219	84.7	2.47	85 - 115	20	*
Calcium, Total	268	5.00	283	289	5.00	272	80.9	3.75	85 - 115	20	*
Chromium, Total	ND	0.250	0.245	98.2	0.250	0.238	95.1	3.15	85 - 115	20	
Cobalt, Total	ND	0.100	0.0959	95.9	0.100	0.0920	92.0	4.11	85 - 115	20	
Copper, Total	ND	0.250	0.240	95.9	0.250	0.238	95.1	0.925	85 - 115	20	
Iron, Total	1.58	2.00	3.56	99.1	2.00	3.41	91.7	4.27	85 - 115	20	
Magnesium, Total	44.1	5.00	51.2	141	5.00	48.5	86.9	5.45	85 - 115	20	*
Manganese, Total	0.327	0.250	0.590	105	0.250	0.560	93.2	5.18	85 - 115	20	
Nickel, Total	ND	0.250	0.243	97.4	0.250	0.233	93.3	4.26	85 - 115	20	
Potassium, Total	14.0	25.0	39.6	103	25.0	38.3	97.3	3.35	85 - 115	20	
Silver, Total	0.00547	0.200	0.202	98.1	0.200	0.198	96.4	1.69	85 - 115	20	
Vanadium, Total	0.0231	0.500	0.537	103	0.500	0.518	99.0	3.59	85 - 115	20	
Zinc, Total	0.0128	0.500	0.480	93.4	0.500	0.468	91.0	2.53	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: 2403912
Report generated 05/07/2012 11:26

Microbac Laboratories Inc.
MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

Loginnum: L12050011 Cal ID: PE-ICP2- Worknum: WG396793
Instrument ID: PE-ICP2 Contract #: Method: 6010B
Parent ID: WG396754-01 File ID: P2.050412.150915 Dil: 100 Matrix: WATER
Sample ID: WG396754-04 MS File ID: P2.050412.151610 Dil: 100 Units: mg/L
Sample ID: WG396754-05 MSD File ID: P2.050412.152308 Dil: 100

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Sodium, Total	1090	25.0	1150	255	25.0	1100	41.0	4.76	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: 2403912
Report generated 05/07/2012 11:26

Microbac Laboratories Inc.
Serial Dilution Report

Login: L12050011 **Worknum:** WG396793
Instrument: PE-ICP2 **Method:** 6010B
Serial Dil: WG396793-02 **File ID:** P2.050412.125704 **Dil:** 5 **Units:** mg/L
Sample: L12040977-04 **File ID:** P2.050412.124408 **Dil:** 1

Analyte	Sample	Qual	Serial Dil	Qual	% Diff	Q
Aluminum	ND	U	ND	U		
Barium	ND	U	ND	U		
Beryllium	ND	U	ND	U		
Cadmium	ND	U	0.00158	F	705.00	
Calcium	0.119	F	ND	U		
Chromium	ND	U	ND	U		
Cobalt	ND	U	ND	U		
Copper	ND	U	ND	U		
Iron	ND	U	ND	U		
Magnesium	ND	U	ND	U		
Manganese	ND	U	ND	U		
Nickel	ND	U	ND	U		
Potassium	ND	U	ND	U		
Silver	ND	U	ND	U		
Sodium	0.272	F	ND	U		
Vanadium	0.00821	F	0.0341	F	315.00	
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: 2403906
05/07/2012 11:25

Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L12050011 **Worknum:** WG396793
Instrument ID: PE-ICP2 **Method:** 6010B
Post Spike ID: WG396793-01 **File ID:** P2.050412.125104 **Dil:** 1 **Units:** mg/L
Sample ID: L12040977-04 **File ID:** P2.050412.124408 **Dil:** 1 **Matrix:** Water

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
ALUMINUM	4.76		0	U	5	95.1	75 - 125	
BARIUM	0.478		0	U	.5	95.5	75 - 125	
BERYLLIUM	0.0229		0	U	.025	91.6	75 - 125	
CADMIUM	0.0225		0	U	.025	90.2	75 - 125	
CALCIUM	4.81		0.119	F	5	94.1	75 - 125	
CHROMIUM	0.242		0	U	.25	96.7	75 - 125	
COBALT	0.0974		0	U	.1	97.4	75 - 125	
COPPER	0.242		0	U	.25	96.9	75 - 125	
IRON	1.87		0	U	2	93.3	75 - 125	
MAGNESIUM	4.82		0	U	5	96.4	75 - 125	
MANGANESE	0.244		0	U	.25	97.8	75 - 125	
NICKEL	0.242		0	U	.25	96.9	75 - 125	
POTASSIUM	23.9		0	U	25	95.5	75 - 125	
SILVER	0.197		0	U	.2	98.3	75 - 125	
SODIUM	24.9		0.272	F	25	98.5	75 - 125	
VANADIUM	0.495		0.00821	F	.5	97.6	75 - 125	
ZINC	0.488		0	U	.5	97.6	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: 2403907
Report generated: 05/07/2012 11:25

Microbac Laboratories Inc.
Initial Calibration Summary

Login:	**L12050011**	Workgroup (AAB#):	**WG396793**
Analytical Method:	**6010B**	Instrument ID:	**PE-ICP2**
ICAL Worknum:	**WG397050**	Initial Calibration Date:	**04-MAY-2012 09:37**

	WG397050-01		WG397050-02		WG397050-03		WG397050-04		WG397050-05			
	Conc	INT	Conc	INT	Conc	INT	Conc	INT	Conc	INT	R	Q
ALUMINUM	0	40.3	.1	729	.2	1570	10	73600	20	147000	.999999	
BARIUM	0	518	.01	1490	.02	3180	1	167000	2	333000	1	
BERYLLIUM	0	-1730	.0005	708	.001	1330	.05	66900	.1	138000	.999865	
CADMIUM	0	87.1	.0005	16.7	.001	46.2	.05	2970	.1	6140	.999888	
CALCIUM	0	-77.1	NA	NA	.2	85.9	10	4610	20	9720	.999653	
CHROMIUM	0	375	.005	544	.01	1140	.5	56900	1	114000	.999999	
COBALT	0	7.50	.002	70.7	.004	161	.1	8090	.4	16000	.999989	
COPPER	0	-843	.005	1430	.01	2760	.5	136000	1	277000	.99996	
IRON	0	21.0	.04	665	.08	1410	4	69000	8	137000	.999998	
MAGNESIUM	0	44.9	.1	364	.2	772	10	37400	20	74500	.999999	
MANGANESE	0	497	.005	4610	.01	8910	.5	437000	1	871000	.999999	
NICKEL	0	-183	.005	380	.01	786	.5	37600	1	71800	.999739	
POTASSIUM	0	61.4	.5	1800	1	3560	50	161000	100	320000	1	
SILVER	0	-201	.004	1210	.008	2700	.4	127000	.8	260000	.999925	
SODIUM	0	731	.5	9790	1	19400	50	977000	100	1920000	1	
VANADIUM	0	15100	.01	1500	.02	3730	1	199000	2	400000	.999998	
ZINC	0	2.41	.01	475	.02	953	1	46900	2	94500	.999993	

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: 2403915
Report generated: 07-MAY-2012 11:25

Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L12050011
Instrument ID: PE-ICP2
File ID: P2.050412.094935
Workgroup (AAB#): WG396793
Matrix: WATER

Run Date: 05/04/2012
Run Time: 09:49
Analyst: KHR
Cal ID: PE-ICP2 - 04-MAY-12

Sample ID: WG397050-07
Method: 6010B
Units: mg/L

Analytes	MDL	RDL	Concentration	Qualifier
ALUMINUM	.05	.1	.05	U
BARIUM	.0025	.01	.0025	U
BERYLLIUM	.0005	.002	.0005	U
CADMIUM	.00025	.0005	.000405	F
CALCIUM	.1	.2	.1	U
CHROMIUM	.0025	.005	.0025	U
COBALT	.0025	.02	.0025	U
COPPER	.005	.02	.005	U
IRON	.025	.1	.025	U
MAGNESIUM	.25	.5	.25	U
MANGANESE	.005	.01	.005	U
NICKEL	.005	.04	.005	U
POTASSIUM	.25	1	.25	U
SILVER	.005	.01	.005	U
SODIUM	.25	.5	.25	U
VANADIUM	.005	.01	.0077	F
ZINC	.005	.02	.005	U

ICB - Modified 07/14/2009
PDF File ID: 2403917
Report generated 05/07/2012 11:25

Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050011 Run Date: 05/04/2012 Sample ID: WG397050-12
Instrument ID: PE-ICP2 Run Time: 10:20 Method: 6010B
File ID: P2.050412.102018 Analyst: KHR Units: mg/L
Workgroup (AAB#): WG396793 Cal ID: PE-ICP - 04-MAY-12
Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00250	0.0100	-0.00282	F
Beryllium	0.000500	0.00200	0.000500	U
Cadmium	0.000250	0.000500	0.000292	F
Calcium	0.100	0.200	0.110	F
Chromium	0.00250	0.00500	0.00250	U
Cobalt	0.00250	0.0200	0.00250	U
Copper	0.00500	0.0200	0.00500	U
Iron	0.0250	0.100	0.0250	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.00500	0.0400	0.00500	U
Potassium	0.250	1.00	0.250	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00642	F
Zinc	0.00500	0.0200	0.00500	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: 2403920
Report generated 05/07/2012 11:26

Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050011
Run Date: 05/04/2012
Sample ID: WG397050-14
Instrument ID: PE-ICP2
Run Time: 11:31
Method: 6010B
File ID: P2.050412.113113
Analyst: KHR
Units: mg/L
Workgroup (AAB#): WG396793
Cal ID: PE-ICP - 04-MAY-12
Matrix: WATER
QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00250	0.0100	-0.00326	F
Beryllium	0.000500	0.00200	0.000500	U
Cadmium	0.000250	0.000500	0.000326	F
Calcium	0.100	0.200	0.107	F
Chromium	0.00250	0.00500	0.00250	U
Cobalt	0.00250	0.0200	0.00250	U
Copper	0.00500	0.0200	0.00500	U
Iron	0.0250	0.100	0.0250	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.00500	0.0400	0.00500	U
Potassium	0.250	1.00	0.250	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00969	F
Zinc	0.00500	0.0200	0.00500	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: 2403920
Report generated 05/07/2012 11:26

Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050011
Run Date: 05/04/2012
Sample ID: WG397050-17
Instrument ID: PE-ICP2
Run Time: 13:10
Method: 6010B
File ID: P2.050412.131037
Analyst: KHR
Units: mg/L
Workgroup (AAB#): WG396793
Cal ID: PE-ICP - 04-MAY-12
Matrix: WATER
QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00250	0.0100	-0.00347	F
Beryllium	0.000500	0.00200	0.000500	U
Cadmium	0.000250	0.000500	0.000286	F
Calcium	0.100	0.200	0.113	F
Chromium	0.00250	0.00500	0.00250	U
Cobalt	0.00250	0.0200	0.00250	U
Copper	0.00500	0.0200	0.00500	U
Iron	0.0250	0.100	0.0250	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.00500	0.0400	0.00500	U
Potassium	0.250	1.00	0.250	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00767	F
Zinc	0.00500	0.0200	0.00500	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: 2403920
Report generated 05/07/2012 11:26

Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050011 Run Date: 05/04/2012 Sample ID: WG397050-19
Instrument ID: PE-ICP2 Run Time: 14:15 Method: 6010B
File ID: P2.050412.141506 Analyst: KHR Units: mg/L
Workgroup (AAB#): WG396793 Cal ID: PE-ICP - 04-MAY-12
Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00250	0.0100	-0.00349	F
Beryllium	0.000500	0.00200	0.000500	U
Cadmium	0.000250	0.000500	0.000460	F
Calcium	0.100	0.200	0.100	U
Chromium	0.00250	0.00500	0.00250	U
Cobalt	0.00250	0.0200	0.00250	U
Copper	0.00500	0.0200	0.00500	U
Iron	0.0250	0.100	0.0250	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.00500	0.0400	0.00500	U
Potassium	0.250	1.00	0.250	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00982	F
Zinc	0.00500	0.0200	0.00500	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: 2403920
Report generated 05/07/2012 11:26

Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050011
Run Date: 05/04/2012
Sample ID: WG397050-21
Instrument ID: PE-ICP2
Run Time: 15:00
Method: 6010B
File ID: P2.050412.150053
Analyst: KHR
Units: mg/L
Workgroup (AAB#): WG396793
Cal ID: PE-ICP - 04-MAY-12
Matrix: WATER
QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00250	0.0100	-0.00329	F
Beryllium	0.000500	0.00200	0.000500	U
Cadmium	0.000250	0.000500	0.000392	F
Calcium	0.100	0.200	0.100	U
Chromium	0.00250	0.00500	0.00250	U
Cobalt	0.00250	0.0200	0.00250	U
Copper	0.00500	0.0200	0.00500	U
Iron	0.0250	0.100	0.0250	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.00500	0.0400	0.00500	U
Potassium	0.250	1.00	0.250	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00572	F
Zinc	0.00500	0.0200	0.00500	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: 2403920
Report generated 05/07/2012 11:26

Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050011
Run Date: 05/04/2012
Sample ID: WG397050-23
Instrument ID: PE-ICP2
Run Time: 15:56
Method: 6010B
File ID: P2.050412.155649
Analyst: KHR
Units: mg/L
Workgroup (AAB#): WG396793
Cal ID: PE-ICP - 04-MAY-12
Matrix: WATER
QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00250	0.0100	-0.00344	F
Beryllium	0.000500	0.00200	0.000500	U
Cadmium	0.000250	0.000500	0.000250	U
Calcium	0.100	0.200	0.113	F
Chromium	0.00250	0.00500	0.00250	U
Cobalt	0.00250	0.0200	0.00250	U
Copper	0.00500	0.0200	0.00500	U
Iron	0.0250	0.100	0.0250	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.00500	0.0400	0.00500	U
Potassium	0.250	1.00	0.250	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	0.00500	0.0200	0.00500	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: 2403920
Report generated 05/07/2012 11:26

Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050011
Run Date: 05/04/2012
Sample ID: WG397050-27
Instrument ID: PE-ICP2
Run Time: 16:21
Method: 6010B
File ID: P2.050412.162136
Analyst: KHR
Units: mg/L
Workgroup (AAB#): WG396793
Cal ID: PE-ICP - 04-MAY-12
Matrix: WATER
QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00250	0.0100	-0.00325	F
Beryllium	0.000500	0.00200	0.000500	U
Cadmium	0.000250	0.000500	0.000433	F
Calcium	0.100	0.200	0.100	U
Chromium	0.00250	0.00500	0.00250	U
Cobalt	0.00250	0.0200	0.00250	U
Copper	0.00500	0.0200	0.00500	U
Iron	0.0250	0.100	0.0250	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.00500	0.0400	0.00500	U
Potassium	0.250	1.00	0.250	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	0.00500	0.0200	0.00500	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: 2403920
Report generated 05/07/2012 11:26

Microbac Laboratories Inc.

INITIAL CALIBRATION VERIFICATION (ICV)

(Alternate Source)

Login Number: L12050011 Run Date: 05/04/2012 Sample ID: WG397050-06

Instrument ID: PE-ICP2 Run Time: 09:43 Method: 6010B

File ID: P2.050412.094339 Analyst: KHR Units: mg/L

Workgroup (AAB#): WG396793 Cal ID: PE-ICP - 04-MAY-12

QC Key: WATERLOO

Analyte		Expected	Found	%REC	LIMITS	Q
Aluminum		10	9.99	99.9	90 - 110	
Barium		1	0.994	99.4	90 - 110	
Beryllium		.05	0.0469	93.9	90 - 110	
Cadmium		.05	0.0468	93.5	90 - 110	
Calcium		10	10.1	101	90 - 110	
Chromium		.5	0.494	98.8	90 - 110	
Cobalt		.2	0.199	99.3	90 - 110	
Copper		.5	0.493	98.6	90 - 110	
Iron		4	3.97	99.1	90 - 110	
Magnesium		10	9.89	98.9	90 - 110	
Manganese		.5	0.501	100	90 - 110	
Nickel		.5	0.510	102	90 - 110	
Potassium		50	50.4	101	90 - 110	
Silver		.4	0.398	99.6	90 - 110	
Sodium		50	50.3	101	90 - 110	
Vanadium		1	0.998	99.8	90 - 110	
Zinc		1	0.974	97.4	90 - 110	

* Exceeds LIMITS Limit

ICV - Modified 03/06/2008
PDF File ID: 2403916
Report generated 05/07/2012 11:25

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050011
Run Date: 05/04/2012
Sample ID: WG397050-11
Instrument ID: PE-ICP2
Run Time: 10:14
Method: 6010B
File ID: P2.050412.101419
Analyst: KHR
QC Key: WATERLOO
Workgroup (AAB#): WG396793
Cal ID: PE-ICP - 04-MAY-12
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	9.85	mg/L	98.5	90 - 110		
Barium		1.00	0.989	mg/L	98.9	90 - 110		
Beryllium		0.0500	0.0490	mg/L	98.1	90 - 110		
Cadmium		0.0500	0.0480	mg/L	96.0	90 - 110		
Calcium		10.0	10.2	mg/L	102	90 - 110		
Chromium		0.500	0.499	mg/L	99.7	90 - 110		
Cobalt		0.200	0.198	mg/L	98.9	90 - 110		
Copper		0.500	0.498	mg/L	99.6	90 - 110		
Iron		4.00	3.97	mg/L	99.3	90 - 110		
Magnesium		10.0	9.97	mg/L	99.7	90 - 110		
Manganese		0.500	0.497	mg/L	99.4	90 - 110		
Nickel		0.500	0.507	mg/L	101	90 - 110		
Potassium		50.0	49.4	mg/L	98.7	90 - 110		
Silver		0.400	0.408	mg/L	102	90 - 110		
Sodium		50.0	49.9	mg/L	99.8	90 - 110		
Vanadium		1.00	1.01	mg/L	101	90 - 110		
Zinc		1.00	0.994	mg/L	99.4	90 - 110		

* Exceeds LIMITS Criteria

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Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050011
Run Date: 05/04/2012
Sample ID: WG397050-13
Instrument ID: PE-ICP2
Run Time: 11:25
Method: 6010B
File ID: P2.050412.112512
Analyst: KHR
QC Key: WATERLOO
Workgroup (AAB#): WG396793
Cal ID: PE-ICP - 04-MAY-12
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	9.82	mg/L	98.2	90 - 110		
Barium		1.00	0.995	mg/L	99.5	90 - 110		
Beryllium		0.0500	0.0485	mg/L	97.0	90 - 110		
Cadmium		0.0500	0.0479	mg/L	95.8	90 - 110		
Calcium		10.0	10.3	mg/L	103	90 - 110		
Chromium		0.500	0.501	mg/L	100	90 - 110		
Cobalt		0.200	0.200	mg/L	99.9	90 - 110		
Copper		0.500	0.504	mg/L	101	90 - 110		
Iron		4.00	3.96	mg/L	98.9	90 - 110		
Magnesium		10.0	9.94	mg/L	99.4	90 - 110		
Manganese		0.500	0.511	mg/L	102	90 - 110		
Nickel		0.500	0.496	mg/L	99.1	90 - 110		
Potassium		50.0	49.6	mg/L	99.1	90 - 110		
Silver		0.400	0.411	mg/L	103	90 - 110		
Sodium		50.0	49.7	mg/L	99.5	90 - 110		
Vanadium		1.00	1.02	mg/L	102	90 - 110		
Zinc		1.00	0.998	mg/L	99.8	90 - 110		

* Exceeds LIMITS Criteria

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Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050011 Run Date: 05/04/2012 Sample ID: WG397050-16
Instrument ID: PE-ICP2 Run Time: 13:04 Method: 6010B
File ID: P2.050412.130436 Analyst: KHR QC Key: WATERLOO
Workgroup (AAB#): WG396793 Cal ID: PE-ICP - 04-MAY-12
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	9.68	mg/L	96.8	90 - 110		
Barium		1.00	0.979	mg/L	97.9	90 - 110		
Beryllium		0.0500	0.0476	mg/L	95.3	90 - 110		
Cadmium		0.0500	0.0471	mg/L	94.1	90 - 110		
Calcium		10.0	10.2	mg/L	102	90 - 110		
Chromium		0.500	0.493	mg/L	98.6	90 - 110		
Cobalt		0.200	0.197	mg/L	98.6	90 - 110		
Copper		0.500	0.499	mg/L	99.9	90 - 110		
Iron		4.00	3.81	mg/L	95.4	90 - 110		
Magnesium		10.0	9.68	mg/L	96.8	90 - 110		
Manganese		0.500	0.503	mg/L	101	90 - 110		
Nickel		0.500	0.488	mg/L	97.6	90 - 110		
Potassium		50.0	48.9	mg/L	97.7	90 - 110		
Silver		0.400	0.406	mg/L	101	90 - 110		
Sodium		50.0	48.8	mg/L	97.7	90 - 110		
Vanadium		1.00	1.01	mg/L	101	90 - 110		
Zinc		1.00	0.979	mg/L	97.9	90 - 110		

* Exceeds LIMITS Criteria

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Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050011
Run Date: 05/04/2012
Sample ID: WG397050-18
Instrument ID: PE-ICP2
Run Time: 14:09
Method: 6010B
File ID: P2.050412.140905
Analyst: KHR
QC Key: WATERLOO
Workgroup (AAB#): WG396793
Cal ID: PE-ICP - 04-MAY-12
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	10.1	mg/L	101	90 - 110		
Barium		1.00	0.997	mg/L	99.7	90 - 110		
Beryllium		0.0500	0.0482	mg/L	96.5	90 - 110		
Cadmium		0.0500	0.0486	mg/L	97.3	90 - 110		
Calcium		10.0	10.5	mg/L	105	90 - 110		
Chromium		0.500	0.504	mg/L	101	90 - 110		
Cobalt		0.200	0.204	mg/L	102	90 - 110		
Copper		0.500	0.506	mg/L	101	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	0.513	mg/L	103	90 - 110		
Nickel		0.500	0.499	mg/L	99.8	90 - 110		
Potassium		50.0	50.4	mg/L	101	90 - 110		
Silver		0.400	0.412	mg/L	103	90 - 110		
Sodium		50.0	50.6	mg/L	101	90 - 110		
Vanadium		1.00	1.03	mg/L	103	90 - 110		
Zinc		1.00	0.994	mg/L	99.4	90 - 110		

* Exceeds LIMITS Criteria

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Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050011
Run Date: 05/04/2012
Sample ID: WG397050-20
Instrument ID: PE-ICP2
Run Time: 14:54
Method: 6010B
File ID: P2.050412.145456
Analyst: KHR
QC Key: WATERLOO
Workgroup (AAB#): WG396793
Cal ID: PE-ICP - 04-MAY-12
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	10.0	mg/L	100	90 - 110		
Barium		1.00	1.00	mg/L	100	90 - 110		
Beryllium		0.0500	0.0491	mg/L	98.2	90 - 110		
Cadmium		0.0500	0.0483	mg/L	96.5	90 - 110		
Calcium		10.0	10.4	mg/L	104	90 - 110		
Chromium		0.500	0.507	mg/L	101	90 - 110		
Cobalt		0.200	0.203	mg/L	101	90 - 110		
Copper		0.500	0.506	mg/L	101	90 - 110		
Iron		4.00	3.98	mg/L	99.4	90 - 110		
Magnesium		10.0	10.0	mg/L	100	90 - 110		
Manganese		0.500	0.506	mg/L	101	90 - 110		
Nickel		0.500	0.520	mg/L	104	90 - 110		
Potassium		50.0	50.2	mg/L	100	90 - 110		
Silver		0.400	0.411	mg/L	103	90 - 110		
Sodium		50.0	50.5	mg/L	101	90 - 110		
Vanadium		1.00	1.03	mg/L	103	90 - 110		
Zinc		1.00	1.01	mg/L	101	90 - 110		

* Exceeds LIMITS Criteria

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Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050011
Run Date: 05/04/2012
Sample ID: WG397050-22
Instrument ID: PE-ICP2
Run Time: 15:50
Method: 6010B
File ID: P2.050412.155049
Analyst: KHR
QC Key: WATERLOO
Workgroup (AAB#): WG396793
Cal ID: PE-ICP - 04-MAY-12
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	9.71	mg/L	97.1	90 - 110		
Barium		1.00	0.974	mg/L	97.4	90 - 110		
Beryllium		0.0500	0.0475	mg/L	95.1	90 - 110		
Cadmium		0.0500	0.0468	mg/L	93.6	90 - 110		
Calcium		10.0	10.1	mg/L	101	90 - 110		
Chromium		0.500	0.493	mg/L	98.6	90 - 110		
Cobalt		0.200	0.197	mg/L	98.5	90 - 110		
Copper		0.500	0.485	mg/L	97.0	90 - 110		
Iron		4.00	3.87	mg/L	96.7	90 - 110		
Magnesium		10.0	9.77	mg/L	97.7	90 - 110		
Manganese		0.500	0.490	mg/L	98.1	90 - 110		
Nickel		0.500	0.503	mg/L	101	90 - 110		
Potassium		50.0	48.8	mg/L	97.6	90 - 110		
Silver		0.400	0.397	mg/L	99.3	90 - 110		
Sodium		50.0	48.9	mg/L	97.7	90 - 110		
Vanadium		1.00	0.997	mg/L	99.7	90 - 110		
Zinc		1.00	0.977	mg/L	97.7	90 - 110		

* Exceeds LIMITS Criteria

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Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050011
Run Date: 05/04/2012
Sample ID: WG397050-26
Instrument ID: PE-ICP2
Run Time: 16:15
Method: 6010B
File ID: P2.050412.161535
Analyst: KHR
QC Key: WATERLOO
Workgroup (AAB#): WG396793
Cal ID: PE-ICP - 04-MAY-12
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	9.77	mg/L	97.7	90 - 110		
Barium		1.00	0.976	mg/L	97.6	90 - 110		
Beryllium		0.0500	0.0479	mg/L	95.8	90 - 110		
Cadmium		0.0500	0.0474	mg/L	94.9	90 - 110		
Calcium		10.0	10.2	mg/L	102	90 - 110		
Chromium		0.500	0.493	mg/L	98.6	90 - 110		
Cobalt		0.200	0.197	mg/L	98.3	90 - 110		
Copper		0.500	0.492	mg/L	98.5	90 - 110		
Iron		4.00	3.87	mg/L	96.8	90 - 110		
Magnesium		10.0	9.82	mg/L	98.2	90 - 110		
Manganese		0.500	0.501	mg/L	100	90 - 110		
Nickel		0.500	0.487	mg/L	97.3	90 - 110		
Potassium		50.0	49.2	mg/L	98.4	90 - 110		
Silver		0.400	0.406	mg/L	102	90 - 110		
Sodium		50.0	48.9	mg/L	97.8	90 - 110		
Vanadium		1.00	1.00	mg/L	100	90 - 110		
Zinc		1.00	0.981	mg/L	98.1	90 - 110		

* Exceeds LIMITS Criteria

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PDF File ID: 2403919
Report generated 05/07/2012 11:26

Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L12050011
Instrument ID: PE-ICP2
Sol. A : WG397050-09 **File ID:** P2.050412.100226
Sol. AB : WG397050-10 **File ID:** P2.050412.100822

Workgroup (AAB#): WG396793
Method: 6010B
Units: mg/L
Matrix: Water

	Sol. A			Sol. AB			
ANALYTE	True	Found	%Recovery	True	Found	%Recovery	Q
Aluminum	250	254	102	250	259	104	
Barium	NS	0.000660	NS	0.250	0.252	101	
Beryllium	NS	-0.00125	NS	0.250	0.251	100	
Cadmium	NS	0.000490	NS	0.500	0.423	84.6	
Calcium	250	263	105	250	271	108	
Chromium	NS	-0.000960	NS	0.250	0.248	99.2	
Cobalt	NS	-0.00200	NS	0.250	0.241	96.4	
Copper	NS	0.00368	NS	0.250	0.261	104	
Iron	100	95.6	95.6	100	96.4	96.4	
Magnesium	250	258	103	250	261	104	
Manganese	NS	-0.000210	NS	0.250	0.248	99.2	
Nickel	NS	-0.00247	NS	0.500	0.481	96.2	
Potassium	NS	-0.0869	NS	5.00	5.02	100	
Silver	NS	0.00113	NS	0.500	0.531	106	
Sodium	NS	0.0254	NS	5.00	5.12	102	
Vanadium	NS	0.00510	NS	0.250	0.259	104	
Zinc	NS	0.00385	NS	0.500	0.483	96.6	

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.

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Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L12050011
Instrument ID: PE-ICP2
Sol. A : WG397050-24 **File ID:** P2.050412.160342
Sol. AB : WG397050-25 **File ID:** P2.050412.160939

Workgroup (AAB#): WG396793
Method: 6010B
Units: mg/L
Matrix: Water

	Sol. A			Sol. AB			
ANALYTE	True	Found	%Recovery	True	Found	%Recovery	Q
Aluminum	250	246	98.4	250	248	99.2	
Barium	NS	-0.000900	NS	0.250	0.247	98.8	
Beryllium	NS	-0.000430	NS	0.250	0.246	98.4	
Cadmium	NS	0.000270	NS	0.500	0.413	82.6	
Calcium	250	255	102	250	265	106	
Chromium	NS	-0.00227	NS	0.250	0.250	100	
Cobalt	NS	-0.00196	NS	0.250	0.235	94.0	
Copper	NS	0.00394	NS	0.250	0.253	101	
Iron	100	90.4	90.4	100	91.0	91.0	
Magnesium	250	247	98.8	250	249	99.6	
Manganese	NS	-0.000520	NS	0.250	0.244	97.6	
Nickel	NS	-0.00228	NS	0.500	0.470	94.0	
Potassium	NS	-0.0993	NS	5.00	4.81	96.2	
Silver	NS	-0.000230	NS	0.500	0.519	104	
Sodium	NS	0.133	NS	5.00	5.01	100	
Vanadium	NS	0.00203	NS	0.250	0.254	102	
Zinc	NS	0.00418	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.

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Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12050011 **Date:** 12/30/2011
Insturment ID: PE-ICP2 **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
PDF File ID: 2403914
Report generated: 05/07/2012 11:25

Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12050011 **Date:** 12/30/2011
Insturment ID: PE-ICP2 **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

CORR_FACTORS - Modified 03/05/2008
PDF File ID: 2403914
Report generated: 05/07/2012 11:25

Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12050011 **Date:** 12/30/2011
Insturment ID: PE-ICP2 **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

CORR_FACTORS - Modified 03/05/2008
PDF File ID: 2403914
Report generated: 05/07/2012 11:25

Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12050011 **Date:** 12/30/2011
Insturment ID: PE-ICP2 **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

CORR_FACTORS - Modified 03/05/2008
PDF File ID: 2403914
Report generated: 05/07/2012 11:25

Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12050011 **Date:** 12/30/2011
Insturment ID: PE-ICP2 **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

CORR_FACTORS - Modified 03/05/2008
PDF File ID: 2403914
Report generated: 05/07/2012 11:25

Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12050011 **Date:** 12/30/2011
Insturment 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: 2403914
Report generated: 05/07/2012 11:25

Microbac Laboratories Inc.
LINEAR RANGE (QUARTERLY)

Login Number: L12050011 **Date:** 03/27/2012
Insturment 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	1.8
Magnesium	10.00	450.0
Manganese	10.00	27.0
Molybdenum	10.00	45.0
Nickel	10.00	45.0
Potassium	10.00	90.0
Selenium	10.00	45.0
Silicon	10.00	36.0
Silver	10.00	4.5
Sodium	10.00	360.0
Strontium	10.00	1.8
Thallium	10.00	45.0
Tin	10.00	45.0
Titanium	10.00	9.0
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: 2403913
Report generated: 05/07/2012 11:25

2.3.1.3 Raw Data

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Analysis Begun

Start Time: 5/4/2012 9:10:54 AM **Plasma On Time: 5/4/2012 8:06:52 AM**
Logged In Analyst: peicp2 **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N4011401 **Autosampler Model: Cetac**

Sample Information File: C:\pe\peicp2\Sample Information\FRIDAY1.sif
Batch ID:
Results Data Set: 050412H
Results Library: C:\pe\peicp2\Results\Results.mdb

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Method Loaded
Method Name: 200.7-6010 PE-ICP2.1 **Method Last Saved: 5/4/2012 8:56:14 AM**
IEC File: CA227_LiBeMOD.iec **SMF File:**
Method Description: STANDARD

==========

Sequence No.: 1 **Autosampler Location: 1**
Sample ID: S0 **Date Collected: 5/4/2012 9:10:57 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: S0

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	2396584.8	26812.01	1.12%		
YRADIAL	309837.1	6702.18	2.16%		
Ga 417.206	1395334.2	15584.13	1.12%		
GaRADIAL	91319.9	1927.54	2.11%		
Ag 328.068†	-201.0	153.67	76.47%	[0.00]	mg/L
Al 396.153†	40.3	21.26	52.76%	[0.00]	mg/L
As 188.979†	-29.2	2.52	8.64%	[0.00]	mg/L
Ba 233.527†	518.3	18.66	3.60%	[0.00]	mg/L
Be 234.861†	-1726.1	46.44	2.69%	[0.00]	mg/L
B 249.677†	14.7	20.03	136.00%	[0.00]	mg/L
Ca 227.546†	-77.1	9.57	12.41%	[0.00]	mg/L
Cd 228.802†	87.1	4.91	5.64%	[0.00]	mg/L
Co 228.616†	7.5	4.96	66.18%	[0.00]	mg/L
Cr 267.716†	374.6	6.36	1.70%	[0.00]	mg/L
Cu 327.393†	-843.3	70.10	8.31%	[0.00]	mg/L
Fe 239.562†	21.0	7.32	34.82%	[0.00]	mg/L
Mg 279.077†	44.9	4.01	8.93%	[0.00]	mg/L
Mn 257.610†	496.7	24.59	4.95%	[0.00]	mg/L
Mo 202.031†	127.2	9.58	7.53%	[0.00]	mg/L
Ni 231.604†	-183.4	13.83	7.54%	[0.00]	mg/L
Pb 220.353†	-110.6	18.88	17.06%	[0.00]	mg/L
Sb 206.836†	3.1	3.92	126.23%	[0.00]	mg/L
Se 196.026†	22.2	4.92	22.16%	[0.00]	mg/L
Si 251.611†	556.9	6.06	1.09%	[0.00]	mg/L
Sn 189.927†	21.2	7.44	35.12%	[0.00]	mg/L
Ti 334.940†	801.6	96.62	12.05%	[0.00]	mg/L
Tl 190.801†	-77.5	12.60	16.26%	[0.00]	mg/L
V 290.880†	15120.4	44.46	0.29%	[0.00]	mg/L
Zn 206.200†	2.4	5.07	210.66%	[0.00]	mg/L
K 766.490†	61.4	65.66	106.91%	[0.00]	mg/L
Na 589.592†	731.5	68.41	9.35%	[0.00]	mg/L
Sr 407.771†	-652.0	6.73	1.03%	[0.00]	mg/L
Li 670.784†	49.7	41.70	83.97%	[0.00]	mg/L

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Sequence No.: 2 **Autosampler Location: 2**
Sample ID: S1 **Date Collected: 5/4/2012 9:17:51 AM**

Approved: May 07, 2012

Analyst:
Initial Sample Wt:
Dilution:
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: S1

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: S1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	2475794.8	47536.11	1.92%		
YRADIAL	313212.4	10029.96	3.20%		
Ga 417.206	1455573.1	13660.13	0.94%		
GaRADIAL	91453.4	481.24	0.53%		
Ag 328.068†	1206.5	40.58	3.36%	[0.0040]	mg/L
Al 396.153†	729.5	21.97	3.01%	[0.10]	mg/L
Ba 233.527†	1492.5	30.74	2.06%	[0.010]	mg/L
Be 234.861†	708.2	26.28	3.71%	[0.0005]	mg/L
Cd 228.802†	16.7	2.45	14.72%	[0.00050]	mg/L
Co 228.616†	70.7	1.12	1.58%	[0.0020]	mg/L
Cr 267.716†	543.8	9.34	1.72%	[0.0050]	mg/L
Cu 327.393†	1432.6	58.62	4.09%	[0.0050]	mg/L
Fe 239.562†	665.3	12.28	1.85%	[0.040]	mg/L
Mg 279.077†	363.9	10.21	2.81%	[0.10]	mg/L
Mn 257.610†	4610.6	91.78	1.99%	[0.0050]	mg/L
Mo 202.031†	349.2	9.92	2.84%	[0.010]	mg/L
Ni 231.604†	380.1	10.69	2.81%	[0.0050]	mg/L
Pb 220.353†	64.6	6.09	9.43%	[0.0050]	mg/L
Sb 206.836†	53.0	0.54	1.02%	[0.012]	mg/L
Si 251.611†	11.9	19.33	162.04%	[0.050]	mg/L
Sn 189.927†	105.5	9.63	9.13%	[0.010]	mg/L
Ti 334.940†	9919.6	104.51	1.05%	[0.010]	mg/L
V 290.880†	1498.3	268.09	17.89%	[0.010]	mg/L
Zn 206.200†	475.3	11.49	2.42%	[0.010]	mg/L
K 766.490†	1802.5	22.24	1.23%	[0.50]	mg/L
Na 589.592†	9788.0	284.16	2.90%	[0.50]	mg/L
Sr 407.771†	26230.8	686.53	2.62%	[0.010]	mg/L
Li 670.784†	1595.7	11.56	0.72%	[0.010]	mg/L

Sequence No.: 3
Sample ID: S2
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 3
Date Collected: 5/4/2012 9:24:45 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: S2

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: S2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	2438594.0	7270.78	0.30%		
YRADIAL	301136.8	13144.37	4.36%		
Ga 417.206	1438208.8	21881.19	1.52%		
GaRADIAL	89277.9	6140.45	6.88%		
Ag 328.068†	2698.6	99.31	3.68%	[0.0080]	mg/L
Al 396.153†	1571.2	100.03	6.37%	[0.20]	mg/L
As 188.979†	28.6	4.60	16.06%	[0.0080]	mg/L
Ba 233.527†	3184.1	28.32	0.89%	[0.020]	mg/L
Be 234.861†	1330.8	28.03	2.11%	[0.0010]	mg/L
B 249.677†	914.1	39.69	4.34%	[0.010]	mg/L
Ca 227.546†	85.9	2.81	3.27%	[0.20]	mg/L
Cd 228.802†	46.2	3.59	7.76%	[0.0010]	mg/L
Co 228.616†	161.2	12.40	7.69%	[0.0040]	mg/L
Cr 267.716†	1143.4	12.40	1.08%	[0.010]	mg/L

Approved: May 07, 2012

Cu 327.393†	2758.3	127.82	4.63%	[0.010]	mg/L
Fe 239.562†	1412.5	90.70	6.42%	[0.080]	mg/L
Mg 279.077†	771.5	37.09	4.81%	[0.20]	mg/L
Mn 257.610†	8906.3	34.81	0.39%	[0.010]	mg/L
Mo 202.031†	747.5	4.14	0.55%	[0.020]	mg/L
Ni 231.604†	786.5	11.48	1.46%	[0.010]	mg/L
Pb 220.353†	118.4	10.50	8.87%	[0.010]	mg/L
Sb 206.836†	105.6	5.60	5.30%	[0.024]	mg/L
Se 196.026†	10.5	5.57	53.27%	[0.0080]	mg/L
Si 251.611†	1.4	38.21	>999.9%	[0.10]	mg/L
Standard intensity and concentration values are not in the same order.					
Sn 189.927†	223.0	6.05	2.71%	[0.020]	mg/L
Ti 334.940†	20247.0	63.42	0.31%	[0.020]	mg/L
Tl 190.801†	46.4	7.75	16.68%	[0.010]	mg/L
V 290.880†	3729.6	90.09	2.42%	[0.020]	mg/L
Zn 206.200†	953.0	14.64	1.54%	[0.020]	mg/L
K 766.490†	3563.3	194.78	5.47%	[1.00]	mg/L
Na 589.592†	19379.7	421.42	2.17%	[1.00]	mg/L
Sr 407.771†	53732.8	1495.99	2.78%	[0.020]	mg/L
Li 670.784†	3229.6	235.18	7.28%	[0.020]	mg/L

Sequence No.: 4 **Autosampler Location: 4**
Sample ID: S3 **Date Collected: 5/4/2012 9:31:40 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: S3

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: S3

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	2343371.5	13618.21	0.58%		
YRADIAL	301984.8	2064.26	0.68%		
Ga 417.206	1389865.8	53180.25	3.83%		
GaRADIAL	88487.8	604.37	0.68%		
Ag 328.068†	126812.6	4941.56	3.90%	[0.40]	mg/L
Al 396.153†	73645.2	311.31	0.42%	[10.00]	mg/L
As 188.979†	1195.2	37.60	3.15%	[0.40]	mg/L
Ba 233.527†	166792.5	1493.01	0.90%	[1.00]	mg/L
Be 234.861†	66860.9	2689.15	4.02%	[0.05]	mg/L
B 249.677†	45292.6	1652.72	3.65%	[0.50]	mg/L
Ca 227.546†	4609.1	210.30	4.56%	[10.00]	mg/L
Cd 228.802†	2972.1	143.33	4.82%	[0.05]	mg/L
Co 228.616†	8092.5	26.46	0.33%	[0.20]	mg/L
Cr 267.716†	56948.2	792.96	1.39%	[0.50]	mg/L
Cu 327.393†	135813.4	4654.43	3.43%	[0.50]	mg/L
Fe 239.562†	69035.4	1115.80	1.62%	[4.00]	mg/L
Mg 279.077†	37365.9	523.13	1.40%	[10.00]	mg/L
Mn 257.610†	436837.2	3593.16	0.82%	[0.50]	mg/L
Mo 202.031†	37528.0	155.85	0.42%	[1.00]	mg/L
Ni 231.604†	37609.8	157.60	0.42%	[0.50]	mg/L
Pb 220.353†	5945.4	9.55	0.16%	[0.50]	mg/L
Sb 206.836†	5314.2	213.95	4.03%	[1.20]	mg/L
Se 196.026†	782.1	32.49	4.15%	[0.40]	mg/L
Si 251.611†	507.0	25.55	5.04%	[5.00]	mg/L
Standard intensity and concentration values are not in the same order.					
Sn 189.927†	11100.1	63.70	0.57%	[1.00]	mg/L
Ti 334.940†	1019989.0	7938.17	0.78%	[1.00]	mg/L
Tl 190.801†	2076.1	27.90	1.34%	[0.50]	mg/L
V 290.880†	199188.3	2032.50	1.02%	[1.00]	mg/L
Zn 206.200†	46868.6	581.53	1.24%	[1.00]	mg/L
K 766.490†	161270.7	496.76	0.31%	[50.00]	mg/L
Na 589.592†	977479.1	14545.14	1.49%	[50.00]	mg/L
Sr 407.771†	2650083.2	45990.21	1.74%	[1.00]	mg/L
Li 670.784†	150693.9	1300.64	0.86%	[1.00]	mg/L

Approved: May 07, 2012

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Sequence No.: 5 **Autosampler Location: 5**
Sample ID: S4 **Date Collected: 5/4/2012 9:37:38 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: S4

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: S4

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Y 371.029	2308806.5	32007.42	1.39%		
YRADIAL	299728.8	397.14	0.13%		
Ga 417.206	1348319.2	21109.41	1.57%		
GaRADIAL	89875.9	191.90	0.21%		
Ag 328.068†	260144.8	5670.21	2.18%	[0.80]	mg/L
Al 396.153†	146951.2	120.26	0.08%	[20.00]	mg/L
As 188.979†	2472.6	35.76	1.45%	[0.80]	mg/L
Ba 233.527†	333455.1	2363.72	0.71%	[2.00]	mg/L
Be 234.861†	138383.3	2388.91	1.73%	[0.10]	mg/L
B 249.677†	94972.2	2224.26	2.34%	[1.00]	mg/L
Ca 227.546†	9716.7	192.87	1.98%	[20.00]	mg/L
Cd 228.802†	6140.5	176.91	2.88%	[0.10]	mg/L
Co 228.616†	16033.7	310.21	1.93%	[0.40]	mg/L
Cr 267.716†	114196.7	310.14	0.27%	[1.00]	mg/L
Cu 327.393†	276704.2	5766.82	2.08%	[1.00]	mg/L
Fe 239.562†	137475.5	399.83	0.29%	[8.00]	mg/L
Mg 279.077†	74471.2	385.14	0.52%	[20.00]	mg/L
Mn 257.610†	871037.5	9618.53	1.10%	[1.00]	mg/L
Mo 202.031†	74790.3	610.59	0.82%	[2.00]	mg/L
Ni 231.604†	71805.0	914.55	1.27%	[1.00]	mg/L
Pb 220.353†	11877.1	173.40	1.46%	[1.00]	mg/L
Sb 206.836†	10930.8	205.90	1.88%	[2.40]	mg/L
Se 196.026†	1675.7	27.29	1.63%	[0.80]	mg/L
Si 251.611†	1030.4	49.29	4.78%	[10.00]	mg/L
Standard intensity and concentration values are not in the same order.					
Sn 189.927†	22017.6	391.38	1.78%	[2.00]	mg/L
Ti 334.940†	2057976.3	6472.52	0.31%	[2.00]	mg/L
Tl 190.801†	4120.3	54.97	1.33%	[1.00]	mg/L
V 290.880†	399992.2	107.00	0.03%	[2.00]	mg/L
Zn 206.200†	94469.9	663.03	0.70%	[2.00]	mg/L
K 766.490†	320013.0	947.71	0.30%	[100.00]	mg/L
Na 589.592†	1922654.1	11751.68	0.61%	[100.00]	mg/L
Sr 407.771†	5329202.7	27971.81	0.52%	[2.00]	mg/L
Li 670.784†	298449.5	2021.47	0.68%	[2.00]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	4	Lin, Calc Int	-405.2	324200	0.00000	0.999925	
Al 396.153	4	Lin, Calc Int	51.2	7348	0.00000	0.999999	
As 188.979	3	Wt. Lin	4.4	3031	0.00000	0.999835	
Ba 233.527	4	Lin, Calc Int	-93.8	166800	0.00000	1.000000	
Be 234.861	4	Lin, Calc Int	-301.7	1378000	0.00000	0.999865	
B 249.677	3	Lin, Calc Int	-415.4	94600	0.00000	0.999715	
Ca 227.546	3	Lin, Calc Int	-50.5	483.9	0.00000	0.999653	
Cd 228.802	4	Lin, Calc Int	-21.4	61270	0.00000	0.999888	
Co 228.616	4	Lin, Calc Int	6.7	40140	0.00000	0.999989	
Cr 267.716	4	Lin, Calc Int	-26.8	114200	0.00000	0.999999	
Cu 327.393	4	Lin, Calc Int	-303.5	276100	0.00000	0.999960	
Fe 239.562	4	Lin, Calc Int	41.9	17190	0.00000	0.999998	
Mg 279.077	4	Lin, Calc Int	21.9	3725	0.00000	0.999999	
Mn 257.610	4	Lin, Calc Int	305.6	871200	0.00000	0.999999	
Mo 202.031	4	Lin, Calc Int	8.6	37420	0.00000	0.999998	
Ni 231.604	4	Lin, Calc Int	240.6	72200	0.00000	0.999739	
Pb 220.353	4	Lin, Calc Int	2.4	11880	0.00000	1.000000	

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Sb 206.836	4	Lin, Calc Int	-20.5	4540	0.00000	0.999910
Se 196.026	3	Wt. Lin	-5.8	2036	0.00000	0.999459
Si 251.611	4	Lin, Calc Int	-1.7	102.9	0.00000	0.999899
Sn 189.927	4	Lin, Calc Int	10.8	11020	0.00000	0.999992
Ti 334.940	4	Lin, Calc Int	-1341.0	1028000	0.00000	0.999991
Tl 190.801	3	Lin, Calc Int	5.3	4120	0.00000	0.999993
V 290.880	4	Lin, Calc Int	-342.6	200000	0.00000	0.999998
Zn 206.200	4	Lin, Calc Int	-42.1	47190	0.00000	0.999993
K 766.490	4	Non Lin, Calc Int	164.2	3246	-0.47572	1.000000
Na 589.592	4	Non Lin, Calc Int	-211.5	19880	-6.49867	1.000000
Sr 407.771	4	Lin, Calc Int	-1801.0	2663000	0.00000	0.999996
Li 670.784	4	Lin, Calc Int	292.0	149300	0.00000	0.999989

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Sequence No.: 6 **Autosampler Location: 11**
Sample ID: ICV 2nd Vendor **Date Collected: 5/4/2012 9:43:39 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICV 2nd Vendor

Analyte	Back Pressure	Flow
All	148.0 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	2340645.1						10061.31	0.43%
YRADIAL	307102.2						3441.99	1.12%
Ga 417.206	1399724.6						45202.13	3.23%
GaRADIAL	90308.3						1365.82	1.51%
Ag 328.068†	127630.6	0.398	mg/L	0.0133	0.398	mg/L	0.0133	3.34%
QC value within limits for Ag 328.068 Recovery = 99.62%								
Al 396.153†	74007.6	9.99	mg/L	0.021	9.99	mg/L	0.021	0.21%
QC value within limits for Al 396.153 Recovery = 99.95%								
As 188.979†	1165.8	0.378	mg/L	0.0094	0.378	mg/L	0.0094	2.48%
QC value less than the lower limit for As 188.979 Recovery = 94.52%								
Ba 233.527†	165721.7	0.994	mg/L	0.0088	0.994	mg/L	0.0088	0.89%
QC value within limits for Ba 233.527 Recovery = 99.45%								
Be 234.861†	64976.1	0.0469	mg/L	0.00148	0.0469	mg/L	0.00148	3.15%
QC value less than the lower limit for Be 234.861 Recovery = 93.86%								
B 249.677†	44912.1	0.475	mg/L	0.0165	0.475	mg/L	0.0165	3.48%
QC value within limits for B 249.677 Recovery = 95.08%								
Ca 227.546†	4595.1	10.1	mg/L	0.34	10.1	mg/L	0.34	3.38%
QC value within limits for Ca 227.546 Recovery = 100.67%								
Cd 228.802†	2924.1	0.0468	mg/L	0.00210	0.0468	mg/L	0.00210	4.49%
QC value less than the lower limit for Cd 228.802 Recovery = 93.55%								
Co 228.616†	8007.0	0.199	mg/L	0.0015	0.199	mg/L	0.0015	0.77%
QC value within limits for Co 228.616 Recovery = 99.27%								
Cr 267.716†	56346.6	0.494	mg/L	0.0019	0.494	mg/L	0.0019	0.38%
QC value within limits for Cr 267.716 Recovery = 98.83%								
Cu 327.393†	135310.9	0.493	mg/L	0.0148	0.493	mg/L	0.0148	3.01%
QC value within limits for Cu 327.393 Recovery = 98.58%								
Fe 239.562†	68229.7	3.97	mg/L	0.028	3.97	mg/L	0.028	0.71%
QC value within limits for Fe 239.562 Recovery = 99.13%								
Mg 279.077†	36782.0	9.89	mg/L	0.085	9.89	mg/L	0.085	0.86%
QC value within limits for Mg 279.077 Recovery = 98.85%								
Mn 257.610†	436064.1	0.501	mg/L	0.0049	0.501	mg/L	0.0049	0.98%
QC value within limits for Mn 257.610 Recovery = 100.16%								
Mo 202.031†	38270.4	1.02	mg/L	0.006	1.02	mg/L	0.006	0.63%
QC value within limits for Mo 202.031 Recovery = 102.34%								
Ni 231.604†	37092.1	0.510	mg/L	0.0036	0.510	mg/L	0.0036	0.70%
QC value within limits for Ni 231.604 Recovery = 102.02%								
Pb 220.353†	5868.2	0.495	mg/L	0.0034	0.495	mg/L	0.0034	0.68%
QC value within limits for Pb 220.353 Recovery = 99.04%								
Sb 206.836†	5210.9	1.15	mg/L	0.038	1.15	mg/L	0.038	3.29%
QC value within limits for Sb 206.836 Recovery = 95.94%								
Se 196.026†	748.8	0.372	mg/L	0.0135	0.372	mg/L	0.0135	3.64%
QC value less than the lower limit for Se 196.026 Recovery = 93.02%								
Si 251.611†	214839.7	2090	mg/L	49.4	2090	mg/L	49.4	2.37%

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   QC value greater than the upper limit for Si 251.611  Recovery = 41751.71%
Sn 189.927†          11123.8       1.01 mg/L        0.006        1.01 mg/L        0.006   0.60%
   QC value within limits for Sn 189.927  Recovery = 100.84%
Ti 334.940†        1025878.1       1.00 mg/L        0.003        1.00 mg/L        0.003   0.30%
   QC value within limits for Ti 334.940  Recovery = 100.05%
Tl 190.801†           2065.0      0.514 mg/L       0.0067       0.514 mg/L       0.0067   1.30%
   QC value within limits for Tl 190.801  Recovery = 102.87%
V 290.880†          199523.3      0.998 mg/L       0.0075       0.998 mg/L       0.0075   0.75%
   QC value within limits for V 290.880  Recovery = 99.79%
Zn 206.200†          45716.0      0.974 mg/L       0.0069       0.974 mg/L       0.0069   0.71%
   QC value within limits for Zn 206.200  Recovery = 97.44%
K 766.490†          162791.6       50.4 mg/L         0.39        50.4 mg/L         0.39   0.78%
   QC value within limits for K 766.490  Recovery = 100.85%
Na 589.592†         982566.1       50.3 mg/L         0.36        50.3 mg/L         0.36   0.72%
   QC value within limits for Na 589.592  Recovery = 100.53%
Sr 407.771†        2652140.1      0.996 mg/L       0.0172       0.996 mg/L       0.0172   1.73%
   QC value within limits for Sr 407.771  Recovery = 99.65%
Li 670.784†         156742.7       1.05 mg/L        0.009        1.05 mg/L        0.009   0.88%
   QC value within limits for Li 670.784  Recovery = 104.76%
QC Failed.  Continue with analysis.

==========================================================================================
Sequence No.: 7                                   Autosampler Location: 1
Sample ID: ICB                                    Date Collected: 5/4/2012 9:49:35 AM
Analyst:                                          Data Type: Original
Initial Sample Wt:                                Initial Sample Vol:
Dilution:                                         Sample Prep Vol:

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Nebulizer Parameters: ICB
Analyte                 Back Pressure    Flow
All                     148.0 kPa        0.50 L/min

------------------------------------------------------------------------------------------
Mean Data: ICB
                   Mean Corrected        Calib.                          Sample
Analyte               Intensity     Conc. Units      Std.Dev.     Conc. Units      Std.Dev.   RSD
Y 371.029            2331352.1                                                    15720.80   0.67%
YRADIAL               298798.3                                                     4474.05   1.50%
Ga 417.206           1389479.1                                                    12315.46   0.89%
GaRADIAL               87617.2                                                     2977.17   3.40%
Ag 328.068†              186.9     0.00184 mg/L      0.000440     0.00184 mg/L      0.000440  23.89%
   QC value within limits for Ag 328.068  Recovery = Not calculated
Al 396.153†              -13.5    -0.00878 mg/L      0.001336    -0.00878 mg/L      0.001336  15.21%
   QC value within limits for Al 396.153  Recovery = Not calculated
As 188.979†                1.1    -0.00108 mg/L      0.000447    -0.00108 mg/L      0.000447  41.54%
   QC value within limits for As 188.979  Recovery = Not calculated
Ba 233.527†             -486.1    -0.00235 mg/L      0.000121    -0.00235 mg/L      0.000121   5.13%
   QC value within limits for Ba 233.527  Recovery = Not calculated
Be 234.861†                3.3     0.00022 mg/L      0.000022     0.00022 mg/L      0.000022   9.93%
   QC value within limits for Be 234.861  Recovery = Not calculated
B 249.677†               168.1     0.00616 mg/L      0.000165     0.00616 mg/L      0.000165   2.68%
   QC value within limits for B 249.677  Recovery = Not calculated
Ca 227.546†               -9.5      0.0820 mg/L       0.01538      0.0820 mg/L       0.01538  18.76%
   QC value within limits for Ca 227.546  Recovery = Not calculated
Cd 228.802†                3.2     0.00040 mg/L      0.000048     0.00040 mg/L      0.000048  11.82%
   QC value within limits for Cd 228.802  Recovery = Not calculated
Co 228.616†                2.7    -0.00010 mg/L      0.000019    -0.00010 mg/L      0.000019  18.03%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -53.3    -0.00023 mg/L      0.000035    -0.00023 mg/L      0.000035  15.35%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 327.393†               67.3     0.00135 mg/L      0.000228     0.00135 mg/L      0.000228  16.93%
   QC value within limits for Cu 327.393  Recovery = Not calculated
Fe 239.562†               -8.4    -0.00292 mg/L      0.000593    -0.00292 mg/L      0.000593  20.28%
   QC value within limits for Fe 239.562  Recovery = Not calculated
Mg 279.077†               -0.4    -0.00600 mg/L      0.001764    -0.00600 mg/L      0.001764  29.41%
   QC value within limits for Mg 279.077  Recovery = Not calculated
Mn 257.610†              -30.3    -0.00038 mg/L      0.000004    -0.00038 mg/L      0.000004   1.03%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -6.0    -0.00039 mg/L      0.000313    -0.00039 mg/L      0.000313  80.84%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Ni 231.604†                6.5    -0.00324 mg/L      0.000145    -0.00324 mg/L      0.000145   4.46%
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   QC value within limits for Ni 231.604  Recovery = Not calculated
Pb 220.353†              -10.7    -0.00110 mg/L      0.000445    -0.00110 mg/L      0.000445  40.57%
   QC value within limits for Pb 220.353  Recovery = Not calculated
Sb 206.836†               -2.6     0.00395 mg/L      0.000326     0.00395 mg/L      0.000326   8.26%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -1.5     0.00215 mg/L      0.001594     0.00215 mg/L      0.001594  74.28%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              130.3        1.28 mg/L         0.107        1.28 mg/L         0.107   8.31%
   QC value greater than the upper limit for Si 251.611  Recovery = Not calculated
Sn 189.927†                9.8    -0.00009 mg/L      0.000438    -0.00009 mg/L      0.000438 477.00%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Ti 334.940†              153.9     0.00147 mg/L      0.000102     0.00147 mg/L      0.000102   6.97%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                3.6    -0.00036 mg/L      0.000356    -0.00036 mg/L      0.000356 100.18%
   QC value within limits for Tl 190.801  Recovery = Not calculated
V 290.880†              1197.7     0.00770 mg/L      0.002083     0.00770 mg/L      0.002083  27.05%
   QC value within limits for V 290.880  Recovery = Not calculated
Zn 206.200†               -6.1     0.00076 mg/L      0.000104     0.00076 mg/L      0.000104  13.69%
   QC value within limits for Zn 206.200  Recovery = Not calculated
K 766.490†                33.0     -0.0404 mg/L       0.02155     -0.0404 mg/L       0.02155  53.31%
   QC value within limits for K 766.490  Recovery = Not calculated
Na 589.592†               81.4      0.0147 mg/L       0.00674      0.0147 mg/L       0.00674  45.75%
   QC value within limits for Na 589.592  Recovery = Not calculated
Sr 407.771†             -111.6     0.00063 mg/L      0.000039     0.00063 mg/L      0.000039   6.18%
   QC value within limits for Sr 407.771  Recovery = Not calculated
Li 670.784†               32.8    -0.00174 mg/L      0.000339    -0.00174 mg/L      0.000339  19.51%
   QC value within limits for Li 670.784  Recovery = Not calculated
QC Failed.  Continue with analysis.

==========================================================================================
Sequence No.: 8                                  Autosampler Location: 14
Sample ID: LLICV                                 Date Collected: 5/4/2012 9:56:28 AM
Analyst: KHR                                     Data Type: Original
Initial Sample Wt:                               Initial Sample Vol:
Dilution:                                        Sample Prep Vol:

------------------------------------------------------------------------------------------
Nebulizer Parameters: LLICV
Analyte                 Back Pressure    Flow
All                    148.0 kPa         0.50 L/min

------------------------------------------------------------------------------------------
Mean Data: LLICV
                   Mean Corrected         Calib.                          Sample
Analyte               Intensity     Conc. Units      Std.Dev.      Conc. Units      Std.Dev.   RSD
Y 371.029            2347645.4                                                    32732.57   1.39%
YRADIAL               305440.5                                                     1374.25   0.45%
Ga 417.206           1359445.8                                                    16431.81   1.21%
GaRADIAL               90134.5                                                      799.04   0.89%
Ag 328.068†            26089.9      0.0825 mg/L       0.00152      0.0825 mg/L       0.00152   1.85%
Al 396.153†            14332.6        1.93 mg/L         0.009        1.93 mg/L         0.009   0.48%
As 188.979†              246.4      0.0789 mg/L       0.00074      0.0789 mg/L       0.00074   0.94%
Ba 233.527†            33184.4       0.200 mg/L        0.0020       0.200 mg/L        0.0020   0.99%
Be 234.861†            13389.2     0.00984 mg/L      0.000198     0.00984 mg/L      0.000198   2.01%
B 249.677†              9348.4       0.102 mg/L        0.0015       0.102 mg/L        0.0015   1.45%
Ca 227.546†              879.0        2.01 mg/L         0.037        2.01 mg/L         0.037   1.85%
Cd 228.802†              608.6      0.0100 mg/L       0.00040      0.0100 mg/L       0.00040   3.99%
Co 228.616†             1650.8      0.0408 mg/L       0.00065      0.0408 mg/L       0.00065   1.60%
Cr 267.716†            11351.0      0.0997 mg/L       0.00162      0.0997 mg/L       0.00162   1.63%
Cu 327.393†            27861.6       0.102 mg/L        0.0011       0.102 mg/L        0.0011   1.04%
Fe 239.562†            13764.5       0.798 mg/L        0.0071       0.798 mg/L        0.0071   0.89%
Mg 279.077†             7459.2        2.00 mg/L         0.033        2.00 mg/L         0.033   1.65%
Mn 257.610†            89079.7       0.102 mg/L        0.0017       0.102 mg/L        0.0017   1.69%
Mo 202.031†             7426.9       0.198 mg/L        0.0028       0.198 mg/L        0.0028   1.39%
Ni 231.604†             7397.9      0.0991 mg/L       0.00118      0.0991 mg/L       0.00118   1.19%
Pb 220.353†             1197.4       0.101 mg/L        0.0017       0.101 mg/L        0.0017   1.71%
Sb 206.836†             1079.0       0.242 mg/L        0.0040       0.242 mg/L        0.0040   1.65%
Se 196.026†              146.6      0.0752 mg/L       0.00232      0.0752 mg/L       0.00232   3.08%
Si 251.611†              441.1        4.30 mg/L         0.410        4.30 mg/L         0.410   9.54%
Sn 189.927†             2310.2       0.209 mg/L        0.0025       0.209 mg/L        0.0025   1.22%
Ti 334.940†           203081.5       0.199 mg/L        0.0009       0.199 mg/L        0.0009   0.47%
Tl 190.801†              428.0       0.105 mg/L        0.0007       0.105 mg/L        0.0007   0.70%
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V 290.880†	41562.8	0.209 mg/L	0.0043	0.209 mg/L	0.0043	2.05%
Zn 206.200†	9594.8	0.205 mg/L	0.0023	0.205 mg/L	0.0023	1.13%
K 766.490†	31314.5	9.60 mg/L	0.161	9.60 mg/L	0.161	1.68%
Na 589.592†	193715.3	9.79 mg/L	0.046	9.79 mg/L	0.046	0.47%
Sr 407.771†	531368.1	0.200 mg/L	0.0008	0.200 mg/L	0.0008	0.38%
Li 670.784†	30417.7	0.202 mg/L	0.0033	0.202 mg/L	0.0033	1.63%

Sequence No.: 9 **Autosampler Location: 12**
Sample ID: ICSA **Date Collected: 5/4/2012 10:02:26 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICSA

Analyte	Back Pressure	Flow
All	148.0 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	2165050.7						7905.80	0.37%
YRADIAL	296026.7						6699.50	2.26%
Ga 417.206	1307684.1						11735.15	0.90%
GaRADIAL	88282.7						2601.76	2.95%
Ag 328.068†	-13787.8	0.00113	mg/L	0.001903	0.00113	mg/L	0.001903	168.42%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	1868975.8	254	mg/L	7.6	254	mg/L	7.6	2.99%
QC value within limits for Al 396.153 Recovery = 101.74%								
As 188.979†	-12.1	0.00089	mg/L	0.003484	0.00089	mg/L	0.003484	392.93%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	417.5	0.00066	mg/L	0.000097	0.00066	mg/L	0.000097	14.58%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	27360.6	-0.00125	mg/L	0.001041	-0.00125	mg/L	0.001041	83.19%
QC value less than the lower limit for Be 234.861 Recovery = Not calculated								
B 249.677†	6140.8	0.0282	mg/L	0.00290	0.0282	mg/L	0.00290	10.28%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	126039.0	263	mg/L	3.1	263	mg/L	3.1	1.18%
QC value within limits for Ca 227.546 Recovery = 105.15%								
Cd 228.802†	18.1	0.00049	mg/L	0.000152	0.00049	mg/L	0.000152	30.89%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	24.0	-0.00200	mg/L	0.000230	-0.00200	mg/L	0.000230	11.51%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	28.1	-0.00096	mg/L	0.000248	-0.00096	mg/L	0.000248	25.92%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-1502.8	0.00368	mg/L	0.000210	0.00368	mg/L	0.000210	5.71%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	1643946.7	95.6	mg/L	2.12	95.6	mg/L	2.12	2.22%
QC value within limits for Fe 239.562 Recovery = 95.61%								
Mg 279.077†	962480.3	258	mg/L	6.1	258	mg/L	6.1	2.35%
QC value within limits for Mg 279.077 Recovery = 103.33%								
Mn 257.610†	-2213.6	-0.00021	mg/L	0.000612	-0.00021	mg/L	0.000612	292.64%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-71.5	0.00256	mg/L	0.000552	0.00256	mg/L	0.000552	21.59%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	61.9	-0.00247	mg/L	0.000271	-0.00247	mg/L	0.000271	10.97%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-445.0	-0.00190	mg/L	0.001542	-0.00190	mg/L	0.001542	81.34%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-27.5	0.00197	mg/L	0.000312	0.00197	mg/L	0.000312	15.79%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-61.7	-0.00199	mg/L	0.005194	-0.00199	mg/L	0.005194	260.79%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	7765.2	75.5	mg/L	0.54	75.5	mg/L	0.54	0.71%
QC value greater than the upper limit for Si 251.611 Recovery = Not calculated								
Sn 189.927†	-330.8	-0.0310	mg/L	0.00191	-0.0310	mg/L	0.00191	6.16%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-39266.3	0.00219	mg/L	0.002820	0.00219	mg/L	0.002820	128.55%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-54.1	-0.00791	mg/L	0.001769	-0.00791	mg/L	0.001769	22.37%

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   QC value within limits for Tl 190.801  Recovery = Not calculated
V 290.880†              5042.5     0.00510 mg/L      0.002966     0.00510 mg/L      0.002966  58.20%
   QC value within limits for V 290.880  Recovery = Not calculated
Zn 206.200†              225.3     0.00385 mg/L      0.000705     0.00385 mg/L      0.000705  18.29%
   QC value within limits for Zn 206.200  Recovery = Not calculated
K 766.490†              -118.0     -0.0869 mg/L       0.01098     -0.0869 mg/L       0.01098  12.63%
   QC value within limits for K 766.490  Recovery = Not calculated
Na 589.592†              294.0      0.0254 mg/L       0.00372      0.0254 mg/L       0.00372  14.61%
   QC value within limits for Na 589.592  Recovery = Not calculated
Sr 407.771†             2638.0    -0.00407 mg/L      0.000061    -0.00407 mg/L      0.000061   1.50%
   QC value within limits for Sr 407.771  Recovery = Not calculated
Li 670.784†              240.3    -0.00035 mg/L      0.000373    -0.00035 mg/L      0.000373 107.61%
   QC value within limits for Li 670.784  Recovery = Not calculated
QC Failed.  Continue with analysis.

==============================================================================================
Sequence No.: 10                                    Autosampler Location: 13
Sample ID: ICSAB                                    Date Collected: 5/4/2012 10:08:22 AM
Analyst:                                            Data Type: Original
Initial Sample Wt:                                  Initial Sample Vol:
Dilution:                                           Sample Prep Vol:

----------------------------------------------------------------------------------------------
Nebulizer Parameters: ICSAB
Analyte                  Back Pressure    Flow
All                     148.0 kPa         0.50 L/min

----------------------------------------------------------------------------------------------
Mean Data: ICSAB
                   Mean Corrected          Calib.                          Sample
Analyte               Intensity      Conc. Units      Std.Dev.      Conc. Units      Std.Dev.   RSD
Y 371.029            2159559.6                                                     18650.70   0.86%
YRADIAL               296395.1                                                      2293.81   0.77%
Ga 417.206           1277951.5                                                     13151.93   1.03%
GaRADIAL               87570.7                                                       302.60   0.35%
Ag 328.068†           157781.0       0.531 mg/L        0.0100       0.531 mg/L        0.0100   1.87%
   QC value within limits for Ag 328.068  Recovery = 106.24%
Al 396.153†          1899487.7         259 mg/L           1.6         259 mg/L           1.6   0.63%
   QC value within limits for Al 396.153  Recovery = 103.41%
As 188.979†              737.4       0.248 mg/L        0.0036       0.248 mg/L        0.0036   1.46%
   QC value within limits for As 188.979  Recovery = 99.30%
Ba 233.527†            42338.6       0.252 mg/L        0.0032       0.252 mg/L        0.0032   1.25%
   QC value within limits for Ba 233.527  Recovery = 100.77%
Be 234.861†           374519.6       0.251 mg/L        0.0029       0.251 mg/L        0.0029   1.18%
   QC value within limits for Be 234.861  Recovery = 100.21%
B 249.677†              4676.5     0.00036 mg/L      0.003941     0.00036 mg/L      0.003941 >999.9%
   QC value within limits for B 249.677  Recovery = Not calculated
Ca 227.546†           129552.8         271 mg/L           7.2         271 mg/L           7.2   2.66%
   QC value within limits for Ca 227.546  Recovery = 108.21%
Cd 228.802†            25954.9       0.423 mg/L        0.0039       0.423 mg/L        0.0039   0.93%
   QC value within limits for Cd 228.802  Recovery = 84.69%
Co 228.616†             9766.6       0.241 mg/L        0.0030       0.241 mg/L        0.0030   1.25%
   QC value within limits for Co 228.616  Recovery = 96.24%
Cr 267.716†            28390.5       0.248 mg/L        0.0001       0.248 mg/L        0.0001   0.03%
   QC value within limits for Cr 267.716  Recovery = 99.03%
Cu 327.393†            69385.2       0.261 mg/L        0.0066       0.261 mg/L        0.0066   2.52%
   QC value within limits for Cu 327.393  Recovery = 104.21%
Fe 239.562†          1656756.8        96.4 mg/L          0.41        96.4 mg/L          0.41   0.43%
   QC value within limits for Fe 239.562  Recovery = 96.35%
Mg 279.077†           972101.5         261 mg/L           1.0         261 mg/L           1.0   0.38%
   QC value within limits for Mg 279.077  Recovery = 104.37%
Mn 257.610†           213492.6       0.248 mg/L        0.0031       0.248 mg/L        0.0031   1.24%
   QC value within limits for Mn 257.610  Recovery = 99.01%
Mo 202.031†             -105.1     0.00187 mg/L      0.000070     0.00187 mg/L      0.000070   3.74%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Ni 231.604†            35026.5       0.481 mg/L        0.0040       0.481 mg/L        0.0040   0.83%
   QC value within limits for Ni 231.604  Recovery = 96.28%
Pb 220.353†             5326.6       0.484 mg/L        0.0046       0.484 mg/L        0.0046   0.95%
   QC value within limits for Pb 220.353  Recovery = 96.87%
Sb 206.836†             2244.8       0.501 mg/L        0.0081       0.501 mg/L        0.0081   1.61%
   QC value within limits for Sb 206.836  Recovery = 100.21%
Se 196.026†              438.1       0.244 mg/L        0.0047       0.244 mg/L        0.0047   1.91%
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Lynn H. Rhoden

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   QC value within limits for Se 196.026  Recovery = 97.52%
Si 251.611†            -147.0       -1.41 mg/L        0.258       -1.41 mg/L        0.258  18.29%
   QC value less than the lower limit for Si 251.611  Recovery = Not calculated
Sn 189.927†            -340.4     -0.0319 mg/L      0.00126     -0.0319 mg/L      0.00126   3.94%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Ti 334.940†          -39308.5     0.00317 mg/L     0.003643     0.00317 mg/L     0.003643 114.99%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†            1961.4       0.482 mg/L       0.0020       0.482 mg/L       0.0020   0.42%
   QC value within limits for Tl 190.801  Recovery = 96.31%
V 290.880†            55949.0       0.259 mg/L       0.0023       0.259 mg/L       0.0023   0.89%
   QC value within limits for V 290.880  Recovery = 103.73%
Zn 206.200†           22738.2       0.483 mg/L       0.0019       0.483 mg/L       0.0019   0.39%
   QC value within limits for Zn 206.200  Recovery = 96.67%
K 766.490†            16455.4        5.02 mg/L        0.041        5.02 mg/L        0.041   0.83%
   QC value within limits for K 766.490  Recovery = 100.35%
Na 589.592†          101471.6        5.12 mg/L        0.033        5.12 mg/L        0.033   0.64%
   QC value within limits for Na 589.592  Recovery = 102.48%
Sr 407.771†            2678.9    -0.00421 mg/L     0.000181    -0.00421 mg/L     0.000181   4.31%
   QC value within limits for Sr 407.771  Recovery = Not calculated
Li 670.784†             312.8     0.00014 mg/L     0.000196     0.00014 mg/L     0.000196 141.21%
   QC value within limits for Li 670.784  Recovery = Not calculated
QC Failed.  Continue with analysis.

==========================================================================================
Sequence No.: 11                                    Autosampler Location: 6
Sample ID: CCV                                      Date Collected: 5/4/2012 10:14:19 AM
Analyst:                                            Data Type: Original
Initial Sample Wt:                                  Initial Sample Vol:
Dilution:                                           Sample Prep Vol:

------------------------------------------------------------------------------------------
Nebulizer Parameters: CCV
Analyte                 Back Pressure    Flow
All                    148.0 kPa         0.50 L/min

------------------------------------------------------------------------------------------
Mean Data: CCV
                   Mean Corrected         Calib.                          Sample
Analyte               Intensity     Conc. Units     Std.Dev.     Conc. Units     Std.Dev.   RSD
Y 371.029            2350456.6                                                  12365.42   0.53%
YRADIAL               307914.0                                                   3248.70   1.06%
Ga 417.206           1355684.8                                                  37617.85   2.77%
GaRADIAL               89067.5                                                    518.09   0.58%
Ag 328.068†           130797.5       0.408 mg/L        0.0125       0.408 mg/L        0.0125   3.05%
   QC value within limits for Ag 328.068  Recovery = 102.07%
Al 396.153†            72926.5        9.85 mg/L         0.016        9.85 mg/L         0.016   0.16%
   QC value within limits for Al 396.153  Recovery = 98.48%
As 188.979†             1214.2       0.394 mg/L        0.0115       0.394 mg/L        0.0115   2.92%
   QC value within limits for As 188.979  Recovery = 98.51%
Ba 233.527†           164769.2       0.989 mg/L        0.0046       0.989 mg/L        0.0046   0.47%
   QC value within limits for Ba 233.527  Recovery = 98.88%
Be 234.861†            67869.4      0.0490 mg/L       0.00134      0.0490 mg/L       0.00134   2.74%
   QC value within limits for Be 234.861  Recovery = 98.06%
B 249.677†             46907.5       0.496 mg/L        0.0147       0.496 mg/L        0.0147   2.96%
   QC value within limits for B 249.677  Recovery = 99.29%
Ca 227.546†             4663.9        10.2 mg/L          0.32        10.2 mg/L          0.32   3.10%
   QC value within limits for Ca 227.546  Recovery = 102.06%
Cd 228.802†             3003.7      0.0480 mg/L       0.00220      0.0480 mg/L       0.00220   4.58%
   QC value within limits for Cd 228.802  Recovery = 95.98%
Co 228.616†             7975.0       0.198 mg/L        0.0011       0.198 mg/L        0.0011   0.55%
   QC value within limits for Co 228.616  Recovery = 98.89%
Cr 267.716†            56862.9       0.499 mg/L        0.0026       0.499 mg/L        0.0026   0.51%
   QC value within limits for Cr 267.716  Recovery = 99.74%
Cu 327.393†           136666.1       0.498 mg/L        0.0127       0.498 mg/L        0.0127   2.55%
   QC value within limits for Cu 327.393  Recovery = 99.56%
Fe 239.562†            68326.3        3.97 mg/L         0.019        3.97 mg/L         0.019   0.48%
   QC value within limits for Fe 239.562  Recovery = 99.27%
Mg 279.077†            37097.9        9.97 mg/L         0.040        9.97 mg/L         0.040   0.40%
   QC value within limits for Mg 279.077  Recovery = 99.70%
Mn 257.610†           432956.0       0.497 mg/L        0.0033       0.497 mg/L        0.0033   0.65%
   QC value within limits for Mn 257.610  Recovery = 99.45%
Mo 202.031†            38364.5        1.03 mg/L         0.002        1.03 mg/L         0.002   0.17%
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   QC value within limits for Mo 202.031  Recovery = 102.59%
Ni 231.604†          36839.4       0.507 mg/L        0.0018       0.507 mg/L        0.0018   0.36%
   QC value within limits for Ni 231.604  Recovery = 101.32%
Pb 220.353†           5862.2       0.495 mg/L        0.0019       0.495 mg/L        0.0019   0.38%
   QC value within limits for Pb 220.353  Recovery = 98.94%
Sb 206.836†           5249.3        1.16 mg/L         0.035        1.16 mg/L         0.035   3.06%
   QC value within limits for Sb 206.836  Recovery = 96.64%
Se 196.026†            766.0       0.381 mg/L        0.0167       0.381 mg/L        0.0167   4.39%
   QC value within limits for Se 196.026  Recovery = 95.14%
Si 251.611†         219626.2        2130 mg/L          41.0        2130 mg/L          41.0   1.92%
   QC value greater than the upper limit for Si 251.611  Recovery = 42681.92%
Sn 189.927†          10915.6       0.989 mg/L        0.0040       0.989 mg/L        0.0040   0.40%
   QC value within limits for Sn 189.927  Recovery = 98.95%
Ti 334.940†        1009400.3       0.985 mg/L        0.0029       0.985 mg/L        0.0029   0.29%
   QC value within limits for Ti 334.940  Recovery = 98.45%
Tl 190.801†           2044.7       0.509 mg/L        0.0078       0.509 mg/L        0.0078   1.53%
   QC value within limits for Tl 190.801  Recovery = 101.85%
V 290.880†          200955.9        1.01 mg/L         0.004        1.01 mg/L         0.004   0.35%
   QC value within limits for V 290.880  Recovery = 100.51%
Zn 206.200†          46628.5       0.994 mg/L        0.0025       0.994 mg/L        0.0025   0.25%
   QC value within limits for Zn 206.200  Recovery = 99.37%
K 766.490†          159398.4        49.4 mg/L          0.37        49.4 mg/L          0.37   0.75%
   QC value within limits for K 766.490  Recovery = 98.73%
Na 589.592†         975590.0        49.9 mg/L          0.42        49.9 mg/L          0.42   0.85%
   QC value within limits for Na 589.592  Recovery = 99.80%
Sr 407.771†        2612144.0       0.981 mg/L        0.0078       0.981 mg/L        0.0078   0.80%
   QC value within limits for Sr 407.771  Recovery = 98.14%
Li 670.784†         150666.1        1.01 mg/L         0.005        1.01 mg/L         0.005   0.47%
   QC value within limits for Li 670.784  Recovery = 100.69%
QC Failed.  Continue with analysis.

==========================================================================================
Sequence No.: 12                                  Autosampler Location: 1
Sample ID: CCB                                    Date Collected: 5/4/2012 10:20:18 AM
Analyst:                                          Data Type: Original
Initial Sample Wt:                                Initial Sample Vol:
Dilution:                                         Sample Prep Vol:

------------------------------------------------------------------------------------------
Nebulizer Parameters: CCB
Analyte                 Back Pressure    Flow
All                    148.0 kPa         0.50 L/min

------------------------------------------------------------------------------------------
Mean Data: CCB
                   Mean Corrected         Calib.                          Sample
Analyte               Intensity     Conc. Units      Std.Dev.      Conc. Units      Std.Dev.   RSD
Y 371.029           2331427.9                                                     17656.64   0.76%
YRADIAL              299132.0                                                      5521.71   1.85%
Ga 417.206          1366728.7                                                     30979.69   2.27%
GaRADIAL              88389.4                                                      1933.59   2.19%
Ag 328.068†             260.6     0.00207 mg/L      0.000549     0.00207 mg/L      0.000549  26.56%
   QC value within limits for Ag 328.068  Recovery = Not calculated
Al 396.153†            -11.6    -0.00851 mg/L      0.001119    -0.00851 mg/L      0.001119  13.14%
   QC value within limits for Al 396.153  Recovery = Not calculated
As 188.979†              3.9    -0.00016 mg/L      0.002365    -0.00016 mg/L      0.002365 >999.9%
   QC value within limits for As 188.979  Recovery = Not calculated
Ba 233.527†            -564.5    -0.00282 mg/L      0.000074    -0.00282 mg/L      0.000074   2.63%
   QC value within limits for Ba 233.527  Recovery = Not calculated
Be 234.861†            -19.2     0.00020 mg/L      0.000012     0.00020 mg/L      0.000012   5.98%
   QC value within limits for Be 234.861  Recovery = Not calculated
B 249.677†              395.2     0.00856 mg/L      0.000078     0.00856 mg/L      0.000078   0.92%
   QC value within limits for B 249.677  Recovery = Not calculated
Ca 227.546†               4.1       0.110 mg/L        0.0016       0.110 mg/L        0.0016   1.42%
   QC value greater than the upper limit for Ca 227.546  Recovery = Not calculated
Cd 228.802†              -3.4     0.00029 mg/L      0.000031     0.00029 mg/L      0.000031  10.58%
   QC value within limits for Cd 228.802  Recovery = Not calculated
Co 228.616†              -7.2    -0.00035 mg/L      0.000267    -0.00035 mg/L      0.000267  76.21%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†            -97.2    -0.00061 mg/L      0.000077    -0.00061 mg/L      0.000077  12.51%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 327.393†             186.2     0.00178 mg/L      0.000471     0.00178 mg/L      0.000471  26.49%
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   QC value within limits for Cu 327.393  Recovery = Not calculated
Fe 239.562†              91.0     0.00286 mg/L      0.000424     0.00286 mg/L      0.000424  14.86%
   QC value within limits for Fe 239.562  Recovery = Not calculated
Mg 279.077†              51.7     0.00797 mg/L      0.005793     0.00797 mg/L      0.005793  72.69%
   QC value within limits for Mg 279.077  Recovery = Not calculated
Mn 257.610†             -61.1    -0.00042 mg/L      0.000014    -0.00042 mg/L      0.000014   3.38%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†             -11.6    -0.00054 mg/L      0.000133    -0.00054 mg/L      0.000133  24.70%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Ni 231.604†              20.6    -0.00305 mg/L      0.000072    -0.00305 mg/L      0.000072   2.35%
   QC value within limits for Ni 231.604  Recovery = Not calculated
Pb 220.353†              -3.6    -0.00051 mg/L      0.000942    -0.00051 mg/L      0.000942 186.20%
   QC value within limits for Pb 220.353  Recovery = Not calculated
Sb 206.836†               2.7     0.00513 mg/L      0.000638     0.00513 mg/L      0.000638  12.44%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               1.0     0.00336 mg/L      0.003224     0.00336 mg/L      0.003224  96.03%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             129.9        1.28 mg/L         0.198        1.28 mg/L         0.198  15.51%
   QC value greater than the upper limit for Si 251.611  Recovery = Not calculated
Sn 189.927†               3.9    -0.00062 mg/L      0.000549    -0.00062 mg/L      0.000549  88.01%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Ti 334.940†              82.4     0.00140 mg/L      0.000031     0.00140 mg/L      0.000031   2.24%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               4.3    -0.00020 mg/L      0.001308    -0.00020 mg/L      0.001308 660.28%
   QC value within limits for Tl 190.801  Recovery = Not calculated
V 290.880†               941.6     0.00642 mg/L      0.000793     0.00642 mg/L      0.000793  12.36%
   QC value within limits for V 290.880  Recovery = Not calculated
Zn 206.200†               -5.7     0.00077 mg/L      0.000040     0.00077 mg/L      0.000040   5.20%
   QC value within limits for Zn 206.200  Recovery = Not calculated
K 766.490†               -31.3     -0.0602 mg/L       0.00710     -0.0602 mg/L       0.00710  11.79%
   QC value within limits for K 766.490  Recovery = Not calculated
Na 589.592†               18.6      0.0116 mg/L       0.00524      0.0116 mg/L       0.00524  45.23%
   QC value within limits for Na 589.592  Recovery = Not calculated
Sr 407.771†               41.2     0.00069 mg/L      0.000033     0.00069 mg/L      0.000033   4.72%
   QC value within limits for Sr 407.771  Recovery = Not calculated
Li 670.784†               35.1    -0.00172 mg/L      0.000317    -0.00172 mg/L      0.000317  18.45%
   QC value within limits for Li 670.784  Recovery = Not calculated
QC Failed.  Continue with analysis.

==========================================================================================
Sequence No.: 13                                    Autosampler Location: 15
Sample ID: PBW 65 WG396769-02                       Date Collected: 5/4/2012 10:27:11 AM
Analyst: KHR                                        Data Type: Original
Initial Sample Wt:                                  Initial Sample Vol:
Dilution:                                           Sample Prep Vol:

------------------------------------------------------------------------------------------
Nebulizer Parameters: PBW 65 WG396769-02
Analyte                 Back Pressure    Flow
All                   149.0 kPa         0.50 L/min

------------------------------------------------------------------------------------------
Mean Data: PBW 65 WG396769-02
                   Mean Corrected         Calib.                          Sample
Analyte               Intensity     Conc. Units      Std.Dev.      Conc. Units      Std.Dev.   RSD
Y 371.029            2381307.0                                                    17860.60   0.75%
YRADIAL               295714.2                                                     6740.16   2.28%
Ga 417.206           1315287.4                                                    20875.61   1.59%
GaRADIAL               86889.9                                                      851.00   0.98%
Ag 328.068†               33.4     0.00136 mg/L      0.000416     0.00136 mg/L      0.000416  30.54%
Al 396.153†              -22.2     -0.0100 mg/L       0.00142     -0.0100 mg/L       0.00142  14.15%
As 188.979†              -14.0    -0.00607 mg/L      0.001256    -0.00607 mg/L      0.001256  20.68%
Ba 233.527†             -721.8    -0.00377 mg/L      0.000103    -0.00377 mg/L      0.000103   2.75%
Be 234.861†             -630.9    -0.00024 mg/L      0.000041    -0.00024 mg/L      0.000041  17.29%
B 249.677†               191.4     0.00639 mg/L      0.000402     0.00639 mg/L      0.000402   6.28%
Ca 227.546†              -36.1      0.0265 mg/L       0.01278      0.0265 mg/L       0.01278  48.25%
Cd 228.802†               35.9     0.00096 mg/L      0.000148     0.00096 mg/L      0.000148  15.38%
Co 228.616†               -2.1    -0.00022 mg/L      0.000213    -0.00022 mg/L      0.000213  95.77%
Cr 267.716†              -80.4    -0.00047 mg/L      0.000069    -0.00047 mg/L      0.000069  14.82%
Cu 327.393†              117.2     0.00153 mg/L      0.000170     0.00153 mg/L      0.000170  11.09%
Fe 239.562†               34.4    -0.00044 mg/L      0.000154    -0.00044 mg/L      0.000154  35.21%
Mg 279.077†               42.2     0.00543 mg/L      0.004611     0.00543 mg/L      0.004611  84.92%
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Approved: May 07, 2012

Kym H. Rhoden

Mn 257.610†	169.6	-0.00016	mg/L	0.000012	-0.00016	mg/L	0.000012	7.73%
Mo 202.031†	15.4	0.00018	mg/L	0.000121	0.00018	mg/L	0.000121	66.60%
Ni 231.604†	-44.7	-0.00395	mg/L	0.000316	-0.00395	mg/L	0.000316	8.01%
Pb 220.353†	-9.3	-0.00098	mg/L	0.001964	-0.00098	mg/L	0.001964	200.06%
Sb 206.836†	3.0	0.00517	mg/L	0.000741	0.00517	mg/L	0.000741	14.35%
Se 196.026†	12.6	0.00905	mg/L	0.002001	0.00905	mg/L	0.002001	22.10%
Si 251.611†	133.8	1.32	mg/L	0.226	1.32	mg/L	0.226	17.16%
Sn 189.927†	13.8	0.00027	mg/L	0.000126	0.00027	mg/L	0.000126	46.63%
Ti 334.940†	258.7	0.00156	mg/L	0.000034	0.00156	mg/L	0.000034	2.18%
Tl 190.801†	-27.4	-0.00790	mg/L	0.001608	-0.00790	mg/L	0.001608	20.34%
V 290.880†	504.7	0.00424	mg/L	0.001347	0.00424	mg/L	0.001347	31.80%
Zn 206.200†	86.8	0.00273	mg/L	0.000075	0.00273	mg/L	0.000075	2.73%
K 766.490†	-63.4	-0.0701	mg/L	0.02024	-0.0701	mg/L	0.02024	28.87%
Na 589.592†	90.0	0.0152	mg/L	0.00352	0.0152	mg/L	0.00352	23.20%
Sr 407.771†	-143.2	0.00062	mg/L	0.000038	0.00062	mg/L	0.000038	6.11%
Li 670.784†	-122.3	-0.00277	mg/L	0.000515	-0.00277	mg/L	0.000515	18.57%

Sequence No.: 14 **Autosampler Location: 16**
Sample ID: LCSW 65 WG396769-03 **Date Collected: 5/4/2012 10:34:06 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW 65 WG396769-03

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: LCSW 65 WG396769-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	2406234.4						32107.05	1.33%
YRADIAL	310828.2						620.06	0.20%
Ga 417.206	1355311.9						28575.03	2.11%
GaRADIAL	89597.4						646.08	0.72%
Ag 328.068†	65913.7	0.206	mg/L	0.0050	0.206	mg/L	0.0050	2.41%
Al 396.153†	36887.1	4.98	mg/L	0.020	4.98	mg/L	0.020	0.40%
As 188.979†	565.7	0.183	mg/L	0.0030	0.183	mg/L	0.0030	1.62%
Ba 233.527†	81946.4	0.492	mg/L	0.0079	0.492	mg/L	0.0079	1.60%
Be 234.861†	31960.3	0.0232	mg/L	0.00068	0.0232	mg/L	0.00068	2.95%
B 249.677†	88068.2	0.933	mg/L	0.0264	0.933	mg/L	0.0264	2.83%
Ca 227.546†	2188.4	4.85	mg/L	0.129	4.85	mg/L	0.129	2.65%
Cd 228.802†	1498.2	0.0242	mg/L	0.00085	0.0242	mg/L	0.00085	3.52%
Co 228.616†	3973.8	0.0985	mg/L	0.00114	0.0985	mg/L	0.00114	1.16%
Cr 267.716†	28842.2	0.253	mg/L	0.0033	0.253	mg/L	0.0033	1.32%
Cu 327.393†	69051.6	0.252	mg/L	0.0040	0.252	mg/L	0.0040	1.60%
Fe 239.562†	34005.4	1.98	mg/L	0.018	1.98	mg/L	0.018	0.89%
Mg 279.077†	18626.1	5.00	mg/L	0.052	5.00	mg/L	0.052	1.04%
Mn 257.610†	218543.9	0.251	mg/L	0.0046	0.251	mg/L	0.0046	1.84%
Mo 202.031†	19544.6	0.523	mg/L	0.0075	0.523	mg/L	0.0075	1.43%
Ni 231.604†	17775.6	0.243	mg/L	0.0019	0.243	mg/L	0.0019	0.76%
Pb 220.353†	2795.0	0.236	mg/L	0.0033	0.236	mg/L	0.0033	1.40%
Sb 206.836†	2606.0	0.578	mg/L	0.0122	0.578	mg/L	0.0122	2.11%
Se 196.026†	351.6	0.176	mg/L	0.0057	0.176	mg/L	0.0057	3.25%
Si 251.611†	111011.6	1080	mg/L	13.0	1080	mg/L	13.0	1.21%
Sn 189.927†	-40.0	-0.00461	mg/L	0.000595	-0.00461	mg/L	0.000595	12.90%
Ti 334.940†	510243.2	0.498	mg/L	0.0031	0.498	mg/L	0.0031	0.63%
Tl 190.801†	947.8	0.236	mg/L	0.0031	0.236	mg/L	0.0031	1.33%
V 290.880†	101848.8	0.510	mg/L	0.0103	0.510	mg/L	0.0103	2.02%
Zn 206.200†	22533.2	0.481	mg/L	0.0044	0.481	mg/L	0.0044	0.91%
K 766.490†	80920.2	24.9	mg/L	0.04	24.9	mg/L	0.04	0.17%
Na 589.592†	497911.6	25.3	mg/L	0.05	25.3	mg/L	0.05	0.19%
Sr 407.771†	1312600.8	0.494	mg/L	0.0033	0.494	mg/L	0.0033	0.66%
Li 670.784†	78158.2	0.521	mg/L	0.0049	0.521	mg/L	0.0049	0.94%

Sequence No.: 15 **Autosampler Location: 17**
Sample ID: FBLK WG396758-01 **Date Collected: 5/4/2012 10:40:05 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**

Approved: May 07, 2012

Dilution: **Sample Prep Vol:**

Nebulizer Parameters: FBLK WG396758-01

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: FBLK WG396758-01

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	2264475.0						49463.08	2.18%
YRADIAL	302616.3						4924.81	1.63%
Ga 417.206	1386444.1						19855.70	1.43%
GaRADIAL	89607.8						1646.30	1.84%
Ag 328.068†	-24.7	0.00122	mg/L	0.000375	0.00122	mg/L	0.000375	30.66%
Al 396.153†	709.9	0.0896	mg/L	0.00041	0.0896	mg/L	0.00041	0.46%
As 188.979†	-13.1	-0.00577	mg/L	0.000489	-0.00577	mg/L	0.000489	8.47%
Ba 233.527†	-609.2	-0.00309	mg/L	0.000104	-0.00309	mg/L	0.000104	3.37%
Be 234.861†	-495.9	-0.00016	mg/L	0.000070	-0.00016	mg/L	0.000070	45.16%
B 249.677†	418.6	0.00877	mg/L	0.000182	0.00877	mg/L	0.000182	2.07%
Ca 227.546†	115.0	0.340	mg/L	0.0279	0.340	mg/L	0.0279	8.19%
Cd 228.802†	33.2	0.00092	mg/L	0.000054	0.00092	mg/L	0.000054	5.86%
Co 228.616†	-0.2	-0.00019	mg/L	0.000247	-0.00019	mg/L	0.000247	131.97%
Cr 267.716†	-30.4	-0.00003	mg/L	0.000113	-0.00003	mg/L	0.000113	436.93%
Cu 327.393†	327.9	0.00231	mg/L	0.000173	0.00231	mg/L	0.000173	7.51%
Fe 239.562†	1202.6	0.0675	mg/L	0.00004	0.0675	mg/L	0.00004	0.07%
Mg 279.077†	265.4	0.0653	mg/L	0.00257	0.0653	mg/L	0.00257	3.94%
Mn 257.610†	2775.0	0.00284	mg/L	0.000089	0.00284	mg/L	0.000089	3.13%
Mo 202.031†	35.6	0.00073	mg/L	0.000232	0.00073	mg/L	0.000232	31.74%
Ni 231.604†	-57.1	-0.00412	mg/L	0.000391	-0.00412	mg/L	0.000391	9.49%
Pb 220.353†	-14.4	-0.00140	mg/L	0.000639	-0.00140	mg/L	0.000639	45.58%
Sb 206.836†	8.0	0.00629	mg/L	0.000791	0.00629	mg/L	0.000791	12.58%
Se 196.026†	13.0	0.00925	mg/L	0.001829	0.00925	mg/L	0.001829	19.76%
Si 251.611†	13510.6	131	mg/L	4.7	131	mg/L	4.7	3.56%
Sn 189.927†	7.9	-0.00026	mg/L	0.000577	-0.00026	mg/L	0.000577	219.31%
Ti 334.940†	6409.1	0.00759	mg/L	0.000105	0.00759	mg/L	0.000105	1.39%
Tl 190.801†	-32.3	-0.00900	mg/L	0.001893	-0.00900	mg/L	0.001893	21.03%
V 290.880†	1583.8	0.00962	mg/L	0.002352	0.00962	mg/L	0.002352	24.45%
Zn 206.200†	227.3	0.00571	mg/L	0.000271	0.00571	mg/L	0.000271	4.74%
K 766.490†	433.8	-0.0706	mg/L	0.00810	-0.0706	mg/L	0.00810	11.47%
Na 589.592†	2901537.9	154	mg/L	3.4	154	mg/L	3.4	2.18%
Sr 407.771†	1508.2	0.00124	mg/L	0.000003	0.00124	mg/L	0.000003	0.28%
Li 670.784†	-9.2	-0.00202	mg/L	0.000130	-0.00202	mg/L	0.000130	6.46%

Sequence No.: 16 **Autosampler Location: 18**
Sample ID: L1204098901 WG396769-01 **Date Collected: 5/4/2012 10:47:04 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204098901 WG396769-01

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1204098901 WG396769-01

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	2272253.0						19934.15	0.88%
YRADIAL	302933.9						1574.98	0.52%
Ga 417.206	1394176.8						9430.83	0.68%
GaRADIAL	89826.2						2008.13	2.24%
Ag 328.068†	289.0	-0.00022	mg/L	0.000335	-0.00022	mg/L	0.000335	153.20%
Al 396.153†	718.0	0.0906	mg/L	0.00093	0.0906	mg/L	0.00093	1.03%
As 188.979†	-12.6	-0.00560	mg/L	0.002418	-0.00560	mg/L	0.002418	43.19%
Ba 233.527†	-19.9	0.00044	mg/L	0.000206	0.00044	mg/L	0.000206	46.70%
Be 234.861†	-574.3	-0.00012	mg/L	0.000030	-0.00012	mg/L	0.000030	25.56%
B 249.677†	22925.9	0.247	mg/L	0.0031	0.247	mg/L	0.0031	1.25%
Ca 227.546†	572.5	2.62	mg/L	0.022	2.62	mg/L	0.022	0.86%

Approved: May 07, 2012

Kym H. Rhoden

Cd 228.802†	22.5	0.00083	mg/L	0.000222	0.00083	mg/L	0.000222	26.72%
Co 228.616†	273.4	0.00643	mg/L	0.000063	0.00643	mg/L	0.000063	0.98%
Cr 267.716†	4435.2	0.0400	mg/L	0.00130	0.0400	mg/L	0.00130	3.26%
Cu 327.393†	8908508.6	32.3	mg/L	0.30	32.3	mg/L	0.30	0.94%
Fe 239.562†	1957.8	0.111	mg/L	0.0012	0.111	mg/L	0.0012	1.11%
Mg 279.077†	2102.1	0.558	mg/L	0.0041	0.558	mg/L	0.0041	0.74%
Mn 257.610†	764029.1	0.878	mg/L	0.0037	0.878	mg/L	0.0037	0.42%
Mo 202.031†	109.2	0.00288	mg/L	0.000304	0.00288	mg/L	0.000304	10.57%
Ni 231.604†	116132.8	1.61	mg/L	0.017	1.61	mg/L	0.017	1.04%
Pb 220.353†	424.2	0.00304	mg/L	0.001716	0.00304	mg/L	0.001716	56.52%
Sb 206.836†	-1.2	0.00512	mg/L	0.000303	0.00512	mg/L	0.000303	5.91%
Se 196.026†	10.1	0.00823	mg/L	0.000987	0.00823	mg/L	0.000987	12.00%
Si 251.611†	21705.8	211	mg/L	3.9	211	mg/L	3.9	1.87%
Sn 189.927†	-23.4	-0.00311	mg/L	0.000581	-0.00311	mg/L	0.000581	18.71%
Ti 334.940†	6345.2	0.00766	mg/L	0.000102	0.00766	mg/L	0.000102	1.33%
Tl 190.801†	-42.8	-0.0124	mg/L	0.00038	-0.0124	mg/L	0.00038	3.06%
V 290.880†	1318.3	0.00827	mg/L	0.001821	0.00827	mg/L	0.001821	22.01%
Zn 206.200†	1072453.4	22.7	mg/L	0.17	22.7	mg/L	0.17	0.77%
K 766.490†	1646.0	0.280	mg/L	0.0041	0.280	mg/L	0.0041	1.46%
Na 589.592†	3297593.0	176	mg/L	5.3	176	mg/L	5.3	3.03%
Sr 407.771†	5877.5	0.00286	mg/L	0.000025	0.00286	mg/L	0.000025	0.86%
Li 670.784†	54.2	-0.00159	mg/L	0.000017	-0.00159	mg/L	0.000017	1.08%

Sequence No.: 17
Sample ID: L1204098901S WG396769-04
Analyst: KHR
Initial Sample Wt:
Dilution:

Autosampler Location: 19
Date Collected: 5/4/2012 10:54:06 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: L1204098901S WG396769-04

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1204098901S WG396769-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2325376.9						16270.10	0.70%
YRADIAL	313717.0						7895.28	2.52%
Ga 417.206	1351465.4						30768.89	2.28%
GaRADIAL	89192.1						2033.63	2.28%
Ag 328.068†	63948.3	0.198	mg/L	0.0046	0.198	mg/L	0.0046	2.30%
Al 396.153†	36630.4	4.94	mg/L	0.019	4.94	mg/L	0.019	0.39%
As 188.979†	554.3	0.179	mg/L	0.0040	0.179	mg/L	0.0040	2.22%
Ba 233.527†	80365.5	0.483	mg/L	0.0067	0.483	mg/L	0.0067	1.39%
Be 234.861†	30837.3	0.0225	mg/L	0.00054	0.0225	mg/L	0.00054	2.40%
B 249.677†	108277.4	1.15	mg/L	0.033	1.15	mg/L	0.033	2.89%
Ca 227.546†	2842.4	7.46	mg/L	0.164	7.46	mg/L	0.164	2.20%
Cd 228.802†	1443.1	0.0234	mg/L	0.00101	0.0234	mg/L	0.00101	4.32%
Co 228.616†	4128.9	0.102	mg/L	0.0012	0.102	mg/L	0.0012	1.21%
Cr 267.716†	32126.5	0.283	mg/L	0.0023	0.283	mg/L	0.0023	0.82%
Cu 327.393†	8929535.1	32.3	mg/L	1.12	32.3	mg/L	1.12	3.45%
Fe 239.562†	33367.0	1.94	mg/L	0.007	1.94	mg/L	0.007	0.38%
Mg 279.077†	19818.2	5.32	mg/L	0.058	5.32	mg/L	0.058	1.09%
Mn 257.610†	931049.2	1.07	mg/L	0.010	1.07	mg/L	0.010	0.91%
Mo 202.031†	19022.0	0.509	mg/L	0.0066	0.509	mg/L	0.0066	1.30%
Ni 231.604†	127576.9	1.76	mg/L	0.028	1.76	mg/L	0.028	1.57%
Pb 220.353†	3117.6	0.231	mg/L	0.0050	0.231	mg/L	0.0050	2.15%
Sb 206.836†	2494.7	0.554	mg/L	0.0123	0.554	mg/L	0.0123	2.21%
Se 196.026†	355.5	0.178	mg/L	0.0035	0.178	mg/L	0.0035	1.94%
Si 251.611†	127637.8	1240	mg/L	19.0	1240	mg/L	19.0	1.53%
Sn 189.927†	-61.6	-0.00657	mg/L	0.000800	-0.00657	mg/L	0.000800	12.17%
Ti 334.940†	504883.8	0.493	mg/L	0.0013	0.493	mg/L	0.0013	0.26%
Tl 190.801†	897.7	0.223	mg/L	0.0049	0.223	mg/L	0.0049	2.19%
V 290.880†	100123.3	0.502	mg/L	0.0031	0.502	mg/L	0.0031	0.61%
Zn 206.200†	1047807.9	22.2	mg/L	0.10	22.2	mg/L	0.10	0.47%
K 766.490†	79898.7	24.5	mg/L	0.27	24.5	mg/L	0.27	1.09%
Na 589.592†	3657683.0	197	mg/L	3.3	197	mg/L	3.3	1.69%
Sr 407.771†	1252197.2	0.471	mg/L	0.0047	0.471	mg/L	0.0047	1.00%
Li 670.784†	74923.0	0.500	mg/L	0.0037	0.500	mg/L	0.0037	0.74%

Approved: May 07, 2012

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Sequence No.: 18 **Autosampler Location: 20**
Sample ID: L1204098901SD WG396769-05 **Date Collected: 5/4/2012 11:00:11 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204098901SD WG396769-05

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1204098901SD WG396769-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2289741.1						22517.91	0.98%
YRADIAL	305324.6						3285.06	1.08%
Ga 417.206	1352645.6						16798.85	1.24%
GaRADIAL	87819.1						508.32	0.58%
Ag 328.068†	65039.3	0.201	mg/L	0.0069	0.201	mg/L	0.0069	3.41%
Al 396.153†	37564.8	5.07	mg/L	0.013	5.07	mg/L	0.013	0.26%
As 188.979†	565.3	0.182	mg/L	0.0024	0.182	mg/L	0.0024	1.33%
Ba 233.527†	83161.6	0.499	mg/L	0.0046	0.499	mg/L	0.0046	0.92%
Be 234.861†	31338.1	0.0228	mg/L	0.00083	0.0228	mg/L	0.00083	3.61%
B 249.677†	109827.6	1.16	mg/L	0.050	1.16	mg/L	0.050	4.34%
Ca 227.546†	2859.4	7.53	mg/L	0.173	7.53	mg/L	0.173	2.30%
Cd 228.802†	1459.9	0.0236	mg/L	0.00082	0.0236	mg/L	0.00082	3.47%
Co 228.616†	4229.8	0.105	mg/L	0.0010	0.105	mg/L	0.0010	0.94%
Cr 267.716†	33255.3	0.293	mg/L	0.0048	0.293	mg/L	0.0048	1.64%
Cu 327.393†	8948331.1	32.4	mg/L	0.91	32.4	mg/L	0.91	2.81%
Fe 239.562†	34196.9	1.99	mg/L	0.012	1.99	mg/L	0.012	0.58%
Mg 279.077†	20396.6	5.48	mg/L	0.022	5.48	mg/L	0.022	0.39%
Mn 257.610†	948167.4	1.09	mg/L	0.007	1.09	mg/L	0.007	0.63%
Mo 202.031†	19601.8	0.524	mg/L	0.0078	0.524	mg/L	0.0078	1.48%
Ni 231.604†	130625.3	1.81	mg/L	0.017	1.81	mg/L	0.017	0.93%
Pb 220.353†	3207.7	0.238	mg/L	0.0044	0.238	mg/L	0.0044	1.83%
Sb 206.836†	2527.9	0.562	mg/L	0.0094	0.562	mg/L	0.0094	1.68%
Se 196.026†	366.8	0.184	mg/L	0.0041	0.184	mg/L	0.0041	2.23%
Si 251.611†	132963.6	1290	mg/L	37.2	1290	mg/L	37.2	2.88%
Sn 189.927†	-58.9	-0.00633	mg/L	0.000618	-0.00633	mg/L	0.000618	9.77%
Ti 334.940†	514969.9	0.503	mg/L	0.0019	0.503	mg/L	0.0019	0.37%
Tl 190.801†	917.3	0.228	mg/L	0.0041	0.228	mg/L	0.0041	1.81%
V 290.880†	103719.5	0.520	mg/L	0.0110	0.520	mg/L	0.0110	2.12%
Zn 206.200†	1069740.4	22.7	mg/L	0.08	22.7	mg/L	0.08	0.36%
K 766.490†	81507.3	24.9	mg/L	0.22	24.9	mg/L	0.22	0.89%
Na 589.592†	3762821.3	203	mg/L	1.3	203	mg/L	1.3	0.66%
Sr 407.771†	1334422.5	0.502	mg/L	0.0077	0.502	mg/L	0.0077	1.54%
Li 670.784†	76549.5	0.511	mg/L	0.0037	0.511	mg/L	0.0037	0.73%

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Sequence No.: 19 **Autosampler Location: 21**
Sample ID: L1204092403 **Date Collected: 5/4/2012 11:06:20 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204092403

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1204092403

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2446958.2						17161.39	0.70%
YRADIAL	318713.3						692.07	0.22%
Ga 417.206	1362475.5						65277.42	4.79%
GaRADIAL	90868.9						1137.08	1.25%
Ag 328.068†	211.1	0.00222	mg/L	0.000372	0.00222	mg/L	0.000372	16.75%

Approved: May 07, 2012

Lynn H. Rhoden

Al 396.153†	2950.7	0.394	mg/L	0.0017	0.394	mg/L	0.0017	0.44%
As 188.979†	-13.4	-0.00581	mg/L	0.001286	-0.00581	mg/L	0.001286	22.13%
Ba 233.527†	347.1	0.00263	mg/L	0.000255	0.00263	mg/L	0.000255	9.69%
Be 234.861†	-4.2	0.00006	mg/L	0.000047	0.00006	mg/L	0.000047	82.66%
B 249.677†	20509.4	0.221	mg/L	0.0153	0.221	mg/L	0.0153	6.93%
Ca 227.546†	2407.4	5.09	mg/L	0.260	5.09	mg/L	0.260	5.11%
Cd 228.802†	53.8	0.00126	mg/L	0.000229	0.00126	mg/L	0.000229	18.24%
Co 228.616†	21.4	0.00035	mg/L	0.000554	0.00035	mg/L	0.000554	160.17%
Cr 267.716†	-22.2	0.00006	mg/L	0.000073	0.00006	mg/L	0.000073	123.41%
Cu 327.393†	7349.1	0.0278	mg/L	0.00268	0.0278	mg/L	0.00268	9.65%
Fe 239.562†	12560.1	0.728	mg/L	0.0089	0.728	mg/L	0.0089	1.23%
Mg 279.077†	6063.0	1.62	mg/L	0.012	1.62	mg/L	0.012	0.73%
Mn 257.610†	12859.7	0.0144	mg/L	0.00009	0.0144	mg/L	0.00009	0.65%
Mo 202.031†	210.0	0.00542	mg/L	0.000249	0.00542	mg/L	0.000249	4.59%
Ni 231.604†	46.9	-0.00268	mg/L	0.000401	-0.00268	mg/L	0.000401	14.95%
Pb 220.353†	-22.0	-0.00205	mg/L	0.001447	-0.00205	mg/L	0.001447	70.75%
Sb 206.836†	-1.1	0.00430	mg/L	0.000873	0.00430	mg/L	0.000873	20.31%
Se 196.026†	11.5	0.00874	mg/L	0.002240	0.00874	mg/L	0.002240	25.64%
Si 251.611†	21413.6	208	mg/L	11.2	208	mg/L	11.2	5.38%
Sn 189.927†	-50.7	-0.00558	mg/L	0.000775	-0.00558	mg/L	0.000775	13.87%
Ti 334.940†	3468.9	0.00544	mg/L	0.000180	0.00544	mg/L	0.000180	3.30%
Tl 190.801†	-8.7	-0.00333	mg/L	0.004002	-0.00333	mg/L	0.004002	120.16%
V 290.880†	370.0	0.00341	mg/L	0.000897	0.00341	mg/L	0.000897	26.35%
Zn 206.200†	327.9	0.00784	mg/L	0.000261	0.00784	mg/L	0.000261	3.33%
K 766.490†	1539.3	0.415	mg/L	0.0057	0.415	mg/L	0.0057	1.37%
Na 589.592†	167377.5	8.45	mg/L	0.071	8.45	mg/L	0.071	0.85%
Sr 407.771†	74330.2	0.0285	mg/L	0.00032	0.0285	mg/L	0.00032	1.14%
Li 670.784†	118.0	-0.00116	mg/L	0.000304	-0.00116	mg/L	0.000304	26.09%

Sequence No.: 20
Sample ID: L1204092403PS WG396791-03
Analyst: KHR
Initial Sample Wt:
Dilution:

Autosampler Location: 22
Date Collected: 5/4/2012 11:12:19 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: L1204092403PS WG396791-03

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1204092403PS WG396791-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2394221.8						31590.19	1.32%
YRADIAL	310576.3						1838.69	0.59%
Ga 417.206	1374750.7						25896.79	1.88%
GaRADIAL	89882.1						944.28	1.05%
Ag 328.068†	65232.8	0.205	mg/L	0.0072	0.205	mg/L	0.0072	3.53%
Al 396.153†	39143.8	5.28	mg/L	0.022	5.28	mg/L	0.022	0.41%
As 188.979†	570.0	0.184	mg/L	0.0030	0.184	mg/L	0.0030	1.61%
Ba 233.527†	82586.4	0.496	mg/L	0.0026	0.496	mg/L	0.0026	0.52%
Be 234.861†	31753.5	0.0229	mg/L	0.00072	0.0229	mg/L	0.00072	3.16%
B 249.677†	104973.1	1.11	mg/L	0.048	1.11	mg/L	0.048	4.33%
Ca 227.546†	4428.2	9.49	mg/L	0.213	9.49	mg/L	0.213	2.24%
Cd 228.802†	1464.8	0.0236	mg/L	0.00087	0.0236	mg/L	0.00087	3.66%
Co 228.616†	3970.9	0.0984	mg/L	0.00165	0.0984	mg/L	0.00165	1.68%
Cr 267.716†	28720.7	0.252	mg/L	0.0022	0.252	mg/L	0.0022	0.86%
Cu 327.393†	72341.6	0.264	mg/L	0.0124	0.264	mg/L	0.0124	4.70%
Fe 239.562†	44431.5	2.58	mg/L	0.016	2.58	mg/L	0.016	0.60%
Mg 279.077†	23804.3	6.39	mg/L	0.034	6.39	mg/L	0.034	0.53%
Mn 257.610†	230043.0	0.264	mg/L	0.0029	0.264	mg/L	0.0029	1.09%
Mo 202.031†	19729.6	0.527	mg/L	0.0031	0.527	mg/L	0.0031	0.59%
Ni 231.604†	17627.3	0.241	mg/L	0.0015	0.241	mg/L	0.0015	0.60%
Pb 220.353†	2802.5	0.236	mg/L	0.0041	0.236	mg/L	0.0041	1.73%
Sb 206.836†	2580.0	0.572	mg/L	0.0114	0.572	mg/L	0.0114	2.00%
Se 196.026†	350.9	0.176	mg/L	0.0053	0.176	mg/L	0.0053	2.98%
Si 251.611†	128601.0	1250	mg/L	36.4	1250	mg/L	36.4	2.91%
Sn 189.927†	-79.1	-0.00815	mg/L	0.000557	-0.00815	mg/L	0.000557	6.83%
Ti 334.940†	508346.1	0.497	mg/L	0.0023	0.497	mg/L	0.0023	0.46%
Tl 190.801†	953.2	0.237	mg/L	0.0029	0.237	mg/L	0.0029	1.20%

Approved: May 07, 2012

Kym H. Rhoden

V 290.880†	102642.5	0.514 mg/L	0.0027	0.514 mg/L	0.0027	0.52%
Zn 206.200†	22784.6	0.486 mg/L	0.0095	0.486 mg/L	0.0095	1.95%
K 766.490†	81103.6	25.0 mg/L	0.15	25.0 mg/L	0.15	0.59%
Na 589.592†	654469.4	33.3 mg/L	0.40	33.3 mg/L	0.40	1.19%
Sr 407.771†	1396097.5	0.525 mg/L	0.0051	0.525 mg/L	0.0051	0.97%
Li 670.784†	78055.7	0.521 mg/L	0.0044	0.521 mg/L	0.0044	0.85%

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Sequence No.: 21 **Autosampler Location: 23**
Sample ID: L1204092403DL WG396791-04 **Date Collected: 5/4/2012 11:18:19 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204092403DL WG396791-04

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1204092403DL WG396791-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2342416.9						3872.42	0.17%
YRADIAL	303269.7						3660.67	1.21%
Ga 417.206	1394634.2						25196.30	1.81%
GaRADIAL	89798.3						2088.45	2.33%
Ag 328.068†	8.2	0.00135	mg/L	0.000143	0.00135	mg/L	0.000143	10.61%
Al 396.153†	600.7	0.0748	mg/L	0.00136	0.0748	mg/L	0.00136	1.81%
As 188.979†	-4.1	-0.00278	mg/L	0.000229	-0.00278	mg/L	0.000229	8.25%
Ba 233.527†	-462.0	-0.00221	mg/L	0.000093	-0.00221	mg/L	0.000093	4.20%
Be 234.861†	-77.7	0.00013	mg/L	0.000008	0.00013	mg/L	0.000008	6.34%
B 249.677†	4903.1	0.0562	mg/L	0.00152	0.0562	mg/L	0.00152	2.70%
Ca 227.546†	448.1	1.03	mg/L	0.006	1.03	mg/L	0.006	0.62%
Cd 228.802†	1.8	0.00039	mg/L	0.000110	0.00039	mg/L	0.000110	28.11%
Co 228.616†	0.6	-0.00016	mg/L	0.000265	-0.00016	mg/L	0.000265	165.04%
Cr 267.716†	-97.8	-0.00061	mg/L	0.000104	-0.00061	mg/L	0.000104	16.92%
Cu 327.393†	1310.8	0.00587	mg/L	0.000441	0.00587	mg/L	0.000441	7.53%
Fe 239.562†	2569.3	0.147	mg/L	0.0020	0.147	mg/L	0.0020	1.36%
Mg 279.077†	1269.2	0.335	mg/L	0.0045	0.335	mg/L	0.0045	1.35%
Mn 257.610†	2689.9	0.00274	mg/L	0.000021	0.00274	mg/L	0.000021	0.78%
Mo 202.031†	22.4	0.00038	mg/L	0.000124	0.00038	mg/L	0.000124	32.69%
Ni 231.604†	-2.1	-0.00336	mg/L	0.000175	-0.00336	mg/L	0.000175	5.21%
Pb 220.353†	3.1	0.00007	mg/L	0.000310	0.00007	mg/L	0.000310	456.97%
Sb 206.836†	1.0	0.00475	mg/L	0.001159	0.00475	mg/L	0.001159	24.38%
Se 196.026†	-0.0	0.00290	mg/L	0.001714	0.00290	mg/L	0.001714	59.10%
Si 251.611†	4577.0	44.5	mg/L	1.22	44.5	mg/L	1.22	2.73%
Sn 189.927†	-10.1	-0.00190	mg/L	0.000404	-0.00190	mg/L	0.000404	21.34%
Ti 334.940†	787.0	0.00222	mg/L	0.000070	0.00222	mg/L	0.000070	3.14%
Tl 190.801†	-12.9	-0.00437	mg/L	0.001809	-0.00437	mg/L	0.001809	41.42%
V 290.880†	788.2	0.00562	mg/L	0.001086	0.00562	mg/L	0.001086	19.32%
Zn 206.200†	183.6	0.00478	mg/L	0.000159	0.00478	mg/L	0.000159	3.32%
K 766.490†	441.9	0.0838	mg/L	0.01181	0.0838	mg/L	0.01181	14.09%
Na 589.592†	34367.8	1.74	mg/L	0.063	1.74	mg/L	0.063	3.63%
Sr 407.771†	15574.7	0.00650	mg/L	0.000080	0.00650	mg/L	0.000080	1.23%
Li 670.784†	38.9	-0.00169	mg/L	0.000196	-0.00169	mg/L	0.000196	11.58%

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Sequence No.: 22 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 5/4/2012 11:25:12 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: CCV

	Mean Corrected	Calib.			Sample			

Approved: May 07, 2012

Kym H. Rhoden

Analyte	Intensity	Conc. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 371.029	2310092.8				22320.53	0.97%
YRADIAL	303394.0				3510.66	1.16%
Ga 417.206	1337574.8				26254.21	1.96%
GaRADIAL	88831.5				1263.66	1.42%
Ag 328.068†	131587.3	0.411 mg/L	0.0152	0.411 mg/L	0.0152	3.69%
QC value within limits for Ag 328.068 Recovery = 102.68%						
Al 396.153†	72720.6	9.82 mg/L	0.015	9.82 mg/L	0.015	0.15%
QC value within limits for Al 396.153 Recovery = 98.19%						
As 188.979†	1217.3	0.395 mg/L	0.0044	0.395 mg/L	0.0044	1.11%
QC value within limits for As 188.979 Recovery = 98.75%						
Ba 233.527†	165867.2	0.995 mg/L	0.0123	0.995 mg/L	0.0123	1.23%
QC value within limits for Ba 233.527 Recovery = 99.53%						
Be 234.861†	67148.2	0.0485 mg/L	0.00155	0.0485 mg/L	0.00155	3.20%
QC value within limits for Be 234.861 Recovery = 97.03%						
B 249.677†	46795.7	0.495 mg/L	0.0226	0.495 mg/L	0.0226	4.55%
QC value within limits for B 249.677 Recovery = 99.06%						
Ca 227.546†	4694.6	10.3 mg/L	0.24	10.3 mg/L	0.24	2.32%
QC value within limits for Ca 227.546 Recovery = 102.60%						
Cd 228.802†	2997.9	0.0479 mg/L	0.00183	0.0479 mg/L	0.00183	3.83%
QC value within limits for Cd 228.802 Recovery = 95.79%						
Co 228.616†	8057.4	0.200 mg/L	0.0026	0.200 mg/L	0.0026	1.33%
QC value within limits for Co 228.616 Recovery = 99.93%						
Cr 267.716†	57170.0	0.501 mg/L	0.0069	0.501 mg/L	0.0069	1.37%
QC value within limits for Cr 267.716 Recovery = 100.28%						
Cu 327.393†	138424.2	0.504 mg/L	0.0203	0.504 mg/L	0.0203	4.04%
QC value within limits for Cu 327.393 Recovery = 100.84%						
Fe 239.562†	68064.6	3.96 mg/L	0.011	3.96 mg/L	0.011	0.28%
QC value within limits for Fe 239.562 Recovery = 98.89%						
Mg 279.077†	36987.9	9.94 mg/L	0.050	9.94 mg/L	0.050	0.50%
QC value within limits for Mg 279.077 Recovery = 99.41%						
Mn 257.610†	444550.2	0.511 mg/L	0.0062	0.511 mg/L	0.0062	1.22%
QC value within limits for Mn 257.610 Recovery = 102.11%						
Mo 202.031†	38622.8	1.03 mg/L	0.016	1.03 mg/L	0.016	1.51%
QC value within limits for Mo 202.031 Recovery = 103.28%						
Ni 231.604†	36043.1	0.496 mg/L	0.0065	0.496 mg/L	0.0065	1.32%
QC value within limits for Ni 231.604 Recovery = 99.11%						
Pb 220.353†	5936.3	0.501 mg/L	0.0061	0.501 mg/L	0.0061	1.22%
QC value within limits for Pb 220.353 Recovery = 100.18%						
Sb 206.836†	5298.5	1.17 mg/L	0.021	1.17 mg/L	0.021	1.80%
QC value within limits for Sb 206.836 Recovery = 97.55%						
Se 196.026†	775.9	0.385 mg/L	0.0077	0.385 mg/L	0.0077	2.00%
QC value within limits for Se 196.026 Recovery = 96.35%						
Si 251.611†	222273.2	2160 mg/L	64.9	2160 mg/L	64.9	3.01%
QC value greater than the upper limit for Si 251.611 Recovery = 43196.32%						
Sn 189.927†	11128.9	1.01 mg/L	0.012	1.01 mg/L	0.012	1.15%
QC value within limits for Sn 189.927 Recovery = 100.89%						
Ti 334.940†	1008608.0	0.984 mg/L	0.0058	0.984 mg/L	0.0058	0.59%
QC value within limits for Ti 334.940 Recovery = 98.38%						
Tl 190.801†	2047.8	0.510 mg/L	0.0029	0.510 mg/L	0.0029	0.56%
QC value within limits for Tl 190.801 Recovery = 102.00%						
V 290.880†	204147.7	1.02 mg/L	0.022	1.02 mg/L	0.022	2.11%
QC value within limits for V 290.880 Recovery = 102.11%						
Zn 206.200†	46838.2	0.998 mg/L	0.0047	0.998 mg/L	0.0047	0.47%
QC value within limits for Zn 206.200 Recovery = 99.82%						
K 766.490†	160059.0	49.6 mg/L	0.29	49.6 mg/L	0.29	0.58%
QC value within limits for K 766.490 Recovery = 99.14%						
Na 589.592†	972605.5	49.7 mg/L	0.86	49.7 mg/L	0.86	1.72%
QC value within limits for Na 589.592 Recovery = 99.49%						
Sr 407.771†	2659233.6	0.999 mg/L	0.0241	0.999 mg/L	0.0241	2.41%
QC value within limits for Sr 407.771 Recovery = 99.91%						
Li 670.784†	151065.3	1.01 mg/L	0.005	1.01 mg/L	0.005	0.45%
QC value within limits for Li 670.784 Recovery = 100.96%						

QC Failed. Continue with analysis.

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Sequence No.: 23
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 5/4/2012 11:31:13 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Approved: May 07, 2012

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	150.0 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	2280012.2						23215.42	1.02%
YRADIAL	299177.1						8359.15	2.79%
Ga 417.206	1373299.1						6342.06	0.46%
GaRADIAL	89261.0						2976.33	3.33%
Ag 328.068†	115.1	0.00163	mg/L	0.000190	0.00163	mg/L	0.000190	11.70%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-17.2	-0.00927	mg/L	0.001735	-0.00927	mg/L	0.001735	18.72%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	2.6	-0.00057	mg/L	0.000425	-0.00057	mg/L	0.000425	74.31%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-636.3	-0.00326	mg/L	0.000101	-0.00326	mg/L	0.000101	3.09%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-5.2	0.00021	mg/L	0.000020	0.00021	mg/L	0.000020	9.16%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	1092.9	0.0159	mg/L	0.00017	0.0159	mg/L	0.00017	1.07%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	2.4	0.107	mg/L	0.0109	0.107	mg/L	0.0109	10.19%
QC value greater than the upper limit for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-1.5	0.00033	mg/L	0.000334	0.00033	mg/L	0.000334	102.34%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	1.7	-0.00013	mg/L	0.000169	-0.00013	mg/L	0.000169	131.26%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-123.2	-0.00084	mg/L	0.000088	-0.00084	mg/L	0.000088	10.47%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	660.0	0.00350	mg/L	0.000628	0.00350	mg/L	0.000628	17.95%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	57.4	0.00090	mg/L	0.000511	0.00090	mg/L	0.000511	56.93%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	-2.6	-0.00659	mg/L	0.001124	-0.00659	mg/L	0.001124	17.06%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-28.5	-0.00038	mg/L	0.000028	-0.00038	mg/L	0.000028	7.23%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-13.0	-0.00057	mg/L	0.000323	-0.00057	mg/L	0.000323	56.37%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	2.1	-0.00330	mg/L	0.000297	-0.00330	mg/L	0.000297	8.98%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-6.1	-0.00071	mg/L	0.001223	-0.00071	mg/L	0.001223	172.05%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.9	0.00472	mg/L	0.001029	0.00472	mg/L	0.001029	21.79%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-4.2	0.00080	mg/L	0.001988	0.00080	mg/L	0.001988	248.32%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	527.0	5.14	mg/L	0.303	5.14	mg/L	0.303	5.89%
QC value greater than the upper limit for Si 251.611 Recovery = Not calculated								
Sn 189.927†	8.2	-0.00023	mg/L	0.000481	-0.00023	mg/L	0.000481	205.85%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	121.1	0.00144	mg/L	0.000141	0.00144	mg/L	0.000141	9.79%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	7.0	0.00047	mg/L	0.003399	0.00047	mg/L	0.003399	717.76%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	1596.5	0.00969	mg/L	0.001747	0.00969	mg/L	0.001747	18.02%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	58.7	0.00213	mg/L	0.000113	0.00213	mg/L	0.000113	5.29%
QC value within limits for Zn 206.200 Recovery = Not calculated								
K 766.490†	-40.9	-0.0632	mg/L	0.01915	-0.0632	mg/L	0.01915	30.30%
QC value within limits for K 766.490 Recovery = Not calculated								
Na 589.592†	147.4	0.0181	mg/L	0.00454	0.0181	mg/L	0.00454	25.16%
QC value within limits for Na 589.592 Recovery = Not calculated								
Sr 407.771†	-167.1	0.00061	mg/L	0.000027	0.00061	mg/L	0.000027	4.47%
QC value within limits for Sr 407.771 Recovery = Not calculated								
Li 670.784†	0.3	-0.00195	mg/L	0.000717	-0.00195	mg/L	0.000717	36.72%
QC value within limits for Li 670.784 Recovery = Not calculated								

QC Failed. Continue with analysis.

Approved: May 07, 2012

Lynn H. Rhoden

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Sequence No.: 24 **Autosampler Location: 24**
Sample ID: LLCCV **Date Collected: 5/4/2012 11:38:06 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LLCCV

Analyte	Back Pressure	Flow
All	150.0 kPa	0.50 L/min

Mean Data: LLCCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	2304082.5						12520.11	0.54%
YRADIAL	302075.8						5361.89	1.78%
Ga 417.206	1349974.1						29923.37	2.22%
GaRADIAL	90593.0						999.26	1.10%
Ag 328.068†	25387.7	0.0803	mg/L	0.00142	0.0803	mg/L	0.00142	1.77%
Al 396.153†	14300.8	1.93	mg/L	0.024	1.93	mg/L	0.024	1.25%
As 188.979†	233.6	0.0746	mg/L	0.00162	0.0746	mg/L	0.00162	2.17%
Ba 233.527†	32414.2	0.195	mg/L	0.0003	0.195	mg/L	0.0003	0.16%
Be 234.861†	13045.5	0.00960	mg/L	0.000269	0.00960	mg/L	0.000269	2.81%
B 249.677†	10143.6	0.111	mg/L	0.0018	0.111	mg/L	0.0018	1.65%
Ca 227.546†	874.6	2.00	mg/L	0.041	2.00	mg/L	0.041	2.06%
Cd 228.802†	593.8	0.00979	mg/L	0.000458	0.00979	mg/L	0.000458	4.68%
Co 228.616†	1617.0	0.0400	mg/L	0.00066	0.0400	mg/L	0.00066	1.64%
Cr 267.716†	11698.6	0.103	mg/L	0.0004	0.103	mg/L	0.0004	0.35%
Cu 327.393†	28094.1	0.103	mg/L	0.0013	0.103	mg/L	0.0013	1.26%
Fe 239.562†	13816.8	0.801	mg/L	0.0131	0.801	mg/L	0.0131	1.64%
Mg 279.077†	7318.8	1.96	mg/L	0.037	1.96	mg/L	0.037	1.89%
Mn 257.610†	87615.6	0.100	mg/L	0.0006	0.100	mg/L	0.0006	0.61%
Mo 202.031†	7600.4	0.203	mg/L	0.0017	0.203	mg/L	0.0017	0.86%
Ni 231.604†	7590.2	0.102	mg/L	0.0007	0.102	mg/L	0.0007	0.71%
Pb 220.353†	1167.4	0.0983	mg/L	0.00202	0.0983	mg/L	0.00202	2.05%
Sb 206.836†	1057.0	0.237	mg/L	0.0054	0.237	mg/L	0.0054	2.27%
Se 196.026†	145.9	0.0748	mg/L	0.00262	0.0748	mg/L	0.00262	3.50%
Si 251.611†	494.0	4.81	mg/L	0.381	4.81	mg/L	0.381	7.91%
Sn 189.927†	2272.3	0.205	mg/L	0.0020	0.205	mg/L	0.0020	0.97%
Ti 334.940†	205925.4	0.202	mg/L	0.0010	0.202	mg/L	0.0010	0.51%
Tl 190.801†	425.7	0.105	mg/L	0.0010	0.105	mg/L	0.0010	0.92%
V 290.880†	41356.8	0.208	mg/L	0.0008	0.208	mg/L	0.0008	0.39%
Zn 206.200†	9616.5	0.206	mg/L	0.0013	0.206	mg/L	0.0013	0.65%
K 766.490†	31633.2	9.70	mg/L	0.173	9.70	mg/L	0.173	1.79%
Na 589.592†	191645.8	9.68	mg/L	0.009	9.68	mg/L	0.009	0.09%
Sr 407.771†	538543.6	0.203	mg/L	0.0016	0.203	mg/L	0.0016	0.77%
Li 670.784†	30727.9	0.204	mg/L	0.0018	0.204	mg/L	0.0018	0.90%

Approved: May 07, 2012

Kym H. Rhoden

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Analysis Begun

Start Time: 5/4/2012 11:58:32 AM **Plasma On Time: 5/4/2012 8:06:52 AM**
Logged In Analyst: peicp2 **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N4011401 **Autosampler Model: Cetac**

Sample Information File: C:\pe\peicp2\Sample Information\FRIDAY1.sif
Batch ID:
Results Data Set: 050412H
Results Library: C:\pe\peicp2\Results\Results.mdb

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Method Loaded
Method Name: 200.7-6010 PE-ICP2.1 **Method Last Saved: 5/4/2012 9:14:23 AM**
IEC File: CA227_LiBeMOD.iec **SMF File:**
Method Description: STANDARD

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Sequence No.: 1 **Autosampler Location: 25**
Sample ID: PBW 2T WG396754-02 **Date Collected: 5/4/2012 11:58:34 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW 2T WG396754-02

Analyte	Back Pressure	Flow
All	150.0 kPa	0.50 L/min

Mean Data: PBW 2T WG396754-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2337794.0						19498.08	0.83%
YRADIAL	308129.7						4488.60	1.46%
Ga 417.206	1446419.2						47798.52	3.30%
GaRADIAL	92161.4						1660.80	1.80%
Ag 328.068†	129.5	0.00167	mg/L	0.000441	0.00167	mg/L	0.000441	26.45%
Al 396.153†	-24.5	-0.0102	mg/L	0.00184	-0.0102	mg/L	0.00184	17.96%
As 188.979†	-1.9	-0.00206	mg/L	0.000776	-0.00206	mg/L	0.000776	37.59%
Ba 233.527†	-642.9	-0.00330	mg/L	0.000109	-0.00330	mg/L	0.000109	3.30%
Be 234.861†	93.5	0.00029	mg/L	0.000022	0.00029	mg/L	0.000022	7.66%
B 249.677†	862.5	0.0135	mg/L	0.00018	0.0135	mg/L	0.00018	1.36%
Ca 227.546†	7.2	0.116	mg/L	0.0212	0.116	mg/L	0.0212	18.16%
Cd 228.802†	-7.8	0.00023	mg/L	0.000044	0.00023	mg/L	0.000044	19.13%
Co 228.616†	-5.9	-0.00032	mg/L	0.000092	-0.00032	mg/L	0.000092	28.87%
Cr 267.716†	-132.3	-0.00092	mg/L	0.000055	-0.00092	mg/L	0.000055	6.00%
Cu 327.393†	310.3	0.00223	mg/L	0.000203	0.00223	mg/L	0.000203	9.12%
Fe 239.562†	88.6	0.00272	mg/L	0.000220	0.00272	mg/L	0.000220	8.11%
Mg 279.077†	-12.9	-0.00936	mg/L	0.001985	-0.00936	mg/L	0.001985	21.20%
Mn 257.610†	127.1	-0.00020	mg/L	0.000079	-0.00020	mg/L	0.000079	38.65%
Mo 202.031†	-27.5	-0.00096	mg/L	0.000509	-0.00096	mg/L	0.000509	52.84%
Ni 231.604†	-3.3	-0.00338	mg/L	0.000347	-0.00338	mg/L	0.000347	10.26%
Pb 220.353†	0.7	-0.00014	mg/L	0.001699	-0.00014	mg/L	0.001699	>999.9%
Sb 206.836†	0.5	0.00463	mg/L	0.000555	0.00463	mg/L	0.000555	11.99%
Se 196.026†	-1.3	0.00222	mg/L	0.002411	0.00222	mg/L	0.002411	108.82%
Si 251.611†	161.1	1.58	mg/L	0.422	1.58	mg/L	0.422	26.66%
Sn 189.927†	5.3	-0.00050	mg/L	0.000677	-0.00050	mg/L	0.000677	135.03%
Ti 334.940†	176.0	0.00149	mg/L	0.000064	0.00149	mg/L	0.000064	4.28%
Tl 190.801†	7.8	0.00065	mg/L	0.001396	0.00065	mg/L	0.001396	214.89%
V 290.880†	1173.8	0.00758	mg/L	0.001642	0.00758	mg/L	0.001642	21.67%
Zn 206.200†	157.9	0.00423	mg/L	0.001312	0.00423	mg/L	0.001312	31.00%
K 766.490†	-53.0	-0.0669	mg/L	0.02200	-0.0669	mg/L	0.02200	32.87%
Na 589.592†	177.7	0.0196	mg/L	0.00459	0.0196	mg/L	0.00459	23.46%
Sr 407.771†	-182.6	0.00061	mg/L	0.000026	0.00061	mg/L	0.000026	4.25%
Li 670.784†	-33.3	-0.00218	mg/L	0.000210	-0.00218	mg/L	0.000210	9.66%

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Sequence No.: 2 **Autosampler Location: 26**
Sample ID: LCSW 2T WG396754-03 **Date Collected: 5/4/2012 12:05:28 PM**

Approved: May 07, 2012

Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW 2T WG396754-03

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: LCSW 2T WG396754-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2348424.7						39480.64	1.68%
YRADIAL	317721.0						3337.36	1.05%
Ga 417.206	1416993.1						35931.68	2.54%
GaRADIAL	93721.5						960.55	1.02%
Ag 328.068†	64249.5	0.201	mg/L	0.0061	0.201	mg/L	0.0061	3.03%
Al 396.153†	36603.4	4.94	mg/L	0.006	4.94	mg/L	0.006	0.12%
As 188.979†	573.9	0.185	mg/L	0.0041	0.185	mg/L	0.0041	2.19%
Ba 233.527†	81870.4	0.492	mg/L	0.0073	0.492	mg/L	0.0073	1.49%
Be 234.861†	32109.7	0.0233	mg/L	0.00061	0.0233	mg/L	0.00061	2.59%
B 249.677†	90866.8	0.963	mg/L	0.0320	0.963	mg/L	0.0320	3.33%
Ca 227.546†	2246.1	4.97	mg/L	0.161	4.97	mg/L	0.161	3.23%
Cd 228.802†	1419.0	0.0229	mg/L	0.00110	0.0229	mg/L	0.00110	4.79%
Co 228.616†	3994.6	0.0990	mg/L	0.00210	0.0990	mg/L	0.00210	2.12%
Cr 267.716†	28385.1	0.249	mg/L	0.0010	0.249	mg/L	0.0010	0.41%
Cu 327.393†	68361.1	0.250	mg/L	0.0066	0.250	mg/L	0.0066	2.64%
Fe 239.562†	32743.5	1.90	mg/L	0.034	1.90	mg/L	0.034	1.81%
Mg 279.077†	18189.9	4.89	mg/L	0.054	4.89	mg/L	0.054	1.11%
Mn 257.610†	218308.0	0.251	mg/L	0.0044	0.251	mg/L	0.0044	1.75%
Mo 202.031†	19234.2	0.514	mg/L	0.0062	0.514	mg/L	0.0062	1.21%
Ni 231.604†	18151.8	0.248	mg/L	0.0039	0.248	mg/L	0.0039	1.59%
Pb 220.353†	2936.4	0.248	mg/L	0.0052	0.248	mg/L	0.0052	2.10%
Sb 206.836†	2542.8	0.564	mg/L	0.0180	0.564	mg/L	0.0180	3.19%
Se 196.026†	370.6	0.186	mg/L	0.0050	0.186	mg/L	0.0050	2.71%
Si 251.611†	110021.5	1070	mg/L	23.0	1070	mg/L	23.0	2.15%
Sn 189.927†	6035.2	0.547	mg/L	0.0086	0.547	mg/L	0.0086	1.56%
Ti 334.940†	506822.4	0.495	mg/L	0.0021	0.495	mg/L	0.0021	0.42%
Tl 190.801†	1045.2	0.260	mg/L	0.0020	0.260	mg/L	0.0020	0.77%
V 290.880†	102271.5	0.512	mg/L	0.0043	0.512	mg/L	0.0043	0.83%
Zn 206.200†	22998.9	0.491	mg/L	0.0061	0.491	mg/L	0.0061	1.24%
K 766.490†	81391.9	25.1	mg/L	0.03	25.1	mg/L	0.03	0.11%
Na 589.592†	495845.6	25.2	mg/L	0.37	25.2	mg/L	0.37	1.46%
Sr 407.771†	1324605.8	0.498	mg/L	0.0066	0.498	mg/L	0.0066	1.32%
Li 670.784†	80557.1	0.537	mg/L	0.0041	0.537	mg/L	0.0041	0.76%

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Sequence No.: 3 **Autosampler Location: 27**
Sample ID: L1204089801 **Date Collected: 5/4/2012 12:11:26 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204089801

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1204089801

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1647988.8						9814.20	0.60%
YRADIAL	254239.9						2456.10	0.97%
Ga 417.206	1157171.5						26629.14	2.30%
GaRADIAL	79100.3						908.52	1.15%
Ag 328.068†	506.2	0.00371	mg/L	0.000832	0.00371	mg/L	0.000832	22.44%
Al 396.153†	6514.8	0.878	mg/L	0.0092	0.878	mg/L	0.0092	1.04%
As 188.979†	4394.1	1.45	mg/L	0.028	1.45	mg/L	0.028	1.96%
Ba 233.527†	34435.3	0.207	mg/L	0.0017	0.207	mg/L	0.0017	0.82%
Be 234.861†	1670.2	0.00134	mg/L	0.000094	0.00134	mg/L	0.000094	7.04%

Approved: May 07, 2012
Lynn H. Rhoden

B 249.677†	101465.9	1.08	mg/L	0.039	1.08	mg/L	0.039	3.63%
Ca 227.546†	1708.4	3.81	mg/L	0.083	3.81	mg/L	0.083	2.17%
Cd 228.802†	1740.9	0.0215	mg/L	0.00292	0.0215	mg/L	0.00292	13.57%
Co 228.616†	408.8	0.00914	mg/L	0.000497	0.00914	mg/L	0.000497	5.43%
Cr 267.716†	8364.3	0.0737	mg/L	0.00068	0.0737	mg/L	0.00068	0.92%
Cu 327.393†	119.4	0.00211	mg/L	0.000356	0.00211	mg/L	0.000356	16.89%
Fe 239.562†	7725.4	0.447	mg/L	0.0059	0.447	mg/L	0.0059	1.33%
Mg 279.077†	9745.9	2.61	mg/L	0.045	2.61	mg/L	0.045	1.71%
Mn 257.610†	9327.9	0.0105	mg/L	0.00010	0.0105	mg/L	0.00010	1.00%
Mo 202.031†	540.1	0.0144	mg/L	0.00063	0.0144	mg/L	0.00063	4.39%
Ni 231.604†	16052.6	0.219	mg/L	0.0013	0.219	mg/L	0.0013	0.60%
Pb 220.353†	-59.4	-0.00494	mg/L	0.001018	-0.00494	mg/L	0.001018	20.61%
Sb 206.836†	39.1	0.0142	mg/L	0.00148	0.0142	mg/L	0.00148	10.44%
Se 196.026†	17.8	0.0119	mg/L	0.00532	0.0119	mg/L	0.00532	44.64%
Si 251.611†	552361.4	5370	mg/L	36.2	5370	mg/L	36.2	0.68%
Sn 189.927†	-22.7	-0.00304	mg/L	0.002858	-0.00304	mg/L	0.002858	94.02%
Ti 334.940†	374384.9	0.366	mg/L	0.0015	0.366	mg/L	0.0015	0.41%
Tl 190.801†	-51.6	-0.00826	mg/L	0.002288	-0.00826	mg/L	0.002288	27.69%
V 290.880†	82837.8	0.415	mg/L	0.0035	0.415	mg/L	0.0035	0.84%
Zn 206.200†	1446.9	0.0322	mg/L	0.00031	0.0322	mg/L	0.00031	0.95%
K 766.490†	16057.5	4.90	mg/L	0.040	4.90	mg/L	0.040	0.82%
Na 589.592†	Saturated3							
Sr 407.771†	2008117.6	0.755	mg/L	0.0026	0.755	mg/L	0.0026	0.35%
Li 670.784†	202.7	-0.00060	mg/L	0.000874	-0.00060	mg/L	0.000874	146.20%

Sequence No.: 4
Sample ID: L1204089802
Analyst: KHR
Initial Sample Wt:
Dilution:

Autosampler Location: 28
Date Collected: 5/4/2012 12:17:24 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: L1204089802

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1204089802

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1689790.7						9686.18	0.57%
YRADIAL	259612.3						945.28	0.36%
Ga 417.206	1178689.0						25200.20	2.14%
GaRADIAL	80345.1						243.22	0.30%
Ag 328.068†	497.2	0.00349	mg/L	0.000402	0.00349	mg/L	0.000402	11.52%
Al 396.153†	5870.9	0.790	mg/L	0.0137	0.790	mg/L	0.0137	1.73%
As 188.979†	6665.7	2.20	mg/L	0.038	2.20	mg/L	0.038	1.71%
Ba 233.527†	32413.9	0.195	mg/L	0.0029	0.195	mg/L	0.0029	1.50%
Be 234.861†	1629.9	0.00136	mg/L	0.000022	0.00136	mg/L	0.000022	1.62%
B 249.677†	102043.9	1.08	mg/L	0.035	1.08	mg/L	0.035	3.27%
Ca 227.546†	1491.8	3.34	mg/L	0.080	3.34	mg/L	0.080	2.41%
Cd 228.802†	2640.1	0.0325	mg/L	0.00424	0.0325	mg/L	0.00424	13.05%
Co 228.616†	428.0	0.00968	mg/L	0.000184	0.00968	mg/L	0.000184	1.90%
Cr 267.716†	8525.0	0.0751	mg/L	0.00078	0.0751	mg/L	0.00078	1.04%
Cu 327.393†	105.3	0.00200	mg/L	0.000262	0.00200	mg/L	0.000262	13.08%
Fe 239.562†	4661.1	0.269	mg/L	0.0019	0.269	mg/L	0.0019	0.70%
Mg 279.077†	8950.1	2.40	mg/L	0.023	2.40	mg/L	0.023	0.95%
Mn 257.610†	6596.0	0.00731	mg/L	0.000093	0.00731	mg/L	0.000093	1.27%
Mo 202.031†	917.0	0.0245	mg/L	0.00049	0.0245	mg/L	0.00049	2.00%
Ni 231.604†	15059.9	0.205	mg/L	0.0021	0.205	mg/L	0.0021	1.03%
Pb 220.353†	-74.4	-0.00622	mg/L	0.001529	-0.00622	mg/L	0.001529	24.60%
Sb 206.836†	92.1	0.0263	mg/L	0.00058	0.0263	mg/L	0.00058	2.22%
Se 196.026†	7.8	0.00699	mg/L	0.001828	0.00699	mg/L	0.001828	26.17%
Si 251.611†	517937.8	5030	mg/L	51.9	5030	mg/L	51.9	1.03%
Sn 189.927†	12.3	0.00014	mg/L	0.003931	0.00014	mg/L	0.003931	>999.9%
Ti 334.940†	361665.5	0.354	mg/L	0.0003	0.354	mg/L	0.0003	0.10%
Tl 190.801†	-44.6	-0.00687	mg/L	0.001293	-0.00687	mg/L	0.001293	18.83%
V 290.880†	71271.5	0.357	mg/L	0.0007	0.357	mg/L	0.0007	0.21%
Zn 206.200†	929.2	0.0213	mg/L	0.00027	0.0213	mg/L	0.00027	1.26%
K 766.490†	14570.9	4.44	mg/L	0.069	4.44	mg/L	0.069	1.55%
Na 589.592†	Saturated3							

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Sr 407.771†	1981467.0	0.745	mg/L	0.0051	0.745	mg/L	0.0051	0.69%
Li 670.784†	234.7	-0.00038	mg/L	0.000295	-0.00038	mg/L	0.000295	76.80%

Sequence No.: 5 **Autosampler Location: 29**
Sample ID: L1204097701 **Date Collected: 5/4/2012 12:23:23 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204097701

Analyte	Back Pressure	Flow
All	150.0 kPa	0.50 L/min

Mean Data: L1204097701

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2234575.6						24455.23	1.09%
YRADIAL	297509.7						5777.60	1.94%
Ga 417.206	1404766.6						23091.87	1.64%
GaRADIAL	89536.6						760.79	0.85%
Ag 328.068†	24.5	0.00135	mg/L	0.000462	0.00135	mg/L	0.000462	34.30%
Al 396.153†	-15.8	-0.00910	mg/L	0.000743	-0.00910	mg/L	0.000743	8.17%
As 188.979†	9.2	0.00158	mg/L	0.002113	0.00158	mg/L	0.002113	133.41%
Ba 233.527†	-647.7	-0.00333	mg/L	0.000176	-0.00333	mg/L	0.000176	5.28%
Be 234.861†	13.9	0.00023	mg/L	0.000005	0.00023	mg/L	0.000005	2.26%
B 249.677†	981.1	0.0148	mg/L	0.00015	0.0148	mg/L	0.00015	1.04%
Ca 227.546†	50.6	0.206	mg/L	0.0128	0.206	mg/L	0.0128	6.20%
Cd 228.802†	-0.8	0.00033	mg/L	0.000082	0.00033	mg/L	0.000082	25.10%
Co 228.616†	-3.8	-0.00027	mg/L	0.000154	-0.00027	mg/L	0.000154	57.76%
Cr 267.716†	-143.6	-0.00102	mg/L	0.000130	-0.00102	mg/L	0.000130	12.82%
Cu 327.393†	725.1	0.00373	mg/L	0.000045	0.00373	mg/L	0.000045	1.20%
Fe 239.562†	84.7	0.00249	mg/L	0.000681	0.00249	mg/L	0.000681	27.38%
Mg 279.077†	21.1	-0.00022	mg/L	0.002958	-0.00022	mg/L	0.002958	>999.9%
Mn 257.610†	352.3	0.00006	mg/L	0.000018	0.00006	mg/L	0.000018	32.79%
Mo 202.031†	-1.7	-0.00027	mg/L	0.000186	-0.00027	mg/L	0.000186	68.70%
Ni 231.604†	26.0	-0.00297	mg/L	0.000193	-0.00297	mg/L	0.000193	6.48%
Pb 220.353†	-7.3	-0.00081	mg/L	0.000795	-0.00081	mg/L	0.000795	97.59%
Sb 206.836†	-0.0	0.00453	mg/L	0.001425	0.00453	mg/L	0.001425	31.47%
Se 196.026†	-1.5	0.00214	mg/L	0.001231	0.00214	mg/L	0.001231	57.65%
Si 251.611†	2836.5	27.6	mg/L	1.14	27.6	mg/L	1.14	4.15%
Sn 189.927†	0.4	-0.00095	mg/L	0.001092	-0.00095	mg/L	0.001092	115.34%
Ti 334.940†	309.6	0.00164	mg/L	0.000122	0.00164	mg/L	0.000122	7.43%
Tl 190.801†	4.2	-0.00022	mg/L	0.002806	-0.00022	mg/L	0.002806	>999.9%
V 290.880†	1802.6	0.0107	mg/L	0.00174	0.0107	mg/L	0.00174	16.20%
Zn 206.200†	151.9	0.00411	mg/L	0.000134	0.00411	mg/L	0.000134	3.26%
K 766.490†	144.5	-0.00677	mg/L	0.023728	-0.00677	mg/L	0.023728	350.56%
Na 589.592†	13997.3	0.715	mg/L	0.0911	0.715	mg/L	0.0911	12.74%
Sr 407.771†	791.2	0.00097	mg/L	0.000048	0.00097	mg/L	0.000048	4.92%
Li 670.784†	-91.3	-0.00257	mg/L	0.000305	-0.00257	mg/L	0.000305	11.90%

Sequence No.: 6 **Autosampler Location: 30**
Sample ID: L1204097702 **Date Collected: 5/4/2012 12:30:18 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204097702

Analyte	Back Pressure	Flow
All	150.0 kPa	0.50 L/min

Mean Data: L1204097702

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2272372.4						12226.72	0.54%
YRADIAL	302760.4						2211.69	0.73%
Ga 417.206	1435401.9						14863.28	1.04%

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GaRADIAL	90777.0					2687.05	2.96%
Ag 328.068†	11.3	0.00130	mg/L	0.000380	0.00130 mg/L	0.000380	29.14%
Al 396.153†	-3.4	-0.00741	mg/L	0.000599	-0.00741 mg/L	0.000599	8.09%
As 188.979†	7.9	0.00115	mg/L	0.000754	0.00115 mg/L	0.000754	65.34%
Ba 233.527†	-629.3	-0.00321	mg/L	0.000108	-0.00321 mg/L	0.000108	3.36%
Be 234.861†	61.6	0.00026	mg/L	0.000018	0.00026 mg/L	0.000018	7.05%
B 249.677†	845.5	0.0133	mg/L	0.00012	0.0133 mg/L	0.00012	0.93%
Ca 227.546†	97.2	0.303	mg/L	0.0127	0.303 mg/L	0.0127	4.20%
Cd 228.802†	-10.4	0.00017	mg/L	0.000102	0.00017 mg/L	0.000102	59.52%
Co 228.616†	-5.9	-0.00032	mg/L	0.000235	-0.00032 mg/L	0.000235	73.72%
Cr 267.716†	-132.9	-0.00092	mg/L	0.000082	-0.00092 mg/L	0.000082	8.85%
Cu 327.393†	703.3	0.00365	mg/L	0.000576	0.00365 mg/L	0.000576	15.76%
Fe 239.562†	144.9	0.00599	mg/L	0.000234	0.00599 mg/L	0.000234	3.91%
Mg 279.077†	58.6	0.00983	mg/L	0.002007	0.00983 mg/L	0.002007	20.42%
Mn 257.610†	462.5	0.00018	mg/L	0.000013	0.00018 mg/L	0.000013	7.09%
Mo 202.031†	-8.6	-0.00046	mg/L	0.000185	-0.00046 mg/L	0.000185	40.45%
Ni 231.604†	20.9	-0.00304	mg/L	0.000138	-0.00304 mg/L	0.000138	4.53%
Pb 220.353†	-1.4	-0.00032	mg/L	0.000936	-0.00032 mg/L	0.000936	290.84%
Sb 206.836†	0.4	0.00462	mg/L	0.001812	0.00462 mg/L	0.001812	39.25%
Se 196.026†	-5.1	0.00039	mg/L	0.001135	0.00039 mg/L	0.001135	292.46%
Si 251.611†	2164.2	21.0	mg/L	0.38	21.0 mg/L	0.38	1.80%
Sn 189.927†	4.9	-0.00053	mg/L	0.000831	-0.00053 mg/L	0.000831	155.87%
Ti 334.940†	253.5	0.00160	mg/L	0.000103	0.00160 mg/L	0.000103	6.46%
Tl 190.801†	-0.6	-0.00139	mg/L	0.002219	-0.00139 mg/L	0.002219	160.17%
V 290.880†	1398.4	0.00870	mg/L	0.001525	0.00870 mg/L	0.001525	17.52%
Zn 206.200†	158.0	0.00424	mg/L	0.000088	0.00424 mg/L	0.000088	2.07%
K 766.490†	141.6	-0.00767	mg/L	0.017815	-0.00767 mg/L	0.017815	232.32%
Na 589.592†	13704.9	0.700	mg/L	0.0498	0.700 mg/L	0.0498	7.11%
Sr 407.771†	1859.7	0.00137	mg/L	0.000009	0.00137 mg/L	0.000009	0.69%
Li 670.784†	16.0	-0.00185	mg/L	0.000484	-0.00185 mg/L	0.000484	26.19%

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Sequence No.: 7 **Autosampler Location: 31**
Sample ID: L1204097703 **Date Collected: 5/4/2012 12:37:13 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204097703

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1204097703

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2304004.9						43834.59	1.90%
YRADIAL	301766.0						6030.02	2.00%
Ga 417.206	1423319.6						19020.89	1.34%
GaRADIAL	90583.9						1436.26	1.59%
Ag 328.068†	123.3	0.00165	mg/L	0.000610	0.00165	mg/L	0.000610	37.05%
Al 396.153†	-32.1	-0.0113	mg/L	0.00142	-0.0113	mg/L	0.00142	12.61%
As 188.979†	5.7	0.00043	mg/L	0.001687	0.00043	mg/L	0.001687	388.88%
Ba 233.527†	-703.5	-0.00366	mg/L	0.000142	-0.00366	mg/L	0.000142	3.88%
Be 234.861†	19.9	0.00023	mg/L	0.000045	0.00023	mg/L	0.000045	19.30%
B 249.677†	699.8	0.0118	mg/L	0.00021	0.0118	mg/L	0.00021	1.76%
Ca 227.546†	4.1	0.110	mg/L	0.0154	0.110	mg/L	0.0154	13.98%
Cd 228.802†	-6.5	0.00024	mg/L	0.000200	0.00024	mg/L	0.000200	83.65%
Co 228.616†	-10.7	-0.00044	mg/L	0.000287	-0.00044	mg/L	0.000287	65.73%
Cr 267.716†	-159.8	-0.00116	mg/L	0.000116	-0.00116	mg/L	0.000116	9.97%
Cu 327.393†	394.3	0.00253	mg/L	0.000134	0.00253	mg/L	0.000134	5.29%
Fe 239.562†	43.1	0.00007	mg/L	0.000299	0.00007	mg/L	0.000299	447.99%
Mg 279.077†	-10.5	-0.00873	mg/L	0.002822	-0.00873	mg/L	0.002822	32.34%
Mn 257.610†	94.4	-0.00024	mg/L	0.000016	-0.00024	mg/L	0.000016	6.80%
Mo 202.031†	-19.4	-0.00075	mg/L	0.000313	-0.00075	mg/L	0.000313	41.95%
Ni 231.604†	5.1	-0.00326	mg/L	0.000121	-0.00326	mg/L	0.000121	3.70%
Pb 220.353†	-5.3	-0.00064	mg/L	0.000551	-0.00064	mg/L	0.000551	85.58%
Sb 206.836†	-0.2	0.00449	mg/L	0.000867	0.00449	mg/L	0.000867	19.33%
Se 196.026†	-3.8	0.00102	mg/L	0.003694	0.00102	mg/L	0.003694	360.73%
Si 251.611†	1019.1	9.92	mg/L	0.291	9.92	mg/L	0.291	2.93%
Sn 189.927†	8.0	-0.00026	mg/L	0.000754	-0.00026	mg/L	0.000754	295.11%

Approved: May 07, 2012

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Ti 334.940†	100.3	0.00142 mg/L	0.000072	0.00142 mg/L	0.000072	5.06%
Tl 190.801†	-4.8	-0.00240 mg/L	0.001892	-0.00240 mg/L	0.001892	78.95%
V 290.880†	1302.8	0.00823 mg/L	0.001753	0.00823 mg/L	0.001753	21.31%
Zn 206.200†	86.8	0.00272 mg/L	0.000216	0.00272 mg/L	0.000216	7.95%
K 766.490†	-1.1	-0.0512 mg/L	0.01170	-0.0512 mg/L	0.01170	22.87%
Na 589.592†	4657.0	0.245 mg/L	0.0282	0.245 mg/L	0.0282	11.53%
Sr 407.771†	-238.6	0.00058 mg/L	0.000079	0.00058 mg/L	0.000079	13.46%
Li 670.784†	-96.7	-0.00260 mg/L	0.000143	-0.00260 mg/L	0.000143	5.49%

Sequence No.: 8 **Autosampler Location: 32**
Sample ID: L1204097704 **Date Collected: 5/4/2012 12:44:08 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204097704

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1204097704

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2325055.1						22892.20	0.98%
YRADIAL	311361.9						10493.33	3.37%
Ga 417.206	1467340.1						19555.23	1.33%
GaRADIAL	93568.0						1978.16	2.11%
Ag 328.068†	53.8	0.00144	mg/L	0.000427	0.00144	mg/L	0.000427	29.74%
Al 396.153†	-31.8	-0.0112	mg/L	0.00216	-0.0112	mg/L	0.00216	19.16%
As 188.979†	4.6	0.00009	mg/L	0.001889	0.00009	mg/L	0.001889	>999.9%
Ba 233.527†	-691.7	-0.00359	mg/L	0.000087	-0.00359	mg/L	0.000087	2.43%
Be 234.861†	59.5	0.00026	mg/L	0.000026	0.00026	mg/L	0.000026	9.97%
B 249.677†	646.1	0.0112	mg/L	0.00008	0.0112	mg/L	0.00008	0.68%
Ca 227.546†	8.3	0.119	mg/L	0.0247	0.119	mg/L	0.0247	20.77%
Cd 228.802†	-9.2	0.00020	mg/L	0.000232	0.00020	mg/L	0.000232	117.77%
Co 228.616†	-0.6	-0.00019	mg/L	0.000116	-0.00019	mg/L	0.000116	61.77%
Cr 267.716†	-128.9	-0.00089	mg/L	0.000046	-0.00089	mg/L	0.000046	5.22%
Cu 327.393†	264.1	0.00206	mg/L	0.000245	0.00206	mg/L	0.000245	11.89%
Fe 239.562†	158.5	0.00678	mg/L	0.000645	0.00678	mg/L	0.000645	9.51%
Mg 279.077†	-12.8	-0.00935	mg/L	0.001773	-0.00935	mg/L	0.001773	18.95%
Mn 257.610†	32.2	-0.00031	mg/L	0.000017	-0.00031	mg/L	0.000017	5.36%
Mo 202.031†	-21.8	-0.00081	mg/L	0.000301	-0.00081	mg/L	0.000301	37.16%
Ni 231.604†	4.6	-0.00327	mg/L	0.000140	-0.00327	mg/L	0.000140	4.28%
Pb 220.353†	-2.0	-0.00037	mg/L	0.001023	-0.00037	mg/L	0.001023	274.93%
Sb 206.836†	1.7	0.00490	mg/L	0.000178	0.00490	mg/L	0.000178	3.63%
Se 196.026†	-3.0	0.00142	mg/L	0.002286	0.00142	mg/L	0.002286	160.67%
Si 251.611†	781.6	7.61	mg/L	0.265	7.61	mg/L	0.265	3.48%
Sn 189.927†	-0.6	-0.00103	mg/L	0.000384	-0.00103	mg/L	0.000384	37.28%
Ti 334.940†	178.6	0.00150	mg/L	0.000146	0.00150	mg/L	0.000146	9.78%
Tl 190.801†	-1.8	-0.00167	mg/L	0.002456	-0.00167	mg/L	0.002456	147.12%
V 290.880†	1300.7	0.00821	mg/L	0.001046	0.00821	mg/L	0.001046	12.73%
Zn 206.200†	100.4	0.00301	mg/L	0.000123	0.00301	mg/L	0.000123	4.07%
K 766.490†	-25.3	-0.0586	mg/L	0.01423	-0.0586	mg/L	0.01423	24.27%
Na 589.592†	5187.2	0.272	mg/L	0.0510	0.272	mg/L	0.0510	18.78%
Sr 407.771†	-94.1	0.00064	mg/L	0.000026	0.00064	mg/L	0.000026	4.12%
Li 670.784†	-49.2	-0.00228	mg/L	0.000026	-0.00228	mg/L	0.000026	1.14%

Sequence No.: 9 **Autosampler Location: 33**
Sample ID: L1204097704PS WG396793-01 **Date Collected: 5/4/2012 12:51:04 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204097704PS WG396793-01

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Approved: May 07, 2012

Kym H. Rhoden

Mean Data: L1204097704PS WG396793-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2368405.6						37534.82	1.58%
YRADIAL	314153.1						5526.56	1.76%
Ga 417.206	1411664.7						38840.78	2.75%
GaRADIAL	92164.6						1371.42	1.49%
Ag 328.068†	62797.3	0.197	mg/L	0.0043	0.197	mg/L	0.0043	2.19%
Al 396.153†	35251.4	4.76	mg/L	0.011	4.76	mg/L	0.011	0.22%
As 188.979†	565.7	0.183	mg/L	0.0019	0.183	mg/L	0.0019	1.04%
Ba 233.527†	79559.6	0.478	mg/L	0.0117	0.478	mg/L	0.0117	2.45%
Be 234.861†	31526.4	0.0229	mg/L	0.00052	0.0229	mg/L	0.00052	2.25%
B 249.677†	89197.9	0.946	mg/L	0.0279	0.946	mg/L	0.0279	2.95%
Ca 227.546†	2171.8	4.81	mg/L	0.130	4.81	mg/L	0.130	2.70%
Cd 228.802†	1398.2	0.0225	mg/L	0.00120	0.0225	mg/L	0.00120	5.31%
Co 228.616†	3929.2	0.0974	mg/L	0.00160	0.0974	mg/L	0.00160	1.65%
Cr 267.716†	27546.3	0.242	mg/L	0.0036	0.242	mg/L	0.0036	1.48%
Cu 327.393†	66321.4	0.242	mg/L	0.0059	0.242	mg/L	0.0059	2.43%
Fe 239.562†	32118.9	1.87	mg/L	0.002	1.87	mg/L	0.002	0.10%
Mg 279.077†	17946.8	4.82	mg/L	0.026	4.82	mg/L	0.026	0.53%
Mn 257.610†	213027.8	0.244	mg/L	0.0068	0.244	mg/L	0.0068	2.78%
Mo 202.031†	18741.5	0.501	mg/L	0.0124	0.501	mg/L	0.0124	2.48%
Ni 231.604†	17750.5	0.242	mg/L	0.0059	0.242	mg/L	0.0059	2.45%
Pb 220.353†	2859.1	0.241	mg/L	0.0038	0.241	mg/L	0.0038	1.57%
Sb 206.836†	2491.1	0.553	mg/L	0.0174	0.553	mg/L	0.0174	3.14%
Se 196.026†	370.5	0.186	mg/L	0.0091	0.186	mg/L	0.0091	4.89%
Si 251.611†	108170.9	1050	mg/L	12.7	1050	mg/L	12.7	1.21%
Sn 189.927†	5544.6	0.502	mg/L	0.0072	0.502	mg/L	0.0072	1.43%
Ti 334.940†	490641.3	0.479	mg/L	0.0009	0.479	mg/L	0.0009	0.20%
Tl 190.801†	1014.9	0.252	mg/L	0.0023	0.252	mg/L	0.0023	0.93%
V 290.880†	98826.2	0.495	mg/L	0.0093	0.495	mg/L	0.0093	1.88%
Zn 206.200†	22884.2	0.488	mg/L	0.0097	0.488	mg/L	0.0097	2.00%
K 766.490†	77462.6	23.9	mg/L	0.14	23.9	mg/L	0.14	0.58%
Na 589.592†	490195.4	24.9	mg/L	0.62	24.9	mg/L	0.62	2.50%
Sr 407.771†	1293278.2	0.486	mg/L	0.0154	0.486	mg/L	0.0154	3.17%
Li 670.784†	75578.0	0.504	mg/L	0.0032	0.504	mg/L	0.0032	0.63%

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Sequence No.: 10 **Autosampler Location: 34**
Sample ID: L1204097704DL WG396793-02 **Date Collected: 5/4/2012 12:57:04 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204097704DL WG396793-02

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1204097704DL WG396793-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2285968.3						37523.78	1.64%
YRADIAL	295067.9						3819.38	1.29%
Ga 417.206	1382882.7						18280.21	1.32%
GaRADIAL	91589.6						753.58	0.82%
Ag 328.068†	159.7	0.00176	mg/L	0.000148	0.00176	mg/L	0.000148	8.40%
Al 396.153†	-22.5	-0.00998	mg/L	0.001328	-0.00998	mg/L	0.001328	13.30%
As 188.979†	4.4	0.00001	mg/L	0.000764	0.00001	mg/L	0.000764	>999.9%
Ba 233.527†	-707.8	-0.00368	mg/L	0.000085	-0.00368	mg/L	0.000085	2.30%
Be 234.861†	-65.3	0.00017	mg/L	0.000016	0.00017	mg/L	0.000016	9.27%
B 249.677†	694.7	0.0117	mg/L	0.00025	0.0117	mg/L	0.00025	2.13%
Ca 227.546†	-1.1	0.0993	mg/L	0.02364	0.0993	mg/L	0.02364	23.81%
Cd 228.802†	-1.9	0.00032	mg/L	0.000076	0.00032	mg/L	0.000076	24.09%
Co 228.616†	-6.3	-0.00033	mg/L	0.000270	-0.00033	mg/L	0.000270	82.29%
Cr 267.716†	-154.1	-0.00111	mg/L	0.000155	-0.00111	mg/L	0.000155	13.97%
Cu 327.393†	288.7	0.00215	mg/L	0.000194	0.00215	mg/L	0.000194	9.02%
Fe 239.562†	50.0	0.00047	mg/L	0.000728	0.00047	mg/L	0.000728	154.26%
Mg 279.077†	-8.7	-0.00824	mg/L	0.003702	-0.00824	mg/L	0.003702	44.93%
Mn 257.610†	68.4	-0.00027	mg/L	0.000010	-0.00027	mg/L	0.000010	3.86%
Mo 202.031†	-14.8	-0.00062	mg/L	0.000120	-0.00062	mg/L	0.000120	19.26%

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Ni 231.604†	-7.8	-0.00344 mg/L	0.000293	-0.00344 mg/L	0.000293	8.52%
Pb 220.353†	8.2	0.00049 mg/L	0.000278	0.00049 mg/L	0.000278	57.09%
Sb 206.836†	2.9	0.00516 mg/L	0.000931	0.00516 mg/L	0.000931	18.03%
Se 196.026†	-0.2	0.00279 mg/L	0.001464	0.00279 mg/L	0.001464	52.53%
Si 251.611†	615.9	6.00 mg/L	0.350	6.00 mg/L	0.350	5.84%
Sn 189.927†	5.9	-0.00044 mg/L	0.000290	-0.00044 mg/L	0.000290	65.47%
Ti 334.940†	135.5	0.00145 mg/L	0.000078	0.00145 mg/L	0.000078	5.35%
Tl 190.801†	-0.4	-0.00134 mg/L	0.001666	-0.00134 mg/L	0.001666	123.98%
V 290.880†	1020.8	0.00682 mg/L	0.003795	0.00682 mg/L	0.003795	55.68%
Zn 206.200†	121.4	0.00346 mg/L	0.000103	0.00346 mg/L	0.000103	2.99%
K 766.490†	4.1	-0.0496 mg/L	0.01001	-0.0496 mg/L	0.01001	20.20%
Na 589.592†	4406.7	0.232 mg/L	0.0601	0.232 mg/L	0.0601	25.85%
Sr 407.771†	-66.6	0.00065 mg/L	0.000021	0.00065 mg/L	0.000021	3.19%
Li 670.784†	-23.4	-0.00211 mg/L	0.000594	-0.00211 mg/L	0.000594	28.12%

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Sequence No.: 11 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 5/4/2012 1:04:36 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	151.0 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	2328047.1						38108.82	1.64%
YRADIAL	309108.8						2363.65	0.76%
Ga 417.206	1352327.4						46220.30	3.42%
GaRADIAL	91267.7						419.90	0.46%
Ag 328.068†	130003.8	0.406	mg/L	0.0133	0.406	mg/L	0.0133	3.27%
QC value within limits for Ag 328.068 Recovery = 101.44%								
Al 396.153†	71699.0	9.68	mg/L	0.049	9.68	mg/L	0.049	0.51%
QC value within limits for Al 396.153 Recovery = 96.81%								
As 188.979†	1188.5	0.386	mg/L	0.0095	0.386	mg/L	0.0095	2.46%
QC value within limits for As 188.979 Recovery = 96.40%								
Ba 233.527†	163062.9	0.979	mg/L	0.0158	0.979	mg/L	0.0158	1.62%
QC value within limits for Ba 233.527 Recovery = 97.85%								
Be 234.861†	65894.3	0.0476	mg/L	0.00145	0.0476	mg/L	0.00145	3.04%
QC value within limits for Be 234.861 Recovery = 95.26%								
B 249.677†	46801.3	0.495	mg/L	0.0197	0.495	mg/L	0.0197	3.98%
QC value within limits for B 249.677 Recovery = 99.09%								
Ca 227.546†	4653.6	10.2	mg/L	0.36	10.2	mg/L	0.36	3.58%
QC value within limits for Ca 227.546 Recovery = 101.66%								
Cd 228.802†	2943.8	0.0471	mg/L	0.00232	0.0471	mg/L	0.00232	4.93%
QC value within limits for Cd 228.802 Recovery = 94.10%								
Co 228.616†	7951.7	0.197	mg/L	0.0047	0.197	mg/L	0.0047	2.36%
QC value within limits for Co 228.616 Recovery = 98.61%								
Cr 267.716†	56215.4	0.493	mg/L	0.0080	0.493	mg/L	0.0080	1.62%
QC value within limits for Cr 267.716 Recovery = 98.60%								
Cu 327.393†	137131.9	0.499	mg/L	0.0171	0.499	mg/L	0.0171	3.43%
QC value within limits for Cu 327.393 Recovery = 99.90%								
Fe 239.562†	65635.3	3.81	mg/L	0.038	3.81	mg/L	0.038	0.98%
QC value within limits for Fe 239.562 Recovery = 95.36%								
Mg 279.077†	36031.1	9.68	mg/L	0.116	9.68	mg/L	0.116	1.20%
QC value within limits for Mg 279.077 Recovery = 96.83%								
Mn 257.610†	438371.4	0.503	mg/L	0.0096	0.503	mg/L	0.0096	1.91%
QC value within limits for Mn 257.610 Recovery = 100.69%								
Mo 202.031†	37967.5	1.02	mg/L	0.022	1.02	mg/L	0.022	2.21%
QC value within limits for Mo 202.031 Recovery = 101.53%								
Ni 231.604†	35495.8	0.488	mg/L	0.0128	0.488	mg/L	0.0128	2.62%
QC value within limits for Ni 231.604 Recovery = 97.59%								
Pb 220.353†	5851.7	0.494	mg/L	0.0108	0.494	mg/L	0.0108	2.18%
QC value within limits for Pb 220.353 Recovery = 98.75%								
Sb 206.836†	5201.5	1.15	mg/L	0.038	1.15	mg/L	0.038	3.27%
QC value within limits for Sb 206.836 Recovery = 95.77%								
Se 196.026†	757.9	0.376	mg/L	0.0135	0.376	mg/L	0.0135	3.57%

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   QC value within limits for Se 196.026  Recovery = 94.12%
Si 251.611†          219112.4        2130 mg/L          62.8        2130 mg/L          62.8   2.95%
   QC value greater than the upper limit for Si 251.611  Recovery = 42582.06%
Sn 189.927†           11149.2        1.01 mg/L         0.020        1.01 mg/L         0.020   1.99%
   QC value within limits for Sn 189.927  Recovery = 101.07%
Ti 334.940†          993363.1       0.969 mg/L        0.0015       0.969 mg/L        0.0015   0.15%
   QC value within limits for Ti 334.940  Recovery = 96.89%
Tl 190.801†            2032.6       0.506 mg/L        0.0069       0.506 mg/L        0.0069   1.36%
   QC value within limits for Tl 190.801  Recovery = 101.22%
V 290.880†           201574.2        1.01 mg/L         0.011        1.01 mg/L         0.011   1.07%
   QC value within limits for V 290.880  Recovery = 100.82%
Zn 206.200†           45924.2       0.979 mg/L        0.0213       0.979 mg/L        0.0213   2.17%
   QC value within limits for Zn 206.200  Recovery = 97.88%
K 766.490†           157823.2        48.9 mg/L          0.39        48.9 mg/L          0.39   0.80%
   QC value within limits for K 766.490  Recovery = 97.74%
Na 589.592†          954969.9        48.8 mg/L          0.69        48.8 mg/L          0.69   1.40%
   QC value within limits for Na 589.592  Recovery = 97.66%
Sr 407.771†         2601891.7       0.978 mg/L        0.0069       0.978 mg/L        0.0069   0.70%
   QC value within limits for Sr 407.771  Recovery = 97.76%
Li 670.784†          150556.7        1.01 mg/L         0.006        1.01 mg/L         0.006   0.59%
   QC value within limits for Li 670.784  Recovery = 100.62%
QC Failed.  Continue with analysis.

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Sequence No.: 12                                    Autosampler Location: 1
Sample ID: CCB                                      Date Collected: 5/4/2012 1:10:37 PM
Analyst:                                            Data Type: Original
Initial Sample Wt:                                  Initial Sample Vol:
Dilution:                                           Sample Prep Vol:

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Nebulizer Parameters: CCB
Analyte                 Back Pressure    Flow
All                    150.0 kPa         0.50 L/min

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Mean Data: CCB
                  Mean Corrected         Calib.                          Sample
Analyte              Intensity      Conc. Units      Std.Dev.      Conc. Units      Std.Dev.   RSD
Y 371.029            2302263.2                                                      5283.59   0.23%
YRADIAL               293617.4                                                      5419.95   1.85%
Ga 417.206           1380898.1                                                     11514.84   0.83%
GaRADIAL               88257.7                                                       466.60   0.53%
Ag 328.068†              184.4     0.00183 mg/L      0.000435     0.00183 mg/L      0.000435  23.72%
   QC value within limits for Ag 328.068  Recovery = Not calculated
Al 396.153†              -27.2     -0.0106 mg/L       0.00154     -0.0106 mg/L       0.00154  14.42%
   QC value within limits for Al 396.153  Recovery = Not calculated
As 188.979†               -5.1    -0.00314 mg/L      0.001591    -0.00314 mg/L      0.001591  50.69%
   QC value within limits for As 188.979  Recovery = Not calculated
Ba 233.527†             -672.5    -0.00347 mg/L      0.000095    -0.00347 mg/L      0.000095   2.74%
   QC value within limits for Ba 233.527  Recovery = Not calculated
Be 234.861†               -9.0     0.00021 mg/L      0.000020     0.00021 mg/L      0.000020   9.39%
   QC value within limits for Be 234.861  Recovery = Not calculated
B 249.677†               671.1      0.0115 mg/L       0.00019      0.0115 mg/L       0.00019   1.63%
   QC value within limits for B 249.677  Recovery = Not calculated
Ca 227.546†                5.6       0.113 mg/L        0.0115       0.113 mg/L        0.0115  10.18%
   QC value greater than the upper limit for Ca 227.546  Recovery = Not calculated
Cd 228.802†               -4.7     0.00029 mg/L      0.000158     0.00029 mg/L      0.000158  55.22%
   QC value within limits for Cd 228.802  Recovery = Not calculated
Co 228.616†               -3.5    -0.00026 mg/L      0.000060    -0.00026 mg/L      0.000060  23.53%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†             -152.2    -0.00109 mg/L      0.000076    -0.00109 mg/L      0.000076   6.99%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 327.393†              357.6     0.00240 mg/L      0.000547     0.00240 mg/L      0.000547  22.78%
   QC value within limits for Cu 327.393  Recovery = Not calculated
Fe 239.562†               31.1    -0.00063 mg/L      0.000248    -0.00063 mg/L      0.000248  39.66%
   QC value within limits for Fe 239.562  Recovery = Not calculated
Mg 279.077†               -2.9    -0.00666 mg/L      0.001368    -0.00666 mg/L      0.001368  20.54%
   QC value within limits for Mg 279.077  Recovery = Not calculated
Mn 257.610†                1.1    -0.00035 mg/L      0.000009    -0.00035 mg/L      0.000009   2.50%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -8.2    -0.00045 mg/L      0.000269    -0.00045 mg/L      0.000269  60.31%
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   QC value within limits for Mo 202.031  Recovery = Not calculated
Ni 231.604†                1.1    -0.00332 mg/L      0.000346    -0.00332 mg/L      0.000346  10.44%
   QC value within limits for Ni 231.604  Recovery = Not calculated
Pb 220.353†               -6.1    -0.00071 mg/L      0.001291    -0.00071 mg/L      0.001291 181.33%
   QC value within limits for Pb 220.353  Recovery = Not calculated
Sb 206.836†                1.3     0.00481 mg/L      0.000784     0.00481 mg/L      0.000784  16.32%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                0.7     0.00323 mg/L      0.002096     0.00323 mg/L      0.002096  64.87%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              471.6        4.60 mg/L         0.150        4.60 mg/L         0.150   3.26%
   QC value greater than the upper limit for Si 251.611  Recovery = Not calculated
Sn 189.927†               17.6     0.00062 mg/L      0.000671     0.00062 mg/L      0.000671 108.60%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Ti 334.940†              157.0     0.00147 mg/L      0.000056     0.00147 mg/L      0.000056   3.77%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -3.4    -0.00207 mg/L      0.004526    -0.00207 mg/L      0.004526 218.75%
   QC value within limits for Tl 190.801  Recovery = Not calculated
V 290.880†               1192.3     0.00767 mg/L      0.001315     0.00767 mg/L      0.001315  17.14%
   QC value within limits for V 290.880  Recovery = Not calculated
Zn 206.200†               21.3     0.00134 mg/L      0.000026     0.00134 mg/L      0.000026   1.94%
   QC value within limits for Zn 206.200  Recovery = Not calculated
K 766.490†                 5.8     -0.0490 mg/L       0.01911     -0.0490 mg/L       0.01911  39.00%
   QC value within limits for K 766.490  Recovery = Not calculated
Na 589.592†              3666.2       0.195 mg/L        0.0409       0.195 mg/L        0.0409  20.97%
   QC value within limits for Na 589.592  Recovery = Not calculated
Sr 407.771†              240.3     0.00076 mg/L      0.000056     0.00076 mg/L      0.000056   7.37%
   QC value within limits for Sr 407.771  Recovery = Not calculated
Li 670.784†              -38.9    -0.00222 mg/L      0.000373    -0.00222 mg/L      0.000373  16.83%
   QC value within limits for Li 670.784  Recovery = Not calculated
QC Failed.  Continue with analysis.
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Sequence No.: 13 **Autosampler Location: 35**
Sample ID: L1204097705 **Date Collected: 5/4/2012 1:17:30 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204097705

Analyte	**Back Pressure**	**Flow**
All	150.0 kPa	0.50 L/min

Mean Data: L1204097705

Analyte	**Mean Corrected Intensity**	**Calib. Conc.**	**Units**	**Std.Dev.**	**Sample Conc.**	**Units**	**Std.Dev.**	**RSD**
Y 371.029	2332488.5						21683.21	0.93%
YRADIAL	294290.9						6086.65	2.07%
Ga 417.206	1417776.6						9158.69	0.65%
GaRADIAL	88580.5						1039.15	1.17%
Ag 328.068†	2.1	0.00127	mg/L	0.000256	0.00127	mg/L	0.000256	20.10%
Al 396.153†	-32.3	-0.0113	mg/L	0.00249	-0.0113	mg/L	0.00249	21.98%
As 188.979†	3.8	-0.00020	mg/L	0.001452	-0.00020	mg/L	0.001452	736.60%
Ba 233.527†	-663.9	-0.00342	mg/L	0.000095	-0.00342	mg/L	0.000095	2.78%
Be 234.861†	19.2	0.00023	mg/L	0.000018	0.00023	mg/L	0.000018	7.56%
B 249.677†	612.5	0.0109	mg/L	0.00029	0.0109	mg/L	0.00029	2.70%
Ca 227.546†	1.1	0.104	mg/L	0.0105	0.104	mg/L	0.0105	10.06%
Cd 228.802†	-2.1	0.00031	mg/L	0.000103	0.00031	mg/L	0.000103	32.75%
Co 228.616†	-5.0	-0.00030	mg/L	0.000070	-0.00030	mg/L	0.000070	23.74%
Cr 267.716†	-142.0	-0.00100	mg/L	0.000177	-0.00100	mg/L	0.000177	17.64%
Cu 327.393†	314.7	0.00225	mg/L	0.000165	0.00225	mg/L	0.000165	7.33%
Fe 239.562†	99.1	0.00332	mg/L	0.000595	0.00332	mg/L	0.000595	17.90%
Mg 279.077†	-6.1	-0.00754	mg/L	0.001722	-0.00754	mg/L	0.001722	22.84%
Mn 257.610†	115.7	-0.00022	mg/L	0.000035	-0.00022	mg/L	0.000035	15.96%
Mo 202.031†	-18.5	-0.00072	mg/L	0.000275	-0.00072	mg/L	0.000275	38.07%
Ni 231.604†	13.5	-0.00315	mg/L	0.000267	-0.00315	mg/L	0.000267	8.48%
Pb 220.353†	-10.2	-0.00106	mg/L	0.000854	-0.00106	mg/L	0.000854	80.79%
Sb 206.836†	2.3	0.00503	mg/L	0.000573	0.00503	mg/L	0.000573	11.40%
Se 196.026†	1.2	0.00345	mg/L	0.000788	0.00345	mg/L	0.000788	22.83%
Si 251.611†	587.1	5.72	mg/L	0.031	5.72	mg/L	0.031	0.55%
Sn 189.927†	4.6	-0.00056	mg/L	0.000414	-0.00056	mg/L	0.000414	73.80%

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Ti 334.940†	298.5	0.00161	mg/L	0.000087	0.00161	mg/L	0.000087	5.39%
Tl 190.801†	3.5	-0.00038	mg/L	0.000381	-0.00038	mg/L	0.000381	99.48%
V 290.880†	1303.9	0.00823	mg/L	0.002514	0.00823	mg/L	0.002514	30.54%
Zn 206.200†	93.2	0.00286	mg/L	0.000160	0.00286	mg/L	0.000160	5.58%
K 766.490†	-18.6	-0.0565	mg/L	0.02075	-0.0565	mg/L	0.02075	36.76%
Na 589.592†	3106.9	0.167	mg/L	0.0286	0.167	mg/L	0.0286	17.12%
Sr 407.771†	-51.7	0.00065	mg/L	0.000022	0.00065	mg/L	0.000022	3.34%
Li 670.784†	-36.7	-0.00220	mg/L	0.000589	-0.00220	mg/L	0.000589	26.75%

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Sequence No.: 14 **Autosampler Location: 36**
Sample ID: L1204097706 **Date Collected: 5/4/2012 1:24:23 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204097706

Analyte	Back Pressure	Flow
All	150.0 kPa	0.50 L/min

Mean Data: L1204097706

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2339284.8						14517.16	0.62%
YRADIAL	307747.5						4335.86	1.41%
Ga 417.206	1423627.9						51282.10	3.60%
GaRADIAL	92476.3						1651.41	1.79%
Ag 328.068†	183.6	0.00183	mg/L	0.000192	0.00183	mg/L	0.000192	10.47%
Al 396.153†	-6.9	-0.00785	mg/L	0.002479	-0.00785	mg/L	0.002479	31.56%
As 188.979†	2.3	-0.00066	mg/L	0.003441	-0.00066	mg/L	0.003441	518.88%
Ba 233.527†	-642.2	-0.00329	mg/L	0.000127	-0.00329	mg/L	0.000127	3.86%
Be 234.861†	22.5	0.00023	mg/L	0.000030	0.00023	mg/L	0.000030	12.82%
B 249.677†	780.0	0.0126	mg/L	0.00040	0.0126	mg/L	0.00040	3.19%
Ca 227.546†	63.2	0.233	mg/L	0.0150	0.233	mg/L	0.0150	6.45%
Cd 228.802†	-9.8	0.00019	mg/L	0.000122	0.00019	mg/L	0.000122	64.17%
Co 228.616†	-10.2	-0.00043	mg/L	0.000063	-0.00043	mg/L	0.000063	14.91%
Cr 267.716†	-148.6	-0.00106	mg/L	0.000196	-0.00106	mg/L	0.000196	18.46%
Cu 327.393†	720.2	0.00371	mg/L	0.000321	0.00371	mg/L	0.000321	8.66%
Fe 239.562†	104.3	0.00363	mg/L	0.000155	0.00363	mg/L	0.000155	4.27%
Mg 279.077†	18.6	-0.00092	mg/L	0.002904	-0.00092	mg/L	0.002904	314.96%
Mn 257.610†	254.6	-0.00006	mg/L	0.000006	-0.00006	mg/L	0.000006	9.95%
Mo 202.031†	-23.7	-0.00086	mg/L	0.000328	-0.00086	mg/L	0.000328	38.09%
Ni 231.604†	9.5	-0.00320	mg/L	0.000224	-0.00320	mg/L	0.000224	6.99%
Pb 220.353†	3.4	0.00009	mg/L	0.001450	0.00009	mg/L	0.001450	>999.9%
Sb 206.836†	0.9	0.00473	mg/L	0.000821	0.00473	mg/L	0.000821	17.34%
Se 196.026†	-2.5	0.00167	mg/L	0.003080	0.00167	mg/L	0.003080	184.91%
Si 251.611†	1438.6	14.0	mg/L	0.89	14.0	mg/L	0.89	6.34%
Sn 189.927†	2.0	-0.00080	mg/L	0.000200	-0.00080	mg/L	0.000200	25.13%
Ti 334.940†	247.1	0.00158	mg/L	0.000123	0.00158	mg/L	0.000123	7.77%
Tl 190.801†	-1.1	-0.00151	mg/L	0.003334	-0.00151	mg/L	0.003334	221.40%
V 290.880†	1003.5	0.00673	mg/L	0.002958	0.00673	mg/L	0.002958	43.95%
Zn 206.200†	152.2	0.00411	mg/L	0.000265	0.00411	mg/L	0.000265	6.44%
K 766.490†	70.9	-0.0290	mg/L	0.01262	-0.0290	mg/L	0.01262	43.52%
Na 589.592†	5138.8	0.269	mg/L	0.0849	0.269	mg/L	0.0849	31.53%
Sr 407.771†	961.7	0.00103	mg/L	0.000033	0.00103	mg/L	0.000033	3.21%
Li 670.784†	-8.3	-0.00201	mg/L	0.000438	-0.00201	mg/L	0.000438	21.77%

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Sequence No.: 15 **Autosampler Location: 37**
Sample ID: L1204097707 **Date Collected: 5/4/2012 1:31:16 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204097707

Analyte	Back Pressure	Flow
All	150.0 kPa	0.50 L/min

Approved: May 07, 2012

Lynn H. Rhoden

Mean Data: L1204097707

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	2359678.8						8775.49	0.37%
YRADIAL	309037.3						3741.89	1.21%
Ga 417.206	1429846.2						12098.13	0.85%
GaRADIAL	92479.9						1671.54	1.81%
Ag 328.068†	58.1	0.00144	mg/L	0.000069	0.00144	mg/L	0.000069	4.76%
Al 396.153†	-21.6	-0.00986	mg/L	0.000497	-0.00986	mg/L	0.000497	5.04%
As 188.979†	5.1	0.00023	mg/L	0.001795	0.00023	mg/L	0.001795	777.82%
Ba 233.527†	-649.6	-0.00334	mg/L	0.000112	-0.00334	mg/L	0.000112	3.35%
Be 234.861†	46.7	0.00025	mg/L	0.000033	0.00025	mg/L	0.000033	13.09%
B 249.677†	656.2	0.0113	mg/L	0.00017	0.0113	mg/L	0.00017	1.47%
Ca 227.546†	45.1	0.195	mg/L	0.0304	0.195	mg/L	0.0304	15.57%
Cd 228.802†	1.9	0.00038	mg/L	0.000192	0.00038	mg/L	0.000192	50.72%
Co 228.616†	-5.0	-0.00030	mg/L	0.000113	-0.00030	mg/L	0.000113	38.09%
Cr 267.716†	-175.5	-0.00130	mg/L	0.000028	-0.00130	mg/L	0.000028	2.18%
Cu 327.393†	635.7	0.00341	mg/L	0.000193	0.00341	mg/L	0.000193	5.68%
Fe 239.562†	103.2	0.00356	mg/L	0.000358	0.00356	mg/L	0.000358	10.04%
Mg 279.077†	11.3	-0.00287	mg/L	0.001949	-0.00287	mg/L	0.001949	67.85%
Mn 257.610†	186.4	-0.00014	mg/L	0.000028	-0.00014	mg/L	0.000028	20.36%
Mo 202.031†	-22.7	-0.00083	mg/L	0.000179	-0.00083	mg/L	0.000179	21.47%
Ni 231.604†	11.2	-0.00318	mg/L	0.000224	-0.00318	mg/L	0.000224	7.04%
Pb 220.353†	4.4	0.00017	mg/L	0.001130	0.00017	mg/L	0.001130	670.90%
Sb 206.836†	-1.2	0.00427	mg/L	0.002198	0.00427	mg/L	0.002198	51.45%
Se 196.026†	-1.7	0.00202	mg/L	0.001135	0.00202	mg/L	0.001135	56.21%
Si 251.611†	1225.8	11.9	mg/L	0.22	11.9	mg/L	0.22	1.82%
Sn 189.927†	-4.8	-0.00142	mg/L	0.000941	-0.00142	mg/L	0.000941	66.47%
Ti 334.940†	221.2	0.00155	mg/L	0.000138	0.00155	mg/L	0.000138	8.88%
Tl 190.801†	-1.8	-0.00169	mg/L	0.004221	-0.00169	mg/L	0.004221	250.46%
V 290.880†	1030.0	0.00686	mg/L	0.001086	0.00686	mg/L	0.001086	15.83%
Zn 206.200†	128.2	0.00360	mg/L	0.000302	0.00360	mg/L	0.000302	8.39%
K 766.490†	23.9	-0.0434	mg/L	0.01561	-0.0434	mg/L	0.01561	35.95%
Na 589.592†	3851.5	0.204	mg/L	0.0207	0.204	mg/L	0.0207	10.14%
Sr 407.771†	744.0	0.00095	mg/L	0.000013	0.00095	mg/L	0.000013	1.37%
Li 670.784†	-30.5	-0.00216	mg/L	0.000047	-0.00216	mg/L	0.000047	2.19%

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Sequence No.: 16 **Autosampler Location: 38**
Sample ID: L1204097708 **Date Collected: 5/4/2012 1:38:10 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204097708

Analyte	Back Pressure	Flow
All	150.0 kPa	0.50 L/min

Mean Data: L1204097708

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	2349850.1						27535.24	1.17%
YRADIAL	308374.8						4542.69	1.47%
Ga 417.206	1464035.1						47603.97	3.25%
GaRADIAL	92811.2						1763.01	1.90%
Ag 328.068†	53.0	0.00143	mg/L	0.000131	0.00143	mg/L	0.000131	9.18%
Al 396.153†	-15.8	-0.00905	mg/L	0.000868	-0.00905	mg/L	0.000868	9.59%
As 188.979†	0.2	-0.00137	mg/L	0.000529	-0.00137	mg/L	0.000529	38.68%
Ba 233.527†	-639.7	-0.00328	mg/L	0.000066	-0.00328	mg/L	0.000066	2.02%
Be 234.861†	99.9	0.00029	mg/L	0.000043	0.00029	mg/L	0.000043	14.98%
B 249.677†	433.9	0.00897	mg/L	0.000154	0.00897	mg/L	0.000154	1.71%
Ca 227.546†	7.8	0.118	mg/L	0.0202	0.118	mg/L	0.0202	17.18%
Cd 228.802†	-9.4	0.00020	mg/L	0.000192	0.00020	mg/L	0.000192	95.97%
Co 228.616†	-3.0	-0.00025	mg/L	0.000210	-0.00025	mg/L	0.000210	85.53%
Cr 267.716†	-154.8	-0.00112	mg/L	0.000140	-0.00112	mg/L	0.000140	12.57%
Cu 327.393†	227.5	0.00193	mg/L	0.000029	0.00193	mg/L	0.000029	1.51%
Fe 239.562†	92.8	0.00296	mg/L	0.000830	0.00296	mg/L	0.000830	28.07%
Mg 279.077†	-11.0	-0.00886	mg/L	0.000513	-0.00886	mg/L	0.000513	5.79%
Mn 257.610†	202.5	-0.00012	mg/L	0.000009	-0.00012	mg/L	0.000009	7.86%
Mo 202.031†	-27.0	-0.00095	mg/L	0.000388	-0.00095	mg/L	0.000388	40.85%

Approved: May 07, 2012

Ni 231.604†	2.4	-0.00330	mg/L	0.000396	-0.00330	mg/L	0.000396	12.01%
Pb 220.353†	6.5	0.00035	mg/L	0.001417	0.00035	mg/L	0.001417	403.79%
Sb 206.836†	2.1	0.00499	mg/L	0.000327	0.00499	mg/L	0.000327	6.55%
Se 196.026†	-4.9	0.00045	mg/L	0.001419	0.00045	mg/L	0.001419	318.26%
Si 251.611†	380.1	3.71	mg/L	0.248	3.71	mg/L	0.248	6.69%
Sn 189.927†	0.3	-0.00095	mg/L	0.000681	-0.00095	mg/L	0.000681	71.58%
Ti 334.940†	104.0	0.00142	mg/L	0.000088	0.00142	mg/L	0.000088	6.16%
Tl 190.801†	-6.7	-0.00288	mg/L	0.001111	-0.00288	mg/L	0.001111	38.58%
V 290.880†	985.9	0.00664	mg/L	0.002455	0.00664	mg/L	0.002455	36.96%
Zn 206.200†	135.2	0.00375	mg/L	0.000114	0.00375	mg/L	0.000114	3.03%
K 766.490†	-29.8	-0.0599	mg/L	0.02143	-0.0599	mg/L	0.02143	35.76%
Na 589.592†	3193.5	0.171	mg/L	0.0402	0.171	mg/L	0.0402	23.48%
Sr 407.771†	-30.0	0.00066	mg/L	0.000058	0.00066	mg/L	0.000058	8.74%
Li 670.784†	-44.7	-0.00225	mg/L	0.000379	-0.00225	mg/L	0.000379	16.82%

Sequence No.: 17 **Autosampler Location: 39**
Sample ID: L1205001101 WG396754-01 **Date Collected: 5/4/2012 1:45:05 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205001101 WG396754-01

Analyte	Back Pressure	Flow
All	150.0 kPa	0.50 L/min

Mean Data: L1205001101 WG396754-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2060450.6						14018.03	0.68%
YRADIAL	300080.3						5305.47	1.77%
Ga 417.206	1382190.2						39488.75	2.86%
GaRADIAL	91339.6						1122.59	1.23%
Ag 328.068†	1226.9	0.00547	mg/L	0.000622	0.00547	mg/L	0.000622	11.36%
Al 396.153†	1907.9	0.253	mg/L	0.0026	0.253	mg/L	0.0026	1.02%
As 188.979†	1.1	-0.00092	mg/L	0.002675	-0.00092	mg/L	0.002675	291.77%
Ba 233.527†	17316.6	0.104	mg/L	0.0012	0.104	mg/L	0.0012	1.17%
Be 234.861†	837.4	0.00051	mg/L	0.000056	0.00051	mg/L	0.000056	11.00%
B 249.677†	16392.3	0.177	mg/L	0.0049	0.177	mg/L	0.0049	2.75%
Ca 227.546†	129808.4	268	mg/L	8.2	268	mg/L	8.2	3.05%
Cd 228.802†	21.3	0.00070	mg/L	0.000302	0.00070	mg/L	0.000302	43.17%
Co 228.616†	23.9	0.00043	mg/L	0.000254	0.00043	mg/L	0.000254	58.68%
Cr 267.716†	69.3	0.00090	mg/L	0.000121	0.00090	mg/L	0.000121	13.36%
Cu 327.393†	-16.6	0.00114	mg/L	0.000609	0.00114	mg/L	0.000609	53.33%
Fe 239.562†	27186.1	1.58	mg/L	0.012	1.58	mg/L	0.012	0.77%
Mg 279.077†	164376.3	44.1	mg/L	0.30	44.1	mg/L	0.30	0.69%
Mn 257.610†	285033.2	0.327	mg/L	0.0036	0.327	mg/L	0.0036	1.09%
Mo 202.031†	90.8	0.00235	mg/L	0.000102	0.00235	mg/L	0.000102	4.31%
Ni 231.604†	190.5	-0.00069	mg/L	0.000305	-0.00069	mg/L	0.000305	44.21%
Pb 220.353†	-15.1	0.00039	mg/L	0.001820	0.00039	mg/L	0.001820	467.44%
Sb 206.836†	-8.3	0.00276	mg/L	0.001159	0.00276	mg/L	0.001159	42.05%
Se 196.026†	-2.0	0.00226	mg/L	0.000320	0.00226	mg/L	0.000320	14.20%
Si 251.611†	368519.4	3580	mg/L	87.8	3580	mg/L	87.8	2.45%
Sn 189.927†	-351.3	-0.0329	mg/L	0.00137	-0.0329	mg/L	0.00137	4.16%
Ti 334.940†	-37490.5	0.00509	mg/L	0.004090	0.00509	mg/L	0.004090	80.36%
Tl 190.801†	-40.9	-0.0119	mg/L	0.00341	-0.0119	mg/L	0.00341	28.73%
V 290.880†	4557.0	0.0231	mg/L	0.00125	0.0231	mg/L	0.00125	5.43%
Zn 206.200†	564.7	0.0128	mg/L	0.00007	0.0128	mg/L	0.00007	0.55%
K 766.490†	45451.0	14.0	mg/L	0.07	14.0	mg/L	0.07	0.48%
Na 589.592†	Saturated2							
Sr 407.771†	3611894.2	1.35	mg/L	0.033	1.35	mg/L	0.033	2.45%
Li 670.784†	4465.5	0.0279	mg/L	0.00064	0.0279	mg/L	0.00064	2.28%

Sequence No.: 18 **Autosampler Location: 40**
Sample ID: L1205001101S WG396754-04 **Date Collected: 5/4/2012 1:51:03 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: May 07, 2012

Kym H. Rhoden

Nebulizer Parameters: L1205001101S WG396754-04

Analyte	Back Pressure	Flow
All	150.0 kPa	0.50 L/min

Mean Data: L1205001101S WG396754-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2004758.3						20124.47	1.00%
YRADIAL	289979.1						1511.23	0.52%
Ga 417.206	1351549.7						44160.83	3.27%
GaRADIAL	89649.0						1027.23	1.15%
Ag 328.068†	64260.1	0.202	mg/L	0.0058	0.202	mg/L	0.0058	2.88%
Al 396.153†	39265.1	5.30	mg/L	0.015	5.30	mg/L	0.015	0.27%
As 188.979†	574.0	0.186	mg/L	0.0038	0.186	mg/L	0.0038	2.07%
Ba 233.527†	98772.1	0.593	mg/L	0.0050	0.593	mg/L	0.0050	0.85%
Be 234.861†	32336.9	0.0231	mg/L	0.00080	0.0231	mg/L	0.00080	3.46%
B 249.677†	103137.8	1.09	mg/L	0.042	1.09	mg/L	0.042	3.85%
Ca 227.546†	136692.6	283	mg/L	6.7	283	mg/L	6.7	2.36%
Cd 228.802†	1391.8	0.0224	mg/L	0.00134	0.0224	mg/L	0.00134	5.99%
Co 228.616†	3869.4	0.0959	mg/L	0.00094	0.0959	mg/L	0.00094	0.98%
Cr 267.716†	27965.6	0.245	mg/L	0.0022	0.245	mg/L	0.0022	0.89%
Cu 327.393†	65647.3	0.240	mg/L	0.0059	0.240	mg/L	0.0059	2.45%
Fe 239.562†	61282.2	3.56	mg/L	0.022	3.56	mg/L	0.022	0.63%
Mg 279.077†	190642.0	51.2	mg/L	0.19	51.2	mg/L	0.19	0.37%
Mn 257.610†	513694.3	0.590	mg/L	0.0075	0.590	mg/L	0.0075	1.28%
Mo 202.031†	19327.2	0.517	mg/L	0.0048	0.517	mg/L	0.0048	0.92%
Ni 231.604†	17830.5	0.243	mg/L	0.0019	0.243	mg/L	0.0019	0.80%
Pb 220.353†	2789.1	0.237	mg/L	0.0034	0.237	mg/L	0.0034	1.44%
Sb 206.836†	2465.7	0.547	mg/L	0.0175	0.547	mg/L	0.0175	3.19%
Se 196.026†	363.1	0.182	mg/L	0.0109	0.182	mg/L	0.0109	5.99%
Si 251.611†	520984.5	5060	mg/L	128.2	5060	mg/L	128.2	2.53%
Sn 189.927†	5432.6	0.492	mg/L	0.0064	0.492	mg/L	0.0064	1.30%
Ti 334.940†	474019.3	0.505	mg/L	0.0013	0.505	mg/L	0.0013	0.26%
Tl 190.801†	700.8	0.175	mg/L	0.0044	0.175	mg/L	0.0044	2.49%
V 290.880†	107464.0	0.537	mg/L	0.0039	0.537	mg/L	0.0039	0.72%
Zn 206.200†	22483.7	0.480	mg/L	0.0042	0.480	mg/L	0.0042	0.88%
K 766.490†	128010.5	39.6	mg/L	0.44	39.6	mg/L	0.44	1.10%
Na 589.592†	Saturated2							
Sr 407.771†	5050279.5	1.89	mg/L	0.018	1.89	mg/L	0.018	0.95%
Li 670.784†	79790.1	0.532	mg/L	0.0057	0.532	mg/L	0.0057	1.07%

Sequence No.: 19 **Autosampler Location: 41**
Sample ID: L1205001101SD WG396754-05 **Date Collected: 5/4/2012 1:57:02 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205001101SD WG396754-05

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205001101SD WG396754-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2070168.7						23705.01	1.15%
YRADIAL	292979.6						1715.47	0.59%
Ga 417.206	1372071.4						43386.58	3.16%
GaRADIAL	91078.4						1091.37	1.20%
Ag 328.068†	63194.7	0.198	mg/L	0.0078	0.198	mg/L	0.0078	3.96%
Al 396.153†	38270.2	5.17	mg/L	0.010	5.17	mg/L	0.010	0.19%
As 188.979†	560.5	0.181	mg/L	0.0069	0.181	mg/L	0.0069	3.83%
Ba 233.527†	95159.1	0.571	mg/L	0.0076	0.571	mg/L	0.0076	1.32%
Be 234.861†	31744.9	0.0227	mg/L	0.00091	0.0227	mg/L	0.00091	4.00%
B 249.677†	101202.4	1.07	mg/L	0.048	1.07	mg/L	0.048	4.48%
Ca 227.546†	131661.6	272	mg/L	11.0	272	mg/L	11.0	4.04%
Cd 228.802†	1357.7	0.0219	mg/L	0.00116	0.0219	mg/L	0.00116	5.32%
Co 228.616†	3714.3	0.0920	mg/L	0.00117	0.0920	mg/L	0.00117	1.27%

Approved: May 07, 2012

Kym H. Rhoden

Cr 267.716†	27097.0	0.238 mg/L	0.0035	0.238 mg/L	0.0035	1.49%
Cu 327.393†	65045.9	0.238 mg/L	0.0082	0.238 mg/L	0.0082	3.47%
Fe 239.562†	58723.1	3.41 mg/L	0.024	3.41 mg/L	0.024	0.70%
Mg 279.077†	180526.8	48.5 mg/L	0.24	48.5 mg/L	0.24	0.49%
Mn 257.610†	487755.4	0.560 mg/L	0.0092	0.560 mg/L	0.0092	1.65%
Mo 202.031†	18598.1	0.497 mg/L	0.0073	0.497 mg/L	0.0073	1.47%
Ni 231.604†	17096.6	0.233 mg/L	0.0019	0.233 mg/L	0.0019	0.83%
Pb 220.353†	2691.2	0.229 mg/L	0.0019	0.229 mg/L	0.0019	0.82%
Sb 206.836†	2421.8	0.538 mg/L	0.0185	0.538 mg/L	0.0185	3.44%
Se 196.026†	348.2	0.175 mg/L	0.0064	0.175 mg/L	0.0064	3.67%
Si 251.611†	502289.7	4880 mg/L	102.3	4880 mg/L	102.3	2.10%
Sn 189.927†	5250.1	0.475 mg/L	0.0072	0.475 mg/L	0.0072	1.51%
Ti 334.940†	462513.1	0.492 mg/L	0.0021	0.492 mg/L	0.0021	0.42%
Tl 190.801†	685.0	0.171 mg/L	0.0014	0.171 mg/L	0.0014	0.79%
V 290.880†	103658.6	0.518 mg/L	0.0062	0.518 mg/L	0.0062	1.20%
Zn 206.200†	21920.8	0.468 mg/L	0.0043	0.468 mg/L	0.0043	0.92%
K 766.490†	123819.5	38.3 mg/L	0.16	38.3 mg/L	0.16	0.41%
Na 589.592†	Saturated2					
Sr 407.771†	4926704.5	1.84 mg/L	0.015	1.84 mg/L	0.015	0.80%
Li 670.784†	77774.3	0.519 mg/L	0.0053	0.519 mg/L	0.0053	1.01%

Sequence No.: 20
Sample ID: L1205001102
Analyst: KHR
Initial Sample Wt:
Dilution:

Autosampler Location: 42
Date Collected: 5/4/2012 2:03:02 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: L1205001102

Analyte	Back Pressure	Flow
All	150.0 kPa	0.50 L/min

Mean Data: L1205001102

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2038942.6						18520.99	0.91%
YRADIAL	303084.0						2297.78	0.76%
Ga 417.206	1314728.3						15770.45	1.20%
GaRADIAL	92040.1						528.71	0.57%
Ag 328.068†	1245.2	0.00537	mg/L	0.000689	0.00537	mg/L	0.000689	12.84%
Al 396.153†	-77.9	-0.0176	mg/L	0.00142	-0.0176	mg/L	0.00142	8.09%
As 188.979†	-0.8	-0.00157	mg/L	0.001222	-0.00157	mg/L	0.001222	77.61%
Ba 233.527†	16676.1	0.101	mg/L	0.0011	0.101	mg/L	0.0011	1.11%
Be 234.861†	681.2	0.00048	mg/L	0.000065	0.00048	mg/L	0.000065	13.50%
B 249.677†	17359.2	0.187	mg/L	0.0045	0.187	mg/L	0.0045	2.40%
Ca 227.546†	130701.9	270	mg/L	4.4	270	mg/L	4.4	1.64%
Cd 228.802†	19.2	0.00067	mg/L	0.000187	0.00067	mg/L	0.000187	28.06%
Co 228.616†	17.9	0.00031	mg/L	0.000232	0.00031	mg/L	0.000232	75.39%
Cr 267.716†	-5.9	0.00024	mg/L	0.000366	0.00024	mg/L	0.000366	154.75%
Cu 327.393†	-313.5	0.00003	mg/L	0.000976	0.00003	mg/L	0.000976	>999.9%
Fe 239.562†	20553.9	1.19	mg/L	0.019	1.19	mg/L	0.019	1.60%
Mg 279.077†	163269.8	43.8	mg/L	0.51	43.8	mg/L	0.51	1.17%
Mn 257.610†	268081.9	0.307	mg/L	0.0064	0.307	mg/L	0.0064	2.09%
Mo 202.031†	95.8	0.00246	mg/L	0.000036	0.00246	mg/L	0.000036	1.48%
Ni 231.604†	147.3	-0.00129	mg/L	0.000414	-0.00129	mg/L	0.000414	32.16%
Pb 220.353†	-15.1	0.00041	mg/L	0.002023	0.00041	mg/L	0.002023	492.18%
Sb 206.836†	-8.9	0.00262	mg/L	0.001379	0.00262	mg/L	0.001379	52.70%
Se 196.026†	-2.4	0.00196	mg/L	0.001088	0.00196	mg/L	0.001088	55.53%
Si 251.611†	330164.7	3210	mg/L	24.2	3210	mg/L	24.2	0.75%
Sn 189.927†	-355.0	-0.0332	mg/L	0.00232	-0.0332	mg/L	0.00232	6.99%
Ti 334.940†	-43073.7	-0.00006	mg/L	0.003635	-0.00006	mg/L	0.003635	>999.9%
Tl 190.801†	-38.0	-0.0112	mg/L	0.00265	-0.0112	mg/L	0.00265	23.60%
V 290.880†	4323.0	0.0220	mg/L	0.00198	0.0220	mg/L	0.00198	8.98%
Zn 206.200†	80.8	0.00259	mg/L	0.000175	0.00259	mg/L	0.000175	6.75%
K 766.490†	45086.6	13.9	mg/L	0.41	13.9	mg/L	0.41	2.97%
Na 589.592†	Saturated2							
Sr 407.771†	3482821.3	1.30	mg/L	0.021	1.30	mg/L	0.021	1.61%
Li 670.784†	4505.1	0.0282	mg/L	0.00122	0.0282	mg/L	0.00122	4.33%

Approved: May 07, 2012

Sequence No.: 21
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 5/4/2012 2:09:05 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	150.0 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	2276975.2						7042.48	0.31%
YRADIAL	307757.3						5248.37	1.71%
Ga 417.206	1328795.5						17358.27	1.31%
GaRADIAL	89807.3						1368.91	1.52%
Ag 328.068†	131864.1	0.412	mg/L	0.0038	0.412	mg/L	0.0038	0.92%
QC value within limits for Ag 328.068 Recovery = 102.90%								
Al 396.153†	74425.1	10.1	mg/L	0.06	10.1	mg/L	0.06	0.61%
QC value within limits for Al 396.153 Recovery = 100.51%								
As 188.979†	1220.3	0.396	mg/L	0.0039	0.396	mg/L	0.0039	0.98%
QC value within limits for As 188.979 Recovery = 99.00%								
Ba 233.527†	166214.1	0.997	mg/L	0.0163	0.997	mg/L	0.0163	1.63%
QC value within limits for Ba 233.527 Recovery = 99.74%								
Be 234.861†	66751.2	0.0482	mg/L	0.00033	0.0482	mg/L	0.00033	0.69%
QC value within limits for Be 234.861 Recovery = 96.45%								
B 249.677†	47130.6	0.499	mg/L	0.0047	0.499	mg/L	0.0047	0.94%
QC value within limits for B 249.677 Recovery = 99.76%								
Ca 227.546†	4801.0	10.5	mg/L	0.19	10.5	mg/L	0.19	1.80%
QC value within limits for Ca 227.546 Recovery = 104.82%								
Cd 228.802†	3042.7	0.0486	mg/L	0.00134	0.0486	mg/L	0.00134	2.75%
QC value within limits for Cd 228.802 Recovery = 97.27%								
Co 228.616†	8224.1	0.204	mg/L	0.0015	0.204	mg/L	0.0015	0.73%
QC value within limits for Co 228.616 Recovery = 101.98%								
Cr 267.716†	57444.4	0.504	mg/L	0.0026	0.504	mg/L	0.0026	0.51%
QC value within limits for Cr 267.716 Recovery = 100.76%								
Cu 327.393†	138928.5	0.506	mg/L	0.0035	0.506	mg/L	0.0035	0.68%
QC value within limits for Cu 327.393 Recovery = 101.21%								
Fe 239.562†	68264.9	3.97	mg/L	0.061	3.97	mg/L	0.061	1.54%
QC value within limits for Fe 239.562 Recovery = 99.18%								
Mg 279.077†	37381.8	10.0	mg/L	0.11	10.0	mg/L	0.11	1.11%
QC value within limits for Mg 279.077 Recovery = 100.46%								
Mn 257.610†	446721.1	0.513	mg/L	0.0089	0.513	mg/L	0.0089	1.73%
QC value within limits for Mn 257.610 Recovery = 102.61%								
Mo 202.031†	38733.9	1.04	mg/L	0.017	1.04	mg/L	0.017	1.65%
QC value within limits for Mo 202.031 Recovery = 103.58%								
Ni 231.604†	36288.2	0.499	mg/L	0.0078	0.499	mg/L	0.0078	1.56%
QC value within limits for Ni 231.604 Recovery = 99.79%								
Pb 220.353†	6049.9	0.511	mg/L	0.0020	0.511	mg/L	0.0020	0.39%
QC value within limits for Pb 220.353 Recovery = 102.10%								
Sb 206.836†	5371.2	1.19	mg/L	0.020	1.19	mg/L	0.020	1.72%
QC value within limits for Sb 206.836 Recovery = 98.88%								
Se 196.026†	773.9	0.384	mg/L	0.0086	0.384	mg/L	0.0086	2.23%
QC value within limits for Se 196.026 Recovery = 96.10%								
Si 251.611†	222461.7	2160	mg/L	7.3	2160	mg/L	7.3	0.34%
QC value greater than the upper limit for Si 251.611 Recovery = 43232.96%								
Sn 189.927†	11552.4	1.05	mg/L	0.005	1.05	mg/L	0.005	0.47%
QC value within limits for Sn 189.927 Recovery = 104.73%								
Ti 334.940†	1030105.3	1.00	mg/L	0.004	1.00	mg/L	0.004	0.42%
QC value within limits for Ti 334.940 Recovery = 100.47%								
Tl 190.801†	2091.3	0.521	mg/L	0.0019	0.521	mg/L	0.0019	0.36%
QC value within limits for Tl 190.801 Recovery = 104.17%								
V 290.880†	205918.6	1.03	mg/L	0.014	1.03	mg/L	0.014	1.31%
QC value within limits for V 290.880 Recovery = 102.99%								
Zn 206.200†	46634.5	0.994	mg/L	0.0073	0.994	mg/L	0.0073	0.73%
QC value within limits for Zn 206.200 Recovery = 99.39%								
K 766.490†	162877.1	50.4	mg/L	0.64	50.4	mg/L	0.64	1.27%
QC value within limits for K 766.490 Recovery = 100.90%								
Na 589.592†	988381.0	50.6	mg/L	1.23	50.6	mg/L	1.23	2.43%

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```
   QC value within limits for Na 589.592  Recovery = 101.14%
Sr 407.771†          2668425.2        1.00 mg/L        0.035        1.00 mg/L         0.035   3.46%
   QC value within limits for Sr 407.771  Recovery = 100.26%
Li 670.784†           157599.2        1.05 mg/L        0.007        1.05 mg/L         0.007   0.64%
   QC value within limits for Li 670.784  Recovery = 105.33%
QC Failed.  Continue with analysis.
```

==========

Sequence No.: 22 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 5/4/2012 2:15:06 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	150.0 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	2301876.4						15860.55	0.69%
YRADIAL	298315.7						3923.37	1.32%
Ga 417.206	1371988.7						23206.55	1.69%
GaRADIAL	88825.7						2416.17	2.72%
Ag 328.068†	119.2	0.00164	mg/L	0.000209	0.00164	mg/L	0.000209	12.78%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-21.7	-0.00988	mg/L	0.000989	-0.00988	mg/L	0.000989	10.02%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	7.2	0.00094	mg/L	0.000336	0.00094	mg/L	0.000336	35.75%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-675.1	-0.00349	mg/L	0.000115	-0.00349	mg/L	0.000115	3.29%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-25.4	0.00020	mg/L	0.000032	0.00020	mg/L	0.000032	16.00%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	781.7	0.0126	mg/L	0.00033	0.0126	mg/L	0.00033	2.61%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	-11.3	0.0783	mg/L	0.01414	0.0783	mg/L	0.01414	18.06%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	7.1	0.00046	mg/L	0.000025	0.00046	mg/L	0.000025	5.34%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	6.8	0.00000	mg/L	0.000232	0.00000	mg/L	0.000232	>999.9%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-160.5	-0.00116	mg/L	0.000020	-0.00116	mg/L	0.000020	1.75%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	294.8	0.00217	mg/L	0.000482	0.00217	mg/L	0.000482	22.18%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	37.4	-0.00026	mg/L	0.000389	-0.00026	mg/L	0.000389	147.46%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	2.3	-0.00528	mg/L	0.001579	-0.00528	mg/L	0.001579	29.89%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-29.9	-0.00038	mg/L	0.000005	-0.00038	mg/L	0.000005	1.18%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-18.9	-0.00073	mg/L	0.000400	-0.00073	mg/L	0.000400	54.75%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	4.9	-0.00326	mg/L	0.000244	-0.00326	mg/L	0.000244	7.47%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	6.2	0.00033	mg/L	0.000388	0.00033	mg/L	0.000388	119.11%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.3	0.00461	mg/L	0.000502	0.00461	mg/L	0.000502	10.90%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-1.3	0.00222	mg/L	0.005389	0.00222	mg/L	0.005389	242.24%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	676.4	6.59	mg/L	0.260	6.59	mg/L	0.260	3.94%
QC value greater than the upper limit for Si 251.611 Recovery = Not calculated								
Sn 189.927†	12.4	0.00014	mg/L	0.001140	0.00014	mg/L	0.001140	809.29%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	159.5	0.00147	mg/L	0.000225	0.00147	mg/L	0.000225	15.30%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	2.7	-0.00059	mg/L	0.001178	-0.00059	mg/L	0.001178	199.84%

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QC value within limits for Tl 190.801 Recovery = Not calculated

V 290.880†	1622.1	0.00982 mg/L	0.001349	0.00982 mg/L	0.001349	13.74%

QC value within limits for V 290.880 Recovery = Not calculated

Zn 206.200†	27.6	0.00147 mg/L	0.000235	0.00147 mg/L	0.000235	15.96%

QC value within limits for Zn 206.200 Recovery = Not calculated

K 766.490†	40.5	-0.0383 mg/L	0.01990	-0.0383 mg/L	0.01990	51.98%

QC value within limits for K 766.490 Recovery = Not calculated

Na 589.592†	3610.5	0.192 mg/L	0.0340	0.192 mg/L	0.0340	17.70%

QC value within limits for Na 589.592 Recovery = Not calculated

Sr 407.771†	41.1	0.00069 mg/L	0.000046	0.00069 mg/L	0.000046	6.70%

QC value within limits for Sr 407.771 Recovery = Not calculated

Li 670.784†	-1.7	-0.00197 mg/L	0.000325	-0.00197 mg/L	0.000325	16.51%

QC value within limits for Li 670.784 Recovery = Not calculated

QC Failed. Continue with analysis.

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Sequence No.: 23 **Autosampler Location: 43**
Sample ID: L1205001103 **Date Collected: 5/4/2012 2:21:59 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205001103

Analyte	Back Pressure	Flow
All	150.0 kPa	0.50 L/min

Mean Data: L1205001103

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2059822.2						23094.66	1.12%
YRADIAL	296820.0						5358.19	1.81%
Ga 417.206	1386409.6						15910.59	1.15%
GaRADIAL	91472.7						2183.54	2.39%
Ag 328.068†	1158.7	0.00526	mg/L	0.000542	0.00526	mg/L	0.000542	10.30%
Al 396.153†	2065.6	0.274	mg/L	0.0044	0.274	mg/L	0.0044	1.60%
As 188.979†	3.8	-0.00002	mg/L	0.000577	-0.00002	mg/L	0.000577	>999.9%
Ba 233.527†	17580.5	0.106	mg/L	0.0016	0.106	mg/L	0.0016	1.51%
Be 234.861†	837.2	0.00050	mg/L	0.000064	0.00050	mg/L	0.000064	12.83%
B 249.677†	16622.6	0.179	mg/L	0.0044	0.179	mg/L	0.0044	2.45%
Ca 227.546†	132529.5	274	mg/L	5.4	274	mg/L	5.4	1.96%
Cd 228.802†	16.7	0.00062	mg/L	0.000139	0.00062	mg/L	0.000139	22.52%
Co 228.616†	25.0	0.00046	mg/L	0.000364	0.00046	mg/L	0.000364	78.77%
Cr 267.716†	73.2	0.00094	mg/L	0.000032	0.00094	mg/L	0.000032	3.39%
Cu 327.393†	13.6	0.00125	mg/L	0.000781	0.00125	mg/L	0.000781	62.26%
Fe 239.562†	27611.2	1.60	mg/L	0.020	1.60	mg/L	0.020	1.22%
Mg 279.077†	166897.8	44.8	mg/L	0.49	44.8	mg/L	0.49	1.10%
Mn 257.610†	287054.5	0.329	mg/L	0.0037	0.329	mg/L	0.0037	1.13%
Mo 202.031†	86.2	0.00223	mg/L	0.000275	0.00223	mg/L	0.000275	12.32%
Ni 231.604†	209.2	-0.00043	mg/L	0.000460	-0.00043	mg/L	0.000460	106.58%
Pb 220.353†	-28.3	-0.00067	mg/L	0.001450	-0.00067	mg/L	0.001450	215.80%
Sb 206.836†	-5.8	0.00332	mg/L	0.000887	0.00332	mg/L	0.000887	26.76%
Se 196.026†	-2.9	0.00183	mg/L	0.004081	0.00183	mg/L	0.004081	223.34%
Si 251.611†	382481.1	3720	mg/L	32.2	3720	mg/L	32.2	0.87%
Sn 189.927†	-352.3	-0.0329	mg/L	0.00134	-0.0329	mg/L	0.00134	4.07%
Ti 334.940†	-38490.5	0.00496	mg/L	0.002757	0.00496	mg/L	0.002757	55.58%
Tl 190.801†	-32.0	-0.00974	mg/L	0.002798	-0.00974	mg/L	0.002798	28.74%
V 290.880†	4971.6	0.0251	mg/L	0.00210	0.0251	mg/L	0.00210	8.34%
Zn 206.200†	898.1	0.0199	mg/L	0.00044	0.0199	mg/L	0.00044	2.19%
K 766.490†	46785.2	14.4	mg/L	0.02	14.4	mg/L	0.02	0.12%
Na 589.592†	Saturated2							
Sr 407.771†	3770814.3	1.41	mg/L	0.027	1.41	mg/L	0.027	1.94%
Li 670.784†	4591.1	0.0288	mg/L	0.00070	0.0288	mg/L	0.00070	2.44%

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Sequence No.: 24 **Autosampler Location: 44**
Sample ID: L1205001104 **Date Collected: 5/4/2012 2:27:59 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: May 07, 2012

Lynn H. Rhoden

Nebulizer Parameters: L1205001104

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205001104

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2045906.3						10032.28	0.49%
YRADIAL	296261.7						3984.05	1.34%
Ga 417.206	1322031.4						23322.23	1.76%
GaRADIAL	90184.7						801.80	0.89%
Ag 328.068†	1310.2	0.00557	mg/L	0.000639	0.00557	mg/L	0.000639	11.47%
Al 396.153†	-162.0	-0.0290	mg/L	0.00850	-0.0290	mg/L	0.00850	29.29%
As 188.979†	0.9	-0.00101	mg/L	0.001168	-0.00101	mg/L	0.001168	115.83%
Ba 233.527†	17233.7	0.104	mg/L	0.0011	0.104	mg/L	0.0011	1.04%
Be 234.861†	730.7	0.00051	mg/L	0.000065	0.00051	mg/L	0.000065	12.84%
B 249.677†	17731.3	0.191	mg/L	0.0065	0.191	mg/L	0.0065	3.41%
Ca 227.546†	135275.9	280	mg/L	5.8	280	mg/L	5.8	2.08%
Cd 228.802†	15.1	0.00060	mg/L	0.000136	0.00060	mg/L	0.000136	22.70%
Co 228.616†	8.9	0.00009	mg/L	0.000196	0.00009	mg/L	0.000196	228.57%
Cr 267.716†	29.2	0.00055	mg/L	0.000114	0.00055	mg/L	0.000114	20.96%
Cu 327.393†	-243.9	0.00028	mg/L	0.000418	0.00028	mg/L	0.000418	148.83%
Fe 239.562†	21147.7	1.23	mg/L	0.024	1.23	mg/L	0.024	1.94%
Mg 279.077†	168799.5	45.3	mg/L	0.78	45.3	mg/L	0.78	1.73%
Mn 257.610†	275525.6	0.316	mg/L	0.0019	0.316	mg/L	0.0019	0.62%
Mo 202.031†	93.9	0.00242	mg/L	0.000474	0.00242	mg/L	0.000474	19.63%
Ni 231.604†	154.1	-0.00119	mg/L	0.000890	-0.00119	mg/L	0.000890	74.59%
Pb 220.353†	-32.1	-0.00096	mg/L	0.000434	-0.00096	mg/L	0.000434	45.27%
Sb 206.836†	-4.1	0.00368	mg/L	0.001575	0.00368	mg/L	0.001575	42.85%
Se 196.026†	-1.8	0.00226	mg/L	0.004846	0.00226	mg/L	0.004846	214.11%
Si 251.611†	339541.7	3300	mg/L	33.0	3300	mg/L	33.0	1.00%
Sn 189.927†	-363.9	-0.0340	mg/L	0.00147	-0.0340	mg/L	0.00147	4.32%
Ti 334.940†	-44868.5	-0.00039	mg/L	0.003488	-0.00039	mg/L	0.003488	887.72%
Tl 190.801†	-40.8	-0.0119	mg/L	0.00462	-0.0119	mg/L	0.00462	38.72%
V 290.880†	4208.4	0.0214	mg/L	0.00091	0.0214	mg/L	0.00091	4.26%
Zn 206.200†	116.8	0.00335	mg/L	0.000124	0.00335	mg/L	0.000124	3.69%
K 766.490†	47639.6	14.7	mg/L	0.15	14.7	mg/L	0.15	1.04%
Na 589.592†	Saturated2							
Sr 407.771†	3642688.1	1.36	mg/L	0.029	1.36	mg/L	0.029	2.14%
Li 670.784†	4753.4	0.0299	mg/L	0.00063	0.0299	mg/L	0.00063	2.10%

Sequence No.: 25 **Autosampler Location: 45**
Sample ID: L1205001105 **Date Collected: 5/4/2012 2:34:02 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205001105

Analyte	Back Pressure	Flow
All	150.0 kPa	0.50 L/min

Mean Data: L1205001105

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2354471.2						12469.30	0.53%
YRADIAL	319089.6						5583.48	1.75%
Ga 417.206	1448971.7						20865.14	1.44%
GaRADIAL	94886.4						934.56	0.98%
Ag 328.068†	159.2	0.00176	mg/L	0.000488	0.00176	mg/L	0.000488	27.72%
Al 396.153†	-6.2	-0.00775	mg/L	0.000200	-0.00775	mg/L	0.000200	2.58%
As 188.979†	3.5	-0.00030	mg/L	0.001041	-0.00030	mg/L	0.001041	351.10%
Ba 233.527†	-493.3	-0.00240	mg/L	0.000143	-0.00240	mg/L	0.000143	5.98%
Be 234.861†	34.9	0.00024	mg/L	0.000002	0.00024	mg/L	0.000002	0.96%
B 249.677†	629.3	0.0110	mg/L	0.00023	0.0110	mg/L	0.00023	2.11%
Ca 227.546†	77.9	0.263	mg/L	0.0538	0.263	mg/L	0.0538	20.46%
Cd 228.802†	-1.4	0.00032	mg/L	0.000163	0.00032	mg/L	0.000163	50.23%
Co 228.616†	-9.3	-0.00040	mg/L	0.000080	-0.00040	mg/L	0.000080	19.73%

Approved: May 07, 2012

Cr 267.716†	-111.0	-0.00073	mg/L	0.000027	-0.00073	mg/L	0.000027	3.69%
Cu 327.393†	217.5	0.00189	mg/L	0.000315	0.00189	mg/L	0.000315	16.62%
Fe 239.562†	146.1	0.00606	mg/L	0.000507	0.00606	mg/L	0.000507	8.36%
Mg 279.077†	54.7	0.00876	mg/L	0.002773	0.00876	mg/L	0.002773	31.64%
Mn 257.610†	351.7	0.00005	mg/L	0.000060	0.00005	mg/L	0.000060	108.91%
Mo 202.031†	-31.5	-0.00107	mg/L	0.000233	-0.00107	mg/L	0.000233	21.80%
Ni 231.604†	3.8	-0.00328	mg/L	0.000269	-0.00328	mg/L	0.000269	8.19%
Pb 220.353†	6.6	0.00035	mg/L	0.000618	0.00035	mg/L	0.000618	174.88%
Sb 206.836†	1.4	0.00483	mg/L	0.001063	0.00483	mg/L	0.001063	22.01%
Se 196.026†	-1.9	0.00194	mg/L	0.001482	0.00194	mg/L	0.001482	76.55%
Si 251.611†	6382.9	62.0	mg/L	1.29	62.0	mg/L	1.29	2.07%
Sn 189.927†	30.4	0.00178	mg/L	0.000865	0.00178	mg/L	0.000865	48.60%
Ti 334.940†	188.0	0.00153	mg/L	0.000104	0.00153	mg/L	0.000104	6.78%
Tl 190.801†	4.8	-0.00006	mg/L	0.002580	-0.00006	mg/L	0.002580	>999.9%
V 290.880†	1348.8	0.00845	mg/L	0.000882	0.00845	mg/L	0.000882	10.44%
Zn 206.200†	279.2	0.00680	mg/L	0.000122	0.00680	mg/L	0.000122	1.80%
K 766.490†	34.0	-0.0409	mg/L	0.00189	-0.0409	mg/L	0.00189	4.62%
Na 589.592†	14759.2	0.753	mg/L	0.0359	0.753	mg/L	0.0359	4.76%
Sr 407.771†	643.3	0.00091	mg/L	0.000031	0.00091	mg/L	0.000031	3.41%
Li 670.784†	-50.6	-0.00229	mg/L	0.000355	-0.00229	mg/L	0.000355	15.46%

Sequence No.: 26
Sample ID: L1204089801 0.01
Analyst: KHR
Initial Sample Wt:
Dilution:

Autosampler Location: 46
Date Collected: 5/4/2012 2:40:59 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: L1204089801 0.01

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1204089801 0.01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2298349.5						28612.71	1.24%
YRADIAL	304170.1						12194.69	4.01%
Ga 417.206	1411681.4						21586.40	1.53%
GaRADIAL	90228.1						429.02	0.48%
Ag 328.068†	109.8	0.00161	mg/L	0.000262	0.00161	mg/L	0.000262	16.23%
Al 396.153†	39.3	-0.00158	mg/L	0.001045	-0.00158	mg/L	0.001045	66.33%
As 188.979†	38.8	0.0114	mg/L	0.00156	0.0114	mg/L	0.00156	13.74%
Ba 233.527†	-326.0	-0.00140	mg/L	0.000129	-0.00140	mg/L	0.000129	9.20%
Be 234.861†	46.4	0.00025	mg/L	0.000030	0.00025	mg/L	0.000030	11.99%
B 249.677†	1583.6	0.0211	mg/L	0.00034	0.0211	mg/L	0.00034	1.60%
Ca 227.546†	15.4	0.135	mg/L	0.0215	0.135	mg/L	0.0215	15.89%
Cd 228.802†	13.1	0.00051	mg/L	0.000029	0.00051	mg/L	0.000029	5.83%
Co 228.616†	2.7	-0.00011	mg/L	0.000226	-0.00011	mg/L	0.000226	200.42%
Cr 267.716†	-74.8	-0.00041	mg/L	0.000051	-0.00041	mg/L	0.000051	12.21%
Cu 327.393†	111.5	0.00151	mg/L	0.000226	0.00151	mg/L	0.000226	14.91%
Fe 239.562†	102.0	0.00349	mg/L	0.000561	0.00349	mg/L	0.000561	16.07%
Mg 279.077†	91.4	0.0186	mg/L	0.00297	0.0186	mg/L	0.00297	15.96%
Mn 257.610†	88.3	-0.00025	mg/L	0.000028	-0.00025	mg/L	0.000028	11.37%
Mo 202.031†	-19.2	-0.00074	mg/L	0.000330	-0.00074	mg/L	0.000330	44.72%
Ni 231.604†	171.3	-0.00096	mg/L	0.000139	-0.00096	mg/L	0.000139	14.51%
Pb 220.353†	-10.6	-0.00109	mg/L	0.001072	-0.00109	mg/L	0.001072	98.49%
Sb 206.836†	3.7	0.00535	mg/L	0.000847	0.00535	mg/L	0.000847	15.82%
Se 196.026†	-8.3	-0.00121	mg/L	0.000685	-0.00121	mg/L	0.000685	56.69%
Si 251.611†	4766.1	46.3	mg/L	0.91	46.3	mg/L	0.91	1.97%
Sn 189.927†	1.2	-0.00087	mg/L	0.000321	-0.00087	mg/L	0.000321	36.89%
Ti 334.940†	3684.0	0.00491	mg/L	0.000094	0.00491	mg/L	0.000094	1.91%
Tl 190.801†	4.9	0.00001	mg/L	0.002500	0.00001	mg/L	0.002500	>999.9%
V 290.880†	1922.7	0.0113	mg/L	0.00049	0.0113	mg/L	0.00049	4.33%
Zn 206.200†	142.4	0.00391	mg/L	0.000120	0.00391	mg/L	0.000120	3.08%
K 766.490†	183.5	-0.0701	mg/L	0.01531	-0.0701	mg/L	0.01531	21.84%
Na 589.592†	1474105.5	76.1	mg/L	1.73	76.1	mg/L	1.73	2.28%
Sr 407.771†	19622.7	0.00804	mg/L	0.000204	0.00804	mg/L	0.000204	2.54%
Li 670.784†	-85.2	-0.00253	mg/L	0.000205	-0.00253	mg/L	0.000205	8.11%

Approved: May 07, 2012

Kym H. Rhoden

Sequence No.: 27 **Autosampler Location: 47**
Sample ID: L1204089802 0.01 **Date Collected: 5/4/2012 2:47:59 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1204089802 0.01

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1204089802 0.01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2331959.1						18229.99	0.78%
YRADIAL	302429.9						9170.35	3.03%
Ga 417.206	1423825.7						9806.75	0.69%
GaRADIAL	90561.2						2537.67	2.80%
Ag 328.068†	26.8	0.00135	mg/L	0.000466	0.00135	mg/L	0.000466	34.45%
Al 396.153†	28.5	-0.00305	mg/L	0.000970	-0.00305	mg/L	0.000970	31.76%
As 188.979†	68.7	0.0212	mg/L	0.00062	0.0212	mg/L	0.00062	2.90%
Ba 233.527†	-355.2	-0.00157	mg/L	0.000083	-0.00157	mg/L	0.000083	5.28%
Be 234.861†	53.1	0.00026	mg/L	0.000017	0.00026	mg/L	0.000017	6.75%
B 249.677†	1506.5	0.0203	mg/L	0.00094	0.0203	mg/L	0.00094	4.64%
Ca 227.546†	17.3	0.139	mg/L	0.0114	0.139	mg/L	0.0114	8.20%
Cd 228.802†	15.9	0.00050	mg/L	0.000132	0.00050	mg/L	0.000132	26.39%
Co 228.616†	1.8	-0.00013	mg/L	0.000068	-0.00013	mg/L	0.000068	50.50%
Cr 267.716†	-68.9	-0.00036	mg/L	0.000149	-0.00036	mg/L	0.000149	41.18%
Cu 327.393†	264.6	0.00207	mg/L	0.000499	0.00207	mg/L	0.000499	24.11%
Fe 239.562†	67.0	0.00146	mg/L	0.000388	0.00146	mg/L	0.000388	26.56%
Mg 279.077†	83.6	0.0165	mg/L	0.00226	0.0165	mg/L	0.00226	13.67%
Mn 257.610†	19.3	-0.00033	mg/L	0.000012	-0.00033	mg/L	0.000012	3.80%
Mo 202.031†	-18.4	-0.00072	mg/L	0.000033	-0.00072	mg/L	0.000033	4.57%
Ni 231.604†	174.0	-0.00092	mg/L	0.000234	-0.00092	mg/L	0.000234	25.35%
Pb 220.353†	-4.9	-0.00061	mg/L	0.001133	-0.00061	mg/L	0.001133	186.20%
Sb 206.836†	3.0	0.00521	mg/L	0.000512	0.00521	mg/L	0.000512	9.83%
Se 196.026†	-4.7	0.00055	mg/L	0.001695	0.00055	mg/L	0.001695	306.76%
Si 251.611†	4630.2	45.0	mg/L	1.10	45.0	mg/L	1.10	2.45%
Sn 189.927†	-1.2	-0.00109	mg/L	0.000338	-0.00109	mg/L	0.000338	31.06%
Ti 334.940†	3717.6	0.00494	mg/L	0.000144	0.00494	mg/L	0.000144	2.92%
Tl 190.801†	-10.2	-0.00367	mg/L	0.000819	-0.00367	mg/L	0.000819	22.30%
V 290.880†	1774.0	0.0106	mg/L	0.00248	0.0106	mg/L	0.00248	23.43%
Zn 206.200†	97.7	0.00296	mg/L	0.000115	0.00296	mg/L	0.000115	3.87%
K 766.490†	65.7	-0.108	mg/L	0.0207	-0.108	mg/L	0.0207	19.22%
Na 589.592†	1500677.6	77.5	mg/L	2.10	77.5	mg/L	2.10	2.71%
Sr 407.771†	20040.0	0.00820	mg/L	0.000167	0.00820	mg/L	0.000167	2.03%
Li 670.784†	-51.6	-0.00230	mg/L	0.000343	-0.00230	mg/L	0.000343	14.92%

Sequence No.: 28 **Autosampler Location: 48**
Sample ID: CCV **Date Collected: 5/4/2012 2:54:56 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	149.0 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	2309587.2						8940.38	0.39%
YRADIAL	305138.4						4414.66	1.45%
Ga 417.206	1351342.6						35143.53	2.60%
GaRADIAL	88832.4						1671.31	1.88%
Ag 328.068†	131619.2	0.411	mg/L	0.0114	0.411	mg/L	0.0114	2.76%
Al 396.153†	74142.8	10.0	mg/L	0.07	10.0	mg/L	0.07	0.68%
As 188.979†	1220.1	0.396	mg/L	0.0058	0.396	mg/L	0.0058	1.47%

Approved: May 07, 2012

Kym H. Rhoden

Ba 233.527†	167339.5	1.00	mg/L	0.010	1.00	mg/L	0.010	1.04%
Be 234.861†	67951.9	0.0491	mg/L	0.00123	0.0491	mg/L	0.00123	2.51%
B 249.677†	47032.0	0.498	mg/L	0.0157	0.498	mg/L	0.0157	3.16%
Ca 227.546†	4752.2	10.4	mg/L	0.30	10.4	mg/L	0.30	2.91%
Cd 228.802†	3019.7	0.0483	mg/L	0.00182	0.0483	mg/L	0.00182	3.77%
Co 228.616†	8179.3	0.203	mg/L	0.0012	0.203	mg/L	0.0012	0.59%
Cr 267.716†	57832.8	0.507	mg/L	0.0012	0.507	mg/L	0.0012	0.23%
Cu 327.393†	138923.2	0.506	mg/L	0.0127	0.506	mg/L	0.0127	2.52%
Fe 239.562†	68412.8	3.98	mg/L	0.037	3.98	mg/L	0.037	0.92%
Mg 279.077†	37285.7	10.0	mg/L	0.12	10.0	mg/L	0.12	1.17%
Mn 257.610†	440724.1	0.506	mg/L	0.0053	0.506	mg/L	0.0053	1.05%
Mo 202.031†	39197.1	1.05	mg/L	0.003	1.05	mg/L	0.003	0.32%
Ni 231.604†	37821.4	0.520	mg/L	0.0030	0.520	mg/L	0.0030	0.57%
Pb 220.353†	5987.0	0.505	mg/L	0.0023	0.505	mg/L	0.0023	0.46%
Sb 206.836†	5322.0	1.18	mg/L	0.033	1.18	mg/L	0.033	2.79%
Se 196.026†	764.8	0.380	mg/L	0.0087	0.380	mg/L	0.0087	2.29%
Si 251.611†	221182.1	2150	mg/L	32.1	2150	mg/L	32.1	1.49%
Sn 189.927†	11397.5	1.03	mg/L	0.004	1.03	mg/L	0.004	0.40%
Ti 334.940†	1033147.7	1.01	mg/L	0.007	1.01	mg/L	0.007	0.68%
Tl 190.801†	2075.4	0.517	mg/L	0.0022	0.517	mg/L	0.0022	0.43%
V 290.880†	205431.8	1.03	mg/L	0.003	1.03	mg/L	0.003	0.34%
Zn 206.200†	47381.6	1.01	mg/L	0.006	1.01	mg/L	0.006	0.64%
K 766.490†	162071.4	50.2	mg/L	0.26	50.2	mg/L	0.26	0.52%
Na 589.592†	986779.2	50.5	mg/L	0.31	50.5	mg/L	0.31	0.61%
Sr 407.771†	2649284.8	0.995	mg/L	0.0034	0.995	mg/L	0.0034	0.34%
Li 670.784†	155598.2	1.04	mg/L	0.009	1.04	mg/L	0.009	0.87%

Sequence No.: 29 **Autosampler Location: 49**
Sample ID: CCB **Date Collected: 5/4/2012 3:00:53 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	149.0 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	2369992.3						58076.59	2.45%
YRADIAL	300695.2						7817.56	2.60%
Ga 417.206	1403243.9						13686.99	0.98%
GaRADIAL	89224.9						1378.42	1.54%
Ag 328.068†	194.8	0.00186	mg/L	0.000439	0.00186	mg/L	0.000439	23.59%
Al 396.153†	-29.2	-0.0109	mg/L	0.00067	-0.0109	mg/L	0.00067	6.15%
As 188.979†	1.6	-0.00092	mg/L	0.001397	-0.00092	mg/L	0.001397	151.73%
Ba 233.527†	-642.1	-0.00329	mg/L	0.000094	-0.00329	mg/L	0.000094	2.85%
Be 234.861†	7.8	0.00022	mg/L	0.000038	0.00022	mg/L	0.000038	16.88%
B 249.677†	566.5	0.0104	mg/L	0.00017	0.0104	mg/L	0.00017	1.64%
Ca 227.546†	-5.0	0.0915	mg/L	0.00246	0.0915	mg/L	0.00246	2.69%
Cd 228.802†	2.4	0.00039	mg/L	0.000096	0.00039	mg/L	0.000096	24.54%
Co 228.616†	4.2	-0.00007	mg/L	0.000085	-0.00007	mg/L	0.000085	129.48%
Cr 267.716†	-159.4	-0.00116	mg/L	0.000254	-0.00116	mg/L	0.000254	21.93%
Cu 327.393†	271.4	0.00209	mg/L	0.000265	0.00209	mg/L	0.000265	12.72%
Fe 239.562†	24.6	-0.00101	mg/L	0.000392	-0.00101	mg/L	0.000392	38.90%
Mg 279.077†	-5.4	-0.00736	mg/L	0.000289	-0.00736	mg/L	0.000289	3.93%
Mn 257.610†	-40.1	-0.00040	mg/L	0.000076	-0.00040	mg/L	0.000076	19.16%
Mo 202.031†	-17.1	-0.00069	mg/L	0.000177	-0.00069	mg/L	0.000177	25.76%
Ni 231.604†	16.2	-0.00311	mg/L	0.000168	-0.00311	mg/L	0.000168	5.40%
Pb 220.353†	-6.2	-0.00072	mg/L	0.000279	-0.00072	mg/L	0.000279	38.85%
Sb 206.836†	-0.3	0.00445	mg/L	0.000737	0.00445	mg/L	0.000737	16.55%
Se 196.026†	-1.3	0.00224	mg/L	0.003792	0.00224	mg/L	0.003792	169.67%
Si 251.611†	382.2	3.73	mg/L	0.286	3.73	mg/L	0.286	7.66%
Sn 189.927†	14.2	0.00031	mg/L	0.000653	0.00031	mg/L	0.000653	213.64%
Ti 334.940†	165.3	0.00148	mg/L	0.000150	0.00148	mg/L	0.000150	10.12%
Tl 190.801†	-1.7	-0.00165	mg/L	0.001862	-0.00165	mg/L	0.001862	112.65%
V 290.880†	801.8	0.00572	mg/L	0.000387	0.00572	mg/L	0.000387	6.77%
Zn 206.200†	78.0	0.00254	mg/L	0.000100	0.00254	mg/L	0.000100	3.95%

Approved: May 07, 2012

K 766.490†	-12.8	-0.0547 mg/L	0.03768	-0.0547 mg/L	0.03768	68.91%
Na 589.592†	3282.9	0.176 mg/L	0.0155	0.176 mg/L	0.0155	8.82%
Sr 407.771†	132.7	0.00072 mg/L	0.000015	0.00072 mg/L	0.000015	2.11%
Li 670.784†	-3.7	-0.00198 mg/L	0.000321	-0.00198 mg/L	0.000321	16.21%

User canceled analysis.

Approved: May 07, 2012

Lynn H. Rhoden

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Analysis Begun

Start Time: 5/4/2012 3:09:13 PM **Plasma On Time: 5/4/2012 8:06:52 AM**
Logged In Analyst: peicp2 **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N4011401 **Autosampler Model: Cetac**

Sample Information File: C:\pe\peicp2\Sample Information\FRIDAY1.sif
Batch ID:
Results Data Set: 050412H
Results Library: C:\pe\peicp2\Results\Results.mdb

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Method Loaded
Method Name: 200.7-6010 PE-ICP2.1 **Method Last Saved: 5/4/2012 12:02:00 PM**
IEC File: CA227_LiBeMOD.iec **SMF File:**
Method Description: STANDARD

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Sequence No.: 1 **Autosampler Location: 50**
Sample ID: L1205001101 WG396754-01 **Date Collected: 5/4/2012 3:09:15 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205001101 WG396754-01

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: L1205001101 WG396754-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2343098.1						19824.67	0.85%
YRADIAL	299835.7						2680.35	0.89%
Ga 417.206	1424070.1						11197.91	0.79%
GaRADIAL	90314.1						3575.03	3.96%
Ag 328.068†	155.6	0.00175	mg/L	0.000351	0.00175	mg/L	0.000351	20.08%
Al 396.153†	8.2	-0.00578	mg/L	0.003707	-0.00578	mg/L	0.003707	64.17%
As 188.979†	8.0	0.00121	mg/L	0.000831	0.00121	mg/L	0.000831	68.53%
Ba 233.527†	-425.9	-0.00199	mg/L	0.000097	-0.00199	mg/L	0.000097	4.86%
Be 234.861†	229.6	0.00038	mg/L	0.000013	0.00038	mg/L	0.000013	3.47%
B 249.677†	634.8	0.0111	mg/L	0.00022	0.0111	mg/L	0.00022	2.01%
Ca 227.546†	1210.9	2.61	mg/L	0.021	2.61	mg/L	0.021	0.79%
Cd 228.802†	-16.9	0.00007	mg/L	0.000200	0.00007	mg/L	0.000200	297.41%
Co 228.616†	9.6	0.00007	mg/L	0.000128	0.00007	mg/L	0.000128	187.92%
Cr 267.716†	-160.0	-0.00116	mg/L	0.000150	-0.00116	mg/L	0.000150	12.87%
Cu 327.393†	269.7	0.00208	mg/L	0.000331	0.00208	mg/L	0.000331	15.88%
Fe 239.562†	284.1	0.0141	mg/L	0.00016	0.0141	mg/L	0.00016	1.11%
Mg 279.077†	1802.6	0.478	mg/L	0.0070	0.478	mg/L	0.0070	1.47%
Mn 257.610†	3193.2	0.00332	mg/L	0.000038	0.00332	mg/L	0.000038	1.16%
Mo 202.031†	-36.7	-0.00121	mg/L	0.000238	-0.00121	mg/L	0.000238	19.74%
Ni 231.604†	61.4	-0.00248	mg/L	0.000166	-0.00248	mg/L	0.000166	6.70%
Pb 220.353†	9.7	0.00064	mg/L	0.000757	0.00064	mg/L	0.000757	119.23%
Sb 206.836†	0.9	0.00472	mg/L	0.001546	0.00472	mg/L	0.001546	32.75%
Se 196.026†	-2.8	0.00151	mg/L	0.002075	0.00151	mg/L	0.002075	137.78%
Si 251.611†	4326.1	42.1	mg/L	0.32	42.1	mg/L	0.32	0.76%
Sn 189.927†	-18.0	-0.00261	mg/L	0.000339	-0.00261	mg/L	0.000339	12.95%
Ti 334.940†	-181.3	0.00152	mg/L	0.000042	0.00152	mg/L	0.000042	2.78%
Tl 190.801†	12.2	0.00171	mg/L	0.000168	0.00171	mg/L	0.000168	9.81%
V 290.880†	1204.1	0.00772	mg/L	0.000505	0.00772	mg/L	0.000505	6.55%
Zn 206.200†	117.7	0.00338	mg/L	0.000122	0.00338	mg/L	0.000122	3.60%
K 766.490†	680.3	0.148	mg/L	0.0056	0.148	mg/L	0.0056	3.78%
Na 589.592†	215175.4	10.9	mg/L	0.23	10.9	mg/L	0.23	2.13%
Sr 407.771†	39313.3	0.0154	mg/L	0.00042	0.0154	mg/L	0.00042	2.72%
Li 670.784†	54.1	-0.00159	mg/L	0.000724	-0.00159	mg/L	0.000724	45.42%

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Sequence No.: 2 **Autosampler Location: 51**
Sample ID: L1205001101S WG396754-04 **Date Collected: 5/4/2012 3:16:10 PM**

Approved: May 07, 2012

Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205001101S WG396754-04

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1205001101S WG396754-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2356232.2						50246.00	2.13%
YRADIAL	293224.4						2861.54	0.98%
Ga 417.206	1431628.7						37404.02	2.61%
GaRADIAL	88789.7						2697.18	3.04%
Ag 328.068†	927.3	0.00415	mg/L	0.000271	0.00415	mg/L	0.000271	6.52%
Al 396.153†	390.9	0.0460	mg/L	0.00085	0.0460	mg/L	0.00085	1.85%
As 188.979†	10.8	0.00209	mg/L	0.001457	0.00209	mg/L	0.001457	69.67%
Ba 233.527†	409.3	0.00301	mg/L	0.000058	0.00301	mg/L	0.000058	1.91%
Be 234.861†	581.9	0.00064	mg/L	0.000013	0.00064	mg/L	0.000013	2.11%
B 249.677†	1448.4	0.0197	mg/L	0.00042	0.0197	mg/L	0.00042	2.15%
Ca 227.546†	1232.7	2.65	mg/L	0.079	2.65	mg/L	0.079	3.00%
Cd 228.802†	-3.0	0.00029	mg/L	0.000073	0.00029	mg/L	0.000073	25.09%
Co 228.616†	46.9	0.00099	mg/L	0.000284	0.00099	mg/L	0.000284	28.61%
Cr 267.716†	133.1	0.00141	mg/L	0.000093	0.00141	mg/L	0.000093	6.61%
Cu 327.393†	898.7	0.00437	mg/L	0.000378	0.00437	mg/L	0.000378	8.64%
Fe 239.562†	649.1	0.0353	mg/L	0.00120	0.0353	mg/L	0.00120	3.41%
Mg 279.077†	2088.4	0.555	mg/L	0.0121	0.555	mg/L	0.0121	2.18%
Mn 257.610†	5188.8	0.00561	mg/L	0.000158	0.00561	mg/L	0.000158	2.82%
Mo 202.031†	150.4	0.00380	mg/L	0.000115	0.00380	mg/L	0.000115	3.04%
Ni 231.604†	198.1	-0.00059	mg/L	0.000300	-0.00059	mg/L	0.000300	50.83%
Pb 220.353†	38.5	0.00306	mg/L	0.000916	0.00306	mg/L	0.000916	29.90%
Sb 206.836†	25.9	0.0102	mg/L	0.00031	0.0102	mg/L	0.00031	2.99%
Se 196.026†	-9.0	-0.00153	mg/L	0.001555	-0.00153	mg/L	0.001555	101.72%
Si 251.611†	5545.9	53.9	mg/L	1.49	53.9	mg/L	1.49	2.76%
Sn 189.927†	34.0	0.00211	mg/L	0.000415	0.00211	mg/L	0.000415	19.69%
Ti 334.940†	4700.4	0.00627	mg/L	0.000182	0.00627	mg/L	0.000182	2.90%
Tl 190.801†	18.1	0.00322	mg/L	0.001903	0.00322	mg/L	0.001903	59.13%
V 290.880†	2228.4	0.0128	mg/L	0.00190	0.0128	mg/L	0.00190	14.82%
Zn 206.200†	319.9	0.00769	mg/L	0.000325	0.00769	mg/L	0.000325	4.23%
K 766.490†	1597.6	0.430	mg/L	0.0185	0.430	mg/L	0.0185	4.30%
Na 589.592†	227752.1	11.5	mg/L	0.28	11.5	mg/L	0.28	2.41%
Sr 407.771†	55268.4	0.0214	mg/L	0.00032	0.0214	mg/L	0.00032	1.48%
Li 670.784†	880.0	0.00394	mg/L	0.000305	0.00394	mg/L	0.000305	7.75%

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Sequence No.: 3 **Autosampler Location: 52**
Sample ID: L1205001101SD WG396754-05 **Date Collected: 5/4/2012 3:23:08 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205001101SD WG396754-05

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: L1205001101SD WG396754-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2369793.7						6630.91	0.28%
YRADIAL	299088.5						4468.85	1.49%
Ga 417.206	1439675.8						49286.52	3.42%
GaRADIAL	90351.6						2616.78	2.90%
Ag 328.068†	796.6	0.00374	mg/L	0.000208	0.00374	mg/L	0.000208	5.56%
Al 396.153†	380.1	0.0445	mg/L	0.00125	0.0445	mg/L	0.00125	2.81%
As 188.979†	12.7	0.00272	mg/L	0.002477	0.00272	mg/L	0.002477	91.03%
Ba 233.527†	410.0	0.00302	mg/L	0.000125	0.00302	mg/L	0.000125	4.15%
Be 234.861†	561.1	0.00062	mg/L	0.000012	0.00062	mg/L	0.000012	2.00%

Approved: May 07, 2012

B 249.677†	1445.2	0.0196	mg/L	0.00058	0.0196	mg/L	0.00058	2.94%
Ca 227.546†	1186.6	2.56	mg/L	0.090	2.56	mg/L	0.090	3.54%
Cd 228.802†	1.8	0.00037	mg/L	0.000223	0.00037	mg/L	0.000223	60.84%
Co 228.616†	45.2	0.00095	mg/L	0.000287	0.00095	mg/L	0.000287	30.12%
Cr 267.716†	127.5	0.00136	mg/L	0.000031	0.00136	mg/L	0.000031	2.27%
Cu 327.393†	901.7	0.00438	mg/L	0.000520	0.00438	mg/L	0.000520	11.87%
Fe 239.562†	616.9	0.0334	mg/L	0.00086	0.0334	mg/L	0.00086	2.57%
Mg 279.077†	1972.7	0.524	mg/L	0.0098	0.524	mg/L	0.0098	1.87%
Mn 257.610†	5406.3	0.00586	mg/L	0.000014	0.00586	mg/L	0.000014	0.23%
Mo 202.031†	157.2	0.00398	mg/L	0.000163	0.00398	mg/L	0.000163	4.11%
Ni 231.604†	194.8	-0.00064	mg/L	0.000247	-0.00064	mg/L	0.000247	38.77%
Pb 220.353†	38.2	0.00304	mg/L	0.000718	0.00304	mg/L	0.000718	23.64%
Sb 206.836†	25.8	0.0102	mg/L	0.00152	0.0102	mg/L	0.00152	14.94%
Se 196.026†	1.5	0.00363	mg/L	0.001368	0.00363	mg/L	0.001368	37.73%
Si 251.611†	5411.0	52.6	mg/L	2.19	52.6	mg/L	2.19	4.16%
Sn 189.927†	29.3	0.00167	mg/L	0.000850	0.00167	mg/L	0.000850	50.76%
Ti 334.940†	4646.9	0.00621	mg/L	0.000073	0.00621	mg/L	0.000073	1.17%
Tl 190.801†	22.1	0.00418	mg/L	0.002104	0.00418	mg/L	0.002104	50.37%
V 290.880†	2048.0	0.0119	mg/L	0.00172	0.0119	mg/L	0.00172	14.44%
Zn 206.200†	343.0	0.00818	mg/L	0.000285	0.00818	mg/L	0.000285	3.48%
K 766.490†	1514.4	0.405	mg/L	0.0146	0.405	mg/L	0.0146	3.62%
Na 589.592†	217199.5	11.0	mg/L	0.24	11.0	mg/L	0.24	2.15%
Sr 407.771†	52798.5	0.0204	mg/L	0.00038	0.0204	mg/L	0.00038	1.84%
Li 670.784†	844.1	0.00370	mg/L	0.000318	0.00370	mg/L	0.000318	8.59%

Sequence No.: 4
Sample ID: L1205001102 0.01
Analyst: KHR
Initial Sample Wt:
Dilution:

Autosampler Location: 53
Date Collected: 5/4/2012 3:30:03 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: L1205001102 0.01

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: L1205001102 0.01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2343260.3						20567.21	0.88%
YRADIAL	299221.5						5523.80	1.85%
Ga 417.206	1426113.3						12756.54	0.89%
GaRADIAL	90012.1						1679.86	1.87%
Ag 328.068†	100.4	0.00157	mg/L	0.000273	0.00157	mg/L	0.000273	17.32%
Al 396.153†	-35.5	-0.0117	mg/L	0.00239	-0.0117	mg/L	0.00239	20.37%
As 188.979†	8.6	0.00140	mg/L	0.002635	0.00140	mg/L	0.002635	187.75%
Ba 233.527†	-433.4	-0.00204	mg/L	0.000098	-0.00204	mg/L	0.000098	4.82%
Be 234.861†	215.5	0.00037	mg/L	0.000019	0.00037	mg/L	0.000019	5.10%
B 249.677†	481.2	0.00947	mg/L	0.000166	0.00947	mg/L	0.000166	1.75%
Ca 227.546†	1193.1	2.57	mg/L	0.042	2.57	mg/L	0.042	1.64%
Cd 228.802†	-15.9	0.00008	mg/L	0.000152	0.00008	mg/L	0.000152	186.04%
Co 228.616†	-2.0	-0.00022	mg/L	0.000203	-0.00022	mg/L	0.000203	91.53%
Cr 267.716†	-175.4	-0.00130	mg/L	0.000063	-0.00130	mg/L	0.000063	4.89%
Cu 327.393†	361.9	0.00242	mg/L	0.000398	0.00242	mg/L	0.000398	16.49%
Fe 239.562†	206.5	0.00956	mg/L	0.000247	0.00956	mg/L	0.000247	2.59%
Mg 279.077†	1823.6	0.484	mg/L	0.0080	0.484	mg/L	0.0080	1.66%
Mn 257.610†	2978.6	0.00307	mg/L	0.000032	0.00307	mg/L	0.000032	1.04%
Mo 202.031†	-32.4	-0.00109	mg/L	0.000284	-0.00109	mg/L	0.000284	26.03%
Ni 231.604†	3.3	-0.00329	mg/L	0.000148	-0.00329	mg/L	0.000148	4.50%
Pb 220.353†	9.8	0.00064	mg/L	0.000193	0.00064	mg/L	0.000193	30.29%
Sb 206.836†	-4.0	0.00366	mg/L	0.001322	0.00366	mg/L	0.001322	36.15%
Se 196.026†	-8.9	-0.00148	mg/L	0.003433	-0.00148	mg/L	0.003433	232.08%
Si 251.611†	3714.3	36.1	mg/L	0.53	36.1	mg/L	0.53	1.48%
Sn 189.927†	-25.5	-0.00329	mg/L	0.000750	-0.00329	mg/L	0.000750	22.75%
Ti 334.940†	-495.2	0.00121	mg/L	0.000108	0.00121	mg/L	0.000108	8.89%
Tl 190.801†	9.2	0.00097	mg/L	0.001765	0.00097	mg/L	0.001765	181.49%
V 290.880†	1063.3	0.00701	mg/L	0.000407	0.00701	mg/L	0.000407	5.80%
Zn 206.200†	83.3	0.00265	mg/L	0.000136	0.00265	mg/L	0.000136	5.14%
K 766.490†	783.6	0.180	mg/L	0.0262	0.180	mg/L	0.0262	14.56%
Na 589.592†	220504.1	11.1	mg/L	0.32	11.1	mg/L	0.32	2.88%

Approved: May 07, 2012

Sr 407.771†	39577.6	0.0155 mg/L	0.00037	0.0155 mg/L	0.00037	2.39%
Li 670.784†	139.9	-0.00102 mg/L	0.000176	-0.00102 mg/L	0.000176	17.32%

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Sequence No.: 5 **Autosampler Location: 54**
Sample ID: L1205001103 0.01 **Date Collected: 5/4/2012 3:36:58 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205001103 0.01

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1205001103 0.01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2305769.2						34466.38	1.49%
YRADIAL	292301.5						3537.64	1.21%
Ga 417.206	1411899.1						23582.19	1.67%
GaRADIAL	88539.1						2318.73	2.62%
Ag 328.068†	160.0	0.00176	mg/L	0.000208	0.00176	mg/L	0.000208	11.82%
Al 396.153†	3.4	-0.00641	mg/L	0.001284	-0.00641	mg/L	0.001284	20.02%
As 188.979†	4.3	-0.00001	mg/L	0.003220	-0.00001	mg/L	0.003220	>999.9%
Ba 233.527†	-436.0	-0.00206	mg/L	0.000056	-0.00206	mg/L	0.000056	2.71%
Be 234.861†	191.9	0.00035	mg/L	0.000017	0.00035	mg/L	0.000017	4.87%
B 249.677†	428.6	0.00891	mg/L	0.000151	0.00891	mg/L	0.000151	1.69%
Ca 227.546†	1236.7	2.66	mg/L	0.010	2.66	mg/L	0.010	0.38%
Cd 228.802†	-12.0	0.00015	mg/L	0.000187	0.00015	mg/L	0.000187	123.60%
Co 228.616†	-1.9	-0.00022	mg/L	0.000122	-0.00022	mg/L	0.000122	55.90%
Cr 267.716†	-146.8	-0.00104	mg/L	0.000164	-0.00104	mg/L	0.000164	15.71%
Cu 327.393†	288.5	0.00215	mg/L	0.000281	0.00215	mg/L	0.000281	13.06%
Fe 239.562†	287.1	0.0143	mg/L	0.00080	0.0143	mg/L	0.00080	5.63%
Mg 279.077†	1865.5	0.495	mg/L	0.0027	0.495	mg/L	0.0027	0.54%
Mn 257.610†	3233.3	0.00336	mg/L	0.000068	0.00336	mg/L	0.000068	2.03%
Mo 202.031†	-40.9	-0.00132	mg/L	0.000084	-0.00132	mg/L	0.000084	6.37%
Ni 231.604†	9.6	-0.00320	mg/L	0.000261	-0.00320	mg/L	0.000261	8.17%
Pb 220.353†	8.5	0.00053	mg/L	0.000157	0.00053	mg/L	0.000157	29.40%
Sb 206.836†	-0.7	0.00438	mg/L	0.000439	0.00438	mg/L	0.000439	10.03%
Se 196.026†	-7.5	-0.00079	mg/L	0.002370	-0.00079	mg/L	0.002370	299.35%
Si 251.611†	4463.6	43.4	mg/L	0.77	43.4	mg/L	0.77	1.77%
Sn 189.927†	-32.5	-0.00393	mg/L	0.000164	-0.00393	mg/L	0.000164	4.18%
Ti 334.940†	-378.1	0.00134	mg/L	0.000122	0.00134	mg/L	0.000122	9.10%
Tl 190.801†	11.2	0.00147	mg/L	0.002461	0.00147	mg/L	0.002461	167.64%
V 290.880†	1360.8	0.00850	mg/L	0.000911	0.00850	mg/L	0.000911	10.72%
Zn 206.200†	85.5	0.00270	mg/L	0.000104	0.00270	mg/L	0.000104	3.87%
K 766.490†	681.8	0.148	mg/L	0.0259	0.148	mg/L	0.0259	17.49%
Na 589.592†	220685.9	11.2	mg/L	0.26	11.2	mg/L	0.26	2.35%
Sr 407.771†	40492.5	0.0158	mg/L	0.00027	0.0158	mg/L	0.00027	1.71%
Li 670.784†	51.0	-0.00161	mg/L	0.000212	-0.00161	mg/L	0.000212	13.11%

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Sequence No.: 6 **Autosampler Location: 55**
Sample ID: L1205001104 0.01 **Date Collected: 5/4/2012 3:43:53 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205001104 0.01

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: L1205001104 0.01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2298413.5						30399.28	1.32%
YRADIAL	290161.1						7491.26	2.58%
Ga 417.206	1423663.4						19710.09	1.38%

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GaRADIAL	87405.3				778.18	0.89%
Ag 328.068†	165.3	0.00178 mg/L	0.000112	0.00178 mg/L	0.000112	6.30%
Al 396.153†	-27.0	-0.0106 mg/L	0.00042	-0.0106 mg/L	0.00042	3.95%
As 188.979†	12.6	0.00272 mg/L	0.000719	0.00272 mg/L	0.000719	26.43%
Ba 233.527†	-447.6	-0.00213 mg/L	0.000124	-0.00213 mg/L	0.000124	5.84%
Be 234.861†	202.6	0.00036 mg/L	0.000025	0.00036 mg/L	0.000025	6.95%
B 249.677†	395.4	0.00857 mg/L	0.000166	0.00857 mg/L	0.000166	1.94%
Ca 227.546†	1201.7	2.59 mg/L	0.042	2.59 mg/L	0.042	1.64%
Cd 228.802†	-13.3	0.00012 mg/L	0.000165	0.00012 mg/L	0.000165	141.23%
Co 228.616†	-3.5	-0.00026 mg/L	0.000137	-0.00026 mg/L	0.000137	52.72%
Cr 267.716†	-168.0	-0.00123 mg/L	0.000131	-0.00123 mg/L	0.000131	10.67%
Cu 327.393†	395.6	0.00254 mg/L	0.000432	0.00254 mg/L	0.000432	17.01%
Fe 239.562†	215.6	0.0101 mg/L	0.00053	0.0101 mg/L	0.00053	5.28%
Mg 279.077†	1907.0	0.506 mg/L	0.0028	0.506 mg/L	0.0028	0.56%
Mn 257.610†	3068.9	0.00317 mg/L	0.000080	0.00317 mg/L	0.000080	2.51%
Mo 202.031†	-38.1	-0.00124 mg/L	0.000336	-0.00124 mg/L	0.000336	27.00%
Ni 231.604†	-4.8	-0.00340 mg/L	0.000362	-0.00340 mg/L	0.000362	10.64%
Pb 220.353†	9.7	0.00063 mg/L	0.001300	0.00063 mg/L	0.001300	206.20%
Sb 206.836†	-0.6	0.00441 mg/L	0.000095	0.00441 mg/L	0.000095	2.17%
Se 196.026†	-7.8	-0.00095 mg/L	0.001441	-0.00095 mg/L	0.001441	151.11%
Si 251.611†	3816.9	37.1 mg/L	0.46	37.1 mg/L	0.46	1.23%
Sn 189.927†	-29.5	-0.00365 mg/L	0.000377	-0.00365 mg/L	0.000377	10.32%
Ti 334.940†	-506.6	0.00120 mg/L	0.000195	0.00120 mg/L	0.000195	16.22%
Tl 190.801†	10.4	0.00128 mg/L	0.003452	0.00128 mg/L	0.003452	270.02%
V 290.880†	1458.7	0.00899 mg/L	0.001330	0.00899 mg/L	0.001330	14.79%
Zn 206.200†	91.4	0.00282 mg/L	0.000116	0.00282 mg/L	0.000116	4.10%
K 766.490†	722.3	0.161 mg/L	0.0364	0.161 mg/L	0.0364	22.64%
Na 589.592†	225523.9	11.4 mg/L	0.66	11.4 mg/L	0.66	5.83%
Sr 407.771†	40770.5	0.0159 mg/L	0.00029	0.0159 mg/L	0.00029	1.84%
Li 670.784†	89.1	-0.00136 mg/L	0.000087	-0.00136 mg/L	0.000087	6.37%

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Sequence No.: 7 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 5/4/2012 3:50:49 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	148.0 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	2355424.7						25069.78	1.06%
YRADIAL	310492.8						3165.61	1.02%
Ga 417.206	1384266.0						44346.81	3.20%
GaRADIAL	91235.3						835.74	0.92%
Ag 328.068†	127233.4	0.397	mg/L	0.0107	0.397	mg/L	0.0107	2.69%
QC value within limits for Ag 328.068 Recovery = 99.30%								
Al 396.153†	71893.0	9.71	mg/L	0.029	9.71	mg/L	0.029	0.30%
QC value within limits for Al 396.153 Recovery = 97.08%								
As 188.979†	1179.5	0.383	mg/L	0.0088	0.383	mg/L	0.0088	2.31%
QC value within limits for As 188.979 Recovery = 95.66%								
Ba 233.527†	162339.1	0.974	mg/L	0.0071	0.974	mg/L	0.0071	0.73%
QC value within limits for Ba 233.527 Recovery = 97.42%								
Be 234.861†	65799.0	0.0475	mg/L	0.00133	0.0475	mg/L	0.00133	2.81%
QC value within limits for Be 234.861 Recovery = 95.09%								
B 249.677†	45235.2	0.479	mg/L	0.0134	0.479	mg/L	0.0134	2.81%
QC value within limits for B 249.677 Recovery = 95.77%								
Ca 227.546†	4596.6	10.1	mg/L	0.34	10.1	mg/L	0.34	3.42%
QC value within limits for Ca 227.546 Recovery = 100.62%								
Cd 228.802†	2927.6	0.0468	mg/L	0.00208	0.0468	mg/L	0.00208	4.44%
QC value within limits for Cd 228.802 Recovery = 93.61%								
Co 228.616†	7943.1	0.197	mg/L	0.0011	0.197	mg/L	0.0011	0.56%
QC value within limits for Co 228.616 Recovery = 98.50%								
Cr 267.716†	56233.5	0.493	mg/L	0.0017	0.493	mg/L	0.0017	0.34%
QC value within limits for Cr 267.716 Recovery = 98.63%								
Cu 327.393†	133069.3	0.485	mg/L	0.0095	0.485	mg/L	0.0095	1.97%

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   QC value within limits for Cu 327.393  Recovery = 96.95%
Fe 239.562†          66583.1        3.87 mg/L        0.032        3.87 mg/L        0.032   0.83%
   QC value within limits for Fe 239.562  Recovery = 96.74%
Mg 279.077†          36358.8        9.77 mg/L        0.082        9.77 mg/L        0.082   0.84%
   QC value within limits for Mg 279.077  Recovery = 97.71%
Mn 257.610†         427078.9       0.490 mg/L       0.0006       0.490 mg/L       0.0006   0.12%
   QC value within limits for Mn 257.610  Recovery = 98.10%
Mo 202.031†          37994.3        1.02 mg/L        0.005        1.02 mg/L        0.005   0.53%
   QC value within limits for Mo 202.031  Recovery = 101.60%
Ni 231.604†          36604.8       0.503 mg/L       0.0043       0.503 mg/L       0.0043   0.85%
   QC value within limits for Ni 231.604  Recovery = 100.67%
Pb 220.353†           5822.2       0.491 mg/L       0.0048       0.491 mg/L       0.0048   0.98%
   QC value within limits for Pb 220.353  Recovery = 98.26%
Sb 206.836†           5144.1        1.14 mg/L        0.036        1.14 mg/L        0.036   3.20%
   QC value within limits for Sb 206.836  Recovery = 94.71%
Se 196.026†            746.5       0.371 mg/L       0.0091       0.371 mg/L       0.0091   2.45%
   QC value within limits for Se 196.026  Recovery = 92.73%
Si 251.611†         213461.0        2070 mg/L         41.5        2070 mg/L         41.5   2.00%
   QC value greater than the upper limit for Si 251.611  Recovery = 41483.77%
Sn 189.927†          10977.2       0.995 mg/L       0.0089       0.995 mg/L       0.0089   0.89%
   QC value within limits for Sn 189.927  Recovery = 99.51%
Ti 334.940†         999267.6       0.975 mg/L       0.0050       0.975 mg/L       0.0050   0.51%
   QC value within limits for Ti 334.940  Recovery = 97.46%
Tl 190.801†           2031.4       0.506 mg/L       0.0073       0.506 mg/L       0.0073   1.44%
   QC value within limits for Tl 190.801  Recovery = 101.17%
V 290.880†           199348.7       0.997 mg/L       0.0120       0.997 mg/L       0.0120   1.20%
   QC value within limits for V 290.880  Recovery = 99.71%
Zn 206.200†           45860.1       0.977 mg/L       0.0114       0.977 mg/L       0.0114   1.16%
   QC value within limits for Zn 206.200  Recovery = 97.74%
K 766.490†           157648.9        48.8 mg/L         0.17        48.8 mg/L         0.17   0.34%
   QC value within limits for K 766.490  Recovery = 97.63%
Na 589.592†          955445.1        48.9 mg/L         0.49        48.9 mg/L         0.49   1.00%
   QC value within limits for Na 589.592  Recovery = 97.71%
Sr 407.771†         2590734.0       0.973 mg/L       0.0087       0.973 mg/L       0.0087   0.89%
   QC value within limits for Sr 407.771  Recovery = 97.34%
Li 670.784†          149376.1       0.998 mg/L       0.0149       0.998 mg/L       0.0149   1.50%
   QC value within limits for Li 670.784  Recovery = 99.83%
QC Failed.  Continue with analysis.

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Sequence No.: 8                                   Autosampler Location: 1
Sample ID: CCB                                    Date Collected: 5/4/2012 3:56:49 PM
Analyst:                                          Data Type: Original
Initial Sample Wt:                                Initial Sample Vol:
Dilution:                                         Sample Prep Vol:

----------------------------------------------------------------------------------------------
Nebulizer Parameters: CCB
Analyte                 Back Pressure    Flow
All                    148.0 kPa         0.50 L/min

----------------------------------------------------------------------------------------------
Mean Data: CCB
                   Mean Corrected         Calib.                          Sample
Analyte               Intensity     Conc. Units      Std.Dev.      Conc. Units      Std.Dev.   RSD
Y 371.029            2434816.6                                                    21488.63   0.88%
YRADIAL               305954.2                                                     1209.82   0.40%
Ga 417.206           1411994.4                                                    27280.55   1.93%
GaRADIAL               91483.7                                                     1983.19   2.17%
Ag 328.068†              188.3     0.00184 mg/L      0.000461     0.00184 mg/L      0.000461  25.10%
   QC value within limits for Ag 328.068  Recovery = Not calculated
Al 396.153†              -28.2     -0.0108 mg/L       0.00086     -0.0108 mg/L       0.00086   8.04%
   QC value within limits for Al 396.153  Recovery = Not calculated
As 188.979†                3.4    -0.00033 mg/L      0.002685    -0.00033 mg/L      0.002685 815.55%
   QC value within limits for As 188.979  Recovery = Not calculated
Ba 233.527†             -667.2    -0.00344 mg/L      0.000043    -0.00344 mg/L      0.000043   1.25%
   QC value within limits for Ba 233.527  Recovery = Not calculated
Be 234.861†               20.2     0.00023 mg/L      0.000021     0.00023 mg/L      0.000021   9.10%
   QC value within limits for Be 234.861  Recovery = Not calculated
B 249.677†               315.2     0.00772 mg/L      0.000185     0.00772 mg/L      0.000185   2.39%
   QC value within limits for B 249.677  Recovery = Not calculated
Ca 227.546†                5.3       0.113 mg/L        0.0103       0.113 mg/L        0.0103   9.15%
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   QC value greater than the upper limit for Ca 227.546  Recovery = Not calculated
Cd 228.802†              -9.2     0.00020 mg/L      0.000194     0.00020 mg/L      0.000194  97.11%
   QC value within limits for Cd 228.802  Recovery = Not calculated
Co 228.616†              10.8     0.00010 mg/L      0.000249     0.00010 mg/L      0.000249 256.77%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†            -177.3    -0.00132 mg/L      0.000100    -0.00132 mg/L      0.000100   7.60%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 327.393†             282.7     0.00213 mg/L      0.000342     0.00213 mg/L      0.000342  16.06%
   QC value within limits for Cu 327.393  Recovery = Not calculated
Fe 239.562†              20.6    -0.00124 mg/L      0.000188    -0.00124 mg/L      0.000188  15.15%
   QC value within limits for Fe 239.562  Recovery = Not calculated
Mg 279.077†              -9.5    -0.00844 mg/L      0.002162    -0.00844 mg/L      0.002162  25.62%
   QC value within limits for Mg 279.077  Recovery = Not calculated
Mn 257.610†             -61.0    -0.00042 mg/L      0.000006    -0.00042 mg/L      0.000006   1.48%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†             -20.5    -0.00078 mg/L      0.000022    -0.00078 mg/L      0.000022   2.88%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Ni 231.604†               4.4    -0.00327 mg/L      0.000194    -0.00327 mg/L      0.000194   5.92%
   QC value within limits for Ni 231.604  Recovery = Not calculated
Pb 220.353†              -3.1    -0.00047 mg/L      0.001747    -0.00047 mg/L      0.001747 374.64%
   QC value within limits for Pb 220.353  Recovery = Not calculated
Sb 206.836†               2.0     0.00497 mg/L      0.000882     0.00497 mg/L      0.000882  17.74%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               3.3     0.00448 mg/L      0.002076     0.00448 mg/L      0.002076  46.33%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             304.2        2.97 mg/L         0.164        2.97 mg/L         0.164   5.53%
   QC value greater than the upper limit for Si 251.611  Recovery = Not calculated
Sn 189.927†               5.1    -0.00052 mg/L      0.000246    -0.00052 mg/L      0.000246  47.71%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Ti 334.940†             115.9     0.00143 mg/L      0.000073     0.00143 mg/L      0.000073   5.08%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -2.1    -0.00175 mg/L      0.001032    -0.00175 mg/L      0.001032  58.84%
   QC value within limits for Tl 190.801  Recovery = Not calculated
V 290.880†              179.4     0.00261 mg/L      0.001421     0.00261 mg/L      0.001421  54.45%
   QC value within limits for V 290.880  Recovery = Not calculated
Zn 206.200†              18.9     0.00128 mg/L      0.000106     0.00128 mg/L      0.000106   8.22%
   QC value within limits for Zn 206.200  Recovery = Not calculated
K 766.490†              -69.2     -0.0720 mg/L       0.02531     -0.0720 mg/L       0.02531  35.14%
   QC value within limits for K 766.490  Recovery = Not calculated
Na 589.592†            3056.7       0.164 mg/L        0.0450       0.164 mg/L        0.0450  27.34%
   QC value within limits for Na 589.592  Recovery = Not calculated
Sr 407.771†             152.1     0.00073 mg/L      0.000075     0.00073 mg/L      0.000075  10.25%
   QC value within limits for Sr 407.771  Recovery = Not calculated
Li 670.784†              -28.6    -0.00215 mg/L      0.000334    -0.00215 mg/L      0.000334  15.56%
   QC value within limits for Li 670.784  Recovery = Not calculated
QC Failed.  Continue with analysis.

==============================================================================================
Sequence No.: 9                                   Autosampler Location: 12
Sample ID: ICSA                                   Date Collected: 5/4/2012 4:03:42 PM
Analyst:                                          Data Type: Original
Initial Sample Wt:                                Initial Sample Vol:
Dilution:                                         Sample Prep Vol:

----------------------------------------------------------------------------------------------
Nebulizer Parameters: ICSA
Analyte                 Back Pressure    Flow
All                   149.0 kPa         0.50 L/min

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Mean Data: ICSA
                   Mean Corrected         Calib.                          Sample
Analyte               Intensity     Conc. Units      Std.Dev.      Conc. Units      Std.Dev.   RSD
Y 371.029            2230357.2                                                     23177.52   1.04%
YRADIAL               301234.7                                                      7100.95   2.36%
Ga 417.206           1342957.7                                                     25706.41   1.91%
GaRADIAL               90103.3                                                      1529.06   1.70%
Ag 328.068†           -13475.9    -0.00023 mg/L      0.000937    -0.00023 mg/L      0.000937 404.92%
   QC value within limits for Ag 328.068  Recovery = Not calculated
Al 396.153†          1807413.6         246 mg/L           4.6         246 mg/L           4.6   1.89%
   QC value within limits for Al 396.153  Recovery = 98.39%
As 188.979†              -14.9    -0.00047 mg/L      0.001887    -0.00047 mg/L      0.001887 399.97%
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   QC value within limits for As 188.979  Recovery = Not calculated
Ba 233.527†              134.5    -0.00090 mg/L      0.000179    -0.00090 mg/L      0.000179  19.88%
   QC value within limits for Ba 233.527  Recovery = Not calculated
Be 234.861†            26882.9    -0.00043 mg/L      0.000585    -0.00043 mg/L      0.000585 135.13%
   QC value within limits for Be 234.861  Recovery = Not calculated
B 249.677†              5848.4      0.0273 mg/L       0.00281      0.0273 mg/L       0.00281  10.29%
   QC value within limits for B 249.677  Recovery = Not calculated
Ca 227.546†           122297.9         255 mg/L           7.4         255 mg/L           7.4   2.90%
   QC value within limits for Ca 227.546  Recovery = 102.01%
Cd 228.802†                3.5     0.00027 mg/L      0.000207     0.00027 mg/L      0.000207  77.26%
   QC value within limits for Cd 228.802  Recovery = Not calculated
Co 228.616†               20.0    -0.00196 mg/L      0.000285    -0.00196 mg/L      0.000285  14.51%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†             -119.1    -0.00227 mg/L      0.000291    -0.00227 mg/L      0.000291  12.80%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 327.393†            -1308.6     0.00394 mg/L      0.000273     0.00394 mg/L      0.000273   6.93%
   QC value within limits for Cu 327.393  Recovery = Not calculated
Fe 239.562†          1554113.8        90.4 mg/L          2.29        90.4 mg/L          2.29   2.54%
   QC value within limits for Fe 239.562  Recovery = 90.38%
Mg 279.077†           919651.9         247 mg/L           6.7         247 mg/L           6.7   2.72%
   QC value within limits for Mg 279.077  Recovery = 98.74%
Mn 257.610†            -2353.1    -0.00052 mg/L      0.000525    -0.00052 mg/L      0.000525 101.52%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              -88.3     0.00185 mg/L      0.000692     0.00185 mg/L      0.000692  37.41%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Ni 231.604†               76.0    -0.00228 mg/L      0.000626    -0.00228 mg/L      0.000626  27.53%
   QC value within limits for Ni 231.604  Recovery = Not calculated
Pb 220.353†             -423.4    -0.00107 mg/L      0.002762    -0.00107 mg/L      0.002762 259.23%
   QC value within limits for Pb 220.353  Recovery = Not calculated
Sb 206.836†              -40.6    -0.00110 mg/L      0.001688    -0.00110 mg/L      0.001688 153.52%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -63.7    -0.00443 mg/L      0.002570    -0.00443 mg/L      0.002570  58.00%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             7752.8        75.3 mg/L          0.96        75.3 mg/L          0.96   1.28%
   QC value greater than the upper limit for Si 251.611  Recovery = Not calculated
Sn 189.927†             -326.9     -0.0306 mg/L       0.00035     -0.0306 mg/L       0.00035   1.14%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Ti 334.940†           -38143.7     0.00213 mg/L      0.003132     0.00213 mg/L      0.003132 147.30%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -47.3    -0.00647 mg/L      0.009127    -0.00647 mg/L      0.009127 141.02%
   QC value within limits for Tl 190.801  Recovery = Not calculated
V 290.880†              4204.3     0.00203 mg/L      0.002759     0.00203 mg/L      0.002759 135.86%
   QC value within limits for V 290.880  Recovery = Not calculated
Zn 206.200†              236.8     0.00418 mg/L      0.000669     0.00418 mg/L      0.000669  16.01%
   QC value within limits for Zn 206.200  Recovery = Not calculated
K 766.490†              -157.8     -0.0993 mg/L       0.01581     -0.0993 mg/L       0.01581  15.91%
   QC value within limits for K 766.490  Recovery = Not calculated
Na 589.592†             2428.6       0.133 mg/L        0.0301       0.133 mg/L        0.0301  22.63%
   QC value within limits for Na 589.592  Recovery = Not calculated
Sr 407.771†             2402.1    -0.00398 mg/L      0.000130    -0.00398 mg/L      0.000130   3.27%
   QC value within limits for Sr 407.771  Recovery = Not calculated
Li 670.784†              182.7    -0.00073 mg/L      0.000421    -0.00073 mg/L      0.000421  57.57%
   QC value within limits for Li 670.784  Recovery = Not calculated
QC Failed.  Continue with analysis.

==========================================================================================
Sequence No.: 10                                  Autosampler Location: 13
Sample ID: ICSAB                                  Date Collected: 5/4/2012 4:09:39 PM
Analyst:                                          Data Type: Original
Initial Sample Wt:                                Initial Sample Vol:
Dilution:                                         Sample Prep Vol:

------------------------------------------------------------------------------------------
Nebulizer Parameters: ICSAB
Analyte                  Back Pressure    Flow
All                     148.0 kPa        0.50 L/min

------------------------------------------------------------------------------------------
Mean Data: ICSAB
                   Mean Corrected        Calib.                          Sample
Analyte               Intensity     Conc. Units     Std.Dev.     Conc. Units     Std.Dev.   RSD
Y 371.029            2193392.8                                                   7062.89   0.32%
```

Approved: May 07, 2012

Lynn H. Rhoden

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YRADIAL              303180.2                                                    2046.96   0.68%
Ga 417.206          1304299.9                                                   21690.50   1.66%
GaRADIAL              90791.7                                                     260.49   0.29%
Ag 328.068†          154454.6       0.519 mg/L        0.0095       0.519 mg/L        0.0095   1.83%
   QC value within limits for Ag 328.068  Recovery = 103.71%
Al 396.153†         1821413.5         248 mg/L           6.2         248 mg/L           6.2   2.50%
   QC value within limits for Al 396.153  Recovery = 99.15%
As 188.979†             718.3       0.242 mg/L        0.0052       0.242 mg/L        0.0052   2.16%
   QC value within limits for As 188.979  Recovery = 96.61%
Ba 233.527†           41456.0       0.247 mg/L        0.0024       0.247 mg/L        0.0024   0.97%
   QC value within limits for Ba 233.527  Recovery = 98.71%
Be 234.861†          367022.6       0.246 mg/L        0.0041       0.246 mg/L        0.0041   1.66%
   QC value within limits for Be 234.861  Recovery = 98.51%
B 249.677†             4495.2     0.00106 mg/L      0.000989     0.00106 mg/L      0.000989  93.14%
   QC value within limits for B 249.677  Recovery = Not calculated
Ca 227.546†          126817.5         265 mg/L           5.9         265 mg/L           5.9   2.24%
   QC value within limits for Ca 227.546  Recovery = 105.89%
Cd 228.802†           25292.6       0.413 mg/L        0.0067       0.413 mg/L        0.0067   1.63%
   QC value within limits for Cd 228.802  Recovery = 82.53%
Co 228.616†            9520.7       0.235 mg/L        0.0016       0.235 mg/L        0.0016   0.66%
   QC value within limits for Co 228.616  Recovery = 93.85%
Cr 267.716†           28702.9       0.250 mg/L        0.0002       0.250 mg/L        0.0002   0.07%
   QC value within limits for Cr 267.716  Recovery = 100.13%
Cu 327.393†           67339.6       0.253 mg/L        0.0049       0.253 mg/L        0.0049   1.92%
   QC value within limits for Cu 327.393  Recovery = 101.06%
Fe 239.562†         1563917.0        91.0 mg/L          2.40        91.0 mg/L          2.40   2.64%
   QC value within limits for Fe 239.562  Recovery = 90.95%
Mg 279.077†          926044.8         249 mg/L           6.3         249 mg/L           6.3   2.53%
   QC value within limits for Mg 279.077  Recovery = 99.42%
Mn 257.610†          210654.0       0.244 mg/L        0.0015       0.244 mg/L        0.0015   0.62%
   QC value within limits for Mn 257.610  Recovery = 97.64%
Mo 202.031†            -115.9     0.00131 mg/L      0.000151     0.00131 mg/L      0.000151  11.53%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Ni 231.604†           34221.4       0.470 mg/L        0.0030       0.470 mg/L        0.0030   0.65%
   QC value within limits for Ni 231.604  Recovery = 94.05%
Pb 220.353†            5222.0       0.474 mg/L        0.0047       0.474 mg/L        0.0047   1.00%
   QC value within limits for Pb 220.353  Recovery = 94.85%
Sb 206.836†            2170.8       0.485 mg/L        0.0079       0.485 mg/L        0.0079   1.63%
   QC value within limits for Sb 206.836  Recovery = 96.90%
Se 196.026†             424.5       0.236 mg/L        0.0006       0.236 mg/L        0.0006   0.26%
   QC value within limits for Se 196.026  Recovery = 94.25%
Si 251.611†             -53.2      -0.501 mg/L        0.3277      -0.501 mg/L        0.3277  65.42%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†            -332.0     -0.0311 mg/L       0.00080     -0.0311 mg/L       0.00080   2.57%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Ti 334.940†          -38697.5     0.00291 mg/L      0.002601     0.00291 mg/L      0.002601  89.29%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†            1907.7       0.468 mg/L        0.0008       0.468 mg/L        0.0008   0.18%
   QC value within limits for Tl 190.801  Recovery = 93.65%
V 290.880†           54661.1       0.254 mg/L        0.0009       0.254 mg/L        0.0009   0.33%
   QC value within limits for V 290.880  Recovery = 101.63%
Zn 206.200†          22158.5       0.471 mg/L        0.0016       0.471 mg/L        0.0016   0.33%
   QC value within limits for Zn 206.200  Recovery = 94.23%
K 766.490†           15783.1        4.81 mg/L         0.065        4.81 mg/L         0.065   1.35%
   QC value within limits for K 766.490  Recovery = 96.20%
Na 589.592†          99135.1        5.01 mg/L         0.084        5.01 mg/L         0.084   1.67%
   QC value within limits for Na 589.592  Recovery = 100.12%
Sr 407.771†           2457.3    -0.00417 mg/L      0.000166    -0.00417 mg/L      0.000166   3.99%
   QC value within limits for Sr 407.771  Recovery = Not calculated
Li 670.784†             255.7    -0.00024 mg/L      0.000260    -0.00024 mg/L      0.000260 106.77%
   QC value within limits for Li 670.784  Recovery = Not calculated
All analyte(s) passed QC.

==========================================================================================
Sequence No.: 11                                    Autosampler Location: 6
Sample ID: CCV                                      Date Collected: 5/4/2012 4:15:35 PM
Analyst:                                            Data Type: Original
Initial Sample Wt:                                  Initial Sample Vol:
Dilution:                                           Sample Prep Vol:

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Nebulizer Parameters: CCV
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Approved: May 07, 2012

Lynn H. Rhoden

Analyte	Back Pressure	Flow
All	149.0 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	2382298.2						30516.99	1.28%
YRADIAL	310440.3						3303.20	1.06%
Ga 417.206	1374573.0						46247.57	3.36%
GaRADIAL	90786.2						890.10	0.98%
Ag 328.068†	130112.6	0.406	mg/L	0.0159	0.406	mg/L	0.0159	3.93%
QC value within limits for Ag 328.068 Recovery = 101.53%								
Al 396.153†	72352.6	9.77	mg/L	0.028	9.77	mg/L	0.028	0.29%
QC value within limits for Al 396.153 Recovery = 97.70%								
As 188.979†	1185.1	0.385	mg/L	0.0136	0.385	mg/L	0.0136	3.53%
QC value within limits for As 188.979 Recovery = 96.13%								
Ba 233.527†	162704.8	0.976	mg/L	0.0103	0.976	mg/L	0.0103	1.06%
QC value within limits for Ba 233.527 Recovery = 97.64%								
Be 234.861†	66313.4	0.0479	mg/L	0.00176	0.0479	mg/L	0.00176	3.68%
QC value within limits for Be 234.861 Recovery = 95.84%								
B 249.677†	45382.3	0.480	mg/L	0.0234	0.480	mg/L	0.0234	4.87%
QC value within limits for B 249.677 Recovery = 96.08%								
Ca 227.546†	4664.3	10.2	mg/L	0.39	10.2	mg/L	0.39	3.85%
QC value within limits for Ca 227.546 Recovery = 101.89%								
Cd 228.802†	2966.8	0.0474	mg/L	0.00216	0.0474	mg/L	0.00216	4.56%
QC value within limits for Cd 228.802 Recovery = 94.86%								
Co 228.616†	7929.9	0.197	mg/L	0.0030	0.197	mg/L	0.0030	1.51%
QC value within limits for Co 228.616 Recovery = 98.33%								
Cr 267.716†	56230.3	0.493	mg/L	0.0026	0.493	mg/L	0.0026	0.54%
QC value within limits for Cr 267.716 Recovery = 98.63%								
Cu 327.393†	135198.9	0.492	mg/L	0.0209	0.492	mg/L	0.0209	4.25%
QC value within limits for Cu 327.393 Recovery = 98.50%								
Fe 239.562†	66592.8	3.87	mg/L	0.011	3.87	mg/L	0.011	0.28%
QC value within limits for Fe 239.562 Recovery = 96.75%								
Mg 279.077†	36522.2	9.82	mg/L	0.046	9.82	mg/L	0.046	0.47%
QC value within limits for Mg 279.077 Recovery = 98.15%								
Mn 257.610†	436269.7	0.501	mg/L	0.0064	0.501	mg/L	0.0064	1.28%
QC value within limits for Mn 257.610 Recovery = 100.21%								
Mo 202.031†	37815.6	1.01	mg/L	0.006	1.01	mg/L	0.006	0.55%
QC value within limits for Mo 202.031 Recovery = 101.12%								
Ni 231.604†	35403.1	0.487	mg/L	0.0031	0.487	mg/L	0.0031	0.63%
QC value within limits for Ni 231.604 Recovery = 97.34%								
Pb 220.353†	5833.9	0.492	mg/L	0.0082	0.492	mg/L	0.0082	1.66%
QC value within limits for Pb 220.353 Recovery = 98.46%								
Sb 206.836†	5214.4	1.15	mg/L	0.040	1.15	mg/L	0.040	3.47%
QC value within limits for Sb 206.836 Recovery = 96.00%								
Se 196.026†	751.9	0.374	mg/L	0.0135	0.374	mg/L	0.0135	3.60%
QC value within limits for Se 196.026 Recovery = 93.39%								
Si 251.611†	217825.7	2120	mg/L	63.2	2120	mg/L	63.2	2.99%
QC value greater than the upper limit for Si 251.611 Recovery = 42332.00%								
Sn 189.927†	10951.2	0.993	mg/L	0.0144	0.993	mg/L	0.0144	1.45%
QC value within limits for Sn 189.927 Recovery = 99.27%								
Ti 334.940†	997076.9	0.973	mg/L	0.0056	0.973	mg/L	0.0056	0.57%
QC value within limits for Ti 334.940 Recovery = 97.25%								
Tl 190.801†	2019.6	0.503	mg/L	0.0073	0.503	mg/L	0.0073	1.44%
QC value within limits for Tl 190.801 Recovery = 100.59%								
V 290.880†	200294.7	1.00	mg/L	0.010	1.00	mg/L	0.010	1.01%
QC value within limits for V 290.880 Recovery = 100.18%								
Zn 206.200†	46019.2	0.981	mg/L	0.0116	0.981	mg/L	0.0116	1.18%
QC value within limits for Zn 206.200 Recovery = 98.08%								
K 766.490†	158940.6	49.2	mg/L	0.22	49.2	mg/L	0.22	0.46%
QC value within limits for K 766.490 Recovery = 98.44%								
Na 589.592†	956310.7	48.9	mg/L	0.43	48.9	mg/L	0.43	0.87%
QC value within limits for Na 589.592 Recovery = 97.80%								
Sr 407.771†	2582090.6	0.970	mg/L	0.0069	0.970	mg/L	0.0069	0.71%
QC value within limits for Sr 407.771 Recovery = 97.02%								
Li 670.784†	150294.3	1.00	mg/L	0.008	1.00	mg/L	0.008	0.76%
QC value within limits for Li 670.784 Recovery = 100.44%								

QC Failed. Continue with analysis.

Approved: May 07, 2012

Lynn H. Rhoden

Sequence No.: 12
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 5/4/2012 4:21:36 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	148.0 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	2404280.7						34685.60	1.44%
YRADIAL	305299.3						7891.64	2.58%
Ga 417.206	1394715.9						22013.74	1.58%
GaRADIAL	90349.6						1561.70	1.73%
Ag 328.068†	206.2	0.00190	mg/L	0.000101	0.00190	mg/L	0.000101	5.32%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-4.4	-0.00751	mg/L	0.001348	-0.00751	mg/L	0.001348	17.95%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	4.5	0.00004	mg/L	0.001952	0.00004	mg/L	0.001952	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-634.9	-0.00325	mg/L	0.000017	-0.00325	mg/L	0.000017	0.52%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-7.3	0.00021	mg/L	0.000037	0.00021	mg/L	0.000037	17.32%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	347.1	0.00805	mg/L	0.000220	0.00805	mg/L	0.000220	2.73%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	-6.3	0.0889	mg/L	0.02195	0.0889	mg/L	0.02195	24.70%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	5.2	0.00043	mg/L	0.000184	0.00043	mg/L	0.000184	42.50%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	2.2	-0.00012	mg/L	0.000056	-0.00012	mg/L	0.000056	48.00%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-160.8	-0.00117	mg/L	0.000221	-0.00117	mg/L	0.000221	18.91%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	294.3	0.00217	mg/L	0.000179	0.00217	mg/L	0.000179	8.26%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	110.6	0.00400	mg/L	0.000344	0.00400	mg/L	0.000344	8.61%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	57.1	0.00941	mg/L	0.001506	0.00941	mg/L	0.001506	16.00%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-40.4	-0.00040	mg/L	0.000010	-0.00040	mg/L	0.000010	2.50%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-24.0	-0.00087	mg/L	0.000080	-0.00087	mg/L	0.000080	9.24%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	22.1	-0.00303	mg/L	0.000323	-0.00303	mg/L	0.000323	10.68%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	2.4	0.00000	mg/L	0.001114	0.00000	mg/L	0.001114	>999.9%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-0.8	0.00435	mg/L	0.000411	0.00435	mg/L	0.000411	9.44%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-3.2	0.00130	mg/L	0.001507	0.00130	mg/L	0.001507	115.54%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	196.1	1.92	mg/L	0.347	1.92	mg/L	0.347	18.05%
QC value greater than the upper limit for Si 251.611 Recovery = Not calculated								
Sn 189.927†	9.3	-0.00014	mg/L	0.000424	-0.00014	mg/L	0.000424	309.27%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	167.7	0.00148	mg/L	0.000106	0.00148	mg/L	0.000106	7.15%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	2.7	-0.00060	mg/L	0.002897	-0.00060	mg/L	0.002897	481.02%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	382.7	0.00363	mg/L	0.001157	0.00363	mg/L	0.001157	31.92%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	25.0	0.00141	mg/L	0.000179	0.00141	mg/L	0.000179	12.68%
QC value within limits for Zn 206.200 Recovery = Not calculated								
K 766.490†	-54.5	-0.0675	mg/L	0.03208	-0.0675	mg/L	0.03208	47.54%
QC value within limits for K 766.490 Recovery = Not calculated								
Na 589.592†	2336.5	0.128	mg/L	0.0186	0.128	mg/L	0.0186	14.51%

Approved: May 07, 2012

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QC value within limits for Na 589.592 Recovery = Not calculated

Sr 407.771†	203.7	0.00075 mg/L	0.000045	0.00075 mg/L	0.000045	5.98%

QC value within limits for Sr 407.771 Recovery = Not calculated

Li 670.784†	-33.3	-0.00218 mg/L	0.000530	-0.00218 mg/L	0.000530	24.34%

QC value within limits for Li 670.784 Recovery = Not calculated

QC Failed. Continue with analysis.

==========

Sequence No.: 13 **Autosampler Location: 71**
Sample ID: PBW B4 WG396863-02 **Date Collected: 5/4/2012 4:28:29 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW B4 WG396863-02

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: PBW B4 WG396863-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2366936.1						15771.04	0.67%
YRADIAL	311614.7						6981.29	2.24%
Ga 417.206	1453446.0						14318.52	0.99%
GaRADIAL	92804.9						4669.00	5.03%
Ag 328.068†	142.5	0.00170	mg/L	0.000531	0.00170	mg/L	0.000531	31.17%
Al 396.153†	137.8	0.0119	mg/L	0.00267	0.0119	mg/L	0.00267	22.55%
As 188.979†	1.1	-0.00109	mg/L	0.001545	-0.00109	mg/L	0.001545	142.16%
Ba 233.527†	-406.8	-0.00188	mg/L	0.000199	-0.00188	mg/L	0.000199	10.57%
Be 234.861†	110.7	0.00030	mg/L	0.000014	0.00030	mg/L	0.000014	4.60%
B 249.677†	462.6	0.00928	mg/L	0.000329	0.00928	mg/L	0.000329	3.55%
Ca 227.546†	46.0	0.197	mg/L	0.0117	0.197	mg/L	0.0117	5.95%
Cd 228.802†	-7.4	0.00023	mg/L	0.000159	0.00023	mg/L	0.000159	68.13%
Co 228.616†	3.8	-0.00008	mg/L	0.000184	-0.00008	mg/L	0.000184	237.22%
Cr 267.716†	-162.4	-0.00118	mg/L	0.000044	-0.00118	mg/L	0.000044	3.68%
Cu 327.393†	219.9	0.00190	mg/L	0.000199	0.00190	mg/L	0.000199	10.46%
Fe 239.562†	104.4	0.00364	mg/L	0.000500	0.00364	mg/L	0.000500	13.74%
Mg 279.077†	43.8	0.00584	mg/L	0.002286	0.00584	mg/L	0.002286	39.16%
Mn 257.610†	11.2	-0.00034	mg/L	0.000016	-0.00034	mg/L	0.000016	4.71%
Mo 202.031†	-33.1	-0.00111	mg/L	0.000162	-0.00111	mg/L	0.000162	14.59%
Ni 231.604†	0.9	-0.00332	mg/L	0.000114	-0.00332	mg/L	0.000114	3.43%
Pb 220.353†	-0.9	-0.00027	mg/L	0.000755	-0.00027	mg/L	0.000755	276.71%
Sb 206.836†	3.3	0.00526	mg/L	0.000852	0.00526	mg/L	0.000852	16.21%
Se 196.026†	-5.0	0.00043	mg/L	0.001800	0.00043	mg/L	0.001800	415.52%
Si 251.611†	188.5	1.85	mg/L	0.182	1.85	mg/L	0.182	9.87%
Sn 189.927†	-3.9	-0.00133	mg/L	0.000041	-0.00133	mg/L	0.000041	3.10%
Ti 334.940†	227.4	0.00156	mg/L	0.000118	0.00156	mg/L	0.000118	7.60%
Tl 190.801†	6.1	0.00024	mg/L	0.001485	0.00024	mg/L	0.001485	631.18%
V 290.880†	857.3	0.00600	mg/L	0.001465	0.00600	mg/L	0.001465	24.42%
Zn 206.200†	77.3	0.00252	mg/L	0.000121	0.00252	mg/L	0.000121	4.81%
K 766.490†	-58.0	-0.0685	mg/L	0.01542	-0.0685	mg/L	0.01542	22.50%
Na 589.592†	1371.1	0.0796	mg/L	0.00805	0.0796	mg/L	0.00805	10.11%
Sr 407.771†	1098.6	0.00108	mg/L	0.000050	0.00108	mg/L	0.000050	4.61%
Li 670.784†	-26.8	-0.00213	mg/L	0.000444	-0.00213	mg/L	0.000444	20.80%

==========

Sequence No.: 14 **Autosampler Location: 72**
Sample ID: LCSW B4 WG396863-03 **Date Collected: 5/4/2012 4:35:24 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW B4 WG396863-03

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: LCSW B4 WG396863-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD

Approved: May 07, 2012

Lynn H. Rhoden

Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Y 371.029	2399383.3						47393.78	1.98%
YRADIAL	317827.8						2054.56	0.65%
Ga 417.206	1417860.7						59629.31	4.21%
GaRADIAL	93687.0						352.40	0.38%
Ag 328.068†	63363.0	0.198	mg/L	0.0081	0.198	mg/L	0.0081	4.09%
Al 396.153†	35372.8	4.77	mg/L	0.005	4.77	mg/L	0.005	0.11%
As 188.979†	570.1	0.184	mg/L	0.0084	0.184	mg/L	0.0084	4.58%
Ba 233.527†	79478.1	0.477	mg/L	0.0007	0.477	mg/L	0.0007	0.15%
Be 234.861†	31825.4	0.0231	mg/L	0.00087	0.0231	mg/L	0.00087	3.78%
B 249.677†	88016.9	0.933	mg/L	0.0456	0.933	mg/L	0.0456	4.88%
Ca 227.546†	2225.0	4.92	mg/L	0.232	4.92	mg/L	0.232	4.72%
Cd 228.802†	1421.6	0.0229	mg/L	0.00165	0.0229	mg/L	0.00165	7.19%
Co 228.616†	3919.8	0.0971	mg/L	0.00180	0.0971	mg/L	0.00180	1.85%
Cr 267.716†	27299.5	0.240	mg/L	0.0021	0.240	mg/L	0.0021	0.87%
Cu 327.393†	66758.1	0.244	mg/L	0.0087	0.244	mg/L	0.0087	3.59%
Fe 239.562†	31622.0	1.84	mg/L	0.004	1.84	mg/L	0.004	0.23%
Mg 279.077†	17709.2	4.76	mg/L	0.028	4.76	mg/L	0.028	0.60%
Mn 257.610†	211590.8	0.243	mg/L	0.0007	0.243	mg/L	0.0007	0.28%
Mo 202.031†	18548.8	0.496	mg/L	0.0036	0.496	mg/L	0.0036	0.73%
Ni 231.604†	17494.6	0.239	mg/L	0.0012	0.239	mg/L	0.0012	0.48%
Pb 220.353†	2867.1	0.242	mg/L	0.0040	0.242	mg/L	0.0040	1.66%
Sb 206.836†	2537.7	0.563	mg/L	0.0279	0.563	mg/L	0.0279	4.96%
Se 196.026†	371.7	0.186	mg/L	0.0101	0.186	mg/L	0.0101	5.43%
Si 251.611†	108085.8	1050	mg/L	30.4	1050	mg/L	30.4	2.90%
Sn 189.927†	-39.9	-0.00460	mg/L	0.000414	-0.00460	mg/L	0.000414	8.99%
Ti 334.940†	487223.8	0.476	mg/L	0.0012	0.476	mg/L	0.0012	0.25%
Tl 190.801†	1003.3	0.249	mg/L	0.0086	0.249	mg/L	0.0086	3.43%
V 290.880†	98640.0	0.494	mg/L	0.0106	0.494	mg/L	0.0106	2.14%
Zn 206.200†	22291.1	0.476	mg/L	0.0061	0.476	mg/L	0.0061	1.27%
K 766.490†	79303.0	24.4	mg/L	0.11	24.4	mg/L	0.11	0.43%
Na 589.592†	486214.0	24.7	mg/L	0.26	24.7	mg/L	0.26	1.05%
Sr 407.771†	1285829.8	0.483	mg/L	0.0079	0.483	mg/L	0.0079	1.64%
Li 670.784†	76612.0	0.511	mg/L	0.0056	0.511	mg/L	0.0056	1.10%

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Sequence No.: 15 **Autosampler Location: 73**
Sample ID: L1205002801 WG396863-01 **Date Collected: 5/4/2012 4:41:23 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205002801 WG396863-01

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1205002801 WG396863-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2300538.1						24391.09	1.06%
YRADIAL	304491.7						4233.40	1.39%
Ga 417.206	1480141.3						12703.86	0.86%
GaRADIAL	95633.2						1910.64	2.00%
Ag 328.068†	766.8	0.00337	mg/L	0.000147	0.00337	mg/L	0.000147	4.37%
Al 396.153†	461.9	0.0559	mg/L	0.00193	0.0559	mg/L	0.00193	3.45%
As 188.979†	5.5	0.00037	mg/L	0.001162	0.00037	mg/L	0.001162	314.75%
Ba 233.527†	16711.2	0.101	mg/L	0.0008	0.101	mg/L	0.0008	0.78%
Be 234.861†	185.1	0.00034	mg/L	0.000013	0.00034	mg/L	0.000013	3.96%
B 249.677†	222316.6	2.35	mg/L	0.035	2.35	mg/L	0.035	1.51%
Ca 227.546†	56767.1	117	mg/L	1.9	117	mg/L	1.9	1.64%
Cd 228.802†	3.9	0.00041	mg/L	0.000172	0.00041	mg/L	0.000172	42.13%
Co 228.616†	-4.3	-0.00027	mg/L	0.000313	-0.00027	mg/L	0.000313	116.48%
Cr 267.716†	10.2	0.00033	mg/L	0.000014	0.00033	mg/L	0.000014	4.31%
Cu 327.393†	443.6	0.00270	mg/L	0.000439	0.00270	mg/L	0.000439	16.28%
Fe 239.562†	1557.5	0.0872	mg/L	0.00161	0.0872	mg/L	0.00161	1.85%
Mg 279.077†	172246.6	46.2	mg/L	0.37	46.2	mg/L	0.37	0.80%
Mn 257.610†	13835.6	0.0155	mg/L	0.00031	0.0155	mg/L	0.00031	1.97%
Mo 202.031†	28.2	0.00053	mg/L	0.000153	0.00053	mg/L	0.000153	28.56%
Ni 231.604†	69.9	-0.00236	mg/L	0.000173	-0.00236	mg/L	0.000173	7.33%
Pb 220.353†	45.6	0.00458	mg/L	0.001575	0.00458	mg/L	0.001575	34.42%

Approved: May 07, 2012

Kym H. Rhoden

Sb 206.836†	-0.3	0.00446	mg/L	0.000917	0.00446	mg/L	0.000917	20.55%
Se 196.026†	-3.2	0.00133	mg/L	0.001907	0.00133	mg/L	0.001907	143.47%
Si 251.611†	193493.7	1880	mg/L	23.6	1880	mg/L	23.6	1.26%
Sn 189.927†	-288.2	-0.0271	mg/L	0.00069	-0.0271	mg/L	0.00069	2.54%
Ti 334.940†	-19911.0	-0.00045	mg/L	0.000698	-0.00045	mg/L	0.000698	154.58%
Tl 190.801†	-37.6	-0.0106	mg/L	0.00301	-0.0106	mg/L	0.00301	28.37%
V 290.880†	1573.2	0.00836	mg/L	0.002124	0.00836	mg/L	0.002124	25.42%
Zn 206.200†	83.1	0.00266	mg/L	0.000280	0.00266	mg/L	0.000280	10.54%
K 766.490†	7128.5	2.11	mg/L	0.024	2.11	mg/L	0.024	1.13%
Na 589.592†	685303.8	34.9	mg/L	0.55	34.9	mg/L	0.55	1.57%
Sr 407.771†	4082132.3	1.53	mg/L	0.048	1.53	mg/L	0.048	3.12%
Li 670.784†	2433.6	0.0143	mg/L	0.00039	0.0143	mg/L	0.00039	2.73%

Sequence No.: 16 **Autosampler Location: 74**
Sample ID: L1205002801DU WG396863-04 **Date Collected: 5/4/2012 4:48:23 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205002801DU WG396863-04

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: L1205002801DU WG396863-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2306082.0						12789.09	0.55%
YRADIAL	302996.1						7462.40	2.46%
Ga 417.206	1501421.9						16211.81	1.08%
GaRADIAL	95183.2						2032.96	2.14%
Ag 328.068†	795.7	0.00345	mg/L	0.000227	0.00345	mg/L	0.000227	6.57%
Al 396.153†	471.8	0.0572	mg/L	0.00072	0.0572	mg/L	0.00072	1.26%
As 188.979†	0.1	-0.00141	mg/L	0.001695	-0.00141	mg/L	0.001695	120.54%
Ba 233.527†	16756.4	0.101	mg/L	0.0009	0.101	mg/L	0.0009	0.84%
Be 234.861†	234.2	0.00037	mg/L	0.000024	0.00037	mg/L	0.000024	6.59%
B 249.677†	221174.3	2.34	mg/L	0.018	2.34	mg/L	0.018	0.79%
Ca 227.546†	56066.3	116	mg/L	0.6	116	mg/L	0.6	0.49%
Cd 228.802†	-8.1	0.00022	mg/L	0.000135	0.00022	mg/L	0.000135	61.14%
Co 228.616†	-4.5	-0.00028	mg/L	0.000325	-0.00028	mg/L	0.000325	117.91%
Cr 267.716†	7.7	0.00031	mg/L	0.000068	0.00031	mg/L	0.000068	21.93%
Cu 327.393†	372.6	0.00244	mg/L	0.000391	0.00244	mg/L	0.000391	16.00%
Fe 239.562†	1575.7	0.0883	mg/L	0.00115	0.0883	mg/L	0.00115	1.30%
Mg 279.077†	173485.4	46.6	mg/L	0.69	46.6	mg/L	0.69	1.49%
Mn 257.610†	13274.7	0.0149	mg/L	0.00009	0.0149	mg/L	0.00009	0.62%
Mo 202.031†	24.3	0.00043	mg/L	0.000402	0.00043	mg/L	0.000402	93.38%
Ni 231.604†	59.4	-0.00251	mg/L	0.000252	-0.00251	mg/L	0.000252	10.05%
Pb 220.353†	24.1	0.00275	mg/L	0.001035	0.00275	mg/L	0.001035	37.67%
Sb 206.836†	-0.5	0.00440	mg/L	0.000395	0.00440	mg/L	0.000395	8.97%
Se 196.026†	3.0	0.00438	mg/L	0.000920	0.00438	mg/L	0.000920	21.01%
Si 251.611†	190636.9	1850	mg/L	19.4	1850	mg/L	19.4	1.05%
Sn 189.927†	-281.7	-0.0265	mg/L	0.00106	-0.0265	mg/L	0.00106	3.98%
Ti 334.940†	-20010.3	-0.00077	mg/L	0.000206	-0.00077	mg/L	0.000206	26.92%
Tl 190.801†	-34.6	-0.00989	mg/L	0.001881	-0.00989	mg/L	0.001881	19.02%
V 290.880†	1628.3	0.00862	mg/L	0.002028	0.00862	mg/L	0.002028	23.52%
Zn 206.200†	88.3	0.00277	mg/L	0.000257	0.00277	mg/L	0.000257	9.30%
K 766.490†	7157.6	2.12	mg/L	0.035	2.12	mg/L	0.035	1.66%
Na 589.592†	682759.5	34.8	mg/L	0.77	34.8	mg/L	0.77	2.22%
Sr 407.771†	4122460.4	1.55	mg/L	0.049	1.55	mg/L	0.049	3.14%
Li 670.784†	2420.3	0.0143	mg/L	0.00049	0.0143	mg/L	0.00049	3.46%

Sequence No.: 17 **Autosampler Location: 75**
Sample ID: L1205002801MS WG396863-05 **Date Collected: 5/4/2012 4:55:23 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205002801MS WG396863-05

Approved: May 07, 2012

Kym H. Rhoden

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1205002801MS WG396863-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2246910.4						5811.45	0.26%
YRADIAL	302095.5						1931.18	0.64%
Ga 417.206	1418047.1						46263.87	3.26%
GaRADIAL	90064.2						1073.22	1.19%
Ag 328.068†	61997.0	0.194	mg/L	0.0084	0.194	mg/L	0.0084	4.33%
Al 396.153†	37553.3	5.07	mg/L	0.012	5.07	mg/L	0.012	0.24%
As 188.979†	570.4	0.184	mg/L	0.0041	0.184	mg/L	0.0041	2.22%
Ba 233.527†	98533.7	0.591	mg/L	0.0089	0.591	mg/L	0.0089	1.50%
Be 234.861†	31382.5	0.0228	mg/L	0.00097	0.0228	mg/L	0.00097	4.24%
B 249.677†	325386.5	3.44	mg/L	0.155	3.44	mg/L	0.155	4.50%
Ca 227.546†	62102.7	129	mg/L	6.8	129	mg/L	6.8	5.25%
Cd 228.802†	1366.9	0.0220	mg/L	0.00120	0.0220	mg/L	0.00120	5.45%
Co 228.616†	3890.0	0.0964	mg/L	0.00032	0.0964	mg/L	0.00032	0.33%
Cr 267.716†	27973.0	0.245	mg/L	0.0064	0.245	mg/L	0.0064	2.62%
Cu 327.393†	62990.6	0.230	mg/L	0.0096	0.230	mg/L	0.0096	4.17%
Fe 239.562†	34156.1	1.98	mg/L	0.014	1.98	mg/L	0.014	0.72%
Mg 279.077†	194228.5	52.1	mg/L	0.33	52.1	mg/L	0.33	0.63%
Mn 257.610†	229920.9	0.264	mg/L	0.0044	0.264	mg/L	0.0044	1.65%
Mo 202.031†	19252.8	0.515	mg/L	0.0108	0.515	mg/L	0.0108	2.09%
Ni 231.604†	17376.6	0.237	mg/L	0.0039	0.237	mg/L	0.0039	1.64%
Pb 220.353†	2897.9	0.245	mg/L	0.0009	0.245	mg/L	0.0009	0.38%
Sb 206.836†	2500.1	0.555	mg/L	0.0204	0.555	mg/L	0.0204	3.68%
Se 196.026†	367.7	0.184	mg/L	0.0080	0.184	mg/L	0.0080	4.34%
Si 251.611†	307882.4	2990	mg/L	117.4	2990	mg/L	117.4	3.92%
Sn 189.927†	-291.8	-0.0275	mg/L	0.00059	-0.0275	mg/L	0.00059	2.14%
Ti 334.940†	486827.4	0.494	mg/L	0.0057	0.494	mg/L	0.0057	1.15%
Tl 190.801†	968.9	0.241	mg/L	0.0033	0.241	mg/L	0.0033	1.36%
V 290.880†	103168.2	0.516	mg/L	0.0158	0.516	mg/L	0.0158	3.06%
Zn 206.200†	22297.8	0.476	mg/L	0.0094	0.476	mg/L	0.0094	1.99%
K 766.490†	89353.1	27.5	mg/L	0.12	27.5	mg/L	0.12	0.45%
Na 589.592†	1220031.0	62.7	mg/L	0.37	62.7	mg/L	0.37	0.59%
Sr 407.771†	5325810.8	2.00	mg/L	0.009	2.00	mg/L	0.009	0.46%
Li 670.784†	81158.0	0.541	mg/L	0.0022	0.541	mg/L	0.0022	0.41%

Sequence No.: 18
Sample ID: L1205002801PS WG396931-03
Analyst: KHR
Initial Sample Wt:
Dilution:

Autosampler Location: 76
Date Collected: 5/4/2012 5:01:26 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: L1205002801PS WG396931-03

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: L1205002801PS WG396931-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2303704.9						19531.17	0.85%
YRADIAL	303026.6						2090.65	0.69%
Ga 417.206	1445200.4						25354.39	1.75%
GaRADIAL	89563.9						920.32	1.03%
Ag 328.068†	62384.2	0.195	mg/L	0.0047	0.195	mg/L	0.0047	2.40%
Al 396.153†	36936.1	4.98	mg/L	0.016	4.98	mg/L	0.016	0.33%
As 188.979†	574.0	0.185	mg/L	0.0033	0.185	mg/L	0.0033	1.76%
Ba 233.527†	96403.1	0.579	mg/L	0.0050	0.579	mg/L	0.0050	0.86%
Be 234.861†	31576.7	0.0229	mg/L	0.00063	0.0229	mg/L	0.00063	2.73%
B 249.677†	299284.5	3.17	mg/L	0.082	3.17	mg/L	0.082	2.60%
Ca 227.546†	55187.6	114	mg/L	2.5	114	mg/L	2.5	2.18%
Cd 228.802†	1369.8	0.0221	mg/L	0.00079	0.0221	mg/L	0.00079	3.60%
Co 228.616†	3885.8	0.0963	mg/L	0.00108	0.0963	mg/L	0.00108	1.12%
Cr 267.716†	27976.7	0.245	mg/L	0.0027	0.245	mg/L	0.0027	1.11%
Cu 327.393†	63772.4	0.233	mg/L	0.0040	0.233	mg/L	0.0040	1.73%

Approved: May 07, 2012

Fe 239.562†	33610.7	1.95	mg/L	0.004	1.95	mg/L	0.004	0.21%
Mg 279.077†	172555.5	46.3	mg/L	0.08	46.3	mg/L	0.08	0.18%
Mn 257.610†	228676.6	0.262	mg/L	0.0021	0.262	mg/L	0.0021	0.80%
Mo 202.031†	19224.9	0.514	mg/L	0.0042	0.514	mg/L	0.0042	0.83%
Ni 231.604†	17337.0	0.237	mg/L	0.0032	0.237	mg/L	0.0032	1.36%
Pb 220.353†	2906.7	0.246	mg/L	0.0032	0.246	mg/L	0.0032	1.28%
Sb 206.836†	2502.8	0.555	mg/L	0.0123	0.555	mg/L	0.0123	2.22%
Se 196.026†	361.4	0.181	mg/L	0.0055	0.181	mg/L	0.0055	3.03%
Si 251.611†	285398.1	2770	mg/L	33.8	2770	mg/L	33.8	1.22%
Sn 189.927†	-276.4	-0.0261	mg/L	0.00062	-0.0261	mg/L	0.00062	2.39%
Ti 334.940†	488208.9	0.493	mg/L	0.0016	0.493	mg/L	0.0016	0.33%
Tl 190.801†	990.4	0.246	mg/L	0.0040	0.246	mg/L	0.0040	1.62%
V 290.880†	102501.6	0.512	mg/L	0.0029	0.512	mg/L	0.0029	0.57%
Zn 206.200†	22305.5	0.476	mg/L	0.0096	0.476	mg/L	0.0096	2.02%
K 766.490†	87992.7	27.1	mg/L	0.29	27.1	mg/L	0.29	1.06%
Na 589.592†	1159870.3	59.5	mg/L	1.30	59.5	mg/L	1.30	2.18%
Sr 407.771†	4862048.8	1.82	mg/L	0.020	1.82	mg/L	0.020	1.10%
Li 670.784†	80214.2	0.535	mg/L	0.0055	0.535	mg/L	0.0055	1.03%

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Sequence No.: 19 **Autosampler Location: 77**
Sample ID: L1205002801DL WG396931-04 **Date Collected: 5/4/2012 5:07:29 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205002801DL WG396931-04

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: L1205002801DL WG396931-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2383557.9						8331.28	0.35%
YRADIAL	301823.4						1742.01	0.58%
Ga 417.206	1490723.7						11020.18	0.74%
GaRADIAL	91071.8						2117.86	2.33%
Ag 328.068†	294.8	0.00211	mg/L	0.000228	0.00211	mg/L	0.000228	10.79%
Al 396.153†	86.0	0.00477	mg/L	0.001335	0.00477	mg/L	0.001335	27.98%
As 188.979†	-0.8	-0.00169	mg/L	0.001571	-0.00169	mg/L	0.001571	92.72%
Ba 233.527†	2988.4	0.0185	mg/L	0.00004	0.0185	mg/L	0.00004	0.21%
Be 234.861†	111.2	0.00030	mg/L	0.000012	0.00030	mg/L	0.000012	4.14%
B 249.677†	48553.6	0.518	mg/L	0.0091	0.518	mg/L	0.0091	1.76%
Ca 227.546†	10987.7	22.8	mg/L	0.46	22.8	mg/L	0.46	2.02%
Cd 228.802†	-6.6	0.00025	mg/L	0.000078	0.00025	mg/L	0.000078	31.51%
Co 228.616†	-3.7	-0.00026	mg/L	0.000157	-0.00026	mg/L	0.000157	59.89%
Cr 267.716†	-103.3	-0.00067	mg/L	0.000070	-0.00067	mg/L	0.000070	10.47%
Cu 327.393†	360.4	0.00241	mg/L	0.000484	0.00241	mg/L	0.000484	20.12%
Fe 239.562†	362.6	0.0185	mg/L	0.00053	0.0185	mg/L	0.00053	2.89%
Mg 279.077†	35364.6	9.49	mg/L	0.128	9.49	mg/L	0.128	1.34%
Mn 257.610†	2931.7	0.00302	mg/L	0.000035	0.00302	mg/L	0.000035	1.17%
Mo 202.031†	-8.7	-0.00046	mg/L	0.000195	-0.00046	mg/L	0.000195	42.42%
Ni 231.604†	18.8	-0.00307	mg/L	0.000109	-0.00307	mg/L	0.000109	3.56%
Pb 220.353†	16.6	0.00138	mg/L	0.000290	0.00138	mg/L	0.000290	21.04%
Sb 206.836†	0.1	0.00453	mg/L	0.000736	0.00453	mg/L	0.000736	16.23%
Se 196.026†	-5.1	0.00037	mg/L	0.004460	0.00037	mg/L	0.004460	>999.9%
Si 251.611†	39332.6	382	mg/L	5.7	382	mg/L	5.7	1.50%
Sn 189.927†	-173.0	-0.0167	mg/L	0.00077	-0.0167	mg/L	0.00077	4.64%
Ti 334.940†	-4046.0	0.00079	mg/L	0.000167	0.00079	mg/L	0.000167	21.18%
Tl 190.801†	-10.5	-0.00385	mg/L	0.001546	-0.00385	mg/L	0.001546	40.15%
V 290.880†	589.0	0.00441	mg/L	0.000762	0.00441	mg/L	0.000762	17.29%
Zn 206.200†	160.1	0.00428	mg/L	0.000067	0.00428	mg/L	0.000067	1.56%
K 766.490†	1395.0	0.372	mg/L	0.0127	0.372	mg/L	0.0127	3.42%
Na 589.592†	144447.4	7.29	mg/L	0.178	7.29	mg/L	0.178	2.44%
Sr 407.771†	849614.6	0.319	mg/L	0.0066	0.319	mg/L	0.0066	2.06%
Li 670.784†	510.9	0.00147	mg/L	0.000567	0.00147	mg/L	0.000567	38.67%

==========

Sequence No.: 20 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 5/4/2012 5:14:27 PM**

Approved: May 07, 2012

Analyst:
Initial Sample Wt:
Dilution:

Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	149.0 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	2314153.8						29669.77	1.28%
YRADIAL	306526.7						768.70	0.25%
Ga 417.206	1361861.7						23605.57	1.73%
GaRADIAL	90350.4						698.27	0.77%
Ag 328.068†	129801.5	0.405	mg/L	0.0085	0.405	mg/L	0.0085	2.10%
QC value within limits for Ag 328.068 Recovery = 101.30%								
Al 396.153†	72837.5	9.84	mg/L	0.024	9.84	mg/L	0.024	0.25%
QC value within limits for Al 396.153 Recovery = 98.35%								
As 188.979†	1199.2	0.389	mg/L	0.0065	0.389	mg/L	0.0065	1.66%
QC value within limits for As 188.979 Recovery = 97.26%								
Ba 233.527†	165229.7	0.992	mg/L	0.0191	0.992	mg/L	0.0191	1.93%
QC value within limits for Ba 233.527 Recovery = 99.15%								
Be 234.861†	66003.2	0.0477	mg/L	0.00112	0.0477	mg/L	0.00112	2.36%
QC value within limits for Be 234.861 Recovery = 95.38%								
B 249.677†	48281.4	0.511	mg/L	0.0121	0.511	mg/L	0.0121	2.36%
QC value within limits for B 249.677 Recovery = 102.20%								
Ca 227.546†	4708.1	10.3	mg/L	0.27	10.3	mg/L	0.27	2.60%
QC value within limits for Ca 227.546 Recovery = 102.85%								
Cd 228.802†	2982.9	0.0477	mg/L	0.00137	0.0477	mg/L	0.00137	2.88%
QC value within limits for Cd 228.802 Recovery = 95.38%								
Co 228.616†	8173.8	0.203	mg/L	0.0039	0.203	mg/L	0.0039	1.93%
QC value within limits for Co 228.616 Recovery = 101.37%								
Cr 267.716†	56752.9	0.498	mg/L	0.0082	0.498	mg/L	0.0082	1.66%
QC value within limits for Cr 267.716 Recovery = 99.54%								
Cu 327.393†	136252.1	0.496	mg/L	0.0116	0.496	mg/L	0.0116	2.34%
QC value within limits for Cu 327.393 Recovery = 99.26%								
Fe 239.562†	67409.0	3.92	mg/L	0.018	3.92	mg/L	0.018	0.46%
QC value within limits for Fe 239.562 Recovery = 97.94%								
Mg 279.077†	36864.8	9.91	mg/L	0.035	9.91	mg/L	0.035	0.36%
QC value within limits for Mg 279.077 Recovery = 99.08%								
Mn 257.610†	443739.7	0.510	mg/L	0.0105	0.510	mg/L	0.0105	2.06%
QC value within limits for Mn 257.610 Recovery = 101.92%								
Mo 202.031†	38526.3	1.03	mg/L	0.018	1.03	mg/L	0.018	1.78%
QC value within limits for Mo 202.031 Recovery = 103.02%								
Ni 231.604†	35958.3	0.494	mg/L	0.0093	0.494	mg/L	0.0093	1.88%
QC value within limits for Ni 231.604 Recovery = 98.87%								
Pb 220.353†	5986.5	0.505	mg/L	0.0071	0.505	mg/L	0.0071	1.41%
QC value within limits for Pb 220.353 Recovery = 101.03%								
Sb 206.836†	5267.1	1.16	mg/L	0.019	1.16	mg/L	0.019	1.62%
QC value within limits for Sb 206.836 Recovery = 96.97%								
Se 196.026†	764.0	0.380	mg/L	0.0087	0.380	mg/L	0.0087	2.30%
QC value within limits for Se 196.026 Recovery = 94.89%								
Si 251.611†	218969.1	2130	mg/L	39.2	2130	mg/L	39.2	1.84%
QC value greater than the upper limit for Si 251.611 Recovery = 42554.21%								
Sn 189.927†	11286.4	1.02	mg/L	0.016	1.02	mg/L	0.016	1.57%
QC value within limits for Sn 189.927 Recovery = 102.31%								
Ti 334.940†	1013686.6	0.989	mg/L	0.0014	0.989	mg/L	0.0014	0.14%
QC value within limits for Ti 334.940 Recovery = 98.87%								
Tl 190.801†	2070.3	0.515	mg/L	0.0055	0.515	mg/L	0.0055	1.07%
QC value within limits for Tl 190.801 Recovery = 103.10%								
V 290.880†	202955.0	1.02	mg/L	0.014	1.02	mg/L	0.014	1.42%
QC value within limits for V 290.880 Recovery = 101.51%								
Zn 206.200†	46353.5	0.988	mg/L	0.0179	0.988	mg/L	0.0179	1.82%
QC value within limits for Zn 206.200 Recovery = 98.79%								
K 766.490†	161979.9	50.2	mg/L	0.23	50.2	mg/L	0.23	0.46%
QC value within limits for K 766.490 Recovery = 100.34%								
Na 589.592†	963246.1	49.3	mg/L	0.65	49.3	mg/L	0.65	1.33%
QC value within limits for Na 589.592 Recovery = 98.52%								
Sr 407.771†	2618012.1	0.984	mg/L	0.0128	0.984	mg/L	0.0128	1.30%

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```
   QC value within limits for Sr 407.771  Recovery = 98.36%
Li 670.784†          152321.3        1.02 mg/L        0.013        1.02 mg/L         0.013   1.28%
   QC value within limits for Li 670.784  Recovery = 101.80%
QC Failed.  Continue with analysis.
```

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Sequence No.: 21 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 5/4/2012 5:20:28 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	148.0 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	2382977.6						39171.63	1.64%
YRADIAL	298155.4						5874.69	1.97%
Ga 417.206	1406298.6						12957.97	0.92%
GaRADIAL	89127.7						1780.33	2.00%
Ag 328.068†	151.1	0.00173	mg/L	0.000269	0.00173	mg/L	0.000269	15.57%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	36.6	-0.00192	mg/L	0.001349	-0.00192	mg/L	0.001349	70.08%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	1.3	-0.00101	mg/L	0.001062	-0.00101	mg/L	0.001062	104.79%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-652.8	-0.00335	mg/L	0.000122	-0.00335	mg/L	0.000122	3.65%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	14.4	0.00023	mg/L	0.000006	0.00023	mg/L	0.000006	2.61%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	2590.3	0.0318	mg/L	0.00135	0.0318	mg/L	0.00135	4.26%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	13.0	0.129	mg/L	0.0143	0.129	mg/L	0.0143	11.13%
QC value greater than the upper limit for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-4.8	0.00028	mg/L	0.000089	0.00028	mg/L	0.000089	32.17%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	1.8	-0.00013	mg/L	0.000163	-0.00013	mg/L	0.000163	129.15%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-150.8	-0.00108	mg/L	0.000122	-0.00108	mg/L	0.000122	11.30%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	224.4	0.00192	mg/L	0.000187	0.00192	mg/L	0.000187	9.73%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	90.3	0.00281	mg/L	0.000245	0.00281	mg/L	0.000245	8.69%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	25.9	0.00105	mg/L	0.001439	0.00105	mg/L	0.001439	136.58%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	8.1	-0.00034	mg/L	0.000023	-0.00034	mg/L	0.000023	6.71%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-24.2	-0.00087	mg/L	0.000176	-0.00087	mg/L	0.000176	20.12%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	9.6	-0.00320	mg/L	0.000310	-0.00320	mg/L	0.000310	9.69%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	2.1	-0.00002	mg/L	0.001334	-0.00002	mg/L	0.001334	>999.9%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	6.9	0.00603	mg/L	0.000772	0.00603	mg/L	0.000772	12.80%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	3.5	0.00461	mg/L	0.001401	0.00461	mg/L	0.001401	30.39%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	200.7	1.97	mg/L	0.281	1.97	mg/L	0.281	14.27%
QC value greater than the upper limit for Si 251.611 Recovery = Not calculated								
Sn 189.927†	10.6	-0.00001	mg/L	0.000620	-0.00001	mg/L	0.000620	>999.9%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	285.2	0.00160	mg/L	0.000041	0.00160	mg/L	0.000041	2.56%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	5.9	0.00018	mg/L	0.002079	0.00018	mg/L	0.002079	>999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	705.3	0.00524	mg/L	0.000859	0.00524	mg/L	0.000859	16.41%

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QC value within limits for V 290.880 Recovery = Not calculated

Zn 206.200†	19.6	0.00130 mg/L	0.000078	0.00130 mg/L	0.000078	5.97%

QC value within limits for Zn 206.200 Recovery = Not calculated

K 766.490†	18.3	-0.0451 mg/L	0.02326	-0.0451 mg/L	0.02326	51.60%

QC value within limits for K 766.490 Recovery = Not calculated

Na 589.592†	2158.1	0.119 mg/L	0.0312	0.119 mg/L	0.0312	26.14%

QC value within limits for Na 589.592 Recovery = Not calculated

Sr 407.771†	400.5	0.00082 mg/L	0.000057	0.00082 mg/L	0.000057	6.93%

QC value within limits for Sr 407.771 Recovery = Not calculated

Li 670.784†	17.1	-0.00184 mg/L	0.000423	-0.00184 mg/L	0.000423	23.00%

QC value within limits for Li 670.784 Recovery = Not calculated

QC Failed. Continue with analysis.

Sequence No.: 22 **Autosampler Location: 78**
Sample ID: PBW 47 WG396995-02 **Date Collected: 5/4/2012 5:27:21 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW 47 WG396995-02

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: PBW 47 WG396995-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2416670.9						23688.32	0.98%
YRADIAL	310033.9						6246.36	2.01%
Ga 417.206	1453490.1						25805.65	1.78%
GaRADIAL	91993.1						1318.36	1.43%
Ag 328.068†	131.3	0.00166	mg/L	0.000273	0.00166	mg/L	0.000273	16.41%
Al 396.153†	7.7	-0.00585	mg/L	0.001758	-0.00585	mg/L	0.001758	30.05%
As 188.979†	5.5	0.00039	mg/L	0.002173	0.00039	mg/L	0.002173	557.36%
Ba 233.527†	-530.1	-0.00262	mg/L	0.000092	-0.00262	mg/L	0.000092	3.50%
Be 234.861†	67.1	0.00027	mg/L	0.000009	0.00027	mg/L	0.000009	3.52%
B 249.677†	2498.3	0.0308	mg/L	0.00074	0.0308	mg/L	0.00074	2.40%
Ca 227.546†	14.5	0.132	mg/L	0.0147	0.132	mg/L	0.0147	11.19%
Cd 228.802†	-8.3	0.00021	mg/L	0.000232	0.00021	mg/L	0.000232	110.33%
Co 228.616†	-4.8	-0.00029	mg/L	0.000088	-0.00029	mg/L	0.000088	30.17%
Cr 267.716†	-165.9	-0.00122	mg/L	0.000037	-0.00122	mg/L	0.000037	3.05%
Cu 327.393†	175.0	0.00174	mg/L	0.000139	0.00174	mg/L	0.000139	8.01%
Fe 239.562†	53.4	0.00067	mg/L	0.000341	0.00067	mg/L	0.000341	51.07%
Mg 279.077†	9.6	-0.00334	mg/L	0.004001	-0.00334	mg/L	0.004001	119.82%
Mn 257.610†	-39.6	-0.00040	mg/L	0.000007	-0.00040	mg/L	0.000007	1.82%
Mo 202.031†	-28.8	-0.00100	mg/L	0.000064	-0.00100	mg/L	0.000064	6.38%
Ni 231.604†	2.1	-0.00330	mg/L	0.000226	-0.00330	mg/L	0.000226	6.85%
Pb 220.353†	0.0	-0.00020	mg/L	0.001878	-0.00020	mg/L	0.001878	950.50%
Sb 206.836†	-2.1	0.00406	mg/L	0.000342	0.00406	mg/L	0.000342	8.44%
Se 196.026†	-2.2	0.00181	mg/L	0.001310	0.00181	mg/L	0.001310	72.57%
Si 251.611†	164.3	1.61	mg/L	0.284	1.61	mg/L	0.284	17.58%
Sn 189.927†	-2.9	-0.00124	mg/L	0.000388	-0.00124	mg/L	0.000388	31.22%
Ti 334.940†	186.0	0.00151	mg/L	0.000131	0.00151	mg/L	0.000131	8.71%
Tl 190.801†	4.7	-0.00010	mg/L	0.001377	-0.00010	mg/L	0.001377	>999.9%
V 290.880†	418.1	0.00380	mg/L	0.000750	0.00380	mg/L	0.000750	19.73%
Zn 206.200†	71.2	0.00239	mg/L	0.000149	0.00239	mg/L	0.000149	6.21%
K 766.490†	-32.9	-0.0608	mg/L	0.00546	-0.0608	mg/L	0.00546	8.98%
Na 589.592†	900.3	0.0559	mg/L	0.01062	0.0559	mg/L	0.01062	18.99%
Sr 407.771†	67.0	0.00070	mg/L	0.000056	0.00070	mg/L	0.000056	8.09%
Li 670.784†	-66.8	-0.00240	mg/L	0.000110	-0.00240	mg/L	0.000110	4.56%

Sequence No.: 23 **Autosampler Location: 79**
Sample ID: LCSW 47 WG396995-03 **Date Collected: 5/4/2012 5:34:16 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW 47 WG396995-03

Approved: May 07, 2012

Lynn H. Rhoden

Analyte	Back Pressure	Flow
All	149.0 kPa	0.50 L/min

Mean Data: LCSW 47 WG396995-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2379823.9						73706.30	3.10%
YRADIAL	313112.1						4908.75	1.57%
Ga 417.206	1389822.4						22329.50	1.61%
GaRADIAL	92411.4						695.88	0.75%
Ag 328.068†	63380.9	0.198	mg/L	0.0012	0.198	mg/L	0.0012	0.60%
Al 396.153†	35143.7	4.74	mg/L	0.006	4.74	mg/L	0.006	0.13%
As 188.979†	577.5	0.187	mg/L	0.0004	0.187	mg/L	0.0004	0.20%
Ba 233.527†	79760.6	0.479	mg/L	0.0130	0.479	mg/L	0.0130	2.72%
Be 234.861†	31955.1	0.0232	mg/L	0.00022	0.0232	mg/L	0.00022	0.94%
B 249.677†	89721.3	0.951	mg/L	0.0097	0.951	mg/L	0.0097	1.02%
Ca 227.546†	2206.4	4.88	mg/L	0.039	4.88	mg/L	0.039	0.79%
Cd 228.802†	1419.5	0.0229	mg/L	0.00025	0.0229	mg/L	0.00025	1.07%
Co 228.616†	3919.3	0.0971	mg/L	0.00356	0.0971	mg/L	0.00356	3.67%
Cr 267.716†	27452.0	0.241	mg/L	0.0049	0.241	mg/L	0.0049	2.04%
Cu 327.393†	65990.7	0.241	mg/L	0.0024	0.241	mg/L	0.0024	1.02%
Fe 239.562†	32114.6	1.87	mg/L	0.016	1.87	mg/L	0.016	0.87%
Mg 279.077†	17776.7	4.77	mg/L	0.030	4.77	mg/L	0.030	0.64%
Mn 257.610†	212113.7	0.243	mg/L	0.0073	0.243	mg/L	0.0073	3.01%
Mo 202.031†	18595.7	0.497	mg/L	0.0086	0.497	mg/L	0.0086	1.73%
Ni 231.604†	17595.5	0.240	mg/L	0.0061	0.240	mg/L	0.0061	2.52%
Pb 220.353†	2852.3	0.241	mg/L	0.0089	0.241	mg/L	0.0089	3.69%
Sb 206.836†	2551.5	0.566	mg/L	0.0104	0.566	mg/L	0.0104	1.83%
Se 196.026†	367.8	0.184	mg/L	0.0025	0.184	mg/L	0.0025	1.37%
Si 251.611†	108310.4	1050	mg/L	13.4	1050	mg/L	13.4	1.27%
Sn 189.927†	-37.1	-0.00435	mg/L	0.000681	-0.00435	mg/L	0.000681	15.67%
Ti 334.940†	484751.4	0.473	mg/L	0.0007	0.473	mg/L	0.0007	0.14%
Tl 190.801†	998.0	0.248	mg/L	0.0069	0.248	mg/L	0.0069	2.79%
V 290.880†	97857.7	0.490	mg/L	0.0117	0.490	mg/L	0.0117	2.39%
Zn 206.200†	22580.0	0.482	mg/L	0.0106	0.482	mg/L	0.0106	2.20%
K 766.490†	79139.9	24.4	mg/L	0.14	24.4	mg/L	0.14	0.59%
Na 589.592†	470166.7	23.8	mg/L	0.06	23.8	mg/L	0.06	0.26%
Sr 407.771†	1247583.0	0.469	mg/L	0.0054	0.469	mg/L	0.0054	1.14%
Li 670.784†	75222.9	0.502	mg/L	0.0105	0.502	mg/L	0.0105	2.10%

Sequence No.: 24
Sample ID: L1205008301 WG396995-01
Analyst: KHR
Initial Sample Wt:
Dilution:

Autosampler Location: 80
Date Collected: 5/4/2012 5:40:15 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: L1205008301 WG396995-01

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: L1205008301 WG396995-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2359655.9						37469.47	1.59%
YRADIAL	309720.2						3151.67	1.02%
Ga 417.206	1431518.4						50232.13	3.51%
GaRADIAL	93560.8						645.43	0.69%
Ag 328.068†	610.1	0.00310	mg/L	0.000241	0.00310	mg/L	0.000241	7.79%
Al 396.153†	1522.9	0.200	mg/L	0.0143	0.200	mg/L	0.0143	7.14%
As 188.979†	-4.7	-0.00299	mg/L	0.001863	-0.00299	mg/L	0.001863	62.37%
Ba 233.527†	11691.3	0.0706	mg/L	0.00141	0.0706	mg/L	0.00141	2.00%
Be 234.861†	320.5	0.00041	mg/L	0.000041	0.00041	mg/L	0.000041	9.99%
B 249.677†	34512.0	0.369	mg/L	0.0162	0.369	mg/L	0.0162	4.39%
Ca 227.546†	27805.8	57.6	mg/L	2.38	57.6	mg/L	2.38	4.13%
Cd 228.802†	14.7	0.00060	mg/L	0.000156	0.00060	mg/L	0.000156	25.84%
Co 228.616†	13.9	0.00015	mg/L	0.000171	0.00015	mg/L	0.000171	111.85%
Cr 267.716†	-44.1	-0.00014	mg/L	0.000021	-0.00014	mg/L	0.000021	14.39%
Cu 327.393†	1021.9	0.00482	mg/L	0.000149	0.00482	mg/L	0.000149	3.10%

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Fe 239.562†	3102.0	0.178	mg/L	0.0034	0.178	mg/L	0.0034	1.91%
Mg 279.077†	82508.7	22.1	mg/L	0.39	22.1	mg/L	0.39	1.76%
Mn 257.610†	3091.4	0.00320	mg/L	0.000074	0.00320	mg/L	0.000074	2.30%
Mo 202.031†	31.1	0.00061	mg/L	0.000058	0.00061	mg/L	0.000058	9.38%
Ni 231.604†	101.5	-0.00193	mg/L	0.000431	-0.00193	mg/L	0.000431	22.39%
Pb 220.353†	6.1	0.00079	mg/L	0.000801	0.00079	mg/L	0.000801	101.14%
Sb 206.836†	-2.7	0.00392	mg/L	0.000728	0.00392	mg/L	0.000728	18.56%
Se 196.026†	0.6	0.00321	mg/L	0.004123	0.00321	mg/L	0.004123	128.29%
Si 251.611†	180885.1	1760	mg/L	55.3	1760	mg/L	55.3	3.14%
Sn 189.927†	-231.7	-0.0220	mg/L	0.00014	-0.0220	mg/L	0.00014	0.63%
Ti 334.940†	-1445.4	0.00853	mg/L	0.000472	0.00853	mg/L	0.000472	5.53%
Tl 190.801†	-10.6	-0.00383	mg/L	0.003172	-0.00383	mg/L	0.003172	82.76%
V 290.880†	1364.2	0.00793	mg/L	0.001526	0.00793	mg/L	0.001526	19.25%
Zn 206.200†	92.2	0.00284	mg/L	0.000045	0.00284	mg/L	0.000045	1.60%
K 766.490†	7813.7	2.35	mg/L	0.051	2.35	mg/L	0.051	2.17%
Na 589.592†	217765.4	11.0	mg/L	0.07	11.0	mg/L	0.07	0.63%
Sr 407.771†	1738942.5	0.652	mg/L	0.0032	0.652	mg/L	0.0032	0.49%
Li 670.784†	1893.6	0.0107	mg/L	0.00022	0.0107	mg/L	0.00022	2.06%

Sequence No.: 25 **Autosampler Location: 81**
Sample ID: L1205008301DU WG396995-04 **Date Collected: 5/4/2012 5:46:14 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205008301DU WG396995-04

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: L1205008301DU WG396995-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2361745.9						28447.64	1.20%
YRADIAL	304595.6						3419.07	1.12%
Ga 417.206	1453626.8						9620.41	0.66%
GaRADIAL	91975.6						756.34	0.82%
Ag 328.068†	538.8	0.00287	mg/L	0.000305	0.00287	mg/L	0.000305	10.62%
Al 396.153†	1395.9	0.183	mg/L	0.0087	0.183	mg/L	0.0087	4.78%
As 188.979†	-1.2	-0.00182	mg/L	0.004027	-0.00182	mg/L	0.004027	220.84%
Ba 233.527†	12333.5	0.0745	mg/L	0.00091	0.0745	mg/L	0.00091	1.22%
Be 234.861†	294.8	0.00039	mg/L	0.000057	0.00039	mg/L	0.000057	14.61%
B 249.677†	34545.1	0.369	mg/L	0.0076	0.369	mg/L	0.0076	2.04%
Ca 227.546†	28022.9	58.0	mg/L	1.36	58.0	mg/L	1.36	2.35%
Cd 228.802†	13.3	0.00057	mg/L	0.000117	0.00057	mg/L	0.000117	20.29%
Co 228.616†	11.7	0.00009	mg/L	0.000125	0.00009	mg/L	0.000125	133.27%
Cr 267.716†	-34.3	-0.00006	mg/L	0.000155	-0.00006	mg/L	0.000155	261.40%
Cu 327.393†	1019.3	0.00481	mg/L	0.000150	0.00481	mg/L	0.000150	3.11%
Fe 239.562†	3267.6	0.187	mg/L	0.0069	0.187	mg/L	0.0069	3.71%
Mg 279.077†	87283.8	23.4	mg/L	0.59	23.4	mg/L	0.59	2.50%
Mn 257.610†	3166.5	0.00329	mg/L	0.000061	0.00329	mg/L	0.000061	1.84%
Mo 202.031†	37.3	0.00078	mg/L	0.000067	0.00078	mg/L	0.000067	8.58%
Ni 231.604†	118.1	-0.00170	mg/L	0.000299	-0.00170	mg/L	0.000299	17.65%
Pb 220.353†	15.1	0.00155	mg/L	0.001435	0.00155	mg/L	0.001435	92.79%
Sb 206.836†	1.2	0.00479	mg/L	0.000345	0.00479	mg/L	0.000345	7.20%
Se 196.026†	-4.4	0.00076	mg/L	0.002289	0.00076	mg/L	0.002289	300.26%
Si 251.611†	187123.8	1820	mg/L	23.1	1820	mg/L	23.1	1.27%
Sn 189.927†	-234.7	-0.0223	mg/L	0.00123	-0.0223	mg/L	0.00123	5.54%
Ti 334.940†	-1340.3	0.00870	mg/L	0.000965	0.00870	mg/L	0.000965	11.09%
Tl 190.801†	-12.0	-0.00418	mg/L	0.001802	-0.00418	mg/L	0.001802	43.10%
V 290.880†	1010.5	0.00612	mg/L	0.001138	0.00612	mg/L	0.001138	18.59%
Zn 206.200†	109.6	0.00321	mg/L	0.000097	0.00321	mg/L	0.000097	3.02%
K 766.490†	8251.6	2.48	mg/L	0.053	2.48	mg/L	0.053	2.14%
Na 589.592†	227018.3	11.5	mg/L	0.07	11.5	mg/L	0.07	0.59%
Sr 407.771†	1812162.3	0.680	mg/L	0.0053	0.680	mg/L	0.0053	0.78%
Li 670.784†	2000.9	0.0114	mg/L	0.00036	0.0114	mg/L	0.00036	3.11%

Sequence No.: 26 **Autosampler Location: 82**
Sample ID: L1205008301MS WG396995-05 **Date Collected: 5/4/2012 5:52:15 PM**

Approved: May 07, 2012

Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205008301MS WG396995-05

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: L1205008301MS WG396995-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2400371.5						15441.45	0.64%
YRADIAL	311652.0						4023.35	1.29%
Ga 417.206	1442257.6						39856.34	2.76%
GaRADIAL	91647.5						971.30	1.06%
Ag 328.068†	59680.2	0.187	mg/L	0.0074	0.187	mg/L	0.0074	3.97%
Al 396.153†	36544.4	4.93	mg/L	0.007	4.93	mg/L	0.007	0.14%
As 188.979†	545.2	0.176	mg/L	0.0066	0.176	mg/L	0.0066	3.76%
Ba 233.527†	87467.7	0.525	mg/L	0.0089	0.525	mg/L	0.0089	1.70%
Be 234.861†	30782.3	0.0223	mg/L	0.00101	0.0223	mg/L	0.00101	4.52%
B 249.677†	116841.4	1.24	mg/L	0.052	1.24	mg/L	0.052	4.21%
Ca 227.546†	30444.9	63.2	mg/L	2.56	63.2	mg/L	2.56	4.05%
Cd 228.802†	1335.0	0.0215	mg/L	0.00094	0.0215	mg/L	0.00094	4.36%
Co 228.616†	3694.4	0.0915	mg/L	0.00077	0.0915	mg/L	0.00077	0.85%
Cr 267.716†	26134.1	0.229	mg/L	0.0060	0.229	mg/L	0.0060	2.61%
Cu 327.393†	62049.6	0.227	mg/L	0.0073	0.227	mg/L	0.0073	3.22%
Fe 239.562†	34083.3	1.98	mg/L	0.007	1.98	mg/L	0.007	0.36%
Mg 279.077†	98906.6	26.6	mg/L	0.06	26.6	mg/L	0.06	0.22%
Mn 257.610†	204296.3	0.234	mg/L	0.0032	0.234	mg/L	0.0032	1.37%
Mo 202.031†	17766.8	0.475	mg/L	0.0064	0.475	mg/L	0.0064	1.34%
Ni 231.604†	16233.7	0.221	mg/L	0.0007	0.221	mg/L	0.0007	0.32%
Pb 220.353†	2720.0	0.230	mg/L	0.0022	0.230	mg/L	0.0022	0.96%
Sb 206.836†	2409.7	0.535	mg/L	0.0147	0.535	mg/L	0.0147	2.74%
Se 196.026†	350.4	0.176	mg/L	0.0059	0.176	mg/L	0.0059	3.37%
Si 251.611†	298414.4	2900	mg/L	101.2	2900	mg/L	101.2	3.49%
Sn 189.927†	-222.0	-0.0211	mg/L	0.00038	-0.0211	mg/L	0.00038	1.78%
Ti 334.940†	471894.7	0.470	mg/L	0.0027	0.470	mg/L	0.0027	0.58%
Tl 190.801†	921.9	0.229	mg/L	0.0020	0.229	mg/L	0.0020	0.85%
V 290.880†	94238.2	0.472	mg/L	0.0094	0.472	mg/L	0.0094	2.00%
Zn 206.200†	20798.9	0.444	mg/L	0.0127	0.444	mg/L	0.0127	2.86%
K 766.490†	85489.1	26.4	mg/L	0.03	26.4	mg/L	0.03	0.12%
Na 589.592†	694929.0	35.4	mg/L	0.47	35.4	mg/L	0.47	1.34%
Sr 407.771†	2958936.3	1.11	mg/L	0.010	1.11	mg/L	0.010	0.91%
Li 670.784†	75573.2	0.504	mg/L	0.0039	0.504	mg/L	0.0039	0.78%

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Sequence No.: 27 **Autosampler Location: 83**
Sample ID: L1205008301PS WG397061-03 **Date Collected: 5/4/2012 5:58:16 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205008301PS WG397061-03

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: L1205008301PS WG397061-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2357611.4						19577.84	0.83%
YRADIAL	301756.5						5798.37	1.92%
Ga 417.206	1405771.9						36553.36	2.60%
GaRADIAL	90067.2						1516.02	1.68%
Ag 328.068†	65189.3	0.204	mg/L	0.0049	0.204	mg/L	0.0049	2.40%
Al 396.153†	38835.3	5.24	mg/L	0.032	5.24	mg/L	0.032	0.61%
As 188.979†	594.8	0.192	mg/L	0.0047	0.192	mg/L	0.0047	2.43%
Ba 233.527†	93395.1	0.561	mg/L	0.0011	0.561	mg/L	0.0011	0.20%
Be 234.861†	33736.9	0.0245	mg/L	0.00056	0.0245	mg/L	0.00056	2.30%

Approved: May 07, 2012

Kym H. Rhoden

B 249.677†	122152.4	1.29	mg/L	0.033	1.29	mg/L	0.033	2.52%
Ca 227.546†	28219.5	58.6	mg/L	1.11	58.6	mg/L	1.11	1.89%
Cd 228.802†	1438.4	0.0232	mg/L	0.00084	0.0232	mg/L	0.00084	3.63%
Co 228.616†	3992.0	0.0989	mg/L	0.00061	0.0989	mg/L	0.00061	0.62%
Cr 267.716†	28646.4	0.251	mg/L	0.0028	0.251	mg/L	0.0028	1.11%
Cu 327.393†	67090.8	0.245	mg/L	0.0049	0.245	mg/L	0.0049	2.00%
Fe 239.562†	36011.9	2.09	mg/L	0.003	2.09	mg/L	0.003	0.13%
Mg 279.077†	92871.3	24.9	mg/L	0.11	24.9	mg/L	0.11	0.44%
Mn 257.610†	222119.1	0.255	mg/L	0.0006	0.255	mg/L	0.0006	0.24%
Mo 202.031†	19398.0	0.519	mg/L	0.0025	0.519	mg/L	0.0025	0.48%
Ni 231.604†	17795.1	0.243	mg/L	0.0014	0.243	mg/L	0.0014	0.56%
Pb 220.353†	2948.7	0.249	mg/L	0.0019	0.249	mg/L	0.0019	0.77%
Sb 206.836†	2629.7	0.583	mg/L	0.0163	0.583	mg/L	0.0163	2.79%
Se 196.026†	389.8	0.195	mg/L	0.0070	0.195	mg/L	0.0070	3.61%
Si 251.611†	284801.6	2770	mg/L	34.7	2770	mg/L	34.7	1.26%
Sn 189.927†	-230.5	-0.0219	mg/L	0.00085	-0.0219	mg/L	0.00085	3.89%
Ti 334.940†	504681.9	0.501	mg/L	0.0005	0.501	mg/L	0.0005	0.10%
Tl 190.801†	998.4	0.248	mg/L	0.0038	0.248	mg/L	0.0038	1.52%
V 290.880†	102854.0	0.515	mg/L	0.0048	0.515	mg/L	0.0048	0.93%
Zn 206.200†	23020.6	0.491	mg/L	0.0055	0.491	mg/L	0.0055	1.13%
K 766.490†	90341.3	27.9	mg/L	0.12	27.9	mg/L	0.12	0.45%
Na 589.592†	714295.8	36.4	mg/L	0.70	36.4	mg/L	0.70	1.94%
Sr 407.771†	2964325.6	1.11	mg/L	0.025	1.11	mg/L	0.025	2.28%
Li 670.784†	80459.2	0.537	mg/L	0.0039	0.537	mg/L	0.0039	0.72%

Sequence No.: 28
Sample ID: L1205008301DL WG397061-04
Analyst: KHR
Initial Sample Wt:
Dilution:

Autosampler Location: 84
Date Collected: 5/4/2012 6:04:15 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: L1205008301DL WG397061-04

Analyte	Back Pressure	Flow
All	148.0 kPa	0.50 L/min

Mean Data: L1205008301DL WG397061-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2400465.4						22890.41	0.95%
YRADIAL	305155.1						3552.38	1.16%
Ga 417.206	1482447.3						11143.94	0.75%
GaRADIAL	92880.6						1557.55	1.68%
Ag 328.068†	121.9	0.00162	mg/L	0.000281	0.00162	mg/L	0.000281	17.33%
Al 396.153†	299.7	0.0339	mg/L	0.00363	0.0339	mg/L	0.00363	10.73%
As 188.979†	-2.7	-0.00234	mg/L	0.001862	-0.00234	mg/L	0.001862	79.73%
Ba 233.527†	1954.6	0.0123	mg/L	0.00015	0.0123	mg/L	0.00015	1.23%
Be 234.861†	100.6	0.00028	mg/L	0.000016	0.00028	mg/L	0.000016	5.73%
B 249.677†	8278.4	0.0919	mg/L	0.00148	0.0919	mg/L	0.00148	1.61%
Ca 227.546†	5415.3	11.3	mg/L	0.13	11.3	mg/L	0.13	1.19%
Cd 228.802†	-5.4	0.00027	mg/L	0.000214	0.00027	mg/L	0.000214	78.98%
Co 228.616†	0.5	-0.00016	mg/L	0.000166	-0.00016	mg/L	0.000166	102.13%
Cr 267.716†	-135.2	-0.00095	mg/L	0.000103	-0.00095	mg/L	0.000103	10.86%
Cu 327.393†	365.2	0.00243	mg/L	0.000304	0.00243	mg/L	0.000304	12.52%
Fe 239.562†	680.7	0.0371	mg/L	0.00067	0.0371	mg/L	0.00067	1.80%
Mg 279.077†	17159.7	4.60	mg/L	0.045	4.60	mg/L	0.045	0.97%
Mn 257.610†	676.0	0.00043	mg/L	0.000038	0.00043	mg/L	0.000038	9.01%
Mo 202.031†	-9.2	-0.00047	mg/L	0.000096	-0.00047	mg/L	0.000096	20.33%
Ni 231.604†	16.0	-0.00311	mg/L	0.000208	-0.00311	mg/L	0.000208	6.69%
Pb 220.353†	17.5	0.00136	mg/L	0.000535	0.00136	mg/L	0.000535	39.18%
Sb 206.836†	4.3	0.00548	mg/L	0.000809	0.00548	mg/L	0.000809	14.77%
Se 196.026†	-2.5	0.00167	mg/L	0.001663	0.00167	mg/L	0.001663	99.60%
Si 251.611†	37548.1	365	mg/L	11.8	365	mg/L	11.8	3.22%
Sn 189.927†	-106.4	-0.0106	mg/L	0.00102	-0.0106	mg/L	0.00102	9.58%
Ti 334.940†	-386.2	0.00262	mg/L	0.000174	0.00262	mg/L	0.000174	6.63%
Tl 190.801†	-11.6	-0.00408	mg/L	0.003627	-0.00408	mg/L	0.003627	88.82%
V 290.880†	459.5	0.00388	mg/L	0.000894	0.00388	mg/L	0.000894	23.01%
Zn 206.200†	134.2	0.00373	mg/L	0.000134	0.00373	mg/L	0.000134	3.60%
K 766.490†	1774.3	0.494	mg/L	0.0039	0.494	mg/L	0.0039	0.80%
Na 589.592†	45166.9	2.28	mg/L	0.033	2.28	mg/L	0.033	1.45%

Approved: May 07, 2012

Sr 407.771†	364483.2	0.137 mg/L	0.0025	0.137 mg/L	0.0025	1.85%
Li 670.784†	408.5	0.00078 mg/L	0.000222	0.00078 mg/L	0.000222	28.40%

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Sequence No.: 29 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 5/4/2012 6:11:10 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	148.0 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	2344854.9						34353.76	1.47%
YRADIAL	308529.9						4230.19	1.37%
Ga 417.206	1355894.3						25695.82	1.90%
GaRADIAL	90086.8						743.21	0.82%
Ag 328.068†	129394.7	0.404	mg/L	0.0101	0.404	mg/L	0.0101	2.51%
QC value within limits for Ag 328.068 Recovery = 100.98%								
Al 396.153†	72843.1	9.84	mg/L	0.029	9.84	mg/L	0.029	0.29%
QC value within limits for Al 396.153 Recovery = 98.36%								
As 188.979†	1214.2	0.394	mg/L	0.0076	0.394	mg/L	0.0076	1.93%
QC value within limits for As 188.979 Recovery = 98.51%								
Ba 233.527†	164943.7	0.990	mg/L	0.0113	0.990	mg/L	0.0113	1.14%
QC value within limits for Ba 233.527 Recovery = 98.98%								
Be 234.861†	67255.5	0.0486	mg/L	0.00092	0.0486	mg/L	0.00092	1.90%
QC value within limits for Be 234.861 Recovery = 97.19%								
B 249.677†	47351.0	0.501	mg/L	0.0103	0.501	mg/L	0.0103	2.06%
QC value within limits for B 249.677 Recovery = 100.23%								
Ca 227.546†	4686.7	10.3	mg/L	0.26	10.3	mg/L	0.26	2.58%
QC value within limits for Ca 227.546 Recovery = 102.56%								
Cd 228.802†	2998.6	0.0479	mg/L	0.00161	0.0479	mg/L	0.00161	3.36%
QC value within limits for Cd 228.802 Recovery = 95.83%								
Co 228.616†	8047.6	0.200	mg/L	0.0023	0.200	mg/L	0.0023	1.17%
QC value within limits for Co 228.616 Recovery = 99.80%								
Cr 267.716†	56652.8	0.497	mg/L	0.0016	0.497	mg/L	0.0016	0.33%
QC value within limits for Cr 267.716 Recovery = 99.37%								
Cu 327.393†	134441.4	0.490	mg/L	0.0118	0.490	mg/L	0.0118	2.41%
QC value within limits for Cu 327.393 Recovery = 97.95%								
Fe 239.562†	67520.8	3.92	mg/L	0.051	3.92	mg/L	0.051	1.29%
QC value within limits for Fe 239.562 Recovery = 98.10%								
Mg 279.077†	36997.2	9.94	mg/L	0.136	9.94	mg/L	0.136	1.37%
QC value within limits for Mg 279.077 Recovery = 99.43%								
Mn 257.610†	433868.5	0.498	mg/L	0.0058	0.498	mg/L	0.0058	1.17%
QC value within limits for Mn 257.610 Recovery = 99.66%								
Mo 202.031†	38303.3	1.02	mg/L	0.007	1.02	mg/L	0.007	0.71%
QC value within limits for Mo 202.031 Recovery = 102.42%								
Ni 231.604†	37154.6	0.511	mg/L	0.0062	0.511	mg/L	0.0062	1.22%
QC value within limits for Ni 231.604 Recovery = 102.19%								
Pb 220.353†	5914.6	0.499	mg/L	0.0051	0.499	mg/L	0.0051	1.02%
QC value within limits for Pb 220.353 Recovery = 99.82%								
Sb 206.836†	5270.9	1.16	mg/L	0.029	1.16	mg/L	0.029	2.46%
QC value within limits for Sb 206.836 Recovery = 97.04%								
Se 196.026†	761.0	0.378	mg/L	0.0086	0.378	mg/L	0.0086	2.28%
QC value within limits for Se 196.026 Recovery = 94.51%								
Si 251.611†	218761.6	2130	mg/L	26.6	2130	mg/L	26.6	1.25%
QC value greater than the upper limit for Si 251.611 Recovery = 42513.89%								
Sn 189.927†	11093.7	1.01	mg/L	0.012	1.01	mg/L	0.012	1.18%
QC value within limits for Sn 189.927 Recovery = 100.57%								
Ti 334.940†	1007582.5	0.983	mg/L	0.0060	0.983	mg/L	0.0060	0.61%
QC value within limits for Ti 334.940 Recovery = 98.28%								
Tl 190.801†	2045.0	0.509	mg/L	0.0092	0.509	mg/L	0.0092	1.81%
QC value within limits for Tl 190.801 Recovery = 101.85%								
V 290.880†	199883.5	1.000	mg/L	0.0080	1.000	mg/L	0.0080	0.80%
QC value within limits for V 290.880 Recovery = 99.98%								
Zn 206.200†	46659.9	0.994	mg/L	0.0102	0.994	mg/L	0.0102	1.02%

Approved: May 07, 2012

```
   QC value within limits for Zn 206.200  Recovery = 99.44%
K 766.490†           162061.4        50.2 mg/L          0.20        50.2 mg/L          0.20   0.39%
   QC value within limits for K 766.490  Recovery = 100.39%
Na 589.592†           955963.3        48.9 mg/L          0.73        48.9 mg/L          0.73   1.50%
   QC value within limits for Na 589.592  Recovery = 97.76%
Sr 407.771†          2567977.4       0.965 mg/L        0.0136       0.965 mg/L        0.0136   1.41%
   QC value within limits for Sr 407.771  Recovery = 96.49%
Li 670.784†           151742.1        1.01 mg/L         0.009        1.01 mg/L         0.009   0.93%
   QC value within limits for Li 670.784  Recovery = 101.41%
QC Failed.  Continue with analysis.

==========================================================================================
Sequence No.: 30                                    Autosampler Location: 1
Sample ID: CCB                                      Date Collected: 5/4/2012 6:17:09 PM
Analyst:                                            Data Type: Original
Initial Sample Wt:                                  Initial Sample Vol:
Dilution:                                           Sample Prep Vol:

------------------------------------------------------------------------------------------
Nebulizer Parameters: CCB
Analyte                  Back Pressure    Flow
All                     148.0 kPa         0.50 L/min

------------------------------------------------------------------------------------------
Mean Data: CCB
                   Mean Corrected          Calib.                          Sample
Analyte               Intensity      Conc. Units      Std.Dev.      Conc. Units      Std.Dev.   RSD
Y 371.029            2378293.8                                                     25058.67   1.05%
YRADIAL               298035.0                                                     12523.58   4.20%
Ga 417.206           1410901.6                                                     25007.68   1.77%
GaRADIAL               88669.4                                                      1523.93   1.72%
Ag 328.068†               82.5     0.00151 mg/L      0.000522     0.00151 mg/L      0.000522  34.52%
   QC value within limits for Ag 328.068  Recovery = Not calculated
Al 396.153†               28.3    -0.00306 mg/L      0.002822    -0.00306 mg/L      0.002822  92.12%
   QC value within limits for Al 396.153  Recovery = Not calculated
As 188.979†               -0.6    -0.00164 mg/L      0.001893    -0.00164 mg/L      0.001893 115.61%
   QC value within limits for As 188.979  Recovery = Not calculated
Ba 233.527†             -652.3    -0.00335 mg/L      0.000107    -0.00335 mg/L      0.000107   3.18%
   QC value within limits for Ba 233.527  Recovery = Not calculated
Be 234.861†               -0.9     0.00022 mg/L      0.000007     0.00022 mg/L      0.000007   3.00%
   QC value within limits for Be 234.861  Recovery = Not calculated
B 249.677†              1854.5      0.0240 mg/L       0.00069      0.0240 mg/L       0.00069   2.87%
   QC value within limits for B 249.677  Recovery = Not calculated
Ca 227.546†                7.8       0.118 mg/L        0.0237       0.118 mg/L        0.0237  20.14%
   QC value greater than the upper limit for Ca 227.546  Recovery = Not calculated
Cd 228.802†               -4.6     0.00028 mg/L      0.000109     0.00028 mg/L      0.000109  39.02%
   QC value within limits for Cd 228.802  Recovery = Not calculated
Co 228.616†               -2.6    -0.00024 mg/L      0.000099    -0.00024 mg/L      0.000099  42.00%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†             -166.7    -0.00122 mg/L      0.000090    -0.00122 mg/L      0.000090   7.36%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 327.393†              316.9     0.00225 mg/L      0.000826     0.00225 mg/L      0.000826  36.68%
   QC value within limits for Cu 327.393  Recovery = Not calculated
Fe 239.562†               85.3     0.00253 mg/L      0.000152     0.00253 mg/L      0.000152   6.04%
   QC value within limits for Fe 239.562  Recovery = Not calculated
Mg 279.077†               18.0    -0.00107 mg/L      0.001677    -0.00107 mg/L      0.001677 156.74%
   QC value within limits for Mg 279.077  Recovery = Not calculated
Mn 257.610†               -5.9    -0.00036 mg/L      0.000023    -0.00036 mg/L      0.000023   6.57%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              -23.3    -0.00085 mg/L      0.000194    -0.00085 mg/L      0.000194  22.76%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Ni 231.604†               13.2    -0.00315 mg/L      0.000194    -0.00315 mg/L      0.000194   6.15%
   QC value within limits for Ni 231.604  Recovery = Not calculated
Pb 220.353†                6.4     0.00034 mg/L      0.002295     0.00034 mg/L      0.002295 678.36%
   QC value within limits for Pb 220.353  Recovery = Not calculated
Sb 206.836†                3.4     0.00528 mg/L      0.000402     0.00528 mg/L      0.000402   7.62%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -0.4     0.00267 mg/L      0.001480     0.00267 mg/L      0.001480  55.41%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              176.2        1.73 mg/L         0.359        1.73 mg/L         0.359  20.75%
   QC value greater than the upper limit for Si 251.611  Recovery = Not calculated
Sn 189.927†               11.7     0.00008 mg/L      0.000712     0.00008 mg/L      0.000712 876.04%
```

Approved: May 07, 2012

Lynn H. Rhoden

```
   QC value within limits for Sn 189.927  Recovery = Not calculated
Ti 334.940†              187.2     0.00150 mg/L      0.000088     0.00150 mg/L      0.000088   5.86%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                8.1     0.00072 mg/L      0.000925     0.00072 mg/L      0.000925 128.84%
   QC value within limits for Tl 190.801  Recovery = Not calculated
V 290.880†               439.7     0.00391 mg/L      0.002211     0.00391 mg/L      0.002211  56.52%
   QC value within limits for V 290.880  Recovery = Not calculated
Zn 206.200†               15.2     0.00121 mg/L      0.000120     0.00121 mg/L      0.000120   9.92%
   QC value within limits for Zn 206.200  Recovery = Not calculated
K 766.490†               -77.3     -0.0745 mg/L       0.01469     -0.0745 mg/L       0.01469  19.72%
   QC value within limits for K 766.490  Recovery = Not calculated
Na 589.592†             1755.9      0.0990 mg/L       0.00923      0.0990 mg/L       0.00923   9.32%
   QC value within limits for Na 589.592  Recovery = Not calculated
Sr 407.771†              397.2     0.00082 mg/L      0.000051     0.00082 mg/L      0.000051   6.23%
   QC value within limits for Sr 407.771  Recovery = Not calculated
Li 670.784†              -73.5    -0.00245 mg/L      0.000796    -0.00245 mg/L      0.000796  32.52%
   QC value within limits for Li 670.784  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

Approved: May 07, 2012

2.3.2 Metals ICP-MS Data

2.3.2.1 Summary Data

Login Number: L12050011
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: WG396772 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

Narrative ID: 45977
Approved By: Sheri Pfalzgraf

2.3.2.2 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:	**Example:**
Cs = Concentration computed by the data system (ug/L)	0.1
Vf = Final volume	100
Vi = Initial volume	40
D = Dilution factor as a multiplier (10X = 10)	1
Cx = Concentration of element in (ug/L)	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:	**Example:**
Cs = Concentration computed by the data system (ug/L)	0.1
Vf = Final volume	200
Vi = Initial volume	0.5
D = Dilution factor as a multiplier (10X = 10)	1
Cx = Concentration of element in (ug/kg)	40

4.0 Adjusting the concentration to dry weight:

$$Cdry = \frac{Cx \times 100}{Px}$$

Where:	**Example:**
Cx = Concentration calculated as received (wet basis)	40
Px = Percent solids of sample (%wt)	80
$Cdry$ = Concentration calculated as dry weight (ug/kg)	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: WG396746
Analyst: VC
Spike Analyst: VC
Run Date: 05/02/2012 07:07
Method: 3015
Balance: BAL016
Instrument: MW-2

SOP: ME407 Revison 12
Spike Solution: STD49281
Spike Witness: BRG
HNO3 Lot #: COA16033
Digestion Tubes Lot #: COA16074
MS WG# 392559 Lot #: COA15974

	SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Initial Vessel Wt	Final Vessel Wt	Spike Amount	Due Date
1	WG396746-02	BLANK	1	40 mL	100 mL	206.918 g	206.911 g		
2	WG396746-03	LCS	1	40 mL	100 mL	207.99 g	207.973 g	.25 mL	
3	L12040898-01	SAMP	1	40 mL	100 mL	208.035 g	208.012 g		05/10/12
4	L12040898-02	SAMP	1	40 mL	100 mL	207.568 g	207.556 g		05/10/12
5	L12050011-01	SAMP	1	40 mL	100 mL	207.159 g	207.133 g		05/15/12
6	L12050011-02	SAMP	1	40 mL	100 mL	206.902 g	206.886 g		05/15/12
7	L12050011-03	SAMP	1	40 mL	100 mL	207.852 g	207.841 g		05/15/12
8	L12050011-04	SAMP	1	40 mL	100 mL	207.861 g	207.849 g		05/15/12
9	L12050011-05	SAMP	1	40 mL	100 mL	208.78 g	208.777 g		05/15/12
10	L12050013-01	SAMP	1	40 mL	100 mL	206.497 g	206.492 g		05/11/12
11	WG396746-01	REF	1	40 mL	100 mL	207.067 g	207.056 g		
12	L12050013-02	SAMP	1	40 mL	100 mL	207.067 g	207.056 g		05/11/12
13	L12050017-01	SAMP	1	40 mL	100 mL	206.993 g	206.98 g		05/08/12
14	L12050017-02	SAMP	1	40 mL	100 mL	206.885 g	206.872 g		05/08/12
15	L12050017-03	SAMP	1	40 mL	100 mL	205.553 g	205.536 g		05/08/12
16	L12050017-04	SAMP	1	40 mL	100 mL	206.569 g	206.544 g		05/08/12
17	L12050017-05	SAMP	1	40 mL	100 mL	206.034 g	206.037 g		05/08/12
18	L12050017-06	SAMP	1	40 mL	100 mL	209.496 g	209.484 g		05/08/12
19	L12050017-07	SAMP	1	40 mL	100 mL	206.082 g	206.063 g		05/08/12
20	L12050017-08	SAMP	1	40 mL	100 mL	205.331 g	205.318 g		05/08/12
21	L12050017-09	SAMP	1	40 mL	100 mL	206.945 g	206.919 g		05/08/12
22	L12050017-10	SAMP	1	40 mL	100 mL	206.617 g	206.597 g		05/08/12
23	L12050017-11	SAMP	1	40 mL	100 mL	208.417 g	208.4 g		05/08/12
24	WG396746-04	MS	1	40 mL	100 mL	207.615 g	207.594 g	.25 mL	
25	WG396746-05	MSD	1	40 mL	100 mL	206.057 g	206.042 g	.25 mL	

L12040898-01	filtered digestate
L12040898-02	filtered digestate
L12050017-01	filtered digestate
L12050017-02	filtered digestate
L12050017-04	filtered digestate
L12050017-08	filtered digestate
L12050017-06	filtered digestate
L12050017-07	filtered digestate
L12050017-09	filtered digestate
L12050017-10	filtered digestate
L12050017-11	filtered digestate

MW_DIG - Modified 09/30/2009
PDF ID: 2399355
Report generated: 05/02/2012 08:58

Microbac Laboratories Inc.
Microwave Digestion Log

Analyst: Vicki Collins	**SOP:**
	Spike Solution:
	Reviewer: Brenda Gregory
	Spike Witness:

Method:
Balance:
Instrument:

MW_DIG - Modified 09/30/2009
PDF ID: 2399355
Report generated: 05/02/2012 08:58

Microbac Laboratories Inc.

Instrument Run Log

Instrument: ICP-MS2 Dataset: 050312CA.REP
Analyst1: SLP Analyst2: N/A
Method: 6020 SOP: N/A Rev:
Maintenance Log ID: 41585

Calibration Std: STD51139 ICV Std: STD51141 Post Spike: STD47984
ICSA: STD51140 ICSAB: STD51239 Int. Std: RGT17150
CCV: STD51215 LLCCV: STD50968

Workgroups: 396772, 396528,

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	NI.050312.103828	Blank	Blank		1		05/03/12 10:38
2	NI.050312.104115	WG396950-01	Calibration Point		1		05/03/12 10:41
3	NI.050312.104402	WG396950-02	Calibration Point		1		05/03/12 10:44
4	NI.050312.104650	WG396950-03	Calibration Point		1		05/03/12 10:46
5	NI.050312.104937	WG396950-04	Calibration Point		1		05/03/12 10:49
6	NI.050312.105226	WG396950-05	Initial Calibration Verification		1		05/03/12 10:52
7	NI.050312.105516	WG396950-06	Initial Calib Blank		1		05/03/12 10:55
8	NI.050312.105805	WG396950-07	Low Level Initial Calibration V		1		05/03/12 10:58
9	NI.050312.110052	WG396950-08	Interference Check		1		05/03/12 11:00
10	NI.050312.110339	WG396950-09	Interference Check		1		05/03/12 11:03
11	NI.050312.110629	WG396950-10	CCV		1		05/03/12 11:06
12	NI.050312.110916	WG396950-11	CCB		1		05/03/12 11:09
13	NI.050312.111205	WG396746-02	Method/Prep Blank	40/100	1		05/03/12 11:12
14	NI.050312.111452	WG396746-03	Laboratory Control S	40/100	1		05/03/12 11:14
15	NI.050312.111740	L12040898-01	MW-21-042512	40/100	5		05/03/12 11:17
16	NI.050312.112027	L12040898-01	MW-21-042512	40/100	1000		05/03/12 11:20
17	NI.050312.112314	L12040898-02	MW-21-042512	40/100	5		05/03/12 11:23
18	NI.050312.112601	L12040898-02	MW-21-042512	40/100	1000		05/03/12 11:26
19	NI.050312.112848	L12050011-01	MW-29-043012	40/100	1		05/03/12 11:28
20	NI.050312.113136	WG396772-02	Serial Dilution		5	L12050011-01	05/03/12 11:31
21	NI.050312.113423	WG396772-01	Post Digestion Spike		1	L12050011-01	05/03/12 11:34
22	NI.050312.113710	L12050011-02	MW-29-043012	40/100	1		05/03/12 11:37
23	NI.050312.114000	WG396950-12	CCV		1		05/03/12 11:40
24	NI.050312.114247	WG396950-13	CCB		1		05/03/12 11:42
25	NI.050312.114536	L12050011-03	DUP-GW-043012	40/100	1		05/03/12 11:45
26	NI.050312.114823	L12050011-04	DUP-GW-043012	40/100	1		05/03/12 11:48
27	NI.050312.115110	L12050011-05	EB-043012-GW	40/100	1		05/03/12 11:51
28	NI.050312.115358	L12050013-01	CLAMW23-120429	40/100	1		05/03/12 11:53
29	NI.050312.115645	WG396746-01	Reference Sample		1	L12050013-02	05/03/12 11:56
30	NI.050312.115932	WG396746-04	Matrix Spike	40/100	1	L12050013-02	05/03/12 11:59
31	NI.050312.120219	WG396746-05	Matrix Spike Duplica	40/100	1	L12050013-02	05/03/12 12:02
32	NI.050312.120506	L12050017-01	2401 MW-1A	40/100	1		05/03/12 12:05
33	NI.050312.120755	WG396950-14	Interference Check		1		05/03/12 12:07
34	NI.050312.121043	WG396950-15	Interference Check		1		05/03/12 12:10

Page: 1 Approved: May 03, 2012

Maren Berry

Microbac

Microbac Laboratories Inc.

Instrument Run Log

Instrument: ICP-MS2 Dataset: 050312CA.REP
Analyst1: SLP Analyst2: N/A
Method: 6020 SOP: N/A Rev:
Maintenance Log ID: 41585

Calibration Std: STD51139 ICV Std: STD51141 Post Spike: STD47984
ICSA: STD51140 ICSAB: STD51239 Int. Std: RGT17150
CCV: STD51215 LLCCV: STD50968

Workgroups: 396772, 396528,

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
35	NI.050312.121333	WG396950-16	CCV		1		05/03/12 12:13
36	NI.050312.121620	WG396950-17	CCB		1		05/03/12 12:16
37	NI.050312.121938	WG396950-18	Low Level Continuing Calibra		1		05/03/12 12:19
38	NI.050312.122728	L12050017-02	2401 MW-2A	40/100	1		05/03/12 12:27
39	NI.050312.123015	L12050017-03	2401 MW-3A	40/100	1		05/03/12 12:30
40	NI.050312.123302	L12050017-04	2401 MW-5A	40/100	1		05/03/12 12:33
41	NI.050312.123549	L12050017-05	2401 MW-7	40/100	1		05/03/12 12:35
42	NI.050312.123836	L12050017-06	2401 MW-11	40/100	1		05/03/12 12:38
43	NI.050312.124124	L12050017-07	2401 MW-12	40/100	1		05/03/12 12:41
44	NI.050312.124411	L12050017-08	2401 CD-4	40/100	1		05/03/12 12:44
45	NI.050312.124658	L12050017-09	2401 CD-4D	40/100	1		05/03/12 12:46
46	NI.050312.124945	L12050017-10	2401 US-1	40/100	1		05/03/12 12:49
47	NI.050312.125232	L12050017-11	2401 DS-1	40/100	1		05/03/12 12:52
48	NI.050312.125522	WG396950-19	CCV		1		05/03/12 12:55
49	NI.050312.125810	WG396950-20	CCB		1		05/03/12 12:58
50	NI.050312.130100	WG396479-01	Reference Sample		1	L12040944-04	05/03/12 13:01
51	NI.050312.130347	WG396479-04	Matrix Spike	.507/200	1	L12040944-04	05/03/12 13:03
52	NI.050312.130634	WG396479-05	Matrix Spike Duplica	.522/200	1	L12040944-04	05/03/12 13:06
53	NI.050312.130925	WG396950-21	CCV		1		05/03/12 13:09
54	NI.050312.131212	WG396950-22	CCB		1		05/03/12 13:12
55	NI.050312.132807	WG396868-02	Method/Prep Blank	40/100	1		05/03/12 13:28
56	NI.050312.133054	WG396868-03	Laboratory Control S	40/100	1		05/03/12 13:30
57	NI.050312.133341	WG396840-01	Fluid Blank		1		05/03/12 13:33
58	NI.050312.133628	L12050035-02	2770-SSP0027		1		05/03/12 13:36
59	NI.050312.133915	WG396925-02	Serial Dilution	40/100	5	L12050035-02	05/03/12 13:39
60	NI.050312.134203	WG396925-01	Post Digestion Spike	40/100	1	L12050035-02	05/03/12 13:42
61	NI.050312.134450	WG396868-01	Reference Sample	40/100	1	L12050073-01	05/03/12 13:44
62	NI.050312.134737	WG396868-06	Duplicate	40/100	1	L12050073-01	05/03/12 13:47
63	NI.050312.135024	WG396868-04	Matrix Spike		1	L12050073-01	05/03/12 13:50
64	NI.050312.135311	WG396868-05	Matrix Spike Duplica		1	L12050073-01	05/03/12 13:53
65	NI.050312.135601	WG396950-23	CCV		1		05/03/12 13:56
66	NI.050312.135848	WG396950-24	CCB		1		05/03/12 13:58
67	NI.050312.140138	L12050046-01	LH18/24-SP650-6624-GRAB	40/100	1		05/03/12 14:01
68	NI.050312.140425	L12050046-02	LH18/24-SP650-6624-COMP	40/100	1		05/03/12 14:04

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Maren Berry

Microbac Laboratories Inc.

Instrument Run Log

Instrument: ICP-MS2 Dataset: 050312CA.REP
Analyst1: SLP Analyst2: N/A
Method: 6020 SOP: N/A Rev:
Maintenance Log ID: 41585

Calibration Std: STD51139 ICV Std: STD51141 Post Spike: STD47984
ICSA: STD51140 ICSAB: STD51239 Int. Std: RGT17150
CCV: STD51215 LLCCV: STD50968

Workgroups: 396772, 396528,

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
69	NI.050312.140713	L12050046-03	DUP 05-120501	40/100	1		05/03/12 14:07
70	NI.050312.141000	L12050050-01	MW-05I-050112	40/100	1		05/03/12 14:10
71	NI.050312.141247	L12050050-02	MW-05I-050112	40/100	1		05/03/12 14:12
72	NI.050312.141534	L12050050-03	MW-05S-050112	40/100	1		05/03/12 14:15
73	NI.050312.141821	L12050050-04	MW-05S-050112	40/100	1		05/03/12 14:18
74	NI.050312.142109	L12050050-05	MW-24-050112	40/100	1		05/03/12 14:21
75	NI.050312.142356	L12050050-06	MW-24-050112	40/100	1		05/03/12 14:23
76	NI.050312.142643	L12050050-07	MW-01-050112	40/100	1		05/03/12 14:26
77	NI.050312.142933	WG396950-25	CCV		1		05/03/12 14:29
78	NI.050312.143220	WG396950-26	CCB		1		05/03/12 14:32
79	NI.050312.143509	L12050050-08	MW-01-050112	40/100	1		05/03/12 14:35
80	NI.050312.143758	WG396950-27	Interference Check		1		05/03/12 14:37
81	NI.050312.144045	WG396950-28	Interference Check		1		05/03/12 14:40
82	NI.050312.144335	WG396950-29	CCV		1		05/03/12 14:43
83	NI.050312.144622	WG396950-30	CCB		1		05/03/12 14:46
84	NI.050312.145817	WG396883-02	Method/Prep Blank		1		05/03/12 14:58
85	NI.050312.150104	WG396883-03	Laboratory Control S		20		05/03/12 15:01
86	NI.050312.150352	WG396841-01	TCLP Fluid Blank 1		1		05/03/12 15:03
87	NI.050312.150639	WG396841-02	TCLP Fluid Blank 2		1		05/03/12 15:06
88	NI.050312.150926	WG396883-01	Reference Sample		20	L12050035-01	05/03/12 15:09
89	NI.050312.151213	WG396883-04	Matrix Spike		20	L12050035-01	05/03/12 15:12
90	NI.050312.151500	WG396883-05	Matrix Spike Duplica		20	L12050035-01	05/03/12 15:15
91	NI.050312.151748	L12050025-01	HSBH RED		20		05/03/12 15:17
92	NI.050312.152035	WG396927-02	Serial Dilution		100	L12050025-01	05/03/12 15:20
93	NI.050312.152322	WG396927-01	Post Digestion Spike		20	L12050025-01	05/03/12 15:23
94	NI.050312.152612	WG396950-31	CCV		1		05/03/12 15:26
95	NI.050312.152859	WG396950-32	CCB		1		05/03/12 15:28

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Maren Berry

Microbac Laboratories Inc.

Data Checklist

Date: 03-MAY-2012
Analyst: SLP
Analyst: NA
Method: 6020
Instrument: ICP-MS2
Curve Workgroup: 396950
Runlog ID: 46530
Analytical Workgroups: 396772, 396528, 396925, 396927

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	0898, 0011, 0017, 0944, 0035, 0046, 00
Client Forms	X
Level X	
Level 3	0046
Level 4	0898, 0011, 0944, 0035, 0050
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	SLP
Secondary Reviewer	MMB
Comments	

Primary Reviewer: 04-MAY-2012
Secondary Reviewer: 07-MAY-2012

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-07-2012 10:41:07

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 6020 AAB#: WG396772

Login Number: L12050011

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
MW-29-043012	01	04/30/12					05/02/12	1.8	180		05/03/12	2.9	180	
MW-29-043012	02	04/30/12					05/02/12	1.8	180		05/03/12	2.9	180	
DUP-GW-043012	03	04/30/12					05/02/12	1.7	180		05/03/12	2.9	180	
DUP-GW-043012	04	04/30/12					05/02/12	1.7	180		05/03/12	2.9	180	
EB-043012-GW	05	04/30/12					05/02/12	1.7	180		05/03/12	2.9	180	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2401340
Report generated 05/03/2012 14:28

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12050011
Blank File ID: NI.050312.111205
Prep Date: 05/02/12 07:07
Analyzed Date: 05/03/12 11:12
Analyst: SLP

Work Group: WG396772
Blank Sample ID: WG396746-02
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	WG396746-03	NI.050312.111452	05/03/12 11:14	01
MW-29-043012	L12050011-01	NI.050312.112848	05/03/12 11:28	01
MW-29-043012	L12050011-02	NI.050312.113710	05/03/12 11:37	01
DUP-GW-043012	L12050011-03	NI.050312.114536	05/03/12 11:45	01
DUP-GW-043012	L12050011-04	NI.050312.114823	05/03/12 11:48	01
EB-043012-GW	L12050011-05	NI.050312.115110	05/03/12 11:51	01

Report Name: BLANK_SUMMARY
PDF File ID: 2401341
Report generated 05/03/2012 14:28

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050011 Prep Date: 05/02/12 07:07 Sample ID: WG396746-02
Instrument ID: ICP-MS2 Run Date: 05/03/12 11:12 Prep Method: 3015
File ID: NI.050312.111205 Analyst: SLP Method: 6020
Workgroup (AAB#): WG396772 Matrix: Water Units: mg/L
Contract #: Cal ID: ICP-MS-03-MAY-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: 2401342
03-MAY-2012 14:28

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050011 Run Date: 05/03/2012 Sample ID: WG396746-03
Instrument ID: ICP-MS2 Run Time: 11:14 Prep Method: 3015
File ID: NI.050312.111452 Analyst: SLP Method: 6020
Workgroup (AAB#): WG396772 Matrix: Water Units: mg/L
QC Key: WATERLOO Lot#: STD49281 Cal ID: ICP-MS-03-MAY-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Antimony, Total	0.0625	0.0638	102	80 - 120	
Arsenic, Total	0.0625	0.0628	101	80 - 120	
Lead, Total	0.0625	0.0645	103	80 - 120	
Selenium, Total	0.0625	0.0612	97.9	80 - 120	
Thallium, Total	0.0625	0.0631	101	80 - 120	

LCS - Modified 03/06/2008
PDF File ID: 2401343
Report generated: 05/03/2012 14:28

Microbac Laboratories Inc.
MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

Loginnum: L12050011 Cal ID: ICP-MS2- Worknum: WG396772
Instrument ID: ICP-MS2 Contract #: Method: 6020
Parent ID: WG396746-01 File ID: NI.050312.115645 Dil: 1 Matrix: WATER
Sample ID: WG396746-04 MS File ID: NI.050312.115932 Dil: 1 Units: mg/L
Sample ID: WG396746-05 MSD File ID: NI.050312.120219 Dil: 1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Antimony, Dissolved	ND	0.0625	0.0672	107	0.0625	0.0656	105	2.31	80 - 120	20	
Arsenic, Dissolved	0.00396	0.0625	0.0723	109	0.0625	0.0719	109	0.579	80 - 120	20	
Lead, Dissolved	ND	0.0625	0.0664	106	0.0625	0.0664	106	0.00188	80 - 120	20	
Selenium, Dissolved	0.0313	0.0625	0.107	122	0.0625	0.107	121	0.0900	80 - 120	20	*
Thallium, Dissolved	ND	0.0625	0.0673	108	0.0625	0.0669	107	0.605	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: 2401344
Report generated 05/03/2012 14:28

Microbac Laboratories Inc.
Serial Dilution Report

Login: L12050011 **Worknum:** WG396772
Instrument: ICP-MS2 **Method:** 6020
Serial Dil: WG396772-02 **File ID:** NI.050312.113136 **Dil:** 5 **Units:** ug/L
Sample: L12050011-01 **File ID:** NI.050312.112848 **Dil:** 1

Analyte	Sample	Qual	Serial Dil	Qual	% Diff	Q
Antimony	ND	U	ND	U		
Arsenic	0.251	F	1.36	F	441.00	
Lead	0.374	F	ND	U		
Selenium	0.743	X	2.82	X	280.00	
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: 2401337
05/03/2012 14:28

Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L12050011 **Worknum:** WG396772
Instrument ID: ICP-MS2 **Method:** 6020
Post Spike ID: WG396772-01 **File ID:** NI.050312.113423 **Dil:** 1 **Units:** ug/L
Sample ID: L12050011-01 **File ID:** NI.050312.112848 **Dil:** 1 **Matrix:** Water

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
ANTIMONY	52.2		0	U	50	104.4	75 - 125	
ARSENIC	54.8		0.251	F	50	109.0	75 - 125	
LEAD	55.4		0.374	F	50	110.1	75 - 125	
SELENIUM	55.3		0.743		50	109.1	75 - 125	
THALLIUM	55.6		0	U	50	111.3	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: 2401338
Report generated: 05/03/2012 14:28

Microbac Laboratories Inc.
Initial Calibration Summary

Login:	**L12050011**	Workgroup (AAB#):	**WG396772**
Analytical Method:	**6020**	Instrument ID:	**ICP-MS2**
ICAL Worknum:	**WG396950**	Initial Calibration Date:	**03-MAY-2012 10:49**

	WG396950-01		WG396950-02		WG396950-03		WG396950-04			
	Conc	INT	Conc	INT	Conc	INT	Conc	INT	R	Q
ANTIMONY	0	32.9	.4	675	50	608000	100	1200000	1	
ARSENIC	0	-252	.4	-140	50	63200	100	124000	1	
LEAD	0	1570	.4	4450	50	2740000	100	5340000	.999999	
SELENIUM	0	19.6	.4	37.1	50	6340	100	12400	1	
THALLIUM	0	5.70	.4	892	50	888000	100	1740000	.999982	

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: 2401348
Report generated: 03-MAY-2012 14:29

Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L12050011
Instrument ID: ICP-MS2
File ID: NI.050312.105516
Workgroup (AAB#): WG396772
Matrix: WATER

Run Date: 05/03/2012
Run Time: 10:55
Analyst: SLP
Cal ID: ICP-MS2 - 03-MAY-12

Sample ID: WG396950-06
Method: 6020
Units: ug/L

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: 2401350
Report generated 05/03/2012 14:29

Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050011
Run Date: 05/03/2012
Sample ID: WG396950-11
Instrument ID: ICP-MS2
Run Time: 11:09
Method: 6020
File ID: NI.050312.110916
Analyst: SLP
Units: ug/L
Workgroup (AAB#): WG396772
Cal ID: ICP-MS - 03-MAY-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: 2401353
Report generated 05/03/2012 14:29

Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050011
Run Date: 05/03/2012
Sample ID: WG396950-13
Instrument ID: ICP-MS2
Run Time: 11:42
Method: 6020
File ID: NI.050312.114247
Analyst: SLP
Units: ug/L
Workgroup (AAB#): WG396772
Cal ID: ICP-MS - 03-MAY-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: 2401353
Report generated 05/03/2012 14:29

Microbac Laboratories Inc.
CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050011
Run Date: 05/03/2012
Sample ID: WG396950-17
Instrument ID: ICP-MS2
Run Time: 12:16
Method: 6020
File ID: NI.050312.121620
Analyst: SLP
Units: ug/L
Workgroup (AAB#): WG396772
Cal ID: ICP-MS - 03-MAY-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: 2401353
Report generated 05/03/2012 14:29

Microbac Laboratories Inc.

INITIAL CALIBRATION VERIFICATION (ICV)
(Alternate Source)

Login Number: L12050011 Run Date: 05/03/2012 Sample ID: WG396950-05
Instrument ID: ICP-MS2 Run Time: 10:52 Method: 6020
File ID: NI.050312.105226 Analyst: SLP Units: ug/L
Workgroup (AAB#): WG396772 Cal ID: ICP-MS - 03-MAY-12
QC Key: WATERLOO

Analyte		Expected	Found	%REC	LIMITS	Q
Antimony		50	50.7	101	90 - 110	
Arsenic		50	50.1	100	90 - 110	
Lead		50	50.5	101	90 - 110	
Selenium		50	50.7	101	90 - 110	
Thallium		50	50.1	100	90 - 110	

* Exceeds LIMITS Limit

ICV - Modified 03/06/2008
PDF File ID: 2401349
Report generated 05/03/2012 14:29

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050011
Run Date: 05/03/2012
Sample ID: WG396950-10
Instrument ID: ICP-MS2
Run Time: 11:06
Method: 6020
File ID: NI.050312.110629
Analyst: SLP
QC Key: WATERLOO
Workgroup (AAB#): WG396772
Cal ID: ICP-MS - 03-MAY-12
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	50.1	ug/L	100	90 - 110		
Arsenic		50.0	49.0	ug/L	98.0	90 - 110		
Lead		50.0	50.0	ug/L	100	90 - 110		
Selenium		50.0	49.1	ug/L	98.3	90 - 110		
Thallium		50.0	49.9	ug/L	99.7	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
PDF File ID: 2401352
Report generated 05/03/2012 14:29

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050011
Run Date: 05/03/2012
Sample ID: WG396950-12
Instrument ID: ICP-MS2
Run Time: 11:40
Method: 6020
File ID: NI.050312.114000
Analyst: SLP
QC Key: WATERLOO
Workgroup (AAB#): WG396772
Cal ID: ICP-MS - 03-MAY-12
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	50.1	ug/L	100	90 - 110		
Arsenic		50.0	49.6	ug/L	99.3	90 - 110		
Lead		50.0	50.6	ug/L	101	90 - 110		
Selenium		50.0	49.9	ug/L	99.8	90 - 110		
Thallium		50.0	50.8	ug/L	102	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
PDF File ID: 2401352
Report generated 05/03/2012 14:29

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050011
Run Date: 05/03/2012
Sample ID: WG396950-16
Instrument ID: ICP-MS2
Run Time: 12:13
Method: 6020
File ID: NI.050312.121333
Analyst: SLP
QC Key: WATERLOO
Workgroup (AAB#): WG396772
Cal ID: ICP-MS - 03-MAY-12
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	52.9	ug/L	106	90 - 110		
Arsenic		50.0	50.6	ug/L	101	90 - 110		
Lead		50.0	50.6	ug/L	101	90 - 110		
Selenium		50.0	54.3	ug/L	109	90 - 110		
Thallium		50.0	50.7	ug/L	101	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
PDF File ID: 2401352
Report generated 05/03/2012 14:29

Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L12050011 **Workgroup (AAB#):** WG396772
Instrument ID: ICP-MS2 **Method:** 6020
Sol. A : WG396950-08 **File ID:** NI.050312.110052 **Units:** ug/L
Sol. AB : WG396950-09 **File ID:** NI.050312.110339 **Matrix:** Water

	Sol. A			Sol. AB			
ANALYTE	True	Found	%Recovery	True	Found	%Recovery	Q
Antimony	NS	0.0516	NS	100	105	105	
Arsenic	NS	0.00240	NS	100	106	106	
Lead	NS	0.0292	NS	100	103	103	
Selenium	NS	-0.0502	NS	100	107	107	
Thallium	NS	0.0196	NS	100	101	101	

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: 2401351
Report generated 05/03/2012 14:29

Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L12050011
Instrument ID: ICP-MS2
Sol. A : WG396950-14 **File ID:** NI.050312.120755
Sol. AB : WG396950-15 **File ID:** NI.050312.121043

Workgroup (AAB#): WG396772
Method: 6020
Units: ug/L
Matrix: Water

	Sol. A			Sol. AB			
ANALYTE	True	Found	%Recovery	True	Found	%Recovery	Q
Antimony	NS	0.0487	NS	100	107	107	
Arsenic	NS	0.0742	NS	100	105	105	
Lead	NS	0.0294	NS	100	103	103	
Selenium	NS	0.144	NS	100	110	110	
Thallium	NS	0.0231	NS	100	101	101	

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: 2401351
Report generated 05/03/2012 14:29

Microbac Laboratories Inc.

INTERNAL STANDARD REPORT

Login: L12050011 **Analytical Method:** 6020
Analytical Workgroup: WG396772 **Matrix:** 1
Instrument: ICP-MS2 **Analyst:** SLP
ICAL Date: 03-MAY-2012 10:41

			BISMUTH	GERMANIUM	INDIUM	TERBIUM
Sample	**Type**	**Run Date**	**% Rec**	**% Rec**	**% Rec**	**% Rec**
L12050011-01	SAMP	03-MAY-2012 11:28	70.155	82.522	82.667	88.766
L12050011-02	SAMP	03-MAY-2012 11:37	71.1	83.846	86.648	91.481
L12050011-03	SAMP	03-MAY-2012 11:45	69.378	81.998	85.431	90.244
L12050011-04	SAMP	03-MAY-2012 11:48	69.802	82.408	85.57	91.449
L12050011-05	SAMP	03-MAY-2012 11:51	98.375	103.448	105.761	103.538
WG396746-02	BLANK	03-MAY-2012 11:12	99.86	103.635	103.318	100.967
WG396746-03	LCS	03-MAY-2012 11:14	102.437	107.022	106.426	103.368
WG396772-01	PSPK	03-MAY-2012 11:34	70.284	83.266	84.958	91.554
WG396772-02	SERIAL	03-MAY-2012 11:31	86.941	89.301	89.874	94.14
WG396950-05	ICV	03-MAY-2012 10:52	97.12	99.301	99.28	101.392
WG396950-06	ICB	03-MAY-2012 10:55	98.485	98.46	97.711	98.914
WG396950-07	LLICV	03-MAY-2012 10:58	99.932	100.044	99.995	99.75
WG396950-08	ICS	03-MAY-2012 11:00	94.856	98.633	97.62	99.63
WG396950-09	ICS	03-MAY-2012 11:03	95.427	98.212	98.895	103.179
WG396950-10	CCV	03-MAY-2012 11:06	99.065	104.686	103.526	104.181
WG396950-11	CCB	03-MAY-2012 11:09	98.483	99.124	98.563	98.459
WG396950-12	CCV	03-MAY-2012 11:40	97.343	103.929	104.368	105.475
WG396950-13	CCB	03-MAY-2012 11:42	98.663	98.917	102.275	101.052
WG396950-14	ICS	03-MAY-2012 12:07	93.354	97.384	104.588	105.678
WG396950-15	ICS	03-MAY-2012 12:10	94.052	96.456	103.89	104.253
WG396950-16	CCV	03-MAY-2012 12:13	95.878	99.02	106.087	105.869
WG396950-17	CCB	03-MAY-2012 12:16	95.671	94.526	102.858	99.604
WG396950-18	LLCCV	03-MAY-2012 12:19	97.495	97.046	105.76	101.888

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: 2401346
Report generated: 05/03/2012 14:28

Microbac Laboratories Inc.
LINEAR RANGE (QUARTERLY)

Login Number: L12050011 **Date:** 03/16/2012
Insturment 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: 2401345
Report generated: 05/03/2012 14:28

2.3.2.3 Raw Data

MassCal File Name

Mass Calibration File Name Default.tun
MassCal File Path C:\NexIONData\MassCal\Default.tun
Peak Search Window: 1.00

Sample Information

Sample Date/Time: Thursday, May 03, 2012 09:53:00

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	1327	2020	0.725
Mg	23.985	24.025	4715	2019	0.723
In	114.904	114.875	22865	2023	0.682
U	238.050	238.025	47468	2035	0.672

Relative Std. Dev.

Mass	Meas. Intens. RSD
5.525	11.899
5.575	1.743
5.625	2.616
5.675	1.378
5.725	2.646
5.775	1.886
5.825	2.497
5.875	3.191
5.925	2.214
5.975	1.783
6.025	1.786
6.075	1.238
6.125	2.348
6.175	0.989
6.225	0.774
6.275	2.838
6.325	4.490
6.375	91.287
6.425	108.653
6.475	30.496
6.525	7.362
6.575	4.479
6.625	2.593
6.675	2.204
6.725	1.286
6.775	0.698
6.825	2.108
6.875	2.354

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6.925	1.323
6.975	2.435
7.025	1.473
7.075	1.778
7.125	0.958
7.175	1.168
7.225	1.166
7.275	2.929
7.325	7.740
7.375	223.607
7.425	223.607
7.475	
7.525	
7.575	223.607
7.625	136.931
7.675	136.931
7.725	136.931
7.775	136.931
7.825	162.980
7.875	223.607
7.925	149.071
7.975	223.607
8.025	
8.075	141.421
8.125	
8.175	
8.225	223.607
8.275	136.931
8.325	223.607
8.375	223.607
8.425	136.931
8.475	91.287
22.525	4.472
22.575	1.473
22.625	0.810
22.675	1.050
22.725	0.610
22.775	0.564
22.825	0.775
22.875	0.370
22.925	0.746
22.975	0.683
23.025	0.544
23.075	1.089
23.125	1.079
23.175	1.043
23.225	0.664

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23.275	0.797
23.325	0.465
23.375	108.653
23.425	104.583
23.475	47.507
23.525	2.362
23.575	4.059
23.625	1.552
23.675	1.825
23.725	2.110
23.775	2.293
23.825	1.154
23.875	0.855
23.925	1.569
23.975	0.580
24.025	0.697
24.075	0.809
24.125	0.555
24.175	0.901
24.225	0.548
24.275	0.894
24.325	2.126
24.375	91.287
24.425	136.931
24.475	44.605
24.525	13.686
24.575	1.772
24.625	3.436
24.675	2.642
24.725	1.199
24.775	2.680
24.825	2.958
24.875	1.190
24.925	2.816
24.975	2.162
25.025	1.070
25.075	2.688
25.125	2.050
25.175	0.854
25.225	3.010
25.275	1.719
25.325	13.871
25.375	
25.425	100.000
25.475	19.444
113.525	15.230
113.575	6.681

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113.625	4.482
113.675	2.980
113.725	1.856
113.775	2.226
113.825	1.472
113.875	1.852
113.925	1.784
113.975	1.848
114.025	2.191
114.075	1.725
114.125	2.719
114.175	3.952
114.225	9.030
114.275	11.076
114.325	70.711
114.375	26.413
114.425	20.613
114.475	5.647
114.525	5.437
114.575	2.252
114.625	2.456
114.675	0.874
114.725	1.450
114.775	1.632
114.825	1.675
114.875	2.209
114.925	1.354
114.975	0.983
115.025	0.705
115.075	2.121
115.125	1.579
115.175	2.267
115.225	4.685
115.275	7.370
115.325	83.853
115.375	136.931
115.425	36.377
115.475	36.388
115.525	12.947
115.575	8.474
115.625	2.801
115.675	1.734
115.725	3.055
115.775	2.192
115.825	4.744
115.875	2.024
115.925	2.004

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115.975	3.467
116.025	3.838
116.075	1.978
116.125	4.377
116.175	5.391
116.225	5.904
116.275	22.268
116.325	136.931
116.375	
116.425	39.123
116.475	33.503
236.525	
236.575	
236.625	
236.675	
236.725	
236.775	
236.825	
236.875	
236.925	
236.975	223.607
237.025	
237.075	
237.125	
237.175	
237.225	
237.275	
237.325	223.607
237.375	
237.425	91.287
237.475	141.421
237.525	39.033
237.575	12.246
237.625	6.065
237.675	3.899
237.725	3.746
237.775	1.179
237.825	1.039
237.875	1.081
237.925	0.615
237.975	1.274
238.025	1.190
238.075	1.320
238.125	1.487
238.175	1.255
238.225	2.230
238.275	1.560

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238.325	3.116
238.375	4.611
238.425	4.869
238.475	10.767
238.525	26.352
238.575	149.071
238.625	
238.675	
238.725	
238.775	
238.825	
238.875	
238.925	
238.975	
239.025	223.607
239.075	
239.125	223.607
239.175	223.607
239.225	
239.275	
239.325	
239.375	
239.425	
239.475	

Approved: May 04, 2012

Daily Performance Report

Sample ID: Daily Performance Check
Sample Date/Time: Thursday, May 03, 2012 09:57:37
Sample Description:
Method File: C:\NexION Data\Method\Daily Performance.mth
Dataset File: C:\NexION Data\DataSet\050212\Daily Performance Check.103
MassCal File: C:\NexION Data\MassCal\Default.tun
Conditions File: C:\NexION Data\Conditions\Default.dac
Dual Detector Mode: Pulse

Acq. Dead Time (ns): 33
Current Dead Time (ns): 33

Torch Z position (mm): 0.00

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD	Mode
	Be	9.0	6460.6	6460.644	114.322	1.8	Standard
	Mg	24.0	254316.5	254316.502	2231.149	0.9	Standard
	In	114.9	106963.8	106963.787	884.575	0.8	Standard
	U	238.1	76492.7	76492.677	591.515	0.8	Standard
⌈	CeO	155.9	2222.8	0.019	0.000	2.5	Standard
| >	Ce	139.9	119078.5	119078.514	787.894	0.7	Standard
⌊	Ce++	70.0	1952.9	0.016	0.000	1.3	Standard
	Bkgd	220.0	0.1	0.067	0.091	136.9	Standard

Current Conditions File Data

Current Value	Description
0.99	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
18.00	Plasma Gas Flow
-8.75	Deflector Voltage
1600.00	ICP RF Power
-1881.00	Analog Stage Voltage
1250.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-15.00	Cell Rod Offset STD [CRO]
12.00	Discriminator Threshold
-2.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.45	RPq
1.00	DRC Mode NEB
-7.00	DRC Mode QRO
-1.50	DRC Mode CRO
-5.00	DRC Mode Cell Entrance/Exit Voltage
0.70	Cell Gas A
200.00	Axial Field Voltage
-17.00	KED Mode CRO
-12.00	KED Mode QRO
-5.00	KED Mode Cell Entrance Voltage
-23.00	KED Mode Cell Exit Voltage
4.40	KED Cell Gas A
0.00	KED RPa
0.25	KED RPq
475.00	KED Mode Axial Field Voltage

Sample ID: Daily Performance Check
Report Date/Time: Thursday, May 03, 2012 09:59:55
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Approved: May 04, 2012

SmartTune Wizard - Summary

```
Optimization Summary

SmartTune file: C:\NexIONData\Wizard\SmartTune\ESI SmartTune Fullmicrobac.swz

Start Time: 5/3/2012 9:57:36 AM
End Time: 5/3/2012 9:59:55 AM

Daily Performance Check - [Passed]  Optimum value(s): N/A
        Obtained Intensity (Be 9.0122): 6460.64
        Obtained Intensity (Mg 23.985): 254316.50
        Obtained Intensity (In 114.904): 106963.79
        Obtained Intensity (U 238.05): 76492.68
        Obtained Intensity (Bkgd 220): 0.07
        Obtained Formula (CeO 155.9 / Ce 139.905): 0.019 (=2222.76 / 119078.51)
        Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.016 (=1952.93 / 119078.51)
```

Report Date/Time: Thursday, May 03, 2012 09:59:56
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SmartTune Wizard - Details

```
Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ESI SmartTune Fullmicrobac.swz

Optimization Status

Start Time: 5/3/2012 9:57:36 AM

Daily Performance Check
        Optimization Settings:
                Method: 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): 6460.64
                Obtained Intensity (Mg 23.985): 254316.50
                Obtained Intensity (In 114.904): 106963.79
                Obtained Intensity (U 238.05): 76492.68
                Obtained Intensity (Bkgd 220): 0.07
                Obtained Formula (CeO 155.9 / Ce 139.905): 0.019 (=2222.76 / 119078.51)
                Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.016 (=1952.93 / 119078.51)
[Passed]  Optimum value(s): N/A

End Time: 5/3/2012 9:59:55 AM
```


Approved: May 04, 2012

Method 6020 - Summary Report

Sample ID: Blank
Sample Date/Time: Thursday, May 03, 2012 10:38:28
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: SLP 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	20538.2	0.8				ug/L		Standard
	Be	9	13.3	37.0				ug/L		Standard
	Al	27	25812.7	3.5				ug/L		Standard
>	**Sc**	45	367704.2	0.8				ug/L		Standard
	Ti	47	127.3	22.5				ug/L		Standard
	V	51	6636.2	2.8				ug/L		Standard
	Cr	52	21243.5	0.7				ug/L		Standard
	Cr	53	467.3	0.5				ug/L		Standard
	Mn	55	8327.3	5.3				ug/L		Standard
	Co	59	122.7	7.4				ug/L		Standard
	Ni	60	271.7	5.7				ug/L		Standard
	Cu	65	1001.7	7.8				ug/L		Standard
	Zn	66	3532.1	4.9				ug/L		Standard
>	**Ge**	72	254938.7	1.0				ug/L		Standard
	As	75	-223.9	7.6				ug/L		Standard
	Se	82	24.1	19.0				ug/L		Standard
	Se-1	77	93.0	5.4				ug/L		Standard
	Ga	71	233175.4	1.4				mg/L		Standard
	Rb	85	20.0	36.1				ug/L		Standard
>	**Y**	89	235100.2	1.6				ug/L		Standard
	Rh	103	6.0	33.3				ug/L		Standard
	Mo	98	13.9	6.0				ug/L		Standard
	Ag	107	38.0	25.9				ug/L		Standard
	Cd	111	438.7	7.8				mg/L		Standard
	Cd	114	1326.4	2.7				ug/L		Standard
>	**In**	115	804157.5	0.3				ug/L		Standard
	Sn	118	4860.1	8.8				ug/L		Standard
	Sb	123	28.2	23.2				ug/L		Standard
	Ba	135	54.0	3.2				ug/L		Standard
	Ce	140	60.7	22.4				ug/L		Standard
>	**Tb**	159	844238.9	1.0				ug/L		Standard
	Ho	165	6.0	88.2				ug/L		Standard
	Tl	203	9.7	23.9				ug/L		Standard
	Tl	205	16.0	12.5				ug/L		Standard
	Pb	206	420.7	3.8				ug/L		Standard
	Pb	207	340.7	2.0				ug/L		Standard
	Pb	208	1571.0	1.4				ug/L		Standard
	U	238	4.3	48.0				ug/L		Standard
>	**Bi**	209	457202.0	0.4				ug/L		Standard
	Na	23	138.0	12.6				mg/L		Standard
	Mg	24	134.0	12.2				mg/L		Standard

Sample ID: Blank
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	K	39	562.7	6.8	mg/L	Standard
	Ca	43	127.3	9.6	mg/L	Standard
	Fe	54	815.3	9.9	mg/L	Standard
	Fe	57	4749.4	1.8	mg/L	Standard
>	**Sc-1**	45	367704.2	0.8	mg/L	Standard
	Cl	35	59900.5	0.3	ug/L	Standard
	Kr	83	49.8	7.4	ug/L	Standard
	Br	81	13965.1	0.8	ug/L	Standard
	P	31	71951.8	0.9	ug/L	Standard
	S	34	878801.5	2.0	ug/L	Standard
	Sr	88	321.3	5.2	ug/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			
	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			

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|	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

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Thursday, May 03, 2012 10:41:15
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: SLP 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	20432.4	2.5				ug/L	20538	Standard
	Be	9	11.0	9.1				ug/L	13	Standard
	Al	27	26188.6	4.9				ug/L	25813	Standard
>	**Sc**	45	362324.3	1.5				ug/L	367704	Standard
	Ti	47	124.0	14.0				ug/L	127	Standard
	V	51	6500.9	2.9				ug/L	6636	Standard
	Cr	52	20844.3	1.4				ug/L	21244	Standard
	Cr	53	447.3	8.1				ug/L	467	Standard
	Mn	55	8722.2	5.8				ug/L	8327	Standard
	Co	59	109.3	9.3				ug/L	123	Standard
	Ni	60	283.3	9.4				ug/L	272	Standard
	Cu	65	1024.0	1.5				ug/L	1002	Standard
	Zn	66	3619.4	4.8				ug/L	3532	Standard
>	**Ge**	72	255147.0	0.4				ug/L	254939	Standard
	As	75	-252.3	9.6				ug/L	-224	Standard
	Se	82	19.6	57.4				ug/L	24	Standard
	Se-1	77	91.7	1.7				ug/L	93	Standard
	Ga	71	238765.3	0.1				mg/L	233175	Standard
	Rb	85	24.7	24.8				ug/L	20	Standard
>	**Y**	89	233544.8	0.2				ug/L	235100	Standard
	Rh	103	3.3	91.7				ug/L	6	Standard
	Mo	98	14.1	23.6				ug/L	14	Standard
	Ag	107	39.3	20.4				ug/L	38	Standard
	Cd	111	445.0	3.2				mg/L	439	Standard
	Cd	114	1233.4	2.5				ug/L	1326	Standard
>	**In**	115	803315.5	0.7				ug/L	804157	Standard
	Sn	118	4797.4	5.5				ug/L	4860	Standard
	Sb	123	32.9	28.3				ug/L	28	Standard
	Ba	135	49.7	12.9				ug/L	54	Standard
	Ce	140	69.3	18.8				ug/L	61	Standard
>	**Tb**	159	824379.0	1.7				ug/L	844239	Standard
	Ho	165	8.0	25.0				ug/L	6	Standard
	Tl	203	5.7	20.4				ug/L	10	Standard
	Tl	205	15.3	7.5				ug/L	16	Standard
	Pb	206	414.3	2.6				ug/L	421	Standard
	Pb	207	344.7	2.9				ug/L	341	Standard
	Pb	208	1573.0	2.4				ug/L	1571	Standard
	U	238	4.3	48.0				ug/L	4	Standard
>	**Bi**	209	453271.8	1.3				ug/L	457202	Standard
	Na	23	156.0	15.6				mg/L	138	Standard
	Mg	24	128.7	13.6				mg/L	134	Standard

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	K	39	632.0	1.6	mg/L	563	Standard
	Ca	43	136.7	23.3	mg/L	127	Standard
	Fe	54	818.3	6.1	mg/L	815	Standard
	Fe	57	4672.7	7.2	mg/L	4749	Standard
>	**Sc-1**	45	362324.3	1.5	mg/L	367704	Standard
	Cl	35	59311.2	0.8	ug/L	59901	Standard
	Kr	83	61.1	9.1	ug/L	50	Standard
	Br	81	13656.8	0.4	ug/L	13965	Standard
	P	31	70539.2	1.1	ug/L	71952	Standard
	S	34	867027.4	0.6	ug/L	878802	Standard
	Sr	88	312.7	4.3	ug/L	321	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			
	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			

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|	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

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: Thursday, May 03, 2012 10:44:02
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: SLP 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	20545.3	1.7				ug/L	20538	Standard
	Be	9	240.0	2.5				ug/L	13	Standard
	Al	27	22932.0	5.6				ug/L	25813	Standard
>	Sc	45	358362.0	2.4				ug/L	367704	Standard
	Ti	47	317.3	6.9				ug/L	127	Standard
	V	51	7821.1	1.5				ug/L	6636	Standard
	Cr	52	22061.7	0.4				ug/L	21244	Standard
	Cr	53	586.0	1.8				ug/L	467	Standard
	Mn	55	6843.5	1.7				ug/L	8327	Standard
	Co	59	984.7	6.1				ug/L	123	Standard
	Ni	60	393.0	2.1				ug/L	272	Standard
	Cu	65	1160.4	3.8				ug/L	1002	Standard
	Zn	66	2743.6	5.1				ug/L	3532	Standard
>	Ge	72	255132.9	1.8				ug/L	254939	Standard
	As	75	-140.2	15.2				ug/L	-224	Standard
	Se	82	37.1	14.4				ug/L	24	Standard
	Se-1	77	102.0	7.1				ug/L	93	Standard
	Ga	71	237566.8	2.6				mg/L	233175	Standard
	Rb	85	27.3	15.2				ug/L	20	Standard
>	Y	89	233177.2	2.4				ug/L	235100	Standard
	Rh	103	5.3	21.7				ug/L	6	Standard
	Mo	98	456.5	7.2				ug/L	14	Standard
	Ag	107	443.7	9.4				ug/L	38	Standard
	Cd	111	699.7	7.1				mg/L	439	Standard
	Cd	114	1992.4	3.9				ug/L	1326	Standard
>	In	115	798504.9	0.8				ug/L	804157	Standard
	Sn	118	4388.0	7.2				ug/L	4860	Standard
	Sb	123	675.1	4.2				ug/L	28	Standard
	Ba	135	334.7	2.6				ug/L	54	Standard
	Ce	140	63.3	11.1				ug/L	61	Standard
>	Tb	159	839523.5	1.0				ug/L	844239	Standard
	Ho	165	14.7	15.7				ug/L	6	Standard
	Tl	203	892.0	4.3				ug/L	10	Standard
	Tl	205	2186.8	3.8				ug/L	16	Standard
	Pb	206	1142.0	1.8				ug/L	421	Standard
	Pb	207	978.4	8.0				ug/L	341	Standard
	Pb	208	4449.9	3.6				ug/L	1571	Standard
	U	238	2548.5	5.1				ug/L	4	Standard
>	Bi	209	456868.7	2.4				ug/L	457202	Standard
	Na	23	142.0	14.8				mg/L	138	Standard
	Mg	24	1605.8	4.0				mg/L	134	Standard

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	K	39	668.7	4.3	mg/L	563	Standard
	Ca	43	120.7	9.7	mg/L	127	Standard
	Fe	54	810.5	13.0	mg/L	815	Standard
	Fe	57	5606.4	1.1	mg/L	4749	Standard
>	**Sc-1**	45	358362.0	2.4	mg/L	367704	Standard
	Cl	35	60249.2	1.3	ug/L	59901	Standard
	Kr	83	49.3	8.2	ug/L	50	Standard
	Br	81	13517.0	2.5	ug/L	13965	Standard
	P	31	71055.9	0.8	ug/L	71952	Standard
	S	34	870648.8	2.0	ug/L	878802	Standard
	Sr	88	300.0	9.2	ug/L	321	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			
	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			

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|	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

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Standard 2
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Method 6020 - Summary Report

Sample ID: Standard 3
Sample Date/Time: Thursday, May 03, 2012 10:46:50
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: SLP 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	21674.8	1.4	**50.0000**	16.636	33.3	ug/L	20538	Standard
	Be	9	222267.1	4.7	**50.0000**	1.970	3.9	ug/L	13	Standard
	Al	27	1232449.8	6.2	**50.0000**	2.825	5.7	ug/L	25813	Standard
>	**Sc**	45	367337.2	1.0				ug/L	367704	Standard
	Ti	47	208382.9	5.0	**100.0000**	4.156	4.2	ug/L	127	Standard
	V	51	1227428.1	4.6	**50.0000**	1.904	3.8	ug/L	6636	Standard
	Cr	52	996886.7	5.7	**50.0000**	2.473	4.9	ug/L	21244	Standard
	Cr	53	111879.8	5.8	**50.0000**	2.521	5.0	ug/L	467	Standard
	Mn	55	1271026.6	5.5	**50.0000**	2.411	4.8	ug/L	8327	Standard
	Co	59	863994.3	6.8	**50.0000**	3.089	6.2	ug/L	123	Standard
	Ni	60	179523.6	5.3	**50.0000**	2.386	4.8	ug/L	272	Standard
	Cu	65	154509.4	6.1	**50.0000**	2.753	5.5	ug/L	1002	Standard
	Zn	66	71994.9	4.4	**50.0000**	1.900	3.8	ug/L	3532	Standard
>	**Ge**	72	257652.0	0.9				ug/L	254939	Standard
	As	75	63165.8	4.2	**50.0000**	1.718	3.4	ug/L	-224	Standard
	Se	82	6336.6	3.1	**50.0000**	1.201	2.4	ug/L	24	Standard
	Se-1	77	4526.3	4.9	**50.0000**	2.283	4.6	ug/L	93	Standard
	Ga	71	240537.6	2.2				mg/L	233175	Standard
	Rb	85	3606.4	2.2				ug/L	20	Standard
>	**Y**	89	235391.0	2.3				ug/L	235100	Standard
	Rh	103	37.3	26.4				ug/L	6	Standard
	Mo	98	417560.9	5.4	**100.0000**	4.686	4.7	ug/L	14	Standard
	Ag	107	408724.9	3.8	**50.0000**	1.516	3.0	ug/L	38	Standard
	Cd	111	247554.6	5.8	**50.0000**	2.518	5.0	mg/L	439	Standard
	Cd	114	686649.9	5.1	**50.0000**	2.166	4.3	ug/L	1326	Standard
>	**In**	115	807107.7	0.8				ug/L	804157	Standard
	Sn	118	917739.3	6.3	**50.0000**	2.792	5.6	ug/L	4860	Standard
	Sb	123	607843.9	5.2	**50.0000**	2.186	4.4	ug/L	28	Standard
	Ba	135	276451.1	4.8	**50.0000**	2.009	4.0	ug/L	54	Standard
	Ce	140	233.3	8.9				ug/L	61	Standard
>	**Tb**	159	868362.8	1.8				ug/L	844239	Standard
	Ho	165	17.3	6.7				ug/L	6	Standard
	Tl	203	887632.0	3.4	**50.0000**	1.576	3.2	ug/L	10	Standard
	Tl	205	2166493.3	3.4	**50.0000**	1.529	3.1	ug/L	16	Standard
	Pb	206	714548.5	4.4	**50.0000**	2.029	4.1	ug/L	421	Standard
	Pb	207	594174.8	4.7	**50.0000**	2.180	4.4	ug/L	341	Standard
	Pb	208	2741679.1	4.3	**50.0000**	2.015	4.0	ug/L	1571	Standard
	U	238	2565199.9	5.4	**50.0000**	2.579	5.2	ug/L	4	Standard
>	**Bi**	209	452913.2	0.7				ug/L	457202	Standard
	Na	23	16662.5	4.2	**5.0000**	0.183	3.7	mg/L	138	Standard
	Mg	24	1304070.9	5.5	**5.0000**	0.240	4.8	mg/L	134	Standard

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	K	39	55547.1	3.8	**5.0000**	0.167	3.3	mg/L	563	Standard
	Ca	43	3580.4	4.5	**5.0000**	0.184	3.7	mg/L	127	Standard
	Fe	54	29854.3	5.9	**5.0000**	0.275	5.5	mg/L	815	Standard
	Fe	57	802186.3	6.9	**5.0000**	0.306	6.1	mg/L	4749	Standard
>	**Sc-1**	45	367337.2	1.0				mg/L	367704	Standard
	Cl	35	69528.8	1.0				ug/L	59901	Standard
	Kr	83	53.1	3.2				ug/L	50	Standard
	Br	81	13482.0	2.9				ug/L	13965	Standard
	P	31	86411.1	1.5				ug/L	71952	Standard
	S	34	947239.1	1.8				ug/L	878802	Standard
	Sr	88	8192.9	8.4				ug/L	321	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			
	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			

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|	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

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: Thursday, May 03, 2012 10:49:37
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: SLP 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	22144.8	1.6	**102.7576**	44.650	43.5	ug/L	20538	Standard
	Be	9	430075.7	4.8	**98.8452**	5.570	5.6	ug/L	13	Standard
	Al	27	2182363.1	5.3	**94.8232**	5.855	6.2	ug/L	25813	Standard
>	**Sc**	45	363902.8	1.0				ug/L	367704	Standard
	Ti	47	412642.4	4.4	**200.8616**	10.064	5.0	ug/L	127	Standard
	V	51	2192519.3	3.9	**95.3906**	4.457	4.7	ug/L	6636	Standard
	Cr	52	1886767.7	5.0	**98.6879**	5.869	5.9	ug/L	21244	Standard
	Cr	53	221883.2	4.7	**100.5961**	4.997	5.0	ug/L	467	Standard
	Mn	55	2320650.5	3.5	**96.4633**	4.131	4.3	ug/L	8327	Standard
	Co	59	1697553.2	4.9	**100.0347**	5.644	5.6	ug/L	123	Standard
	Ni	60	348110.5	5.2	**99.3979**	5.888	5.9	ug/L	272	Standard
	Cu	65	297088.2	4.1	**99.1087**	4.849	4.9	ug/L	1002	Standard
	Zn	66	136333.7	4.3	**99.1101**	5.036	5.1	ug/L	3532	Standard
>	**Ge**	72	253098.9	0.9				ug/L	254939	Standard
	As	75	124215.8	3.4	**99.9832**	4.022	4.0	ug/L	-224	Standard
	Se	82	12395.2	3.1	**99.9187**	3.665	3.7	ug/L	24	Standard
	Se-1	77	8605.8	3.0	**98.9101**	3.672	3.7	ug/L	93	Standard
	Ga	71	233278.7	2.2				mg/L	233175	Standard
	Rb	85	7231.7	4.1				ug/L	20	Standard
>	**Y**	89	234371.5	0.9				ug/L	235100	Standard
	Rh	103	64.7	8.9				ug/L	6	Standard
	Mo	98	837813.9	4.1	**201.3114**	8.066	4.0	ug/L	14	Standard
	Ag	107	800001.1	2.3	**99.4131**	2.179	2.2	ug/L	38	Standard
	Cd	111	484917.8	4.0	**99.5006**	3.959	4.0	mg/L	439	Standard
	Cd	114	1351213.3	4.8	**99.7289**	4.707	4.7	ug/L	1326	Standard
>	**In**	115	799371.4	0.4				ug/L	804157	Standard
	Sn	118	1811758.2	6.0	**99.9404**	5.973	6.0	ug/L	4860	Standard
	Sb	123	1204291.9	4.6	**100.0247**	4.469	4.5	ug/L	28	Standard
	Ba	135	552803.4	4.5	**100.4894**	4.513	4.5	ug/L	54	Standard
	Ce	140	418.0	1.7				ug/L	61	Standard
>	**Tb**	159	863753.1	0.5				ug/L	844239	Standard
	Ho	165	32.7	25.5				ug/L	6	Standard
	Tl	203	1743352.8	3.0	**100.5997**	1.966	2.0	ug/L	10	Standard
	Tl	205	4163477.1	2.4	**99.5156**	1.276	1.3	ug/L	16	Standard
	Pb	206	1400919.7	4.2	**100.5233**	3.163	3.1	ug/L	421	Standard
	Pb	207	1157532.7	4.9	**100.2053**	3.812	3.8	ug/L	341	Standard
	Pb	208	5336871.3	4.7	**100.1637**	3.604	3.6	ug/L	1571	Standard
	U	238	5049088.3	5.2	**100.7018**	4.176	4.1	ug/L	4	Standard
>	**Bi**	209	439420.8	1.1				ug/L	457202	Standard
	Na	23	32076.6	4.4	**9.8773**	0.528	5.3	mg/L	138	Standard
	Mg	24	2510495.7	5.0	**9.8596**	0.566	5.7	mg/L	134	Standard

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	K	39	106643.6	3.3	**9.8720**	0.408	4.1	mg/L	563	Standard
	Ca	43	6801.5	5.3	**9.8746**	0.603	6.1	mg/L	127	Standard
	Fe	54	58072.5	6.5	**9.9786**	0.742	7.4	mg/L	815	Standard
	Fe	57	1622629.1	7.0	**10.1235**	0.807	8.0	mg/L	4749	Standard
>	**Sc-1**	45	363902.8	1.0				mg/L	367704	Standard
	Cl	35	69300.5	1.9				ug/L	59901	Standard
	Kr	83	61.3	15.2				ug/L	50	Standard
	Br	81	13176.7	2.4				ug/L	13965	Standard
	P	31	90622.2	1.6				ug/L	71952	Standard
	S	34	875314.8	2.8				ug/L	878802	Standard
	Sr	88	16103.9	5.5				ug/L	321	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			
	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			

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|	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

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Thursday, May 03, 2012 10:52:26
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: SLP 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	20015.5	0.4	**-41.8822**	26.045	62.2	ug/L	20538	Standard
	Be	9	215786.7	2.5	**50.3987**	2.142	4.2	ug/L	13	Standard
	Al	27	1191044.6	5.5	**52.1765**	3.831	7.3	ug/L	25813	Standard
>	**Sc**	45	358149.3	2.0				ug/L	367704	Standard
	Ti	47	205167.4	4.3	**99.8346**	5.345	5.4	ug/L	127	Standard
	V	51	1186848.6	2.4	**51.4922**	1.744	3.4	ug/L	6636	Standard
	Cr	52	979526.2	2.6	**50.6825**	1.746	3.4	ug/L	21244	Standard
	Cr	53	109774.0	4.2	**49.6547**	2.387	4.8	ug/L	467	Standard
	Mn	55	1267043.7	3.0	**52.5528**	2.119	4.0	ug/L	8327	Standard
	Co	59	853425.5	3.1	**50.2764**	2.091	4.2	ug/L	123	Standard
	Ni	60	177401.1	2.9	**50.6121**	2.006	4.0	ug/L	272	Standard
	Cu	65	151038.7	3.4	**50.2133**	2.259	4.5	ug/L	1002	Standard
	Zn	66	71979.1	4.0	**51.3892**	2.624	5.1	ug/L	3532	Standard
>	**Ge**	72	253156.6	1.1				ug/L	254939	Standard
	As	75	62115.8	3.2	**50.0698**	1.999	4.0	ug/L	-224	Standard
	Se	82	6309.6	2.4	**50.7340**	1.736	3.4	ug/L	24	Standard
	Se-1	77	4233.6	2.7	**48.0780**	1.756	3.7	ug/L	93	Standard
	Ga	71	233213.9	0.9				mg/L	233175	Standard
	Rb	85	1045.4	1.5				ug/L	20	Standard
>	**Y**	89	233375.0	0.7				ug/L	235100	Standard
	Rh	103	38.7	41.8				ug/L	6	Standard
	Mo	98	417912.1	3.0	**100.5365**	2.814	2.8	ug/L	14	Standard
	Ag	107	405827.6	2.5	**50.4905**	1.140	2.3	ug/L	38	Standard
	Cd	111	244196.5	4.1	**50.1208**	1.916	3.8	mg/L	439	Standard
	Cd	114	683159.3	4.5	**50.4362**	2.193	4.3	ug/L	1326	Standard
>	**In**	115	798371.2	0.7				ug/L	804157	Standard
	Sn	118	942251.3	4.5	**51.9471**	2.192	4.2	ug/L	4860	Standard
	Sb	123	609460.3	3.9	**50.6802**	1.923	3.8	ug/L	28	Standard
	Ba	135	274247.0	4.0	**49.9075**	1.882	3.8	ug/L	54	Standard
	Ce	140	973.4	4.7				ug/L	61	Standard
>	**Tb**	159	855988.2	0.3				ug/L	844239	Standard
	Ho	165	18.0	29.4				ug/L	6	Standard
	Tl	203	877253.2	1.3	**50.1058**	0.885	1.8	ug/L	10	Standard
	Tl	205	2122029.4	3.4	**50.2029**	1.853	3.7	ug/L	16	Standard
	Pb	206	701633.3	3.5	**49.8243**	1.906	3.8	ug/L	421	Standard
	Pb	207	589871.5	3.2	**50.5362**	1.789	3.5	ug/L	341	Standard
	Pb	208	2720968.7	3.2	**50.5401**	1.789	3.5	ug/L	1571	Standard
	U	238	2433649.3	4.6	**48.0545**	2.385	5.0	ug/L	4	Standard
>	**Bi**	209	444034.7	0.6				ug/L	457202	Standard
	Na	23	16230.7	3.1	**5.0603**	0.242	4.8	mg/L	138	Standard
	Mg	24	1271729.7	4.2	**5.0764**	0.308	6.1	mg/L	134	Standard

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	K	39	54077.7	3.2	**5.0602**	0.257	5.1	mg/L	563	Standard
	Ca	43	3537.7	5.1	**5.1388**	0.367	7.1	mg/L	127	Standard
	Fe	54	28986.5	6.0	**4.9950**	0.392	7.8	mg/L	815	Standard
	Fe	57	813993.9	5.0	**5.1471**	0.356	6.9	mg/L	4749	Standard
>	**Sc-1**	45	358149.3	2.0				mg/L	367704	Standard
	Cl	35	70042.5	1.0				ug/L	59901	Standard
	Kr	83	44.7	20.5				ug/L	50	Standard
	Br	81	13082.0	0.7				ug/L	13965	Standard
	P	31	88451.1	0.2				ug/L	71952	Standard
	S	34	858732.1	1.6				ug/L	878802	Standard
	Sr	88	654.7	1.7				ug/L	321	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9	100.797		
	Al	27	104.353		
>	Sc	45			
	Ti	47	99.835		
	V	51	102.984		
	Cr	52	101.365		
	Cr	53	99.309		
	Mn	55	105.106		
	Co	59	100.553		
	Ni	60	101.224		
	Cu	65	100.427		
	Zn	66	102.778		
>	Ge	72		99.301	
	As	75	100.140		
	Se	82	101.468		
	Se-1	77	96.156		
	Ga	71			
	Rb	85			
>	Y	89		99.266	
	Rh	103			
	Mo	98	100.537		
	Ag	107	100.981		
	Cd	111	100.242		
	Cd	114			
>	In	115		99.280	
	Sn	118	103.894		
	Sb	123	101.360		
	Ba	135	99.815		
	Ce	140			
>	Tb	159		101.392	
	Ho	165			
	Tl	203	100.212		
	Tl	205			
	Pb	206	99.649		

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Pb	207	101.072	
Pb	208	101.080	
U	238	96.109	
> Bi	209		97.120
Na	23	101.205	
Mg	24	101.528	
K	39	101.204	
Ca	43	102.777	
Fe	54	99.901	
Fe	57	102.943	
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Thursday, May 03, 2012 10:55:16
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: SLP 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	19219.9	1.0	**-72.1978**	18.996	26.3	ug/L	20538	Standard
	Be	9	39.7	29.9	**0.0034**	0.003	82.4	ug/L	13	Standard
	Al	27	12265.0	0.6	**-0.4129**	0.003	0.7	ug/L	25813	Standard
>	**Sc**	45	350369.5	0.6				ug/L	367704	Standard
	Ti	47	129.3	31.9	**0.0100**	0.020	198.0	ug/L	127	Standard
	V	51	6129.1	2.1	**-0.0190**	0.008	40.6	ug/L	6636	Standard
	Cr	52	19362.4	1.0	**-0.0751**	0.015	20.4	ug/L	21244	Standard
	Cr	53	461.3	3.5	**-0.0028**	0.005	193.3	ug/L	467	Standard
	Mn	55	1451.4	5.4	**-0.1719**	0.003	1.7	ug/L	8327	Standard
	Co	59	173.7	17.9	**0.0028**	0.002	65.0	ug/L	123	Standard
	Ni	60	131.3	14.9	**-0.0235**	0.006	25.6	ug/L	272	Standard
	Cu	65	922.7	2.6	**-0.0238**	0.005	23.0	ug/L	1002	Standard
	Zn	66	1096.4	2.9	**-1.1478**	0.019	1.7	ug/L	3532	Standard
>	**Ge**	72	251013.0	1.0				ug/L	254939	Standard
	As	75	-180.0	35.0	**0.0159**	0.051	317.7	ug/L	-224	Standard
	Se	82	30.2	33.1	**-0.0004**	0.084	23004.2	ug/L	24	Standard
	Se-1	77	87.3	2.6	**-0.1021**	0.023	22.6	ug/L	93	Standard
	Ga	71	231938.0	1.5				mg/L	233175	Standard
	Rb	85	15.3	7.5				ug/L	20	Standard
>	**Y**	89	227181.9	0.3				ug/L	235100	Standard
	Rh	103	2.0	100.0				ug/L	6	Standard
	Mo	98	167.6	29.2	**0.0311**	0.012	37.7	ug/L	14	Standard
	Ag	107	87.7	45.6	**0.0059**	0.005	85.2	ug/L	38	Standard
	Cd	111	470.1	5.5	**0.0043**	0.005	111.9	mg/L	439	Standard
	Cd	114	1302.9	3.4	**0.0005**	0.003	571.8	ug/L	1326	Standard
>	**In**	115	785753.5	0.6				ug/L	804157	Standard
	Sn	118	1933.5	6.1	**-0.0841**	0.006	7.5	ug/L	4860	Standard
	Sb	123	618.4	44.6	**0.0460**	0.023	50.0	ug/L	28	Standard
	Ba	135	72.3	12.8	**0.0025**	0.002	67.1	ug/L	54	Standard
	Ce	140	81.3	7.5				ug/L	61	Standard
>	**Tb**	159	835073.3	1.4				ug/L	844239	Standard
	Ho	165	6.7	45.8				ug/L	6	Standard
	Tl	203	116.0	26.9	**0.0070**	0.002	24.1	ug/L	10	Standard
	Tl	205	278.7	34.8	**0.0062**	0.002	35.3	ug/L	16	Standard
	Pb	206	427.0	8.7	**0.0010**	0.002	221.5	ug/L	421	Standard
	Pb	207	379.7	3.1	**0.0005**	0.001	121.6	ug/L	341	Standard
	Pb	208	1678.4	6.4	**0.0003**	0.002	470.0	ug/L	1571	Standard
	U	238	554.0	8.6	**0.0119**	0.001	7.8	ug/L	4	Standard
>	**Bi**	209	450273.2	1.1				ug/L	457202	Standard
	Na	23	168.0	1.2	**0.0144**	0.001	4.0	mg/L	138	Standard
	Mg	24	217.3	13.7	**-0.0005**	0.000	23.4	mg/L	134	Standard

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K	39	611.3	3.1	**0.0009**	0.002	227.2	mg/L	563	Standard
Ca	43	121.3	12.5	**0.0103**	0.024	232.0	mg/L	127	Standard
Fe	54	784.4	4.9	**0.0032**	0.006	200.3	mg/L	815	Standard
Fe	57	4410.6	1.5	**-0.0020**	0.000	13.6	mg/L	4749	Standard
> **Sc-1**	45	350369.5	0.6				mg/L	367704	Standard
Cl	35	62985.7	1.1				ug/L	59901	Standard
Kr	83	47.1	16.9				ug/L	50	Standard
Br	81	12679.6	1.6				ug/L	13965	Standard
P	31	76723.2	3.5				ug/L	71952	Standard
S	34	869665.3	1.6				ug/L	878802	Standard
Sr	88	234.0	12.6				ug/L	321	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		98.460	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
> Y	89		96.632	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
> In	115		97.711	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
> Tb	159		98.914	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	98.485
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 2
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Method 6020 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Thursday, May 03, 2012 10:58:05
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: SLP 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	20065.3	1.8	**-52.6463**	42.470	80.7	ug/L	20538	Standard
	Be	9	17.3	6.7	**-0.0020**	0.000	14.7	ug/L	13	Standard
	Al	27	11585.8	4.4	**-0.4598**	0.026	5.6	ug/L	25813	Standard
>	**Sc**	45	361420.4	1.5				ug/L	367704	Standard
	Ti	47	133.3	5.7	**0.0110**	0.004	34.9	ug/L	127	Standard
	V	51	15511.8	2.5	**0.3829**	0.015	3.8	ug/L	6636	Standard
	Cr	52	35408.0	1.8	**0.7504**	0.027	3.5	ug/L	21244	Standard
	Cr	53	2184.8	6.0	**0.7706**	0.051	6.6	ug/L	467	Standard
	Mn	55	13926.7	3.3	**0.3429**	0.016	4.7	ug/L	8327	Standard
	Co	59	6738.2	6.1	**0.3863**	0.022	5.6	ug/L	123	Standard
	Ni	60	5681.4	2.2	**1.5489**	0.028	1.8	ug/L	272	Standard
	Cu	65	2556.9	4.7	**0.5139**	0.036	7.0	ug/L	1002	Standard
	Zn	66	10641.4	4.9	**5.8594**	0.355	6.1	ug/L	3532	Standard
>	**Ge**	72	255050.9	0.8				ug/L	254939	Standard
	As	75	276.6	19.6	**0.3820**	0.041	10.8	ug/L	-224	Standard
	Se	82	72.7	10.8	**0.3356**	0.060	17.8	ug/L	24	Standard
	Se-1	77	128.0	2.8	**0.3506**	0.031	8.9	ug/L	93	Standard
	Ga	71	236925.7	1.6				mg/L	233175	Standard
	Rb	85	14.7	78.7				ug/L	20	Standard
>	**Y**	89	230255.9	1.3				ug/L	235100	Standard
	Rh	103	1.3	86.6				ug/L	6	Standard
	Mo	98	42.4	30.1	**0.0003**	0.003	930.2	ug/L	14	Standard
	Ag	107	3393.0	1.2	**0.4140**	0.009	2.3	ug/L	38	Standard
	Cd	111	1665.0	6.2	**0.2463**	0.025	10.3	mg/L	439	Standard
	Cd	114	4575.6	2.2	**0.2387**	0.010	4.3	ug/L	1326	Standard
>	**In**	115	804118.2	1.3				ug/L	804157	Standard
	Sn	118	986.0	4.8	**-0.1386**	0.003	1.9	ug/L	4860	Standard
	Sb	123	5047.7	2.9	**0.4107**	0.016	3.8	ug/L	28	Standard
	Ba	135	4113.9	2.2	**0.7327**	0.020	2.7	ug/L	54	Standard
	Ce	140	46.7	22.0				ug/L	61	Standard
>	**Tb**	159	842129.1	0.4				ug/L	844239	Standard
	Ho	165	10.0	20.0				ug/L	6	Standard
	Tl	203	1425.1	0.9	**0.0796**	0.001	0.7	ug/L	10	Standard
	Tl	205	3271.7	4.2	**0.0749**	0.003	3.8	ug/L	16	Standard
	Pb	206	3158.0	2.2	**0.1892**	0.005	2.8	ug/L	421	Standard
	Pb	207	2633.9	2.6	**0.1879**	0.007	3.7	ug/L	341	Standard
	Pb	208	12046.5	3.5	**0.1872**	0.008	4.2	ug/L	1571	Standard
	U	238	18943.9	6.0	**0.3646**	0.022	6.1	ug/L	4	Standard
>	**Bi**	209	456893.1	0.8				ug/L	457202	Standard
	Na	23	156.0	10.0	**0.0090**	0.004	49.2	mg/L	138	Standard
	Mg	24	82.3	17.8	**-0.0011**	0.000	5.8	mg/L	134	Standard

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K	39	600.0	6.1	**-0.0020**	0.004	201.0	mg/L	563	Standard
Ca	43	116.0	9.1	**-0.0032**	0.018	576.9	mg/L	127	Standard
Fe	54	849.2	0.8	**0.0102**	0.002	19.4	mg/L	815	Standard
Fe	57	4826.1	3.4	**-0.0002**	0.001	557.1	mg/L	4749	Standard
> Sc-1	45	361420.4	1.5				mg/L	367704	Standard
Cl	35	66559.9	0.5				ug/L	59901	Standard
Kr	83	46.7	7.6				ug/L	50	Standard
Br	81	13204.8	2.6				ug/L	13965	Standard
P	31	89382.4	3.2				ug/L	71952	Standard
S	34	904932.6	0.8				ug/L	878802	Standard
Sr	88	244.0	5.7				ug/L	321	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	95.732		
Cr	52	93.799		
Cr	53			
Mn	55	68.572		
Co	59	96.581		
Ni	60	96.806		
Cu	65	64.233		
Zn	66	93.750		
> Ge	72		100.044	
As	75	95.507		
Se	82	83.902		
Se-1	77	87.655		
Ga	71			
Rb	85			
> Y	89		97.939	
Rh	103			
Mo	98			
Ag	107	103.512		
Cd	111	102.627		
Cd	114			
> In	115		99.995	
Sn	118			
Sb	123	102.687		
Ba	135	97.690		
Ce	140			
> Tb	159		99.750	
Ho	165			
Tl	203	99.460		
Tl	205			
Pb	206			

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Pb	207			
Pb	208	93.588		
U	238	91.146		
> Bi	209			99.932
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			

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	Mn	55	
QC Std 3	Cu	65	

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Method 6020 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Thursday, May 03, 2012 11:00:52
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: SLP 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	20679.1	0.9	**38.2941**	30.286	79.1	ug/L	20538	Standard
	Be	9	18.3	8.3	**-0.0017**	0.000	19.9	ug/L	13	Standard
	Al	27	102671613.5	4.6	**4648.5043**	212.166	4.6	ug/L	25813	Standard
>	**Sc**	45	352622.1	1.1				ug/L	367704	Standard
	Ti	47	220795.5	3.2	**108.1229**	2.981	2.8	ug/L	127	Standard
	V	51	6726.5	3.4	**0.0068**	0.010	149.5	ug/L	6636	Standard
	Cr	52	22352.8	0.9	**0.0822**	0.004	4.5	ug/L	21244	Standard
	Cr	53	2636.2	4.9	**0.9915**	0.063	6.4	ug/L	467	Standard
	Mn	55	7174.4	3.7	**0.0680**	0.010	14.7	ug/L	8327	Standard
	Co	59	2495.9	7.9	**0.1404**	0.011	7.6	ug/L	123	Standard
	Ni	60	1601.1	5.8	**0.3989**	0.027	6.7	ug/L	272	Standard
	Cu	65	1487.7	1.1	**0.1660**	0.003	1.7	ug/L	1002	Standard
	Zn	66	6377.7	4.3	**2.7908**	0.192	6.9	ug/L	3532	Standard
>	**Ge**	72	251453.8	0.8				ug/L	254939	Standard
	As	75	-197.0	9.1	**0.0024**	0.013	540.5	ug/L	-224	Standard
	Se	82	24.2	41.9	**-0.0502**	0.081	161.0	ug/L	24	Standard
	Se-1	77	219.0	6.4	**1.4373**	0.181	12.6	ug/L	93	Standard
	Ga	71	224656.8	1.3				mg/L	233175	Standard
	Rb	85	3491.1	1.8				ug/L	20	Standard
>	**Y**	89	227840.6	1.7				ug/L	235100	Standard
	Rh	103	10.0	72.1				ug/L	6	Standard
	Mo	98	400522.3	3.2	**98.0024**	3.487	3.6	ug/L	14	Standard
	Ag	107	106.7	9.5	**0.0083**	0.001	14.7	ug/L	38	Standard
	Cd	111	1045.4	4.5	**0.1248**	0.010	8.1	mg/L	439	Standard
	Cd	114	3713.4	4.4	**0.1820**	0.013	7.1	ug/L	1326	Standard
>	**In**	115	785015.0	0.5				ug/L	804157	Standard
	Sn	118	2626.2	2.8	**-0.0450**	0.005	10.8	ug/L	4860	Standard
	Sb	123	683.1	3.4	**0.0516**	0.002	4.4	ug/L	28	Standard
	Ba	135	155.7	5.5	**0.0179**	0.002	9.5	ug/L	54	Standard
	Ce	140	2089.5	7.0				ug/L	61	Standard
>	**Tb**	159	841118.7	1.1				ug/L	844239	Standard
	Ho	165	22.0	18.2				ug/L	6	Standard
	Tl	203	326.3	3.4	**0.0196**	0.001	3.9	ug/L	10	Standard
	Tl	205	794.0	6.9	**0.0189**	0.001	6.8	ug/L	16	Standard
	Pb	206	814.4	2.7	**0.0304**	0.002	6.6	ug/L	421	Standard
	Pb	207	682.7	4.7	**0.0283**	0.003	9.0	ug/L	341	Standard
	Pb	208	3130.5	2.6	**0.0292**	0.002	6.6	ug/L	1571	Standard
	U	238	69.0	14.3	**0.0025**	0.000	7.6	ug/L	4	Standard
>	**Bi**	209	433682.0	0.8				ug/L	457202	Standard
	Na	23	37839.9	3.6	**12.0301**	0.449	3.7	mg/L	138	Standard
	Mg	24	1248173.5	4.6	**5.0568**	0.234	4.6	mg/L	134	Standard

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K	39	52686.8	2.5	**5.0039**	0.137	2.7	mg/L	563	Standard
Ca	43	9821.2	4.3	**14.7988**	0.696	4.7	mg/L	127	Standard
Fe	54	68931.6	6.2	**12.2512**	0.805	6.6	mg/L	815	Standard
Fe	57	1853424.7	3.5	**11.9355**	0.502	4.2	mg/L	4749	Standard
> **Sc-1**	45	352622.1	1.1				mg/L	367704	Standard
Cl	35	9029227.9	1.2				ug/L	59901	Standard
Kr	83	62.2	13.3				ug/L	50	Standard
Br	81	12823.1	1.1				ug/L	13965	Standard
P	31	7649820.3	2.7				ug/L	71952	Standard
S	34	1666687.7	1.4				ug/L	878802	Standard
Sr	88	1399.4	3.7				ug/L	321	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	92.970		
> Sc	45			
Ti	47	108.123		
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
> Ge	72		98.633	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
> Y	89		96.912	
Rh	103			
Mo	98	98.002		
Ag	107			
Cd	111			
Cd	114			
> In	115		97.620	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
> Tb	159		99.630	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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Pb	207		
Pb	208		
U	238		
> Bi	209		94.856
Na	23	96.241	
Mg	24	101.135	
K	39	100.077	
Ca	43	98.659	
Fe	54	98.010	
Fe	57	95.484	
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	Se-1	77	
QC Std 4	Cd	111	

Sample ID: QC Std 4
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Method 6020 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Thursday, May 03, 2012 11:03:39
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: SLP 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	20932.1	1.7	**42.1642**	7.971	18.9	ug/L	20538	Standard
	Be	9	448124.1	3.3	**105.2352**	3.817	3.6	ug/L	13	Standard
	Al	27	106206411.1	5.5	**4762.7732**	283.092	5.9	ug/L	25813	Standard
>	**Sc**	45	356086.4	1.6				ug/L	367704	Standard
	Ti	47	230641.4	4.7	**113.5015**	6.732	5.9	ug/L	127	Standard
	V	51	2214770.1	2.9	**97.4185**	3.746	3.8	ug/L	6636	Standard
	Cr	52	1895868.2	0.3	**100.2405**	1.507	1.5	ug/L	21244	Standard
	Cr	53	226480.4	3.8	**103.8363**	5.139	4.9	ug/L	467	Standard
	Mn	55	2407805.6	4.0	**101.2152**	5.449	5.4	ug/L	8327	Standard
	Co	59	1722959.9	3.6	**102.6614**	5.300	5.2	ug/L	123	Standard
	Ni	60	356186.0	4.6	**102.8497**	6.358	6.2	ug/L	272	Standard
	Cu	65	302127.2	3.2	**101.9213**	4.909	4.8	ug/L	1002	Standard
	Zn	66	147501.9	3.1	**108.5956**	4.742	4.4	ug/L	3532	Standard
>	**Ge**	72	250379.9	1.7				ug/L	254939	Standard
	As	75	130302.8	3.3	**106.0474**	5.153	4.9	ug/L	-224	Standard
	Se	82	13106.0	3.6	**106.8600**	5.641	5.3	ug/L	24	Standard
	Se-1	77	9181.4	3.2	**106.7827**	4.615	4.3	ug/L	93	Standard
	Ga	71	228609.8	2.5				mg/L	233175	Standard
	Rb	85	3717.8	2.5				ug/L	20	Standard
>	**Y**	89	230992.2	0.5				ug/L	235100	Standard
	Rh	103	68.7	14.4				ug/L	6	Standard
	Mo	98	419299.7	5.1	**101.2601**	4.936	4.9	ug/L	14	Standard
	Ag	107	677852.2	8.9	**84.6479**	7.181	8.5	ug/L	38	Standard
	Cd	111	508255.9	4.0	**104.8250**	3.773	3.6	mg/L	439	Standard
	Cd	114	1408801.9	4.3	**104.5128**	4.067	3.9	ug/L	1326	Standard
>	**In**	115	795274.2	0.9				ug/L	804157	Standard
	Sn	118	3063.6	4.9	**-0.0226**	0.007	32.0	ug/L	4860	Standard
	Sb	123	1262354.3	4.0	**105.3891**	4.117	3.9	ug/L	28	Standard
	Ba	135	550157.4	4.2	**100.5250**	4.181	4.2	ug/L	54	Standard
	Ce	140	2188.8	3.9				ug/L	61	Standard
>	**Tb**	159	871075.6	2.0				ug/L	844239	Standard
	Ho	165	26.0	40.7				ug/L	6	Standard
	Tl	203	1742822.3	3.3	**101.3316**	4.269	4.2	ug/L	10	Standard
	Tl	205	4204918.3	3.4	**101.2629**	4.349	4.3	ug/L	16	Standard
	Pb	206	1396122.1	4.5	**100.9556**	5.471	5.4	ug/L	421	Standard
	Pb	207	1194525.7	3.6	**104.2097**	4.776	4.6	ug/L	341	Standard
	Pb	208	5466783.5	3.8	**103.3972**	4.937	4.8	ug/L	1571	Standard
	U	238	4983327.0	5.0	**100.1701**	5.888	5.9	ug/L	4	Standard
>	**Bi**	209	436296.3	1.0				ug/L	457202	Standard
	Na	23	38600.5	4.4	**12.1556**	0.616	5.1	mg/L	138	Standard
	Mg	24	1273270.1	4.9	**5.1093**	0.274	5.4	mg/L	134	Standard

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K	39	53666.9	2.9	**5.0482**	0.163	3.2	mg/L	563	Standard
Ca	43	9998.0	4.2	**14.9220**	0.735	4.9	mg/L	127	Standard
Fe	54	70580.9	5.9	**12.4254**	0.786	6.3	mg/L	815	Standard
Fe	57	1940814.3	0.0	**12.3772**	0.198	1.6	mg/L	4749	Standard
> **Sc-1**	45	356086.4	1.6				mg/L	367704	Standard
Cl	35	9388849.1	1.0				ug/L	59901	Standard
Kr	83	59.1	1.7				ug/L	50	Standard
Br	81	13061.0	1.9				ug/L	13965	Standard
P	31	7847453.5	3.8				ug/L	71952	Standard
S	34	1680540.0	1.6				ug/L	878802	Standard
Sr	88	1362.1	2.0				ug/L	321	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	95.255		
> Sc	45			
Ti	47	113.502		
V	51	97.418		
Cr	52	100.241		
Cr	53			
Mn	55	101.215		
Co	59	102.661		
Ni	60	102.850		
Cu	65	101.921		
Zn	66	108.596		
> Ge	72		98.212	
As	75	106.047		
Se	82	106.860		
Se-1	77	106.783		
Ga	71			
Rb	85			
> Y	89		98.253	
Rh	103			
Mo	98	101.260		
Ag	107	84.648		
Cd	111	104.825		
Cd	114			
> In	115		98.895	
Sn	118			
Sb	123	105.389		
Ba	135	100.525		
Ce	140			
> Tb	159		103.179	
Ho	165			
Tl	203	101.332		
Tl	205			
Pb	206	100.956		

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	Pb	207	104.210	
	Pb	208	103.397	
	U	238	100.170	
>	Bi	209		95.427
	Na	23	97.245	
	Mg	24	102.186	
	K	39	100.964	
	Ca	43	99.480	
	Fe	54	99.403	
	Fe	57	99.017	
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, May 03, 2012 11:06:29
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: SLP 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	20372.0	1.3	**-90.4667**	4.910	5.4	ug/L	20538	Standard
	Be	9	223718.7	3.3	**49.7955**	1.802	3.6	ug/L	13	Standard
	Al	27	1208011.7	5.6	**50.3789**	2.879	5.7	ug/L	25813	Standard
>	**Sc**	45	375655.9	1.2				ug/L	367704	Standard
	Ti	47	211959.7	4.7	**97.7914**	4.244	4.3	ug/L	127	Standard
	V	51	1240714.1	3.8	**51.0438**	1.763	3.5	ug/L	6636	Standard
	Cr	52	1017514.7	4.2	**49.9135**	2.029	4.1	ug/L	21244	Standard
	Cr	53	115085.8	3.8	**49.3715**	1.939	3.9	ug/L	467	Standard
	Mn	55	1324767.5	3.5	**52.1052**	1.781	3.4	ug/L	8327	Standard
	Co	59	894079.8	3.8	**49.9489**	1.869	3.7	ug/L	123	Standard
	Ni	60	180543.5	4.2	**48.8456**	2.050	4.2	ug/L	272	Standard
	Cu	65	156059.6	5.1	**49.1875**	2.346	4.8	ug/L	1002	Standard
	Zn	66	70648.3	5.1	**47.6868**	2.257	4.7	ug/L	3532	Standard
>	**Ge**	72	266884.2	1.3				ug/L	254939	Standard
	As	75	64104.6	2.5	**49.0079**	1.112	2.3	ug/L	-224	Standard
	Se	82	6444.1	1.1	**49.1357**	0.855	1.7	ug/L	24	Standard
	Se-1	77	4499.7	1.9	**48.4677**	0.513	1.1	ug/L	93	Standard
	Ga	71	244709.0	0.3				mg/L	233175	Standard
	Rb	85	1016.7	3.4				ug/L	20	Standard
>	**Y**	89	240849.9	0.3				ug/L	235100	Standard
	Rh	103	41.3	14.8				ug/L	6	Standard
	Mo	98	422518.6	4.7	**97.4888**	4.914	5.0	ug/L	14	Standard
	Ag	107	448943.3	4.8	**53.5729**	2.797	5.2	ug/L	38	Standard
	Cd	111	256070.6	4.5	**50.4094**	2.350	4.7	mg/L	439	Standard
	Cd	114	702418.4	4.4	**49.7351**	2.261	4.5	ug/L	1326	Standard
>	**In**	115	832511.9	0.6				ug/L	804157	Standard
	Sn	118	919548.9	4.3	**48.6108**	2.205	4.5	ug/L	4860	Standard
	Sb	123	628530.2	3.8	**50.1270**	1.997	4.0	ug/L	28	Standard
	Ba	135	278154.1	3.3	**48.5470**	1.683	3.5	ug/L	54	Standard
	Ce	140	1008.7	6.1				ug/L	61	Standard
>	**Tb**	159	879538.0	0.8				ug/L	844239	Standard
	Ho	165	17.3	46.6				ug/L	6	Standard
	Tl	203	890520.9	2.2	**49.8703**	1.493	3.0	ug/L	10	Standard
	Tl	205	2178699.4	2.1	**50.5349**	1.453	2.9	ug/L	16	Standard
	Pb	206	717921.8	3.7	**49.9875**	2.241	4.5	ug/L	421	Standard
	Pb	207	593396.2	3.4	**49.8465**	2.087	4.2	ug/L	341	Standard
	Pb	208	2746704.2	3.3	**50.0225**	2.059	4.1	ug/L	1571	Standard
	U	238	2484636.0	3.9	**48.1049**	2.268	4.7	ug/L	4	Standard
>	**Bi**	209	452928.0	0.8				ug/L	457202	Standard
	Na	23	15969.1	3.2	**4.7421**	0.170	3.6	mg/L	138	Standard
	Mg	24	1295503.5	3.7	**4.9273**	0.208	4.2	mg/L	134	Standard

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	K	39	54093.8	3.5	**4.8206**	0.186	3.9	mg/L	563	Standard
	Ca	43	3516.4	3.1	**4.8576**	0.205	4.2	mg/L	127	Standard
	Fe	54	29378.2	5.9	**4.8174**	0.286	5.9	mg/L	815	Standard
	Fe	57	856369.4	4.3	**5.1591**	0.247	4.8	mg/L	4749	Standard
>	**Sc-1**	45	375655.9	1.2				mg/L	367704	Standard
	Cl	35	155251.7	36.9				ug/L	59901	Standard
	Kr	83	58.9	8.6				ug/L	50	Standard
	Br	81	13578.4	0.2				ug/L	13965	Standard
	P	31	85631.7	1.4				ug/L	71952	Standard
	S	34	864821.4	0.8				ug/L	878802	Standard
	Sr	88	626.0	7.3				ug/L	321	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	100.758		
>	Sc	45			
	Ti	47	97.791		
	V	51	102.088		
	Cr	52	99.827		
	Cr	53			
	Mn	55	104.210		
	Co	59	99.898		
	Ni	60	97.691		
	Cu	65	98.375		
	Zn	66	95.374		
>	Ge	72		104.686	
	As	75	98.016		
	Se	82	98.271		
	Se-1	77	96.935		
	Ga	71			
	Rb	85			
>	Y	89		102.446	
	Rh	103			
	Mo	98	97.489		
	Ag	107	107.146		
	Cd	111	100.819		
	Cd	114			
>	In	115		103.526	
	Sn	118	97.222		
	Sb	123	100.254		
	Ba	135	97.094		
	Ce	140			
>	Tb	159		104.181	
	Ho	165			
	Tl	203	99.741		
	Tl	205			
	Pb	206	99.975		

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	Pb	207	99.693	
	Pb	208	100.045	
	U	238	96.210	
>	Bi	209		99.065
	Na	23	94.841	
	Mg	24	98.546	
	K	39	96.412	
	Ca	43	97.152	
	Fe	54	96.348	
	Fe	57	103.182	
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, May 03, 2012 11:09:16
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: SLP 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	19641.7	1.1	**-61.8974**	26.438	42.7	ug/L	20538	Standard
	Be	9	49.7	61.6	**0.0056**	0.007	126.4	ug/L	13	Standard
	Al	27	17091.7	11.0	**-0.2049**	0.083	40.3	ug/L	25813	Standard
>	**Sc**	45	355802.1	1.4				ug/L	367704	Standard
	Ti	47	144.0	35.4	**0.0168**	0.025	147.2	ug/L	127	Standard
	V	51	6521.9	1.8	**-0.0037**	0.004	118.1	ug/L	6636	Standard
	Cr	52	20119.3	0.7	**-0.0419**	0.008	19.4	ug/L	21244	Standard
	Cr	53	498.0	4.6	**0.0125**	0.010	81.5	ug/L	467	Standard
	Mn	55	1516.4	7.5	**-0.1696**	0.005	2.7	ug/L	8327	Standard
	Co	59	224.3	32.0	**0.0057**	0.004	73.8	ug/L	123	Standard
	Ni	60	113.7	21.5	**-0.0289**	0.007	23.8	ug/L	272	Standard
	Cu	65	937.7	2.3	**-0.0208**	0.008	36.2	ug/L	1002	Standard
	Zn	66	1061.0	3.3	**-1.1794**	0.029	2.4	ug/L	3532	Standard
>	**Ge**	72	252704.6	0.4				ug/L	254939	Standard
	As	75	-229.4	15.5	**-0.0229**	0.028	123.8	ug/L	-224	Standard
	Se	82	26.7	21.1	**-0.0305**	0.046	151.7	ug/L	24	Standard
	Se-1	77	91.0	4.0	**-0.0662**	0.043	65.1	ug/L	93	Standard
	Ga	71	232937.7	0.8				mg/L	233175	Standard
	Rb	85	13.3	52.7				ug/L	20	Standard
>	**Y**	89	227431.0	1.1				ug/L	235100	Standard
	Rh	103	1.3	173.2				ug/L	6	Standard
	Mo	98	145.7	22.1	**0.0256**	0.008	31.8	ug/L	14	Standard
	Ag	107	195.3	32.8	**0.0193**	0.008	42.7	ug/L	38	Standard
	Cd	111	471.8	9.0	**0.0039**	0.009	239.1	mg/L	439	Standard
	Cd	114	1353.0	5.8	**0.0034**	0.006	172.4	ug/L	1326	Standard
>	**In**	115	792599.9	1.7				ug/L	804157	Standard
	Sn	118	1804.1	1.8	**-0.0922**	0.002	2.5	ug/L	4860	Standard
	Sb	123	635.9	24.5	**0.0472**	0.013	28.6	ug/L	28	Standard
	Ba	135	74.7	41.8	**0.0028**	0.006	208.6	ug/L	54	Standard
	Ce	140	72.0	12.7				ug/L	61	Standard
>	**Tb**	159	831229.8	0.8				ug/L	844239	Standard
	Ho	165	8.0	25.0				ug/L	6	Standard
	Tl	203	127.3	59.5	**0.0076**	0.004	56.1	ug/L	10	Standard
	Tl	205	326.0	69.3	**0.0073**	0.005	72.4	ug/L	16	Standard
	Pb	206	453.3	15.6	**0.0029**	0.005	174.6	ug/L	421	Standard
	Pb	207	376.3	10.4	**0.0002**	0.003	1438.6	ug/L	341	Standard
	Pb	208	1740.7	13.1	**0.0015**	0.004	280.5	ug/L	1571	Standard
	U	238	609.0	20.3	**0.0129**	0.002	19.0	ug/L	4	Standard
>	**Bi**	209	450268.4	1.4				ug/L	457202	Standard
	Na	23	171.3	9.8	**0.0147**	0.006	38.7	mg/L	138	Standard
	Mg	24	223.7	44.2	**-0.0005**	0.000	75.9	mg/L	134	Standard

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K	39	582.0	3.6	**-0.0028**	0.001	50.0	mg/L	563	Standard
Ca	43	104.0	1.9	**-0.0187**	0.005	27.5	mg/L	127	Standard
Fe	54	790.4	7.2	**0.0020**	0.009	438.8	mg/L	815	Standard
Fe	57	4440.7	3.3	**-0.0022**	0.001	50.6	mg/L	4749	Standard
> Sc-1	45	355802.1	1.4				mg/L	367704	Standard
Cl	35	87703.2	5.1				ug/L	59901	Standard
Kr	83	47.3	4.2				ug/L	50	Standard
Br	81	13121.7	1.1				ug/L	13965	Standard
P	31	71497.7	3.3				ug/L	71952	Standard
S	34	829936.2	1.6				ug/L	878802	Standard
Sr	88	212.7	4.2				ug/L	321	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		99.124	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		96.738	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		98.563	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		98.459	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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|	Pb	207	
|	Pb	208	
|	U	238	
|>	Bi	209	98.483
⌈	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: PBW 40 WG396746-02
Sample Date/Time: Thursday, May 03, 2012 11:12:05
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: SLP 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	20837.7	0.8	**-51.6745**	19.175	37.1	ug/L	20538	Standard
	Be	9	25.3	13.9	**-0.0004**	0.001	198.4	ug/L	13	Standard
	Al	27	123270.2	6.6	**4.2769**	0.358	8.4	ug/L	25813	Standard
>	**Sc**	45	375046.7	0.4				ug/L	367704	Standard
	Ti	47	360.0	62.2	**0.1137**	0.102	89.6	ug/L	127	Standard
	V	51	7787.7	20.5	**0.0364**	0.063	172.2	ug/L	6636	Standard
	Cr	52	22491.7	6.1	**0.0314**	0.056	178.3	ug/L	21244	Standard
	Cr	53	601.3	9.9	**0.0474**	0.023	48.0	ug/L	467	Standard
	Mn	55	3816.2	31.4	**-0.0809**	0.046	56.7	ug/L	8327	Standard
	Co	59	539.4	111.0	**0.0227**	0.033	146.7	ug/L	123	Standard
	Ni	60	173.0	65.6	**-0.0143**	0.030	212.5	ug/L	272	Standard
	Cu	65	322.7	15.2	**-0.2318**	0.014	6.2	ug/L	1002	Standard
	Zn	66	5336.6	1.4	**1.8228**	0.095	5.2	ug/L	3532	Standard
>	**Ge**	72	264204.5	1.1				ug/L	254939	Standard
	As	75	-206.1	22.3	**0.0027**	0.037	1352.9	ug/L	-224	Standard
	Se	82	23.5	27.8	**-0.0655**	0.048	73.4	ug/L	24	Standard
	Se-1	77	100.0	14.7	**-0.0129**	0.155	1200.0	ug/L	93	Standard
	Ga	71	243491.3	1.7				mg/L	233175	Standard
	Rb	85	49.3	26.4				ug/L	20	Standard
>	**Y**	89	240539.7	0.4				ug/L	235100	Standard
	Rh	103	0.7	173.2				ug/L	6	Standard
	Mo	98	73.2	25.3	**0.0071**	0.004	59.3	ug/L	14	Standard
	Ag	107	117.0	16.5	**0.0088**	0.002	25.7	ug/L	38	Standard
	Cd	111	579.2	5.3	**0.0206**	0.005	26.4	mg/L	439	Standard
	Cd	114	1563.0	2.0	**0.0137**	0.002	16.5	ug/L	1326	Standard
>	**In**	115	830836.5	0.8				ug/L	804157	Standard
	Sn	118	1134.0	5.3	**-0.1325**	0.004	2.7	ug/L	4860	Standard
	Sb	123	464.5	1.1	**0.0310**	0.000	0.5	ug/L	28	Standard
	Ba	135	228.3	2.0	**0.0290**	0.001	2.2	ug/L	54	Standard
	Ce	140	210.0	11.9				ug/L	61	Standard
>	**Tb**	159	852406.7	0.5				ug/L	844239	Standard
	Ho	165	18.0	50.9				ug/L	6	Standard
	Tl	203	75.7	2.8	**0.0047**	0.000	2.1	ug/L	10	Standard
	Tl	205	208.0	13.4	**0.0045**	0.001	13.8	ug/L	16	Standard
	Pb	206	394.7	8.2	**-0.0016**	0.002	134.0	ug/L	421	Standard
	Pb	207	339.7	4.4	**-0.0033**	0.001	33.7	ug/L	341	Standard
	Pb	208	1580.0	2.7	**-0.0018**	0.001	34.3	ug/L	1571	Standard
	U	238	204.3	11.3	**0.0050**	0.000	9.3	ug/L	4	Standard
>	**Bi**	209	456561.5	0.6				ug/L	457202	Standard
	Na	23	166.0	3.2	**0.0103**	0.002	17.2	mg/L	138	Standard
	Mg	24	1493.4	5.8	**0.0043**	0.000	8.0	mg/L	134	Standard

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K	39	636.0	2.5	**-0.0008**	0.002	205.4	mg/L	563	Standard
Ca	43	132.0	9.2	**0.0133**	0.017	129.6	mg/L	127	Standard
Fe	54	988.5	2.6	**0.0283**	0.005	17.5	mg/L	815	Standard
Fe	57	5526.3	3.6	**0.0029**	0.001	42.0	mg/L	4749	Standard
> **Sc-1**	45	375046.7	0.4				mg/L	367704	Standard
Cl	35	100542.6	2.1				ug/L	59901	Standard
Kr	83	54.2	19.1				ug/L	50	Standard
Br	81	14228.7	2.3				ug/L	13965	Standard
P	31	86371.9	1.6				ug/L	71952	Standard
S	34	850534.4	1.2				ug/L	878802	Standard
Sr	88	2246.2	3.1				ug/L	321	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		103.635	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		102.314	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		103.318	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		100.967	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	99.860
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: PBW 40 WG396746-02
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Method 6020 - Summary Report

Sample ID: LCSW 40 WG396746-03
Sample Date/Time: Thursday, May 03, 2012 11:14:52
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: SLP 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	21274.3	1.0	**-55.0320**	17.388	31.6	ug/L	20538	Standard
	Be	9	117613.0	2.8	**25.6284**	0.928	3.6	ug/L	13	Standard
	Al	27	687381.4	4.8	**27.6451**	1.681	6.1	ug/L	25813	Standard
>	**Sc**	45	383743.7	2.0				ug/L	367704	Standard
	Ti	47	224.0	13.3	**0.0479**	0.015	30.8	ug/L	127	Standard
	V	51	653726.4	3.3	**26.1779**	1.117	4.3	ug/L	6636	Standard
	Cr	52	554710.2	3.4	**26.1130**	1.300	5.0	ug/L	21244	Standard
	Cr	53	62049.5	3.2	**25.9461**	1.178	4.5	ug/L	467	Standard
	Mn	55	712157.7	3.7	**27.3009**	1.375	5.0	ug/L	8327	Standard
	Co	59	476547.1	3.8	**26.0522**	1.403	5.4	ug/L	123	Standard
	Ni	60	98518.9	3.9	**26.0557**	1.376	5.3	ug/L	272	Standard
	Cu	65	85489.9	2.4	**26.2128**	0.958	3.7	ug/L	1002	Standard
	Zn	66	41365.4	2.8	**26.4820**	0.997	3.8	ug/L	3532	Standard
>	**Ge**	72	272840.4	1.6				ug/L	254939	Standard
	As	75	33491.5	1.9	**25.1303**	0.736	2.9	ug/L	-224	Standard
	Se	82	3298.1	2.8	**24.4787**	0.858	3.5	ug/L	24	Standard
	Se-1	77	2409.2	1.4	**24.8573**	0.791	3.2	ug/L	93	Standard
	Ga	71	254374.8	3.7				mg/L	233175	Standard
	Rb	85	64.0	10.8				ug/L	20	Standard
>	**Y**	89	248148.8	2.1				ug/L	235100	Standard
	Rh	103	27.3	21.1				ug/L	6	Standard
	Mo	98	60.5	15.8	**0.0038**	0.002	60.2	ug/L	14	Standard
	Ag	107	231955.5	3.1	**26.9270**	1.114	4.1	ug/L	38	Standard
	Cd	111	135192.3	3.8	**25.8489**	1.217	4.7	mg/L	439	Standard
	Cd	114	368653.3	3.5	**25.3516**	1.188	4.7	ug/L	1326	Standard
>	**In**	115	855836.5	1.2				ug/L	804157	Standard
	Sn	118	1494.7	1.8	**-0.1156**	0.001	1.1	ug/L	4860	Standard
	Sb	123	328944.7	2.6	**25.5214**	0.937	3.7	ug/L	28	Standard
	Ba	135	146249.7	3.5	**24.8308**	1.097	4.4	ug/L	54	Standard
	Ce	140	122.0	18.3				ug/L	61	Standard
>	**Tb**	159	872673.8	1.3				ug/L	844239	Standard
	Ho	165	14.0	24.7				ug/L	6	Standard
	Tl	203	465949.7	2.7	**25.2324**	0.704	2.8	ug/L	10	Standard
	Tl	205	1123385.3	3.1	**25.1988**	0.906	3.6	ug/L	16	Standard
	Pb	206	374312.9	3.4	**25.1852**	0.840	3.3	ug/L	421	Standard
	Pb	207	321726.8	3.6	**26.1142**	0.860	3.3	ug/L	341	Standard
	Pb	208	1466130.8	3.7	**25.8013**	0.894	3.5	ug/L	1571	Standard
	U	238	1272691.1	4.8	**23.8222**	1.075	4.5	ug/L	4	Standard
>	**Bi**	209	468342.4	1.1				ug/L	457202	Standard
	Na	23	240.7	7.9	**0.0310**	0.004	13.6	mg/L	138	Standard
	Mg	24	993.7	4.9	**0.0023**	0.000	8.4	mg/L	134	Standard

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K	39	633.3	3.5	**-0.0023**	0.001	36.7	mg/L	563	Standard
Ca	43	131.3	5.3	**0.0082**	0.012	152.2	mg/L	127	Standard
Fe	54	966.2	7.2	**0.0209**	0.011	53.9	mg/L	815	Standard
Fe	57	5189.6	4.2	**0.0002**	0.001	841.9	mg/L	4749	Standard
> **Sc-1**	45	383743.7	2.0				mg/L	367704	Standard
Cl	35	97839.9	1.1				ug/L	59901	Standard
Kr	83	54.9	8.5				ug/L	50	Standard
Br	81	14765.5	2.5				ug/L	13965	Standard
P	31	89902.9	0.6				ug/L	71952	Standard
S	34	846317.8	1.1				ug/L	878802	Standard
Sr	88	1234.1	7.0				ug/L	321	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		107.022	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
> Y	89		105.550	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
> In	115		106.426	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
> Tb	159		103.368	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	102.437
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1204089801
Sample Date/Time: Thursday, May 03, 2012 11:17:40
Number of Replicates: 3
Autosampler Position: 207
Sample Description: 5
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP 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	17269.5	1.7	**61.9887**	8.047	13.0	ug/L	20538	Standard
	Be	9	360.0	6.1	**0.0976**	0.006	5.7	ug/L	13	Standard
	Al	27	1599796.5	3.7	**86.9736**	2.232	2.6	ug/L	25813	Standard
>	**Sc**	45	290409.7	1.3				ug/L	367704	Standard
	Ti	47	161657.9	3.7	**105.3898**	4.225	4.0	ug/L	127	Standard
	V	51	744591.1	3.8	**43.2401**	1.810	4.2	ug/L	6636	Standard
	Cr	52	219022.0	4.0	**14.4093**	0.647	4.5	ug/L	21244	Standard
	Cr	53	22970.8	5.0	**13.7685**	0.722	5.2	ug/L	467	Standard
	Mn	55	17499.8	3.3	**0.7440**	0.035	4.8	ug/L	8327	Standard
	Co	59	17823.5	4.1	**1.3994**	0.059	4.2	ug/L	123	Standard
	Ni	60	56446.4	4.0	**21.5420**	0.932	4.3	ug/L	272	Standard
	Cu	65	2042.8	12.1	**0.5804**	0.106	18.2	ug/L	1002	Standard
	Zn	66	7414.1	3.8	**5.3967**	0.314	5.8	ug/L	3532	Standard
>	**Ge**	72	188908.7	0.7				ug/L	254939	Standard
	As	75	454786.6	3.3	**489.7825**	18.154	3.7	ug/L	-224	Standard
	Se	82	87.3	4.6	**0.6982**	0.044	6.4	ug/L	24	Standard
	Se-1	77	128.7	2.2	**0.8780**	0.041	4.7	ug/L	93	Standard
	Ga	71	171136.4	0.7				mg/L	233175	Standard
	Rb	85	1160.0	6.5				ug/L	20	Standard
>	**Y**	89	195759.2	0.1				ug/L	235100	Standard
	Rh	103	79.3	14.6				ug/L	6	Standard
	Mo	98	17147.3	3.3	**5.4590**	0.139	2.5	ug/L	14	Standard
	Ag	107	611.3	6.1	**0.0956**	0.005	5.7	ug/L	38	Standard
	Cd	111	272.3	9.7	**-0.0197**	0.007	33.2	mg/L	439	Standard
	Cd	114	638.0	11.2	**-0.0349**	0.007	19.1	ug/L	1326	Standard
>	**In**	115	602211.5	0.9				ug/L	804157	Standard
	Sn	118	23884.8	5.0	**1.5591**	0.073	4.7	ug/L	4860	Standard
	Sb	123	96460.6	4.8	**10.6271**	0.426	4.0	ug/L	28	Standard
	Ba	135	73827.5	3.0	**17.8030**	0.375	2.1	ug/L	54	Standard
	Ce	140	28100.1	3.4				ug/L	61	Standard
>	**Tb**	159	672341.5	1.1				ug/L	844239	Standard
	Ho	165	2685.6	4.4				ug/L	6	Standard
	Tl	203	315.0	8.2	**0.0266**	0.002	8.1	ug/L	10	Standard
	Tl	205	724.0	7.7	**0.0246**	0.002	7.5	ug/L	16	Standard
	Pb	206	2019.8	3.0	**0.1793**	0.007	3.7	ug/L	421	Standard
	Pb	207	1641.4	2.3	**0.1726**	0.005	2.9	ug/L	341	Standard
	Pb	208	7747.8	1.8	**0.1785**	0.004	2.4	ug/L	1571	Standard
	U	238	431234.2	4.2	**12.3552**	0.543	4.4	ug/L	4	Standard
>	**Bi**	209	306029.0	0.3				ug/L	457202	Standard
	Na	23	1553653.5	3.0	**601.5612**	11.125	1.8	mg/L	138	Standard
	Mg	24	51821.9	3.4	**0.2535**	0.005	2.1	mg/L	134	Standard

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K	39	3338.4	4.1	**0.3312**	0.013	4.0	mg/L	563	Standard
Ca	43	178.0	12.7	**0.1534**	0.039	25.2	mg/L	127	Standard
Fe	54	437.9	8.4	**-0.0432**	0.007	15.8	mg/L	815	Standard
Fe	57	7663.9	4.5	**0.0295**	0.003	10.4	mg/L	4749	Standard
> **Sc-1**	45	290409.7	1.3				mg/L	367704	Standard
Cl	35	2363869.4	1.6				ug/L	59901	Standard
Kr	83	70.4	9.5				ug/L	50	Standard
Br	81	31087.9	1.6				ug/L	13965	Standard
P	31	1864400.1	3.9				ug/L	71952	Standard
S	34	5480256.1	3.5				ug/L	878802	Standard
Sr	88	942042.5	2.3				ug/L	321	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		74.100	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		83.266	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		74.887	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		79.639	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	66.935
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	
As 75 Upper, S, EEE	As	75	
Na 23 Upper, S, EEE	Na	23	

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Method 6020 - Summary Report

Sample ID: L1204089801
Sample Date/Time: Thursday, May 03, 2012 11:20:27
Number of Replicates: 3
Autosampler Position: 208
Sample Description: 1000
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP 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	17704.3	2.3	**-34.4493**	46.777	135.8	ug/L	20538	Standard
	Be	9	24.7	20.8	**0.0005**	0.001	262.4	ug/L	13	Standard
	Al	27	39644.6	7.0	**1.0368**	0.162	15.6	ug/L	25813	Standard
>	**Sc**	45	315328.1	1.1				ug/L	367704	Standard
	Ti	47	3444.4	3.0	**1.7981**	0.040	2.2	ug/L	127	Standard
	V	51	20891.6	3.3	**0.7178**	0.023	3.2	ug/L	6636	Standard
	Cr	52	19970.5	5.0	**0.0584**	0.047	80.7	ug/L	21244	Standard
	Cr	53	826.0	6.2	**0.2002**	0.022	10.8	ug/L	467	Standard
	Mn	55	1186.4	6.3	**-0.1783**	0.003	1.7	ug/L	8327	Standard
	Co	59	523.3	4.2	**0.0265**	0.001	4.1	ug/L	123	Standard
	Ni	60	1511.4	6.1	**0.4152**	0.025	6.0	ug/L	272	Standard
	Cu	65	499.3	36.8	**-0.1502**	0.069	46.2	ug/L	1002	Standard
	Zn	66	4670.4	3.1	**1.8556**	0.090	4.9	ug/L	3532	Standard
>	**Ge**	72	229176.0	1.0				ug/L	254939	Standard
	As	75	10626.6	3.9	**9.5940**	0.458	4.8	ug/L	-224	Standard
	Se	82	36.5	37.9	**0.0795**	0.125	157.4	ug/L	24	Standard
	Se-1	77	70.0	10.0	**-0.2269**	0.091	40.2	ug/L	93	Standard
	Ga	71	205446.3	1.2				mg/L	233175	Standard
	Rb	85	31.3	13.3				ug/L	20	Standard
>	**Y**	89	204915.7	0.6				ug/L	235100	Standard
	Rh	103	2.7	43.3				ug/L	6	Standard
	Mo	98	385.5	3.0	**0.0919**	0.004	4.7	ug/L	14	Standard
	Ag	107	61.3	8.4	**0.0032**	0.001	26.4	ug/L	38	Standard
	Cd	111	122.5	11.8	**-0.0662**	0.004	5.4	mg/L	439	Standard
	Cd	114	330.8	4.3	**-0.0706**	0.002	2.2	ug/L	1326	Standard
>	**In**	115	728272.6	1.7				ug/L	804157	Standard
	Sn	118	988.7	3.6	**-0.1328**	0.003	2.4	ug/L	4860	Standard
	Sb	123	2543.3	2.6	**0.2258**	0.009	3.9	ug/L	28	Standard
	Ba	135	1736.4	7.6	**0.3355**	0.023	6.8	ug/L	54	Standard
	Ce	140	491.3	44.9				ug/L	61	Standard
>	**Tb**	159	768998.8	1.7				ug/L	844239	Standard
	Ho	165	66.7	25.2				ug/L	6	Standard
	Tl	203	101.0	42.5	**0.0065**	0.003	39.2	ug/L	10	Standard
	Tl	205	250.7	18.6	**0.0059**	0.001	19.3	ug/L	16	Standard
	Pb	206	349.3	5.7	**-0.0031**	0.001	45.0	ug/L	421	Standard
	Pb	207	289.3	3.3	**-0.0059**	0.001	13.8	ug/L	341	Standard
	Pb	208	1341.7	2.7	**-0.0045**	0.001	14.0	ug/L	1571	Standard
	U	238	7477.2	14.6	**0.1542**	0.022	14.4	ug/L	4	Standard
>	**Bi**	209	428055.8	0.2				ug/L	457202	Standard
	Na	23	38609.8	2.6	**13.7347**	0.500	3.6	mg/L	138	Standard
	Mg	24	1366.4	3.2	**0.0048**	0.000	4.9	mg/L	134	Standard

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K	39	686.7	4.6	**0.0155**	0.003	17.5	mg/L	563	Standard
Ca	43	128.0	2.7	**0.0423**	0.004	10.2	mg/L	127	Standard
Fe	54	309.1	1.7	**-0.0766**	0.001	0.8	mg/L	815	Standard
Fe	57	3325.0	1.8	**-0.0066**	0.000	2.9	mg/L	4749	Standard
> **Sc-1**	45	315328.1	1.1				mg/L	367704	Standard
Cl	35	135340.4	15.6				ug/L	59901	Standard
Kr	83	42.4	16.1				ug/L	50	Standard
Br	81	11107.4	1.1				ug/L	13965	Standard
P	31	78596.8	3.0				ug/L	71952	Standard
S	34	744443.5	4.2				ug/L	878802	Standard
Sr	88	21572.7	3.1				ug/L	321	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		89.895	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		87.161	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		90.563	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		91.088	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	93.625
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1204089802
Sample Date/Time: Thursday, May 03, 2012 11:23:14
Number of Replicates: 3
Autosampler Position: 209
Sample Description: 5
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP 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	16968.5	3.2	**28.2621**	36.764	130.1	ug/L	20538	Standard
	Be	9	307.7	2.8	**0.0824**	0.001	1.7	ug/L	13	Standard
	Al	27	1445132.5	5.1	**78.3099**	3.240	4.1	ug/L	25813	Standard
>	**Sc**	45	290985.6	1.2				ug/L	367704	Standard
	Ti	47	142432.2	3.4	**92.0622**	3.419	3.7	ug/L	127	Standard
	V	51	729641.2	3.5	**42.0046**	1.588	3.8	ug/L	6636	Standard
	Cr	52	204999.3	4.5	**13.2921**	0.640	4.8	ug/L	21244	Standard
	Cr	53	21781.7	4.4	**12.9324**	0.610	4.7	ug/L	467	Standard
	Mn	55	12597.2	2.6	**0.4643**	0.017	3.6	ug/L	8327	Standard
	Co	59	17284.5	3.5	**1.3454**	0.052	3.8	ug/L	123	Standard
	Ni	60	57071.0	3.4	**21.5965**	0.815	3.8	ug/L	272	Standard
	Cu	65	1966.1	12.0	**0.5386**	0.100	18.6	ug/L	1002	Standard
	Zn	66	6418.0	1.3	**4.3527**	0.089	2.0	ug/L	3532	Standard
>	**Ge**	72	190522.8	1.0				ug/L	254939	Standard
	As	75	443197.4	2.7	**473.2192**	12.178	2.6	ug/L	-224	Standard
	Se	82	88.8	16.5	**0.7055**	0.154	21.8	ug/L	24	Standard
	Se-1	77	126.7	5.1	**0.8308**	0.115	13.8	ug/L	93	Standard
	Ga	71	173738.7	1.9				mg/L	233175	Standard
	Rb	85	1088.7	4.2				ug/L	20	Standard
>	**Y**	89	197140.3	1.1				ug/L	235100	Standard
	Rh	103	140.7	16.5				ug/L	6	Standard
	Mo	98	16614.6	4.8	**5.2888**	0.285	5.4	ug/L	14	Standard
	Ag	107	631.3	11.7	**0.0990**	0.013	13.0	ug/L	38	Standard
	Cd	111	213.7	9.9	**-0.0357**	0.005	14.7	mg/L	439	Standard
	Cd	114	526.8	4.7	**-0.0458**	0.002	4.9	ug/L	1326	Standard
>	**In**	115	602466.3	1.1				ug/L	804157	Standard
	Sn	118	22861.3	4.9	**1.4842**	0.094	6.4	ug/L	4860	Standard
	Sb	123	93542.8	5.1	**10.3068**	0.610	5.9	ug/L	28	Standard
	Ba	135	70194.1	4.2	**16.9262**	0.855	5.0	ug/L	54	Standard
	Ce	140	24455.1	3.5				ug/L	61	Standard
>	**Tb**	159	669581.0	1.4				ug/L	844239	Standard
	Ho	165	2660.2	2.0				ug/L	6	Standard
	Tl	203	247.3	8.3	**0.0210**	0.002	7.8	ug/L	10	Standard
	Tl	205	666.0	11.2	**0.0226**	0.002	10.8	ug/L	16	Standard
	Pb	206	619.7	2.9	**0.0353**	0.002	6.0	ug/L	421	Standard
	Pb	207	529.7	5.2	**0.0346**	0.004	10.7	ug/L	341	Standard
	Pb	208	2389.1	1.1	**0.0343**	0.001	2.9	ug/L	1571	Standard
	U	238	420045.7	5.0	**12.0813**	0.653	5.4	ug/L	4	Standard
>	**Bi**	209	304878.9	0.5				ug/L	457202	Standard
	Na	23	1598831.7	2.8	**617.8511**	10.775	1.7	mg/L	138	Standard
	Mg	24	48299.9	3.1	**0.2358**	0.005	2.3	mg/L	134	Standard

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K	39	3003.6	1.1	**0.2915**	0.006	2.2	mg/L	563	Standard
Ca	43	152.0	6.0	**0.1050**	0.020	18.6	mg/L	127	Standard
Fe	54	358.4	2.5	**-0.0606**	0.002	2.5	mg/L	815	Standard
Fe	57	5612.4	4.9	**0.0133**	0.002	12.9	mg/L	4749	Standard
> **Sc-1**	45	290985.6	1.2				mg/L	367704	Standard
Cl	35	2151840.1	1.4				ug/L	59901	Standard
Kr	83	60.2	3.4				ug/L	50	Standard
Br	81	31124.3	2.0				ug/L	13965	Standard
P	31	1899468.5	2.9				ug/L	71952	Standard
S	34	5729975.9	3.2				ug/L	878802	Standard
Sr	88	953032.9	3.1				ug/L	321	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		74.733	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		83.854	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		74.919	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		79.312	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	66.684
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
As 75 Upper, S, EEE	As	75	
Na 23 Upper, S, EEE	Na	23	

Sample ID: L1204089802
Report Date/Time: Thursday, May 03, 2012 11:25:41
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Method 6020 - Summary Report

Sample ID: L1204089802
Sample Date/Time: Thursday, May 03, 2012 11:26:01
Number of Replicates: 3
Autosampler Position: 210
Sample Description: 1000
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP 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	17702.7	1.2	**-21.0777**	8.625	40.9	ug/L	20538	Standard
	Be	9	16.7	21.1	**-0.0016**	0.001	57.4	ug/L	13	Standard
	Al	27	53303.2	7.0	**1.7494**	0.171	9.8	ug/L	25813	Standard
>	**Sc**	45	312692.8	0.7				ug/L	367704	Standard
	Ti	47	2884.9	5.1	**1.5140**	0.090	5.9	ug/L	127	Standard
	V	51	19622.3	2.5	**0.6666**	0.025	3.8	ug/L	6636	Standard
	Cr	52	19566.6	4.3	**0.0470**	0.050	107.0	ug/L	21244	Standard
	Cr	53	812.0	8.1	**0.1976**	0.035	17.7	ug/L	467	Standard
	Mn	55	1727.1	5.3	**-0.1525**	0.005	3.0	ug/L	8327	Standard
	Co	59	471.3	3.4	**0.0234**	0.001	3.2	ug/L	123	Standard
	Ni	60	1317.7	4.6	**0.3587**	0.022	6.2	ug/L	272	Standard
	Cu	65	633.0	34.2	**-0.0984**	0.083	84.3	ug/L	1002	Standard
	Zn	66	1993.1	7.2	**-0.3179**	0.135	42.5	ug/L	3532	Standard
>	**Ge**	72	226842.6	1.1				ug/L	254939	Standard
	As	75	9555.5	3.7	**8.7285**	0.330	3.8	ug/L	-224	Standard
	Se	82	45.4	33.7	**0.1633**	0.142	86.9	ug/L	24	Standard
	Se-1	77	81.3	10.2	**-0.0712**	0.102	142.7	ug/L	93	Standard
	Ga	71	200511.5	1.1				mg/L	233175	Standard
	Rb	85	56.7	10.2				ug/L	20	Standard
>	**Y**	89	203359.0	0.3				ug/L	235100	Standard
	Rh	103	6.7	75.5				ug/L	6	Standard
	Mo	98	338.9	3.1	**0.0805**	0.003	3.5	ug/L	14	Standard
	Ag	107	51.3	8.8	**0.0019**	0.001	35.3	ug/L	38	Standard
	Cd	111	109.9	11.3	**-0.0688**	0.003	4.3	mg/L	439	Standard
	Cd	114	285.0	0.4	**-0.0740**	0.000	0.2	ug/L	1326	Standard
>	**In**	115	720791.2	0.7				ug/L	804157	Standard
	Sn	118	981.4	1.7	**-0.1327**	0.001	0.5	ug/L	4860	Standard
	Sb	123	2145.0	4.9	**0.1914**	0.009	4.6	ug/L	28	Standard
	Ba	135	1544.7	10.7	**0.3006**	0.034	11.4	ug/L	54	Standard
	Ce	140	519.3	61.2				ug/L	61	Standard
>	**Tb**	159	765369.4	0.7				ug/L	844239	Standard
	Ho	165	56.0	37.3				ug/L	6	Standard
	Tl	203	81.3	29.7	**0.0053**	0.001	26.9	ug/L	10	Standard
	Tl	205	196.0	33.6	**0.0045**	0.002	35.5	ug/L	16	Standard
	Pb	206	413.0	4.8	**0.0015**	0.001	96.9	ug/L	421	Standard
	Pb	207	320.7	3.9	**-0.0031**	0.001	38.3	ug/L	341	Standard
	Pb	208	1529.4	7.0	**-0.0010**	0.002	224.9	ug/L	1571	Standard
	U	238	6878.3	16.9	**0.1418**	0.024	17.0	ug/L	4	Standard
>	**Bi**	209	428673.6	0.3				ug/L	457202	Standard
	Na	23	36554.7	2.4	**13.1074**	0.230	1.8	mg/L	138	Standard
	Mg	24	1193.0	5.8	**0.0040**	0.000	6.8	mg/L	134	Standard

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K	39	665.3	6.5	**0.0139**	0.005	33.6	mg/L	563	Standard
Ca	43	123.3	0.9	**0.0361**	0.003	9.4	mg/L	127	Standard
Fe	54	332.9	8.8	**-0.0712**	0.006	9.0	mg/L	815	Standard
Fe	57	3515.1	3.2	**-0.0050**	0.001	13.9	mg/L	4749	Standard
> **Sc-1**	45	312692.8	0.7				mg/L	367704	Standard
Cl	35	121999.8	14.3				ug/L	59901	Standard
Kr	83	47.3	11.5				ug/L	50	Standard
Br	81	11332.6	0.7				ug/L	13965	Standard
P	31	74512.9	2.6				ug/L	71952	Standard
S	34	731513.4	4.8				ug/L	878802	Standard
Sr	88	20234.2	5.0				ug/L	321	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		88.979	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
> Y	89		86.499	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
> In	115		89.633	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
> Tb	159		90.658	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	93.760
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1205001101
Sample Date/Time: Thursday, May 03, 2012 11:28:48
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: SLP 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	377880.3	1.2	**30189.4731**	280.467	0.9	ug/L	20538	Standard
	Be	9	31.3	4.9	**0.0015**	0.000	17.0	ug/L	13	Standard
	Al	27	2355932.4	5.3	**107.9027**	5.298	4.9	ug/L	25813	Standard
>	**Sc**	45	345503.0	1.4				ug/L	367704	Standard
	Ti	47	7209.1	13.2	**4.1725**	0.598	14.3	ug/L	127	Standard
	V	51	14893.7	3.4	**0.4931**	0.022	4.5	ug/L	6636	Standard
	Cr	52	27177.0	1.3	**0.6215**	0.014	2.3	ug/L	21244	Standard
	Cr	53	13727.6	2.8	**7.2902**	0.241	3.3	ug/L	467	Standard
	Mn	55	2774368.1	2.7	**138.8430**	4.439	3.2	ug/L	8327	Standard
	Co	59	4369.0	3.0	**0.3021**	0.007	2.2	ug/L	123	Standard
	Ni	60	10580.7	1.9	**3.5745**	0.024	0.7	ug/L	272	Standard
	Cu	65	3209.3	6.4	**0.9582**	0.106	11.0	ug/L	1002	Standard
	Zn	66	17759.4	2.1	**13.8749**	0.526	3.8	ug/L	3532	Standard
>	**Ge**	72	210381.2	2.0				ug/L	254939	Standard
	As	75	93.4	159.7	**0.2508**	0.144	57.5	ug/L	-224	Standard
	Se	82	101.6	48.8	**0.7429**	0.483	65.0	ug/L	24	Standard
	Se-1	77	1095.0	0.6	**14.1897**	0.329	2.3	ug/L	93	Standard
	Ga	71	195355.4	0.5				mg/L	233175	Standard
	Rb	85	27677.9	2.2				ug/L	20	Standard
>	**Y**	89	209710.2	1.6				ug/L	235100	Standard
	Rh	103	308.0	3.4				ug/L	6	Standard
	Mo	98	3053.6	4.1	**0.8730**	0.047	5.4	ug/L	14	Standard
	Ag	107	53.7	17.6	**0.0028**	0.002	53.2	ug/L	38	Standard
	Cd	111	519.1	5.4	**0.0343**	0.006	18.4	mg/L	439	Standard
	Cd	114	1384.2	2.3	**0.0256**	0.004	17.3	ug/L	1326	Standard
>	**In**	115	664774.5	1.4				ug/L	804157	Standard
	Sn	118	2106.1	2.4	**-0.0528**	0.005	9.7	ug/L	4860	Standard
	Sb	123	742.8	6.0	**0.0681**	0.005	7.1	ug/L	28	Standard
	Ba	135	211873.4	3.1	**46.3252**	2.064	4.5	ug/L	54	Standard
	Ce	140	27950.4	3.7				ug/L	61	Standard
>	**Tb**	159	749394.0	1.5				ug/L	844239	Standard
	Ho	165	384.7	4.7				ug/L	6	Standard
	Tl	203	129.7	4.6	**0.0107**	0.000	3.7	ug/L	10	Standard
	Tl	205	346.0	5.7	**0.0110**	0.001	5.6	ug/L	16	Standard
	Pb	206	4226.9	3.4	**0.3869**	0.017	4.4	ug/L	421	Standard
	Pb	207	3285.0	1.5	**0.3582**	0.006	1.6	ug/L	341	Standard
	Pb	208	15733.2	1.7	**0.3744**	0.010	2.7	ug/L	1571	Standard
	U	238	24054.4	3.9	**0.6587**	0.030	4.5	ug/L	4	Standard
>	**Bi**	209	320751.7	0.8				ug/L	457202	Standard
	Na	23	1157089.8	1.9	**376.6345**	6.815	1.8	mg/L	138	Standard
	Mg	24	4293858.6	3.8	**17.7578**	0.669	3.8	mg/L	134	Standard

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K	39	50279.3	0.7	**4.8726**	0.095	1.9	mg/L	563	Standard
Ca	43	46398.3	2.5	**72.0248**	2.045	2.8	mg/L	127	Standard
Fe	54	3444.8	3.0	**0.4932**	0.017	3.5	mg/L	815	Standard
Fe	57	143789.5	6.3	**0.9166**	0.056	6.1	mg/L	4749	Standard
Sc-1	45	345503.0	1.4				mg/L	367704	Standard
Cl	35	58400120.7	0.5				ug/L	59901	Standard
Kr	83	315.1	9.2				ug/L	50	Standard
Br	81	105213.9	3.1				ug/L	13965	Standard
P	31	169529.2	2.5				ug/L	71952	Standard
S	34	9850706.3	2.1				ug/L	878802	Standard
Sr	88	9363222.1	2.9				ug/L	321	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		82.522	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		89.200	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		82.667	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		88.766	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	70.155
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Na 23 Upper, S, EEE	Na	23	

Sample ID: L1205001101
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Method 6020 - Summary Report

Sample ID: L1205001101DL WG396772-02
Sample Date/Time: Thursday, May 03, 2012 11:31:36
Number of Replicates: 3
Autosampler Position: 212
Sample Description: 5
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP 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	88699.9	1.8	**5995.2194**	24.374	0.4	ug/L	20538	Standard
	Be	9	19.3	16.6	**-0.0012**	0.001	70.9	ug/L	13	Standard
	Al	27	473661.5	6.7	**21.4740**	1.589	7.4	ug/L	25813	Standard
>	**Sc**	45	337053.6	1.5				ug/L	367704	Standard
	Ti	47	1266.1	6.9	**0.6323**	0.056	8.9	ug/L	127	Standard
	V	51	8170.9	2.3	**0.1077**	0.006	5.3	ug/L	6636	Standard
	Cr	52	20391.7	3.6	**0.0911**	0.031	34.3	ug/L	21244	Standard
	Cr	53	4596.7	7.4	**2.1067**	0.152	7.2	ug/L	467	Standard
	Mn	55	558896.0	1.7	**25.6588**	0.806	3.1	ug/L	8327	Standard
	Co	59	909.7	5.0	**0.0521**	0.003	6.1	ug/L	123	Standard
	Ni	60	2210.5	0.9	**0.6406**	0.005	0.8	ug/L	272	Standard
	Cu	65	1043.7	15.6	**0.0537**	0.066	122.1	ug/L	1002	Standard
	Zn	66	8571.8	3.8	**5.0996**	0.363	7.1	ug/L	3532	Standard
>	**Ge**	72	227663.9	1.4				ug/L	254939	Standard
	As	75	122.1	83.9	**0.2715**	0.093	34.2	ug/L	-224	Standard
	Se	82	90.0	35.4	**0.5644**	0.296	52.5	ug/L	24	Standard
	Se-1	77	306.3	5.5	**2.8327**	0.216	7.6	ug/L	93	Standard
	Ga	71	201004.0	1.6				mg/L	233175	Standard
	Rb	85	5069.5	3.8				ug/L	20	Standard
>	**Y**	89	202488.3	1.6				ug/L	235100	Standard
	Rh	103	45.3	6.7				ug/L	6	Standard
	Mo	98	582.9	7.3	**0.1452**	0.012	8.5	ug/L	14	Standard
	Ag	107	30.0	8.8	**-0.0011**	0.000	34.3	ug/L	38	Standard
	Cd	111	204.5	7.6	**-0.0474**	0.003	6.9	mg/L	439	Standard
	Cd	114	575.2	6.2	**-0.0504**	0.003	5.2	ug/L	1326	Standard
>	**In**	115	722728.2	0.8				ug/L	804157	Standard
	Sn	118	850.0	2.4	**-0.1408**	0.002	1.1	ug/L	4860	Standard
	Sb	123	284.8	0.7	**0.0200**	0.000	1.9	ug/L	28	Standard
	Ba	135	43351.0	2.5	**8.7066**	0.237	2.7	ug/L	54	Standard
	Ce	140	5864.5	5.6				ug/L	61	Standard
>	**Tb**	159	794769.6	1.7				ug/L	844239	Standard
	Ho	165	92.0	9.5				ug/L	6	Standard
	Tl	203	156.0	10.6	**0.0104**	0.001	9.3	ug/L	10	Standard
	Tl	205	399.3	3.8	**0.0103**	0.000	4.6	ug/L	16	Standard
	Pb	206	1288.1	2.9	**0.0734**	0.003	4.6	ug/L	421	Standard
	Pb	207	984.0	1.7	**0.0627**	0.002	3.2	ug/L	341	Standard
	Pb	208	4712.6	2.1	**0.0675**	0.003	4.4	ug/L	1571	Standard
	U	238	4613.0	4.2	**0.1029**	0.006	5.5	ug/L	4	Standard
>	**Bi**	209	397497.0	1.5				ug/L	457202	Standard
	Na	23	238648.3	1.2	**79.6096**	1.939	2.4	mg/L	138	Standard
	Mg	24	854030.8	1.9	**3.6201**	0.104	2.9	mg/L	134	Standard

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K	39	12229.6	1.2	**1.1712**	0.027	2.3	mg/L	563	Standard
Ca	43	12463.1	2.9	**19.7098**	0.849	4.3	mg/L	127	Standard
Fe	54	1017.2	5.1	**0.0526**	0.009	17.3	mg/L	815	Standard
Fe	57	27173.7	4.1	**0.1528**	0.005	3.4	mg/L	4749	Standard
Sc-1	45	337053.6	1.5				mg/L	367704	Standard
Cl	35	11162484.0	2.0				ug/L	59901	Standard
Kr	83	55.6	16.0				ug/L	50	Standard
Br	81	28894.9	2.7				ug/L	13965	Standard
P	31	51589.4	2.1				ug/L	71952	Standard
S	34	2635240.7	1.6				ug/L	878802	Standard
Sr	88	1825724.6	3.2				ug/L	321	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		89.301	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		86.128	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		89.874	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		94.140	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205001101DL WG396772-02
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|	Pb	207	
|	Pb	208	
|	U	238	
|>	Bi	209	86.941
⌈	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1205001101DL WG396772-02
Report Date/Time: Thursday, May 03, 2012 11:34:03
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Approved: May 04, 2012

Method 6020 - Summary Report

Sample ID: L1205001101PS WG396772-01
Sample Date/Time: Thursday, May 03, 2012 11:34:23
Number of Replicates: 3
Autosampler Position: 213
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP 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	384902.5	3.2	**30217.8063**	1211.657	4.0	ug/L	20538	Standard
	Be	9	193410.9	3.5	**45.9912**	1.923	4.2	ug/L	13	Standard
	Al	27	3404129.4	7.6	**153.6581**	12.706	8.3	ug/L	25813	Standard
>	**Sc**	45	351656.5	0.8				ug/L	367704	Standard
	Ti	47	6335.3	11.8	**3.6265**	0.466	12.9	ug/L	127	Standard
	V	51	1115046.5	4.0	**57.7343**	2.895	5.0	ug/L	6636	Standard
	Cr	52	883594.3	4.6	**54.6183**	3.146	5.8	ug/L	21244	Standard
	Cr	53	116037.0	3.5	**62.6571**	2.826	4.5	ug/L	467	Standard
	Mn	55	3781308.0	3.3	**187.6421**	8.186	4.4	ug/L	8327	Standard
	Co	59	748670.9	2.6	**52.5974**	1.939	3.7	ug/L	123	Standard
	Ni	60	157303.5	1.9	**53.5208**	1.567	2.9	ug/L	272	Standard
	Cu	65	122097.3	3.0	**48.3955**	1.949	4.0	ug/L	1002	Standard
	Zn	66	73889.2	3.0	**63.3504**	2.583	4.1	ug/L	3532	Standard
>	**Ge**	72	212277.1	1.1				ug/L	254939	Standard
	As	75	56971.4	2.9	**54.7546**	2.156	3.9	ug/L	-224	Standard
	Se	82	5763.6	2.3	**55.2906**	1.905	3.4	ug/L	24	Standard
	Se-1	77	5067.5	3.3	**69.1184**	3.047	4.4	ug/L	93	Standard
	Ga	71	196535.5	2.0				mg/L	233175	Standard
	Rb	85	26857.1	1.2				ug/L	20	Standard
>	**Y**	89	207790.5	0.4				ug/L	235100	Standard
	Rh	103	264.0	3.3				ug/L	6	Standard
	Mo	98	3191.9	4.9	**0.8875**	0.039	4.4	ug/L	14	Standard
	Ag	107	326812.8	3.5	**47.5099**	1.400	2.9	ug/L	38	Standard
	Cd	111	212335.8	3.2	**50.9277**	1.369	2.7	mg/L	439	Standard
	Cd	114	573342.4	3.4	**49.4592**	1.425	2.9	ug/L	1326	Standard
>	**In**	115	683198.7	0.6				ug/L	804157	Standard
	Sn	118	2243.5	4.6	**-0.0477**	0.007	14.6	ug/L	4860	Standard
	Sb	123	536965.7	3.1	**52.1756**	1.329	2.5	ug/L	28	Standard
	Ba	135	446000.2	3.7	**94.8494**	3.046	3.2	ug/L	54	Standard
	Ce	140	27559.7	2.7				ug/L	61	Standard
>	**Tb**	159	772931.6	0.5				ug/L	844239	Standard
	Ho	165	383.3	4.0				ug/L	6	Standard
	Tl	203	705069.5	1.7	**55.6474**	1.106	2.0	ug/L	10	Standard
	Tl	205	1681434.3	1.7	**54.9662**	1.162	2.1	ug/L	16	Standard
	Pb	206	556109.3	3.0	**54.5714**	1.831	3.4	ug/L	421	Standard
	Pb	207	472698.7	2.9	**55.9640**	1.835	3.3	ug/L	341	Standard
	Pb	208	2158263.5	3.1	**55.3978**	1.914	3.5	ug/L	1571	Standard
	U	238	2352803.2	4.2	**64.1969**	2.925	4.6	ug/L	4	Standard
>	**Bi**	209	321338.1	0.4				ug/L	457202	Standard
	Na	23	1134130.5	2.9	**362.7327**	12.644	3.5	mg/L	138	Standard
	Mg	24	4273651.3	4.5	**17.3687**	0.910	5.2	mg/L	134	Standard

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K	39	49886.7	1.3	**4.7482**	0.098	2.1	mg/L	563	Standard
Ca	43	46294.0	2.3	**70.6045**	2.129	3.0	mg/L	127	Standard
Fe	54	3317.5	8.6	**0.4594**	0.056	12.2	mg/L	815	Standard
Fe	57	140261.8	9.1	**0.8776**	0.088	10.1	mg/L	4749	Standard
Sc-1	45	351656.5	0.8				mg/L	367704	Standard
Cl	35	58441960.9	2.1				ug/L	59901	Standard
Kr	83	186.7	10.8				ug/L	50	Standard
Br	81	102179.8	1.7				ug/L	13965	Standard
P	31	167865.2	2.7				ug/L	71952	Standard
S	34	9852613.7	3.1				ug/L	878802	Standard
Sr	88	9118396.2	3.6				ug/L	321	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		83.266	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		88.384	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		84.958	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		91.554	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	70.284
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Na 23 Upper, S, EEE	Na	23	

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Method 6020 - Summary Report

Sample ID: L1205001102
Sample Date/Time: Thursday, May 03, 2012 11:37:10
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: SLP 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	390800.2	1.6	**30392.3113**	779.509	2.6	ug/L	20538	Standard
	Be	9	45.0	70.2	**0.0046**	0.008	164.4	ug/L	13	Standard
	Al	27	395978.8	5.3	**16.8409**	1.084	6.4	ug/L	25813	Standard
>	**Sc**	45	355095.5	1.1				ug/L	367704	Standard
	Ti	47	1308.1	5.2	**0.7007**	0.042	5.9	ug/L	127	Standard
	V	51	11020.2	7.2	**0.2805**	0.038	13.5	ug/L	6636	Standard
	Cr	52	26753.3	0.6	**0.5675**	0.006	1.0	ug/L	21244	Standard
	Cr	53	22575.5	6.2	**11.9322**	0.812	6.8	ug/L	467	Standard
	Mn	55	2628294.5	3.0	**129.3990**	3.241	2.5	ug/L	8327	Standard
	Co	59	3268.0	5.9	**0.2204**	0.013	5.9	ug/L	123	Standard
	Ni	60	10492.0	0.4	**3.4871**	0.017	0.5	ug/L	272	Standard
	Cu	65	1826.8	4.0	**0.3887**	0.026	6.7	ug/L	1002	Standard
	Zn	66	5451.0	3.4	**2.8165**	0.145	5.1	ug/L	3532	Standard
>	**Ge**	72	213755.3	0.6				ug/L	254939	Standard
	As	75	532.4	12.2	**0.6683**	0.064	9.6	ug/L	-224	Standard
	Se	82	236.8	0.7	**2.0183**	0.025	1.3	ug/L	24	Standard
	Se-1	77	1387.4	1.8	**17.9662**	0.230	1.3	ug/L	93	Standard
	Ga	71	200132.5	1.1				mg/L	233175	Standard
	Rb	85	25176.9	1.8				ug/L	20	Standard
>	**Y**	89	206864.7	1.1				ug/L	235100	Standard
	Rh	103	235.3	4.7				ug/L	6	Standard
	Mo	98	3320.1	5.1	**0.9054**	0.045	4.9	ug/L	14	Standard
	Ag	107	112.0	41.8	**0.0108**	0.007	61.9	ug/L	38	Standard
	Cd	111	483.7	4.4	**0.0201**	0.005	26.3	mg/L	439	Standard
	Cd	114	1381.0	7.1	**0.0196**	0.008	41.8	ug/L	1326	Standard
>	**In**	115	696783.9	0.4				ug/L	804157	Standard
	Sn	118	1830.1	3.9	**-0.0768**	0.004	5.3	ug/L	4860	Standard
	Sb	123	1680.5	25.4	**0.1539**	0.040	26.3	ug/L	28	Standard
	Ba	135	204562.8	2.9	**42.6512**	1.067	2.5	ug/L	54	Standard
	Ce	140	8762.5	5.8				ug/L	61	Standard
>	**Tb**	159	772318.1	0.5				ug/L	844239	Standard
	Ho	165	141.3	4.3				ug/L	6	Standard
	Tl	203	207.3	51.7	**0.0166**	0.008	50.0	ug/L	10	Standard
	Tl	205	448.0	39.4	**0.0142**	0.006	39.9	ug/L	16	Standard
	Pb	206	697.3	8.9	**0.0388**	0.006	14.7	ug/L	421	Standard
	Pb	207	527.0	14.8	**0.0301**	0.009	30.3	ug/L	341	Standard
	Pb	208	2540.8	12.3	**0.0341**	0.008	23.2	ug/L	1571	Standard
	U	238	24360.6	5.5	**0.6582**	0.040	6.0	ug/L	4	Standard
>	**Bi**	209	325071.6	0.8				ug/L	457202	Standard
	Na	23	1138120.4	2.4	**360.5094**	12.107	3.4	mg/L	138	Standard
	Mg	24	4227351.0	4.4	**17.0150**	0.893	5.2	mg/L	134	Standard

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	K	39	50195.7	2.7	**4.7308**	0.131	2.8	mg/L	563	Standard
	Ca	43	45805.2	3.0	**69.1824**	2.597	3.8	mg/L	127	Standard
	Fe	54	2912.0	7.2	**0.3813**	0.042	11.0	mg/L	815	Standard
	Fe	57	116388.4	6.0	**0.7158**	0.052	7.3	mg/L	4749	Standard
>	**Sc-1**	45	355095.5	1.1				mg/L	367704	Standard
	Cl	35	58303041.4	0.7				ug/L	59901	Standard
	Kr	83	138.0	13.9				ug/L	50	Standard
	Br	81	114259.5	3.2				ug/L	13965	Standard
	P	31	149683.0	2.2				ug/L	71952	Standard
	S	34	9829550.2	1.9				ug/L	878802	Standard
	Sr	88	8917637.1	2.0				ug/L	321	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		83.846	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		87.990	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		86.648	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		91.481	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	71.100
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Na 23 Upper, S, EEE	Na	23	

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Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, May 03, 2012 11:40:00
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: SLP 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	21338.4	1.5	**-34.1451**	18.780	55.0	ug/L	20538	Standard
	Be	9	229914.2	3.7	**50.5984**	2.042	4.0	ug/L	13	Standard
	Al	27	1244821.4	5.7	**51.3560**	3.171	6.2	ug/L	25813	Standard
>	**Sc**	45	379923.8	0.6				ug/L	367704	Standard
	Ti	47	215088.9	4.1	**99.9925**	4.890	4.9	ug/L	127	Standard
	V	51	1266985.5	3.3	**52.5199**	1.848	3.5	ug/L	6636	Standard
	Cr	52	1035899.2	4.7	**51.2191**	2.552	5.0	ug/L	21244	Standard
	Cr	53	116152.2	4.9	**50.1959**	2.514	5.0	ug/L	467	Standard
	Mn	55	1337396.2	3.3	**52.9974**	2.035	3.8	ug/L	8327	Standard
	Co	59	908182.3	2.7	**51.1155**	1.797	3.5	ug/L	123	Standard
	Ni	60	187903.0	3.1	**51.2172**	1.910	3.7	ug/L	272	Standard
	Cu	65	157864.9	5.1	**50.1360**	2.696	5.4	ug/L	1002	Standard
	Zn	66	72046.1	4.0	**49.0498**	2.091	4.3	ug/L	3532	Standard
>	**Ge**	72	264954.1	1.2				ug/L	254939	Standard
	As	75	64447.0	2.8	**49.6327**	1.599	3.2	ug/L	-224	Standard
	Se	82	6495.4	3.4	**49.8965**	2.028	4.1	ug/L	24	Standard
	Se-1	77	4536.0	4.4	**49.2468**	2.549	5.2	ug/L	93	Standard
	Ga	71	245173.2	1.0				mg/L	233175	Standard
	Rb	85	1051.4	8.9				ug/L	20	Standard
>	**Y**	89	239484.5	0.3				ug/L	235100	Standard
	Rh	103	45.3	22.2				ug/L	6	Standard
	Mo	98	423738.4	4.3	**96.9899**	4.666	4.8	ug/L	14	Standard
	Ag	107	435230.1	3.2	**51.5153**	1.825	3.5	ug/L	38	Standard
	Cd	111	264550.7	4.0	**51.6672**	2.363	4.6	mg/L	439	Standard
	Cd	114	723421.8	4.1	**50.8165**	2.327	4.6	ug/L	1326	Standard
>	**In**	115	839284.3	1.0				ug/L	804157	Standard
	Sn	118	940352.2	6.0	**49.3194**	3.200	6.5	ug/L	4860	Standard
	Sb	123	632916.4	2.6	**50.0712**	1.504	3.0	ug/L	28	Standard
	Ba	135	281197.4	4.6	**48.6914**	2.558	5.3	ug/L	54	Standard
	Ce	140	1040.7	4.8				ug/L	61	Standard
>	**Tb**	159	890460.1	0.7				ug/L	844239	Standard
	Ho	165	31.3	35.2				ug/L	6	Standard
	Tl	203	891574.9	2.6	**50.8116**	1.637	3.2	ug/L	10	Standard
	Tl	205	2187391.9	3.2	**51.6356**	2.006	3.9	ug/L	16	Standard
	Pb	206	713467.5	3.9	**50.5553**	2.329	4.6	ug/L	421	Standard
	Pb	207	593279.7	4.3	**50.7194**	2.548	5.0	ug/L	341	Standard
	Pb	208	2729223.4	3.9	**50.5833**	2.304	4.6	ug/L	1571	Standard
	U	238	2574957.1	4.6	**50.7347**	2.661	5.2	ug/L	4	Standard
>	**Bi**	209	445055.4	0.8				ug/L	457202	Standard
	Na	23	17191.1	3.3	**5.0501**	0.190	3.8	mg/L	138	Standard
	Mg	24	1353463.3	4.8	**5.0900**	0.268	5.3	mg/L	134	Standard

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	K	39	56691.9	2.0	**4.9973**	0.124	2.5	mg/L	563	Standard
	Ca	43	3670.4	4.7	**5.0183**	0.261	5.2	mg/L	127	Standard
	Fe	54	30701.6	3.9	**4.9829**	0.217	4.4	mg/L	815	Standard
	Fe	57	861610.1	5.5	**5.1321**	0.304	5.9	mg/L	4749	Standard
>	**Sc-1**	45	379923.8	0.6				mg/L	367704	Standard
	Cl	35	625123.4	43.4				ug/L	59901	Standard
	Kr	83	53.3	8.8				ug/L	50	Standard
	Br	81	15523.3	5.9				ug/L	13965	Standard
	P	31	84285.2	1.7				ug/L	71952	Standard
	S	34	931526.1	0.0				ug/L	878802	Standard
	Sr	88	2077.5	40.3				ug/L	321	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	102.712		
>	Sc	45			
	Ti	47	99.992		
	V	51	105.040		
	Cr	52	102.438		
	Cr	53			
	Mn	55	105.995		
	Co	59	102.231		
	Ni	60	102.434		
	Cu	65	100.272		
	Zn	66	98.100		
>	Ge	72		103.929	
	As	75	99.265		
	Se	82	99.793		
	Se-1	77	98.494		
	Ga	71			
	Rb	85			
>	Y	89		101.865	
	Rh	103			
	Mo	98	96.990		
	Ag	107	103.031		
	Cd	111	103.334		
	Cd	114			
>	In	115		104.368	
	Sn	118	98.639		
	Sb	123	100.142		
	Ba	135	97.383		
	Ce	140			
>	Tb	159		105.475	
	Ho	165			
	Tl	203	101.623		
	Tl	205			
	Pb	206	101.111		

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Pb	207	101.439	
Pb	208	101.167	
U	238	101.469	
> Bi	209		97.343
Na	23	101.002	
Mg	24	101.799	
K	39	99.945	
Ca	43	100.367	
Fe	54	99.659	
Fe	57	102.643	
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

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: Thursday, May 03, 2012 11:42:47
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: SLP 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	20779.9	0.4	**-17.2171**	25.631	148.9	ug/L	20538	Standard
	Be	9	36.0	25.5	**0.0022**	0.002	90.7	ug/L	13	Standard
	Al	27	13406.6	1.1	**-0.3873**	0.006	1.4	ug/L	25813	Standard
>	**Sc**	45	366269.2	1.8				ug/L	367704	Standard
	Ti	47	133.3	8.3	**0.0118**	0.005	44.4	ug/L	127	Standard
	V	51	6432.6	4.8	**-0.0070**	0.009	123.5	ug/L	6636	Standard
	Cr	52	19879.4	1.8	**-0.0520**	0.031	59.4	ug/L	21244	Standard
	Cr	53	880.0	8.0	**0.1868**	0.022	11.6	ug/L	467	Standard
	Mn	55	1605.8	11.2	**-0.1658**	0.006	3.6	ug/L	8327	Standard
	Co	59	165.7	19.4	**0.0022**	0.002	77.5	ug/L	123	Standard
	Ni	60	118.7	9.5	**-0.0274**	0.003	10.5	ug/L	272	Standard
	Cu	65	1054.0	3.0	**0.0190**	0.010	54.2	ug/L	1002	Standard
	Zn	66	1137.7	4.9	**-1.1211**	0.020	1.8	ug/L	3532	Standard
>	**Ge**	72	252176.5	2.7				ug/L	254939	Standard
	As	75	-212.9	23.4	**-0.0107**	0.045	418.1	ug/L	-224	Standard
	Se	82	25.7	55.2	**-0.0401**	0.112	279.6	ug/L	24	Standard
	Se-1	77	89.3	2.6	**-0.0833**	0.020	24.4	ug/L	93	Standard
	Ga	71	233319.0	1.6				mg/L	233175	Standard
	Rb	85	14.0	24.7				ug/L	20	Standard
>	**Y**	89	228315.9	2.1				ug/L	235100	Standard
	Rh	103	0.7	173.2				ug/L	6	Standard
	Mo	98	138.5	28.7	**0.0225**	0.009	39.8	ug/L	14	Standard
	Ag	107	80.3	27.4	**0.0045**	0.003	58.2	ug/L	38	Standard
	Cd	111	518.1	7.2	**0.0095**	0.007	68.7	mg/L	439	Standard
	Cd	114	1386.7	5.7	**0.0022**	0.006	264.8	ug/L	1326	Standard
>	**In**	115	822451.9	1.3				ug/L	804157	Standard
	Sn	118	1964.8	1.9	**-0.0873**	0.002	2.9	ug/L	4860	Standard
	Sb	123	397.1	25.0	**0.0259**	0.008	30.4	ug/L	28	Standard
	Ba	135	91.7	44.8	**0.0053**	0.007	138.3	ug/L	54	Standard
	Ce	140	86.0	8.4				ug/L	61	Standard
>	**Tb**	159	853123.6	1.8				ug/L	844239	Standard
	Ho	165	8.7	48.0				ug/L	6	Standard
	Tl	203	216.7	37.6	**0.0126**	0.005	35.9	ug/L	10	Standard
	Tl	205	472.0	30.6	**0.0107**	0.003	31.1	ug/L	16	Standard
	Pb	206	442.3	13.2	**0.0020**	0.004	183.4	ug/L	421	Standard
	Pb	207	368.0	4.3	**-0.0005**	0.001	173.2	ug/L	341	Standard
	Pb	208	1694.0	10.1	**0.0006**	0.003	473.7	ug/L	1571	Standard
	U	238	516.3	16.9	**0.0111**	0.002	14.6	ug/L	4	Standard
>	**Bi**	209	451087.3	1.9				ug/L	457202	Standard
	Na	23	236.0	3.7	**0.0330**	0.001	4.1	mg/L	138	Standard
	Mg	24	285.3	32.4	**-0.0003**	0.000	115.0	mg/L	134	Standard

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K	39	634.7	7.8	**0.0005**	0.004	894.7	mg/L	563	Standard
Ca	43	107.3	15.1	**-0.0186**	0.021	115.5	mg/L	127	Standard
Fe	54	819.9	4.7	**0.0033**	0.009	285.2	mg/L	815	Standard
Fe	57	4922.1	3.0	**-0.0000**	0.001	10648.9	mg/L	4749	Standard
> **Sc-1**	45	366269.2	1.8				mg/L	367704	Standard
Cl	35	284191.3	10.5				ug/L	59901	Standard
Kr	83	53.1	14.0				ug/L	50	Standard
Br	81	13507.4	0.5				ug/L	13965	Standard
P	31	76148.3	2.7				ug/L	71952	Standard
S	34	927913.6	0.8				ug/L	878802	Standard
Sr	88	317.3	26.0				ug/L	321	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		98.917	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
> Y	89		97.114	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
> In	115		102.275	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
> Tb	159		101.052	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	98.663
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1205001103
Sample Date/Time: Thursday, May 03, 2012 11:45:36
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: SLP 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	379870.4	0.6	**29747.1536**	353.880	1.2	ug/L	20538	Standard
	Be	9	38.3	10.9	**0.0031**	0.001	28.0	ug/L	13	Standard
	Al	27	1988499.5	4.3	**89.1709**	3.540	4.0	ug/L	25813	Standard
>	**Sc**	45	352241.1	1.7				ug/L	367704	Standard
	Ti	47	5855.8	12.1	**3.3956**	0.388	11.4	ug/L	127	Standard
	V	51	15812.6	2.1	**0.5466**	0.009	1.7	ug/L	6636	Standard
	Cr	52	31439.3	2.5	**0.9052**	0.045	4.9	ug/L	21244	Standard
	Cr	53	19038.9	18.1	**10.2682**	1.972	19.2	ug/L	467	Standard
	Mn	55	2682113.6	3.7	**135.0226**	3.585	2.7	ug/L	8327	Standard
	Co	59	4085.2	5.6	**0.2838**	0.013	4.7	ug/L	123	Standard
	Ni	60	10814.5	4.3	**3.6778**	0.127	3.5	ug/L	272	Standard
	Cu	65	2476.2	3.7	**0.6680**	0.027	4.1	ug/L	1002	Standard
	Zn	66	6705.2	3.4	**4.0492**	0.144	3.6	ug/L	3532	Standard
>	**Ge**	72	209044.0	1.0				ug/L	254939	Standard
	As	75	354.1	35.3	**0.5063**	0.122	24.0	ug/L	-224	Standard
	Se	82	193.0	25.5	**1.6432**	0.490	29.8	ug/L	24	Standard
	Se-1	77	1215.7	8.7	**15.9907**	1.629	10.2	ug/L	93	Standard
	Ga	71	195107.0	1.2				mg/L	233175	Standard
	Rb	85	27194.4	1.6				ug/L	20	Standard
>	**Y**	89	205718.1	1.8				ug/L	235100	Standard
	Rh	103	260.7	8.9				ug/L	6	Standard
	Mo	98	3013.8	3.8	**0.8329**	0.035	4.2	ug/L	14	Standard
	Ag	107	48.0	17.1	**0.0017**	0.001	66.9	ug/L	38	Standard
	Cd	111	547.5	2.3	**0.0370**	0.003	8.7	mg/L	439	Standard
	Cd	114	1495.4	2.1	**0.0312**	0.003	9.3	ug/L	1326	Standard
>	**In**	115	687001.9	0.3				ug/L	804157	Standard
	Sn	118	1515.4	1.1	**-0.0954**	0.001	1.2	ug/L	4860	Standard
	Sb	123	722.8	1.7	**0.0637**	0.001	2.2	ug/L	28	Standard
	Ba	135	205300.3	3.5	**43.4208**	1.639	3.8	ug/L	54	Standard
	Ce	140	24326.3	8.2				ug/L	61	Standard
>	**Tb**	159	761872.5	0.8				ug/L	844239	Standard
	Ho	165	398.0	15.9				ug/L	6	Standard
	Tl	203	142.0	5.5	**0.0118**	0.001	6.0	ug/L	10	Standard
	Tl	205	352.0	1.1	**0.0114**	0.000	2.9	ug/L	16	Standard
	Pb	206	3782.1	3.8	**0.3475**	0.020	5.7	ug/L	421	Standard
	Pb	207	2865.9	3.8	**0.3125**	0.018	5.8	ug/L	341	Standard
	Pb	208	13819.1	3.7	**0.3293**	0.019	5.7	ug/L	1571	Standard
	U	238	23188.8	4.3	**0.6424**	0.038	6.0	ug/L	4	Standard
>	**Bi**	209	317196.5	1.7				ug/L	457202	Standard
	Na	23	1099893.1	2.5	**351.1972**	9.797	2.8	mg/L	138	Standard
	Mg	24	4150755.0	4.8	**16.8382**	0.815	4.8	mg/L	134	Standard

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K	39	49431.9	1.6	**4.6960**	0.007	0.2	mg/L	563	Standard
Ca	43	46100.1	3.1	**70.1817**	1.915	2.7	mg/L	127	Standard
Fe	54	3283.0	2.6	**0.4521**	0.021	4.7	mg/L	815	Standard
Fe	57	134860.0	7.9	**0.8408**	0.068	8.1	mg/L	4749	Standard
> **Sc-1**	45	352241.1	1.7				mg/L	367704	Standard
Cl	35	56546460.9	0.8				ug/L	59901	Standard
Kr	83	186.4	24.1				ug/L	50	Standard
Br	81	95407.2	2.4				ug/L	13965	Standard
P	31	164578.7	1.0				ug/L	71952	Standard
S	34	9551882.1	0.6				ug/L	878802	Standard
Sr	88	8927856.3	4.8				ug/L	321	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		81.998	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
> Y	89		87.502	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
> In	115		85.431	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
> Tb	159		90.244	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	69.378
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Na 23 Upper, S, EEE	Na	23	

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Method 6020 - Summary Report

Sample ID: L1205001104
Sample Date/Time: Thursday, May 03, 2012 11:48:23
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: SLP 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	383807.8	1.5	**30229.6722**	323.371	1.1	ug/L	20538	Standard
	Be	9	23.7	6.5	**-0.0004**	0.000	88.8	ug/L	13	Standard
	Al	27	53537.9	4.1	**1.4671**	0.081	5.5	ug/L	25813	Standard
>	**Sc**	45	350459.0	0.8				ug/L	367704	Standard
	Ti	47	1422.7	2.2	**0.7810**	0.023	3.0	ug/L	127	Standard
	V	51	12944.3	10.2	**0.3915**	0.066	16.9	ug/L	6636	Standard
	Cr	52	31395.8	2.4	**0.8926**	0.056	6.3	ug/L	21244	Standard
	Cr	53	24056.4	2.9	**12.9508**	0.312	2.4	ug/L	467	Standard
	Mn	55	2542886.0	4.5	**127.3968**	6.028	4.7	ug/L	8327	Standard
	Co	59	2876.6	4.4	**0.1967**	0.010	5.0	ug/L	123	Standard
	Ni	60	10410.9	5.4	**3.5214**	0.201	5.7	ug/L	272	Standard
	Cu	65	1668.8	6.2	**0.3377**	0.044	13.0	ug/L	1002	Standard
	Zn	66	4575.0	3.2	**2.1184**	0.141	6.7	ug/L	3532	Standard
>	**Ge**	72	210090.2	0.7				ug/L	254939	Standard
	As	75	439.0	45.2	**0.5858**	0.190	32.4	ug/L	-224	Standard
	Se	82	214.7	6.0	**1.8431**	0.122	6.6	ug/L	24	Standard
	Se-1	77	1446.7	2.8	**19.1318**	0.597	3.1	ug/L	93	Standard
	Ga	71	193482.9	0.8				mg/L	233175	Standard
	Rb	85	25529.5	3.0				ug/L	20	Standard
>	**Y**	89	204580.0	1.2				ug/L	235100	Standard
	Rh	103	250.7	10.4				ug/L	6	Standard
	Mo	98	3199.9	2.7	**0.8835**	0.024	2.7	ug/L	14	Standard
	Ag	107	38.3	6.6	**0.0003**	0.000	121.6	ug/L	38	Standard
	Cd	111	522.5	2.8	**0.0308**	0.003	9.3	mg/L	439	Standard
	Cd	114	1333.8	9.8	**0.0170**	0.011	62.3	ug/L	1326	Standard
>	**In**	115	688117.5	0.8				ug/L	804157	Standard
	Sn	118	1102.7	4.7	**-0.1220**	0.004	2.9	ug/L	4860	Standard
	Sb	123	682.5	2.4	**0.0597**	0.001	1.8	ug/L	28	Standard
	Ba	135	200590.0	3.8	**42.3473**	1.381	3.3	ug/L	54	Standard
	Ce	140	5019.5	3.8				ug/L	61	Standard
>	**Tb**	159	772048.3	0.6				ug/L	844239	Standard
	Ho	165	114.0	7.6				ug/L	6	Standard
	Tl	203	137.0	12.7	**0.0114**	0.001	12.5	ug/L	10	Standard
	Tl	205	332.7	7.0	**0.0107**	0.001	7.8	ug/L	16	Standard
	Pb	206	479.0	2.2	**0.0185**	0.002	8.5	ug/L	421	Standard
	Pb	207	411.3	9.3	**0.0175**	0.005	27.2	ug/L	341	Standard
	Pb	208	1883.7	3.7	**0.0183**	0.002	11.6	ug/L	1571	Standard
	U	238	23605.7	5.1	**0.6498**	0.039	5.9	ug/L	4	Standard
>	**Bi**	209	319136.9	1.1				ug/L	457202	Standard
	Na	23	1093597.5	2.3	**350.8942**	6.474	1.8	mg/L	138	Standard
	Mg	24	4162715.9	3.4	**16.9692**	0.457	2.7	mg/L	134	Standard

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K	39	49638.5	1.3	**4.7400**	0.028	0.6	mg/L	563	Standard
Ca	43	45400.6	3.8	**69.4562**	2.154	3.1	mg/L	127	Standard
Fe	54	2716.5	2.7	**0.3525**	0.010	2.7	mg/L	815	Standard
Fe	57	109501.1	5.8	**0.6804**	0.035	5.2	mg/L	4749	Standard
> **Sc-1**	45	350459.0	0.8				mg/L	367704	Standard
Cl	35	56501597.0	1.2				ug/L	59901	Standard
Kr	83	149.6	3.2				ug/L	50	Standard
Br	81	98699.2	2.6				ug/L	13965	Standard
P	31	145379.7	2.2				ug/L	71952	Standard
S	34	9472974.9	2.8				ug/L	878802	Standard
Sr	88	8822511.1	4.2				ug/L	321	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		82.408	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
> Y	89		87.018	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
> In	115		85.570	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
> Tb	159		91.449	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	69.802
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Na 23 Upper, S, EEE	Na	23	

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Method 6020 - Summary Report

Sample ID: L1205001105
Sample Date/Time: Thursday, May 03, 2012 11:51:10
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: SLP 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	22806.8	1.0	**48.5653**	20.905	43.0	ug/L	20538	Standard
	Be	9	51.7	13.6	**0.0051**	0.002	29.4	ug/L	13	Standard
	Al	27	329261.8	4.8	**12.6290**	0.624	4.9	ug/L	25813	Standard
>	**Sc**	45	386545.1	0.5				ug/L	367704	Standard
	Ti	47	268.7	11.3	**0.0721**	0.014	19.2	ug/L	127	Standard
	V	51	9313.7	1.2	**0.1013**	0.001	0.7	ug/L	6636	Standard
	Cr	52	29207.1	1.0	**0.3747**	0.007	1.8	ug/L	21244	Standard
	Cr	53	2004.8	14.9	**0.6591**	0.120	18.2	ug/L	467	Standard
	Mn	55	10687.4	4.9	**0.1945**	0.023	11.9	ug/L	8327	Standard
	Co	59	469.7	41.6	**0.0191**	0.011	58.7	ug/L	123	Standard
	Ni	60	455.3	15.6	**0.0635**	0.020	31.7	ug/L	272	Standard
	Cu	65	544.3	11.9	**-0.1604**	0.020	12.4	ug/L	1002	Standard
	Zn	66	6902.6	2.2	**2.9430**	0.098	3.3	ug/L	3532	Standard
>	**Ge**	72	263729.3	1.1				ug/L	254939	Standard
	As	75	-113.5	65.7	**0.0737**	0.058	78.9	ug/L	-224	Standard
	Se	82	42.5	44.9	**0.0820**	0.144	175.4	ug/L	24	Standard
	Se-1	77	114.0	7.9	**0.1454**	0.087	60.0	ug/L	93	Standard
	Ga	71	246405.5	0.4				mg/L	233175	Standard
	Rb	85	276.0	8.2				ug/L	20	Standard
>	**Y**	89	235746.3	2.0				ug/L	235100	Standard
	Rh	103	5.3	43.3				ug/L	6	Standard
	Mo	98	65.9	16.0	**0.0051**	0.002	41.7	ug/L	14	Standard
	Ag	107	76.3	13.1	**0.0037**	0.001	27.2	ug/L	38	Standard
	Cd	111	636.9	5.1	**0.0291**	0.007	24.1	mg/L	439	Standard
	Cd	114	1841.3	7.3	**0.0304**	0.008	27.5	ug/L	1326	Standard
>	**In**	115	850483.6	2.1				ug/L	804157	Standard
	Sn	118	16857.4	6.4	**0.6839**	0.074	10.9	ug/L	4860	Standard
	Sb	123	293.4	7.0	**0.0167**	0.001	6.9	ug/L	28	Standard
	Ba	135	1389.4	5.2	**0.2265**	0.010	4.6	ug/L	54	Standard
	Ce	140	1697.4	4.6				ug/L	61	Standard
>	**Tb**	159	874105.3	1.2				ug/L	844239	Standard
	Ho	165	24.7	30.7				ug/L	6	Standard
	Tl	203	408.3	21.3	**0.0235**	0.005	22.1	ug/L	10	Standard
	Tl	205	950.7	21.5	**0.0220**	0.005	23.0	ug/L	16	Standard
	Pb	206	897.0	2.5	**0.0340**	0.001	3.5	ug/L	421	Standard
	Pb	207	738.7	4.5	**0.0309**	0.002	7.0	ug/L	341	Standard
	Pb	208	3379.5	3.2	**0.0316**	0.001	4.2	ug/L	1571	Standard
	U	238	411.3	14.7	**0.0091**	0.001	12.0	ug/L	4	Standard
>	**Bi**	209	449774.2	1.3				ug/L	457202	Standard
	Na	23	1261.4	3.9	**0.3275**	0.013	3.9	mg/L	138	Standard
	Mg	24	4551.0	5.8	**0.0154**	0.001	5.9	mg/L	134	Standard

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K	39	700.7	6.0	**0.0032**	0.004	125.3	mg/L	563	Standard
Ca	43	159.3	6.4	**0.0457**	0.015	33.8	mg/L	127	Standard
Fe	54	1118.7	4.7	**0.0447**	0.009	21.1	mg/L	815	Standard
Fe	57	7914.1	3.1	**0.0160**	0.001	7.4	mg/L	4749	Standard
> **Sc-1**	45	386545.1	0.5				mg/L	367704	Standard
Cl	35	779551.6	35.8				ug/L	59901	Standard
Kr	83	58.0	18.5				ug/L	50	Standard
Br	81	18156.9	3.9				ug/L	13965	Standard
P	31	92385.5	1.6				ug/L	71952	Standard
S	34	992211.8	1.9				ug/L	878802	Standard
Sr	88	5218.3	18.5				ug/L	321	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		103.448	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
> Y	89		100.275	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
> In	115		105.761	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
> Tb	159		103.538	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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|	Pb	207	
|	Pb	208	
|	U	238	
|>	Bi	209	98.375
⌈	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1205001301
Sample Date/Time: Thursday, May 03, 2012 11:53:58
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: SLP 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	1870479.3	3.0	**160785.9790**	1861.522	1.2	ug/L	20538	Standard
	Be	9	22.7	21.8	**-0.0004**	0.001	313.2	ug/L	13	Standard
	Al	27	243558.3	4.9	**10.6220**	0.379	3.6	ug/L	25813	Standard
>	**Sc**	45	335340.3	2.0				ug/L	367704	Standard
	Ti	47	1465.4	3.5	**0.8098**	0.018	2.3	ug/L	127	Standard
	V	51	11105.2	4.0	**0.2977**	0.021	7.0	ug/L	6636	Standard
	Cr	52	34357.6	3.1	**1.0912**	0.059	5.4	ug/L	21244	Standard
	Cr	53	3892.5	1.4	**1.9266**	0.059	3.0	ug/L	467	Standard
	Mn	55	48436.0	3.2	**2.2095**	0.083	3.8	ug/L	8327	Standard
	Co	59	3146.7	5.8	**0.2168**	0.012	5.6	ug/L	123	Standard
	Ni	60	17431.4	5.8	**5.9652**	0.358	6.0	ug/L	272	Standard
	Cu	65	5568.4	0.7	**1.9203**	0.018	0.9	ug/L	1002	Standard
	Zn	66	8481.4	3.0	**5.6402**	0.123	2.2	ug/L	3532	Standard
>	**Ge**	72	209123.8	1.4				ug/L	254939	Standard
	As	75	2213.6	8.5	**2.3129**	0.155	6.7	ug/L	-224	Standard
	Se	82	1462.3	4.6	**14.0485**	0.461	3.3	ug/L	24	Standard
	Se-1	77	727.4	1.3	**9.1065**	0.169	1.9	ug/L	93	Standard
	Ga	71	195683.3	2.3				mg/L	233175	Standard
	Rb	85	27076.9	3.4				ug/L	20	Standard
>	**Y**	89	218971.8	1.2				ug/L	235100	Standard
	Rh	103	1148.7	6.8				ug/L	6	Standard
	Mo	98	2801.1	2.6	**0.7565**	0.029	3.8	ug/L	14	Standard
	Ag	107	60.0	6.0	**0.0033**	0.001	18.7	ug/L	38	Standard
	Cd	111	2043.2	4.1	**0.3839**	0.024	6.2	mg/L	439	Standard
	Cd	114	5165.1	1.8	**0.3370**	0.013	3.8	ug/L	1326	Standard
>	**In**	115	702351.9	1.3				ug/L	804157	Standard
	Sn	118	1208.7	20.5	**-0.1169**	0.015	12.4	ug/L	4860	Standard
	Sb	123	719.2	26.5	**0.0617**	0.017	27.7	ug/L	28	Standard
	Ba	135	26865.1	2.0	**5.5493**	0.178	3.2	ug/L	54	Standard
	Ce	140	6516.7	6.0				ug/L	61	Standard
>	**Tb**	159	807695.1	3.0				ug/L	844239	Standard
	Ho	165	474.7	5.9				ug/L	6	Standard
	Tl	203	565.7	25.8	**0.0501**	0.011	22.5	ug/L	10	Standard
	Tl	205	1322.7	23.0	**0.0478**	0.010	20.1	ug/L	16	Standard
	Pb	206	474.7	18.5	**0.0230**	0.008	35.1	ug/L	421	Standard
	Pb	207	389.3	11.3	**0.0198**	0.004	22.0	ug/L	341	Standard
	Pb	208	1758.0	13.3	**0.0199**	0.005	26.7	ug/L	1571	Standard
	U	238	759705.3	3.4	**23.1637**	1.406	6.1	ug/L	4	Standard
>	**Bi**	209	287858.8	2.8				ug/L	457202	Standard
	Na	23	1085367.9	5.1	**363.8426**	12.463	3.4	mg/L	138	Standard
	Mg	24	18080339.6	4.5	**77.0212**	2.258	2.9	mg/L	134	Standard

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K	39	23298.6	1.8	**2.2957**	0.034	1.5	mg/L	563	Standard
Ca	43	52108.1	2.2	**83.3579**	0.880	1.1	mg/L	127	Standard
Fe	54	659.4	4.9	**-0.0141**	0.005	36.8	mg/L	815	Standard
Fe	57	62680.3	5.7	**0.3946**	0.016	4.1	mg/L	4749	Standard
> **Sc-1**	45	335340.3	2.0				mg/L	367704	Standard
Cl	35	6344854.8	2.5				ug/L	59901	Standard
Kr	83	121.1	9.1				ug/L	50	Standard
Br	81	148778.7	3.1				ug/L	13965	Standard
P	31	86638.1	2.1				ug/L	71952	Standard
S	34	65931151.0	2.7				ug/L	878802	Standard
Sr	88	31842656.4	2.2				ug/L	321	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		82.029	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
> Y	89		93.140	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
> In	115		87.340	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
> Tb	159		95.671	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	62.961
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Na 23 Upper, S, EEE	Na	23	

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Method 6020 - Summary Report

Sample ID: L1205001302 WG396746-01
Sample Date/Time: Thursday, May 03, 2012 11:56:45
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: SLP 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	979681.6	1.4	**73232.9352**	832.653	1.1	ug/L	20538	Standard
	Be	9	23.0	23.0	**-0.0010**	0.001	114.1	ug/L	13	Standard
	Al	27	45301.0	3.0	**0.9269**	0.059	6.4	ug/L	25813	Standard
>	**Sc**	45	381019.0	1.9				ug/L	367704	Standard
	Ti	47	1102.7	9.8	**0.5239**	0.042	8.0	ug/L	127	Standard
	V	51	25906.8	1.4	**0.9287**	0.022	2.4	ug/L	6636	Standard
	Cr	52	41596.7	2.2	**1.2611**	0.040	3.2	ug/L	21244	Standard
	Cr	53	3412.4	4.0	**1.4562**	0.093	6.4	ug/L	467	Standard
	Mn	55	23060.9	3.9	**0.8017**	0.038	4.8	ug/L	8327	Standard
	Co	59	2157.2	5.0	**0.1293**	0.007	5.5	ug/L	123	Standard
	Ni	60	11729.9	4.7	**3.5454**	0.114	3.2	ug/L	272	Standard
	Cu	65	3250.3	0.5	**0.8364**	0.024	2.9	ug/L	1002	Standard
	Zn	66	6118.2	4.7	**2.9157**	0.195	6.7	ug/L	3532	Standard
>	**Ge**	72	235067.2	2.6				ug/L	254939	Standard
	As	75	1640.6	4.5	**1.5826**	0.098	6.2	ug/L	-224	Standard
	Se	82	1465.1	1.4	**12.5033**	0.334	2.7	ug/L	24	Standard
	Se-1	77	851.7	3.6	**9.5344**	0.379	4.0	ug/L	93	Standard
	Ga	71	216983.6	1.6				mg/L	233175	Standard
	Rb	85	7071.7	3.6				ug/L	20	Standard
>	**Y**	89	237913.5	1.1				ug/L	235100	Standard
	Rh	103	672.7	6.1				ug/L	6	Standard
	Mo	98	3068.1	4.1	**0.7307**	0.019	2.6	ug/L	14	Standard
	Ag	107	54.3	18.9	**0.0016**	0.001	84.5	ug/L	38	Standard
	Cd	111	3975.6	4.7	**0.7262**	0.027	3.7	mg/L	439	Standard
	Cd	114	10171.2	4.6	**0.6574**	0.027	4.1	ug/L	1326	Standard
>	**In**	115	795684.1	1.6				ug/L	804157	Standard
	Sn	118	1127.4	2.3	**-0.1302**	0.002	1.7	ug/L	4860	Standard
	Sb	123	785.3	2.0	**0.0594**	0.001	1.7	ug/L	28	Standard
	Ba	135	52358.0	2.4	**9.5515**	0.141	1.5	ug/L	54	Standard
	Ce	140	1409.4	11.4				ug/L	61	Standard
>	**Tb**	159	879466.7	2.5				ug/L	844239	Standard
	Ho	165	86.7	14.1				ug/L	6	Standard
	Tl	203	537.0	3.4	**0.0379**	0.001	3.9	ug/L	10	Standard
	Tl	205	1264.1	2.3	**0.0362**	0.001	1.9	ug/L	16	Standard
	Pb	206	356.7	8.7	**0.0021**	0.003	124.6	ug/L	421	Standard
	Pb	207	308.0	12.4	**0.0006**	0.004	598.6	ug/L	341	Standard
	Pb	208	1363.7	2.6	**0.0005**	0.001	120.1	ug/L	1571	Standard
	U	238	403039.2	4.7	**9.7148**	0.420	4.3	ug/L	4	Standard
>	**Bi**	209	363702.5	0.5				ug/L	457202	Standard
	Na	23	239142.6	2.6	**70.5609**	2.031	2.9	mg/L	138	Standard
	Mg	24	11213362.3	3.3	**42.0572**	1.428	3.4	mg/L	134	Standard

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K	39	5569.7	2.5	**0.4370**	0.008	1.9	mg/L	563	Standard
Ca	43	51104.1	3.4	**71.9286**	2.135	3.0	mg/L	127	Standard
Fe	54	815.8	7.3	**-0.0030**	0.010	339.7	mg/L	815	Standard
Fe	57	49415.2	2.6	**0.2646**	0.004	1.4	mg/L	4749	Standard
> **Sc-1**	45	381019.0	1.9				mg/L	367704	Standard
Cl	35	2670526.7	2.0				ug/L	59901	Standard
Kr	83	78.0	14.8				ug/L	50	Standard
Br	81	112129.9	2.7				ug/L	13965	Standard
P	31	124566.2	2.6				ug/L	71952	Standard
S	34	22425945.7	2.7				ug/L	878802	Standard
Sr	88	18107257.7	3.2				ug/L	321	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		92.205	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
> Y	89		101.197	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
> In	115		98.946	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
> Tb	159		104.173	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205001302 WG396746-01
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|	Pb	207	
|	Pb	208	
|	U	238	
|>	Bi	209	79.550
⌈	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1205001302 WG396746-01
Report Date/Time: Thursday, May 03, 2012 11:59:12
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Method 6020 - Summary Report

Sample ID: L1205001302S WG396746-04
Sample Date/Time: Thursday, May 03, 2012 11:59:32
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: SLP 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	968667.4	1.7	**71825.5364**	1340.015	1.9	ug/L	20538	Standard
	Be	9	116339.0	3.4	**25.3317**	0.878	3.5	ug/L	13	Standard
	Al	27	590771.7	4.8	**23.6004**	1.206	5.1	ug/L	25813	Standard
>	**Sc**	45	383924.1	0.6				ug/L	367704	Standard
	Ti	47	1008.7	3.7	**0.4734**	0.021	4.4	ug/L	127	Standard
	V	51	624281.1	2.7	**28.9268**	0.740	2.6	ug/L	6636	Standard
	Cr	52	510256.6	2.4	**27.8319**	0.662	2.4	ug/L	21244	Standard
	Cr	53	56384.8	2.2	**27.2622**	0.584	2.1	ug/L	467	Standard
	Mn	55	640551.3	1.8	**28.3907**	0.512	1.8	ug/L	8327	Standard
	Co	59	406407.8	3.7	**25.6764**	0.947	3.7	ug/L	123	Standard
	Ni	60	91712.8	2.2	**28.0389**	0.661	2.4	ug/L	272	Standard
	Cu	65	69145.5	3.0	**24.4859**	0.767	3.1	ug/L	1002	Standard
	Zn	66	37881.0	1.4	**28.1517**	0.461	1.6	ug/L	3532	Standard
>	**Ge**	72	235953.4	0.5				ug/L	254939	Standard
	As	75	33357.9	2.4	**28.9121**	0.738	2.6	ug/L	-224	Standard
	Se	82	4977.2	4.0	**42.8928**	1.842	4.3	ug/L	24	Standard
	Se-1	77	3015.3	4.9	**36.4608**	1.672	4.6	ug/L	93	Standard
	Ga	71	221091.8	1.9				mg/L	233175	Standard
	Rb	85	6893.6	1.6				ug/L	20	Standard
>	**Y**	89	238079.7	1.9				ug/L	235100	Standard
	Rh	103	668.7	4.5				ug/L	6	Standard
	Mo	98	2943.3	3.0	**0.6949**	0.022	3.2	ug/L	14	Standard
	Ag	107	234233.4	2.5	**29.0012**	0.989	3.4	ug/L	38	Standard
	Cd	111	134151.6	4.3	**27.3657**	1.448	5.3	mg/L	439	Standard
	Cd	114	349984.3	3.4	**25.6707**	1.131	4.4	ug/L	1326	Standard
>	**In**	115	802394.0	1.4				ug/L	804157	Standard
	Sn	118	1499.4	6.1	**-0.1102**	0.006	5.6	ug/L	4860	Standard
	Sb	123	324630.0	3.2	**26.8647**	1.098	4.1	ug/L	28	Standard
	Ba	135	181123.4	3.7	**32.8054**	1.557	4.7	ug/L	54	Standard
	Ce	140	1344.1	2.2				ug/L	61	Standard
>	**Tb**	159	887334.7	2.1				ug/L	844239	Standard
	Ho	165	87.3	34.8				ug/L	6	Standard
	Tl	203	391879.5	2.5	**26.9115**	1.126	4.2	ug/L	10	Standard
	Tl	205	942175.3	3.1	**26.7985**	1.223	4.6	ug/L	16	Standard
	Pb	206	306982.9	3.1	**26.1993**	1.327	5.1	ug/L	421	Standard
	Pb	207	261815.2	2.8	**26.9562**	1.292	4.8	ug/L	341	Standard
	Pb	208	1190510.8	3.2	**26.5730**	1.279	4.8	ug/L	1571	Standard
	U	238	1724070.0	4.0	**40.9286**	2.127	5.2	ug/L	4	Standard
>	**Bi**	209	369522.9	2.7				ug/L	457202	Standard
	Na	23	233407.0	2.8	**68.3378**	2.032	3.0	mg/L	138	Standard
	Mg	24	10945277.8	4.0	**40.7369**	1.652	4.1	mg/L	134	Standard

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K	39	5433.6	2.8	**0.4212**	0.013	3.1	mg/L	563	Standard
Ca	43	50745.0	4.7	**70.8806**	3.410	4.8	mg/L	127	Standard
Fe	54	778.1	4.6	**-0.0103**	0.005	52.5	mg/L	815	Standard
Fe	57	49414.6	5.4	**0.2623**	0.015	5.9	mg/L	4749	Standard
Sc-1	45	383924.1	0.6				mg/L	367704	Standard
Cl	35	2570250.2	1.6				ug/L	59901	Standard
Kr	83	84.2	2.3				ug/L	50	Standard
Br	81	113473.4	2.1				ug/L	13965	Standard
P	31	127622.7	1.9				ug/L	71952	Standard
S	34	22042032.3	0.3				ug/L	878802	Standard
Sr	88	17941210.0	3.1				ug/L	321	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		92.553	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		101.267	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		99.781	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		105.105	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205001302S WG396746-04
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	80.823
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1205001302S WG396746-04
Report Date/Time: Thursday, May 03, 2012 12:01:59
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Method 6020 - Summary Report

Sample ID: L1205001302SD WG396746-05
Sample Date/Time: Thursday, May 03, 2012 12:02:19
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: SLP 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	952989.0	1.9	**71791.9566**	1999.996	2.8	ug/L	20538	Standard
	Be	9	113063.9	2.9	**25.0124**	0.891	3.6	ug/L	13	Standard
	Al	27	665299.5	5.4	**27.1507**	1.847	6.8	ug/L	25813	Standard
>	**Sc**	45	377990.5	2.3				ug/L	367704	Standard
	Ti	47	1249.4	3.7	**0.6001**	0.016	2.6	ug/L	127	Standard
	V	51	604921.3	4.6	**28.0727**	1.106	3.9	ug/L	6636	Standard
	Cr	52	499388.2	4.9	**27.2677**	1.217	4.5	ug/L	21244	Standard
	Cr	53	55551.2	5.8	**26.9040**	1.371	5.1	ug/L	467	Standard
	Mn	55	626257.3	4.6	**27.8013**	0.999	3.6	ug/L	8327	Standard
	Co	59	391753.5	3.8	**24.7950**	0.685	2.8	ug/L	123	Standard
	Ni	60	89716.2	4.7	**27.4779**	1.146	4.2	ug/L	272	Standard
	Cu	65	67162.0	4.3	**23.8177**	0.850	3.6	ug/L	1002	Standard
	Zn	66	39294.3	3.9	**29.3310**	0.887	3.0	ug/L	3532	Standard
>	**Ge**	72	235486.8	1.3				ug/L	254939	Standard
	As	75	33100.9	3.6	**28.7451**	0.903	3.1	ug/L	-224	Standard
	Se	82	4962.7	3.4	**42.8542**	1.546	3.6	ug/L	24	Standard
	Se-1	77	2943.6	3.6	**35.6435**	1.172	3.3	ug/L	93	Standard
	Ga	71	218092.8	2.0				mg/L	233175	Standard
	Rb	85	7050.3	1.6				ug/L	20	Standard
>	**Y**	89	243724.0	0.7				ug/L	235100	Standard
	Rh	103	672.7	9.5				ug/L	6	Standard
	Mo	98	2961.6	3.5	**0.6956**	0.032	4.6	ug/L	14	Standard
	Ag	107	225786.2	3.8	**27.8065**	1.355	4.9	ug/L	38	Standard
	Cd	111	130760.0	4.1	**26.5263**	1.368	5.2	mg/L	439	Standard
	Cd	114	339747.1	4.4	**24.7833**	1.363	5.5	ug/L	1326	Standard
>	**In**	115	806762.9	1.1				ug/L	804157	Standard
	Sn	118	1522.7	4.0	**-0.1094**	0.004	3.7	ug/L	4860	Standard
	Sb	123	318918.7	4.0	**26.2514**	1.338	5.1	ug/L	28	Standard
	Ba	135	177968.1	3.8	**32.0586**	1.548	4.8	ug/L	54	Standard
	Ce	140	2630.2	5.8				ug/L	61	Standard
>	**Tb**	159	878458.8	2.4				ug/L	844239	Standard
	Ho	165	96.7	8.6				ug/L	6	Standard
	Tl	203	380630.1	2.6	**26.7493**	1.207	4.5	ug/L	10	Standard
	Tl	205	915253.1	3.4	**26.6473**	1.534	5.8	ug/L	16	Standard
	Pb	206	300306.2	3.9	**26.2311**	1.608	6.1	ug/L	421	Standard
	Pb	207	253640.3	3.7	**26.7306**	1.664	6.2	ug/L	341	Standard
	Pb	208	1163051.3	3.4	**26.5725**	1.559	5.9	ug/L	1571	Standard
	U	238	1675873.0	5.3	**40.7349**	3.084	7.6	ug/L	4	Standard
>	**Bi**	209	361130.1	2.8				ug/L	457202	Standard
	Na	23	229488.5	2.9	**68.2628**	2.385	3.5	mg/L	138	Standard
	Mg	24	10903325.4	4.6	**41.2304**	2.108	5.1	mg/L	134	Standard

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K	39	5388.3	2.0	**0.4249**	0.017	3.9	mg/L	563	Standard
Ca	43	50259.3	3.4	**71.3294**	2.986	4.2	mg/L	127	Standard
Fe	54	839.0	3.8	**0.0020**	0.006	298.3	mg/L	815	Standard
Fe	57	50450.6	4.3	**0.2733**	0.014	5.3	mg/L	4749	Standard
Sc-1	45	377990.5	2.3				mg/L	367704	Standard
Cl	35	2517017.7	0.4				ug/L	59901	Standard
Kr	83	84.2	8.2				ug/L	50	Standard
Br	81	106648.7	3.4				ug/L	13965	Standard
P	31	126048.3	2.0				ug/L	71952	Standard
S	34	21973660.8	1.7				ug/L	878802	Standard
Sr	88	17877162.6	4.1				ug/L	321	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		92.370	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		103.668	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		100.324	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		104.053	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	78.987
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1205001701
Sample Date/Time: Thursday, May 03, 2012 12:05:06
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: SLP 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	73050.8	3.3	**3222.9727**	42.450	1.3	ug/L	20538	Standard
	Be	9	705.0	8.5	**0.1294**	0.009	6.6	ug/L	13	Standard
	Al	27	19559376.8	7.5	**716.4828**	28.793	4.0	ug/L	25813	Standard
>	**Sc**	45	434908.5	3.5				ug/L	367704	Standard
	Ti	47	20249.6	5.6	**9.5668**	0.397	4.2	ug/L	127	Standard
	V	51	40677.0	5.5	**1.4434**	0.070	4.8	ug/L	6636	Standard
	Cr	52	57533.2	5.3	**1.8615**	0.108	5.8	ug/L	21244	Standard
	Cr	53	5238.9	2.4	**2.1095**	0.032	1.5	ug/L	467	Standard
	Mn	55	240721.9	6.8	**9.5541**	0.546	5.7	ug/L	8327	Standard
	Co	59	12615.3	4.9	**0.7180**	0.031	4.2	ug/L	123	Standard
	Ni	60	14852.6	4.8	**4.0822**	0.236	5.8	ug/L	272	Standard
	Cu	65	2089.5	8.5	**0.3470**	0.044	12.6	ug/L	1002	Standard
	Zn	66	33679.8	4.4	**22.4001**	0.744	3.3	ug/L	3532	Standard
>	**Ge**	72	259254.3	2.3				ug/L	254939	Standard
	As	75	187.3	5.1	**0.3085**	0.005	1.8	ug/L	-224	Standard
	Se	82	93.2	2.8	**0.4886**	0.027	5.5	ug/L	24	Standard
	Se-1	77	121.3	6.3	**0.2506**	0.065	26.0	ug/L	93	Standard
	Ga	71	246302.0	2.6				mg/L	233175	Standard
	Rb	85	45359.2	4.7				ug/L	20	Standard
>	**Y**	89	280148.8	1.9				ug/L	235100	Standard
	Rh	103	9.3	24.7				ug/L	6	Standard
	Mo	98	167.8	2.6	**0.0262**	0.002	6.5	ug/L	14	Standard
	Ag	107	133.3	6.8	**0.0096**	0.001	13.6	ug/L	38	Standard
	Cd	111	689.1	4.4	**0.0323**	0.003	8.2	mg/L	439	Standard
	Cd	114	1784.3	6.2	**0.0201**	0.005	24.5	ug/L	1326	Standard
>	**In**	115	896247.2	2.3				ug/L	804157	Standard
	Sn	118	8569.1	4.3	**0.2295**	0.012	5.3	ug/L	4860	Standard
	Sb	123	451.5	3.7	**0.0273**	0.000	1.8	ug/L	28	Standard
	Ba	135	62371.6	4.5	**10.1025**	0.392	3.9	ug/L	54	Standard
	Ce	140	250113.8	6.1				ug/L	61	Standard
>	**Tb**	159	918876.8	1.9				ug/L	844239	Standard
	Ho	165	4466.0	8.7				ug/L	6	Standard
	Tl	203	542.0	13.8	**0.0305**	0.003	11.4	ug/L	10	Standard
	Tl	205	1316.7	10.1	**0.0299**	0.002	7.9	ug/L	16	Standard
	Pb	206	7231.1	4.0	**0.4703**	0.008	1.8	ug/L	421	Standard
	Pb	207	5997.2	4.6	**0.4679**	0.012	2.5	ug/L	341	Standard
	Pb	208	27852.3	5.0	**0.4725**	0.014	2.9	ug/L	1571	Standard
	U	238	5635.0	3.0	**0.1092**	0.001	0.6	ug/L	4	Standard
>	**Bi**	209	456830.1	2.4				ug/L	457202	Standard
	Na	23	9012.0	6.3	**2.2896**	0.067	2.9	mg/L	138	Standard
	Mg	24	96326.0	4.5	**0.3150**	0.004	1.1	mg/L	134	Standard

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K	39	5495.7	2.6	**0.3700**	0.010	2.8	mg/L	563	Standard
Ca	43	897.4	5.1	**0.9329**	0.018	1.9	mg/L	127	Standard
Fe	54	5582.6	4.5	**0.6746**	0.013	1.9	mg/L	815	Standard
Fe	57	167406.6	7.6	**0.8447**	0.037	4.4	mg/L	4749	Standard
> **Sc-1**	45	434908.5	3.5				mg/L	367704	Standard
Cl	35	858480.1	3.6				ug/L	59901	Standard
Kr	83	65.8	4.2				ug/L	50	Standard
Br	81	33494.4	4.2				ug/L	13965	Standard
P	31	112008.3	4.1				ug/L	71952	Standard
S	34	922609.8	5.3				ug/L	878802	Standard
Sr	88	208179.2	4.8				ug/L	321	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		101.693	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
> Y	89		119.161	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
> In	115		111.452	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
> Tb	159		108.841	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	99.919
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: May 04, 2012

Method 6020 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Thursday, May 03, 2012 12:07:55
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: SLP 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	21507.6	1.7	**67.3329**	12.511	18.6	ug/L	20538	Standard
	Be	9	16.7	28.4	**-0.0022**	0.001	52.1	ug/L	13	Standard
	Al	27	98613339.6	6.5	**4364.9286**	250.251	5.7	ug/L	25813	Standard
>	**Sc**	45	360562.6	0.9				ug/L	367704	Standard
	Ti	47	231831.0	4.4	**114.9741**	4.179	3.6	ug/L	127	Standard
	V	51	7370.1	4.3	**0.0391**	0.011	29.4	ug/L	6636	Standard
	Cr	52	22544.1	1.9	**0.1077**	0.014	12.6	ug/L	21244	Standard
	Cr	53	4187.2	10.7	**1.7240**	0.188	10.9	ug/L	467	Standard
	Mn	55	7088.0	2.0	**0.0682**	0.004	5.8	ug/L	8327	Standard
	Co	59	2493.9	6.6	**0.1423**	0.010	6.9	ug/L	123	Standard
	Ni	60	1499.7	4.4	**0.3753**	0.016	4.4	ug/L	272	Standard
	Cu	65	1830.4	7.3	**0.2892**	0.041	14.3	ug/L	1002	Standard
	Zn	66	7007.6	2.8	**3.3276**	0.114	3.4	ug/L	3532	Standard
>	**Ge**	72	248269.0	1.0				ug/L	254939	Standard
	As	75	-106.7	51.3	**0.0742**	0.045	60.8	ug/L	-224	Standard
	Se	82	47.4	17.7	**0.1436**	0.066	46.3	ug/L	24	Standard
	Se-1	77	262.7	4.8	**1.9869**	0.155	7.8	ug/L	93	Standard
	Ga	71	227501.5	2.8				mg/L	233175	Standard
	Rb	85	3950.5	4.0				ug/L	20	Standard
>	**Y**	89	232799.1	1.5				ug/L	235100	Standard
	Rh	103	6.7	45.8				ug/L	6	Standard
	Mo	98	425342.7	3.6	**97.1514**	3.855	4.0	ug/L	14	Standard
	Ag	107	126.0	14.3	**0.0097**	0.002	20.5	ug/L	38	Standard
	Cd	111	1146.6	2.0	**0.1300**	0.008	6.1	mg/L	439	Standard
	Cd	114	3826.0	3.5	**0.1713**	0.011	6.5	ug/L	1326	Standard
>	**In**	115	841049.2	1.5				ug/L	804157	Standard
	Sn	118	2876.3	5.4	**-0.0417**	0.009	22.0	ug/L	4860	Standard
	Sb	123	694.9	6.2	**0.0487**	0.004	8.4	ug/L	28	Standard
	Ba	135	173.7	6.3	**0.0191**	0.002	11.1	ug/L	54	Standard
	Ce	140	2161.5	5.6				ug/L	61	Standard
>	**Tb**	159	892174.4	1.1				ug/L	844239	Standard
	Ho	165	26.7	22.9				ug/L	6	Standard
	Tl	203	381.7	5.8	**0.0231**	0.001	5.3	ug/L	10	Standard
	Tl	205	943.4	6.0	**0.0229**	0.001	5.5	ug/L	16	Standard
	Pb	206	814.4	4.7	**0.0313**	0.003	9.6	ug/L	421	Standard
	Pb	207	668.3	6.3	**0.0280**	0.003	12.5	ug/L	341	Standard
	Pb	208	3092.8	3.7	**0.0294**	0.002	7.8	ug/L	1571	Standard
	U	238	183.3	44.1	**0.0048**	0.002	34.0	ug/L	4	Standard
>	**Bi**	209	426816.3	0.6				ug/L	457202	Standard
	Na	23	36080.3	4.1	**11.2135**	0.399	3.6	mg/L	138	Standard
	Mg	24	1258119.5	4.4	**4.9837**	0.184	3.7	mg/L	134	Standard

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K	39	50831.2	3.2	**4.7172**	0.121	2.6	mg/L	563	Standard
Ca	43	9845.9	5.5	**14.5022**	0.754	5.2	mg/L	127	Standard
Fe	54	67007.3	6.4	**11.6362**	0.699	6.0	mg/L	815	Standard
Fe	57	1993870.4	5.3	**12.5532**	0.563	4.5	mg/L	4749	Standard
> **Sc-1**	45	360562.6	0.9				mg/L	367704	Standard
Cl	35	9276437.3	0.4				ug/L	59901	Standard
Kr	83	58.0	4.1				ug/L	50	Standard
Br	81	13729.9	2.5				ug/L	13965	Standard
P	31	7782533.6	2.5				ug/L	71952	Standard
S	34	1806532.1	0.9				ug/L	878802	Standard
Sr	88	2384.9	32.5				ug/L	321	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	87.299		
> Sc	45			
Ti	47	114.974		
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
> Ge	72		97.384	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
> Y	89		99.021	
Rh	103			
Mo	98	97.151		
Ag	107			
Cd	111			
Cd	114			
> In	115		104.588	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
> Tb	159		105.678	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: QC Std 4
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Pb	207		
Pb	208		
U	238		
Bi	209		93.354
Na	23	89.708	
Mg	24	99.674	
K	39	94.345	
Ca	43	96.682	
Fe	54	93.089	
Fe	57	100.425	
Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	Se-1	77	
QC Std 4	Cd	111	

Approved: May 04, 2012

Method 6020 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Thursday, May 03, 2012 12:10:43
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: SLP 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	21563.7	1.4	**56.8118**	15.249	26.8	ug/L	20538	Standard
	Be	9	485570.1	4.0	**111.6082**	3.912	3.5	ug/L	13	Standard
	Al	27	100924757.4	6.3	**4428.9448**	252.613	5.7	ug/L	25813	Standard
>	**Sc**	45	363709.7	0.6				ug/L	367704	Standard
	Ti	47	229148.9	3.9	**114.7517**	3.934	3.4	ug/L	127	Standard
	V	51	2184078.4	3.9	**97.7816**	3.191	3.3	ug/L	6636	Standard
	Cr	52	1866198.0	1.3	**100.4657**	1.761	1.8	ug/L	21244	Standard
	Cr	53	221245.1	5.2	**103.2408**	5.261	5.1	ug/L	467	Standard
	Mn	55	2380466.2	3.6	**101.8400**	3.590	3.5	ug/L	8327	Standard
	Co	59	1671181.7	4.5	**101.3292**	4.204	4.1	ug/L	123	Standard
	Ni	60	343015.2	4.9	**100.7637**	4.052	4.0	ug/L	272	Standard
	Cu	65	286715.9	4.7	**98.4025**	3.704	3.8	ug/L	1002	Standard
	Zn	66	140289.2	4.1	**105.0524**	3.777	3.6	ug/L	3532	Standard
>	**Ge**	72	245902.7	1.5				ug/L	254939	Standard
	As	75	126961.0	3.4	**105.1439**	2.521	2.4	ug/L	-224	Standard
	Se	82	13307.9	2.1	**110.4256**	1.728	1.6	ug/L	24	Standard
	Se-1	77	8819.9	3.0	**104.3969**	3.590	3.4	ug/L	93	Standard
	Ga	71	227289.3	2.2				mg/L	233175	Standard
	Rb	85	3996.5	3.2				ug/L	20	Standard
>	**Y**	89	228611.8	0.7				ug/L	235100	Standard
	Rh	103	86.0	8.1				ug/L	6	Standard
	Mo	98	427586.9	4.0	**98.3124**	4.224	4.3	ug/L	14	Standard
	Ag	107	903928.4	6.1	**107.4980**	6.925	6.4	ug/L	38	Standard
	Cd	111	553107.1	3.9	**108.6171**	4.704	4.3	mg/L	439	Standard
	Cd	114	1462067.9	4.6	**103.2761**	5.279	5.1	ug/L	1326	Standard
>	**In**	115	835442.6	0.8				ug/L	804157	Standard
	Sn	118	3597.1	1.6	**-0.0026**	0.004	171.4	ug/L	4860	Standard
	Sb	123	1347549.2	3.8	**107.1119**	4.687	4.4	ug/L	28	Standard
	Ba	135	538537.0	4.7	**93.6838**	4.801	5.1	ug/L	54	Standard
	Ce	140	2256.8	7.5				ug/L	61	Standard
>	**Tb**	159	880144.4	1.0				ug/L	844239	Standard
	Ho	165	41.3	26.6				ug/L	6	Standard
	Tl	203	1709264.4	2.4	**100.8040**	2.283	2.3	ug/L	10	Standard
	Tl	205	4164045.1	3.2	**101.7143**	3.075	3.0	ug/L	16	Standard
	Pb	206	1363186.0	4.7	**99.9759**	4.612	4.6	ug/L	421	Standard
	Pb	207	1165620.6	4.7	**103.1392**	4.677	4.5	ug/L	341	Standard
	Pb	208	5374591.6	4.4	**103.1036**	4.387	4.3	ug/L	1571	Standard
	U	238	5302883.8	6.5	**108.1045**	6.808	6.3	ug/L	4	Standard
>	**Bi**	209	430007.5	0.2				ug/L	457202	Standard
	Na	23	36059.6	3.9	**11.1095**	0.368	3.3	mg/L	138	Standard
	Mg	24	1247489.8	5.0	**4.8988**	0.215	4.4	mg/L	134	Standard

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	K	39	51387.7	2.0	**4.7280**	0.079	1.7	mg/L	563	Standard
	Ca	43	9920.6	5.8	**14.4842**	0.772	5.3	mg/L	127	Standard
	Fe	54	67002.6	4.8	**11.5338**	0.491	4.3	mg/L	815	Standard
	Fe	57	2001984.7	6.6	**12.4955**	0.765	6.1	mg/L	4749	Standard
>	**Sc-1**	45	363709.7	0.6				mg/L	367704	Standard
	Cl	35	9383981.4	1.7				ug/L	59901	Standard
	Kr	83	64.4	9.9				ug/L	50	Standard
	Br	81	13397.9	1.5				ug/L	13965	Standard
	P	31	7801438.3	2.6				ug/L	71952	Standard
	S	34	1804513.5	2.5				ug/L	878802	Standard
	Sr	88	1630.8	4.4				ug/L	321	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	88.579		
>	Sc	45			
	Ti	47	114.752		
	V	51	97.782		
	Cr	52	100.466		
	Cr	53			
	Mn	55	101.840		
	Co	59	101.329		
	Ni	60	100.764		
	Cu	65	98.402		
	Zn	66	105.052		
>	Ge	72		96.456	
	As	75	105.144		
	Se	82	110.426		
	Se-1	77	104.397		
	Ga	71			
	Rb	85			
>	Y	89		97.240	
	Rh	103			
	Mo	98	98.312		
	Ag	107	107.498		
	Cd	111	108.617		
	Cd	114			
>	In	115		103.890	
	Sn	118			
	Sb	123	107.112		
	Ba	135	93.684		
	Ce	140			
>	Tb	159		104.253	
	Ho	165			
	Tl	203	100.804		
	Tl	205			
	Pb	206	99.976		

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	Pb	207	103.139	
	Pb	208	103.104	
	U	238	108.105	
>	Bi	209		94.052
	Na	23	88.876	
	Mg	24	97.977	
	K	39	94.560	
	Ca	43	96.562	
	Fe	54	92.271	
	Fe	57	99.964	
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, May 03, 2012 12:13:33
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: SLP 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	20950.8	0.3	**-16.8655**	12.723	75.4	ug/L	20538	Standard
	Be	9	241181.3	3.9	**54.6314**	2.395	4.4	ug/L	13	Standard
	Al	27	1137256.1	5.5	**48.2316**	2.931	6.1	ug/L	25813	Standard
>	**Sc**	45	369142.1	0.5				ug/L	367704	Standard
	Ti	47	208017.1	4.1	**101.4652**	3.845	3.8	ug/L	127	Standard
	V	51	1237956.5	3.6	**53.8609**	1.813	3.4	ug/L	6636	Standard
	Cr	52	1008242.0	5.6	**52.3392**	2.893	5.5	ug/L	21244	Standard
	Cr	53	113991.5	5.8	**51.7018**	2.866	5.5	ug/L	467	Standard
	Mn	55	1321090.6	5.8	**54.9382**	2.966	5.4	ug/L	8327	Standard
	Co	59	864234.9	5.4	**51.0364**	2.585	5.1	ug/L	123	Standard
	Ni	60	178572.1	4.9	**51.0717**	2.277	4.5	ug/L	272	Standard
	Cu	65	147979.2	3.9	**49.3128**	1.850	3.8	ug/L	1002	Standard
	Zn	66	68396.2	4.6	**48.8608**	2.265	4.6	ug/L	3532	Standard
>	**Ge**	72	252440.3	0.8				ug/L	254939	Standard
	As	75	62590.7	3.5	**50.5828**	1.777	3.5	ug/L	-224	Standard
	Se	82	6729.3	4.1	**54.2668**	2.206	4.1	ug/L	24	Standard
	Se-1	77	4283.6	4.2	**48.7842**	1.830	3.8	ug/L	93	Standard
	Ga	71	237308.7	0.7				mg/L	233175	Standard
	Rb	85	1192.7	5.6				ug/L	20	Standard
>	**Y**	89	240751.2	2.7				ug/L	235100	Standard
	Rh	103	34.7	18.5				ug/L	6	Standard
	Mo	98	443869.2	4.0	**99.9325**	4.009	4.0	ug/L	14	Standard
	Ag	107	510660.3	4.8	**59.4596**	2.853	4.8	ug/L	38	Standard
	Cd	111	276675.0	3.4	**53.1525**	1.837	3.5	mg/L	439	Standard
	Cd	114	728200.4	3.5	**50.3146**	1.808	3.6	ug/L	1326	Standard
>	**In**	115	853105.0	0.1				ug/L	804157	Standard
	Sn	118	969168.0	4.6	**49.9993**	2.312	4.6	ug/L	4860	Standard
	Sb	123	679856.9	4.1	**52.9087**	2.159	4.1	ug/L	28	Standard
	Ba	135	276464.8	3.8	**47.0851**	1.802	3.8	ug/L	54	Standard
	Ce	140	1030.0	5.0				ug/L	61	Standard
>	**Tb**	159	893787.4	1.0				ug/L	844239	Standard
	Ho	165	28.7	17.6				ug/L	6	Standard
	Tl	203	876100.8	2.2	**50.6863**	1.147	2.3	ug/L	10	Standard
	Tl	205	2174338.7	1.7	**52.1029**	0.956	1.8	ug/L	16	Standard
	Pb	206	701546.8	2.9	**50.4604**	1.509	3.0	ug/L	421	Standard
	Pb	207	581666.0	3.8	**50.4758**	1.972	3.9	ug/L	341	Standard
	Pb	208	2691016.0	3.5	**50.6280**	1.815	3.6	ug/L	1571	Standard
	U	238	2654599.5	5.0	**53.0921**	2.704	5.1	ug/L	4	Standard
>	**Bi**	209	438355.4	0.1				ug/L	457202	Standard
	Na	23	15489.9	2.9	**4.6804**	0.160	3.4	mg/L	138	Standard
	Mg	24	1264591.1	5.1	**4.8946**	0.271	5.5	mg/L	134	Standard

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	K	39	52312.9	3.6	**4.7433**	0.197	4.2	mg/L	563	Standard
	Ca	43	3407.1	6.7	**4.7869**	0.357	7.5	mg/L	127	Standard
	Fe	54	28436.8	5.2	**4.7441**	0.279	5.9	mg/L	815	Standard
	Fe	57	919611.9	6.4	**5.6409**	0.386	6.8	mg/L	4749	Standard
>	**Sc-1**	45	369142.1	0.5				mg/L	367704	Standard
	Cl	35	236382.4	23.3				ug/L	59901	Standard
	Kr	83	58.4	16.1				ug/L	50	Standard
	Br	81	13952.1	1.5				ug/L	13965	Standard
	P	31	87635.1	2.1				ug/L	71952	Standard
	S	34	940752.4	1.3				ug/L	878802	Standard
	Sr	88	1112.7	49.7				ug/L	321	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	96.463		
>	Sc	45			
	Ti	47	101.465		
	V	51	107.722		
	Cr	52	104.678		
	Cr	53			
	Mn	55	109.876		
	Co	59	102.073		
	Ni	60	102.143		
	Cu	65	98.626		
	Zn	66	97.722		
>	Ge	72		99.020	
	As	75	101.166		
	Se	82	108.534		
	Se-1	77	97.568		
	Ga	71			
	Rb	85			
>	Y	89		102.404	
	Rh	103			
	Mo	98	99.933		
	Ag	107	118.919		
	Cd	111	106.305		
	Cd	114			
>	In	115		106.087	
	Sn	118	99.999		
	Sb	123	105.817		
	Ba	135	94.170		
	Ce	140			
>	Tb	159		105.869	
	Ho	165			
	Tl	203	101.373		
	Tl	205			
	Pb	206	100.921		

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Pb	207	100.952		
Pb	208	101.256		
U	238	106.184		
> Bi	209		95.878	
Na	23	93.607		
Mg	24	97.892		
K	39	94.866		
Ca	43	95.738		
Fe	54	94.882		
Fe	57	112.817		
> Sc-1	45			
Cl	35			
Kr	83			
Br	81			
P	31			
S	34			
Sr	88			

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Ag	107	
QC Std 6	Fe	57	

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Method 6020 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, May 03, 2012 12:16:20
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: SLP 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	20242.2	3.0	**-15.6697**	54.476	347.7	ug/L	20538	Standard
	Be	9	46.7	4.5	**0.0049**	0.000	4.1	ug/L	13	Standard
	Al	27	15959.1	1.8	**-0.2565**	0.030	11.7	ug/L	25813	Standard
>	**Sc**	45	356509.7	2.9				ug/L	367704	Standard
	Ti	47	126.0	15.1	**0.0110**	0.010	87.6	ug/L	127	Standard
	V	51	6247.1	1.0	**-0.0024**	0.004	180.7	ug/L	6636	Standard
	Cr	52	19638.7	0.4	**-0.0168**	0.009	54.1	ug/L	21244	Standard
	Cr	53	634.0	2.5	**0.0884**	0.005	5.8	ug/L	467	Standard
	Mn	55	1546.7	1.8	**-0.1652**	0.001	0.4	ug/L	8327	Standard
	Co	59	177.3	9.6	**0.0034**	0.001	28.3	ug/L	123	Standard
	Ni	60	122.0	18.3	**-0.0248**	0.006	26.0	ug/L	272	Standard
	Cu	65	1053.7	5.6	**0.0352**	0.020	56.7	ug/L	1002	Standard
	Zn	66	1176.7	2.9	**-1.0512**	0.021	2.0	ug/L	3532	Standard
>	**Ge**	72	240984.4	0.8				ug/L	254939	Standard
	As	75	-187.8	14.6	**0.0032**	0.023	702.8	ug/L	-224	Standard
	Se	82	35.1	20.2	**0.0510**	0.059	116.0	ug/L	24	Standard
	Se-1	77	90.0	8.4	**-0.0267**	0.095	356.7	ug/L	93	Standard
	Ga	71	226337.7	1.7				mg/L	233175	Standard
	Rb	85	18.7	6.2				ug/L	20	Standard
>	**Y**	89	222201.1	1.7				ug/L	235100	Standard
	Rh	103	3.3	34.6				ug/L	6	Standard
	Mo	98	151.8	27.5	**0.0255**	0.010	39.9	ug/L	14	Standard
	Ag	107	121.3	35.3	**0.0094**	0.005	54.9	ug/L	38	Standard
	Cd	111	527.8	7.1	**0.0110**	0.009	83.0	mg/L	439	Standard
	Cd	114	1344.4	1.3	**-0.0014**	0.001	38.7	ug/L	1326	Standard
>	**In**	115	827141.5	1.8				ug/L	804157	Standard
	Sn	118	1899.5	10.6	**-0.0913**	0.011	11.9	ug/L	4860	Standard
	Sb	123	703.2	14.2	**0.0503**	0.009	16.9	ug/L	28	Standard
	Ba	135	74.7	26.5	**0.0022**	0.003	150.2	ug/L	54	Standard
	Ce	140	59.3	8.5				ug/L	61	Standard
>	**Tb**	159	840897.1	1.5				ug/L	844239	Standard
	Ho	165	10.0	20.0				ug/L	6	Standard
	Tl	203	197.7	14.9	**0.0119**	0.002	14.3	ug/L	10	Standard
	Tl	205	464.0	2.3	**0.0109**	0.000	3.0	ug/L	16	Standard
	Pb	206	492.3	5.7	**0.0066**	0.002	34.0	ug/L	421	Standard
	Pb	207	372.0	1.2	**0.0008**	0.001	84.2	ug/L	341	Standard
	Pb	208	1830.4	4.3	**0.0041**	0.002	45.6	ug/L	1571	Standard
	U	238	735.0	10.8	**0.0158**	0.002	11.1	ug/L	4	Standard
>	**Bi**	209	437409.1	1.1				ug/L	457202	Standard
	Na	23	159.3	12.4	**0.0108**	0.006	59.8	mg/L	138	Standard
	Mg	24	350.3	15.6	**0.0000**	0.000	87751.0	mg/L	134	Standard

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	K	39	580.7	6.4	**-0.0030**	0.004	122.0	mg/L	563	Standard
	Ca	43	86.7	5.3	**-0.0451**	0.008	17.3	mg/L	127	Standard
	Fe	54	739.2	5.7	**-0.0072**	0.008	115.1	mg/L	815	Standard
	Fe	57	5461.7	3.0	**0.0043**	0.002	43.8	mg/L	4749	Standard
>	**Sc-1**	45	356509.7	2.9				mg/L	367704	Standard
	Cl	35	162142.8	5.2				ug/L	59901	Standard
	Kr	83	52.2	1.5				ug/L	50	Standard
	Br	81	13331.9	1.1				ug/L	13965	Standard
	P	31	75624.4	3.0				ug/L	71952	Standard
	S	34	947889.2	1.4				ug/L	878802	Standard
	Sr	88	370.0	4.3				ug/L	321	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		94.526	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		94.513	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		102.858	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		99.604	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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Pb	207	
Pb	208	
U	238	
> Bi	209	95.671
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	

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: Thursday, May 03, 2012 12:19:38
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: SLP 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	20868.7	2.5	**-11.8608**	40.761	343.7	ug/L	20538	Standard
	Be	9	37.0	35.4	**0.0024**	0.003	119.7	ug/L	13	Standard
	Al	27	52509.9	7.7	**1.3164**	0.196	14.9	ug/L	25813	Standard
>	**Sc**	45	366605.6	1.7				ug/L	367704	Standard
	Ti	47	112.7	10.7	**0.0027**	0.005	201.7	ug/L	127	Standard
	V	51	16513.2	5.1	**0.4482**	0.029	6.5	ug/L	6636	Standard
	Cr	52	37490.4	3.8	**0.9200**	0.051	5.6	ug/L	21244	Standard
	Cr	53	2346.2	4.9	**0.8759**	0.039	4.5	ug/L	467	Standard
	Mn	55	14502.9	2.7	**0.3852**	0.008	2.1	ug/L	8327	Standard
	Co	59	6961.3	5.0	**0.4119**	0.015	3.8	ug/L	123	Standard
	Ni	60	5752.8	3.0	**1.6193**	0.029	1.8	ug/L	272	Standard
	Cu	65	2624.6	4.1	**0.5631**	0.025	4.4	ug/L	1002	Standard
	Zn	66	11071.4	4.5	**6.4255**	0.268	4.2	ug/L	3532	Standard
>	**Ge**	72	247408.9	1.4				ug/L	254939	Standard
	As	75	253.3	30.2	**0.3694**	0.061	16.4	ug/L	-224	Standard
	Se	82	78.2	14.1	**0.3992**	0.085	21.2	ug/L	24	Standard
	Se-1	77	126.7	1.8	**0.3808**	0.040	10.6	ug/L	93	Standard
	Ga	71	232549.8	1.0				mg/L	233175	Standard
	Rb	85	20.0	17.3				ug/L	20	Standard
>	**Y**	89	233460.3	1.1				ug/L	235100	Standard
	Rh	103	8.0	25.0				ug/L	6	Standard
	Mo	98	61.6	34.5	**0.0041**	0.005	112.9	ug/L	14	Standard
	Ag	107	3865.5	5.5	**0.4461**	0.017	3.8	ug/L	38	Standard
	Cd	111	1868.0	6.8	**0.2665**	0.018	6.9	mg/L	439	Standard
	Cd	114	4945.6	6.9	**0.2458**	0.018	7.3	ug/L	1326	Standard
>	**In**	115	850478.6	1.7				ug/L	804157	Standard
	Sn	118	990.7	3.0	**-0.1413**	0.002	1.6	ug/L	4860	Standard
	Sb	123	5563.5	6.3	**0.4280**	0.020	4.7	ug/L	28	Standard
	Ba	135	4221.6	6.9	**0.7100**	0.038	5.3	ug/L	54	Standard
	Ce	140	52.7	8.8				ug/L	61	Standard
>	**Tb**	159	860174.0	1.1				ug/L	844239	Standard
	Ho	165	11.3	36.7				ug/L	6	Standard
	Tl	203	1456.7	8.8	**0.0833**	0.006	7.8	ug/L	10	Standard
	Tl	205	3536.4	6.9	**0.0830**	0.005	6.0	ug/L	16	Standard
	Pb	206	3119.3	4.5	**0.1918**	0.008	4.1	ug/L	421	Standard
	Pb	207	2579.6	7.5	**0.1886**	0.015	7.8	ug/L	341	Standard
	Pb	208	11976.2	6.4	**0.1912**	0.012	6.3	ug/L	1571	Standard
	U	238	20554.0	5.8	**0.4052**	0.021	5.1	ug/L	4	Standard
>	**Bi**	209	445749.4	1.2				ug/L	457202	Standard
	Na	23	181.3	20.4	**0.0160**	0.010	64.7	mg/L	138	Standard
	Mg	24	611.3	63.5	**0.0010**	0.001	152.5	mg/L	134	Standard

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K	39	588.7	2.9	**-0.0038**	0.001	30.7	mg/L	563	Standard
Ca	43	106.7	8.7	**-0.0196**	0.012	60.3	mg/L	127	Standard
Fe	54	864.6	3.7	**0.0107**	0.003	31.8	mg/L	815	Standard
Fe	57	5721.1	5.8	**0.0049**	0.002	31.4	mg/L	4749	Standard
> **Sc-1**	45	366605.6	1.7				mg/L	367704	Standard
Cl	35	148933.5	3.0				ug/L	59901	Standard
Kr	83	55.6	1.8				ug/L	50	Standard
Br	81	13518.7	1.3				ug/L	13965	Standard
P	31	89423.2	2.4				ug/L	71952	Standard
S	34	1004025.5	2.1				ug/L	878802	Standard
Sr	88	1024.0	55.3				ug/L	321	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	112.041		
Cr	52	115.004		
Cr	53			
Mn	55	77.034		
Co	59	102.972		
Ni	60	101.209		
Cu	65	70.393		
Zn	66	102.807		
> Ge	72		97.046	
As	75	92.353		
Se	82	99.806		
Se-1	77	95.199		
Ga	71			
Rb	85			
> Y	89		99.302	
Rh	103			
Mo	98			
Ag	107	111.529		
Cd	111	111.055		
Cd	114			
> In	115		105.760	
Sn	118			
Sb	123	106.993		
Ba	135	94.669		
Ce	140			
> Tb	159		101.888	
Ho	165			
Tl	203	104.132		
Tl	205			
Pb	206			

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Pb	207			
Pb	208	95.618		
U	238	101.308		
> Bi	209			97.495
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			

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1205001702
Sample Date/Time: Thursday, May 03, 2012 12:27:28
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: SLP 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	28880.8	1.9	**387.6688**	39.758	10.3	ug/L	20538	Standard
	Be	9	627.7	5.9	**0.1222**	0.003	2.7	ug/L	13	Standard
	Al	27	3282332.0	6.4	**127.0899**	3.876	3.0	ug/L	25813	Standard
>	**Sc**	45	409017.7	3.8				ug/L	367704	Standard
	Ti	47	2526.2	4.2	**1.1804**	0.062	5.2	ug/L	127	Standard
	V	51	22676.8	4.4	**0.7040**	0.052	7.3	ug/L	6636	Standard
	Cr	52	37887.0	3.9	**0.9026**	0.100	11.1	ug/L	21244	Standard
	Cr	53	1880.8	2.1	**0.6431**	0.027	4.2	ug/L	467	Standard
	Mn	55	102730.3	3.0	**4.0605**	0.156	3.8	ug/L	8327	Standard
	Co	59	11485.4	2.7	**0.6713**	0.023	3.4	ug/L	123	Standard
	Ni	60	4933.5	3.4	**1.3519**	0.035	2.6	ug/L	272	Standard
	Cu	65	2524.5	1.8	**0.5122**	0.003	0.6	ug/L	1002	Standard
	Zn	66	18944.2	3.2	**12.1177**	0.441	3.6	ug/L	3532	Standard
>	**Ge**	72	252339.5	1.4				ug/L	254939	Standard
	As	75	302.8	13.9	**0.4059**	0.036	8.8	ug/L	-224	Standard
	Se	82	64.9	7.6	**0.2795**	0.047	17.0	ug/L	24	Standard
	Se-1	77	112.3	7.5	**0.1851**	0.117	63.0	ug/L	93	Standard
	Ga	71	237205.1	2.4				mg/L	233175	Standard
	Rb	85	117123.7	1.8				ug/L	20	Standard
>	**Y**	89	270046.9	2.4				ug/L	235100	Standard
	Rh	103	3.3	34.6				ug/L	6	Standard
	Mo	98	532.5	4.5	**0.1096**	0.003	2.7	ug/L	14	Standard
	Ag	107	105.3	15.2	**0.0070**	0.002	23.3	ug/L	38	Standard
	Cd	111	6295.2	3.3	**1.1137**	0.052	4.7	mg/L	439	Standard
	Cd	114	16496.7	6.4	**1.0409**	0.077	7.4	ug/L	1326	Standard
>	**In**	115	856234.1	2.2				ug/L	804157	Standard
	Sn	118	5187.6	3.7	**0.0749**	0.010	13.7	ug/L	4860	Standard
	Sb	123	556.9	2.4	**0.0370**	0.001	2.0	ug/L	28	Standard
	Ba	135	95002.2	4.1	**16.1183**	0.722	4.5	ug/L	54	Standard
	Ce	140	190387.1	4.7				ug/L	61	Standard
>	**Tb**	159	899053.0	1.4				ug/L	844239	Standard
	Ho	165	7939.4	5.4				ug/L	6	Standard
	Tl	203	875.0	2.4	**0.0497**	0.002	3.5	ug/L	10	Standard
	Tl	205	2049.5	2.0	**0.0475**	0.000	0.1	ug/L	16	Standard
	Pb	206	3326.4	7.1	**0.2039**	0.013	6.6	ug/L	421	Standard
	Pb	207	2691.6	3.9	**0.1957**	0.005	2.7	ug/L	341	Standard
	Pb	208	12642.7	4.3	**0.2011**	0.008	3.9	ug/L	1571	Standard
	U	238	5528.7	2.3	**0.1087**	0.002	2.1	ug/L	4	Standard
>	**Bi**	209	450566.3	1.8				ug/L	457202	Standard
	Na	23	17287.2	4.5	**4.7137**	0.086	1.8	mg/L	138	Standard
	Mg	24	176080.6	4.5	**0.6136**	0.004	0.7	mg/L	134	Standard

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K	39	10549.7	2.5	**0.8161**	0.028	3.4	mg/L	563	Standard
Ca	43	749.4	3.3	**0.8108**	0.071	8.8	mg/L	127	Standard
Fe	54	5663.1	1.0	**0.7394**	0.025	3.4	mg/L	815	Standard
Fe	57	166337.5	5.9	**0.8946**	0.022	2.4	mg/L	4749	Standard
> **Sc-1**	45	409017.7	3.8				mg/L	367704	Standard
Cl	35	358319.4	1.5				ug/L	59901	Standard
Kr	83	64.4	12.3				ug/L	50	Standard
Br	81	28416.0	3.5				ug/L	13965	Standard
P	31	135884.7	3.3				ug/L	71952	Standard
S	34	1465596.7	2.2				ug/L	878802	Standard
Sr	88	243488.5	2.7				ug/L	321	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		98.980	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		114.865	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		106.476	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		106.493	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	98.549
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1205001703
Sample Date/Time: Thursday, May 03, 2012 12:30:15
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: SLP 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	26740.2	1.2	**271.8562**	19.423	7.1	ug/L	20538	Standard
	Be	9	36.3	5.7	**0.0015**	0.000	28.5	ug/L	13	Standard
	Al	27	126172.1	2.8	**4.0519**	0.173	4.3	ug/L	25813	Standard
>	**Sc**	45	401096.9	0.9				ug/L	367704	Standard
	Ti	47	1524.7	21.2	**0.6977**	0.159	22.8	ug/L	127	Standard
	V	51	28691.8	1.5	**0.9782**	0.029	3.0	ug/L	6636	Standard
	Cr	52	34393.3	2.8	**0.7329**	0.059	8.0	ug/L	21244	Standard
	Cr	53	1260.7	2.9	**0.3656**	0.023	6.2	ug/L	467	Standard
	Mn	55	790458.7	2.4	**33.0966**	1.164	3.5	ug/L	8327	Standard
	Co	59	120184.4	2.8	**7.1590**	0.260	3.6	ug/L	123	Standard
	Ni	60	47677.3	3.7	**13.7231**	0.652	4.7	ug/L	272	Standard
	Cu	65	858.4	4.3	**-0.0443**	0.016	36.3	ug/L	1002	Standard
	Zn	66	6790.2	2.3	**3.1266**	0.157	5.0	ug/L	3532	Standard
>	**Ge**	72	250127.6	1.2				ug/L	254939	Standard
	As	75	32338.4	1.6	**26.4587**	0.722	2.7	ug/L	-224	Standard
	Se	82	115.4	4.1	**0.6967**	0.045	6.4	ug/L	24	Standard
	Se-1	77	138.3	8.4	**0.5005**	0.120	24.0	ug/L	93	Standard
	Ga	71	232198.7	1.8				mg/L	233175	Standard
	Rb	85	32944.4	0.9				ug/L	20	Standard
>	**Y**	89	242546.6	2.4				ug/L	235100	Standard
	Rh	103	70.7	11.4				ug/L	6	Standard
	Mo	98	14135.9	4.0	**3.1645**	0.155	4.9	ug/L	14	Standard
	Ag	107	65.3	13.7	**0.0024**	0.001	47.4	ug/L	38	Standard
	Cd	111	887.6	5.6	**0.0766**	0.013	16.7	mg/L	439	Standard
	Cd	114	2334.6	3.1	**0.0638**	0.007	11.6	ug/L	1326	Standard
>	**In**	115	855746.9	2.0				ug/L	804157	Standard
	Sn	118	1601.4	1.2	**-0.1101**	0.003	2.5	ug/L	4860	Standard
	Sb	123	14718.3	3.0	**1.1364**	0.048	4.3	ug/L	28	Standard
	Ba	135	170582.5	3.8	**28.9762**	1.567	5.4	ug/L	54	Standard
	Ce	140	9148.8	6.1				ug/L	61	Standard
>	**Tb**	159	888158.0	0.1				ug/L	844239	Standard
	Ho	165	156.7	13.3				ug/L	6	Standard
	Tl	203	422.7	5.0	**0.0254**	0.001	3.5	ug/L	10	Standard
	Tl	205	1004.7	4.2	**0.0243**	0.001	2.8	ug/L	16	Standard
	Pb	206	1472.4	2.6	**0.0792**	0.004	5.5	ug/L	421	Standard
	Pb	207	1220.4	10.5	**0.0766**	0.012	15.8	ug/L	341	Standard
	Pb	208	5564.4	4.8	**0.0765**	0.006	8.0	ug/L	1571	Standard
	U	238	339421.2	4.1	**6.9278**	0.372	5.4	ug/L	4	Standard
>	**Bi**	209	429792.6	1.6				ug/L	457202	Standard
	Na	23	15424.5	1.1	**4.2860**	0.083	1.9	mg/L	138	Standard
	Mg	24	770329.6	3.0	**2.7435**	0.106	3.8	mg/L	134	Standard

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K	39	6458.7	2.3	**0.4874**	0.015	3.2	mg/L	563	Standard
Ca	43	29653.0	3.0	**39.5742**	1.462	3.7	mg/L	127	Standard
Fe	54	3274.0	1.4	**0.3787**	0.012	3.2	mg/L	815	Standard
Fe	57	105108.7	5.3	**0.5661**	0.037	6.5	mg/L	4749	Standard
Sc-1	45	401096.9	0.9				mg/L	367704	Standard
Cl	35	781361.2	0.5				ug/L	59901	Standard
Kr	83	62.9	6.2				ug/L	50	Standard
Br	81	38920.9	1.1				ug/L	13965	Standard
P	31	124294.6	2.3				ug/L	71952	Standard
S	34	1202148.1	1.4				ug/L	878802	Standard
Sr	88	2103596.1	2.8				ug/L	321	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		98.113	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		103.167	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		106.415	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		105.202	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	94.005
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: May 04, 2012

Method 6020 - Summary Report

Sample ID: L1205001704
Sample Date/Time: Thursday, May 03, 2012 12:33:02
Number of Replicates: 3
Autosampler Position: 225
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP 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	174357.9	4.0	**9478.2630**	386.817	4.1	ug/L	20538	Standard
	Be	9	99.0	5.2	**0.0121**	0.001	8.7	ug/L	13	Standard
	Al	27	6253520.5	7.7	**218.1879**	15.753	7.2	ug/L	25813	Standard
>	**Sc**	45	455509.9	0.6				ug/L	367704	Standard
	Ti	47	7762.0	6.1	**3.6524**	0.188	5.2	ug/L	127	Standard
	V	51	32032.8	3.5	**1.0823**	0.028	2.6	ug/L	6636	Standard
	Cr	52	34165.2	3.7	**0.6649**	0.056	8.4	ug/L	21244	Standard
	Cr	53	2536.9	6.0	**0.9165**	0.063	6.8	ug/L	467	Standard
	Mn	55	1566853.1	4.5	**63.7874**	1.874	2.9	ug/L	8327	Standard
	Co	59	3275.7	4.2	**0.1818**	0.005	2.6	ug/L	123	Standard
	Ni	60	3797.8	4.1	**1.0026**	0.025	2.5	ug/L	272	Standard
	Cu	65	1241.1	5.9	**0.0722**	0.020	27.6	ug/L	1002	Standard
	Zn	66	15503.9	5.2	**9.3039**	0.440	4.7	ug/L	3532	Standard
>	**Ge**	72	257976.4	1.8				ug/L	254939	Standard
	As	75	1286.7	5.0	**1.1756**	0.034	2.9	ug/L	-224	Standard
	Se	82	228.0	1.6	**1.5613**	0.061	3.9	ug/L	24	Standard
	Se-1	77	140.7	10.2	**0.4796**	0.178	37.2	ug/L	93	Standard
	Ga	71	241603.0	2.2				mg/L	233175	Standard
	Rb	85	35734.1	0.9				ug/L	20	Standard
>	**Y**	89	254997.9	0.3				ug/L	235100	Standard
	Rh	103	65.3	1.8				ug/L	6	Standard
	Mo	98	1899.1	5.9	**0.4051**	0.026	6.3	ug/L	14	Standard
	Ag	107	70.0	6.2	**0.0027**	0.001	21.8	ug/L	38	Standard
	Cd	111	763.7	1.4	**0.0487**	0.003	5.4	mg/L	439	Standard
	Cd	114	2115.0	4.0	**0.0447**	0.007	16.6	ug/L	1326	Standard
>	**In**	115	879378.2	1.4				ug/L	804157	Standard
	Sn	118	5385.6	3.6	**0.0778**	0.009	11.5	ug/L	4860	Standard
	Sb	123	1089.8	4.9	**0.0761**	0.003	4.1	ug/L	28	Standard
	Ba	135	409883.7	4.2	**67.7267**	2.668	3.9	ug/L	54	Standard
	Ce	140	92984.9	5.0				ug/L	61	Standard
>	**Tb**	159	909725.6	1.7				ug/L	844239	Standard
	Ho	165	1760.1	5.0				ug/L	6	Standard
	Tl	203	369.7	5.3	**0.0213**	0.001	7.0	ug/L	10	Standard
	Tl	205	941.4	2.1	**0.0216**	0.001	3.5	ug/L	16	Standard
	Pb	206	7113.0	3.2	**0.4689**	0.027	5.8	ug/L	421	Standard
	Pb	207	5881.5	4.6	**0.4651**	0.034	7.3	ug/L	341	Standard
	Pb	208	27237.5	4.3	**0.4682**	0.032	6.8	ug/L	1571	Standard
	U	238	5890.8	5.6	**0.1157**	0.009	7.7	ug/L	4	Standard
>	**Bi**	209	451187.3	2.3				ug/L	457202	Standard
	Na	23	24835.7	4.9	**6.0916**	0.266	4.4	mg/L	138	Standard
	Mg	24	601170.0	5.0	**1.8841**	0.084	4.4	mg/L	134	Standard

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K	39	16529.0	4.1	**1.1709**	0.044	3.8	mg/L	563	Standard
Ca	43	12988.2	6.5	**15.1491**	0.909	6.0	mg/L	127	Standard
Fe	54	3741.3	4.9	**0.3817**	0.023	5.9	mg/L	815	Standard
Fe	57	109416.6	6.0	**0.5160**	0.030	5.8	mg/L	4749	Standard
> **Sc-1**	45	455509.9	0.6				mg/L	367704	Standard
Cl	35	1077318.4	1.3				ug/L	59901	Standard
Kr	83	60.0	6.2				ug/L	50	Standard
Br	81	130619.9	2.9				ug/L	13965	Standard
P	31	153029.2	3.5				ug/L	71952	Standard
S	34	1412406.4	1.2				ug/L	878802	Standard
Sr	88	2588005.3	5.3				ug/L	321	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		101.192	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
> Y	89		108.463	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
> In	115		109.354	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
> Tb	159		107.757	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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|	Pb	207	
|	Pb	208	
|	U	238	
|>	Bi	209	98.684
⌈	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1205001705
Sample Date/Time: Thursday, May 03, 2012 12:35:49
Number of Replicates: 3
Autosampler Position: 226
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP 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	29370.4	1.4	**410.7158**	32.983	8.0	ug/L	20538	Standard
	Be	9	75.0	10.7	**0.0092**	0.002	16.4	ug/L	13	Standard
	Al	27	1520552.3	8.1	**58.0982**	5.058	8.7	ug/L	25813	Standard
>	**Sc**	45	411165.2	0.9				ug/L	367704	Standard
	Ti	47	4966.9	31.7	**2.4087**	0.806	33.5	ug/L	127	Standard
	V	51	56429.1	4.2	**2.2141**	0.100	4.5	ug/L	6636	Standard
	Cr	52	49692.8	3.6	**1.5636**	0.090	5.8	ug/L	21244	Standard
	Cr	53	2374.2	1.5	**0.8825**	0.020	2.2	ug/L	467	Standard
	Mn	55	3615915.6	3.8	**152.9110**	6.014	3.9	ug/L	8327	Standard
	Co	59	11595.4	4.4	**0.6870**	0.030	4.4	ug/L	123	Standard
	Ni	60	12701.3	6.0	**3.6268**	0.221	6.1	ug/L	272	Standard
	Cu	65	6011.5	4.8	**1.7100**	0.095	5.6	ug/L	1002	Standard
	Zn	66	16950.5	2.8	**10.8050**	0.306	2.8	ug/L	3532	Standard
>	**Ge**	72	248974.9	1.5				ug/L	254939	Standard
	As	75	2961.9	4.1	**2.5810**	0.098	3.8	ug/L	-224	Standard
	Se	82	96.8	26.9	**0.5482**	0.214	39.0	ug/L	24	Standard
	Se-1	77	118.7	12.0	**0.2768**	0.171	61.9	ug/L	93	Standard
	Ga	71	234020.8	0.8				mg/L	233175	Standard
	Rb	85	62802.0	3.4				ug/L	20	Standard
>	**Y**	89	246129.3	1.3				ug/L	235100	Standard
	Rh	103	114.0	19.0				ug/L	6	Standard
	Mo	98	5713.3	1.0	**1.2975**	0.022	1.7	ug/L	14	Standard
	Ag	107	144.0	3.0	**0.0118**	0.001	4.8	ug/L	38	Standard
	Cd	111	813.4	8.3	**0.0652**	0.013	19.9	mg/L	439	Standard
	Cd	114	2145.3	2.4	**0.0535**	0.004	7.8	ug/L	1326	Standard
>	**In**	115	839560.2	0.8				ug/L	804157	Standard
	Sn	118	1969.5	4.0	**-0.0891**	0.005	5.2	ug/L	4860	Standard
	Sb	123	52576.5	3.7	**4.1523**	0.162	3.9	ug/L	28	Standard
	Ba	135	301397.5	3.4	**52.1650**	1.936	3.7	ug/L	54	Standard
	Ce	140	64628.5	5.5				ug/L	61	Standard
>	**Tb**	159	885739.7	0.6				ug/L	844239	Standard
	Ho	165	1152.7	4.6				ug/L	6	Standard
	Tl	203	449.7	5.8	**0.0273**	0.002	6.2	ug/L	10	Standard
	Tl	205	1016.0	7.1	**0.0249**	0.002	7.8	ug/L	16	Standard
	Pb	206	81819.6	4.0	**6.0515**	0.283	4.7	ug/L	421	Standard
	Pb	207	67155.3	4.0	**5.9896**	0.276	4.6	ug/L	341	Standard
	Pb	208	308857.0	3.8	**5.9732**	0.261	4.4	ug/L	1571	Standard
	U	238	51553.7	5.5	**1.0658**	0.064	6.0	ug/L	4	Standard
>	**Bi**	209	424595.3	0.7				ug/L	457202	Standard
	Na	23	16592.4	4.3	**4.4998**	0.214	4.8	mg/L	138	Standard
	Mg	24	1336004.7	5.0	**4.6428**	0.261	5.6	mg/L	134	Standard

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K	39	13829.0	4.3	**1.0814**	0.054	5.0	mg/L	563	Standard
Ca	43	35394.7	4.9	**46.1117**	2.542	5.5	mg/L	127	Standard
Fe	54	14392.2	7.0	**2.0802**	0.167	8.0	mg/L	815	Standard
Fe	57	477747.9	5.7	**2.6148**	0.167	6.4	mg/L	4749	Standard
> **Sc-1**	45	411165.2	0.9				mg/L	367704	Standard
Cl	35	810318.4	1.0				ug/L	59901	Standard
Kr	83	60.9	14.6				ug/L	50	Standard
Br	81	37451.7	6.4				ug/L	13965	Standard
P	31	172998.6	3.7				ug/L	71952	Standard
S	34	1974250.1	0.4				ug/L	878802	Standard
Sr	88	3531445.5	4.1				ug/L	321	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		97.661	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		104.691	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		104.402	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		104.916	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	92.868
	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	

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: L1205001706
Sample Date/Time: Thursday, May 03, 2012 12:38:36
Number of Replicates: 3
Autosampler Position: 227
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP 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	34978.7	1.0	**916.7944**	24.598	2.7	ug/L	20538	Standard
	Be	9	311.0	7.4	**0.0599**	0.004	6.5	ug/L	13	Standard
	Al	27	2731195.5	5.5	**109.7565**	6.160	5.6	ug/L	25813	Standard
>	**Sc**	45	393889.3	1.5				ug/L	367704	Standard
	Ti	47	4651.4	3.6	**2.2774**	0.066	2.9	ug/L	127	Standard
	V	51	26264.1	2.2	**0.8910**	0.018	2.0	ug/L	6636	Standard
	Cr	52	41905.6	3.1	**1.1732**	0.028	2.4	ug/L	21244	Standard
	Cr	53	3431.1	6.0	**1.3895**	0.057	4.1	ug/L	467	Standard
	Mn	55	1282772.6	5.0	**54.7843**	2.755	5.0	ug/L	8327	Standard
	Co	59	81094.8	5.1	**4.9110**	0.237	4.8	ug/L	123	Standard
	Ni	60	25124.2	6.5	**7.3243**	0.413	5.6	ug/L	272	Standard
	Cu	65	1234.7	7.4	**0.0902**	0.031	34.1	ug/L	1002	Standard
	Zn	66	24103.9	5.6	**16.4255**	0.988	6.0	ug/L	3532	Standard
>	**Ge**	72	245877.1	2.4				ug/L	254939	Standard
	As	75	5769.5	4.7	**4.9345**	0.230	4.7	ug/L	-224	Standard
	Se	82	424.6	4.4	**3.2876**	0.214	6.5	ug/L	24	Standard
	Se-1	77	236.7	4.7	**1.7052**	0.082	4.8	ug/L	93	Standard
	Ga	71	226113.4	3.5				mg/L	233175	Standard
	Rb	85	63983.5	2.7				ug/L	20	Standard
>	**Y**	89	380870.3	2.6				ug/L	235100	Standard
	Rh	103	108.7	16.5				ug/L	6	Standard
	Mo	98	584.5	5.0	**0.1248**	0.006	5.2	ug/L	14	Standard
	Ag	107	73.7	10.5	**0.0036**	0.001	24.9	ug/L	38	Standard
	Cd	111	690.9	4.0	**0.0421**	0.006	14.2	mg/L	439	Standard
	Cd	114	1940.5	6.5	**0.0400**	0.009	23.5	ug/L	1326	Standard
>	**In**	115	834115.7	0.4				ug/L	804157	Standard
	Sn	118	7415.8	3.3	**0.2000**	0.013	6.6	ug/L	4860	Standard
	Sb	123	552.6	4.6	**0.0378**	0.002	5.5	ug/L	28	Standard
	Ba	135	375032.7	2.6	**65.3319**	1.776	2.7	ug/L	54	Standard
	Ce	140	744960.2	3.8				ug/L	61	Standard
>	**Tb**	159	917873.0	0.3				ug/L	844239	Standard
	Ho	165	31613.7	5.6				ug/L	6	Standard
	Tl	203	869.7	0.9	**0.0544**	0.001	1.8	ug/L	10	Standard
	Tl	205	2098.8	2.9	**0.0536**	0.002	3.6	ug/L	16	Standard
	Pb	206	3601.8	4.7	**0.2490**	0.013	5.1	ug/L	421	Standard
	Pb	207	2946.3	4.0	**0.2426**	0.009	3.8	ug/L	341	Standard
	Pb	208	13621.0	3.6	**0.2444**	0.009	3.5	ug/L	1571	Standard
	U	238	3997.2	5.4	**0.0868**	0.004	5.1	ug/L	4	Standard
>	**Bi**	209	408923.0	0.9				ug/L	457202	Standard
	Na	23	96228.7	2.2	**27.4400**	0.690	2.5	mg/L	138	Standard
	Mg	24	1241489.8	4.3	**4.5025**	0.187	4.2	mg/L	134	Standard

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K	39	16505.0	2.7	**1.3613**	0.033	2.5	mg/L	563	Standard
Ca	43	23098.9	4.2	**31.3485**	1.184	3.8	mg/L	127	Standard
Fe	54	107351.9	7.2	**17.1323**	1.209	7.1	mg/L	815	Standard
Fe	57	3217675.8	5.9	**18.5603**	0.984	5.3	mg/L	4749	Standard
> **Sc-1**	45	393889.3	1.5				mg/L	367704	Standard
Cl	35	7076243.3	1.0				ug/L	59901	Standard
Kr	83	79.3	10.9				ug/L	50	Standard
Br	81	236517.7	2.2				ug/L	13965	Standard
P	31	149360.6	3.7				ug/L	71952	Standard
S	34	1975833.4	1.4				ug/L	878802	Standard
Sr	88	4430095.4	5.4				ug/L	321	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		96.446	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
> Y	89		162.003	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
> In	115		103.725	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
> Tb	159		108.722	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	89.440
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Y 89 Int Std for sample	Y	89	Rerun sample

Sample ID: L1205001706
Report Date/Time: Thursday, May 03, 2012 12:41:04
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Method 6020 - Summary Report

Sample ID: L1205001707
Sample Date/Time: Thursday, May 03, 2012 12:41:24
Number of Replicates: 3
Autosampler Position: 228
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP 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	58942.8	2.3	**1991.8351**	24.913	1.3	ug/L	20538	Standard
	Be	9	1441.4	3.5	**0.2510**	0.005	2.0	ug/L	13	Standard
	Al	27	40515982.4	6.3	**1378.2927**	64.804	4.7	ug/L	25813	Standard
>	**Sc**	45	468824.8	1.7				ug/L	367704	Standard
	Ti	47	29723.8	5.0	**13.9313**	0.658	4.7	ug/L	127	Standard
	V	51	90926.9	5.5	**3.5459**	0.210	5.9	ug/L	6636	Standard
	Cr	52	78515.9	4.8	**2.9049**	0.174	6.0	ug/L	21244	Standard
	Cr	53	10428.3	1.2	**4.3656**	0.093	2.1	ug/L	467	Standard
	Mn	55	524356.3	3.9	**20.8782**	0.688	3.3	ug/L	8327	Standard
	Co	59	28667.8	5.1	**1.6248**	0.076	4.7	ug/L	123	Standard
	Ni	60	13424.6	4.0	**3.6444**	0.123	3.4	ug/L	272	Standard
	Cu	65	4073.2	3.9	**0.9823**	0.046	4.7	ug/L	1002	Standard
	Zn	66	94105.4	4.7	**65.4493**	2.941	4.5	ug/L	3532	Standard
>	**Ge**	72	261850.1	1.0				ug/L	254939	Standard
	As	75	1856.6	3.1	**1.6038**	0.052	3.2	ug/L	-224	Standard
	Se	82	655.6	2.6	**4.8737**	0.142	2.9	ug/L	24	Standard
	Se-1	77	268.0	5.5	**1.8857**	0.178	9.4	ug/L	93	Standard
	Ga	71	246109.2	2.1				mg/L	233175	Standard
	Rb	85	194423.0	3.3				ug/L	20	Standard
>	**Y**	89	318809.8	1.7				ug/L	235100	Standard
	Rh	103	23.3	42.3				ug/L	6	Standard
	Mo	98	504.1	7.0	**0.1012**	0.007	7.2	ug/L	14	Standard
	Ag	107	151.3	7.4	**0.0120**	0.001	9.9	ug/L	38	Standard
	Cd	111	988.0	3.6	**0.0921**	0.006	6.2	mg/L	439	Standard
	Cd	114	2592.9	3.1	**0.0781**	0.004	5.7	ug/L	1326	Standard
>	**In**	115	872363.3	0.6				ug/L	804157	Standard
	Sn	118	17947.3	3.2	**0.7160**	0.024	3.4	ug/L	4860	Standard
	Sb	123	1400.2	1.8	**0.1004**	0.002	1.9	ug/L	28	Standard
	Ba	135	315877.2	4.1	**52.6050**	1.894	3.6	ug/L	54	Standard
	Ce	140	633134.1	6.1				ug/L	61	Standard
>	**Tb**	159	921030.1	0.9				ug/L	844239	Standard
	Ho	165	11499.7	5.6				ug/L	6	Standard
	Tl	203	1830.1	0.3	**0.1076**	0.001	0.9	ug/L	10	Standard
	Tl	205	4530.0	5.0	**0.1096**	0.006	5.1	ug/L	16	Standard
	Pb	206	27201.8	4.5	**1.9519**	0.072	3.7	ug/L	421	Standard
	Pb	207	22326.5	4.5	**1.9299**	0.072	3.7	ug/L	341	Standard
	Pb	208	103841.2	4.5	**1.9475**	0.073	3.7	ug/L	1571	Standard
	U	238	15376.8	5.8	**0.3122**	0.015	4.9	ug/L	4	Standard
>	**Bi**	209	433140.6	0.9				ug/L	457202	Standard
	Na	23	112542.1	3.4	**26.9533**	0.460	1.7	mg/L	138	Standard
	Mg	24	586718.8	4.2	**1.7864**	0.047	2.6	mg/L	134	Standard

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K	39	47969.8	2.2	**3.4079**	0.019	0.6	mg/L	563	Standard
Ca	43	2259.5	6.1	**2.4137**	0.113	4.7	mg/L	127	Standard
Fe	54	10501.4	5.6	**1.2803**	0.061	4.7	mg/L	815	Standard
Fe	57	335119.3	5.2	**1.5957**	0.057	3.6	mg/L	4749	Standard
> **Sc-1**	45	468824.8	1.7				mg/L	367704	Standard
Cl	35	5106087.7	2.2				ug/L	59901	Standard
Kr	83	66.2	13.7				ug/L	50	Standard
Br	81	369692.5	2.6				ug/L	13965	Standard
P	31	174510.8	3.7				ug/L	71952	Standard
S	34	1920598.3	1.2				ug/L	878802	Standard
Sr	88	726268.3	4.2				ug/L	321	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		102.711	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
> Y	89		135.606	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
> In	115		108.482	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
> Tb	159		109.096	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	94.737
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Y 89 Int Std for sample	Y	89	Rerun sample

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Method 6020 - Summary Report

Sample ID: L1205001708
Sample Date/Time: Thursday, May 03, 2012 12:44:11
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: SLP 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	104199.6	2.5	**5170.1516**	115.241	2.2	ug/L	20538	Standard
	Be	9	452.7	3.8	**0.0793**	0.002	3.1	ug/L	13	Standard
	Al	27	5467880.2	5.8	**195.7530**	9.588	4.9	ug/L	25813	Standard
>	**Sc**	45	443684.9	0.9				ug/L	367704	Standard
	Ti	47	9542.3	2.7	**4.4501**	0.052	1.2	ug/L	127	Standard
	V	51	20252.8	2.9	**0.5681**	0.020	3.5	ug/L	6636	Standard
	Cr	52	34940.9	1.8	**0.6840**	0.021	3.0	ug/L	21244	Standard
	Cr	53	2081.5	3.9	**0.7025**	0.019	2.7	ug/L	467	Standard
	Mn	55	4827166.1	5.4	**194.6494**	6.568	3.4	ug/L	8327	Standard
	Co	59	78677.6	4.2	**4.4855**	0.097	2.2	ug/L	123	Standard
	Ni	60	9340.5	3.8	**2.5247**	0.043	1.7	ug/L	272	Standard
	Cu	65	1321.4	6.6	**0.0934**	0.022	23.3	ug/L	1002	Standard
	Zn	66	24287.1	2.7	**15.4855**	0.086	0.6	ug/L	3532	Standard
>	**Ge**	72	261052.2	2.4				ug/L	254939	Standard
	As	75	658.5	3.8	**0.6748**	0.024	3.6	ug/L	-224	Standard
	Se	82	76.0	8.5	**0.3487**	0.045	12.9	ug/L	24	Standard
	Se-1	77	110.0	9.8	**0.1130**	0.102	90.7	ug/L	93	Standard
	Ga	71	244670.6	2.6				mg/L	233175	Standard
	Rb	85	27557.0	1.8				ug/L	20	Standard
>	**Y**	89	282934.2	1.2				ug/L	235100	Standard
	Rh	103	72.7	12.7				ug/L	6	Standard
	Mo	98	597.5	2.6	**0.1223**	0.002	1.5	ug/L	14	Standard
	Ag	107	72.0	9.7	**0.0030**	0.001	24.2	ug/L	38	Standard
	Cd	111	912.9	4.6	**0.0786**	0.006	8.1	mg/L	439	Standard
	Cd	114	2434.0	6.1	**0.0680**	0.009	13.9	ug/L	1326	Standard
>	**In**	115	868926.7	1.2				ug/L	804157	Standard
	Sn	118	9328.9	3.7	**0.2814**	0.012	4.3	ug/L	4860	Standard
	Sb	123	457.0	9.0	**0.0288**	0.003	10.9	ug/L	28	Standard
	Ba	135	328824.4	5.0	**54.9716**	2.282	4.2	ug/L	54	Standard
	Ce	140	232186.9	5.4				ug/L	61	Standard
>	**Tb**	159	899860.8	2.1				ug/L	844239	Standard
	Ho	165	4718.1	5.4				ug/L	6	Standard
	Tl	203	379.0	7.9	**0.0222**	0.002	8.6	ug/L	10	Standard
	Tl	205	899.4	3.5	**0.0211**	0.001	5.1	ug/L	16	Standard
	Pb	206	4538.0	4.4	**0.2948**	0.014	4.8	ug/L	421	Standard
	Pb	207	3664.4	4.9	**0.2838**	0.017	5.9	ug/L	341	Standard
	Pb	208	17250.5	4.3	**0.2915**	0.015	5.2	ug/L	1571	Standard
	U	238	4021.2	4.1	**0.0808**	0.003	3.9	ug/L	4	Standard
>	**Bi**	209	442324.7	1.6				ug/L	457202	Standard
	Na	23	14478.2	2.3	**3.6303**	0.062	1.7	mg/L	138	Standard
	Mg	24	413966.3	4.6	**1.3315**	0.049	3.7	mg/L	134	Standard

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K	39	7256.4	3.3	**0.4958**	0.013	2.7	mg/L	563	Standard
Ca	43	13516.7	4.9	**16.1971**	0.650	4.0	mg/L	127	Standard
Fe	54	4515.9	7.3	**0.5061**	0.041	8.2	mg/L	815	Standard
Fe	57	136131.2	5.1	**0.6676**	0.030	4.4	mg/L	4749	Standard
Sc-1	45	443684.9	0.9				mg/L	367704	Standard
Cl	35	799501.0	3.9				ug/L	59901	Standard
Kr	83	57.3	4.2				ug/L	50	Standard
Br	81	32196.0	9.3				ug/L	13965	Standard
P	31	168899.1	2.1				ug/L	71952	Standard
S	34	1776458.9	2.1				ug/L	878802	Standard
Sr	88	2714771.0	4.9				ug/L	321	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		102.398	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		120.346	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		108.054	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		106.588	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	96.746
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Y 89 Int Std for sample	Y	89	Rerun sample

Approved: May 04, 2012

Method 6020 - Summary Report

Sample ID: L1205001709
Sample Date/Time: Thursday, May 03, 2012 12:46:58
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: SLP 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	186839.6	3.7	**10802.3223**	423.207	3.9	ug/L	20538	Standard
	Be	9	84.3	11.9	**0.0101**	0.002	17.7	ug/L	13	Standard
	Al	27	3234805.0	7.3	**117.4395**	9.294	7.9	ug/L	25813	Standard
>	**Sc**	45	436401.2	2.2				ug/L	367704	Standard
	Ti	47	9395.6	6.0	**4.5141**	0.317	7.0	ug/L	127	Standard
	V	51	21462.0	3.2	**0.6463**	0.038	5.8	ug/L	6636	Standard
	Cr	52	32721.7	3.8	**0.6201**	0.081	13.0	ug/L	21244	Standard
	Cr	53	1997.5	3.8	**0.6917**	0.035	5.0	ug/L	467	Standard
	Mn	55	382519.9	3.8	**15.6786**	0.743	4.7	ug/L	8327	Standard
	Co	59	1863.1	4.1	**0.1021**	0.006	5.4	ug/L	123	Standard
	Ni	60	3117.3	4.7	**0.8277**	0.050	6.0	ug/L	272	Standard
	Cu	65	1308.1	4.0	**0.1020**	0.021	21.0	ug/L	1002	Standard
	Zn	66	18694.5	3.8	**11.8690**	0.649	5.5	ug/L	3532	Standard
>	**Ge**	72	253547.6	0.9				ug/L	254939	Standard
	As	75	470.5	0.6	**0.5391**	0.006	1.1	ug/L	-224	Standard
	Se	82	54.2	14.9	**0.1907**	0.067	35.0	ug/L	24	Standard
	Se-1	77	106.7	14.2	**0.1127**	0.183	162.2	ug/L	93	Standard
	Ga	71	234641.7	1.0				mg/L	233175	Standard
	Rb	85	15940.4	5.6				ug/L	20	Standard
>	**Y**	89	242360.1	1.8				ug/L	235100	Standard
	Rh	103	84.0	7.1				ug/L	6	Standard
	Mo	98	3103.9	6.2	**0.6888**	0.039	5.7	ug/L	14	Standard
	Ag	107	75.3	7.5	**0.0036**	0.001	16.5	ug/L	38	Standard
	Cd	111	731.0	0.7	**0.0468**	0.000	0.7	mg/L	439	Standard
	Cd	114	1937.8	3.8	**0.0367**	0.004	11.2	ug/L	1326	Standard
>	**In**	115	853230.4	0.9				ug/L	804157	Standard
	Sn	118	7143.7	3.7	**0.1770**	0.011	6.3	ug/L	4860	Standard
	Sb	123	892.6	6.4	**0.0633**	0.004	6.2	ug/L	28	Standard
	Ba	135	333812.6	4.6	**56.8339**	2.189	3.9	ug/L	54	Standard
	Ce	140	54771.0	5.9				ug/L	61	Standard
>	**Tb**	159	884588.6	0.9				ug/L	844239	Standard
	Ho	165	644.7	6.5				ug/L	6	Standard
	Tl	203	145.3	0.4	**0.0089**	0.000	2.3	ug/L	10	Standard
	Tl	205	354.0	6.9	**0.0082**	0.000	5.8	ug/L	16	Standard
	Pb	206	3364.4	2.4	**0.2149**	0.002	1.0	ug/L	421	Standard
	Pb	207	2754.3	4.9	**0.2091**	0.009	4.2	ug/L	341	Standard
	Pb	208	12688.4	4.7	**0.2100**	0.008	4.0	ug/L	1571	Standard
	U	238	7953.4	6.0	**0.1612**	0.007	4.6	ug/L	4	Standard
>	**Bi**	209	435398.2	2.2				ug/L	457202	Standard
	Na	23	10508.3	4.8	**2.6686**	0.110	4.1	mg/L	138	Standard
	Mg	24	521357.7	5.3	**1.7063**	0.099	5.8	mg/L	134	Standard

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K	39	11425.6	5.2	**0.8289**	0.045	5.5	mg/L	563	Standard
Ca	43	12375.7	4.7	**15.0750**	0.825	5.5	mg/L	127	Standard
Fe	54	2290.2	6.6	**0.1941**	0.026	13.3	mg/L	815	Standard
Fe	57	57287.9	8.2	**0.2682**	0.025	9.3	mg/L	4749	Standard
> **Sc-1**	45	436401.2	2.2				mg/L	367704	Standard
Cl	35	365241.8	2.7				ug/L	59901	Standard
Kr	83	52.2	7.3				ug/L	50	Standard
Br	81	20103.0	1.9				ug/L	13965	Standard
P	31	126898.0	3.6				ug/L	71952	Standard
S	34	1226362.4	1.3				ug/L	878802	Standard
Sr	88	2903206.5	5.4				ug/L	321	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		99.454	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
> Y	89		103.088	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
> In	115		106.102	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
> Tb	159		104.779	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	95.231
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: May 04, 2012

Method 6020 - Summary Report

Sample ID: L1205001710
Sample Date/Time: Thursday, May 03, 2012 12:49:45
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: SLP 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	32416.7	2.2	**661.9319**	17.382	2.6	ug/L	20538	Standard
	Be	9	149.7	12.4	**0.0248**	0.003	13.9	ug/L	13	Standard
	Al	27	5243122.4	5.0	**205.7042**	5.859	2.8	ug/L	25813	Standard
>	**Sc**	45	404919.2	2.3				ug/L	367704	Standard
	Ti	47	3611.1	7.3	**1.6841**	0.103	6.1	ug/L	127	Standard
	V	51	20883.0	2.9	**0.6123**	0.018	2.9	ug/L	6636	Standard
	Cr	52	30885.5	2.3	**0.5076**	0.032	6.3	ug/L	21244	Standard
	Cr	53	2168.2	3.0	**0.7602**	0.035	4.5	ug/L	467	Standard
	Mn	55	81416.7	4.0	**3.1211**	0.113	3.6	ug/L	8327	Standard
	Co	59	2074.1	1.9	**0.1133**	0.002	2.1	ug/L	123	Standard
	Ni	60	1859.8	4.9	**0.4640**	0.026	5.7	ug/L	272	Standard
	Cu	65	1288.1	6.3	**0.0913**	0.029	32.2	ug/L	1002	Standard
	Zn	66	14191.7	5.2	**8.4359**	0.526	6.2	ug/L	3532	Standard
>	**Ge**	72	255928.0	1.4				ug/L	254939	Standard
	As	75	224.9	15.3	**0.3402**	0.026	7.5	ug/L	-224	Standard
	Se	82	85.6	12.9	**0.4368**	0.084	19.1	ug/L	24	Standard
	Se-1	77	108.0	5.2	**0.1156**	0.055	47.9	ug/L	93	Standard
	Ga	71	240993.6	1.0				mg/L	233175	Standard
	Rb	85	38958.0	2.8				ug/L	20	Standard
>	**Y**	89	246552.1	1.5				ug/L	235100	Standard
	Rh	103	16.0	43.3				ug/L	6	Standard
	Mo	98	434.6	8.8	**0.0863**	0.008	8.9	ug/L	14	Standard
	Ag	107	53.3	23.7	**0.0009**	0.001	160.6	ug/L	38	Standard
	Cd	111	649.7	3.7	**0.0290**	0.005	15.8	mg/L	439	Standard
	Cd	114	1683.1	6.4	**0.0171**	0.007	39.2	ug/L	1326	Standard
>	**In**	115	868038.6	0.8				ug/L	804157	Standard
	Sn	118	4362.0	3.7	**0.0292**	0.006	21.8	ug/L	4860	Standard
	Sb	123	416.1	6.7	**0.0257**	0.002	7.6	ug/L	28	Standard
	Ba	135	76810.1	3.8	**12.8464**	0.383	3.0	ug/L	54	Standard
	Ce	140	39236.1	3.8				ug/L	61	Standard
>	**Tb**	159	891062.8	2.0				ug/L	844239	Standard
	Ho	165	547.3	7.8				ug/L	6	Standard
	Tl	203	436.3	2.4	**0.0253**	0.000	1.8	ug/L	10	Standard
	Tl	205	1000.0	4.2	**0.0233**	0.001	4.5	ug/L	16	Standard
	Pb	206	4341.6	4.4	**0.2782**	0.013	4.8	ug/L	421	Standard
	Pb	207	3574.4	4.2	**0.2734**	0.011	4.1	ug/L	341	Standard
	Pb	208	16637.6	4.4	**0.2774**	0.013	4.7	ug/L	1571	Standard
	U	238	1434.4	1.9	**0.0293**	0.001	1.9	ug/L	4	Standard
>	**Bi**	209	446002.3	0.7				ug/L	457202	Standard
	Na	23	11735.9	4.7	**3.2190**	0.078	2.4	mg/L	138	Standard
	Mg	24	248547.4	4.3	**0.8755**	0.020	2.3	mg/L	134	Standard

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K	39	14175.3	3.5	**1.1275**	0.016	1.5	mg/L	563	Standard
Ca	43	2625.6	4.2	**3.3097**	0.116	3.5	mg/L	127	Standard
Fe	54	4054.6	3.0	**0.4960**	0.021	4.2	mg/L	815	Standard
Fe	57	108964.5	5.3	**0.5816**	0.019	3.3	mg/L	4749	Standard
> **Sc-1**	45	404919.2	2.3				mg/L	367704	Standard
Cl	35	941157.8	2.3				ug/L	59901	Standard
Kr	83	58.4	13.0				ug/L	50	Standard
Br	81	45204.3	1.4				ug/L	13965	Standard
P	31	137734.0	1.8				ug/L	71952	Standard
S	34	1208333.7	1.8				ug/L	878802	Standard
Sr	88	374784.1	4.3				ug/L	321	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		100.388	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
> Y	89		104.871	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
> In	115		107.944	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
> Tb	159		105.546	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	97.550
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: May 04, 2012

Method 6020 - Summary Report

Sample ID: L1205001711
Sample Date/Time: Thursday, May 03, 2012 12:52:32
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: SLP 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	30667.4	2.6	**564.4643**	28.320	5.0	ug/L	20538	Standard
	Be	9	108.7	17.9	**0.0166**	0.003	20.8	ug/L	13	Standard
	Al	27	2857946.3	6.6	**113.0912**	4.379	3.9	ug/L	25813	Standard
>	**Sc**	45	399800.7	2.8				ug/L	367704	Standard
	Ti	47	4309.3	6.6	**2.0590**	0.085	4.1	ug/L	127	Standard
	V	51	21984.3	5.4	**0.6776**	0.036	5.3	ug/L	6636	Standard
	Cr	52	34872.8	3.9	**0.7504**	0.032	4.3	ug/L	21244	Standard
	Cr	53	2038.1	4.5	**0.7188**	0.024	3.4	ug/L	467	Standard
	Mn	55	5090912.4	6.3	**213.3603**	8.368	3.9	ug/L	8327	Standard
	Co	59	9293.9	4.4	**0.5441**	0.014	2.6	ug/L	123	Standard
	Ni	60	5070.5	6.2	**1.3972**	0.055	3.9	ug/L	272	Standard
	Cu	65	1780.1	7.3	**0.2647**	0.029	11.0	ug/L	1002	Standard
	Zn	66	18820.4	3.8	**12.0879**	0.218	1.8	ug/L	3532	Standard
>	**Ge**	72	251160.2	2.7				ug/L	254939	Standard
	As	75	4522.4	7.0	**3.8210**	0.176	4.6	ug/L	-224	Standard
	Se	82	89.4	3.8	**0.4817**	0.045	9.4	ug/L	24	Standard
	Se-1	77	115.0	4.3	**0.2221**	0.071	32.2	ug/L	93	Standard
	Ga	71	232651.1	2.1				mg/L	233175	Standard
	Rb	85	233099.0	4.5				ug/L	20	Standard
>	**Y**	89	243387.5	1.4				ug/L	235100	Standard
	Rh	103	34.7	12.0				ug/L	6	Standard
	Mo	98	610.7	6.0	**0.1299**	0.008	6.1	ug/L	14	Standard
	Ag	107	94.7	20.8	**0.0060**	0.002	38.2	ug/L	38	Standard
	Cd	111	631.2	9.8	**0.0295**	0.012	39.3	mg/L	439	Standard
	Cd	114	1620.7	2.9	**0.0166**	0.003	18.2	ug/L	1326	Standard
>	**In**	115	839707.4	0.4				ug/L	804157	Standard
	Sn	118	5369.0	4.1	**0.0897**	0.010	11.6	ug/L	4860	Standard
	Sb	123	719.4	6.1	**0.0507**	0.003	6.5	ug/L	28	Standard
	Ba	135	151597.1	3.9	**26.2232**	0.931	3.5	ug/L	54	Standard
	Ce	140	47035.6	2.9				ug/L	61	Standard
>	**Tb**	159	877409.0	0.5				ug/L	844239	Standard
	Ho	165	850.0	13.3				ug/L	6	Standard
	Tl	203	297.0	6.3	**0.0181**	0.001	6.5	ug/L	10	Standard
	Tl	205	732.7	4.4	**0.0177**	0.001	3.6	ug/L	16	Standard
	Pb	206	5453.3	4.3	**0.3737**	0.015	3.9	ug/L	421	Standard
	Pb	207	4640.0	3.0	**0.3818**	0.014	3.7	ug/L	341	Standard
	Pb	208	21240.8	4.0	**0.3797**	0.015	3.8	ug/L	1571	Standard
	U	238	5407.6	5.1	**0.1120**	0.005	4.4	ug/L	4	Standard
>	**Bi**	209	427310.5	0.9				ug/L	457202	Standard
	Na	23	23003.5	4.7	**6.4297**	0.149	2.3	mg/L	138	Standard
	Mg	24	1042832.0	3.7	**3.7252**	0.046	1.2	mg/L	134	Standard

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K	39	93497.7	2.3	**7.8661**	0.157	2.0	mg/L	563	Standard
Ca	43	12276.3	4.8	**16.3249**	0.326	2.0	mg/L	127	Standard
Fe	54	9680.3	4.4	**1.3955**	0.040	2.9	mg/L	815	Standard
Fe	57	303225.4	5.8	**1.6947**	0.053	3.1	mg/L	4749	Standard
> **Sc-1**	45	399800.7	2.8				mg/L	367704	Standard
Cl	35	882881.7	2.1				ug/L	59901	Standard
Kr	83	56.2	10.6				ug/L	50	Standard
Br	81	37980.6	3.4				ug/L	13965	Standard
P	31	674634.0	3.4				ug/L	71952	Standard
S	34	1205541.5	3.6				ug/L	878802	Standard
Sr	88	1553845.4	5.5				ug/L	321	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		98.518	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
> Y	89		103.525	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
> In	115		104.421	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
> Tb	159		103.929	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	93.462
	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	

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: QC Std 6
Sample Date/Time: Thursday, May 03, 2012 12:55:22
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: SLP 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	21129.7	2.1	**-7.6631**	16.998	221.8	ug/L	20538	Standard
	Be	9	237198.3	2.3	**53.5739**	1.487	2.8	ug/L	13	Standard
	Al	27	1152333.2	5.3	**48.7342**	2.652	5.4	ug/L	25813	Standard
>	**Sc**	45	370198.7	1.1				ug/L	367704	Standard
	Ti	47	203237.9	2.4	**99.1607**	2.805	2.8	ug/L	127	Standard
	V	51	1219096.9	2.3	**53.0511**	1.502	2.8	ug/L	6636	Standard
	Cr	52	994212.0	2.1	**51.6109**	1.411	2.7	ug/L	21244	Standard
	Cr	53	112350.4	1.9	**50.9678**	1.036	2.0	ug/L	467	Standard
	Mn	55	1288427.6	2.8	**53.5871**	1.347	2.5	ug/L	8327	Standard
	Co	59	852235.6	2.5	**50.3454**	1.479	2.9	ug/L	123	Standard
	Ni	60	173960.3	3.3	**49.7689**	1.837	3.7	ug/L	272	Standard
	Cu	65	147966.7	2.8	**49.3196**	1.489	3.0	ug/L	1002	Standard
	Zn	66	67879.1	3.2	**48.4804**	1.331	2.7	ug/L	3532	Standard
>	**Ge**	72	252436.1	2.1				ug/L	254939	Standard
	As	75	61518.0	2.8	**49.7234**	1.257	2.5	ug/L	-224	Standard
	Se	82	6396.3	3.5	**51.5752**	1.732	3.4	ug/L	24	Standard
	Se-1	77	4221.9	3.9	**48.0633**	1.170	2.4	ug/L	93	Standard
	Ga	71	233383.8	2.5				mg/L	233175	Standard
	Rb	85	1050.0	5.5				ug/L	20	Standard
>	**Y**	89	232192.4	0.9				ug/L	235100	Standard
	Rh	103	31.3	18.4				ug/L	6	Standard
	Mo	98	423129.4	4.6	**96.7060**	4.647	4.8	ug/L	14	Standard
	Ag	107	470403.3	2.6	**55.6016**	1.611	2.9	ug/L	38	Standard
	Cd	111	272141.5	3.9	**53.0673**	1.969	3.7	mg/L	439	Standard
	Cd	114	718944.6	4.4	**50.4221**	2.112	4.2	ug/L	1326	Standard
>	**In**	115	840476.9	1.5				ug/L	804157	Standard
	Sn	118	940550.2	5.3	**49.2440**	2.379	4.8	ug/L	4860	Standard
	Sb	123	656210.0	4.1	**51.8362**	2.018	3.9	ug/L	28	Standard
	Ba	135	271990.2	4.3	**47.0177**	1.874	4.0	ug/L	54	Standard
	Ce	140	1103.4	18.4				ug/L	61	Standard
>	**Tb**	159	882306.3	1.7				ug/L	844239	Standard
	Ho	165	33.3	42.1				ug/L	6	Standard
	Tl	203	866238.3	2.2	**50.2598**	1.056	2.1	ug/L	10	Standard
	Tl	205	2158522.7	1.9	**51.8749**	1.096	2.1	ug/L	16	Standard
	Pb	206	696869.4	3.7	**50.2668**	1.791	3.6	ug/L	421	Standard
	Pb	207	577398.8	3.5	**50.2474**	1.690	3.4	ug/L	341	Standard
	Pb	208	2670756.5	3.4	**50.3896**	1.626	3.2	ug/L	1571	Standard
	U	238	2608418.5	5.1	**52.3164**	2.614	5.0	ug/L	4	Standard
>	**Bi**	209	437089.3	0.5				ug/L	457202	Standard
	Na	23	15609.4	3.4	**4.7028**	0.161	3.4	mg/L	138	Standard
	Mg	24	1290393.8	2.6	**4.9796**	0.128	2.6	mg/L	134	Standard

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	K	39	53276.2	2.3	**4.8179**	0.149	3.1	mg/L	563	Standard
	Ca	43	3438.4	1.7	**4.8178**	0.123	2.6	mg/L	127	Standard
	Fe	54	28766.7	5.1	**4.7865**	0.268	5.6	mg/L	815	Standard
	Fe	57	900243.5	2.5	**5.5046**	0.140	2.6	mg/L	4749	Standard
>	**Sc-1**	45	370198.7	1.1				mg/L	367704	Standard
	Cl	35	118676.7	5.9				ug/L	59901	Standard
	Kr	83	55.8	4.8				ug/L	50	Standard
	Br	81	13621.1	4.5				ug/L	13965	Standard
	P	31	94909.4	1.5				ug/L	71952	Standard
	S	34	997675.0	0.8				ug/L	878802	Standard
	Sr	88	1994.2	100.9				ug/L	321	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	97.468		
>	Sc	45			
	Ti	47	99.161		
	V	51	106.102		
	Cr	52	103.222		
	Cr	53			
	Mn	55	107.174		
	Co	59	100.691		
	Ni	60	99.538		
	Cu	65	98.639		
	Zn	66	96.961		
>	Ge	72		99.018	
	As	75	99.447		
	Se	82	103.150		
	Se-1	77	96.127		
	Ga	71			
	Rb	85			
>	Y	89		98.763	
	Rh	103			
	Mo	98	96.706		
	Ag	107	111.203		
	Cd	111	106.135		
	Cd	114			
>	In	115		104.516	
	Sn	118	98.488		
	Sb	123	103.672		
	Ba	135	94.035		
	Ce	140			
>	Tb	159		104.509	
	Ho	165			
	Tl	203	100.520		
	Tl	205			
	Pb	206	100.534		

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	Pb	207	100.495	
	Pb	208	100.779	
	U	238	104.633	
>	Bi	209		95.601
	Na	23	94.057	
	Mg	24	99.591	
	K	39	96.359	
	Ca	43	96.356	
	Fe	54	95.730	
	Fe	57	110.092	
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Ag	107	
QC Std 6	Fe	57	

Sample ID: QC Std 6
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Method 6020 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, May 03, 2012 12:58:10
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: SLP 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	19897.7	2.2	**-27.9006**	46.232	165.7	ug/L	20538	Standard
	Be	9	39.7	36.6	**0.0034**	0.004	105.1	ug/L	13	Standard
	Al	27	13240.5	5.2	**-0.3730**	0.027	7.3	ug/L	25813	Standard
>	**Sc**	45	352999.6	1.5				ug/L	367704	Standard
	Ti	47	108.7	14.9	**0.0026**	0.009	329.8	ug/L	127	Standard
	V	51	6160.9	1.4	**-0.0041**	0.005	115.6	ug/L	6636	Standard
	Cr	52	19354.0	1.1	**-0.0243**	0.005	21.4	ug/L	21244	Standard
	Cr	53	513.3	5.7	**0.0327**	0.014	41.8	ug/L	467	Standard
	Mn	55	1622.1	16.8	**-0.1613**	0.012	7.7	ug/L	8327	Standard
	Co	59	199.0	31.5	**0.0049**	0.004	81.3	ug/L	123	Standard
	Ni	60	126.3	15.1	**-0.0232**	0.006	25.8	ug/L	272	Standard
	Cu	65	912.7	5.2	**-0.0119**	0.016	134.6	ug/L	1002	Standard
	Zn	66	1077.4	4.5	**-1.1220**	0.037	3.3	ug/L	3532	Standard
>	**Ge**	72	239135.1	0.7				ug/L	254939	Standard
	As	75	-174.4	17.7	**0.0134**	0.026	193.7	ug/L	-224	Standard
	Se	82	31.4	15.5	**0.0220**	0.042	192.0	ug/L	24	Standard
	Se-1	77	82.3	9.3	**-0.1123**	0.100	89.2	ug/L	93	Standard
	Ga	71	223336.9	1.4				mg/L	233175	Standard
	Rb	85	28.7	53.3				ug/L	20	Standard
>	**Y**	89	223467.9	0.1				ug/L	235100	Standard
	Rh	103	2.7	114.6				ug/L	6	Standard
	Mo	98	129.2	35.1	**0.0207**	0.011	52.4	ug/L	14	Standard
	Ag	107	90.7	40.2	**0.0059**	0.005	76.9	ug/L	38	Standard
	Cd	111	510.5	2.4	**0.0090**	0.003	33.7	mg/L	439	Standard
	Cd	114	1333.6	6.8	**-0.0007**	0.007	984.3	ug/L	1326	Standard
>	**In**	115	814802.2	0.6				ug/L	804157	Standard
	Sn	118	1956.8	5.9	**-0.0867**	0.007	7.7	ug/L	4860	Standard
	Sb	123	276.9	33.4	**0.0164**	0.008	46.7	ug/L	28	Standard
	Ba	135	72.7	11.9	**0.0020**	0.002	78.7	ug/L	54	Standard
	Ce	140	73.3	27.6				ug/L	61	Standard
>	**Tb**	159	820034.6	2.5				ug/L	844239	Standard
	Ho	165	8.7	58.1				ug/L	6	Standard
	Tl	203	109.0	25.7	**0.0069**	0.002	25.3	ug/L	10	Standard
	Tl	205	272.0	32.3	**0.0064**	0.002	34.9	ug/L	16	Standard
	Pb	206	428.3	2.0	**0.0025**	0.001	44.0	ug/L	421	Standard
	Pb	207	361.7	6.2	**0.0004**	0.002	527.5	ug/L	341	Standard
	Pb	208	1661.4	3.8	**0.0015**	0.002	114.8	ug/L	1571	Standard
	U	238	628.0	5.5	**0.0139**	0.001	4.3	ug/L	4	Standard
>	**Bi**	209	430507.7	1.5				ug/L	457202	Standard
	Na	23	142.7	16.4	**0.0059**	0.007	116.7	mg/L	138	Standard
	Mg	24	265.0	6.7	**-0.0003**	0.000	23.8	mg/L	134	Standard

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K	39	612.0	4.5	**0.0005**	0.002	429.6	mg/L	563	Standard
Ca	43	90.0	9.7	**-0.0387**	0.015	39.7	mg/L	127	Standard
Fe	54	770.3	5.1	**-0.0004**	0.008	2105.6	mg/L	815	Standard
Fe	57	4764.7	3.1	**0.0001**	0.001	1096.8	mg/L	4749	Standard
> **Sc-1**	45	352999.6	1.5				mg/L	367704	Standard
Cl	35	103865.8	1.6				ug/L	59901	Standard
Kr	83	49.1	18.8				ug/L	50	Standard
Br	81	12927.5	1.2				ug/L	13965	Standard
P	31	81450.1	3.1				ug/L	71952	Standard
S	34	984501.8	2.1				ug/L	878802	Standard
Sr	88	368.0	16.5				ug/L	321	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		93.801	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
> Y	89		95.052	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
> In	115		101.324	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
> Tb	159		97.133	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	94.161
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
Report Date/Time: Thursday, May 03, 2012 13:00:38
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Method 6020 - Summary Report

Sample ID: L1204094404 WG396479-01
Sample Date/Time: Thursday, May 03, 2012 13:01:00
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: SLP 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	132806.0	2.2	**7506.0157**	115.454	1.5	ug/L	20538	Standard
	Be	9	1412.7	7.6	**0.2741**	0.019	7.0	ug/L	13	Standard
	Al	27	84551509.5	6.7	**3200.6660**	187.010	5.8	ug/L	25813	Standard
>	**Sc**	45	421546.3	0.9				ug/L	367704	Standard
	Ti	47	9111.4	4.0	**4.2732**	0.144	3.4	ug/L	127	Standard
	V	51	246469.4	4.2	**10.2008**	0.363	3.6	ug/L	6636	Standard
	Cr	52	144028.6	3.6	**6.3212**	0.209	3.3	ug/L	21244	Standard
	Cr	53	14745.8	4.0	**6.3205**	0.210	3.3	ug/L	467	Standard
	Mn	55	3208458.8	2.3	**130.1591**	1.939	1.5	ug/L	8327	Standard
	Co	59	51915.6	4.3	**2.9760**	0.101	3.4	ug/L	123	Standard
	Ni	60	15457.2	4.8	**4.2451**	0.171	4.0	ug/L	272	Standard
	Cu	65	11606.1	4.7	**3.4533**	0.143	4.1	ug/L	1002	Standard
	Zn	66	38613.2	3.9	**25.9511**	0.842	3.2	ug/L	3532	Standard
>	**Ge**	72	259420.5	0.9				ug/L	254939	Standard
	As	75	2111.9	6.8	**1.8166**	0.099	5.5	ug/L	-224	Standard
	Se	82	68.5	15.1	**0.2936**	0.082	28.0	ug/L	24	Standard
	Se-1	77	121.7	2.5	**0.2541**	0.035	13.6	ug/L	93	Standard
	Ga	71	247506.5	2.1				mg/L	233175	Standard
	Rb	85	88030.4	1.4				ug/L	20	Standard
>	**Y**	89	302787.5	1.8				ug/L	235100	Standard
	Rh	103	9.3	24.7				ug/L	6	Standard
	Mo	98	591.5	11.4	**0.1232**	0.016	13.1	ug/L	14	Standard
	Ag	107	329.3	12.5	**0.0331**	0.005	14.6	ug/L	38	Standard
	Cd	111	1188.2	4.5	**0.1345**	0.015	10.9	mg/L	439	Standard
	Cd	114	3169.3	6.3	**0.1216**	0.015	12.7	ug/L	1326	Standard
>	**In**	115	855002.6	2.3				ug/L	804157	Standard
	Sn	118	2972.3	3.2	**-0.0392**	0.006	15.5	ug/L	4860	Standard
	Sb	123	331.9	12.2	**0.0197**	0.004	18.9	ug/L	28	Standard
	Ba	135	262269.7	4.5	**44.5912**	2.479	5.6	ug/L	54	Standard
	Ce	140	918971.3	5.0				ug/L	61	Standard
>	**Tb**	159	899664.4	1.2				ug/L	844239	Standard
	Ho	165	10549.7	3.5				ug/L	6	Standard
	Tl	203	1012.7	2.9	**0.0570**	0.001	1.9	ug/L	10	Standard
	Tl	205	2494.2	4.3	**0.0574**	0.002	4.3	ug/L	16	Standard
	Pb	206	262529.8	3.9	**18.1977**	0.525	2.9	ug/L	421	Standard
	Pb	207	203735.3	3.9	**17.0344**	0.498	2.9	ug/L	341	Standard
	Pb	208	968794.4	4.3	**17.5625**	0.576	3.3	ug/L	1571	Standard
	U	238	19417.8	4.8	**0.3757**	0.014	3.8	ug/L	4	Standard
>	**Bi**	209	454308.3	1.0				ug/L	457202	Standard
	Na	23	307.3	20.0	**0.0426**	0.017	40.3	mg/L	138	Standard
	Mg	24	364814.2	4.4	**1.2349**	0.044	3.5	mg/L	134	Standard

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	K	39	5336.3	3.9	**0.3706**	0.014	3.9	mg/L	563	Standard
	Ca	43	1638.1	4.2	**1.9127**	0.071	3.7	mg/L	127	Standard
	Fe	54	47215.0	5.1	**6.9575**	0.301	4.3	mg/L	815	Standard
	Fe	57	1469892.9	8.1	**7.9025**	0.571	7.2	mg/L	4749	Standard
>	**Sc-1**	45	421546.3	0.9				mg/L	367704	Standard
	Cl	35	134670.7	2.1				ug/L	59901	Standard
	Kr	83	59.1	16.4				ug/L	50	Standard
	Br	81	18189.9	1.1				ug/L	13965	Standard
	P	31	374417.7	2.8				ug/L	71952	Standard
	S	34	965284.0	3.6				ug/L	878802	Standard
	Sr	88	129330.8	5.6				ug/L	321	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		101.758	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		128.791	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		106.323	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		106.565	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	99.367
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Y 89 Int Std for sample	Y	89	Rerun sample

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Method 6020 - Summary Report

Sample ID: L1204094404S WG396479-04
Sample Date/Time: Thursday, May 03, 2012 13:03:47
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: SLP 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	127957.2	2.0	**7154.8196**	150.925	2.1	ug/L	20538	Standard
	Be	9	26059.7	3.1	**5.1531**	0.155	3.0	ug/L	13	Standard
	Al	27	84562374.7	4.8	**3195.9988**	146.037	4.6	ug/L	25813	Standard
>	**Sc**	45	422342.3	0.8				ug/L	367704	Standard
	Ti	47	9088.7	4.3	**4.2729**	0.192	4.5	ug/L	127	Standard
	V	51	407542.6	3.2	**17.0982**	0.610	3.6	ug/L	6636	Standard
	Cr	52	257805.7	2.9	**12.2217**	0.417	3.4	ug/L	21244	Standard
	Cr	53	27557.7	4.2	**12.0280**	0.537	4.5	ug/L	467	Standard
	Mn	55	4205292.4	2.4	**171.0694**	4.478	2.6	ug/L	8327	Standard
	Co	59	163441.8	3.4	**9.4088**	0.357	3.8	ug/L	123	Standard
	Ni	60	34438.1	3.1	**9.5575**	0.328	3.4	ug/L	272	Standard
	Cu	65	27385.1	3.5	**8.6261**	0.329	3.8	ug/L	1002	Standard
	Zn	66	43701.3	4.2	**29.7078**	1.387	4.7	ug/L	3532	Standard
>	**Ge**	72	258847.4	0.4				ug/L	254939	Standard
	As	75	7668.1	5.7	**6.1867**	0.366	5.9	ug/L	-224	Standard
	Se	82	620.9	7.9	**4.6599**	0.405	8.7	ug/L	24	Standard
	Se-1	77	511.7	6.5	**4.6903**	0.402	8.6	ug/L	93	Standard
	Ga	71	251851.6	1.6				mg/L	233175	Standard
	Rb	85	80722.5	1.3				ug/L	20	Standard
>	**Y**	89	314981.6	1.6				ug/L	235100	Standard
	Rh	103	11.3	40.8				ug/L	6	Standard
	Mo	98	678.1	2.2	**0.1386**	0.005	3.6	ug/L	14	Standard
	Ag	107	46161.9	2.9	**5.2173**	0.118	2.3	ug/L	38	Standard
	Cd	111	28506.9	3.2	**5.2359**	0.117	2.2	mg/L	439	Standard
	Cd	114	76994.8	3.3	**5.0809**	0.124	2.4	ug/L	1326	Standard
>	**In**	115	878015.0	1.2				ug/L	804157	Standard
	Sn	118	3063.6	1.3	**-0.0386**	0.003	7.1	ug/L	4860	Standard
	Sb	123	3842.2	4.3	**0.2843**	0.010	3.4	ug/L	28	Standard
	Ba	135	302401.3	4.2	**50.0331**	1.660	3.3	ug/L	54	Standard
	Ce	140	945189.3	4.9				ug/L	61	Standard
>	**Tb**	159	914195.8	0.8				ug/L	844239	Standard
	Ho	165	10990.0	4.9				ug/L	6	Standard
	Tl	203	89338.4	2.5	**4.9632**	0.099	2.0	ug/L	10	Standard
	Tl	205	215551.2	2.8	**4.9591**	0.113	2.3	ug/L	16	Standard
	Pb	206	332958.1	4.0	**22.9777**	0.799	3.5	ug/L	421	Standard
	Pb	207	264269.6	4.8	**21.9994**	0.944	4.3	ug/L	341	Standard
	Pb	208	1237001.5	4.7	**22.3267**	0.922	4.1	ug/L	1571	Standard
	U	238	275671.4	5.5	**5.2942**	0.263	5.0	ug/L	4	Standard
>	**Bi**	209	456500.4	0.6				ug/L	457202	Standard
	Na	23	304.0	9.3	**0.0415**	0.008	19.5	mg/L	138	Standard
	Mg	24	165803.2	4.0	**0.5596**	0.022	4.0	mg/L	134	Standard

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	K	39	4731.4	5.2	**0.3213**	0.020	6.2	mg/L	563	Standard
	Ca	43	766.7	7.6	**0.7999**	0.072	9.0	mg/L	127	Standard
	Fe	54	55593.2	6.2	**8.2032**	0.523	6.4	mg/L	815	Standard
	Fe	57	1717638.2	2.8	**9.2263**	0.257	2.8	mg/L	4749	Standard
>	**Sc-1**	45	422342.3	0.8				mg/L	367704	Standard
	Cl	35	115383.8	1.6				ug/L	59901	Standard
	Kr	83	67.3	7.5				ug/L	50	Standard
	Br	81	17225.8	0.8				ug/L	13965	Standard
	P	31	344512.4	3.3				ug/L	71952	Standard
	S	34	912484.1	1.5				ug/L	878802	Standard
	Sr	88	121960.7	3.9				ug/L	321	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		101.533	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		133.978	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		109.184	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		108.286	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	99.847
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Y 89 Int Std for sample	Y	89	Rerun sample

Sample ID: L1204094404S WG396479-04
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Method 6020 - Summary Report

Sample ID: L1204094404SD WG396479-05
Sample Date/Time: Thursday, May 03, 2012 13:06:34
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: SLP 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	133709.8	0.9	**7438.5792**	5.738	0.1	ug/L	20538	Standard
	Be	9	26443.1	2.3	**5.1645**	0.079	1.5	ug/L	13	Standard
	Al	27	88939948.6	6.8	**3319.4230**	200.340	6.0	ug/L	25813	Standard
>	**Sc**	45	427589.5	0.9				ug/L	367704	Standard
	Ti	47	9037.4	6.4	**4.2631**	0.200	4.7	ug/L	127	Standard
	V	51	402539.6	6.1	**16.9437**	0.743	4.4	ug/L	6636	Standard
	Cr	52	258281.4	5.4	**12.2941**	0.516	4.2	ug/L	21244	Standard
	Cr	53	27623.2	7.0	**12.0978**	0.643	5.3	ug/L	467	Standard
	Mn	55	3721821.0	4.2	**151.9355**	3.831	2.5	ug/L	8327	Standard
	Co	59	154961.7	4.4	**8.9526**	0.237	2.6	ug/L	123	Standard
	Ni	60	34181.5	3.2	**9.5219**	0.136	1.4	ug/L	272	Standard
	Cu	65	26748.3	3.7	**8.4505**	0.166	2.0	ug/L	1002	Standard
	Zn	66	53829.6	4.4	**37.1923**	1.116	3.0	ug/L	3532	Standard
>	**Ge**	72	257810.4	1.8				ug/L	254939	Standard
	As	75	7674.5	0.6	**6.2160**	0.075	1.2	ug/L	-224	Standard
	Se	82	634.1	2.1	**4.7857**	0.197	4.1	ug/L	24	Standard
	Se-1	77	486.7	3.9	**4.4279**	0.212	4.8	ug/L	93	Standard
	Ga	71	251759.0	2.0				mg/L	233175	Standard
	Rb	85	86136.3	3.5				ug/L	20	Standard
>	**Y**	89	313082.5	4.1				ug/L	235100	Standard
	Rh	103	18.0	22.2				ug/L	6	Standard
	Mo	98	660.6	6.9	**0.1368**	0.008	5.8	ug/L	14	Standard
	Ag	107	46653.4	3.8	**5.3502**	0.123	2.3	ug/L	38	Standard
	Cd	111	29356.2	5.3	**5.4745**	0.212	3.9	mg/L	439	Standard
	Cd	114	79020.4	5.4	**5.2943**	0.207	3.9	ug/L	1326	Standard
>	**In**	115	865231.3	1.9				ug/L	804157	Standard
	Sn	118	3681.1	3.0	**-0.0048**	0.004	87.7	ug/L	4860	Standard
	Sb	123	3224.1	5.4	**0.2412**	0.010	3.9	ug/L	28	Standard
	Ba	135	304780.9	5.2	**51.1640**	1.928	3.8	ug/L	54	Standard
	Ce	140	969818.2	6.2				ug/L	61	Standard
>	**Tb**	159	906188.9	1.8				ug/L	844239	Standard
	Ho	165	11406.3	7.2				ug/L	6	Standard
	Tl	203	90000.4	3.6	**4.9975**	0.159	3.2	ug/L	10	Standard
	Tl	205	215139.1	3.4	**4.9473**	0.145	2.9	ug/L	16	Standard
	Pb	206	338461.1	5.3	**23.3435**	1.034	4.4	ug/L	421	Standard
	Pb	207	271221.5	4.5	**22.5702**	0.954	4.2	ug/L	341	Standard
	Pb	208	1267971.7	4.9	**22.8743**	0.961	4.2	ug/L	1571	Standard
	U	238	281249.9	5.4	**5.3989**	0.269	5.0	ug/L	4	Standard
>	**Bi**	209	456773.0	2.0				ug/L	457202	Standard
	Na	23	322.7	12.5	**0.0453**	0.010	22.1	mg/L	138	Standard
	Mg	24	170107.2	5.1	**0.5669**	0.024	4.2	mg/L	134	Standard

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	K	39	5100.2	2.7	**0.3458**	0.008	2.2	mg/L	563	Standard
	Ca	43	790.0	2.2	**0.8175**	0.031	3.8	mg/L	127	Standard
	Fe	54	53778.6	6.3	**7.8293**	0.439	5.6	mg/L	815	Standard
	Fe	57	1626324.0	5.3	**8.6243**	0.384	4.5	mg/L	4749	Standard
>	**Sc-1**	45	427589.5	0.9				mg/L	367704	Standard
	Cl	35	98523.0	2.1				ug/L	59901	Standard
	Kr	83	56.4	5.6				ug/L	50	Standard
	Br	81	17845.5	2.4				ug/L	13965	Standard
	P	31	357382.9	3.0				ug/L	71952	Standard
	S	34	870128.6	2.6				ug/L	878802	Standard
	Sr	88	127341.2	5.4				ug/L	321	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		101.126	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		133.170	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		107.595	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		107.338	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1204094404SD WG396479-05
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	99.906
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Y 89 Int Std for sample	Y	89	Rerun sample

Sample ID: L1204094404SD WG396479-05
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Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, May 03, 2012 13:09:25
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: SLP 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	21078.3	1.6	**-32.8175**	14.673	44.7	ug/L	20538	Standard
	Be	9	238437.4	4.6	**53.1396**	1.601	3.0	ug/L	13	Standard
	Al	27	1208665.2	6.1	**50.4747**	2.536	5.0	ug/L	25813	Standard
>	**Sc**	45	375013.1	1.7				ug/L	367704	Standard
	Ti	47	210794.7	4.4	**103.5703**	3.036	2.9	ug/L	127	Standard
	V	51	1264021.3	4.3	**55.4048**	1.671	3.0	ug/L	6636	Standard
	Cr	52	1020786.6	5.6	**53.3938**	2.373	4.4	ug/L	21244	Standard
	Cr	53	115628.0	6.2	**52.8316**	2.768	5.2	ug/L	467	Standard
	Mn	55	1312936.8	4.1	**55.0080**	1.734	3.2	ug/L	8327	Standard
	Co	59	863739.1	4.5	**51.3840**	1.684	3.3	ug/L	123	Standard
	Ni	60	180266.7	4.9	**51.9356**	1.937	3.7	ug/L	272	Standard
	Cu	65	148969.1	4.6	**50.0082**	1.632	3.3	ug/L	1002	Standard
	Zn	66	68671.5	4.3	**49.4376**	1.624	3.3	ug/L	3532	Standard
>	**Ge**	72	250557.3	1.4				ug/L	254939	Standard
	As	75	61996.4	3.8	**50.4679**	1.257	2.5	ug/L	-224	Standard
	Se	82	6318.5	4.2	**51.3095**	1.440	2.8	ug/L	24	Standard
	Se-1	77	4319.3	3.4	**49.5742**	1.025	2.1	ug/L	93	Standard
	Ga	71	232757.6	0.6				mg/L	233175	Standard
	Rb	85	1031.4	4.7				ug/L	20	Standard
>	**Y**	89	230181.6	1.7				ug/L	235100	Standard
	Rh	103	48.0	18.2				ug/L	6	Standard
	Mo	98	419977.3	3.9	**95.3785**	3.812	4.0	ug/L	14	Standard
	Ag	107	457866.4	4.4	**53.7745**	2.332	4.3	ug/L	38	Standard
	Cd	111	266700.9	5.6	**51.6775**	2.848	5.5	mg/L	439	Standard
	Cd	114	718445.8	4.2	**50.0717**	2.086	4.2	ug/L	1326	Standard
>	**In**	115	845794.7	1.3				ug/L	804157	Standard
	Sn	118	946342.3	5.7	**49.2442**	2.825	5.7	ug/L	4860	Standard
	Sb	123	655931.1	5.0	**51.4901**	2.574	5.0	ug/L	28	Standard
	Ba	135	273572.5	4.2	**46.9986**	1.990	4.2	ug/L	54	Standard
	Ce	140	1136.7	6.8				ug/L	61	Standard
>	**Tb**	159	873879.7	0.8				ug/L	844239	Standard
	Ho	165	31.3	9.8				ug/L	6	Standard
	Tl	203	868735.6	3.3	**50.5222**	1.906	3.8	ug/L	10	Standard
	Tl	205	2143741.4	6.8	**51.6360**	3.630	7.0	ug/L	16	Standard
	Pb	206	699398.4	5.1	**50.5646**	2.683	5.3	ug/L	421	Standard
	Pb	207	581595.9	4.4	**50.7262**	2.203	4.3	ug/L	341	Standard
	Pb	208	2688736.3	4.3	**50.8430**	2.180	4.3	ug/L	1571	Standard
	U	238	2626752.6	5.9	**52.7915**	2.840	5.4	ug/L	4	Standard
>	**Bi**	209	436165.8	1.8				ug/L	457202	Standard
	Na	23	16178.7	5.6	**4.8121**	0.248	5.1	mg/L	138	Standard
	Mg	24	1317354.6	5.6	**5.0165**	0.220	4.4	mg/L	134	Standard

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	K	39	55160.9	2.7	**4.9244**	0.067	1.4	mg/L	563	Standard
	Ca	43	3441.7	5.2	**4.7558**	0.174	3.7	mg/L	127	Standard
	Fe	54	29862.7	6.3	**4.9056**	0.256	5.2	mg/L	815	Standard
	Fe	57	896713.1	4.8	**5.4106**	0.195	3.6	mg/L	4749	Standard
>	**Sc-1**	45	375013.1	1.7				mg/L	367704	Standard
	Cl	35	99402.7	1.8				ug/L	59901	Standard
	Kr	83	62.4	5.0				ug/L	50	Standard
	Br	81	13452.0	2.2				ug/L	13965	Standard
	P	31	96013.0	1.9				ug/L	71952	Standard
	S	34	978575.7	2.1				ug/L	878802	Standard
	Sr	88	732.7	8.4				ug/L	321	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	100.949		
>	Sc	45			
	Ti	47	103.570		
	V	51	110.810		
	Cr	52	106.788		
	Cr	53			
	Mn	55	110.016		
	Co	59	102.768		
	Ni	60	103.871		
	Cu	65	100.016		
	Zn	66	98.875		
>	Ge	72		98.281	
	As	75	100.936		
	Se	82	102.619		
	Se-1	77	99.148		
	Ga	71			
	Rb	85			
>	Y	89		97.908	
	Rh	103			
	Mo	98	95.378		
	Ag	107	107.549		
	Cd	111	103.355		
	Cd	114			
>	In	115		105.178	
	Sn	118	98.488		
	Sb	123	102.980		
	Ba	135	93.997		
	Ce	140			
>	Tb	159		103.511	
	Ho	165			
	Tl	203	101.044		
	Tl	205			
	Pb	206	101.129		

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	Pb	207	101.452	
	Pb	208	101.686	
	U	238	105.583	
>	Bi	209		95.399
	Na	23	96.242	
	Mg	24	100.331	
	K	39	98.488	
	Ca	43	95.117	
	Fe	54	98.113	
	Fe	57	108.213	
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	V	51	
QC Std 6	Mn	55	

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Method 6020 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, May 03, 2012 13:12:12
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: SLP 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	20360.7	1.1	**7.0688**	42.324	598.7	ug/L	20538	Standard
	Be	9	33.3	12.1	**0.0018**	0.001	44.1	ug/L	13	Standard
	Al	27	15361.8	0.8	**-0.2782**	0.013	4.8	ug/L	25813	Standard
>	**Sc**	45	353749.5	2.5				ug/L	367704	Standard
	Ti	47	115.3	22.3	**0.0063**	0.013	213.1	ug/L	127	Standard
	V	51	5855.4	3.2	**-0.0172**	0.009	51.4	ug/L	6636	Standard
	Cr	52	18427.5	2.5	**-0.0720**	0.026	36.5	ug/L	21244	Standard
	Cr	53	501.3	5.6	**0.0279**	0.014	49.2	ug/L	467	Standard
	Mn	55	1590.4	2.8	**-0.1624**	0.002	1.2	ug/L	8327	Standard
	Co	59	151.3	16.2	**0.0019**	0.002	79.2	ug/L	123	Standard
	Ni	60	114.0	10.7	**-0.0268**	0.004	13.7	ug/L	272	Standard
	Cu	65	909.7	1.2	**-0.0116**	0.004	36.8	ug/L	1002	Standard
	Zn	66	1059.0	1.2	**-1.1330**	0.011	1.0	ug/L	3532	Standard
>	**Ge**	72	238175.4	0.1				ug/L	254939	Standard
	As	75	-219.0	13.2	**-0.0253**	0.025	97.4	ug/L	-224	Standard
	Se	82	19.9	31.2	**-0.0762**	0.053	70.1	ug/L	24	Standard
	Se-1	77	80.3	4.0	**-0.1334**	0.038	28.8	ug/L	93	Standard
	Ga	71	221491.3	1.2				mg/L	233175	Standard
	Rb	85	30.0	13.3				ug/L	20	Standard
>	**Y**	89	218679.6	1.3				ug/L	235100	Standard
	Rh	103	1.3	86.6				ug/L	6	Standard
	Mo	98	146.6	38.0	**0.0248**	0.013	51.6	ug/L	14	Standard
	Ag	107	87.3	34.7	**0.0055**	0.004	65.6	ug/L	38	Standard
	Cd	111	496.5	4.6	**0.0065**	0.003	45.9	mg/L	439	Standard
	Cd	114	1331.9	1.3	**-0.0005**	0.003	564.4	ug/L	1326	Standard
>	**In**	115	812082.0	2.1				ug/L	804157	Standard
	Sn	118	1919.5	7.4	**-0.0884**	0.006	7.3	ug/L	4860	Standard
	Sb	123	280.2	24.6	**0.0167**	0.005	32.1	ug/L	28	Standard
	Ba	135	78.3	9.6	**0.0031**	0.001	35.7	ug/L	54	Standard
	Ce	140	106.7	18.8				ug/L	61	Standard
>	**Tb**	159	842237.7	1.5				ug/L	844239	Standard
	Ho	165	10.7	21.7				ug/L	6	Standard
	Tl	203	88.7	23.8	**0.0056**	0.001	20.3	ug/L	10	Standard
	Tl	205	226.0	23.8	**0.0052**	0.001	23.4	ug/L	16	Standard
	Pb	206	440.7	6.6	**0.0032**	0.002	52.1	ug/L	421	Standard
	Pb	207	357.7	6.2	**-0.0001**	0.002	1403.1	ug/L	341	Standard
	Pb	208	1655.4	5.9	**0.0011**	0.002	133.5	ug/L	1571	Standard
	U	238	553.7	12.9	**0.0123**	0.002	13.3	ug/L	4	Standard
>	**Bi**	209	433100.7	1.8				ug/L	457202	Standard
	Na	23	116.7	12.9	**-0.0024**	0.005	213.8	mg/L	138	Standard
	Mg	24	228.7	10.5	**-0.0005**	0.000	21.8	mg/L	134	Standard

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K	39	605.3	7.3	**-0.0002**	0.005	2346.8	mg/L	563	Standard
Ca	43	97.3	24.5	**-0.0274**	0.040	145.5	mg/L	127	Standard
Fe	54	818.6	6.1	**0.0079**	0.008	103.5	mg/L	815	Standard
Fe	57	4659.4	3.4	**-0.0006**	0.001	179.9	mg/L	4749	Standard
> **Sc-1**	45	353749.5	2.5				mg/L	367704	Standard
Cl	35	92881.2	1.5				ug/L	59901	Standard
Kr	83	52.4	7.0				ug/L	50	Standard
Br	81	12674.6	1.6				ug/L	13965	Standard
P	31	81047.7	3.9				ug/L	71952	Standard
S	34	950471.8	1.9				ug/L	878802	Standard
Sr	88	263.3	8.4				ug/L	321	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		93.425	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
> Y	89		93.015	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
> In	115		100.985	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
> Tb	159		99.763	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	94.729
	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	

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: PBW 32 WG396868-02
Sample Date/Time: Thursday, May 03, 2012 13:28:07
Number of Replicates: 3
Autosampler Position: 236
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP 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	21827.0	1.2	**35.5160**	28.864	81.3	ug/L	20538	Standard
	Be	9	41.7	9.1	**0.0033**	0.001	27.1	ug/L	13	Standard
	Al	27	125134.5	6.0	**4.3880**	0.317	7.2	ug/L	25813	Standard
>	**Sc**	45	372786.1	0.8				ug/L	367704	Standard
	Ti	47	157.3	3.2	**0.0235**	0.004	18.1	ug/L	127	Standard
	V	51	6550.3	1.2	**-0.0019**	0.011	551.8	ug/L	6636	Standard
	Cr	52	20746.5	0.2	**-0.0072**	0.031	426.8	ug/L	21244	Standard
	Cr	53	528.7	4.8	**0.0267**	0.012	43.8	ug/L	467	Standard
	Mn	55	4988.5	4.8	**-0.0244**	0.011	45.5	ug/L	8327	Standard
	Co	59	216.7	0.5	**0.0053**	0.000	5.0	ug/L	123	Standard
	Ni	60	136.7	5.9	**-0.0222**	0.003	12.3	ug/L	272	Standard
	Cu	65	339.0	1.6	**-0.2213**	0.004	1.9	ug/L	1002	Standard
	Zn	66	4394.3	4.9	**1.2980**	0.130	10.0	ug/L	3532	Standard
>	**Ge**	72	252460.2	2.6				ug/L	254939	Standard
	As	75	-243.2	3.8	**-0.0342**	0.005	14.9	ug/L	-224	Standard
	Se	82	22.1	28.8	**-0.0679**	0.049	72.6	ug/L	24	Standard
	Se-1	77	96.7	11.4	**-0.0002**	0.112	56590.9	ug/L	93	Standard
	Ga	71	235338.9	2.2				mg/L	233175	Standard
	Rb	85	50.7	34.5				ug/L	20	Standard
>	**Y**	89	230455.5	0.9				ug/L	235100	Standard
	Rh	103	6.0					ug/L	6	Standard
	Mo	98	21.9	12.0	**-0.0048**	0.001	11.6	ug/L	14	Standard
	Ag	107	45.7	10.1	**0.0002**	0.001	334.8	ug/L	38	Standard
	Cd	111	572.0	8.0	**0.0171**	0.008	47.2	mg/L	439	Standard
	Cd	114	1539.8	1.7	**0.0101**	0.003	25.8	ug/L	1326	Standard
>	**In**	115	845726.2	0.8				ug/L	804157	Standard
	Sn	118	1478.1	0.4	**-0.1156**	0.000	0.3	ug/L	4860	Standard
	Sb	123	253.6	2.2	**0.0138**	0.000	3.4	ug/L	28	Standard
	Ba	135	174.3	10.3	**0.0190**	0.003	16.2	ug/L	54	Standard
	Ce	140	166.7	9.0				ug/L	61	Standard
>	**Tb**	159	845133.5	1.2				ug/L	844239	Standard
	Ho	165	11.3	40.8				ug/L	6	Standard
	Tl	203	103.3	3.0	**0.0064**	0.000	2.7	ug/L	10	Standard
	Tl	205	243.3	6.6	**0.0055**	0.000	6.5	ug/L	16	Standard
	Pb	206	424.7	6.7	**0.0013**	0.002	132.0	ug/L	421	Standard
	Pb	207	360.0	3.3	**-0.0007**	0.001	207.5	ug/L	341	Standard
	Pb	208	1607.7	1.1	**-0.0005**	0.000	42.2	ug/L	1571	Standard
	U	238	166.3	8.2	**0.0044**	0.000	6.9	ug/L	4	Standard
>	**Bi**	209	443211.1	1.1				ug/L	457202	Standard
	Na	23	140.0	8.6	**0.0028**	0.004	139.1	mg/L	138	Standard
	Mg	24	492.3	9.5	**0.0005**	0.000	36.3	mg/L	134	Standard

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K	39	613.3	2.4	**-0.0025**	0.001	35.8	mg/L	563	Standard
Ca	43	125.3	3.3	**0.0048**	0.006	128.4	mg/L	127	Standard
Fe	54	867.1	9.8	**0.0088**	0.015	176.4	mg/L	815	Standard
Fe	57	5301.6	4.0	**0.0018**	0.001	75.1	mg/L	4749	Standard
Sc-1	45	372786.1	0.8				mg/L	367704	Standard
Cl	35	146995.6	0.4				ug/L	59901	Standard
Kr	83	48.7	9.0				ug/L	50	Standard
Br	81	14704.8	1.0				ug/L	13965	Standard
P	31	93364.5	0.8				ug/L	71952	Standard
S	34	971375.3	2.1				ug/L	878802	Standard
Sr	88	1335.4	5.5				ug/L	321	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		99.028	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		98.024	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		105.169	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		100.106	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	96.940
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: LCSW 32 WG396868-03
Sample Date/Time: Thursday, May 03, 2012 13:30:54
Number of Replicates: 3
Autosampler Position: 237
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP 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	21958.9	0.6	**7.4837**	18.534	247.7	ug/L	20538	Standard
	Be	9	124020.4	2.8	**27.1850**	0.374	1.4	ug/L	13	Standard
	Al	27	687723.6	7.8	**27.8082**	1.810	6.5	ug/L	25813	Standard
>	**Sc**	45	381321.2	1.6				ug/L	367704	Standard
	Ti	47	152.7	7.9	**0.0189**	0.006	32.8	ug/L	127	Standard
	V	51	653314.7	3.9	**27.4272**	0.312	1.1	ug/L	6636	Standard
	Cr	52	551568.3	5.4	**27.2396**	0.536	2.0	ug/L	21244	Standard
	Cr	53	61250.7	7.7	**26.8212**	1.267	4.7	ug/L	467	Standard
	Mn	55	704964.5	6.6	**28.3052**	0.932	3.3	ug/L	8327	Standard
	Co	59	470556.5	5.7	**26.9372**	0.573	2.1	ug/L	123	Standard
	Ni	60	96511.7	7.0	**26.7217**	0.923	3.5	ug/L	272	Standard
	Cu	65	82971.9	6.9	**26.6425**	0.893	3.4	ug/L	1002	Standard
	Zn	66	39797.8	8.0	**26.6867**	1.278	4.8	ug/L	3532	Standard
>	**Ge**	72	260286.3	3.7				ug/L	254939	Standard
	As	75	32495.7	5.4	**25.5387**	0.458	1.8	ug/L	-224	Standard
	Se	82	3320.9	6.8	**25.8272**	0.976	3.8	ug/L	24	Standard
	Se-1	77	2302.2	5.0	**24.8833**	0.356	1.4	ug/L	93	Standard
	Ga	71	244693.3	4.5				mg/L	233175	Standard
	Rb	85	48.7	10.3				ug/L	20	Standard
>	**Y**	89	241334.4	3.5				ug/L	235100	Standard
	Rh	103	22.7	13.5				ug/L	6	Standard
	Mo	98	52.3	9.7	**0.0017**	0.001	52.0	ug/L	14	Standard
	Ag	107	242705.4	3.1	**27.6396**	0.483	1.7	ug/L	38	Standard
	Cd	111	140445.2	4.8	**26.3350**	0.640	2.4	mg/L	439	Standard
	Cd	114	376939.4	5.3	**25.4161**	0.733	2.9	ug/L	1326	Standard
>	**In**	115	872127.9	2.4				ug/L	804157	Standard
	Sn	118	2193.5	7.7	**-0.0818**	0.006	7.4	ug/L	4860	Standard
	Sb	123	341526.1	4.5	**25.9870**	0.535	2.1	ug/L	28	Standard
	Ba	135	145168.5	5.5	**24.1670**	0.749	3.1	ug/L	54	Standard
	Ce	140	284.7	11.8				ug/L	61	Standard
>	**Tb**	159	882111.1	2.0				ug/L	844239	Standard
	Ho	165	7.3	68.6				ug/L	6	Standard
	Tl	203	461229.1	3.3	**25.7711**	0.361	1.4	ug/L	10	Standard
	Tl	205	1106158.3	4.0	**25.5968**	0.550	2.1	ug/L	16	Standard
	Pb	206	369315.7	4.0	**25.6380**	0.530	2.1	ug/L	421	Standard
	Pb	207	316610.0	5.0	**26.5133**	0.810	3.1	ug/L	341	Standard
	Pb	208	1442793.4	4.8	**26.1953**	0.747	2.9	ug/L	1571	Standard
	U	238	1293161.0	6.4	**24.9680**	1.121	4.5	ug/L	4	Standard
>	**Bi**	209	453804.3	1.9				ug/L	457202	Standard
	Na	23	126.0	24.4	**-0.0022**	0.010	429.7	mg/L	138	Standard
	Mg	24	280.0	8.0	**-0.0004**	0.000	24.0	mg/L	134	Standard

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K	39	622.0	1.7	**-0.0030**	0.000	6.0	mg/L	563	Standard
Ca	43	104.7	16.7	**-0.0286**	0.022	78.6	mg/L	127	Standard
Fe	54	985.7	2.4	**0.0252**	0.007	25.9	mg/L	815	Standard
Fe	57	6020.5	4.0	**0.0053**	0.001	16.4	mg/L	4749	Standard
> **Sc-1**	45	381321.2	1.6				mg/L	367704	Standard
Cl	35	116096.5	1.8				ug/L	59901	Standard
Kr	83	47.3	13.9				ug/L	50	Standard
Br	81	15103.2	3.3				ug/L	13965	Standard
P	31	100477.1	1.8				ug/L	71952	Standard
S	34	969560.8	3.2				ug/L	878802	Standard
Sr	88	614.7	10.2				ug/L	321	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		102.652	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		108.452	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		104.486	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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|	Pb	207	
|	Pb	208	
|	U	238	
|>	Bi	209	99.257
⌈	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: LCSW 32 WG396868-03
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Method 6020 - Summary Report

Sample ID: FBLK WG396840-01
Sample Date/Time: Thursday, May 03, 2012 13:33:41
Number of Replicates: 3
Autosampler Position: 238
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP 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	22178.9	2.1	**57.8180**	3.517	6.1	ug/L	20538	Standard
	Be	9	28.0	35.7	**0.0002**	0.002	1060.2	ug/L	13	Standard
	Al	27	111929.4	7.3	**3.8050**	0.252	6.6	ug/L	25813	Standard
>	**Sc**	45	373880.4	2.1				ug/L	367704	Standard
	Ti	47	194.0	8.1	**0.0397**	0.009	22.5	ug/L	127	Standard
	V	51	6652.2	1.8	**-0.0027**	0.012	442.5	ug/L	6636	Standard
	Cr	52	21467.2	1.8	**0.0106**	0.046	428.8	ug/L	21244	Standard
	Cr	53	618.7	3.1	**0.0629**	0.018	28.8	ug/L	467	Standard
	Mn	55	5830.1	5.8	**0.0064**	0.016	243.6	ug/L	8327	Standard
	Co	59	246.7	11.1	**0.0067**	0.001	18.5	ug/L	123	Standard
	Ni	60	379.7	8.3	**0.0454**	0.009	19.1	ug/L	272	Standard
	Cu	65	2508.5	5.2	**0.4918**	0.054	11.0	ug/L	1002	Standard
	Zn	66	7576.2	6.6	**3.5626**	0.388	10.9	ug/L	3532	Standard
>	**Ge**	72	257211.2	4.1				ug/L	254939	Standard
	As	75	-205.6	6.5	**-0.0008**	0.005	596.3	ug/L	-224	Standard
	Se	82	36.9	27.5	**0.0456**	0.073	160.7	ug/L	24	Standard
	Se-1	77	98.7	11.1	**0.0014**	0.096	6704.9	ug/L	93	Standard
	Ga	71	242095.9	4.4				mg/L	233175	Standard
	Rb	85	164.0	11.6				ug/L	20	Standard
>	**Y**	89	234205.4	3.1				ug/L	235100	Standard
	Rh	103	2.0	100.0				ug/L	6	Standard
	Mo	98	28.7	19.7	**-0.0032**	0.001	39.0	ug/L	14	Standard
	Ag	107	64.7	19.6	**0.0024**	0.001	60.3	ug/L	38	Standard
	Cd	111	641.0	2.8	**0.0310**	0.003	9.0	mg/L	439	Standard
	Cd	114	1785.2	5.6	**0.0277**	0.007	24.6	ug/L	1326	Standard
>	**In**	115	842457.3	0.6				ug/L	804157	Standard
	Sn	118	26477.8	6.4	**1.1955**	0.082	6.8	ug/L	4860	Standard
	Sb	123	198.3	6.4	**0.0095**	0.001	9.7	ug/L	28	Standard
	Ba	135	345.7	9.2	**0.0487**	0.005	10.9	ug/L	54	Standard
	Ce	140	615.3	7.8				ug/L	61	Standard
>	**Tb**	159	864192.2	0.4				ug/L	844239	Standard
	Ho	165	22.0	48.1				ug/L	6	Standard
	Tl	203	121.7	34.0	**0.0073**	0.002	29.2	ug/L	10	Standard
	Tl	205	272.0	24.1	**0.0061**	0.001	22.2	ug/L	16	Standard
	Pb	206	1644.8	7.5	**0.0871**	0.005	6.0	ug/L	421	Standard
	Pb	207	1340.1	6.7	**0.0824**	0.004	5.4	ug/L	341	Standard
	Pb	208	6235.8	7.0	**0.0846**	0.005	5.5	ug/L	1571	Standard
	U	238	415.3	15.8	**0.0092**	0.001	11.6	ug/L	4	Standard
>	**Bi**	209	447046.7	3.0				ug/L	457202	Standard
	Na	23	346.7	7.5	**0.0647**	0.006	9.3	mg/L	138	Standard
	Mg	24	4178.9	8.5	**0.0145**	0.001	7.2	mg/L	134	Standard

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K	39	612.0	1.2	**-0.0028**	0.001	36.8	mg/L	563	Standard
Ca	43	109.3	23.9	**-0.0188**	0.037	195.4	mg/L	127	Standard
Fe	54	1005.7	5.3	**0.0319**	0.011	33.2	mg/L	815	Standard
Fe	57	6294.6	5.9	**0.0077**	0.001	19.2	mg/L	4749	Standard
> **Sc-1**	45	373880.4	2.1				mg/L	367704	Standard
Cl	35	112155.0	1.7				ug/L	59901	Standard
Kr	83	50.0	4.0				ug/L	50	Standard
Br	81	15805.9	0.8				ug/L	13965	Standard
P	31	101762.3	2.0				ug/L	71952	Standard
S	34	950736.2	0.8				ug/L	878802	Standard
Sr	88	5944.5	7.0				ug/L	321	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		100.891	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		99.619	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		104.763	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		102.363	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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|	Pb	207	
|	Pb	208	
|	U	238	
|>	Bi	209	97.779
⌈	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: FBLK WG396840-01
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Method 6020 - Summary Report

Sample ID: L1205003502
Sample Date/Time: Thursday, May 03, 2012 13:36:28
Number of Replicates: 3
Autosampler Position: 239
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP 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	1010670.6	4.4	**72553.6710**	2069.272	2.9	ug/L	20538	Standard
	Be	9	127.0	11.1	**0.0207**	0.003	13.8	ug/L	13	Standard
	Al	27	1815955.3	8.7	**72.1159**	5.529	7.7	ug/L	25813	Standard
>	**Sc**	45	396517.1	1.7				ug/L	367704	Standard
	Ti	47	7228.4	76.0	**3.2621**	2.529	77.5	ug/L	127	Standard
	V	51	93149.5	5.0	**3.5354**	0.184	5.2	ug/L	6636	Standard
	Cr	52	54131.9	3.4	**1.5858**	0.085	5.4	ug/L	21244	Standard
	Cr	53	4152.6	3.1	**1.5610**	0.050	3.2	ug/L	467	Standard
	Mn	55	259182.3	3.7	**9.9272**	0.360	3.6	ug/L	8327	Standard
	Co	59	5916.5	4.8	**0.3205**	0.015	4.8	ug/L	123	Standard
	Ni	60	9279.8	5.2	**2.4327**	0.125	5.1	ug/L	272	Standard
	Cu	65	6270.3	5.3	**1.6393**	0.100	6.1	ug/L	1002	Standard
	Zn	66	4451.0	3.6	**1.1372**	0.102	9.0	ug/L	3532	Standard
>	**Ge**	72	268959.5	0.3				ug/L	254939	Standard
	As	75	9763.1	3.9	**7.5429**	0.268	3.6	ug/L	-224	Standard
	Se	82	138.7	4.7	**0.8079**	0.050	6.2	ug/L	24	Standard
	Se-1	77	156.3	8.3	**0.5842**	0.140	24.0	ug/L	93	Standard
	Ga	71	251176.3	0.8				mg/L	233175	Standard
	Rb	85	28862.1	2.1				ug/L	20	Standard
>	**Y**	89	248135.1	2.9				ug/L	235100	Standard
	Rh	103	176.0	9.3				ug/L	6	Standard
	Mo	98	32185.0	4.7	**7.1560**	0.248	3.5	ug/L	14	Standard
	Ag	107	95.3	3.2	**0.0058**	0.000	5.6	ug/L	38	Standard
	Cd	111	890.0	7.0	**0.0755**	0.012	15.3	mg/L	439	Standard
	Cd	114	2406.2	0.6	**0.0674**	0.002	2.7	ug/L	1326	Standard
>	**In**	115	862523.6	1.7				ug/L	804157	Standard
	Sn	118	1315.4	3.2	**-0.1254**	0.003	2.0	ug/L	4860	Standard
	Sb	123	5861.8	3.8	**0.4450**	0.011	2.4	ug/L	28	Standard
	Ba	135	238108.9	4.2	**40.0985**	1.124	2.8	ug/L	54	Standard
	Ce	140	8023.5	15.4				ug/L	61	Standard
>	**Tb**	159	890293.1	1.7				ug/L	844239	Standard
	Ho	165	216.7	6.7				ug/L	6	Standard
	Tl	203	9663.4	2.8	**0.5654**	0.012	2.0	ug/L	10	Standard
	Tl	205	23141.0	3.7	**0.5600**	0.017	3.0	ug/L	16	Standard
	Pb	206	1808.8	7.0	**0.1026**	0.008	8.0	ug/L	421	Standard
	Pb	207	1490.1	3.5	**0.0991**	0.003	3.5	ug/L	341	Standard
	Pb	208	6777.2	4.3	**0.0985**	0.005	4.6	ug/L	1571	Standard
	U	238	23879.5	5.5	**0.4836**	0.023	4.8	ug/L	4	Standard
>	**Bi**	209	433768.8	0.8				ug/L	457202	Standard
	Na	23	41061.6	2.7	**11.6063**	0.172	1.5	mg/L	138	Standard
	Mg	24	1544792.7	5.1	**5.5646**	0.240	4.3	mg/L	134	Standard

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	K	39	16113.2	3.5	**1.3185**	0.047	3.6	mg/L	563	Standard
	Ca	43	16111.9	5.4	**21.6623**	0.958	4.4	mg/L	127	Standard
	Fe	54	1386.7	5.7	**0.0829**	0.010	12.1	mg/L	815	Standard
	Fe	57	31939.2	9.8	**0.1527**	0.017	11.1	mg/L	4749	Standard
>	**Sc-1**	45	396517.1	1.7				mg/L	367704	Standard
	Cl	35	1758284.1	2.1				ug/L	59901	Standard
	Kr	83	54.0	13.9				ug/L	50	Standard
	Br	81	41580.0	2.4				ug/L	13965	Standard
	P	31	122418.8	4.1				ug/L	71952	Standard
	S	34	4103006.2	3.1				ug/L	878802	Standard
	Sr	88	4484691.5	5.0				ug/L	321	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		105.500	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		105.544	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		107.258	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		105.455	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	94.875
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: May 04, 2012

Method 6020 - Summary Report

Sample ID: L1205003502DL WG396925-02
Sample Date/Time: Thursday, May 03, 2012 13:39:15
Number of Replicates: 3
Autosampler Position: 240
Sample Description: 5
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP 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	967588.9	3.2	**68825.7554**	2955.516	4.3	ug/L	20538	Standard
	Be	9	136.0	10.2	**0.0224**	0.002	10.9	ug/L	13	Standard
	Al	27	1680515.0	6.2	**66.1518**	4.676	7.1	ug/L	25813	Standard
>	**Sc**	45	399995.3	2.8				ug/L	367704	Standard
	Ti	47	4194.6	27.3	**1.8858**	0.512	27.1	ug/L	127	Standard
	V	51	88582.4	4.9	**3.3857**	0.135	4.0	ug/L	6636	Standard
	Cr	52	52449.4	4.0	**1.5294**	0.073	4.8	ug/L	21244	Standard
	Cr	53	4447.3	3.4	**1.7070**	0.044	2.6	ug/L	467	Standard
	Mn	55	241015.8	4.0	**9.3135**	0.263	2.8	ug/L	8327	Standard
	Co	59	5600.7	3.8	**0.3062**	0.009	2.8	ug/L	123	Standard
	Ni	60	8639.5	4.6	**2.2848**	0.078	3.4	ug/L	272	Standard
	Cu	65	5840.1	5.1	**1.5229**	0.071	4.7	ug/L	1002	Standard
	Zn	66	3959.2	4.8	**0.8231**	0.108	13.1	ug/L	3532	Standard
>	**Ge**	72	266134.5	1.3				ug/L	254939	Standard
	As	75	9241.6	3.1	**7.2222**	0.136	1.9	ug/L	-224	Standard
	Se	82	131.6	7.2	**0.7651**	0.086	11.2	ug/L	24	Standard
	Se-1	77	160.7	5.1	**0.6501**	0.078	12.1	ug/L	93	Standard
	Ga	71	249824.4	1.6				mg/L	233175	Standard
	Rb	85	27527.7	3.7				ug/L	20	Standard
>	**Y**	89	241338.4	2.6				ug/L	235100	Standard
	Rh	103	170.7	17.6				ug/L	6	Standard
	Mo	98	30288.3	6.2	**6.7677**	0.332	4.9	ug/L	14	Standard
	Ag	107	48.3	4.3	**0.0004**	0.000	41.8	ug/L	38	Standard
	Cd	111	854.0	6.5	**0.0694**	0.008	11.8	mg/L	439	Standard
	Cd	114	2393.6	2.5	**0.0673**	0.002	3.7	ug/L	1326	Standard
>	**In**	115	858088.0	1.5				ug/L	804157	Standard
	Sn	118	1514.7	6.3	**-0.1148**	0.005	4.7	ug/L	4860	Standard
	Sb	123	5671.8	5.1	**0.4326**	0.016	3.7	ug/L	28	Standard
	Ba	135	227678.2	4.9	**38.5355**	1.318	3.4	ug/L	54	Standard
	Ce	140	7501.9	9.9				ug/L	61	Standard
>	**Tb**	159	892664.6	1.5				ug/L	844239	Standard
	Ho	165	213.3	8.2				ug/L	6	Standard
	Tl	203	9204.5	2.9	**0.5337**	0.007	1.4	ug/L	10	Standard
	Tl	205	22221.6	4.1	**0.5328**	0.011	2.1	ug/L	16	Standard
	Pb	206	1556.7	4.3	**0.0833**	0.003	3.4	ug/L	421	Standard
	Pb	207	1211.4	2.5	**0.0737**	0.001	1.0	ug/L	341	Standard
	Pb	208	5760.1	3.5	**0.0782**	0.002	2.0	ug/L	1571	Standard
	U	238	22639.6	4.9	**0.4543**	0.013	2.9	ug/L	4	Standard
>	**Bi**	209	437758.3	2.1				ug/L	457202	Standard
	Na	23	39686.6	4.2	**11.1218**	0.460	4.1	mg/L	138	Standard
	Mg	24	1475823.7	4.3	**5.2723**	0.235	4.5	mg/L	134	Standard

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K	39	15681.4	2.5	**1.2706**	0.052	4.1	mg/L	563	Standard
Ca	43	15461.9	3.0	**20.6100**	0.660	3.2	mg/L	127	Standard
Fe	54	1324.7	4.8	**0.0714**	0.015	21.0	mg/L	815	Standard
Fe	57	30257.6	8.1	**0.1417**	0.015	10.6	mg/L	4749	Standard
> **Sc-1**	45	399995.3	2.8				mg/L	367704	Standard
Cl	35	1681578.6	1.9				ug/L	59901	Standard
Kr	83	54.0	11.9				ug/L	50	Standard
Br	81	38783.6	2.2				ug/L	13965	Standard
P	31	120341.7	4.7				ug/L	71952	Standard
S	34	4019636.8	4.2				ug/L	878802	Standard
Sr	88	4196145.9	4.3				ug/L	321	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		104.392	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
> Y	89		102.653	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
> In	115		106.706	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
> Tb	159		105.736	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205003502DL WG396925-02
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|	Pb	207	
|	Pb	208	
|	U	238	
|>	Bi	209	95.747
⌈	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1205003502DL WG396925-02
Report Date/Time: Thursday, May 03, 2012 13:41:43
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Method 6020 - Summary Report

Sample ID: L1205003502PS WG396925-01
Sample Date/Time: Thursday, May 03, 2012 13:42:03
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: SLP 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	961311.6	4.2	**68882.9792**	1694.600	2.5	ug/L	20538	Standard
	Be	9	124873.5	4.6	**26.3004**	0.787	3.0	ug/L	13	Standard
	Al	27	2187715.3	7.1	**86.9888**	3.907	4.5	ug/L	25813	Standard
>	**Sc**	45	396845.4	2.9				ug/L	367704	Standard
	Ti	47	4025.2	8.3	**1.8271**	0.162	8.8	ug/L	127	Standard
	V	51	727868.5	4.0	**30.1734**	0.805	2.7	ug/L	6636	Standard
	Cr	52	575133.9	4.6	**28.0613**	0.959	3.4	ug/L	21244	Standard
	Cr	53	63248.6	5.1	**27.3459**	1.058	3.9	ug/L	467	Standard
	Mn	55	913155.7	4.7	**36.2553**	1.224	3.4	ug/L	8327	Standard
	Co	59	451202.7	5.2	**25.4894**	0.991	3.9	ug/L	123	Standard
	Ni	60	98875.7	4.4	**27.0286**	0.839	3.1	ug/L	272	Standard
	Cu	65	81853.9	5.3	**25.9378**	1.041	4.0	ug/L	1002	Standard
	Zn	66	39437.6	3.4	**26.0750**	0.582	2.2	ug/L	3532	Standard
>	**Ge**	72	263786.7	1.4				ug/L	254939	Standard
	As	75	41469.3	4.4	**32.1221**	0.965	3.0	ug/L	-224	Standard
	Se	82	3343.0	4.8	**25.6616**	0.912	3.6	ug/L	24	Standard
	Se-1	77	2379.9	5.1	**25.4057**	1.048	4.1	ug/L	93	Standard
	Ga	71	246207.8	1.3				mg/L	233175	Standard
	Rb	85	27696.0	2.8				ug/L	20	Standard
>	**Y**	89	242211.7	1.7				ug/L	235100	Standard
	Rh	103	155.3	4.5				ug/L	6	Standard
	Mo	98	30513.4	6.0	**6.8368**	0.354	5.2	ug/L	14	Standard
	Ag	107	229202.7	2.6	**26.5955**	0.339	1.3	ug/L	38	Standard
	Cd	111	136668.9	3.9	**26.1182**	0.725	2.8	mg/L	439	Standard
	Cd	114	361850.0	4.8	**24.8655**	0.912	3.7	ug/L	1326	Standard
>	**In**	115	855881.8	1.5				ug/L	804157	Standard
	Sn	118	3137.0	2.1	**-0.0309**	0.003	9.1	ug/L	4860	Standard
	Sb	123	336066.2	4.9	**26.0614**	1.082	4.2	ug/L	28	Standard
	Ba	135	362741.6	4.9	**61.5754**	2.692	4.4	ug/L	54	Standard
	Ce	140	6740.8	6.5				ug/L	61	Standard
>	**Tb**	159	882992.1	0.9				ug/L	844239	Standard
	Ho	165	200.0	9.8				ug/L	6	Standard
	Tl	203	447139.1	4.0	**26.1668**	0.887	3.4	ug/L	10	Standard
	Tl	205	1061084.2	4.1	**25.7181**	0.902	3.5	ug/L	16	Standard
	Pb	206	347509.9	4.5	**25.2695**	1.055	4.2	ug/L	421	Standard
	Pb	207	295997.9	4.8	**25.9673**	1.174	4.5	ug/L	341	Standard
	Pb	208	1355125.1	4.6	**25.7733**	1.059	4.1	ug/L	1571	Standard
	U	238	1296320.9	5.3	**26.2250**	1.301	5.0	ug/L	4	Standard
>	**Bi**	209	433340.2	1.6				ug/L	457202	Standard
	Na	23	39322.4	4.6	**11.1046**	0.402	3.6	mg/L	138	Standard
	Mg	24	1478848.8	6.0	**5.3212**	0.203	3.8	mg/L	134	Standard

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K	39	15537.3	4.0	**1.2679**	0.018	1.4	mg/L	563	Standard
Ca	43	15304.4	4.4	**20.5534**	0.563	2.7	mg/L	127	Standard
Fe	54	1254.2	3.4	**0.0617**	0.008	13.6	mg/L	815	Standard
Fe	57	30373.9	7.6	**0.1435**	0.009	6.2	mg/L	4749	Standard
> **Sc-1**	45	396845.4	2.9				mg/L	367704	Standard
Cl	35	1686428.0	2.1				ug/L	59901	Standard
Kr	83	56.7	11.6				ug/L	50	Standard
Br	81	38054.1	2.6				ug/L	13965	Standard
P	31	119164.6	4.2				ug/L	71952	Standard
S	34	3950517.6	2.8				ug/L	878802	Standard
Sr	88	4179332.9	4.5				ug/L	321	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		103.471	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
> Y	89		103.025	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
> In	115		106.432	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
> Tb	159		104.590	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	94.781
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1205007301 WG396868-01
Sample Date/Time: Thursday, May 03, 2012 13:44:50
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: SLP 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	979384.9	4.4	**69503.4641**	2393.468	3.4	ug/L	20538	Standard
	Be	9	126617.3	4.6	**26.4064**	0.950	3.6	ug/L	13	Standard
	Al	27	2341536.8	7.7	**92.2920**	6.329	6.9	ug/L	25813	Standard
>	**Sc**	45	400730.9	1.1				ug/L	367704	Standard
	Ti	47	5058.9	25.7	**2.3278**	0.619	26.6	ug/L	127	Standard
	V	51	729826.8	5.3	**30.4778**	1.163	3.8	ug/L	6636	Standard
	Cr	52	566458.1	5.5	**27.8347**	1.271	4.6	ug/L	21244	Standard
	Cr	53	63497.6	4.4	**27.6593**	0.707	2.6	ug/L	467	Standard
	Mn	55	917529.9	3.7	**36.7076**	0.958	2.6	ug/L	8327	Standard
	Co	59	450216.7	3.1	**25.6302**	0.594	2.3	ug/L	123	Standard
	Ni	60	98909.1	4.0	**27.2387**	0.617	2.3	ug/L	272	Standard
	Cu	65	81199.3	4.6	**25.9213**	0.764	2.9	ug/L	1002	Standard
	Zn	66	38087.5	3.5	**25.3154**	0.508	2.0	ug/L	3532	Standard
>	**Ge**	72	261866.0	2.3				ug/L	254939	Standard
	As	75	41903.7	4.7	**32.6918**	0.844	2.6	ug/L	-224	Standard
	Se	82	3467.0	6.0	**26.8158**	1.154	4.3	ug/L	24	Standard
	Se-1	77	2330.5	3.5	**25.0493**	0.393	1.6	ug/L	93	Standard
	Ga	71	242279.5	1.9				mg/L	233175	Standard
	Rb	85	27655.2	3.7				ug/L	20	Standard
>	**Y**	89	237987.4	3.7				ug/L	235100	Standard
	Rh	103	154.0	16.0				ug/L	6	Standard
	Mo	98	30110.2	6.5	**6.7846**	0.323	4.8	ug/L	14	Standard
	Ag	107	227507.9	4.5	**26.5509**	0.706	2.7	ug/L	38	Standard
	Cd	111	135045.1	5.2	**25.9560**	0.884	3.4	mg/L	439	Standard
	Cd	114	362847.4	5.3	**25.0794**	0.890	3.5	ug/L	1326	Standard
>	**In**	115	850778.9	1.8				ug/L	804157	Standard
	Sn	118	2131.5	4.4	**-0.0822**	0.003	3.4	ug/L	4860	Standard
	Sb	123	337379.3	4.8	**26.3147**	0.801	3.0	ug/L	28	Standard
	Ba	135	366599.8	5.0	**62.5886**	2.134	3.4	ug/L	54	Standard
	Ce	140	10513.2	29.8				ug/L	61	Standard
>	**Tb**	159	897728.6	2.5				ug/L	844239	Standard
	Ho	165	208.0	20.2				ug/L	6	Standard
	Tl	203	443877.1	3.6	**25.9800**	0.574	2.2	ug/L	10	Standard
	Tl	205	1067158.4	3.6	**25.8701**	0.556	2.1	ug/L	16	Standard
	Pb	206	348290.4	4.6	**25.3271**	0.827	3.3	ug/L	421	Standard
	Pb	207	298214.0	4.7	**26.1620**	0.858	3.3	ug/L	341	Standard
	Pb	208	1362134.7	4.8	**25.9080**	0.882	3.4	ug/L	1571	Standard
	U	238	1318571.2	6.2	**26.6727**	1.305	4.9	ug/L	4	Standard
>	**Bi**	209	433205.9	1.4				ug/L	457202	Standard
	Na	23	39942.0	4.2	**11.1681**	0.360	3.2	mg/L	138	Standard
	Mg	24	1500797.6	5.3	**5.3485**	0.227	4.2	mg/L	134	Standard

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K	39	15710.8	4.3	**1.2697**	0.043	3.4	mg/L	563	Standard
Ca	43	15282.4	4.3	**20.3206**	0.679	3.3	mg/L	127	Standard
Fe	54	1302.3	10.2	**0.0671**	0.019	28.2	mg/L	815	Standard
Fe	57	30273.6	5.4	**0.1413**	0.007	5.3	mg/L	4749	Standard
> **Sc-1**	45	400730.9	1.1				mg/L	367704	Standard
Cl	35	1780238.3	2.1				ug/L	59901	Standard
Kr	83	53.8	9.6				ug/L	50	Standard
Br	81	42786.4	2.8				ug/L	13965	Standard
P	31	119833.3	3.1				ug/L	71952	Standard
S	34	3988520.9	3.6				ug/L	878802	Standard
Sr	88	4208484.3	6.2				ug/L	321	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		102.717	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
> Y	89		101.228	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
> In	115		105.798	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
> Tb	159		106.336	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	94.752
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: May 04, 2012

Method 6020 - Summary Report

Sample ID: L1205007301DP WG396868-06
Sample Date/Time: Thursday, May 03, 2012 13:47:37
Number of Replicates: 3
Autosampler Position: 243
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP 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	91609.0	3.4	**5376.5421**	158.738	3.0	ug/L	20538	Standard
	Be	9	33.7	27.0	**0.0014**	0.002	147.4	ug/L	13	Standard
	Al	27	165510.6	6.9	**6.0052**	0.399	6.6	ug/L	25813	Standard
>	**Sc**	45	378624.2	1.3				ug/L	367704	Standard
	Ti	47	566.7	5.4	**0.2362**	0.012	5.3	ug/L	127	Standard
	V	51	25825.8	4.2	**0.8942**	0.025	2.8	ug/L	6636	Standard
	Cr	52	29746.9	4.6	**0.5436**	0.041	7.6	ug/L	21244	Standard
	Cr	53	1875.4	6.4	**0.6804**	0.048	7.1	ug/L	467	Standard
	Mn	55	29116.7	5.1	**1.0403**	0.039	3.7	ug/L	8327	Standard
	Co	59	2802.9	5.1	**0.1658**	0.005	3.1	ug/L	123	Standard
	Ni	60	14045.9	7.4	**4.1483**	0.223	5.4	ug/L	272	Standard
	Cu	65	19333.3	4.6	**6.4563**	0.169	2.6	ug/L	1002	Standard
	Zn	66	6833.5	7.5	**3.3475**	0.285	8.5	ug/L	3532	Standard
>	**Ge**	72	241028.6	2.2				ug/L	254939	Standard
	As	75	3060.6	1.8	**2.7441**	0.030	1.1	ug/L	-224	Standard
	Se	82	1504.5	4.2	**12.5168**	0.419	3.3	ug/L	24	Standard
	Se-1	77	1027.0	7.5	**11.4014**	0.741	6.5	ug/L	93	Standard
	Ga	71	224914.9	3.3				mg/L	233175	Standard
	Rb	85	5393.6	4.1				ug/L	20	Standard
>	**Y**	89	234986.4	1.2				ug/L	235100	Standard
	Rh	103	246.0	2.8				ug/L	6	Standard
	Mo	98	40486.5	3.7	**9.6743**	0.360	3.7	ug/L	14	Standard
	Ag	107	98.0	17.0	**0.0069**	0.002	29.8	ug/L	38	Standard
	Cd	111	678.3	3.7	**0.0448**	0.005	11.7	mg/L	439	Standard
	Cd	114	1864.4	6.7	**0.0397**	0.009	23.1	ug/L	1326	Standard
>	**In**	115	803062.5	0.0				ug/L	804157	Standard
	Sn	118	1628.8	10.4	**-0.1032**	0.009	9.1	ug/L	4860	Standard
	Sb	123	3130.1	2.8	**0.2526**	0.007	2.9	ug/L	28	Standard
	Ba	135	78901.8	3.6	**14.2676**	0.520	3.6	ug/L	54	Standard
	Ce	140	908.0	4.5				ug/L	61	Standard
>	**Tb**	159	859489.2	1.3				ug/L	844239	Standard
	Ho	165	21.3	54.1				ug/L	6	Standard
	Tl	203	677.0	3.6	**0.0445**	0.001	2.9	ug/L	10	Standard
	Tl	205	1390.7	3.4	**0.0372**	0.001	2.7	ug/L	16	Standard
	Pb	206	809.4	3.3	**0.0366**	0.002	4.5	ug/L	421	Standard
	Pb	207	667.7	1.4	**0.0336**	0.001	3.0	ug/L	341	Standard
	Pb	208	3090.1	3.5	**0.0350**	0.002	5.1	ug/L	1571	Standard
	U	238	3056.0	2.9	**0.0698**	0.002	2.3	ug/L	4	Standard
>	**Bi**	209	389940.6	0.8				ug/L	457202	Standard
	Na	23	66961.2	4.6	**19.8460**	0.704	3.5	mg/L	138	Standard
	Mg	24	760629.5	5.1	**2.8684**	0.119	4.1	mg/L	134	Standard

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	K	39	12341.0	3.7	**1.0458**	0.031	2.9	mg/L	563	Standard
	Ca	43	70920.5	4.6	**100.5009**	3.900	3.9	mg/L	127	Standard
	Fe	54	1399.9	7.6	**0.0956**	0.016	17.0	mg/L	815	Standard
	Fe	57	80557.7	7.3	**0.4534**	0.030	6.5	mg/L	4749	Standard
>	**Sc-1**	45	378624.2	1.3				mg/L	367704	Standard
	Cl	35	1766426.9	1.5				ug/L	59901	Standard
	Kr	83	57.1	4.1				ug/L	50	Standard
	Br	81	45738.6	2.9				ug/L	13965	Standard
	P	31	100813.9	3.9				ug/L	71952	Standard
	S	34	16254009.4	3.6				ug/L	878802	Standard
	Sr	88	7236654.9	3.5				ug/L	321	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		94.544	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		99.952	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		99.864	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		101.806	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	85.288
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ca 43 Upper, S, EEE	Ca	43	

Sample ID: L1205007301DP WG396868-06
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Method 6020 - Summary Report

Sample ID: L1205007301S WG396868-04
Sample Date/Time: Thursday, May 03, 2012 13:50:24
Number of Replicates: 3
Autosampler Position: 244
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP 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	33299.9	1.5	**1113.5456**	44.014	4.0	ug/L	20538	Standard
	Be	9	18.3	16.7	**-0.0016**	0.001	44.9	ug/L	13	Standard
	Al	27	70797.8	3.0	**2.2731**	0.126	5.5	ug/L	25813	Standard
>	**Sc**	45	348510.4	2.1				ug/L	367704	Standard
	Ti	47	190.0	10.0	**0.0471**	0.009	19.6	ug/L	127	Standard
	V	51	10295.2	0.8	**0.1998**	0.011	5.5	ug/L	6636	Standard
	Cr	52	22286.0	1.2	**0.1739**	0.036	20.5	ug/L	21244	Standard
	Cr	53	696.0	8.9	**0.1297**	0.030	23.4	ug/L	467	Standard
	Mn	55	6181.9	1.5	**0.0472**	0.004	8.1	ug/L	8327	Standard
	Co	59	598.0	5.5	**0.0308**	0.002	5.8	ug/L	123	Standard
	Ni	60	2570.9	3.8	**0.7369**	0.027	3.6	ug/L	272	Standard
	Cu	65	4060.9	2.1	**1.1421**	0.017	1.5	ug/L	1002	Standard
	Zn	66	9793.5	3.1	**5.9228**	0.115	1.9	ug/L	3532	Standard
>	**Ge**	72	232825.9	1.7				ug/L	254939	Standard
	As	75	478.9	23.0	**0.5804**	0.098	16.9	ug/L	-224	Standard
	Se	82	347.5	5.6	**2.8063**	0.183	6.5	ug/L	24	Standard
	Se-1	77	284.7	9.3	**2.4755**	0.397	16.0	ug/L	93	Standard
	Ga	71	209076.1	1.1				mg/L	233175	Standard
	Rb	85	950.0	1.8				ug/L	20	Standard
>	**Y**	89	214572.1	0.9				ug/L	235100	Standard
	Rh	103	41.3	18.3				ug/L	6	Standard
	Mo	98	7033.4	1.7	**1.6765**	0.043	2.5	ug/L	14	Standard
	Ag	107	51.0	12.2	**0.0011**	0.001	65.7	ug/L	38	Standard
	Cd	111	227.2	5.0	**-0.0473**	0.002	4.1	mg/L	439	Standard
	Cd	114	641.2	4.5	**-0.0501**	0.002	4.9	ug/L	1326	Standard
>	**In**	115	801286.3	0.8				ug/L	804157	Standard
	Sn	118	1100.0	7.1	**-0.1321**	0.005	3.5	ug/L	4860	Standard
	Sb	123	788.9	1.9	**0.0592**	0.001	1.6	ug/L	28	Standard
	Ba	135	15449.2	3.0	**2.7916**	0.106	3.8	ug/L	54	Standard
	Ce	140	256.7	9.0				ug/L	61	Standard
>	**Tb**	159	832175.9	0.8				ug/L	844239	Standard
	Ho	165	13.3	22.9				ug/L	6	Standard
	Tl	203	283.3	8.7	**0.0172**	0.001	8.4	ug/L	10	Standard
	Tl	205	668.7	6.3	**0.0161**	0.001	6.5	ug/L	16	Standard
	Pb	206	421.0	2.6	**0.0021**	0.001	49.3	ug/L	421	Standard
	Pb	207	352.0	8.2	**-0.0003**	0.003	770.8	ug/L	341	Standard
	Pb	208	1630.7	3.1	**0.0010**	0.001	94.9	ug/L	1571	Standard
	U	238	554.3	3.2	**0.0124**	0.000	3.7	ug/L	4	Standard
>	**Bi**	209	428696.1	0.8				ug/L	457202	Standard
	Na	23	13945.1	2.0	**4.4632**	0.183	4.1	mg/L	138	Standard
	Mg	24	162815.6	3.0	**0.6663**	0.023	3.5	mg/L	134	Standard

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K	39	2909.6	6.0	**0.2248**	0.019	8.6	mg/L	563	Standard
Ca	43	14265.4	3.1	**21.8379**	0.940	4.3	mg/L	127	Standard
Fe	54	532.6	0.2	**-0.0418**	0.002	4.4	mg/L	815	Standard
Fe	57	19379.1	1.8	**0.0960**	0.000	0.5	mg/L	4749	Standard
> **Sc-1**	45	348510.4	2.1				mg/L	367704	Standard
Cl	35	403549.3	1.2				ug/L	59901	Standard
Kr	83	43.8	5.3				ug/L	50	Standard
Br	81	17916.3	2.3				ug/L	13965	Standard
P	31	38374.3	4.6				ug/L	71952	Standard
S	34	4137271.2	2.0				ug/L	878802	Standard
Sr	88	1343031.5	3.6				ug/L	321	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		91.326	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		91.268	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		99.643	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		98.571	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	93.765
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1205007301S WG396868-04
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Method 6020 - Summary Report

Sample ID: L1205007301SD WG396868-05
Sample Date/Time: Thursday, May 03, 2012 13:53:11
Number of Replicates: 3
Autosampler Position: 245
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP 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	94044.0	1.5	**5282.8956**	93.163	1.8	ug/L	20538	Standard
	Be	9	247107.6	3.4	**52.4242**	1.107	2.1	ug/L	13	Standard
	Al	27	1331002.7	4.8	**52.9464**	1.586	3.0	ug/L	25813	Standard
>	**Sc**	45	394063.8	2.5				ug/L	367704	Standard
	Ti	47	694.0	13.3	**0.2987**	0.042	14.1	ug/L	127	Standard
	V	51	1313824.0	3.6	**59.4967**	1.610	2.7	ug/L	6636	Standard
	Cr	52	1056663.8	4.3	**57.1615**	1.888	3.3	ug/L	21244	Standard
	Cr	53	118531.7	4.0	**55.9468**	1.670	3.0	ug/L	467	Standard
	Mn	55	1373431.8	3.5	**59.4439**	1.622	2.7	ug/L	8327	Standard
	Co	59	888787.2	3.1	**54.6107**	1.282	2.3	ug/L	123	Standard
	Ni	60	192746.0	3.1	**57.3632**	1.366	2.4	ug/L	272	Standard
	Cu	65	164819.1	3.0	**57.1969**	1.327	2.3	ug/L	1002	Standard
	Zn	66	72127.8	4.2	**53.7913**	1.770	3.3	ug/L	3532	Standard
>	**Ge**	72	242629.5	1.3				ug/L	254939	Standard
	As	75	70341.2	2.2	**59.1144**	0.822	1.4	ug/L	-224	Standard
	Se	82	8779.9	1.2	**73.7538**	0.193	0.3	ug/L	24	Standard
	Se-1	77	5454.6	1.3	**65.0098**	0.968	1.5	ug/L	93	Standard
	Ga	71	226333.4	1.0				mg/L	233175	Standard
	Rb	85	5585.0	3.2				ug/L	20	Standard
>	**Y**	89	243506.8	1.5				ug/L	235100	Standard
	Rh	103	336.0	7.4				ug/L	6	Standard
	Mo	98	43287.9	4.3	**10.1086**	0.416	4.1	ug/L	14	Standard
	Ag	107	491143.3	2.9	**59.3628**	1.326	2.2	ug/L	38	Standard
	Cd	111	274490.8	4.0	**54.7480**	2.172	4.0	mg/L	439	Standard
	Cd	114	716375.5	4.0	**51.3873**	2.002	3.9	ug/L	1326	Standard
>	**In**	115	821754.7	0.8				ug/L	804157	Standard
	Sn	118	2172.2	4.5	**-0.0760**	0.006	7.8	ug/L	4860	Standard
	Sb	123	680175.9	2.7	**54.9539**	1.484	2.7	ug/L	28	Standard
	Ba	135	359935.8	2.7	**63.6468**	1.841	2.9	ug/L	54	Standard
	Ce	140	1100.7	3.9				ug/L	61	Standard
>	**Tb**	159	875417.8	0.3				ug/L	844239	Standard
	Ho	165	22.0	41.7				ug/L	6	Standard
	Tl	203	858404.9	2.4	**55.1467**	1.255	2.3	ug/L	10	Standard
	Tl	205	2169718.1	1.7	**57.7357**	1.047	1.8	ug/L	16	Standard
	Pb	206	678147.3	3.2	**54.1657**	1.696	3.1	ug/L	421	Standard
	Pb	207	579013.3	3.5	**55.7958**	1.879	3.4	ug/L	341	Standard
	Pb	208	2633525.1	3.3	**55.0185**	1.696	3.1	ug/L	1571	Standard
	U	238	2754898.8	3.6	**61.1803**	2.104	3.4	ug/L	4	Standard
>	**Bi**	209	394755.5	0.6				ug/L	457202	Standard
	Na	23	69085.8	1.6	**19.6811**	0.205	1.0	mg/L	138	Standard
	Mg	24	779866.8	3.3	**2.8263**	0.047	1.7	mg/L	134	Standard

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K	39	12709.3	1.9	**1.0346**	0.015	1.4	mg/L	563	Standard
Ca	43	72668.7	3.8	**98.9524**	2.578	2.6	mg/L	127	Standard
Fe	54	1398.8	3.4	**0.0863**	0.007	8.4	mg/L	815	Standard
Fe	57	85307.1	4.2	**0.4621**	0.014	3.0	mg/L	4749	Standard
> **Sc-1**	45	394063.8	2.5				mg/L	367704	Standard
Cl	35	1832537.9	1.5				ug/L	59901	Standard
Kr	83	64.9	12.8				ug/L	50	Standard
Br	81	47295.7	1.3				ug/L	13965	Standard
P	31	110486.3	3.1				ug/L	71952	Standard
S	34	17082612.3	2.3				ug/L	878802	Standard
Sr	88	7604731.8	2.9				ug/L	321	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		95.172	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		103.576	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		102.188	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		103.693	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	86.342
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1205007301SD WG396868-05
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Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, May 03, 2012 13:56:01
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: SLP 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	22150.5	0.8	**8.8570**	17.822	201.2	ug/L	20538	Standard
	Be	9	248724.7	3.3	**54.1071**	1.656	3.1	ug/L	13	Standard
	Al	27	1188715.7	4.6	**48.4116**	1.964	4.1	ug/L	25813	Standard
>	**Sc**	45	384312.6	1.1				ug/L	367704	Standard
	Ti	47	214449.5	3.5	**102.8207**	2.096	2.0	ug/L	127	Standard
	V	51	1265023.3	4.0	**54.0981**	1.402	2.6	ug/L	6636	Standard
	Cr	52	1043070.2	4.8	**53.2344**	1.756	3.3	ug/L	21244	Standard
	Cr	53	116525.2	5.4	**51.9420**	2.032	3.9	ug/L	467	Standard
	Mn	55	1353463.9	3.8	**55.3289**	1.222	2.2	ug/L	8327	Standard
	Co	59	894550.1	4.5	**51.9244**	1.546	3.0	ug/L	123	Standard
	Ni	60	183701.8	4.6	**51.6400**	1.606	3.1	ug/L	272	Standard
	Cu	65	153080.9	4.0	**50.1451**	1.215	2.4	ug/L	1002	Standard
	Zn	66	70306.3	4.1	**49.3838**	1.326	2.7	ug/L	3532	Standard
>	**Ge**	72	256781.3	1.6				ug/L	254939	Standard
	As	75	63492.5	3.4	**50.4345**	0.904	1.8	ug/L	-224	Standard
	Se	82	6767.9	2.7	**53.6455**	0.581	1.1	ug/L	24	Standard
	Se-1	77	4364.6	3.2	**48.8652**	0.818	1.7	ug/L	93	Standard
	Ga	71	245761.1	2.2				mg/L	233175	Standard
	Rb	85	1151.4	4.8				ug/L	20	Standard
>	**Y**	89	245236.6	3.0				ug/L	235100	Standard
	Rh	103	32.0	10.8				ug/L	6	Standard
	Mo	98	439046.2	5.0	**96.8820**	4.548	4.7	ug/L	14	Standard
	Ag	107	495482.4	4.6	**56.5446**	2.386	4.2	ug/L	38	Standard
	Cd	111	278094.9	3.9	**52.3639**	1.915	3.7	mg/L	439	Standard
	Cd	114	732188.0	3.6	**49.5847**	1.655	3.3	ug/L	1326	Standard
>	**In**	115	870320.4	0.4				ug/L	804157	Standard
	Sn	118	981972.7	5.1	**49.6519**	2.405	4.8	ug/L	4860	Standard
	Sb	123	678316.6	3.3	**51.7418**	1.568	3.0	ug/L	28	Standard
	Ba	135	278960.5	3.6	**46.5678**	1.598	3.4	ug/L	54	Standard
	Ce	140	1028.0	4.9				ug/L	61	Standard
>	**Tb**	159	898197.9	0.6				ug/L	844239	Standard
	Ho	165	31.3	9.8				ug/L	6	Standard
	Tl	203	887102.5	3.0	**50.3096**	1.264	2.5	ug/L	10	Standard
	Tl	205	2240654.2	1.9	**52.6344**	0.728	1.4	ug/L	16	Standard
	Pb	206	714225.8	3.8	**50.3563**	1.631	3.2	ug/L	421	Standard
	Pb	207	593230.7	4.0	**50.4603**	1.772	3.5	ug/L	341	Standard
	Pb	208	2747421.8	3.9	**50.6666**	1.690	3.3	ug/L	1571	Standard
	U	238	2685107.8	4.6	**52.6376**	2.155	4.1	ug/L	4	Standard
>	**Bi**	209	447140.7	0.6				ug/L	457202	Standard
	Na	23	16067.9	2.3	**4.6623**	0.069	1.5	mg/L	138	Standard
	Mg	24	1313132.3	3.9	**4.8808**	0.176	3.6	mg/L	134	Standard

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	K	39	53117.6	1.4	**4.6241**	0.046	1.0	mg/L	563	Standard
	Ca	43	3567.8	4.6	**4.8143**	0.208	4.3	mg/L	127	Standard
	Fe	54	29669.8	6.4	**4.7530**	0.291	6.1	mg/L	815	Standard
	Fe	57	969899.3	3.2	**5.7134**	0.163	2.8	mg/L	4749	Standard
>	**Sc-1**	45	384312.6	1.1				mg/L	367704	Standard
	Cl	35	104936.3	10.3				ug/L	59901	Standard
	Kr	83	46.4	7.4				ug/L	50	Standard
	Br	81	14863.6	3.7				ug/L	13965	Standard
	P	31	97841.9	0.8				ug/L	71952	Standard
	S	34	1056844.0	1.2				ug/L	878802	Standard
	Sr	88	2363.5	13.4				ug/L	321	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	96.823		
>	Sc	45			
	Ti	47	102.821		
	V	51	108.196		
	Cr	52	106.469		
	Cr	53			
	Mn	55	110.658		
	Co	59	103.849		
	Ni	60	103.280		
	Cu	65	100.290		
	Zn	66	98.768		
>	Ge	72		100.723	
	As	75	100.869		
	Se	82	107.291		
	Se-1	77	97.730		
	Ga	71			
	Rb	85			
>	Y	89		104.311	
	Rh	103			
	Mo	98	96.882		
	Ag	107	113.089		
	Cd	111	104.728		
	Cd	114			
>	In	115		108.228	
	Sn	118	99.304		
	Sb	123	103.484		
	Ba	135	93.136		
	Ce	140			
>	Tb	159		106.391	
	Ho	165			
	Tl	203	100.619		
	Tl	205			
	Pb	206	100.713		

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	Pb	207	100.921	
	Pb	208	101.333	
	U	238	105.275	
>	Bi	209		97.799
	Na	23	93.247	
	Mg	24	97.616	
	K	39	92.482	
	Ca	43	96.286	
	Fe	54	95.059	
	Fe	57	114.268	
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Mn	55	
QC Std 6	Ag	107	
QC Std 6	Fe	57	

Sample ID: QC Std 6
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Method 6020 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, May 03, 2012 13:58:48
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: SLP 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	20863.7	1.1	**-0.6538**	25.848	3953.7	ug/L	20538	Standard
	Be	9	60.7	39.6	**0.0080**	0.006	73.9	ug/L	13	Standard
	Al	27	14530.3	7.2	**-0.3351**	0.031	9.3	ug/L	25813	Standard
>	**Sc**	45	364127.8	2.7				ug/L	367704	Standard
	Ti	47	155.3	18.8	**0.0239**	0.015	63.4	ug/L	127	Standard
	V	51	6378.0	3.4	**-0.0044**	0.014	320.0	ug/L	6636	Standard
	Cr	52	19767.9	0.6	**-0.0399**	0.024	59.0	ug/L	21244	Standard
	Cr	53	455.3	2.9	**-0.0028**	0.009	336.3	ug/L	467	Standard
	Mn	55	1580.7	3.9	**-0.1655**	0.004	2.2	ug/L	8327	Standard
	Co	59	257.0	15.7	**0.0080**	0.003	33.9	ug/L	123	Standard
	Ni	60	137.3	22.2	**-0.0212**	0.009	44.0	ug/L	272	Standard
	Cu	65	1013.7	2.2	**0.0113**	0.010	91.6	ug/L	1002	Standard
	Zn	66	1146.0	3.4	**-1.1000**	0.016	1.5	ug/L	3532	Standard
>	**Ge**	72	247879.5	1.6				ug/L	254939	Standard
	As	75	-195.0	33.8	**0.0012**	0.057	4804.7	ug/L	-224	Standard
	Se	82	30.4	34.6	**0.0038**	0.084	2199.4	ug/L	24	Standard
	Se-1	77	89.7	17.3	**-0.0599**	0.196	327.6	ug/L	93	Standard
	Ga	71	234226.2	1.7				mg/L	233175	Standard
	Rb	85	17.3	17.6				ug/L	20	Standard
>	**Y**	89	229820.7	1.1				ug/L	235100	Standard
	Rh	103	2.0	100.0				ug/L	6	Standard
	Mo	98	160.9	15.3	**0.0274**	0.006	21.4	ug/L	14	Standard
	Ag	107	106.7	10.3	**0.0076**	0.001	18.9	ug/L	38	Standard
	Cd	111	511.8	3.1	**0.0072**	0.003	37.6	mg/L	439	Standard
	Cd	114	1387.9	2.9	**0.0012**	0.004	316.2	ug/L	1326	Standard
>	**In**	115	831576.2	1.4				ug/L	804157	Standard
	Sn	118	2094.1	2.6	**-0.0815**	0.004	5.5	ug/L	4860	Standard
	Sb	123	542.6	13.2	**0.0372**	0.006	15.9	ug/L	28	Standard
	Ba	135	83.0	7.5	**0.0036**	0.001	35.9	ug/L	54	Standard
	Ce	140	75.3	14.6				ug/L	61	Standard
>	**Tb**	159	845999.5	2.3				ug/L	844239	Standard
	Ho	165	6.7	105.4				ug/L	6	Standard
	Tl	203	126.7	13.0	**0.0078**	0.001	12.0	ug/L	10	Standard
	Tl	205	308.7	25.0	**0.0071**	0.002	26.1	ug/L	16	Standard
	Pb	206	467.7	9.7	**0.0047**	0.004	77.0	ug/L	421	Standard
	Pb	207	390.0	7.4	**0.0022**	0.003	119.2	ug/L	341	Standard
	Pb	208	1814.7	11.1	**0.0036**	0.004	110.1	ug/L	1571	Standard
	U	238	1058.7	23.8	**0.0222**	0.005	23.5	ug/L	4	Standard
>	**Bi**	209	440073.3	1.1				ug/L	457202	Standard
	Na	23	146.7	6.7	**0.0058**	0.002	39.9	mg/L	138	Standard
	Mg	24	377.3	31.1	**0.0001**	0.000	615.1	mg/L	134	Standard

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K	39	592.0	2.1	**-0.0031**	0.002	56.4	mg/L	563	Standard
Ca	43	84.0	4.1	**-0.0519**	0.002	3.8	mg/L	127	Standard
Fe	54	833.7	6.5	**0.0064**	0.008	118.3	mg/L	815	Standard
Fe	57	5427.0	1.4	**0.0033**	0.001	26.2	mg/L	4749	Standard
> **Sc-1**	45	364127.8	2.7				mg/L	367704	Standard
Cl	35	90166.9	2.5				ug/L	59901	Standard
Kr	83	52.2	7.0				ug/L	50	Standard
Br	81	13819.0	1.0				ug/L	13965	Standard
P	31	87716.4	3.7				ug/L	71952	Standard
S	34	1022283.7	1.8				ug/L	878802	Standard
Sr	88	515.3	9.7				ug/L	321	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		97.231	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		97.754	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		103.410	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		100.209	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	96.254
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1205004601
Sample Date/Time: Thursday, May 03, 2012 14:01:38
Number of Replicates: 3
Autosampler Position: 246
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP 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	423592.0	1.0	**28142.1438**	97.798	0.3	ug/L	20538	Standard
	Be	9	43.0	20.1	**0.0026**	0.002	63.5	ug/L	13	Standard
	Al	27	143331.6	4.3	**4.5577**	0.220	4.8	ug/L	25813	Standard
>	**Sc**	45	413873.0	0.7				ug/L	367704	Standard
	Ti	47	4171.9	3.4	**2.1585**	0.077	3.5	ug/L	127	Standard
	V	51	9050.6	11.1	**0.1413**	0.045	32.2	ug/L	6636	Standard
	Cr	52	35263.0	1.7	**0.9233**	0.032	3.4	ug/L	21244	Standard
	Cr	53	19552.7	9.0	**9.4562**	0.799	8.5	ug/L	467	Standard
	Mn	55	395613.5	3.0	**17.7192**	0.633	3.6	ug/L	8327	Standard
	Co	59	3386.0	5.3	**0.2098**	0.013	6.3	ug/L	123	Standard
	Ni	60	2447.5	2.8	**0.7001**	0.026	3.7	ug/L	272	Standard
	Cu	65	1397.1	7.4	**0.1739**	0.034	19.8	ug/L	1002	Standard
	Zn	66	6053.9	5.4	**2.9212**	0.291	10.0	ug/L	3532	Standard
>	**Ge**	72	232388.0	0.7				ug/L	254939	Standard
	As	75	1247.0	13.9	**1.2537**	0.160	12.8	ug/L	-224	Standard
	Se	82	590.3	1.6	**4.9480**	0.078	1.6	ug/L	24	Standard
	Se-1	77	842.0	11.1	**9.5274**	1.105	11.6	ug/L	93	Standard
	Ga	71	215540.4	0.9				mg/L	233175	Standard
	Rb	85	15656.8	3.7				ug/L	20	Standard
>	**Y**	89	229361.3	1.7				ug/L	235100	Standard
	Rh	103	68.0	24.1				ug/L	6	Standard
	Mo	98	2102.7	3.6	**0.5027**	0.020	4.1	ug/L	14	Standard
	Ag	107	55.7	20.2	**0.0018**	0.001	76.5	ug/L	38	Standard
	Cd	111	597.7	2.3	**0.0307**	0.003	11.3	mg/L	439	Standard
	Cd	114	1588.2	2.0	**0.0216**	0.002	8.8	ug/L	1326	Standard
>	**In**	115	788165.6	0.5				ug/L	804157	Standard
	Sn	118	1065.4	4.2	**-0.1331**	0.002	1.8	ug/L	4860	Standard
	Sb	123	760.2	1.9	**0.0579**	0.002	2.6	ug/L	28	Standard
	Ba	135	216261.8	2.6	**39.8672**	1.160	2.9	ug/L	54	Standard
	Ce	140	621.3	5.6				ug/L	61	Standard
>	**Tb**	159	831987.6	0.7				ug/L	844239	Standard
	Ho	165	25.3	45.6				ug/L	6	Standard
	Tl	203	343.0	4.0	**0.0241**	0.001	3.8	ug/L	10	Standard
	Tl	205	794.0	7.2	**0.0224**	0.002	7.1	ug/L	16	Standard
	Pb	206	518.3	7.5	**0.0155**	0.003	21.1	ug/L	421	Standard
	Pb	207	443.0	15.1	**0.0142**	0.007	49.0	ug/L	341	Standard
	Pb	208	2029.7	3.4	**0.0151**	0.002	10.6	ug/L	1571	Standard
	U	238	692.3	3.8	**0.0176**	0.001	3.4	ug/L	4	Standard
>	**Bi**	209	368097.7	0.2				ug/L	457202	Standard
	Na	23	528682.5	1.3	**143.6239**	1.104	0.8	mg/L	138	Standard
	Mg	24	1668155.0	4.3	**5.7574**	0.221	3.8	mg/L	134	Standard

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K	39	9036.7	0.4	**0.6815**	0.004	0.6	mg/L	563	Standard
Ca	43	2474.9	3.1	**3.0385**	0.086	2.8	mg/L	127	Standard
Fe	54	1279.8	5.3	**0.0573**	0.010	17.5	mg/L	815	Standard
Fe	57	23845.5	8.8	**0.1005**	0.011	11.4	mg/L	4749	Standard
Sc-1	45	413873.0	0.7				mg/L	367704	Standard
Cl	35	27674322.3	1.8				ug/L	59901	Standard
Kr	83	85.8	2.4				ug/L	50	Standard
Br	81	331530.4	1.6				ug/L	13965	Standard
P	31	1018458.2	2.4				ug/L	71952	Standard
S	34	1290933.8	0.5				ug/L	878802	Standard
Sr	88	1752379.3	2.8				ug/L	321	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		91.154	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		97.559	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		98.011	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		98.549	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	80.511
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Na 23 Upper, S, EEE	Na	23	

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Method 6020 - Summary Report

Sample ID: L1205004602
Sample Date/Time: Thursday, May 03, 2012 14:04:25
Number of Replicates: 3
Autosampler Position: 247
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP 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	421424.3	2.3	**27917.6914**	396.527	1.4	ug/L	20538	Standard
	Be	9	24.3	22.6	**-0.0011**	0.001	93.2	ug/L	13	Standard
	Al	27	81106.9	5.4	**2.1494**	0.147	6.9	ug/L	25813	Standard
>	**Sc**	45	414850.7	1.0				ug/L	367704	Standard
	Ti	47	4024.5	5.2	**2.0248**	0.106	5.2	ug/L	127	Standard
	V	51	10307.3	9.7	**0.1884**	0.046	24.5	ug/L	6636	Standard
	Cr	52	39692.9	1.3	**1.1190**	0.026	2.3	ug/L	21244	Standard
	Cr	53	22672.3	4.5	**10.7122**	0.475	4.4	ug/L	467	Standard
	Mn	55	398379.1	3.2	**17.3717**	0.490	2.8	ug/L	8327	Standard
	Co	59	3156.3	2.2	**0.1897**	0.003	1.8	ug/L	123	Standard
	Ni	60	2692.6	2.6	**0.7545**	0.017	2.3	ug/L	272	Standard
	Cu	65	1405.4	1.4	**0.1638**	0.008	4.7	ug/L	1002	Standard
	Zn	66	9132.8	4.6	**5.2134**	0.304	5.8	ug/L	3532	Standard
>	**Ge**	72	238580.1	0.5				ug/L	254939	Standard
	As	75	1503.4	10.0	**1.4431**	0.129	8.9	ug/L	-224	Standard
	Se	82	644.9	6.0	**5.2802**	0.319	6.0	ug/L	24	Standard
	Se-1	77	1041.7	5.2	**11.7176**	0.644	5.5	ug/L	93	Standard
	Ga	71	216871.1	0.5				mg/L	233175	Standard
	Rb	85	15181.6	3.3				ug/L	20	Standard
>	**Y**	89	226479.6	1.2				ug/L	235100	Standard
	Rh	103	73.3	16.4				ug/L	6	Standard
	Mo	98	2010.4	5.1	**0.4813**	0.025	5.1	ug/L	14	Standard
	Ag	107	71.0	23.5	**0.0038**	0.002	57.9	ug/L	38	Standard
	Cd	111	571.9	2.3	**0.0255**	0.002	6.5	mg/L	439	Standard
	Cd	114	1578.3	5.2	**0.0212**	0.007	34.3	ug/L	1326	Standard
>	**In**	115	786359.4	0.9				ug/L	804157	Standard
	Sn	118	1134.7	2.9	**-0.1291**	0.001	1.0	ug/L	4860	Standard
	Sb	123	752.1	3.7	**0.0574**	0.003	4.6	ug/L	28	Standard
	Ba	135	219421.1	3.2	**40.5427**	1.357	3.3	ug/L	54	Standard
	Ce	140	651.3	11.9				ug/L	61	Standard
>	**Tb**	159	834895.5	0.4				ug/L	844239	Standard
	Ho	165	27.3	42.9				ug/L	6	Standard
	Tl	203	299.7	8.0	**0.0208**	0.002	7.9	ug/L	10	Standard
	Tl	205	675.3	6.5	**0.0187**	0.001	6.7	ug/L	16	Standard
	Pb	206	499.7	5.0	**0.0133**	0.002	16.2	ug/L	421	Standard
	Pb	207	405.3	10.6	**0.0097**	0.004	45.8	ug/L	341	Standard
	Pb	208	1895.7	4.1	**0.0114**	0.002	15.3	ug/L	1571	Standard
	U	238	559.7	7.0	**0.0142**	0.001	6.6	ug/L	4	Standard
>	**Bi**	209	373820.6	0.1				ug/L	457202	Standard
	Na	23	526378.8	1.6	**142.6588**	1.025	0.7	mg/L	138	Standard
	Mg	24	1656464.8	3.5	**5.7033**	0.150	2.6	mg/L	134	Standard

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K	39	9135.4	2.0	**0.6878**	0.009	1.3	mg/L	563	Standard
Ca	43	2494.9	2.9	**3.0579**	0.126	4.1	mg/L	127	Standard
Fe	54	1254.6	0.7	**0.0530**	0.003	4.7	mg/L	815	Standard
Fe	57	21212.8	2.9	**0.0858**	0.002	2.5	mg/L	4749	Standard
> **Sc-1**	45	414850.7	1.0				mg/L	367704	Standard
Cl	35	27320181.6	1.8				ug/L	59901	Standard
Kr	83	83.8	4.8				ug/L	50	Standard
Br	81	395149.6	5.4				ug/L	13965	Standard
P	31	1043667.0	2.3				ug/L	71952	Standard
S	34	1316928.2	1.6				ug/L	878802	Standard
Sr	88	1686652.0	4.6				ug/L	321	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		93.583	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
> Y	89		96.333	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
> In	115		97.787	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
> Tb	159		98.893	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	81.763
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Na 23 Upper, S, EEE	Na	23	

Sample ID: L1205004602
Report Date/Time: Thursday, May 03, 2012 14:06:53
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Method 6020 - Summary Report

Sample ID: L1205004603
Sample Date/Time: Thursday, May 03, 2012 14:07:13
Number of Replicates: 3
Autosampler Position: 248
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP 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	435145.9	2.9	**28830.8458**	655.338	2.3	ug/L	20538	Standard
	Be	9	22.0	38.8	**-0.0016**	0.002	103.9	ug/L	13	Standard
	Al	27	83322.0	3.4	**2.2296**	0.082	3.7	ug/L	25813	Standard
>	**Sc**	45	415526.5	1.0				ug/L	367704	Standard
	Ti	47	4133.9	6.1	**2.0668**	0.104	5.1	ug/L	127	Standard
	V	51	10194.7	12.4	**0.1795**	0.050	27.8	ug/L	6636	Standard
	Cr	52	41304.9	3.0	**1.1940**	0.037	3.1	ug/L	21244	Standard
	Cr	53	25998.3	3.3	**12.2411**	0.646	5.3	ug/L	467	Standard
	Mn	55	408401.1	3.2	**17.6947**	0.258	1.5	ug/L	8327	Standard
	Co	59	3202.3	5.8	**0.1912**	0.008	4.2	ug/L	123	Standard
	Ni	60	2771.9	3.3	**0.7730**	0.020	2.6	ug/L	272	Standard
	Cu	65	1215.7	4.9	**0.0935**	0.013	14.4	ug/L	1002	Standard
	Zn	66	11444.3	3.8	**6.9707**	0.183	2.6	ug/L	3532	Standard
>	**Ge**	72	240155.4	1.8				ug/L	254939	Standard
	As	75	1121.7	6.6	**1.1112**	0.054	4.8	ug/L	-224	Standard
	Se	82	486.5	1.1	**3.8966**	0.078	2.0	ug/L	24	Standard
	Se-1	77	1126.7	3.5	**12.6806**	0.632	5.0	ug/L	93	Standard
	Ga	71	221461.5	0.9				mg/L	233175	Standard
	Rb	85	15778.9	3.1				ug/L	20	Standard
>	**Y**	89	227215.0	0.2				ug/L	235100	Standard
	Rh	103	60.7	20.1				ug/L	6	Standard
	Mo	98	2007.5	2.9	**0.4834**	0.013	2.6	ug/L	14	Standard
	Ag	107	40.7	16.4	**-0.0000**	0.001	2896.6	ug/L	38	Standard
	Cd	111	586.9	1.1	**0.0294**	0.001	3.6	mg/L	439	Standard
	Cd	114	1490.1	2.8	**0.0152**	0.004	29.6	ug/L	1326	Standard
>	**In**	115	781786.2	1.3				ug/L	804157	Standard
	Sn	118	1514.1	5.8	**-0.1072**	0.006	5.2	ug/L	4860	Standard
	Sb	123	709.5	1.0	**0.0541**	0.001	1.9	ug/L	28	Standard
	Ba	135	225520.1	3.7	**41.9043**	1.120	2.7	ug/L	54	Standard
	Ce	140	628.0	3.1				ug/L	61	Standard
>	**Tb**	159	835390.8	1.7				ug/L	844239	Standard
	Ho	165	20.7	22.3				ug/L	6	Standard
	Tl	203	283.3	6.3	**0.0199**	0.001	7.0	ug/L	10	Standard
	Tl	205	650.7	5.5	**0.0182**	0.001	5.6	ug/L	16	Standard
	Pb	206	496.7	2.5	**0.0134**	0.001	10.3	ug/L	421	Standard
	Pb	207	421.3	5.6	**0.0117**	0.003	22.5	ug/L	341	Standard
	Pb	208	1910.7	1.3	**0.0122**	0.000	1.1	ug/L	1571	Standard
	U	238	493.0	2.4	**0.0127**	0.000	2.2	ug/L	4	Standard
>	**Bi**	209	370473.6	1.1				ug/L	457202	Standard
	Na	23	549090.0	2.2	**148.5670**	1.849	1.2	mg/L	138	Standard
	Mg	24	1738698.0	3.9	**5.9767**	0.184	3.1	mg/L	134	Standard

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K	39	9114.7	1.7	**0.6849**	0.008	1.1	mg/L	563	Standard
Ca	43	2581.6	4.6	**3.1633**	0.129	4.1	mg/L	127	Standard
Fe	54	1270.5	3.8	**0.0550**	0.006	10.2	mg/L	815	Standard
Fe	57	22631.6	3.0	**0.0933**	0.003	2.8	mg/L	4749	Standard
Sc-1	45	415526.5	1.0				mg/L	367704	Standard
Cl	35	28361210.4	0.8				ug/L	59901	Standard
Kr	83	70.7	8.2				ug/L	50	Standard
Br	81	286384.0	5.1				ug/L	13965	Standard
P	31	1076303.8	3.1				ug/L	71952	Standard
S	34	1317277.5	1.9				ug/L	878802	Standard
Sr	88	1748116.5	2.7				ug/L	321	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		94.201	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		96.646	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		97.218	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		98.952	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	81.031
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Na 23 Upper, S, EEE	Na	23	

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Method 6020 - Summary Report

Sample ID: L1205005001
Sample Date/Time: Thursday, May 03, 2012 14:10:00
Number of Replicates: 3
Autosampler Position: 249
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP 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	429579.7	3.8	**29206.7310**	622.913	2.1	ug/L	20538	Standard
	Be	9	44.3	24.7	**0.0031**	0.002	74.4	ug/L	13	Standard
	Al	27	438038.4	7.7	**16.2784**	0.989	6.1	ug/L	25813	Standard
>	**Sc**	45	405166.9	2.0				ug/L	367704	Standard
	Ti	47	2294.2	11.4	**1.0859**	0.133	12.2	ug/L	127	Standard
	V	51	12358.1	3.5	**0.2612**	0.008	3.2	ug/L	6636	Standard
	Cr	52	34104.0	3.9	**0.7313**	0.045	6.1	ug/L	21244	Standard
	Cr	53	3671.8	10.8	**1.4852**	0.149	10.0	ug/L	467	Standard
	Mn	55	431227.7	4.4	**18.0843**	0.527	2.9	ug/L	8327	Standard
	Co	59	11837.0	5.3	**0.7035**	0.027	3.8	ug/L	123	Standard
	Ni	60	9182.1	3.0	**2.6133**	0.049	1.9	ug/L	272	Standard
	Cu	65	1907.8	3.5	**0.3159**	0.011	3.5	ug/L	1002	Standard
	Zn	66	7860.4	3.3	**3.9741**	0.105	2.6	ug/L	3532	Standard
>	**Ge**	72	248163.3	2.0				ug/L	254939	Standard
	As	75	845.1	1.4	**0.8542**	0.009	1.0	ug/L	-224	Standard
	Se	82	132.5	2.9	**0.8460**	0.050	5.9	ug/L	24	Standard
	Se-1	77	224.7	2.2	**1.5377**	0.040	2.6	ug/L	93	Standard
	Ga	71	230818.3	1.0				mg/L	233175	Standard
	Rb	85	29179.4	2.5				ug/L	20	Standard
>	**Y**	89	233783.4	2.8				ug/L	235100	Standard
	Rh	103	932.0	3.3				ug/L	6	Standard
	Mo	98	4556.7	2.3	**1.0908**	0.028	2.5	ug/L	14	Standard
	Ag	107	58.0	12.1	**0.0020**	0.001	36.6	ug/L	38	Standard
	Cd	111	1165.7	5.3	**0.1465**	0.002	1.7	mg/L	439	Standard
	Cd	114	3148.7	3.9	**0.1363**	0.005	3.6	ug/L	1326	Standard
>	**In**	115	795848.8	4.6				ug/L	804157	Standard
	Sn	118	1852.1	6.8	**-0.0900**	0.003	3.7	ug/L	4860	Standard
	Sb	123	497.3	5.8	**0.0353**	0.002	4.6	ug/L	28	Standard
	Ba	135	377828.5	4.9	**68.9767**	0.555	0.8	ug/L	54	Standard
	Ce	140	2962.3	4.3				ug/L	61	Standard
>	**Tb**	159	877655.4	3.7				ug/L	844239	Standard
	Ho	165	56.0	31.1				ug/L	6	Standard
	Tl	203	974.0	4.4	**0.0669**	0.004	5.7	ug/L	10	Standard
	Tl	205	2399.5	4.2	**0.0675**	0.002	3.0	ug/L	16	Standard
	Pb	206	1788.8	7.2	**0.1228**	0.010	8.1	ug/L	421	Standard
	Pb	207	1474.7	1.8	**0.1193**	0.003	2.2	ug/L	341	Standard
	Pb	208	6795.6	3.5	**0.1203**	0.004	3.3	ug/L	1571	Standard
	U	238	16288.8	4.3	**0.3849**	0.012	3.2	ug/L	4	Standard
>	**Bi**	209	371937.0	1.4				ug/L	457202	Standard
	Na	23	74550.4	3.4	**20.6507**	0.321	1.6	mg/L	138	Standard
	Mg	24	4599606.2	4.3	**16.2153**	0.383	2.4	mg/L	134	Standard

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K	39	16948.8	2.4	**1.3589**	0.012	0.8	mg/L	563	Standard
Ca	43	28178.9	4.2	**37.2014**	0.834	2.2	mg/L	127	Standard
Fe	54	1495.2	6.7	**0.0950**	0.011	11.9	mg/L	815	Standard
Fe	57	45070.5	7.1	**0.2224**	0.014	6.1	mg/L	4749	Standard
> **Sc-1**	45	405166.9	2.0				mg/L	367704	Standard
Cl	35	4319056.0	4.3				ug/L	59901	Standard
Kr	83	54.7	12.7				ug/L	50	Standard
Br	81	70530.4	5.5				ug/L	13965	Standard
P	31	97699.5	3.2				ug/L	71952	Standard
S	34	3338394.5	1.7				ug/L	878802	Standard
Sr	88	29307711.3	4.2				ug/L	321	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		97.342	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		99.440	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		98.967	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		103.958	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	81.351
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1205005001
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Method 6020 - Summary Report

Sample ID: L1205005002
Sample Date/Time: Thursday, May 03, 2012 14:12:47
Number of Replicates: 3
Autosampler Position: 250
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP 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	427572.2	2.1	**28635.8331**	541.222	1.9	ug/L	20538	Standard
	Be	9	21.3	2.7	**-0.0017**	0.000	4.7	ug/L	13	Standard
	Al	27	75758.3	2.4	**1.9716**	0.049	2.5	ug/L	25813	Standard
>	**Sc**	45	410953.5	0.9				ug/L	367704	Standard
	Ti	47	1227.4	6.3	**0.5458**	0.040	7.3	ug/L	127	Standard
	V	51	10660.5	2.4	**0.1777**	0.010	5.8	ug/L	6636	Standard
	Cr	52	31739.6	1.9	**0.5751**	0.020	3.5	ug/L	21244	Standard
	Cr	53	3274.4	3.6	**1.2772**	0.044	3.5	ug/L	467	Standard
	Mn	55	474330.7	3.4	**19.5776**	0.576	2.9	ug/L	8327	Standard
	Co	59	11937.7	4.5	**0.6975**	0.027	3.8	ug/L	123	Standard
	Ni	60	9001.7	2.7	**2.5164**	0.059	2.3	ug/L	272	Standard
	Cu	65	1220.4	2.8	**0.0743**	0.009	11.8	ug/L	1002	Standard
	Zn	66	5227.2	3.5	**1.9171**	0.112	5.8	ug/L	3532	Standard
>	**Ge**	72	252432.2	0.7				ug/L	254939	Standard
	As	75	755.3	9.2	**0.7700**	0.053	6.9	ug/L	-224	Standard
	Se	82	110.3	7.4	**0.6466**	0.061	9.4	ug/L	24	Standard
	Se-1	77	209.7	7.2	**1.3172**	0.162	12.3	ug/L	93	Standard
	Ga	71	236129.5	2.0				mg/L	233175	Standard
	Rb	85	26922.6	1.4				ug/L	20	Standard
>	**Y**	89	236539.2	2.0				ug/L	235100	Standard
	Rh	103	946.0	3.7				ug/L	6	Standard
	Mo	98	5119.3	6.3	**1.1951**	0.072	6.0	ug/L	14	Standard
	Ag	107	54.3	14.3	**0.0014**	0.001	68.6	ug/L	38	Standard
	Cd	111	671.2	5.3	**0.0412**	0.007	16.3	mg/L	439	Standard
	Cd	114	1798.4	1.7	**0.0328**	0.003	8.2	ug/L	1326	Standard
>	**In**	115	816021.7	0.4				ug/L	804157	Standard
	Sn	118	1131.4	1.4	**-0.1316**	0.001	0.8	ug/L	4860	Standard
	Sb	123	475.0	3.0	**0.0325**	0.001	3.9	ug/L	28	Standard
	Ba	135	350311.8	3.2	**62.3726**	1.797	2.9	ug/L	54	Standard
	Ce	140	554.0	3.4				ug/L	61	Standard
>	**Tb**	159	884157.8	2.9				ug/L	844239	Standard
	Ho	165	26.7	11.5				ug/L	6	Standard
	Tl	203	1009.0	3.0	**0.0688**	0.003	4.2	ug/L	10	Standard
	Tl	205	2334.8	2.8	**0.0652**	0.002	2.8	ug/L	16	Standard
	Pb	206	548.0	4.7	**0.0173**	0.002	11.7	ug/L	421	Standard
	Pb	207	433.3	3.2	**0.0125**	0.002	15.3	ug/L	341	Standard
	Pb	208	2077.7	0.9	**0.0154**	0.001	6.1	ug/L	1571	Standard
	U	238	13658.5	2.8	**0.3206**	0.006	1.7	ug/L	4	Standard
>	**Bi**	209	374668.6	1.1				ug/L	457202	Standard
	Na	23	75093.7	2.2	**20.5114**	0.405	2.0	mg/L	138	Standard
	Mg	24	4563567.3	4.2	**15.8642**	0.563	3.6	mg/L	134	Standard

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K	39	16298.8	2.0	**1.2855**	0.030	2.3	mg/L	563	Standard
Ca	43	27330.0	3.0	**35.5717**	0.846	2.4	mg/L	127	Standard
Fe	54	1357.7	1.4	**0.0707**	0.001	1.7	mg/L	815	Standard
Fe	57	41841.1	3.1	**0.2011**	0.005	2.6	mg/L	4749	Standard
> **Sc-1**	45	410953.5	0.9				mg/L	367704	Standard
Cl	35	4119300.1	1.3				ug/L	59901	Standard
Kr	83	50.2	7.3				ug/L	50	Standard
Br	81	58908.0	2.9				ug/L	13965	Standard
P	31	101269.7	1.3				ug/L	71952	Standard
S	34	3359471.4	1.5				ug/L	878802	Standard
Sr	88	29193025.6	4.2				ug/L	321	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		99.017	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		100.612	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		101.475	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		104.728	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	81.948
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1205005002
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Method 6020 - Summary Report

Sample ID: L1205005003
Sample Date/Time: Thursday, May 03, 2012 14:15:34
Number of Replicates: 3
Autosampler Position: 251
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP 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	528370.3	2.3	**35720.0849**	866.748	2.4	ug/L	20538	Standard
	Be	9	43.7	6.6	**0.0028**	0.001	21.9	ug/L	13	Standard
	Al	27	264488.7	6.4	**9.2863**	0.612	6.6	ug/L	25813	Standard
>	**Sc**	45	411627.9	0.5				ug/L	367704	Standard
	Ti	47	1648.8	19.8	**0.7690**	0.148	19.3	ug/L	127	Standard
	V	51	18131.2	4.0	**0.5233**	0.018	3.4	ug/L	6636	Standard
	Cr	52	28583.6	2.3	**0.4442**	0.012	2.7	ug/L	21244	Standard
	Cr	53	2366.9	3.7	**0.8905**	0.057	6.4	ug/L	467	Standard
	Mn	55	535354.1	2.1	**22.6655**	0.372	1.6	ug/L	8327	Standard
	Co	59	2553.5	0.7	**0.1470**	0.003	2.2	ug/L	123	Standard
	Ni	60	8197.6	2.9	**2.3428**	0.068	2.9	ug/L	272	Standard
	Cu	65	1404.4	2.7	**0.1474**	0.007	4.8	ug/L	1002	Standard
	Zn	66	5962.8	5.2	**2.5689**	0.161	6.3	ug/L	3532	Standard
>	**Ge**	72	246517.3	1.8				ug/L	254939	Standard
	As	75	808.4	15.8	**0.8276**	0.095	11.5	ug/L	-224	Standard
	Se	82	159.0	9.8	**1.0718**	0.118	11.0	ug/L	24	Standard
	Se-1	77	229.0	6.0	**1.6079**	0.179	11.1	ug/L	93	Standard
	Ga	71	230621.5	1.4				mg/L	233175	Standard
	Rb	85	11382.9	1.8				ug/L	20	Standard
>	**Y**	89	234874.0	1.1				ug/L	235100	Standard
	Rh	103	300.7	1.7				ug/L	6	Standard
	Mo	98	1799.2	1.6	**0.4133**	0.005	1.2	ug/L	14	Standard
	Ag	107	94.7	16.7	**0.0063**	0.002	29.9	ug/L	38	Standard
	Cd	111	876.8	2.4	**0.0824**	0.005	6.1	mg/L	439	Standard
	Cd	114	2390.6	1.8	**0.0754**	0.003	4.5	ug/L	1326	Standard
>	**In**	115	816840.2	0.5				ug/L	804157	Standard
	Sn	118	1302.7	1.2	**-0.1223**	0.001	0.6	ug/L	4860	Standard
	Sb	123	1134.9	4.9	**0.0861**	0.005	5.6	ug/L	28	Standard
	Ba	135	125502.9	2.7	**22.3188**	0.661	3.0	ug/L	54	Standard
	Ce	140	23846.8	5.2				ug/L	61	Standard
>	**Tb**	159	856096.2	0.8				ug/L	844239	Standard
	Ho	165	183.3	7.7				ug/L	6	Standard
	Tl	203	769.7	3.8	**0.0496**	0.002	4.2	ug/L	10	Standard
	Tl	205	1872.8	6.2	**0.0493**	0.003	6.8	ug/L	16	Standard
	Pb	206	829.0	3.6	**0.0370**	0.003	7.6	ug/L	421	Standard
	Pb	207	693.3	3.6	**0.0349**	0.003	7.6	ug/L	341	Standard
	Pb	208	3167.8	2.1	**0.0355**	0.002	4.9	ug/L	1571	Standard
	U	238	35327.5	3.6	**0.7814**	0.033	4.2	ug/L	4	Standard
>	**Bi**	209	396971.6	0.7				ug/L	457202	Standard
	Na	23	51257.3	3.4	**13.9644**	0.434	3.1	mg/L	138	Standard
	Mg	24	3597722.0	3.1	**12.4870**	0.342	2.7	mg/L	134	Standard

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K	39	13281.8	3.1	**1.0349**	0.033	3.1	mg/L	563	Standard
Ca	43	35386.0	4.0	**46.0333**	1.683	3.7	mg/L	127	Standard
Fe	54	1308.4	8.1	**0.0628**	0.017	27.2	mg/L	815	Standard
Fe	57	47936.4	2.0	**0.2344**	0.005	2.0	mg/L	4749	Standard
> **Sc-1**	45	411627.9	0.5				mg/L	367704	Standard
Cl	35	2230820.9	1.7				ug/L	59901	Standard
Kr	83	56.4	6.1				ug/L	50	Standard
Br	81	29557.8	3.6				ug/L	13965	Standard
P	31	100069.9	3.3				ug/L	71952	Standard
S	34	4286903.9	4.1				ug/L	878802	Standard
Sr	88	9847838.1	3.2				ug/L	321	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		96.697	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
> Y	89		99.904	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
> In	115		101.577	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
> Tb	159		101.404	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	86.826
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1205005004
Sample Date/Time: Thursday, May 03, 2012 14:18:21
Number of Replicates: 3
Autosampler Position: 252
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP 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	497754.3	2.8	**33856.5824**	757.602	2.2	ug/L	20538	Standard
	Be	9	42.0	9.5	**0.0026**	0.001	34.2	ug/L	13	Standard
	Al	27	84681.9	11.0	**2.3392**	0.329	14.1	ug/L	25813	Standard
>	**Sc**	45	408102.3	1.6				ug/L	367704	Standard
	Ti	47	1417.4	5.3	**0.6509**	0.036	5.5	ug/L	127	Standard
	V	51	27930.3	3.0	**0.9557**	0.050	5.2	ug/L	6636	Standard
	Cr	52	28621.7	2.1	**0.4377**	0.044	10.1	ug/L	21244	Standard
	Cr	53	2320.2	2.1	**0.8626**	0.049	5.7	ug/L	467	Standard
	Mn	55	533907.3	5.0	**22.4668**	0.891	4.0	ug/L	8327	Standard
	Co	59	2377.5	5.9	**0.1354**	0.006	4.3	ug/L	123	Standard
	Ni	60	12505.5	5.6	**3.5834**	0.145	4.0	ug/L	272	Standard
	Cu	65	1495.7	8.7	**0.1759**	0.046	25.9	ug/L	1002	Standard
	Zn	66	4753.4	3.3	**1.6294**	0.098	6.0	ug/L	3532	Standard
>	**Ge**	72	247977.1	2.7				ug/L	254939	Standard
	As	75	644.3	16.0	**0.6910**	0.093	13.5	ug/L	-224	Standard
	Se	82	167.8	10.3	**1.1392**	0.171	15.0	ug/L	24	Standard
	Se-1	77	252.3	10.0	**1.8662**	0.263	14.1	ug/L	93	Standard
	Ga	71	229182.9	3.3				mg/L	233175	Standard
	Rb	85	10571.0	2.5				ug/L	20	Standard
>	**Y**	89	236274.9	1.5				ug/L	235100	Standard
	Rh	103	324.0	9.9				ug/L	6	Standard
	Mo	98	1963.5	6.3	**0.4518**	0.028	6.2	ug/L	14	Standard
	Ag	107	55.3	2.1	**0.0015**	0.000	10.2	ug/L	38	Standard
	Cd	111	720.3	7.1	**0.0509**	0.010	20.2	mg/L	439	Standard
	Cd	114	1946.9	2.4	**0.0433**	0.003	7.6	ug/L	1326	Standard
>	**In**	115	817013.9	0.3				ug/L	804157	Standard
	Sn	118	1538.1	4.9	**-0.1096**	0.004	3.5	ug/L	4860	Standard
	Sb	123	2318.8	4.0	**0.1823**	0.007	3.9	ug/L	28	Standard
	Ba	135	118498.9	4.7	**21.0660**	0.963	4.6	ug/L	54	Standard
	Ce	140	21400.5	4.2				ug/L	61	Standard
>	**Tb**	159	857115.1	1.2				ug/L	844239	Standard
	Ho	165	163.3	17.8				ug/L	6	Standard
	Tl	203	763.7	0.2	**0.0498**	0.001	1.7	ug/L	10	Standard
	Tl	205	1870.8	3.4	**0.0497**	0.002	3.0	ug/L	16	Standard
	Pb	206	568.3	0.6	**0.0168**	0.001	3.6	ug/L	421	Standard
	Pb	207	495.0	7.1	**0.0164**	0.003	17.1	ug/L	341	Standard
	Pb	208	2223.7	3.1	**0.0163**	0.001	3.7	ug/L	1571	Standard
	U	238	42542.4	4.3	**0.9503**	0.024	2.5	ug/L	4	Standard
>	**Bi**	209	392804.7	1.8				ug/L	457202	Standard
	Na	23	49511.5	2.8	**13.6041**	0.231	1.7	mg/L	138	Standard
	Mg	24	3510959.5	4.3	**12.2894**	0.399	3.2	mg/L	134	Standard

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K	39	12788.1	3.4	**1.0033**	0.027	2.7	mg/L	563	Standard
Ca	43	34863.4	3.8	**45.7468**	1.531	3.3	mg/L	127	Standard
Fe	54	1172.2	4.4	**0.0433**	0.006	13.2	mg/L	815	Standard
Fe	57	40845.1	4.4	**0.1971**	0.007	3.6	mg/L	4749	Standard
> **Sc-1**	45	408102.3	1.6				mg/L	367704	Standard
Cl	35	2182849.4	1.8				ug/L	59901	Standard
Kr	83	55.6	9.7				ug/L	50	Standard
Br	81	31164.7	2.6				ug/L	13965	Standard
P	31	95416.5	1.4				ug/L	71952	Standard
S	34	4307045.4	1.5				ug/L	878802	Standard
Sr	88	9835492.3	3.9				ug/L	321	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		97.269	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		100.500	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		101.599	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		101.525	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	85.915
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1205005005
Sample Date/Time: Thursday, May 03, 2012 14:21:09
Number of Replicates: 3
Autosampler Position: 253
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP 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	352249.6	2.7	**23462.7867**	516.284	2.2	ug/L	20538	Standard
	Be	9	293.0	7.3	**0.0540**	0.004	7.0	ug/L	13	Standard
	Al	27	20377803.1	5.8	**795.9456**	40.697	5.1	ug/L	25813	Standard
>	**Sc**	45	408219.1	1.0				ug/L	367704	Standard
	Ti	47	36818.1	4.2	**20.3720**	0.820	4.0	ug/L	127	Standard
	V	51	68442.6	2.4	**3.1155**	0.126	4.0	ug/L	6636	Standard
	Cr	52	79072.3	3.2	**3.6570**	0.117	3.2	ug/L	21244	Standard
	Cr	53	19463.2	9.7	**9.8541**	0.819	8.3	ug/L	467	Standard
	Mn	55	5692940.0	3.7	**269.9920**	6.569	2.4	ug/L	8327	Standard
	Co	59	22242.7	4.5	**1.4856**	0.053	3.6	ug/L	123	Standard
	Ni	60	14912.3	3.9	**4.7925**	0.161	3.4	ug/L	272	Standard
	Cu	65	14332.8	2.4	**5.1323**	0.177	3.5	ug/L	1002	Standard
	Zn	66	64380.5	2.5	**52.4224**	1.505	2.9	ug/L	3532	Standard
>	**Ge**	72	222102.1	2.1				ug/L	254939	Standard
	As	75	3871.7	9.7	**3.7041**	0.293	7.9	ug/L	-224	Standard
	Se	82	368.9	14.4	**3.1458**	0.438	13.9	ug/L	24	Standard
	Se-1	77	900.0	6.4	**10.7886**	0.548	5.1	ug/L	93	Standard
	Ga	71	206898.1	1.9				mg/L	233175	Standard
	Rb	85	72806.0	3.7				ug/L	20	Standard
>	**Y**	89	235117.3	1.8				ug/L	235100	Standard
	Rh	103	990.0	5.8				ug/L	6	Standard
	Mo	98	9385.8	4.1	**2.4757**	0.077	3.1	ug/L	14	Standard
	Ag	107	147.7	13.3	**0.0150**	0.003	18.8	ug/L	38	Standard
	Cd	111	2570.4	0.4	**0.4881**	0.007	1.4	mg/L	439	Standard
	Cd	114	6816.8	4.8	**0.4576**	0.020	4.3	ug/L	1326	Standard
>	**In**	115	725233.1	1.4				ug/L	804157	Standard
	Sn	118	7065.0	3.4	**0.2376**	0.011	4.8	ug/L	4860	Standard
	Sb	123	3290.6	5.1	**0.2950**	0.011	3.8	ug/L	28	Standard
	Ba	135	261156.2	3.1	**52.3149**	1.068	2.0	ug/L	54	Standard
	Ce	140	136312.3	3.6				ug/L	61	Standard
>	**Tb**	159	835842.7	2.9				ug/L	844239	Standard
	Ho	165	2620.2	4.8				ug/L	6	Standard
	Tl	203	513.3	5.0	**0.0430**	0.001	2.2	ug/L	10	Standard
	Tl	205	1184.7	4.4	**0.0403**	0.002	4.2	ug/L	16	Standard
	Pb	206	26292.8	2.7	**2.6808**	0.117	4.4	ug/L	421	Standard
	Pb	207	21363.7	2.4	**2.6256**	0.134	5.1	ug/L	341	Standard
	Pb	208	99141.6	2.8	**2.6428**	0.136	5.2	ug/L	1571	Standard
	U	238	65531.9	4.0	**1.8786**	0.119	6.3	ug/L	4	Standard
>	**Bi**	209	306307.9	2.9				ug/L	457202	Standard
	Na	23	736085.4	2.4	**202.7411**	3.329	1.6	mg/L	138	Standard
	Mg	24	5596221.6	4.3	**19.5848**	0.725	3.7	mg/L	134	Standard

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	K	39	34343.6	1.8	**2.7920**	0.054	1.9	mg/L	563	Standard
	Ca	43	36502.6	2.6	**47.8913**	0.973	2.0	mg/L	127	Standard
	Fe	54	22676.5	3.3	**3.3812**	0.088	2.6	mg/L	815	Standard
	Fe	57	867460.3	5.7	**4.8053**	0.254	5.3	mg/L	4749	Standard
>	**Sc-1**	45	408219.1	1.0				mg/L	367704	Standard
	Cl	35	27900857.0	1.2				ug/L	59901	Standard
	Kr	83	123.3	11.3				ug/L	50	Standard
	Br	81	98106.7	2.2				ug/L	13965	Standard
	P	31	482731.4	3.7				ug/L	71952	Standard
	S	34	7392639.8	2.9				ug/L	878802	Standard
	Sr	88	33963619.2	5.2				ug/L	321	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		87.120	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		100.007	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		90.185	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		99.005	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	66.996
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Na 23 Upper, S, EEE	Na	23	

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Method 6020 - Summary Report

Sample ID: L1205005006
Sample Date/Time: Thursday, May 03, 2012 14:23:56
Number of Replicates: 3
Autosampler Position: 254
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP 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	268528.4	2.6	**18884.9751**	599.739	3.2	ug/L	20538	Standard
	Be	9	26.0	30.5	**-0.0003**	0.002	598.5	ug/L	13	Standard
	Al	27	223608.1	8.7	**8.4079**	0.763	9.1	ug/L	25813	Standard
>	**Sc**	45	380576.3	1.4				ug/L	367704	Standard
	Ti	47	3002.3	2.9	**1.6070**	0.047	2.9	ug/L	127	Standard
	V	51	27646.2	2.7	**1.0816**	0.029	2.7	ug/L	6636	Standard
	Cr	52	46895.2	3.1	**1.7094**	0.069	4.0	ug/L	21244	Standard
	Cr	53	15418.5	2.5	**7.7433**	0.151	2.0	ug/L	467	Standard
	Mn	55	5327969.9	4.1	**251.9160**	9.500	3.8	ug/L	8327	Standard
	Co	59	11743.6	4.0	**0.7785**	0.029	3.7	ug/L	123	Standard
	Ni	60	9248.2	2.2	**2.9401**	0.083	2.8	ug/L	272	Standard
	Cu	65	2023.1	4.5	**0.4340**	0.033	7.5	ug/L	1002	Standard
	Zn	66	8371.0	2.1	**5.0817**	0.099	2.0	ug/L	3532	Standard
>	**Ge**	72	222774.2	0.8				ug/L	254939	Standard
	As	75	2432.2	7.4	**2.3812**	0.151	6.3	ug/L	-224	Standard
	Se	82	261.7	11.8	**2.1556**	0.287	13.3	ug/L	24	Standard
	Se-1	77	846.0	7.6	**10.0493**	0.912	9.1	ug/L	93	Standard
	Ga	71	205430.9	1.9				mg/L	233175	Standard
	Rb	85	42314.4	2.1				ug/L	20	Standard
>	**Y**	89	219456.8	1.7				ug/L	235100	Standard
	Rh	103	850.7	4.9				ug/L	6	Standard
	Mo	98	9715.2	2.8	**2.5709**	0.072	2.8	ug/L	14	Standard
	Ag	107	53.3	12.5	**0.0021**	0.001	42.8	ug/L	38	Standard
	Cd	111	583.4	3.4	**0.0386**	0.004	11.1	mg/L	439	Standard
	Cd	114	1517.7	4.3	**0.0266**	0.005	20.6	ug/L	1326	Standard
>	**In**	115	723125.4	0.2				ug/L	804157	Standard
	Sn	118	1207.4	4.9	**-0.1190**	0.004	3.0	ug/L	4860	Standard
	Sb	123	2145.4	2.9	**0.1908**	0.005	2.8	ug/L	28	Standard
	Ba	135	194465.2	3.8	**39.0703**	1.458	3.7	ug/L	54	Standard
	Ce	140	2489.6	31.5				ug/L	61	Standard
>	**Tb**	159	814314.2	1.8				ug/L	844239	Standard
	Ho	165	148.7	7.4				ug/L	6	Standard
	Tl	203	246.3	8.1	**0.0204**	0.001	7.2	ug/L	10	Standard
	Tl	205	585.3	8.6	**0.0194**	0.002	9.7	ug/L	16	Standard
	Pb	206	688.7	3.4	**0.0406**	0.003	6.8	ug/L	421	Standard
	Pb	207	571.0	6.3	**0.0379**	0.004	11.4	ug/L	341	Standard
	Pb	208	2622.1	2.2	**0.0387**	0.002	4.1	ug/L	1571	Standard
	U	238	75295.8	4.1	**2.1108**	0.108	5.1	ug/L	4	Standard
>	**Bi**	209	312998.6	1.2				ug/L	457202	Standard
	Na	23	718659.5	2.1	**212.3664**	5.541	2.6	mg/L	138	Standard
	Mg	24	4818530.0	3.9	**18.0927**	0.758	4.2	mg/L	134	Standard

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K	39	32229.6	2.0	**2.8108**	0.056	2.0	mg/L	563	Standard
Ca	43	34054.2	1.5	**47.9324**	0.950	2.0	mg/L	127	Standard
Fe	54	13026.8	5.3	**2.0310**	0.125	6.2	mg/L	815	Standard
Fe	57	486330.5	6.2	**2.8786**	0.193	6.7	mg/L	4749	Standard
> **Sc-1**	45	380576.3	1.4				mg/L	367704	Standard
Cl	35	27698487.0	1.1				ug/L	59901	Standard
Kr	83	122.0	5.7				ug/L	50	Standard
Br	81	106250.6	1.6				ug/L	13965	Standard
P	31	297595.4	2.9				ug/L	71952	Standard
S	34	6432611.9	1.9				ug/L	878802	Standard
Sr	88	27699792.3	2.9				ug/L	321	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		87.383	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
> Y	89		93.346	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
> In	115		89.923	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
> Tb	159		96.455	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	68.460
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Na 23 Upper, S, EEE	Na	23	

Sample ID: L1205005006
Report Date/Time: Thursday, May 03, 2012 14:26:23
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Method 6020 - Summary Report

Sample ID: L1205005007
Sample Date/Time: Thursday, May 03, 2012 14:26:43
Number of Replicates: 3
Autosampler Position: 255
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP 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	170084.7	2.5	**10619.6086**	196.530	1.9	ug/L	20538	Standard
	Be	9	35.7	27.7	**0.0014**	0.002	154.4	ug/L	13	Standard
	Al	27	577217.5	4.7	**21.8885**	0.863	3.9	ug/L	25813	Standard
>	**Sc**	45	403087.4	1.0				ug/L	367704	Standard
	Ti	47	1591.4	35.1	**0.7021**	0.267	38.1	ug/L	127	Standard
	V	51	34196.2	4.3	**1.1651**	0.081	6.9	ug/L	6636	Standard
	Cr	52	36203.9	2.9	**0.7576**	0.075	9.9	ug/L	21244	Standard
	Cr	53	2807.6	1.8	**1.0285**	0.037	3.6	ug/L	467	Standard
	Mn	55	766889.7	3.3	**30.8936**	1.382	4.5	ug/L	8327	Standard
	Co	59	3494.7	3.4	**0.1930**	0.008	4.2	ug/L	123	Standard
	Ni	60	5972.5	2.7	**1.6003**	0.050	3.1	ug/L	272	Standard
	Cu	65	5547.7	3.1	**1.4736**	0.075	5.1	ug/L	1002	Standard
	Zn	66	14425.9	3.2	**8.4505**	0.444	5.3	ug/L	3532	Standard
>	**Ge**	72	259865.1	1.3				ug/L	254939	Standard
	As	75	1023.7	8.6	**0.9628**	0.070	7.3	ug/L	-224	Standard
	Se	82	120.5	9.0	**0.7011**	0.081	11.5	ug/L	24	Standard
	Se-1	77	175.7	6.1	**0.8634**	0.129	14.9	ug/L	93	Standard
	Ga	71	241860.6	1.0				mg/L	233175	Standard
	Rb	85	17039.6	3.3				ug/L	20	Standard
>	**Y**	89	243734.3	2.6				ug/L	235100	Standard
	Rh	103	82.0	24.0				ug/L	6	Standard
	Mo	98	2752.4	2.7	**0.6146**	0.014	2.3	ug/L	14	Standard
	Ag	107	53.7	12.7	**0.0011**	0.001	71.7	ug/L	38	Standard
	Cd	111	954.5	5.4	**0.0912**	0.009	10.2	mg/L	439	Standard
	Cd	114	2518.4	3.5	**0.0783**	0.006	7.2	ug/L	1326	Standard
>	**In**	115	846673.6	0.5				ug/L	804157	Standard
	Sn	118	1756.1	5.0	**-0.1012**	0.004	4.1	ug/L	4860	Standard
	Sb	123	5066.8	3.1	**0.3912**	0.011	2.8	ug/L	28	Standard
	Ba	135	145768.3	3.2	**25.0082**	0.749	3.0	ug/L	54	Standard
	Ce	140	5790.4	3.5				ug/L	61	Standard
>	**Tb**	159	884639.9	1.0				ug/L	844239	Standard
	Ho	165	198.7	17.2				ug/L	6	Standard
	Tl	203	690.7	2.9	**0.0420**	0.001	2.0	ug/L	10	Standard
	Tl	205	1677.4	8.9	**0.0415**	0.003	8.3	ug/L	16	Standard
	Pb	206	74157.5	3.3	**5.5214**	0.197	3.6	ug/L	421	Standard
	Pb	207	57038.3	3.6	**5.1191**	0.200	3.9	ug/L	341	Standard
	Pb	208	270481.8	3.3	**5.2647**	0.185	3.5	ug/L	1571	Standard
	U	238	5516.0	3.3	**0.1158**	0.004	3.3	ug/L	4	Standard
>	**Bi**	209	421540.5	0.9				ug/L	457202	Standard
	Na	23	58009.6	2.9	**16.1442**	0.322	2.0	mg/L	138	Standard
	Mg	24	777263.5	3.2	**2.7536**	0.062	2.2	mg/L	134	Standard

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K	39	14736.5	1.9	**1.1802**	0.012	1.0	mg/L	563	Standard
Ca	43	18907.1	3.3	**25.0360**	0.614	2.5	mg/L	127	Standard
Fe	54	1378.7	2.4	**0.0780**	0.003	4.0	mg/L	815	Standard
Fe	57	34259.4	5.5	**0.1628**	0.009	5.6	mg/L	4749	Standard
Sc-1	45	403087.4	1.0				mg/L	367704	Standard
Cl	35	2014683.2	6.3				ug/L	59901	Standard
Kr	83	52.9	8.9				ug/L	50	Standard
Br	81	30979.0	5.0				ug/L	13965	Standard
P	31	116839.3	2.8				ug/L	71952	Standard
S	34	2591171.7	2.9				ug/L	878802	Standard
Sr	88	2648117.1	4.4				ug/L	321	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		101.932	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		103.672	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		105.287	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		104.785	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	92.200
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, May 03, 2012 14:29:33
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: SLP 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	21621.1	1.4	**-4.8869**	33.651	688.6	ug/L	20538	Standard
	Be	9	239624.4	4.4	**52.9402**	1.154	2.2	ug/L	13	Standard
	Al	27	1199616.6	5.2	**49.6424**	1.567	3.2	ug/L	25813	Standard
>	**Sc**	45	378317.6	2.6				ug/L	367704	Standard
	Ti	47	215977.8	5.2	**104.4282**	4.988	4.8	ug/L	127	Standard
	V	51	1256535.7	2.7	**54.1961**	1.320	2.4	ug/L	6636	Standard
	Cr	52	1021957.2	2.7	**52.5976**	1.384	2.6	ug/L	21244	Standard
	Cr	53	114863.8	5.1	**51.6396**	2.313	4.5	ug/L	467	Standard
	Mn	55	1345016.7	3.2	**55.4553**	1.672	3.0	ug/L	8327	Standard
	Co	59	882770.9	3.4	**51.6817**	1.584	3.1	ug/L	123	Standard
	Ni	60	180128.2	4.0	**51.0666**	1.654	3.2	ug/L	272	Standard
	Cu	65	152645.8	2.9	**50.4305**	1.141	2.3	ug/L	1002	Standard
	Zn	66	69036.7	3.3	**48.8882**	1.454	3.0	ug/L	3532	Standard
>	**Ge**	72	254678.4	1.9				ug/L	254939	Standard
	As	75	62788.2	3.4	**50.2951**	1.307	2.6	ug/L	-224	Standard
	Se	82	6488.6	2.0	**51.8581**	0.811	1.6	ug/L	24	Standard
	Se-1	77	4375.6	2.2	**49.4120**	0.137	0.3	ug/L	93	Standard
	Ga	71	239141.9	1.1				mg/L	233175	Standard
	Rb	85	1152.0	5.1				ug/L	20	Standard
>	**Y**	89	237168.0	1.2				ug/L	235100	Standard
	Rh	103	42.7	23.6				ug/L	6	Standard
	Mo	98	420110.9	2.9	**96.0918**	2.074	2.2	ug/L	14	Standard
	Ag	107	458636.0	2.6	**54.2545**	1.113	2.1	ug/L	38	Standard
	Cd	111	269094.7	3.8	**52.5207**	1.812	3.5	mg/L	439	Standard
	Cd	114	722522.0	4.0	**50.7170**	1.730	3.4	ug/L	1326	Standard
>	**In**	115	839626.0	0.8				ug/L	804157	Standard
	Sn	118	954015.9	4.8	**50.0026**	2.223	4.4	ug/L	4860	Standard
	Sb	123	652412.0	3.4	**51.5831**	1.481	2.9	ug/L	28	Standard
	Ba	135	273079.5	4.1	**47.2479**	1.587	3.4	ug/L	54	Standard
	Ce	140	987.4	12.9				ug/L	61	Standard
>	**Tb**	159	881995.6	1.4				ug/L	844239	Standard
	Ho	165	23.3	27.6				ug/L	6	Standard
	Tl	203	865553.1	2.3	**50.8191**	1.109	2.2	ug/L	10	Standard
	Tl	205	2184841.0	2.1	**53.1292**	0.853	1.6	ug/L	16	Standard
	Pb	206	699443.1	3.5	**51.0516**	1.541	3.0	ug/L	421	Standard
	Pb	207	577930.1	4.4	**50.8897**	1.967	3.9	ug/L	341	Standard
	Pb	208	2669238.5	3.9	**50.9593**	1.799	3.5	ug/L	1571	Standard
	U	238	2669336.4	3.9	**54.1747**	1.915	3.5	ug/L	4	Standard
>	**Bi**	209	431947.0	1.1				ug/L	457202	Standard
	Na	23	16621.1	2.9	**4.9022**	0.102	2.1	mg/L	138	Standard
	Mg	24	1326664.3	4.0	**5.0086**	0.103	2.1	mg/L	134	Standard

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	K	39	54447.0	2.3	**4.8178**	0.050	1.0	mg/L	563	Standard
	Ca	43	3529.7	4.6	**4.8383**	0.123	2.5	mg/L	127	Standard
	Fe	54	30159.3	6.6	**4.9099**	0.198	4.0	mg/L	815	Standard
	Fe	57	946230.5	5.7	**5.6595**	0.186	3.3	mg/L	4749	Standard
>	**Sc-1**	45	378317.6	2.6				mg/L	367704	Standard
	Cl	35	221112.6	12.8				ug/L	59901	Standard
	Kr	83	53.1	11.6				ug/L	50	Standard
	Br	81	14676.1	3.0				ug/L	13965	Standard
	P	31	97263.2	1.8				ug/L	71952	Standard
	S	34	1023975.4	2.8				ug/L	878802	Standard
	Sr	88	1528.7	22.1				ug/L	321	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	99.285		
>	Sc	45			
	Ti	47	104.428		
	V	51	108.392		
	Cr	52	105.195		
	Cr	53			
	Mn	55	110.911		
	Co	59	103.363		
	Ni	60	102.133		
	Cu	65	100.861		
	Zn	66	97.776		
>	Ge	72		99.898	
	As	75	100.590		
	Se	82	103.716		
	Se-1	77	98.824		
	Ga	71			
	Rb	85			
>	Y	89		100.880	
	Rh	103			
	Mo	98	96.092		
	Ag	107	108.509		
	Cd	111	105.041		
	Cd	114			
>	In	115		104.411	
	Sn	118	100.005		
	Sb	123	103.166		
	Ba	135	94.496		
	Ce	140			
>	Tb	159		104.472	
	Ho	165			
	Tl	203	101.638		
	Tl	205			
	Pb	206	102.103		

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	Pb	207	101.779	
	Pb	208	101.919	
	U	238	108.349	
>	Bi	209		94.476
	Na	23	98.043	
	Mg	24	100.173	
	K	39	96.356	
	Ca	43	96.767	
	Fe	54	98.197	
	Fe	57	113.189	
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Mn	55	
QC Std 6	Fe	57	

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Method 6020 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, May 03, 2012 14:32:20
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: SLP 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	20644.1	2.7	**-29.3513**	61.157	208.4	ug/L	20538	Standard
	Be	9	42.0	40.6	**0.0036**	0.004	109.9	ug/L	13	Standard
	Al	27	14456.3	9.8	**-0.3422**	0.061	17.9	ug/L	25813	Standard
>	**Sc**	45	366695.1	3.1				ug/L	367704	Standard
	Ti	47	164.7	8.5	**0.0276**	0.005	19.5	ug/L	127	Standard
	V	51	6436.3	2.9	**-0.0044**	0.009	202.3	ug/L	6636	Standard
	Cr	52	20055.3	2.1	**-0.0342**	0.030	88.8	ug/L	21244	Standard
	Cr	53	578.7	5.5	**0.0518**	0.008	16.3	ug/L	467	Standard
	Mn	55	1679.8	3.7	**-0.1620**	0.003	1.9	ug/L	8327	Standard
	Co	59	178.3	25.9	**0.0031**	0.003	93.9	ug/L	123	Standard
	Ni	60	111.0	18.0	**-0.0293**	0.006	18.9	ug/L	272	Standard
	Cu	65	1025.0	2.5	**0.0119**	0.002	17.0	ug/L	1002	Standard
	Zn	66	1118.0	7.9	**-1.1295**	0.044	3.9	ug/L	3532	Standard
>	**Ge**	72	250157.4	2.5				ug/L	254939	Standard
	As	75	-225.6	21.0	**-0.0217**	0.038	176.2	ug/L	-224	Standard
	Se	82	17.8	43.6	**-0.1004**	0.066	65.7	ug/L	24	Standard
	Se-1	77	83.3	8.2	**-0.1465**	0.055	37.7	ug/L	93	Standard
	Ga	71	231565.9	3.1				mg/L	233175	Standard
	Rb	85	21.3	19.5				ug/L	20	Standard
>	**Y**	89	223998.5	1.2				ug/L	235100	Standard
	Rh	103	4.7	24.7				ug/L	6	Standard
	Mo	98	162.2	7.7	**0.0285**	0.003	10.8	ug/L	14	Standard
	Ag	107	113.3	17.8	**0.0086**	0.002	28.6	ug/L	38	Standard
	Cd	111	526.4	5.7	**0.0124**	0.006	50.3	mg/L	439	Standard
	Cd	114	1459.7	1.6	**0.0086**	0.002	22.1	ug/L	1326	Standard
>	**In**	115	813184.1	0.4				ug/L	804157	Standard
	Sn	118	2003.5	0.9	**-0.0840**	0.001	1.2	ug/L	4860	Standard
	Sb	123	295.6	8.6	**0.0180**	0.002	11.6	ug/L	28	Standard
	Ba	135	77.3	9.9	**0.0029**	0.001	48.7	ug/L	54	Standard
	Ce	140	73.3	12.3				ug/L	61	Standard
>	**Tb**	159	841371.5	2.8				ug/L	844239	Standard
	Ho	165	10.0	40.0				ug/L	6	Standard
	Tl	203	141.7	15.0	**0.0088**	0.001	16.0	ug/L	10	Standard
	Tl	205	334.7	6.0	**0.0078**	0.001	6.4	ug/L	16	Standard
	Pb	206	432.3	6.8	**0.0026**	0.002	72.2	ug/L	421	Standard
	Pb	207	366.3	6.8	**0.0007**	0.003	381.2	ug/L	341	Standard
	Pb	208	1674.7	4.6	**0.0015**	0.002	110.5	ug/L	1571	Standard
	U	238	719.4	29.9	**0.0157**	0.005	28.9	ug/L	4	Standard
>	**Bi**	209	432759.3	2.6				ug/L	457202	Standard
	Na	23	194.7	14.5	**0.0203**	0.009	44.3	mg/L	138	Standard
	Mg	24	433.7	35.0	**0.0003**	0.001	212.5	mg/L	134	Standard

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K	39	601.3	5.3	**-0.0027**	0.002	75.6	mg/L	563	Standard
Ca	43	100.0	12.2	**-0.0296**	0.014	47.1	mg/L	127	Standard
Fe	54	815.5	8.3	**0.0026**	0.016	619.0	mg/L	815	Standard
Fe	57	5292.3	4.0	**0.0023**	0.002	69.6	mg/L	4749	Standard
> **Sc-1**	45	366695.1	3.1				mg/L	367704	Standard
Cl	35	167408.8	5.4				ug/L	59901	Standard
Kr	83	49.6	12.1				ug/L	50	Standard
Br	81	13708.2	1.1				ug/L	13965	Standard
P	31	84166.6	2.7				ug/L	71952	Standard
S	34	1003054.7	3.3				ug/L	878802	Standard
Sr	88	1091.4	32.5				ug/L	321	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		98.125	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
> Y	89		95.278	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
> In	115		101.122	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
> Tb	159		99.660	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	94.654
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
Report Date/Time: Thursday, May 03, 2012 14:34:47
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Method 6020 - Summary Report

Sample ID: L1205005008
Sample Date/Time: Thursday, May 03, 2012 14:35:09
Number of Replicates: 3
Autosampler Position: 256
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP 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	170359.3	2.0	**10617.7257**	75.424	0.7	ug/L	20538	Standard
	Be	9	34.3	8.9	**0.0011**	0.001	68.5	ug/L	13	Standard
	Al	27	137721.7	5.5	**4.4712**	0.203	4.5	ug/L	25813	Standard
>	**Sc**	45	403837.9	1.9				ug/L	367704	Standard
	Ti	47	808.0	7.3	**0.3327**	0.024	7.3	ug/L	127	Standard
	V	51	31730.7	4.7	**1.0704**	0.053	4.9	ug/L	6636	Standard
	Cr	52	31429.6	2.7	**0.5241**	0.024	4.6	ug/L	21244	Standard
	Cr	53	2064.1	11.1	**0.7076**	0.113	16.0	ug/L	467	Standard
	Mn	55	740032.5	3.8	**30.0337**	0.917	3.1	ug/L	8327	Standard
	Co	59	3273.4	5.3	**0.1818**	0.008	4.4	ug/L	123	Standard
	Ni	60	6010.9	3.2	**1.6243**	0.044	2.7	ug/L	272	Standard
	Cu	65	4320.9	3.3	**1.0844**	0.030	2.7	ug/L	1002	Standard
	Zn	66	15837.3	4.0	**9.5569**	0.348	3.6	ug/L	3532	Standard
>	**Ge**	72	257765.3	1.2				ug/L	254939	Standard
	As	75	882.2	3.6	**0.8576**	0.023	2.7	ug/L	-224	Standard
	Se	82	102.1	7.8	**0.5640**	0.071	12.7	ug/L	24	Standard
	Se-1	77	168.3	3.0	**0.7954**	0.048	6.1	ug/L	93	Standard
	Ga	71	239208.9	0.4				mg/L	233175	Standard
	Rb	85	16843.4	0.9				ug/L	20	Standard
>	**Y**	89	242301.9	1.9				ug/L	235100	Standard
	Rh	103	92.7	23.1				ug/L	6	Standard
	Mo	98	2855.0	3.0	**0.6280**	0.020	3.2	ug/L	14	Standard
	Ag	107	61.3	12.3	**0.0019**	0.001	46.0	ug/L	38	Standard
	Cd	111	860.7	3.8	**0.0705**	0.006	9.1	mg/L	439	Standard
	Cd	114	2387.0	2.1	**0.0666**	0.004	5.3	ug/L	1326	Standard
>	**In**	115	859826.8	0.4				ug/L	804157	Standard
	Sn	118	1984.8	1.8	**-0.0908**	0.002	2.5	ug/L	4860	Standard
	Sb	123	5117.9	3.3	**0.3890**	0.012	3.1	ug/L	28	Standard
	Ba	135	147697.8	4.0	**24.9531**	0.996	4.0	ug/L	54	Standard
	Ce	140	1851.4	2.9				ug/L	61	Standard
>	**Tb**	159	885441.6	1.9				ug/L	844239	Standard
	Ho	165	122.0	8.7				ug/L	6	Standard
	Tl	203	649.7	6.9	**0.0393**	0.002	6.1	ug/L	10	Standard
	Tl	205	1699.4	1.6	**0.0418**	0.000	1.1	ug/L	16	Standard
	Pb	206	53592.0	2.8	**3.9557**	0.135	3.4	ug/L	421	Standard
	Pb	207	40836.3	2.7	**3.6317**	0.126	3.5	ug/L	341	Standard
	Pb	208	194826.8	3.1	**3.7586**	0.138	3.7	ug/L	1571	Standard
	U	238	5633.4	5.4	**0.1175**	0.007	5.8	ug/L	4	Standard
>	**Bi**	209	424372.6	0.9				ug/L	457202	Standard
	Na	23	59514.8	3.9	**16.5309**	0.344	2.1	mg/L	138	Standard
	Mg	24	778007.1	3.7	**2.7508**	0.052	1.9	mg/L	134	Standard

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K	39	14728.5	1.7	**1.1775**	0.022	1.8	mg/L	563	Standard
Ca	43	18953.9	4.8	**25.0459**	0.770	3.1	mg/L	127	Standard
Fe	54	1131.0	5.0	**0.0388**	0.009	22.3	mg/L	815	Standard
Fe	57	24353.6	3.7	**0.1066**	0.003	2.8	mg/L	4749	Standard
> **Sc-1**	45	403837.9	1.9				mg/L	367704	Standard
Cl	35	1867622.8	1.5				ug/L	59901	Standard
Kr	83	59.8	10.3				ug/L	50	Standard
Br	81	30483.0	1.0				ug/L	13965	Standard
P	31	119072.0	3.3				ug/L	71952	Standard
S	34	2663429.4	2.0				ug/L	878802	Standard
Sr	88	2634087.8	1.9				ug/L	321	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		101.109	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		103.063	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		106.923	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		104.880	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	92.820
	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	

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: Thursday, May 03, 2012 14:37:58
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: SLP 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	22430.3	0.3	**75.4000**	39.717	52.7	ug/L	20538	Standard
	Be	9	24.3	23.4	**-0.0006**	0.001	200.1	ug/L	13	Standard
	Al	27	105965906.2	6.3	**4515.7908**	207.861	4.6	ug/L	25813	Standard
>	**Sc**	45	374457.4	2.6				ug/L	367704	Standard
	Ti	47	244589.6	4.4	**119.4821**	0.973	0.8	ug/L	127	Standard
	V	51	7154.7	4.3	**0.0254**	0.024	96.1	ug/L	6636	Standard
	Cr	52	23675.2	1.4	**0.1504**	0.034	22.5	ug/L	21244	Standard
	Cr	53	3758.5	2.7	**1.5011**	0.040	2.7	ug/L	467	Standard
	Mn	55	19444.2	4.9	**0.5806**	0.029	5.0	ug/L	8327	Standard
	Co	59	976.4	6.7	**0.0502**	0.002	4.2	ug/L	123	Standard
	Ni	60	2061.8	6.2	**0.5296**	0.016	3.0	ug/L	272	Standard
	Cu	65	1665.8	5.4	**0.2246**	0.021	9.3	ug/L	1002	Standard
	Zn	66	8164.2	5.2	**4.1069**	0.077	1.9	ug/L	3532	Standard
>	**Ge**	72	252071.0	4.0				ug/L	254939	Standard
	As	75	-202.9	19.3	**-0.0014**	0.026	1838.7	ug/L	-224	Standard
	Se	82	30.0	22.2	**-0.0040**	0.051	1284.1	ug/L	24	Standard
	Se-1	77	248.3	6.0	**1.7710**	0.073	4.1	ug/L	93	Standard
	Ga	71	230312.5	4.1				mg/L	233175	Standard
	Rb	85	4005.2	3.1				ug/L	20	Standard
>	**Y**	89	232614.1	1.0				ug/L	235100	Standard
	Rh	103	9.3	12.4				ug/L	6	Standard
	Mo	98	424423.4	3.4	**97.3865**	2.469	2.5	ug/L	14	Standard
	Ag	107	117.3	15.3	**0.0087**	0.002	24.5	ug/L	38	Standard
	Cd	111	1272.6	4.3	**0.1557**	0.007	4.5	mg/L	439	Standard
	Cd	114	3992.0	5.2	**0.1842**	0.010	5.3	ug/L	1326	Standard
>	**In**	115	837008.4	1.9				ug/L	804157	Standard
	Sn	118	4892.1	7.2	**0.0653**	0.015	22.5	ug/L	4860	Standard
	Sb	123	608.4	4.8	**0.0421**	0.002	3.8	ug/L	28	Standard
	Ba	135	184.7	9.3	**0.0211**	0.003	12.0	ug/L	54	Standard
	Ce	140	2280.8	7.2				ug/L	61	Standard
>	**Tb**	159	889665.3	0.6				ug/L	844239	Standard
	Ho	165	33.3	3.5				ug/L	6	Standard
	Tl	203	422.7	3.3	**0.0257**	0.001	4.0	ug/L	10	Standard
	Tl	205	1040.7	7.9	**0.0255**	0.002	9.3	ug/L	16	Standard
	Pb	206	778.4	1.7	**0.0290**	0.001	2.4	ug/L	421	Standard
	Pb	207	660.0	3.7	**0.0276**	0.002	5.6	ug/L	341	Standard
	Pb	208	3002.1	3.5	**0.0280**	0.001	4.9	ug/L	1571	Standard
	U	238	97.7	8.3	**0.0031**	0.000	6.2	ug/L	4	Standard
>	**Bi**	209	424140.9	1.3				ug/L	457202	Standard
	Na	23	38853.8	2.9	**11.6334**	0.369	3.2	mg/L	138	Standard
	Mg	24	1326572.2	5.1	**5.0596**	0.181	3.6	mg/L	134	Standard

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K	39	54654.4	2.0	**4.8871**	0.068	1.4	mg/L	563	Standard
Ca	43	10290.8	6.9	**14.5940**	0.872	6.0	mg/L	127	Standard
Fe	54	72873.8	6.1	**12.1917**	0.612	5.0	mg/L	815	Standard
Fe	57	2155389.1	5.8	**13.0647**	0.481	3.7	mg/L	4749	Standard
> **Sc-1**	45	374457.4	2.6				mg/L	367704	Standard
Cl	35	9785743.9	1.6				ug/L	59901	Standard
Kr	83	47.1	6.4				ug/L	50	Standard
Br	81	14135.3	1.2				ug/L	13965	Standard
P	31	8292538.5	3.6				ug/L	71952	Standard
S	34	1939656.2	2.2				ug/L	878802	Standard
Sr	88	2084.1	10.1				ug/L	321	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9			
Al	27	90.316		
> Sc	45			
Ti	47	119.482		
V	51			
Cr	52			
Cr	53			
Mn	55			
Co	59			
Ni	60			
Cu	65			
Zn	66			
> Ge	72		98.875	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
> Y	89		98.943	
Rh	103			
Mo	98	97.386		
Ag	107			
Cd	111			
Cd	114			
> In	115		104.085	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
> Tb	159		105.381	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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Pb	207		
Pb	208		
U	238		
Bi	209		92.769
Na	23	93.067	
Mg	24	101.192	
K	39	97.742	
Ca	43	97.293	
Fe	54	97.533	
Fe	57	104.518	
Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	Mn	55	
QC Std 4	Se-1	77	
QC Std 4	Cd	111	

Sample ID: QC Std 4
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Method 6020 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Thursday, May 03, 2012 14:40:45
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: SLP 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	21968.6	1.2	**62.7004**	22.353	35.7	ug/L	20538	Standard
	Be	9	488416.0	3.8	**110.5791**	4.189	3.8	ug/L	13	Standard
	Al	27	105971627.6	5.7	**4581.1848**	265.262	5.8	ug/L	25813	Standard
>	**Sc**	45	369296.0	0.1				ug/L	367704	Standard
	Ti	47	241751.8	3.7	**118.5763**	5.048	4.3	ug/L	127	Standard
	V	51	2289332.0	2.7	**100.3955**	3.369	3.4	ug/L	6636	Standard
	Cr	52	1935746.9	0.8	**102.0548**	1.082	1.1	ug/L	21244	Standard
	Cr	53	228928.1	3.7	**104.6273**	4.568	4.4	ug/L	467	Standard
	Mn	55	2488659.3	3.0	**104.2705**	3.601	3.5	ug/L	8327	Standard
	Co	59	1721888.3	3.3	**102.2594**	4.125	4.0	ug/L	123	Standard
	Ni	60	357667.7	3.7	**102.9279**	4.587	4.5	ug/L	272	Standard
	Cu	65	294700.6	4.4	**99.0858**	5.008	5.1	ug/L	1002	Standard
	Zn	66	150517.0	3.8	**110.5006**	5.007	4.5	ug/L	3532	Standard
>	**Ge**	72	251117.6	0.8				ug/L	254939	Standard
	As	75	129194.1	3.7	**104.8012**	4.470	4.3	ug/L	-224	Standard
	Se	82	13349.1	2.0	**108.4744**	2.895	2.7	ug/L	24	Standard
	Se-1	77	9122.7	2.7	**105.7433**	3.017	2.9	ug/L	93	Standard
	Ga	71	229457.9	1.2				mg/L	233175	Standard
	Rb	85	4047.9	0.1				ug/L	20	Standard
>	**Y**	89	231119.9	2.0				ug/L	235100	Standard
	Rh	103	78.0	9.2				ug/L	6	Standard
	Mo	98	423848.4	3.4	**98.4950**	2.435	2.5	ug/L	14	Standard
	Ag	107	727809.8	7.7	**87.4495**	5.969	6.8	ug/L	38	Standard
	Cd	111	541662.6	3.7	**107.5010**	3.064	2.9	mg/L	439	Standard
	Cd	114	1442818.1	4.9	**102.9892**	4.130	4.0	ug/L	1326	Standard
>	**In**	115	826390.6	0.9				ug/L	804157	Standard
	Sn	118	3810.5	3.3	**0.0109**	0.006	52.2	ug/L	4860	Standard
	Sb	123	1326038.4	3.4	**106.5219**	2.724	2.6	ug/L	28	Standard
	Ba	135	551146.7	4.8	**96.8892**	3.793	3.9	ug/L	54	Standard
	Ce	140	2270.2	7.6				ug/L	61	Standard
>	**Tb**	159	876283.8	1.6				ug/L	844239	Standard
	Ho	165	40.0	25.0				ug/L	6	Standard
	Tl	203	1709856.8	2.8	**101.8499**	1.933	1.9	ug/L	10	Standard
	Tl	205	4292180.7	3.0	**105.8967**	2.334	2.2	ug/L	16	Standard
	Pb	206	1361916.0	3.6	**100.8735**	2.157	2.1	ug/L	421	Standard
	Pb	207	1171403.4	4.1	**104.6694**	2.575	2.5	ug/L	341	Standard
	Pb	208	5449889.2	3.9	**105.5798**	2.519	2.4	ug/L	1571	Standard
	U	238	5325835.5	4.7	**109.6349**	3.307	3.0	ug/L	4	Standard
>	**Bi**	209	425738.6	2.0				ug/L	457202	Standard
	Na	23	38690.7	4.4	**11.7438**	0.526	4.5	mg/L	138	Standard
	Mg	24	1305497.0	5.0	**5.0501**	0.253	5.0	mg/L	134	Standard

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	K	39	53338.4	3.1	**4.8348**	0.154	3.2	mg/L	563	Standard
	Ca	43	10087.4	5.5	**14.5082**	0.813	5.6	mg/L	127	Standard
	Fe	54	72170.0	4.5	**12.2461**	0.562	4.6	mg/L	815	Standard
	Fe	57	2096373.5	6.3	**12.8904**	0.818	6.3	mg/L	4749	Standard
>	**Sc-1**	45	369296.0	0.1				mg/L	367704	Standard
	Cl	35	9735215.1	1.4				ug/L	59901	Standard
	Kr	83	65.1	7.2				ug/L	50	Standard
	Br	81	13580.1	2.5				ug/L	13965	Standard
	P	31	8099798.4	3.3				ug/L	71952	Standard
	S	34	1882638.9	2.7				ug/L	878802	Standard
	Sr	88	1855.4	1.9				ug/L	321	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	91.624		
>	Sc	45			
	Ti	47	118.576		
	V	51	100.395		
	Cr	52	102.055		
	Cr	53			
	Mn	55	104.271		
	Co	59	102.259		
	Ni	60	102.928		
	Cu	65	99.086		
	Zn	66	110.501		
>	Ge	72		98.501	
	As	75	104.801		
	Se	82	108.474		
	Se-1	77	105.743		
	Ga	71			
	Rb	85			
>	Y	89		98.307	
	Rh	103			
	Mo	98	98.495		
	Ag	107	87.449		
	Cd	111	107.501		
	Cd	114			
>	In	115		102.765	
	Sn	118			
	Sb	123	106.522		
	Ba	135	96.889		
	Ce	140			
>	Tb	159		103.796	
	Ho	165			
	Tl	203	101.850		
	Tl	205			
	Pb	206	100.873		

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Pb	207	104.669		
Pb	208	105.580		
U	238	109.635		
> Bi	209		93.118	
Na	23	93.950		
Mg	24	101.001		
K	39	96.696		
Ca	43	96.722		
Fe	54	97.969		
Fe	57	103.123		
> Sc-1	45			
Cl	35			
Kr	83			
Br	81			
P	31			
S	34			
Sr	88			

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 5
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Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, May 03, 2012 14:43:35
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: SLP 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	21343.0	0.4	**-19.0130**	17.080	89.8	ug/L	20538	Standard
	Be	9	237304.8	3.1	**52.6874**	1.602	3.0	ug/L	13	Standard
	Al	27	1207219.1	3.5	**50.2190**	1.672	3.3	ug/L	25813	Standard
>	**Sc**	45	376568.7	1.4				ug/L	367704	Standard
	Ti	47	215253.2	3.1	**103.1239**	1.565	1.5	ug/L	127	Standard
	V	51	1271192.7	3.2	**54.3196**	0.580	1.1	ug/L	6636	Standard
	Cr	52	1034738.4	4.1	**52.7592**	1.312	2.5	ug/L	21244	Standard
	Cr	53	117270.7	4.6	**52.2370**	1.596	3.1	ug/L	467	Standard
	Mn	55	1348791.9	4.2	**55.0889**	1.466	2.7	ug/L	8327	Standard
	Co	59	892935.0	4.0	**51.7928**	1.392	2.7	ug/L	123	Standard
	Ni	60	184159.6	5.0	**51.7318**	2.074	4.0	ug/L	272	Standard
	Cu	65	153017.3	4.9	**50.0738**	1.463	2.9	ug/L	1002	Standard
	Zn	66	68968.7	3.3	**48.3712**	0.940	1.9	ug/L	3532	Standard
>	**Ge**	72	257018.4	2.4				ug/L	254939	Standard
	As	75	62705.8	3.7	**49.7691**	1.089	2.2	ug/L	-224	Standard
	Se	82	6521.5	2.3	**51.6471**	0.918	1.8	ug/L	24	Standard
	Se-1	77	4380.0	3.8	**48.9998**	1.370	2.8	ug/L	93	Standard
	Ga	71	239777.8	3.4				mg/L	233175	Standard
	Rb	85	1119.4	6.5				ug/L	20	Standard
>	**Y**	89	238293.7	1.8				ug/L	235100	Standard
	Rh	103	41.3	15.6				ug/L	6	Standard
	Mo	98	426215.9	4.1	**96.0880**	2.544	2.6	ug/L	14	Standard
	Ag	107	492345.8	5.0	**57.4034**	2.159	3.8	ug/L	38	Standard
	Cd	111	272452.9	3.1	**52.4166**	0.858	1.6	mg/L	439	Standard
	Cd	114	720603.1	3.9	**49.8576**	1.200	2.4	ug/L	1326	Standard
>	**In**	115	851718.7	1.5				ug/L	804157	Standard
	Sn	118	959042.1	3.6	**49.5448**	1.044	2.1	ug/L	4860	Standard
	Sb	123	656556.2	3.3	**51.1686**	0.933	1.8	ug/L	28	Standard
	Ba	135	275284.7	3.9	**46.9490**	1.139	2.4	ug/L	54	Standard
	Ce	140	1004.7	4.3				ug/L	61	Standard
>	**Tb**	159	878620.6	0.6				ug/L	844239	Standard
	Ho	165	20.7	24.4				ug/L	6	Standard
	Tl	203	861252.2	2.1	**50.7398**	0.862	1.7	ug/L	10	Standard
	Tl	205	2162787.1	6.8	**52.7717**	3.426	6.5	ug/L	16	Standard
	Pb	206	700621.3	4.1	**51.3143**	1.898	3.7	ug/L	421	Standard
	Pb	207	578127.0	3.4	**51.0869**	1.579	3.1	ug/L	341	Standard
	Pb	208	2673914.6	3.4	**51.2259**	1.554	3.0	ug/L	1571	Standard
	U	238	2640516.2	4.3	**53.7757**	2.176	4.0	ug/L	4	Standard
>	**Bi**	209	430455.7	1.0				ug/L	457202	Standard
	Na	23	15823.6	4.4	**4.6855**	0.157	3.4	mg/L	138	Standard
	Mg	24	1313051.3	5.1	**4.9801**	0.216	4.3	mg/L	134	Standard

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	K	39	53612.0	1.8	**4.7650**	0.069	1.5	mg/L	563	Standard
	Ca	43	3457.7	5.6	**4.7584**	0.211	4.4	mg/L	127	Standard
	Fe	54	29757.4	7.0	**4.8689**	0.338	6.9	mg/L	815	Standard
	Fe	57	918873.1	6.4	**5.5220**	0.316	5.7	mg/L	4749	Standard
>	**Sc-1**	45	376568.7	1.4				mg/L	367704	Standard
	Cl	35	220296.0	28.5				ug/L	59901	Standard
	Kr	83	51.3	9.8				ug/L	50	Standard
	Br	81	14054.5	0.9				ug/L	13965	Standard
	P	31	98065.8	2.6				ug/L	71952	Standard
	S	34	990159.2	1.2				ug/L	878802	Standard
	Sr	88	849.4	6.1				ug/L	321	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	100.438		
>	Sc	45			
	Ti	47	103.124		
	V	51	108.639		
	Cr	52	105.518		
	Cr	53			
	Mn	55	110.178		
	Co	59	103.586		
	Ni	60	103.464		
	Cu	65	100.148		
	Zn	66	96.742		
>	Ge	72		100.816	
	As	75	99.538		
	Se	82	103.294		
	Se-1	77	98.000		
	Ga	71			
	Rb	85			
>	Y	89		101.358	
	Rh	103			
	Mo	98	96.088		
	Ag	107	114.807		
	Cd	111	104.833		
	Cd	114			
>	In	115		105.914	
	Sn	118	99.090		
	Sb	123	102.337		
	Ba	135	93.898		
	Ce	140			
>	Tb	159		104.073	
	Ho	165			
	Tl	203	101.480		
	Tl	205			
	Pb	206	102.629		

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Pb	207	102.174	
Pb	208	102.452	
U	238	107.551	
> Bi	209		94.150
Na	23	93.709	
Mg	24	99.603	
K	39	95.299	
Ca	43	95.168	
Fe	54	97.378	
Fe	57	110.441	
> Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Mn	55	
QC Std 6	Ag	107	
QC Std 6	Fe	57	

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Method 6020 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, May 03, 2012 14:46:22
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: SLP 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	20475.8	2.3	**-2.2879**	54.609	2386.9	ug/L	20538	Standard
	Be	9	63.3	30.9	**0.0089**	0.005	59.6	ug/L	13	Standard
	Al	27	15782.9	9.0	**-0.2676**	0.057	21.3	ug/L	25813	Standard
>	**Sc**	45	357942.8	4.7				ug/L	367704	Standard
	Ti	47	138.0	37.3	**0.0180**	0.029	160.2	ug/L	127	Standard
	V	51	6664.1	2.1	**0.0178**	0.005	29.6	ug/L	6636	Standard
	Cr	52	20503.9	2.1	**0.0352**	0.012	35.4	ug/L	21244	Standard
	Cr	53	568.7	9.3	**0.0583**	0.027	45.6	ug/L	467	Standard
	Mn	55	1680.1	5.5	**-0.1589**	0.006	4.0	ug/L	8327	Standard
	Co	59	230.3	32.2	**0.0069**	0.005	74.1	ug/L	123	Standard
	Ni	60	128.3	9.3	**-0.0227**	0.005	21.0	ug/L	272	Standard
	Cu	65	927.4	4.1	**-0.0081**	0.011	134.5	ug/L	1002	Standard
	Zn	66	1089.0	5.4	**-1.1170**	0.020	1.8	ug/L	3532	Standard
>	**Ge**	72	240187.0	3.1				ug/L	254939	Standard
	As	75	-212.2	1.8	**-0.0182**	0.009	47.5	ug/L	-224	Standard
	Se	82	23.9	16.5	**-0.0428**	0.040	93.4	ug/L	24	Standard
	Se-1	77	89.3	11.0	**-0.0330**	0.092	279.7	ug/L	93	Standard
	Ga	71	223011.1	2.3				mg/L	233175	Standard
	Rb	85	20.0	45.8				ug/L	20	Standard
>	**Y**	89	213387.6	4.7				ug/L	235100	Standard
	Rh	103	1.3	86.6				ug/L	6	Standard
	Mo	98	217.2	29.9	**0.0429**	0.016	38.4	ug/L	14	Standard
	Ag	107	135.3	28.7	**0.0118**	0.005	43.3	ug/L	38	Standard
	Cd	111	507.4	6.7	**0.0111**	0.009	77.8	mg/L	439	Standard
	Cd	114	1417.3	4.3	**0.0080**	0.005	68.3	ug/L	1326	Standard
>	**In**	115	794227.3	1.8				ug/L	804157	Standard
	Sn	118	1968.1	2.7	**-0.0833**	0.005	5.8	ug/L	4860	Standard
	Sb	123	751.9	12.5	**0.0568**	0.009	15.2	ug/L	28	Standard
	Ba	135	103.0	25.2	**0.0080**	0.005	63.1	ug/L	54	Standard
	Ce	140	62.0	11.6				ug/L	61	Standard
>	**Tb**	159	810489.1	1.5				ug/L	844239	Standard
	Ho	165	6.7	45.8				ug/L	6	Standard
	Tl	203	169.3	26.0	**0.0107**	0.003	24.6	ug/L	10	Standard
	Tl	205	472.0	16.8	**0.0115**	0.002	17.0	ug/L	16	Standard
	Pb	206	484.3	5.7	**0.0074**	0.002	33.5	ug/L	421	Standard
	Pb	207	396.3	6.6	**0.0043**	0.003	62.4	ug/L	341	Standard
	Pb	208	1860.0	7.3	**0.0061**	0.003	51.1	ug/L	1571	Standard
	U	238	938.7	28.5	**0.0207**	0.006	28.4	ug/L	4	Standard
>	**Bi**	209	420940.9	1.4				ug/L	457202	Standard
	Na	23	154.7	9.1	**0.0093**	0.006	63.6	mg/L	138	Standard
	Mg	24	346.7	40.0	**-0.0000**	0.001	8133.5	mg/L	134	Standard

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K	39	569.3	1.5	**-0.0043**	0.002	41.9	mg/L	563	Standard
Ca	43	105.3	10.5	**-0.0177**	0.015	83.0	mg/L	127	Standard
Fe	54	834.2	3.4	**0.0092**	0.009	98.6	mg/L	815	Standard
Fe	57	5272.9	3.2	**0.0030**	0.002	73.6	mg/L	4749	Standard
Sc-1	45	357942.8	4.7				mg/L	367704	Standard
Cl	35	144207.2	5.2				ug/L	59901	Standard
Kr	83	48.0	10.0				ug/L	50	Standard
Br	81	13123.7	1.0				ug/L	13965	Standard
P	31	82276.4	4.5				ug/L	71952	Standard
S	34	977329.4	1.5				ug/L	878802	Standard
Sr	88	346.7	14.2				ug/L	321	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		94.214	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		90.765	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		98.765	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		96.002	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	92.069
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: PBW 58 WG396883-02
Sample Date/Time: Thursday, May 03, 2012 14:58:17
Number of Replicates: 3
Autosampler Position: 249
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP 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	18633.1	2.9	**11.7177**	31.874	272.0	ug/L	20538	Standard
	Be	9	13.7	40.3	**-0.0025**	0.001	56.8	ug/L	13	Standard
	Al	27	17413.3	3.5	**-0.1102**	0.028	25.2	ug/L	25813	Standard
>	**Sc**	45	322678.7	1.0				ug/L	367704	Standard
	Ti	47	81.3	10.2	**-0.0095**	0.005	47.9	ug/L	127	Standard
	V	51	5898.7	1.3	**-0.0030**	0.006	193.4	ug/L	6636	Standard
	Cr	52	17965.3	1.9	**-0.0532**	0.029	54.6	ug/L	21244	Standard
	Cr	53	417.3	8.4	**-0.0038**	0.016	417.4	ug/L	467	Standard
	Mn	55	3680.1	2.8	**-0.0627**	0.006	9.8	ug/L	8327	Standard
	Co	59	114.0	7.6	**-0.0001**	0.001	772.1	ug/L	123	Standard
	Ni	60	129.0	10.7	**-0.0205**	0.004	19.6	ug/L	272	Standard
	Cu	65	251.0	9.2	**-0.2420**	0.008	3.2	ug/L	1002	Standard
	Zn	66	2777.6	4.1	**0.3178**	0.106	33.3	ug/L	3532	Standard
>	**Ge**	72	228081.6	0.8				ug/L	254939	Standard
	As	75	-194.3	5.2	**-0.0116**	0.010	87.8	ug/L	-224	Standard
	Se	82	17.5	13.5	**-0.0897**	0.022	25.0	ug/L	24	Standard
	Se-1	77	67.7	10.5	**-0.2530**	0.088	34.6	ug/L	93	Standard
	Ga	71	206114.8	1.8				mg/L	233175	Standard
	Rb	85	18.0	0.0				ug/L	20	Standard
>	**Y**	89	201227.4	2.6				ug/L	235100	Standard
	Rh	103	3.3	91.7				ug/L	6	Standard
	Mo	98	20.7	24.9	**-0.0045**	0.001	27.0	ug/L	14	Standard
	Ag	107	54.7	30.7	**0.0020**	0.002	108.6	ug/L	38	Standard
	Cd	111	151.3	4.5	**-0.0609**	0.001	2.2	mg/L	439	Standard
	Cd	114	424.2	1.9	**-0.0641**	0.001	1.2	ug/L	1326	Standard
>	**In**	115	753433.0	2.5				ug/L	804157	Standard
	Sn	118	938.7	46.6	**-0.1379**	0.025	18.3	ug/L	4860	Standard
	Sb	123	141.5	12.5	**0.0063**	0.001	23.5	ug/L	28	Standard
	Ba	135	61.0	24.6	**0.0008**	0.003	325.2	ug/L	54	Standard
	Ce	140	74.7	10.8				ug/L	61	Standard
>	**Tb**	159	775820.9	1.1				ug/L	844239	Standard
	Ho	165	8.0	50.0				ug/L	6	Standard
	Tl	203	118.7	15.7	**0.0076**	0.001	13.8	ug/L	10	Standard
	Tl	205	288.7	12.5	**0.0069**	0.001	12.8	ug/L	16	Standard
	Pb	206	320.0	6.5	**-0.0049**	0.002	37.0	ug/L	421	Standard
	Pb	207	273.0	3.0	**-0.0069**	0.001	7.4	ug/L	341	Standard
	Pb	208	1256.7	1.9	**-0.0057**	0.001	10.5	ug/L	1571	Standard
	U	238	43.3	8.7	**0.0020**	0.000	3.5	ug/L	4	Standard
>	**Bi**	209	420668.5	1.0				ug/L	457202	Standard
	Na	23	171.3	17.0	**0.0202**	0.010	50.6	mg/L	138	Standard
	Mg	24	503.3	10.1	**0.0008**	0.000	26.7	mg/L	134	Standard

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K	39	608.7	1.6	**0.0057**	0.001	21.1	mg/L	563	Standard
Ca	43	96.0	13.0	**-0.0161**	0.019	118.8	mg/L	127	Standard
Fe	54	345.7	2.0	**-0.0708**	0.002	2.8	mg/L	815	Standard
Fe	57	4538.7	2.3	**0.0014**	0.000	34.4	mg/L	4749	Standard
Sc-1	45	322678.7	1.0				mg/L	367704	Standard
Cl	35	209136.9	2.2				ug/L	59901	Standard
Kr	83	42.7	9.5				ug/L	50	Standard
Br	81	11738.9	0.7				ug/L	13965	Standard
P	31	33587.2	2.8				ug/L	71952	Standard
S	34	891778.9	1.9				ug/L	878802	Standard
Sr	88	798.7	15.2				ug/L	321	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		89.465	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		85.592	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		93.692	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		91.896	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	92.009
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: LCSW 58 WG396883-03
Sample Date/Time: Thursday, May 03, 2012 15:01:04
Number of Replicates: 3
Autosampler Position: 250
Sample Description: 20
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP 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	915343.3	1.6	**73938.3790**	840.605	1.1	ug/L	20538	Standard
	Be	9	7045.3	1.9	**1.6644**	0.022	1.3	ug/L	13	Standard
	Al	27	5846882.2	3.3	**263.7622**	7.263	2.8	ug/L	25813	Standard
>	**Sc**	45	352628.0	0.6				ug/L	367704	Standard
	Ti	47	51845.3	3.4	**26.7317**	0.927	3.5	ug/L	127	Standard
	V	51	602846.1	2.9	**27.6242**	0.751	2.7	ug/L	6636	Standard
	Cr	52	262908.5	1.7	**13.6457**	0.247	1.8	ug/L	21244	Standard
	Cr	53	53437.4	1.7	**25.5492**	0.339	1.3	ug/L	467	Standard
	Mn	55	309964.4	2.1	**13.4712**	0.274	2.0	ug/L	8327	Standard
	Co	59	83267.2	2.0	**5.1988**	0.094	1.8	ug/L	123	Standard
	Ni	60	43418.1	2.5	**13.0996**	0.284	2.2	ug/L	272	Standard
	Cu	65	37447.9	2.7	**12.9642**	0.314	2.4	ug/L	1002	Standard
	Zn	66	43556.2	2.0	**32.2952**	0.566	1.8	ug/L	3532	Standard
>	**Ge**	72	238481.5	0.4				ug/L	254939	Standard
	As	75	13389.5	3.6	**11.5783**	0.373	3.2	ug/L	-224	Standard
	Se	82	1588.9	2.6	**13.3774**	0.289	2.2	ug/L	24	Standard
	Se-1	77	2253.2	3.4	**26.6640**	0.835	3.1	ug/L	93	Standard
	Ga	71	216196.2	0.7				mg/L	233175	Standard
	Rb	85	890.7	7.1				ug/L	20	Standard
>	**Y**	89	210650.1	2.3				ug/L	235100	Standard
	Rh	103	20.0	17.3				ug/L	6	Standard
	Mo	98	97174.6	2.9	**23.7802**	0.664	2.8	ug/L	14	Standard
	Ag	107	83935.3	2.8	**10.6215**	0.268	2.5	ug/L	38	Standard
	Cd	111	7420.5	3.4	**1.4587**	0.045	3.1	mg/L	439	Standard
	Cd	114	20806.1	2.4	**1.4687**	0.034	2.3	ug/L	1326	Standard
>	**In**	115	784612.5	0.7				ug/L	804157	Standard
	Sn	118	1201.4	0.9	**-0.1252**	0.000	0.2	ug/L	4860	Standard
	Sb	123	398703.5	2.7	**33.7354**	0.914	2.7	ug/L	28	Standard
	Ba	135	140769.4	2.1	**26.0638**	0.617	2.4	ug/L	54	Standard
	Ce	140	84.0	21.8				ug/L	61	Standard
>	**Tb**	159	822802.1	0.8				ug/L	844239	Standard
	Ho	165	17.3	29.0				ug/L	6	Standard
	Tl	203	215929.4	5.1	**12.3984**	0.747	6.0	ug/L	10	Standard
	Tl	205	522975.0	4.8	**12.4364**	0.701	5.6	ug/L	16	Standard
	Pb	206	173635.6	2.2	**12.3711**	0.410	3.3	ug/L	421	Standard
	Pb	207	159070.7	2.5	**13.6742**	0.475	3.5	ug/L	341	Standard
	Pb	208	697295.8	2.3	**12.9949**	0.437	3.4	ug/L	1571	Standard
	U	238	129.0	38.7	**0.0036**	0.001	27.5	ug/L	4	Standard
>	**Bi**	209	441860.2	1.1				ug/L	457202	Standard
	Na	23	4773.4	2.9	**1.4830**	0.046	3.1	mg/L	138	Standard
	Mg	24	77781.5	2.1	**0.3138**	0.005	1.5	mg/L	134	Standard

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	K	39	15635.4	0.9	**1.4439**	0.006	0.4	mg/L	563	Standard
	Ca	43	329.3	8.7	**0.3263**	0.047	14.3	mg/L	127	Standard
	Fe	54	950.1	1.6	**0.0321**	0.002	5.7	mg/L	815	Standard
	Fe	57	18875.1	4.2	**0.0912**	0.005	5.1	mg/L	4749	Standard
>	**Sc-1**	45	352628.0	0.6				mg/L	367704	Standard
	Cl	35	45147972.5	1.7				ug/L	59901	Standard
	Kr	83	41.6	12.3				ug/L	50	Standard
	Br	81	12071.8	0.3				ug/L	13965	Standard
	P	31	35618.5	4.1				ug/L	71952	Standard
	S	34	921236.3	1.3				ug/L	878802	Standard
	Sr	88	461832.2	1.7				ug/L	321	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		93.545	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		89.600	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		97.570	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		97.461	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	96.644
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: LCSW 58 WG396883-03
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Method 6020 - Summary Report

Sample ID: FBLK1 WG396841-01
Sample Date/Time: Thursday, May 03, 2012 15:03:52
Number of Replicates: 3
Autosampler Position: 251
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP 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	20784.9	2.8	**83.7645**	38.530	46.0	ug/L	20538	Standard
	Be	9	15.3	21.0	**-0.0023**	0.001	32.1	ug/L	13	Standard
	Al	27	206852.0	1.5	**8.5968**	0.048	0.6	ug/L	25813	Standard
>	**Sc**	45	345186.2	1.3				ug/L	367704	Standard
	Ti	47	580.7	4.1	**0.2500**	0.013	5.3	ug/L	127	Standard
	V	51	7153.6	4.7	**0.0463**	0.015	32.0	ug/L	6636	Standard
	Cr	52	20607.3	1.7	**0.0621**	0.019	30.5	ug/L	21244	Standard
	Cr	53	2080.8	12.1	**0.8006**	0.124	15.5	ug/L	467	Standard
	Mn	55	21553.7	2.7	**0.7310**	0.030	4.1	ug/L	8327	Standard
	Co	59	235.7	5.6	**0.0074**	0.001	11.3	ug/L	123	Standard
	Ni	60	218.0	5.6	**0.0055**	0.004	68.2	ug/L	272	Standard
	Cu	65	367.0	1.7	**-0.2033**	0.002	1.2	ug/L	1002	Standard
	Zn	66	3547.4	1.2	**0.8552**	0.041	4.8	ug/L	3532	Standard
>	**Ge**	72	235799.7	0.4				ug/L	254939	Standard
	As	75	-231.5	26.5	**-0.0380**	0.053	138.6	ug/L	-224	Standard
	Se	82	18.7	22.8	**-0.0849**	0.037	43.3	ug/L	24	Standard
	Se-1	77	139.3	6.9	**0.6128**	0.123	20.1	ug/L	93	Standard
	Ga	71	213836.0	1.8				mg/L	233175	Standard
	Rb	85	212.0	6.8				ug/L	20	Standard
>	**Y**	89	208763.3	1.7				ug/L	235100	Standard
	Rh	103	2.7	43.3				ug/L	6	Standard
	Mo	98	162.4	23.9	**0.0303**	0.010	31.6	ug/L	14	Standard
	Ag	107	44.3	27.2	**0.0005**	0.002	338.5	ug/L	38	Standard
	Cd	111	166.1	4.0	**-0.0589**	0.001	2.1	mg/L	439	Standard
	Cd	114	438.4	7.3	**-0.0641**	0.003	4.1	ug/L	1326	Standard
>	**In**	115	778713.3	0.7				ug/L	804157	Standard
	Sn	118	1500.7	2.6	**-0.1076**	0.003	2.6	ug/L	4860	Standard
	Sb	123	160.5	11.6	**0.0075**	0.002	20.7	ug/L	28	Standard
	Ba	135	516.0	5.2	**0.0854**	0.006	6.6	ug/L	54	Standard
	Ce	140	1450.1	5.5				ug/L	61	Standard
>	**Tb**	159	806557.6	1.0				ug/L	844239	Standard
	Ho	165	18.7	6.2				ug/L	6	Standard
	Tl	203	705.7	6.7	**0.0411**	0.003	7.8	ug/L	10	Standard
	Tl	205	1672.1	7.2	**0.0396**	0.003	8.8	ug/L	16	Standard
	Pb	206	1482.7	4.8	**0.0771**	0.003	4.4	ug/L	421	Standard
	Pb	207	1172.0	7.4	**0.0695**	0.006	8.5	ug/L	341	Standard
	Pb	208	5511.7	5.7	**0.0727**	0.004	5.8	ug/L	1571	Standard
	U	238	87.0	9.8	**0.0028**	0.000	5.5	ug/L	4	Standard
>	**Bi**	209	441059.3	1.7				ug/L	457202	Standard
	Na	23	24288.1	0.8	**7.8753**	0.152	1.9	mg/L	138	Standard
	Mg	24	1950.5	5.3	**0.0067**	0.000	5.0	mg/L	134	Standard

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K	39	699.3	2.5	**0.0104**	0.002	17.0	mg/L	563	Standard
Ca	43	116.0	9.6	**0.0046**	0.015	328.1	mg/L	127	Standard
Fe	54	473.8	4.2	**-0.0517**	0.004	7.1	mg/L	815	Standard
Fe	57	7575.9	1.9	**0.0193**	0.000	2.3	mg/L	4749	Standard
> **Sc-1**	45	345186.2	1.3				mg/L	367704	Standard
Cl	35	2520998.6	9.4				ug/L	59901	Standard
Kr	83	45.6	6.9				ug/L	50	Standard
Br	81	12470.8	2.6				ug/L	13965	Standard
P	31	35269.7	4.3				ug/L	71952	Standard
S	34	891735.7	0.3				ug/L	878802	Standard
Sr	88	1154.7	4.1				ug/L	321	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		92.493	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
> Y	89		88.798	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
> In	115		96.836	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
> Tb	159		95.537	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	96.469
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: FBLK1 WG396841-01
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Method 6020 - Summary Report

Sample ID: FBLK2 WG396841-02
Sample Date/Time: Thursday, May 03, 2012 15:06:39
Number of Replicates: 3
Autosampler Position: 252
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP 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	19161.1	0.7	**20.8292**	10.690	51.3	ug/L	20538	Standard
	Be	9	14.3	26.4	**-0.0024**	0.001	38.3	ug/L	13	Standard
	Al	27	74013.8	3.7	**2.6078**	0.091	3.5	ug/L	25813	Standard
>	**Sc**	45	330090.6	1.3				ug/L	367704	Standard
	Ti	47	345.3	13.7	**0.1325**	0.024	18.1	ug/L	127	Standard
	V	51	6948.2	5.0	**0.0467**	0.015	32.1	ug/L	6636	Standard
	Cr	52	20859.7	1.3	**0.1131**	0.029	25.9	ug/L	21244	Standard
	Cr	53	1933.5	4.3	**0.7575**	0.033	4.3	ug/L	467	Standard
	Mn	55	3060.6	4.9	**-0.0918**	0.006	6.0	ug/L	8327	Standard
	Co	59	111.3	8.2	**-0.0003**	0.001	188.1	ug/L	123	Standard
	Ni	60	94.7	4.3	**-0.0314**	0.002	5.1	ug/L	272	Standard
	Cu	65	261.7	9.8	**-0.2382**	0.011	4.5	ug/L	1002	Standard
	Zn	66	2512.5	3.3	**0.0932**	0.056	59.7	ug/L	3532	Standard
>	**Ge**	72	228762.5	1.1				ug/L	254939	Standard
	As	75	-172.0	21.4	**0.0085**	0.034	404.0	ug/L	-224	Standard
	Se	82	26.5	13.5	**-0.0094**	0.035	370.8	ug/L	24	Standard
	Se-1	77	133.0	7.3	**0.5850**	0.130	22.1	ug/L	93	Standard
	Ga	71	209025.4	1.0				mg/L	233175	Standard
	Rb	85	62.7	12.1				ug/L	20	Standard
>	**Y**	89	204422.7	1.8				ug/L	235100	Standard
	Rh	103	2.7	173.2				ug/L	6	Standard
	Mo	98	31.0	12.9	**-0.0019**	0.001	56.6	ug/L	14	Standard
	Ag	107	39.7	15.2	**-0.0000**	0.001	8864.4	ug/L	38	Standard
	Cd	111	162.6	6.3	**-0.0587**	0.002	3.2	mg/L	439	Standard
	Cd	114	453.2	8.5	**-0.0621**	0.003	4.9	ug/L	1326	Standard
>	**In**	115	757914.1	1.1				ug/L	804157	Standard
	Sn	118	702.0	7.0	**-0.1519**	0.003	2.0	ug/L	4860	Standard
	Sb	123	114.0	2.3	**0.0038**	0.000	3.5	ug/L	28	Standard
	Ba	135	776.0	5.5	**0.1379**	0.008	6.1	ug/L	54	Standard
	Ce	140	365.3	5.0				ug/L	61	Standard
>	**Tb**	159	789650.8	1.1				ug/L	844239	Standard
	Ho	165	12.0	72.6				ug/L	6	Standard
	Tl	203	405.7	5.7	**0.0242**	0.001	2.9	ug/L	10	Standard
	Tl	205	1047.4	4.4	**0.0251**	0.000	1.5	ug/L	16	Standard
	Pb	206	495.7	5.0	**0.0072**	0.002	28.7	ug/L	421	Standard
	Pb	207	413.7	5.8	**0.0047**	0.002	39.7	ug/L	341	Standard
	Pb	208	1864.0	5.1	**0.0051**	0.001	24.1	ug/L	1571	Standard
	U	238	31.3	4.9	**0.0017**	0.000	1.9	ug/L	4	Standard
>	**Bi**	209	433763.8	2.9				ug/L	457202	Standard
	Na	23	130.0	4.1	**0.0048**	0.002	41.7	mg/L	138	Standard
	Mg	24	1098.0	5.1	**0.0033**	0.000	5.5	mg/L	134	Standard

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K	39	627.3	8.8	**0.0062**	0.006	101.8	mg/L	563	Standard
Ca	43	106.7	2.2	**-0.0022**	0.004	195.8	mg/L	127	Standard
Fe	54	369.8	3.7	**-0.0677**	0.002	2.8	mg/L	815	Standard
Fe	57	5034.8	1.8	**0.0041**	0.000	10.6	mg/L	4749	Standard
> **Sc-1**	45	330090.6	1.3				mg/L	367704	Standard
Cl	35	2302962.7	1.9				ug/L	59901	Standard
Kr	83	42.4	12.2				ug/L	50	Standard
Br	81	12440.4	1.3				ug/L	13965	Standard
P	31	34290.8	0.6				ug/L	71952	Standard
S	34	895090.0	0.9				ug/L	878802	Standard
Sr	88	882.7	5.2				ug/L	321	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		89.732	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		86.951	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		94.249	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		93.534	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	94.874
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: FBLK2 WG396841-02
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Method 6020 - Summary Report

Sample ID: L1205003501 WG396883-01
Sample Date/Time: Thursday, May 03, 2012 15:09:26
Number of Replicates: 3
Autosampler Position: 253
Sample Description: 20
Method File: C:\NexION Data\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP 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	22670.6	0.2	**248.2951**	35.300	14.2	ug/L	20538	Standard
	Be	9	18.7	27.5	**-0.0015**	0.001	89.6	ug/L	13	Standard
	Al	27	98931.3	1.2	**3.6170**	0.078	2.2	ug/L	25813	Standard
>	**Sc**	45	344309.5	2.0				ug/L	367704	Standard
	Ti	47	556.7	6.2	**0.2401**	0.016	6.8	ug/L	127	Standard
	V	51	8135.9	4.8	**0.0958**	0.016	16.3	ug/L	6636	Standard
	Cr	52	22914.0	5.1	**0.2045**	0.047	23.0	ug/L	21244	Standard
	Cr	53	1599.4	1.2	**0.5733**	0.027	4.7	ug/L	467	Standard
	Mn	55	67817.8	2.0	**2.8278**	0.064	2.3	ug/L	8327	Standard
	Co	59	540.0	3.6	**0.0269**	0.001	2.6	ug/L	123	Standard
	Ni	60	834.7	5.6	**0.1968**	0.010	5.0	ug/L	272	Standard
	Cu	65	58420.1	1.7	**20.8478**	0.604	2.9	ug/L	1002	Standard
	Zn	66	4717.1	0.8	**1.8213**	0.097	5.3	ug/L	3532	Standard
>	**Ge**	72	233682.7	2.6				ug/L	254939	Standard
	As	75	-24.1	207.7	**0.1411**	0.043	30.3	ug/L	-224	Standard
	Se	82	62.3	17.0	**0.3004**	0.108	36.1	ug/L	24	Standard
	Se-1	77	153.3	9.8	**0.8065**	0.209	25.9	ug/L	93	Standard
	Ga	71	212846.3	3.3				mg/L	233175	Standard
	Rb	85	356.0	5.4				ug/L	20	Standard
>	**Y**	89	210543.6	1.5				ug/L	235100	Standard
	Rh	103	6.7	45.8				ug/L	6	Standard
	Mo	98	368.9	4.2	**0.0807**	0.004	5.3	ug/L	14	Standard
	Ag	107	34.7	17.4	**-0.0008**	0.001	100.5	ug/L	38	Standard
	Cd	111	667.8	0.8	**0.0461**	0.002	4.6	mg/L	439	Standard
	Cd	114	1846.7	1.6	**0.0418**	0.004	8.4	ug/L	1326	Standard
>	**In**	115	783343.9	0.9				ug/L	804157	Standard
	Sn	118	1420.1	6.6	**-0.1127**	0.006	5.1	ug/L	4860	Standard
	Sb	123	232.1	5.9	**0.0135**	0.001	8.3	ug/L	28	Standard
	Ba	135	7469.5	1.2	**1.3750**	0.029	2.1	ug/L	54	Standard
	Ce	140	1759.4	4.7				ug/L	61	Standard
>	**Tb**	159	814308.3	2.2				ug/L	844239	Standard
	Ho	165	41.3	39.1				ug/L	6	Standard
	Tl	203	485.0	31.3	**0.0285**	0.009	31.3	ug/L	10	Standard
	Tl	205	1111.4	26.4	**0.0264**	0.007	27.3	ug/L	16	Standard
	Pb	206	2529.9	2.8	**0.1532**	0.008	5.2	ug/L	421	Standard
	Pb	207	2157.2	2.5	**0.1558**	0.007	4.7	ug/L	341	Standard
	Pb	208	9828.6	2.3	**0.1547**	0.007	4.5	ug/L	1571	Standard
	U	238	1205.0	4.9	**0.0252**	0.001	5.2	ug/L	4	Standard
>	**Bi**	209	438432.2	1.6				ug/L	457202	Standard
	Na	23	27058.8	1.5	**8.8002**	0.111	1.3	mg/L	138	Standard
	Mg	24	33558.1	2.7	**0.1379**	0.001	1.0	mg/L	134	Standard

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K	39	1040.0	2.3	**0.0442**	0.004	9.7	mg/L	563	Standard
Ca	43	3767.1	3.5	**5.7051**	0.125	2.2	mg/L	127	Standard
Fe	54	420.0	2.8	**-0.0613**	0.004	6.0	mg/L	815	Standard
Fe	57	8180.2	1.3	**0.0235**	0.001	2.7	mg/L	4749	Standard
Sc-1	45	344309.5	2.0				mg/L	367704	Standard
Cl	35	2471212.9	2.0				ug/L	59901	Standard
Kr	83	42.4	18.7				ug/L	50	Standard
Br	81	13091.3	1.9				ug/L	13965	Standard
P	31	38631.9	1.3				ug/L	71952	Standard
S	34	1211291.0	1.6				ug/L	878802	Standard
Sr	88	252672.0	2.1				ug/L	321	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		91.662	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		89.555	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		97.412	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		96.455	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205003501 WG396883-01
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	95.895
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: May 04, 2012

Method 6020 - Summary Report

Sample ID: L1205003501S WG396883-04
Sample Date/Time: Thursday, May 03, 2012 15:12:13
Number of Replicates: 3
Autosampler Position: 254
Sample Description: 20
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP 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	903458.2	3.2	**73485.4449**	1257.102	1.7	ug/L	20538	Standard
	Be	9	7064.3	4.1	**1.6807**	0.044	2.6	ug/L	13	Standard
	Al	27	5857562.8	4.4	**266.0855**	6.185	2.3	ug/L	25813	Standard
>	**Sc**	45	350122.7	2.1				ug/L	367704	Standard
	Ti	47	52954.5	3.7	**28.5168**	0.227	0.8	ug/L	127	Standard
	V	51	611640.1	3.8	**29.2870**	0.226	0.8	ug/L	6636	Standard
	Cr	52	264803.7	3.7	**14.4115**	0.211	1.5	ug/L	21244	Standard
	Cr	53	49565.0	2.7	**24.7477**	0.122	0.5	ug/L	467	Standard
	Mn	55	365131.9	3.4	**16.6279**	0.247	1.5	ug/L	8327	Standard
	Co	59	83063.1	4.9	**5.4150**	0.101	1.9	ug/L	123	Standard
	Ni	60	43495.4	4.6	**13.7063**	0.261	1.9	ug/L	272	Standard
	Cu	65	93994.3	4.1	**34.5249**	0.380	1.1	ug/L	1002	Standard
	Zn	66	44675.5	4.5	**34.7291**	0.523	1.5	ug/L	3532	Standard
>	**Ge**	72	228327.6	3.1				ug/L	254939	Standard
	As	75	13954.0	4.3	**12.5865**	0.152	1.2	ug/L	-224	Standard
	Se	82	1669.1	3.2	**14.7020**	0.042	0.3	ug/L	24	Standard
	Se-1	77	2192.5	0.7	**27.1396**	0.944	3.5	ug/L	93	Standard
	Ga	71	203754.0	3.6				mg/L	233175	Standard
	Rb	85	1217.4	5.9				ug/L	20	Standard
>	**Y**	89	205822.6	0.8				ug/L	235100	Standard
	Rh	103	34.7	13.3				ug/L	6	Standard
	Mo	98	98483.0	3.8	**24.5824**	0.721	2.9	ug/L	14	Standard
	Ag	107	82375.2	3.5	**10.6335**	0.298	2.8	ug/L	38	Standard
	Cd	111	7768.9	4.7	**1.5640**	0.055	3.5	mg/L	439	Standard
	Cd	114	21827.3	3.3	**1.5785**	0.043	2.7	ug/L	1326	Standard
>	**In**	115	769140.2	1.5				ug/L	804157	Standard
	Sn	118	1384.1	3.9	**-0.1133**	0.004	3.6	ug/L	4860	Standard
	Sb	123	401917.2	4.5	**34.6836**	1.179	3.4	ug/L	28	Standard
	Ba	135	147235.6	3.7	**27.8053**	0.776	2.8	ug/L	54	Standard
	Ce	140	1502.1	1.4				ug/L	61	Standard
>	**Tb**	159	809389.5	2.0				ug/L	844239	Standard
	Ho	165	44.0	18.2				ug/L	6	Standard
	Tl	203	214067.3	5.3	**12.6402**	0.506	4.0	ug/L	10	Standard
	Tl	205	517408.3	4.5	**12.6545**	0.414	3.3	ug/L	16	Standard
	Pb	206	172590.2	4.2	**12.6493**	0.371	2.9	ug/L	421	Standard
	Pb	207	155460.9	3.9	**13.7471**	0.368	2.7	ug/L	341	Standard
	Pb	208	689438.3	4.2	**13.2169**	0.390	3.0	ug/L	1571	Standard
	U	238	1125.0	0.8	**0.0241**	0.000	0.6	ug/L	4	Standard
>	**Bi**	209	429353.7	1.3				ug/L	457202	Standard
	Na	23	33612.6	3.6	**10.7553**	0.164	1.5	mg/L	138	Standard
	Mg	24	109776.0	3.8	**0.4465**	0.008	1.8	mg/L	134	Standard

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K	39	16032.5	2.2	**1.4932**	0.030	2.0	mg/L	563	Standard
Ca	43	4125.9	2.8	**6.1584**	0.042	0.7	mg/L	127	Standard
Fe	54	942.1	1.3	**0.0319**	0.004	13.4	mg/L	815	Standard
Fe	57	21783.7	3.9	**0.1110**	0.003	2.4	mg/L	4749	Standard
> **Sc-1**	45	350122.7	2.1				mg/L	367704	Standard
Cl	35	46786066.8	2.6				ug/L	59901	Standard
Kr	83	48.7	6.3				ug/L	50	Standard
Br	81	12612.6	2.5				ug/L	13965	Standard
P	31	38663.6	2.9				ug/L	71952	Standard
S	34	1224807.1	3.2				ug/L	878802	Standard
Sr	88	718235.8	2.7				ug/L	321	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		89.562	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
> Y	89		87.547	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
> In	115		95.645	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
> Tb	159		95.872	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	93.909
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1205003501S WG396883-04
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Method 6020 - Summary Report

Sample ID: L1205003501SD WG396883-05
Sample Date/Time: Thursday, May 03, 2012 15:15:00
Number of Replicates: 3
Autosampler Position: 255
Sample Description: 20
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP 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	931004.4	2.5	**74109.3422**	907.052	1.2	ug/L	20538	Standard
	Be	9	7202.4	3.3	**1.6767**	0.034	2.0	ug/L	13	Standard
	Al	27	5992672.3	3.7	**266.3882**	5.967	2.2	ug/L	25813	Standard
>	**Sc**	45	357830.3	1.4				ug/L	367704	Standard
	Ti	47	54465.1	2.8	**28.6084**	1.017	3.6	ug/L	127	Standard
	V	51	623633.8	2.8	**29.1251**	1.033	3.5	ug/L	6636	Standard
	Cr	52	270720.4	3.5	**14.3676**	0.661	4.6	ug/L	21244	Standard
	Cr	53	52522.3	3.3	**25.5809**	1.027	4.0	ug/L	467	Standard
	Mn	55	379168.9	3.2	**16.8436**	0.682	4.0	ug/L	8327	Standard
	Co	59	84836.8	4.0	**5.3962**	0.259	4.8	ug/L	123	Standard
	Ni	60	45148.2	3.5	**13.8801**	0.587	4.2	ug/L	272	Standard
	Cu	65	97072.0	4.0	**34.7843**	1.639	4.7	ug/L	1002	Standard
	Zn	66	46284.0	3.2	**35.1208**	1.465	4.2	ug/L	3532	Standard
>	**Ge**	72	234164.0	0.8				ug/L	254939	Standard
	As	75	14159.3	1.4	**12.4594**	0.269	2.2	ug/L	-224	Standard
	Se	82	1734.3	0.2	**14.8993**	0.111	0.7	ug/L	24	Standard
	Se-1	77	2276.2	1.6	**27.4713**	0.682	2.5	ug/L	93	Standard
	Ga	71	208731.4	1.2				mg/L	233175	Standard
	Rb	85	1267.4	1.4				ug/L	20	Standard
>	**Y**	89	209120.1	1.3				ug/L	235100	Standard
	Rh	103	39.3	5.9				ug/L	6	Standard
	Mo	98	101587.4	3.3	**24.7553**	0.740	3.0	ug/L	14	Standard
	Ag	107	84310.5	4.1	**10.6250**	0.441	4.2	ug/L	38	Standard
	Cd	111	8094.0	2.0	**1.5926**	0.025	1.6	mg/L	439	Standard
	Cd	114	22452.5	2.9	**1.5855**	0.044	2.8	ug/L	1326	Standard
>	**In**	115	787913.9	0.8				ug/L	804157	Standard
	Sn	118	1173.4	4.7	**-0.1270**	0.003	2.5	ug/L	4860	Standard
	Sb	123	410123.6	3.9	**34.5571**	1.395	4.0	ug/L	28	Standard
	Ba	135	152110.4	3.6	**28.0464**	1.044	3.7	ug/L	54	Standard
	Ce	140	1442.7	4.6				ug/L	61	Standard
>	**Tb**	159	831956.9	1.0				ug/L	844239	Standard
	Ho	165	44.7	2.6				ug/L	6	Standard
	Tl	203	221305.6	3.2	**12.8628**	0.391	3.0	ug/L	10	Standard
	Tl	205	535205.9	3.1	**12.8837**	0.381	3.0	ug/L	16	Standard
	Pb	206	177095.5	2.8	**12.7757**	0.374	2.9	ug/L	421	Standard
	Pb	207	161313.4	3.0	**14.0406**	0.440	3.1	ug/L	341	Standard
	Pb	208	710421.0	2.7	**13.4055**	0.384	2.9	ug/L	1571	Standard
	U	238	1098.7	2.0	**0.0232**	0.000	1.6	ug/L	4	Standard
>	**Bi**	209	436335.6	0.8				ug/L	457202	Standard
	Na	23	33944.7	2.1	**10.6287**	0.083	0.8	mg/L	138	Standard
	Mg	24	112082.5	2.4	**0.4461**	0.005	1.0	mg/L	134	Standard

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K	39	16186.6	1.4	**1.4744**	0.026	1.8	mg/L	563	Standard
Ca	43	4179.2	2.9	**6.1024**	0.137	2.2	mg/L	127	Standard
Fe	54	915.4	4.5	**0.0234**	0.006	27.3	mg/L	815	Standard
Fe	57	21475.2	1.5	**0.1060**	0.003	3.2	mg/L	4749	Standard
> **Sc-1**	45	357830.3	1.4				mg/L	367704	Standard
Cl	35	48743249.2	2.2				ug/L	59901	Standard
Kr	83	53.8	1.9				ug/L	50	Standard
Br	81	12964.5	0.4				ug/L	13965	Standard
P	31	38450.1	0.9				ug/L	71952	Standard
S	34	1243948.7	0.8				ug/L	878802	Standard
Sr	88	729356.8	1.7				ug/L	321	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		91.851	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		88.949	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		97.980	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		98.545	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	95.436
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1205003501SD WG396883-05
Report Date/Time: Thursday, May 03, 2012 15:17:28
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Method 6020 - Summary Report

Sample ID: L1205002501
Sample Date/Time: Thursday, May 03, 2012 15:17:48
Number of Replicates: 3
Autosampler Position: 256
Sample Description: 20
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP 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	88164.8	0.5	**5846.5759**	47.103	0.8	ug/L	20538	Standard
	Be	9	14.0	32.7	**-0.0026**	0.001	44.4	ug/L	13	Standard
	Al	27	120201.8	2.4	**4.6455**	0.106	2.3	ug/L	25813	Standard
>	**Sc**	45	341666.9	0.9				ug/L	367704	Standard
	Ti	47	614.7	5.7	**0.2720**	0.018	6.8	ug/L	127	Standard
	V	51	7982.1	4.3	**0.0900**	0.014	15.5	ug/L	6636	Standard
	Cr	52	23965.3	2.4	**0.2704**	0.029	10.6	ug/L	21244	Standard
	Cr	53	3108.3	12.9	**1.3221**	0.207	15.6	ug/L	467	Standard
	Mn	55	4269.3	2.5	**-0.0394**	0.004	10.8	ug/L	8327	Standard
	Co	59	397.0	5.2	**0.0179**	0.001	6.8	ug/L	123	Standard
	Ni	60	1560.4	4.1	**0.4232**	0.018	4.2	ug/L	272	Standard
	Cu	65	680.7	5.8	**-0.0874**	0.015	16.9	ug/L	1002	Standard
	Zn	66	22317.8	1.8	**16.0210**	0.309	1.9	ug/L	3532	Standard
>	**Ge**	72	232755.2	0.6				ug/L	254939	Standard
	As	75	-48.8	93.7	**0.1190**	0.040	33.5	ug/L	-224	Standard
	Se	82	177.7	9.2	**1.3149**	0.152	11.6	ug/L	24	Standard
	Se-1	77	292.7	15.3	**2.5751**	0.585	22.7	ug/L	93	Standard
	Ga	71	209246.5	1.4				mg/L	233175	Standard
	Rb	85	59613.1	2.1				ug/L	20	Standard
>	**Y**	89	209051.1	1.1				ug/L	235100	Standard
	Rh	103	12.0	33.3				ug/L	6	Standard
	Mo	98	1092.0	7.8	**0.2674**	0.020	7.6	ug/L	14	Standard
	Ag	107	51.3	25.9	**0.0015**	0.002	112.0	ug/L	38	Standard
	Cd	111	162.1	5.3	**-0.0587**	0.002	3.4	mg/L	439	Standard
	Cd	114	453.3	13.3	**-0.0620**	0.005	7.7	ug/L	1326	Standard
>	**In**	115	756508.4	0.5				ug/L	804157	Standard
	Sn	118	746.7	9.1	**-0.1492**	0.004	2.7	ug/L	4860	Standard
	Sb	123	212.6	5.8	**0.0125**	0.001	7.8	ug/L	28	Standard
	Ba	135	105531.7	2.0	**20.2627**	0.447	2.2	ug/L	54	Standard
	Ce	140	531.3	3.1				ug/L	61	Standard
>	**Tb**	159	794250.8	0.9				ug/L	844239	Standard
	Ho	165	12.0	28.9				ug/L	6	Standard
	Tl	203	691.0	6.9	**0.0411**	0.003	6.3	ug/L	10	Standard
	Tl	205	1693.4	4.5	**0.0410**	0.002	4.6	ug/L	16	Standard
	Pb	206	18388.2	2.9	**1.3169**	0.038	2.9	ug/L	421	Standard
	Pb	207	14681.1	1.7	**1.2648**	0.019	1.5	ug/L	341	Standard
	Pb	208	68817.1	1.8	**1.2870**	0.025	1.9	ug/L	1571	Standard
	U	238	19.0	45.9	**0.0015**	0.000	12.0	ug/L	4	Standard
>	**Bi**	209	431053.2	0.8				ug/L	457202	Standard
	Na	23	55255.3	1.7	**18.1511**	0.428	2.4	mg/L	138	Standard
	Mg	24	1176.0	3.8	**0.0035**	0.000	4.0	mg/L	134	Standard

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K	39	123909.3	0.9	**12.2290**	0.216	1.8	mg/L	563	Standard
Ca	43	9000.7	0.9	**13.9859**	0.086	0.6	mg/L	127	Standard
Fe	54	445.3	2.3	**-0.0561**	0.002	3.2	mg/L	815	Standard
Fe	57	12335.7	2.1	**0.0516**	0.002	3.7	mg/L	4749	Standard
> **Sc-1**	45	341666.9	0.9				mg/L	367704	Standard
Cl	35	5647179.2	3.8				ug/L	59901	Standard
Kr	83	44.2	7.4				ug/L	50	Standard
Br	81	21433.1	0.9				ug/L	13965	Standard
P	31	44938.2	1.0				ug/L	71952	Standard
S	34	1049624.6	3.9				ug/L	878802	Standard
Sr	88	434160.6	1.9				ug/L	321	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		91.298	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
> Y	89		88.920	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
> In	115		94.075	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
> Tb	159		94.079	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205002501
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	94.281
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: May 04, 2012

Method 6020 - Summary Report

Sample ID: L1205002501DL WG396927-02
Sample Date/Time: Thursday, May 03, 2012 15:20:35
Number of Replicates: 3
Autosampler Position: 257
Sample Description: 100
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP 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	32638.8	1.8	**1150.8747**	16.600	1.4	ug/L	20538	Standard
	Be	9	12.0	52.0	**-0.0030**	0.002	51.8	ug/L	13	Standard
	Al	27	43063.8	1.5	**1.0686**	0.009	0.8	ug/L	25813	Standard
>	**Sc**	45	337001.9	1.2				ug/L	367704	Standard
	Ti	47	156.0	10.3	**0.0297**	0.008	26.3	ug/L	127	Standard
	V	51	7443.5	1.9	**0.0667**	0.008	12.5	ug/L	6636	Standard
	Cr	52	21821.7	2.5	**0.1551**	0.033	21.0	ug/L	21244	Standard
	Cr	53	1176.7	0.9	**0.3708**	0.007	1.9	ug/L	467	Standard
	Mn	55	2061.5	1.8	**-0.1389**	0.001	0.6	ug/L	8327	Standard
	Co	59	159.3	12.0	**0.0027**	0.001	48.4	ug/L	123	Standard
	Ni	60	422.0	4.4	**0.0705**	0.006	8.2	ug/L	272	Standard
	Cu	65	313.7	4.0	**-0.2203**	0.003	1.5	ug/L	1002	Standard
	Zn	66	15008.1	2.2	**10.2031**	0.136	1.3	ug/L	3532	Standard
>	**Ge**	72	231328.7	1.2				ug/L	254939	Standard
	As	75	-156.3	9.5	**0.0243**	0.012	47.7	ug/L	-224	Standard
	Se	82	48.8	13.8	**0.1855**	0.064	34.7	ug/L	24	Standard
	Se-1	77	125.0	4.8	**0.4637**	0.064	13.7	ug/L	93	Standard
	Ga	71	209592.8	2.0				mg/L	233175	Standard
	Rb	85	11186.8	1.1				ug/L	20	Standard
>	**Y**	89	209139.6	1.0				ug/L	235100	Standard
	Rh	103	4.7	65.5				ug/L	6	Standard
	Mo	98	194.2	11.4	**0.0392**	0.006	14.3	ug/L	14	Standard
	Ag	107	35.7	11.3	**-0.0005**	0.001	95.8	ug/L	38	Standard
	Cd	111	123.4	16.7	**-0.0672**	0.005	6.8	mg/L	439	Standard
	Cd	114	304.7	3.9	**-0.0737**	0.001	1.3	ug/L	1326	Standard
>	**In**	115	760845.3	1.4				ug/L	804157	Standard
	Sn	118	570.0	6.8	**-0.1597**	0.003	1.6	ug/L	4860	Standard
	Sb	123	137.3	3.7	**0.0058**	0.001	9.5	ug/L	28	Standard
	Ba	135	19854.7	1.6	**3.7818**	0.073	1.9	ug/L	54	Standard
	Ce	140	173.3	9.8				ug/L	61	Standard
>	**Tb**	159	783218.8	0.8				ug/L	844239	Standard
	Ho	165	6.7	105.4				ug/L	6	Standard
	Tl	203	449.0	7.5	**0.0267**	0.002	6.2	ug/L	10	Standard
	Tl	205	1127.4	4.4	**0.0270**	0.001	3.6	ug/L	16	Standard
	Pb	206	3801.1	2.3	**0.2475**	0.005	2.0	ug/L	421	Standard
	Pb	207	3021.6	4.0	**0.2336**	0.014	5.9	ug/L	341	Standard
	Pb	208	14168.9	1.8	**0.2391**	0.007	2.8	ug/L	1571	Standard
	U	238	12.3	37.4	**0.0013**	0.000	7.2	ug/L	4	Standard
>	**Bi**	209	433952.2	1.2				ug/L	457202	Standard
	Na	23	11026.7	2.0	**3.6413**	0.112	3.1	mg/L	138	Standard
	Mg	24	402.0	6.9	**0.0003**	0.000	42.5	mg/L	134	Standard

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K	39	25222.3	1.5	**2.4776**	0.056	2.3	mg/L	563	Standard
Ca	43	1794.1	4.4	**2.6855**	0.100	3.7	mg/L	127	Standard
Fe	54	335.8	14.6	**-0.0756**	0.009	11.3	mg/L	815	Standard
Fe	57	6440.7	2.8	**0.0129**	0.001	9.4	mg/L	4749	Standard
> **Sc-1**	45	337001.9	1.2				mg/L	367704	Standard
Cl	35	1326180.2	5.0				ug/L	59901	Standard
Kr	83	46.0	17.8				ug/L	50	Standard
Br	81	13334.2	1.1				ug/L	13965	Standard
P	31	30979.0	1.0				ug/L	71952	Standard
S	34	1052554.2	0.1				ug/L	878802	Standard
Sr	88	81394.1	1.7				ug/L	321	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		90.739	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
> Y	89		88.958	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
> In	115		94.614	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
> Tb	159		92.772	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	94.915
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1205002501PS WG396927-01
Sample Date/Time: Thursday, May 03, 2012 15:23:22
Number of Replicates: 3
Autosampler Position: 258
Sample Description: 20
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: SLP 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	87175.8	2.3	**5782.8808**	80.478	1.4	ug/L	20538	Standard
	Be	9	261222.2	2.1	**64.1013**	0.540	0.8	ug/L	13	Standard
	Al	27	1348827.9	3.8	**62.2402**	1.953	3.1	ug/L	25813	Standard
>	**Sc**	45	340716.8	2.1				ug/L	367704	Standard
	Ti	47	610.7	4.6	**0.2786**	0.011	3.8	ug/L	127	Standard
	V	51	1193961.9	2.9	**57.9031**	0.864	1.5	ug/L	6636	Standard
	Cr	52	981529.8	3.3	**56.8663**	1.166	2.1	ug/L	21244	Standard
	Cr	53	109545.5	3.2	**55.3777**	0.987	1.8	ug/L	467	Standard
	Mn	55	1237063.6	2.3	**57.3459**	1.146	2.0	ug/L	8327	Standard
	Co	59	823388.6	3.6	**54.1847**	1.399	2.6	ug/L	123	Standard
	Ni	60	171638.5	2.6	**54.7100**	0.972	1.8	ug/L	272	Standard
	Cu	65	145561.9	2.9	**54.0827**	0.962	1.8	ug/L	1002	Standard
	Zn	66	102656.7	1.7	**83.0448**	0.426	0.5	ug/L	3532	Standard
>	**Ge**	72	226534.8	1.5				ug/L	254939	Standard
	As	75	70859.8	2.9	**63.7625**	0.919	1.4	ug/L	-224	Standard
	Se	82	8182.1	1.8	**73.6129**	0.529	0.7	ug/L	24	Standard
	Se-1	77	5722.7	1.6	**73.1841**	0.149	0.2	ug/L	93	Standard
	Ga	71	205010.3	0.4				mg/L	233175	Standard
	Rb	85	57505.6	2.2				ug/L	20	Standard
>	**Y**	89	202703.2	1.8				ug/L	235100	Standard
	Rh	103	46.0	8.7				ug/L	6	Standard
	Mo	98	1057.6	3.7	**0.2582**	0.013	5.0	ug/L	14	Standard
	Ag	107	397206.7	4.1	**52.0332**	1.754	3.4	ug/L	38	Standard
	Cd	111	283709.4	2.7	**61.3367**	0.997	1.6	mg/L	439	Standard
	Cd	114	785320.5	3.0	**61.0646**	0.792	1.3	ug/L	1326	Standard
>	**In**	115	758220.9	2.0				ug/L	804157	Standard
	Sn	118	1103.4	0.5	**-0.1285**	0.001	1.1	ug/L	4860	Standard
	Sb	123	679331.3	3.5	**59.4764**	1.312	2.2	ug/L	28	Standard
	Ba	135	380662.0	3.0	**72.9548**	1.986	2.7	ug/L	54	Standard
	Ce	140	548.7	5.5				ug/L	61	Standard
>	**Tb**	159	808589.2	1.0				ug/L	844239	Standard
	Ho	165	16.7	25.0				ug/L	6	Standard
	Tl	203	876075.8	1.6	**50.7265**	1.614	3.2	ug/L	10	Standard
	Tl	205	2219813.3	1.0	**53.2334**	1.388	2.6	ug/L	16	Standard
	Pb	206	719856.4	2.4	**51.8225**	1.975	3.8	ug/L	421	Standard
	Pb	207	617718.3	2.6	**53.6503**	2.032	3.8	ug/L	341	Standard
	Pb	208	2820518.1	2.8	**53.1127**	2.203	4.1	ug/L	1571	Standard
	U	238	2593150.2	4.1	**51.9133**	2.797	5.4	ug/L	4	Standard
>	**Bi**	209	438139.0	1.7				ug/L	457202	Standard
	Na	23	53733.8	2.4	**17.6984**	0.311	1.8	mg/L	138	Standard
	Mg	24	1237.1	2.9	**0.0038**	0.000	2.8	mg/L	134	Standard

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K	39	123065.9	1.7	**12.1803**	0.235	1.9	mg/L	563	Standard
Ca	43	8972.0	1.9	**13.9811**	0.169	1.2	mg/L	127	Standard
Fe	54	383.3	2.5	**-0.0674**	0.003	4.9	mg/L	815	Standard
Fe	57	12525.8	3.2	**0.0530**	0.001	2.2	mg/L	4749	Standard
> **Sc-1**	45	340716.8	2.1				mg/L	367704	Standard
Cl	35	5219250.7	1.2				ug/L	59901	Standard
Kr	83	48.7	3.6				ug/L	50	Standard
Br	81	21210.5	1.1				ug/L	13965	Standard
P	31	45398.3	1.2				ug/L	71952	Standard
S	34	1047975.1	0.5				ug/L	878802	Standard
Sr	88	425589.1	2.7				ug/L	321	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		88.859	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
> Y	89		86.220	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
> In	115		94.288	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
> Tb	159		95.777	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	95.831
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, May 03, 2012 15:26:12
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: SLP 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	22114.8	4.2	**36.1037**	17.969	49.8	ug/L	20538	Standard
	Be	9	238376.6	4.1	**52.8057**	1.792	3.4	ug/L	13	Standard
	Al	27	1221621.3	6.1	**50.6837**	2.011	4.0	ug/L	25813	Standard
>	**Sc**	45	377467.6	3.2				ug/L	367704	Standard
	Ti	47	209164.2	4.2	**100.9281**	1.165	1.2	ug/L	127	Standard
	V	51	1243238.6	4.1	**53.5102**	0.822	1.5	ug/L	6636	Standard
	Cr	52	1015406.3	4.7	**52.1327**	0.669	1.3	ug/L	21244	Standard
	Cr	53	114196.4	5.8	**51.2172**	1.271	2.5	ug/L	467	Standard
	Mn	55	1324521.2	4.4	**54.4911**	0.955	1.8	ug/L	8327	Standard
	Co	59	880611.7	4.4	**51.4512**	1.226	2.4	ug/L	123	Standard
	Ni	60	181878.8	5.3	**51.4487**	1.134	2.2	ug/L	272	Standard
	Cu	65	152576.5	3.9	**50.3122**	1.013	2.0	ug/L	1002	Standard
	Zn	66	69611.7	3.7	**49.2103**	0.306	0.6	ug/L	3532	Standard
>	**Ge**	72	255159.2	3.4				ug/L	254939	Standard
	As	75	62422.9	5.0	**49.8969**	1.095	2.2	ug/L	-224	Standard
	Se	82	6461.9	4.2	**51.5429**	1.308	2.5	ug/L	24	Standard
	Se-1	77	4445.0	5.0	**50.1108**	1.559	3.1	ug/L	93	Standard
	Ga	71	238876.0	2.9				mg/L	233175	Standard
	Rb	85	1058.7	1.8				ug/L	20	Standard
>	**Y**	89	237070.4	2.6				ug/L	235100	Standard
	Rh	103	34.0	21.2				ug/L	6	Standard
	Mo	98	413306.1	4.1	**95.0732**	2.163	2.3	ug/L	14	Standard
	Ag	107	438025.2	2.7	**52.1213**	0.720	1.4	ug/L	38	Standard
	Cd	111	259132.9	5.2	**50.8537**	1.737	3.4	mg/L	439	Standard
	Cd	114	706992.0	4.1	**49.9101**	1.151	2.3	ug/L	1326	Standard
>	**In**	115	834723.6	1.9				ug/L	804157	Standard
	Sn	118	935337.3	4.0	**49.3009**	1.067	2.2	ug/L	4860	Standard
	Sb	123	631754.4	3.7	**50.2368**	0.974	1.9	ug/L	28	Standard
	Ba	135	277838.4	4.6	**48.3445**	1.327	2.7	ug/L	54	Standard
	Ce	140	1014.7	4.6				ug/L	61	Standard
>	**Tb**	159	869816.8	1.9				ug/L	844239	Standard
	Ho	165	24.0	8.3				ug/L	6	Standard
	Tl	203	870337.1	3.1	**49.8782**	1.310	2.6	ug/L	10	Standard
	Tl	205	2176565.2	7.1	**51.6491**	3.231	6.3	ug/L	16	Standard
	Pb	206	702982.1	4.3	**50.0895**	2.096	4.2	ug/L	421	Standard
	Pb	207	584305.9	3.3	**50.2329**	1.762	3.5	ug/L	341	Standard
	Pb	208	2699113.3	3.9	**50.3042**	1.927	3.8	ug/L	1571	Standard
	U	238	2528113.2	4.6	**50.0901**	2.348	4.7	ug/L	4	Standard
>	**Bi**	209	442671.4	3.7				ug/L	457202	Standard
	Na	23	16840.7	4.8	**4.9773**	0.143	2.9	mg/L	138	Standard
	Mg	24	1331302.4	5.1	**5.0367**	0.129	2.6	mg/L	134	Standard

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	K	39	54569.5	3.9	**4.8393**	0.102	2.1	mg/L	563	Standard
	Ca	43	3527.1	6.4	**4.8442**	0.187	3.9	mg/L	127	Standard
	Fe	54	30500.8	5.4	**4.9806**	0.170	3.4	mg/L	815	Standard
	Fe	57	956751.2	6.0	**5.7359**	0.202	3.5	mg/L	4749	Standard
>	**Sc-1**	45	377467.6	3.2				mg/L	367704	Standard
	Cl	35	260566.1	19.7				ug/L	59901	Standard
	Kr	83	45.8	19.8				ug/L	50	Standard
	Br	81	14650.4	4.5				ug/L	13965	Standard
	P	31	109336.1	3.8				ug/L	71952	Standard
	S	34	1107494.5	3.6				ug/L	878802	Standard
	Sr	88	682.7	6.3				ug/L	321	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	101.367		
>	Sc	45			
	Ti	47	100.928		
	V	51	107.020		
	Cr	52	104.265		
	Cr	53			
	Mn	55	108.982		
	Co	59	102.902		
	Ni	60	102.897		
	Cu	65	100.624		
	Zn	66	98.421		
>	Ge	72		100.086	
	As	75	99.794		
	Se	82	103.086		
	Se-1	77	100.222		
	Ga	71			
	Rb	85			
>	Y	89		100.838	
	Rh	103			
	Mo	98	95.073		
	Ag	107	104.243		
	Cd	111	101.707		
	Cd	114			
>	In	115		103.801	
	Sn	118	98.602		
	Sb	123	100.474		
	Ba	135	96.689		
	Ce	140			
>	Tb	159		103.030	
	Ho	165			
	Tl	203	99.756		
	Tl	205			
	Pb	206	100.179		

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	Pb	207	100.466	
	Pb	208	100.608	
	U	238	100.180	
>	Bi	209		96.822
	Na	23	99.547	
	Mg	24	100.733	
	K	39	96.785	
	Ca	43	96.885	
	Fe	54	99.612	
	Fe	57	114.719	
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Fe	57	

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Method 6020 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, May 03, 2012 15:28:59
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: SLP 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	20647.1	2.7	**30.2961**	14.506	47.9	ug/L	20538	Standard
	Be	9	38.0	17.3	**0.0030**	0.002	58.4	ug/L	13	Standard
	Al	27	12161.6	3.7	**-0.4229**	0.010	2.3	ug/L	25813	Standard
>	**Sc**	45	353663.4	2.0				ug/L	367704	Standard
	Ti	47	126.0	4.2	**0.0107**	0.000	3.7	ug/L	127	Standard
	V	51	6517.6	1.4	**0.0088**	0.011	129.3	ug/L	6636	Standard
	Cr	52	20274.2	1.4	**0.0137**	0.026	190.3	ug/L	21244	Standard
	Cr	53	598.7	3.6	**0.0702**	0.004	5.8	ug/L	467	Standard
	Mn	55	1447.4	4.6	**-0.1698**	0.001	0.9	ug/L	8327	Standard
	Co	59	165.3	26.7	**0.0027**	0.003	109.7	ug/L	123	Standard
	Ni	60	108.3	19.4	**-0.0289**	0.008	26.0	ug/L	272	Standard
	Cu	65	894.7	5.2	**-0.0221**	0.014	65.2	ug/L	1002	Standard
	Zn	66	1044.7	7.8	**-1.1586**	0.037	3.2	ug/L	3532	Standard
>	**Ge**	72	242152.7	3.7				ug/L	254939	Standard
	As	75	-202.9	13.4	**-0.0084**	0.018	215.5	ug/L	-224	Standard
	Se	82	24.8	2.5	**-0.0371**	0.013	33.9	ug/L	24	Standard
	Se-1	77	95.0	3.8	**0.0285**	0.002	6.0	ug/L	93	Standard
	Ga	71	223928.7	2.7				mg/L	233175	Standard
	Rb	85	20.0	17.3				ug/L	20	Standard
>	**Y**	89	220977.6	4.2				ug/L	235100	Standard
	Rh	103	1.3	86.6				ug/L	6	Standard
	Mo	98	133.9	37.8	**0.0226**	0.012	52.2	ug/L	14	Standard
	Ag	107	103.3	31.2	**0.0077**	0.004	51.6	ug/L	38	Standard
	Cd	111	520.5	4.0	**0.0140**	0.007	47.2	mg/L	439	Standard
	Cd	114	1323.9	6.0	**0.0012**	0.005	419.7	ug/L	1326	Standard
>	**In**	115	792790.3	2.3				ug/L	804157	Standard
	Sn	118	1868.1	4.8	**-0.0887**	0.003	2.9	ug/L	4860	Standard
	Sb	123	308.1	33.9	**0.0196**	0.008	42.5	ug/L	28	Standard
	Ba	135	83.0	35.9	**0.0043**	0.005	123.5	ug/L	54	Standard
	Ce	140	40.0	8.7				ug/L	61	Standard
>	**Tb**	159	809210.0	2.0				ug/L	844239	Standard
	Ho	165	10.7	28.6				ug/L	6	Standard
	Tl	203	169.0	20.4	**0.0105**	0.002	19.7	ug/L	10	Standard
	Tl	205	406.7	27.1	**0.0097**	0.003	28.3	ug/L	16	Standard
	Pb	206	432.0	7.9	**0.0029**	0.002	85.6	ug/L	421	Standard
	Pb	207	361.3	4.9	**0.0005**	0.002	421.8	ug/L	341	Standard
	Pb	208	1691.4	6.9	**0.0021**	0.002	106.8	ug/L	1571	Standard
	U	238	726.4	15.0	**0.0159**	0.003	16.2	ug/L	4	Standard
>	**Bi**	209	429452.0	2.2				ug/L	457202	Standard
	Na	23	120.7	11.8	**-0.0011**	0.004	393.8	mg/L	138	Standard
	Mg	24	220.0	40.8	**-0.0005**	0.000	73.8	mg/L	134	Standard

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K	39	662.7	5.3	**0.0053**	0.004	70.1	mg/L	563	Standard
Ca	43	104.7	5.8	**-0.0169**	0.006	37.5	mg/L	127	Standard
Fe	54	783.7	5.8	**0.0018**	0.009	511.7	mg/L	815	Standard
Fe	57	5409.6	3.0	**0.0042**	0.001	20.6	mg/L	4749	Standard
> **Sc-1**	45	353663.4	2.0				mg/L	367704	Standard
Cl	35	177713.5	4.5				ug/L	59901	Standard
Kr	83	44.2	11.4				ug/L	50	Standard
Br	81	13876.7	2.4				ug/L	13965	Standard
P	31	89869.0	3.8				ug/L	71952	Standard
S	34	1039864.3	1.7				ug/L	878802	Standard
Sr	88	258.0	9.7				ug/L	321	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		94.985	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
> Y	89		93.993	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
> In	115		98.586	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
> Tb	159		95.851	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	93.930
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
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MassCal File Name

Mass Calibration File Name Default.tun
MassCal File Path C:\NexIONData\MassCal\Default.tun
Peak Search Window: 1.00

Sample Information

Sample Date/Time: Monday, May 07, 2012 09:12:04

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	1325	2021	0.712
Mg	23.985	23.975	4710	2020	0.700
In	114.904	114.925	22873	2022	0.690
U	238.050	238.025	47469	2033	0.687

Relative Std. Dev.

Mass	Meas. Intens. RSD
5.525	7.971
5.575	1.076
5.625	3.373
5.675	2.829
5.725	0.783
5.775	2.281
5.825	2.882
5.875	2.097
5.925	2.050
5.975	1.467
6.025	1.481
6.075	1.958
6.125	2.192
6.175	2.653
6.225	1.009
6.275	2.810
6.325	0.967
6.375	104.583
6.425	136.931
6.475	52.322
6.525	9.285
6.575	3.376
6.625	1.636
6.675	1.680
6.725	3.292
6.775	2.444
6.825	2.657
6.875	3.277

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6.925	1.815
6.975	2.329
7.025	2.887
7.075	2.295
7.125	1.792
7.175	1.852
7.225	3.600
7.275	2.829
7.325	5.961
7.375	136.931
7.425	136.931
7.475	223.607
7.525	149.071
7.575	
7.625	136.931
7.675	223.607
7.725	223.607
7.775	149.071
7.825	223.607
7.875	223.607
7.925	136.931
7.975	
8.025	
8.075	136.931
8.125	136.931
8.175	
8.225	223.607
8.275	223.607
8.325	
8.375	104.583
8.425	223.607
8.475	223.607
22.525	4.748
22.575	3.628
22.625	2.223
22.675	2.260
22.725	1.812
22.775	2.324
22.825	1.768
22.875	1.836
22.925	2.408
22.975	2.415
23.025	2.360
23.075	2.570
23.125	2.363
23.175	1.911
23.225	1.887

23.275	1.717
23.325	6.673
23.375	
23.425	223.607
23.475	26.726
23.525	5.404
23.575	1.658
23.625	2.965
23.675	3.037
23.725	2.631
23.775	2.012
23.825	1.803
23.875	1.621
23.925	1.761
23.975	1.768
24.025	1.794
24.075	1.286
24.125	1.567
24.175	2.550
24.225	2.163
24.275	2.941
24.325	34.993
24.375	223.607
24.425	223.607
24.475	60.858
24.525	34.223
24.575	14.132
24.625	5.737
24.675	4.299
24.725	5.186
24.775	7.324
24.825	2.737
24.875	2.712
24.925	4.513
24.975	3.298
25.025	2.766
25.075	3.822
25.125	4.228
25.175	2.687
25.225	4.140
25.275	8.696
25.325	61.237
25.375	149.071
25.425	223.607
25.475	21.066
113.525	19.544
113.575	11.088

113.625	6.047
113.675	2.144
113.725	1.615
113.775	1.559
113.825	2.647
113.875	1.744
113.925	3.004
113.975	2.705
114.025	1.876
114.075	2.463
114.125	1.757
114.175	3.505
114.225	7.520
114.275	11.841
114.325	122.475
114.375	55.277
114.425	9.769
114.475	8.031
114.525	3.504
114.575	5.022
114.625	1.070
114.675	1.451
114.725	2.085
114.775	1.754
114.825	1.733
114.875	1.216
114.925	2.102
114.975	1.657
115.025	1.897
115.075	1.772
115.125	1.174
115.175	1.440
115.225	2.974
115.275	6.476
115.325	41.191
115.375	223.607
115.425	71.261
115.475	27.653
115.525	12.894
115.575	4.863
115.625	7.628
115.675	6.202
115.725	2.545
115.775	2.441
115.825	1.987
115.875	4.485
115.925	4.636

115.975	3.775
116.025	1.394
116.075	2.806
116.125	2.136
116.175	8.755
116.225	8.828
116.275	21.181
116.325	69.722
116.375	91.287
116.425	91.287
116.475	50.000
236.525	
236.575	
236.625	
236.675	
236.725	
236.775	
236.825	
236.875	
236.925	
236.975	
237.025	
237.075	
237.125	
237.175	
237.225	223.607
237.275	
237.325	223.607
237.375	223.607
237.425	122.475
237.475	62.361
237.525	29.410
237.575	10.089
237.625	4.832
237.675	1.775
237.725	2.000
237.775	1.070
237.825	0.938
237.875	1.665
237.925	2.339
237.975	1.473
238.025	1.221
238.075	1.973
238.125	1.479
238.175	1.798
238.225	1.665
238.275	0.921

238.325	2.749
238.375	2.307
238.425	4.773
238.475	10.766
238.525	39.239
238.575	162.980
238.625	
238.675	
238.725	
238.775	
238.825	223.607
238.875	
238.925	223.607
238.975	
239.025	136.931
239.075	
239.125	
239.175	
239.225	
239.275	
239.325	
239.375	
239.425	
239.475	

Daily Performance Report

Sample ID: Daily Performance Check
Sample Date/Time: Monday, May 07, 2012 09:16:43
Sample Description:
Method File: C:\NexION Data\Method\Daily Performance.mth
Dataset File: C:\NexION Data\DataSet\050212\Daily Performance Check.301
MassCal File: C:\NexION Data\MassCal\Default.tun
Conditions File: C:\NexION Data\Conditions\Default.dac
Dual Detector Mode: Pulse

Acq. Dead Time (ns): 33
Current Dead Time (ns): 33

Torch Z position (mm): 0.00

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD	Mode
	Be	9.0	7240.4	7240.396	47.007	0.6	Standard
	Mg	24.0	96056.8	96056.770	1305.014	1.4	Standard
	In	114.9	125925.0	125924.994	2333.005	1.9	Standard
	U	238.1	89725.3	89725.324	1198.477	1.3	Standard
⌈	CeO	155.9	3177.1	0.024	0.000	1.8	Standard
| >	Ce	139.9	133735.7	133735.703	1794.716	1.3	Standard
⌊	Ce++	70.0	1328.1	0.010	0.000	0.9	Standard
	Bkgd	220.0	0.0	0.000	0.000		Standard

Current Conditions File Data

Current Value	Description
0.99	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
18.00	Plasma Gas Flow
-8.75	Deflector Voltage
1600.00	ICP RF Power
-1881.00	Analog Stage Voltage
1250.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-15.00	Cell Rod Offset STD [CRO]
12.00	Discriminator Threshold
-2.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.45	RPq
1.00	DRC Mode NEB
-7.00	DRC Mode QRO
-1.50	DRC Mode CRO
-5.00	DRC Mode Cell Entrance/Exit Voltage
0.70	Cell Gas A
200.00	Axial Field Voltage
-17.00	KED Mode CRO
-12.00	KED Mode QRO
-5.00	KED Mode Cell Entrance Voltage
-23.00	KED Mode Cell Exit Voltage
4.40	KED Cell Gas A
0.00	KED RPa
0.25	KED RPq
475.00	KED Mode Axial Field Voltage

SmartTune Wizard - Summary

```
Optimization Summary

SmartTune file: C:\NexIONData\Wizard\SmartTune\ESI SmartTune Fullmicrobac.swz

Start Time: 5/7/2012 9:16:42 AM
End Time: 5/7/2012 9:19:02 AM

Daily Performance Check - [Passed]  Optimum value(s): N/A
        Obtained Intensity (Be 9.0122): 7240.40
        Obtained Intensity (Mg 23.985): 96056.77
        Obtained Intensity (In 114.904): 125924.99
        Obtained Intensity (U 238.05): 89725.32
        Obtained Intensity (Bkgd 220): 0.00
        Obtained Formula (CeO 155.9 / Ce 139.905): 0.024 (=3177.07 / 133735.70)
        Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.010 (=1328.12 / 133735.70)
```

SmartTune Wizard - Details

```
Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ESI SmartTune Fullmicrobac.swz

Optimization Status

Start Time: 5/7/2012 9:16:42 AM

Daily Performance Check
        Optimization Settings:
                Method: 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): 7240.40
                Obtained Intensity (Mg 23.985): 96056.77
                Obtained Intensity (In 114.904): 125924.99
                Obtained Intensity (U 238.05): 89725.32
                Obtained Intensity (Bkgd 220): 0.00
                Obtained Formula (CeO 155.9 / Ce 139.905): 0.024 (=3177.07 / 133735.70)
                Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.010 (=1328.12 / 133735.70)
[Passed]  Optimum value(s): N/A

End Time: 5/7/2012 9:19:02 AM
```

Method 6020 - Summary Report

Sample ID: Blank
Sample Date/Time: Monday, May 07, 2012 15:21:30
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	18450.6	3.4				ug/L		Standard
	Be	9	6.7	48.2				ug/L		Standard
	Al	27	28447.4	1.6				ug/L		Standard
>	**Sc**	45	340291.8	1.0				ug/L		Standard
	Ti	47	116.0	17.5				ug/L		Standard
	V	51	4654.4	0.6				ug/L		Standard
	Cr	52	14933.4	0.4				ug/L		Standard
	Cr	53	342.0	6.1				ug/L		Standard
	Mn	55	1266.7	5.5				ug/L		Standard
	Co	59	140.0	9.0				ug/L		Standard
	Ni	60	75.0	4.8				ug/L		Standard
	Cu	65	238.7	9.6				ug/L		Standard
	Zn	66	225.7	12.4				ug/L		Standard
>	**Ge**	72	288220.2	1.3				ug/L		Standard
	As	75	-236.1	3.1				ug/L		Standard
	Se	82	48.0	21.7				ug/L		Standard
	Se-1	77	95.7	3.7				ug/L		Standard
	Ga	71	267912.7	1.1				mg/L		Standard
	Rb	85	31.3	39.0				ug/L		Standard
>	**Y**	89	301679.3	3.4				ug/L		Standard
	Rh	103	1.3	86.6				ug/L		Standard
	Mo	98	6.9	38.8				ug/L		Standard
	Ag	107	66.0	5.2				ug/L		Standard
	Cd	111	527.3	6.3				mg/L		Standard
	Cd	114	1272.6	2.9				ug/L		Standard
>	**In**	115	755896.1	0.4				ug/L		Standard
	Sn	118	403.7	7.4				ug/L		Standard
	Sb	123	33.5	26.1				ug/L		Standard
	Ba	135	45.3	10.4				ug/L		Standard
	Ce	140	52.0	27.7				ug/L		Standard
>	**Tb**	159	861973.9	0.6				ug/L		Standard
	Ho	165	8.7	48.0				ug/L		Standard
	Tl	203	5.0	40.0				ug/L		Standard
	Tl	205	14.7	41.7				ug/L		Standard
	Pb	206	297.0	7.0				ug/L		Standard
	Pb	207	266.0	12.7				ug/L		Standard
	Pb	208	1205.4	4.0				ug/L		Standard
	U	238	4.0	43.3				ug/L		Standard
>	**Bi**	209	470254.0	1.1				ug/L		Standard
	Na	23	98.0	10.8				mg/L		Standard
	Mg	24	170.7	5.0				mg/L		Standard

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	K	39	367.3	6.3	mg/L	Standard
	Ca	43	58.0	10.3	mg/L	Standard
	Fe	54	954.7	5.0	mg/L	Standard
	Fe	57	5343.6	2.9	mg/L	Standard
>	**Sc-1**	45	340291.8	1.0	mg/L	Standard
	Cl	35	43575.9	0.5	ug/L	Standard
	Kr	83	78.2	8.6	ug/L	Standard
	Br	81	19680.4	3.0	ug/L	Standard
	P	31	84049.8	0.4	ug/L	Standard
	S	34	907586.8	0.5	ug/L	Standard
	Sr	88	382.7	12.0	ug/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			
	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			

Sample ID: Blank
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│	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

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Monday, May 07, 2012 15:24:19
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	18519.3	1.4				ug/L	18451	Standard
	Be	9	7.3	20.8				ug/L	7	Standard
	Al	27	29016.4	0.9				ug/L	28447	Standard
>	**Sc**	45	349216.3	0.6				ug/L	340292	Standard
	Ti	47	122.0	30.4				ug/L	116	Standard
	V	51	4675.5	2.0				ug/L	4654	Standard
	Cr	52	15054.5	0.8				ug/L	14933	Standard
	Cr	53	320.7	11.1				ug/L	342	Standard
	Mn	55	1289.4	0.9				ug/L	1267	Standard
	Co	59	126.7	9.2				ug/L	140	Standard
	Ni	60	74.3	12.2				ug/L	75	Standard
	Cu	65	244.3	3.8				ug/L	239	Standard
	Zn	66	222.7	4.2				ug/L	226	Standard
>	**Ge**	72	292222.5	1.6				ug/L	288220	Standard
	As	75	-276.0	12.3				ug/L	-236	Standard
	Se	82	32.6	10.0				ug/L	48	Standard
	Se-1	77	106.7	8.5				ug/L	96	Standard
	Ga	71	267371.4	1.3				mg/L	267913	Standard
	Rb	85	32.0	32.5				ug/L	31	Standard
>	**Y**	89	300929.3	2.2				ug/L	301679	Standard
	Rh	103	1.3	86.6				ug/L	1	Standard
	Mo	98	4.6	26.6				ug/L	7	Standard
	Ag	107	65.7	6.3				ug/L	66	Standard
	Cd	111	530.0	3.3				mg/L	527	Standard
	Cd	114	1237.8	5.4				ug/L	1273	Standard
>	**In**	115	763959.7	0.8				ug/L	755896	Standard
	Sn	118	432.3	7.5				ug/L	404	Standard
	Sb	123	27.6	14.7				ug/L	34	Standard
	Ba	135	43.0	14.1				ug/L	45	Standard
	Ce	140	52.0	26.9				ug/L	52	Standard
>	**Tb**	159	879337.3	1.3				ug/L	861974	Standard
	Ho	165	10.0	20.0				ug/L	9	Standard
	Tl	203	5.0	0.0				ug/L	5	Standard
	Tl	205	11.3	97.2				ug/L	15	Standard
	Pb	206	308.3	2.6				ug/L	297	Standard
	Pb	207	257.0	1.0				ug/L	266	Standard
	Pb	208	1205.0	3.2				ug/L	1205	Standard
	U	238	5.0	20.0				ug/L	4	Standard
>	**Bi**	209	482873.8	1.4				ug/L	470254	Standard
	Na	23	101.3	8.0				mg/L	98	Standard
	Mg	24	184.0	9.0				mg/L	171	Standard

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K	39	361.3	5.5	mg/L	367	Standard
Ca	43	52.0	13.9	mg/L	58	Standard
Fe	54	940.5	1.2	mg/L	955	Standard
Fe	57	5517.7	1.1	mg/L	5344	Standard
Sc-1	45	349216.3	0.6	mg/L	340292	Standard
Cl	35	43889.1	0.1	ug/L	43576	Standard
Kr	83	81.6	10.9	ug/L	78	Standard
Br	81	19686.5	3.3	ug/L	19680	Standard
P	31	83515.3	1.8	ug/L	84050	Standard
S	34	898281.1	1.4	ug/L	907587	Standard
Sr	88	347.3	5.7	ug/L	383	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			
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			

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│	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

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Monday, May 07, 2012 15:27:05
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	18129.2	1.0				ug/L	18451	Standard
	Be	9	219.0	0.8				ug/L	7	Standard
	Al	27	17802.5	4.5				ug/L	28447	Standard
>	**Sc**	45	345435.2	1.4				ug/L	340292	Standard
	Ti	47	314.0	7.1				ug/L	116	Standard
	V	51	5658.4	2.8				ug/L	4654	Standard
	Cr	52	15852.3	2.2				ug/L	14933	Standard
	Cr	53	440.7	2.1				ug/L	342	Standard
	Mn	55	3940.8	3.4				ug/L	1267	Standard
	Co	59	1110.0	1.4				ug/L	140	Standard
	Ni	60	298.3	1.2				ug/L	75	Standard
	Cu	65	360.0	8.1				ug/L	239	Standard
	Zn	66	355.0	11.5				ug/L	226	Standard
>	**Ge**	72	291774.6	1.3				ug/L	288220	Standard
	As	75	-156.1	13.3				ug/L	-236	Standard
	Se	82	53.5	14.7				ug/L	48	Standard
	Se-1	77	106.7	9.4				ug/L	96	Standard
	Ga	71	268570.0	2.1				mg/L	267913	Standard
	Rb	85	23.3	17.8				ug/L	31	Standard
>	**Y**	89	304054.6	0.6				ug/L	301679	Standard
	Rh	103	2.0	0.0				ug/L	1	Standard
	Mo	98	593.3	1.5				ug/L	7	Standard
	Ag	107	776.0	4.9				ug/L	66	Standard
	Cd	111	784.5	4.8				mg/L	527	Standard
	Cd	114	1971.1	3.2				ug/L	1273	Standard
>	**In**	115	759440.5	0.7				ug/L	755896	Standard
	Sn	118	909.4	2.6				ug/L	404	Standard
	Sb	123	659.5	2.6				ug/L	34	Standard
	Ba	135	309.7	2.3				ug/L	45	Standard
	Ce	140	64.7	9.9				ug/L	52	Standard
>	**Tb**	159	868986.9	0.2				ug/L	861974	Standard
	Ho	165	10.7	28.6				ug/L	9	Standard
	Tl	203	1002.7	3.2				ug/L	5	Standard
	Tl	205	2398.9	3.2				ug/L	15	Standard
	Pb	206	1114.4	1.7				ug/L	297	Standard
	Pb	207	910.0	7.4				ug/L	266	Standard
	Pb	208	4252.9	1.7				ug/L	1205	Standard
	U	238	1608.4	2.8				ug/L	4	Standard
>	**Bi**	209	485171.3	0.6				ug/L	470254	Standard
	Na	23	113.3	24.7				mg/L	98	Standard
	Mg	24	1407.7	5.2				mg/L	171	Standard

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K	39	403.3	2.2	mg/L	367	Standard
Ca	43	54.7	23.8	mg/L	58	Standard
Fe	54	961.9	2.7	mg/L	955	Standard
Fe	57	6314.6	1.7	mg/L	5344	Standard
Sc-1	45	345435.2	1.4	mg/L	340292	Standard
Cl	35	45139.1	1.0	ug/L	43576	Standard
Kr	83	70.4	10.4	ug/L	78	Standard
Br	81	19860.3	1.7	ug/L	19680	Standard
P	31	83521.7	2.9	ug/L	84050	Standard
S	34	895508.3	1.8	ug/L	907587	Standard
Sr	88	394.7	1.8	ug/L	383	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			
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			

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│	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

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: Standard 3

Sample Date/Time: Monday, May 07, 2012 15:29:52
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	19186.5	2.1	**50.0000**	38.499	77.0	ug/L	18451	Standard
	Be	9	202921.2	1.0	**50.0000**	0.203	0.4	ug/L	7	Standard
	Al	27	1055106.0	2.4	**50.0000**	1.366	2.7	ug/L	28447	Standard
>	**Sc**	45	358320.9	0.6				ug/L	340292	Standard
	Ti	47	211742.7	0.7	**100.0000**	1.061	1.1	ug/L	116	Standard
	V	51	967309.8	2.7	**50.0000**	1.432	2.9	ug/L	4654	Standard
	Cr	52	750692.5	2.1	**50.0000**	1.337	2.7	ug/L	14933	Standard
	Cr	53	117147.2	1.4	**50.0000**	0.648	1.3	ug/L	342	Standard
	Mn	55	1361088.1	2.1	**50.0000**	0.653	1.3	ug/L	1267	Standard
	Co	59	988795.0	1.0	**50.0000**	0.165	0.3	ug/L	140	Standard
	Ni	60	209167.0	1.2	**50.0000**	0.364	0.7	ug/L	75	Standard
	Cu	65	183870.9	2.1	**50.0000**	0.830	1.7	ug/L	239	Standard
	Zn	66	79480.3	2.0	**50.0000**	0.759	1.5	ug/L	226	Standard
>	**Ge**	72	300776.9	1.1				ug/L	288220	Standard
	As	75	83284.3	0.9	**50.0000**	0.190	0.4	ug/L	-236	Standard
	Se	82	10460.4	2.0	**50.0000**	0.600	1.2	ug/L	48	Standard
	Se-1	77	5289.3	0.9	**50.0000**	0.738	1.5	ug/L	96	Standard
	Ga	71	278821.5	0.8				mg/L	267913	Standard
	Rb	85	1688.8	2.5				ug/L	31	Standard
>	**Y**	89	312134.3	1.8				ug/L	301679	Standard
	Rh	103	61.3	10.5				ug/L	1	Standard
	Mo	98	587205.5	1.3	**100.0000**	0.851	0.9	ug/L	7	Standard
	Ag	107	699909.1	2.2	**50.0000**	1.963	3.9	ug/L	66	Standard
	Cd	111	268270.9	0.7	**50.0000**	1.173	2.3	mg/L	527	Standard
	Cd	114	667345.8	0.7	**50.0000**	1.187	2.4	ug/L	1273	Standard
>	**In**	115	772598.0	1.7				ug/L	755896	Standard
	Sn	118	449585.5	0.6	**50.0000**	0.655	1.3	ug/L	404	Standard
	Sb	123	629196.0	0.5	**50.0000**	0.982	2.0	ug/L	34	Standard
	Ba	135	270157.6	0.8	**50.0000**	1.240	2.5	ug/L	45	Standard
	Ce	140	994.0	3.0				ug/L	52	Standard
>	**Tb**	159	904820.6	1.5				ug/L	861974	Standard
	Ho	165	29.3	41.1				ug/L	9	Standard
	Tl	203	973746.3	1.3	**50.0000**	0.708	1.4	ug/L	5	Standard
	Tl	205	2348324.3	1.2	**50.0000**	0.618	1.2	ug/L	15	Standard
	Pb	206	773198.8	0.5	**50.0000**	0.607	1.2	ug/L	297	Standard
	Pb	207	644589.2	0.9	**50.0000**	0.080	0.2	ug/L	266	Standard
	Pb	208	3001948.4	1.2	**50.0000**	0.179	0.4	ug/L	1205	Standard
	U	238	1632076.9	1.8	**50.0000**	0.938	1.9	ug/L	4	Standard
>	**Bi**	209	475632.3	1.1				ug/L	470254	Standard
	Na	23	14198.6	0.3	**5.0000**	0.043	0.9	mg/L	98	Standard
	Mg	24	1137179.5	1.9	**5.0000**	0.072	1.4	mg/L	171	Standard

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	K	39	44848.3	1.4	**5.0000**	0.044	0.9	mg/L	367	Standard
	Ca	43	2894.3	2.8	**5.0000**	0.113	2.3	mg/L	58	Standard
	Fe	54	33952.1	0.9	**5.0000**	0.055	1.1	mg/L	955	Standard
	Fe	57	988067.0	1.3	**5.0000**	0.062	1.2	mg/L	5344	Standard
>	**Sc-1**	45	358320.9	0.6				mg/L	340292	Standard
	Cl	35	52636.9	0.7				ug/L	43576	Standard
	Kr	83	85.3	13.9				ug/L	78	Standard
	Br	81	18608.4	2.2				ug/L	19680	Standard
	P	31	97390.7	4.3				ug/L	84050	Standard
	S	34	932495.5	4.0				ug/L	907587	Standard
	Sr	88	9384.2	2.0				ug/L	383	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			
	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

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: Standard 4

Sample Date/Time: Monday, May 07, 2012 15:32:40
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	20077.3	1.2	**146.7668**	44.030	30.0	ug/L	18451	Standard
	Be	9	383101.0	3.4	**99.0840**	3.300	3.3	ug/L	7	Standard
	Al	27	1903947.8	1.1	**97.2245**	3.020	3.1	ug/L	28447	Standard
>	**Sc**	45	344564.5	2.0				ug/L	340292	Standard
	Ti	47	397620.8	3.9	**198.2588**	6.454	3.3	ug/L	116	Standard
	V	51	1909639.5	3.1	**101.7447**	2.049	2.0	ug/L	4654	Standard
	Cr	52	1444077.8	3.6	**100.8453**	2.592	2.6	ug/L	14933	Standard
	Cr	53	221758.7	3.0	**99.5911**	2.264	2.3	ug/L	342	Standard
	Mn	55	2412165.2	2.1	**96.2785**	1.055	1.1	ug/L	1267	Standard
	Co	59	1908946.0	3.0	**100.5058**	1.957	1.9	ug/L	140	Standard
	Ni	60	401170.6	2.4	**100.1871**	1.399	1.4	ug/L	75	Standard
	Cu	65	346329.2	1.8	**99.2998**	0.743	0.7	ug/L	239	Standard
	Zn	66	149341.6	3.3	**99.2365**	2.273	2.3	ug/L	226	Standard
>	**Ge**	72	287396.3	1.1				ug/L	288220	Standard
	As	75	161501.9	0.6	**100.6572**	0.474	0.5	ug/L	-236	Standard
	Se	82	20378.6	1.3	**101.0734**	0.730	0.7	ug/L	48	Standard
	Se-1	77	10302.2	1.8	**101.4623**	2.028	2.0	ug/L	96	Standard
	Ga	71	262474.8	1.1				mg/L	267913	Standard
	Rb	85	12194.9	1.7				ug/L	31	Standard
>	**Y**	89	304948.6	1.5				ug/L	301679	Standard
	Rh	103	112.0	12.5				ug/L	1	Standard
	Mo	98	1173728.8	3.9	**201.5543**	4.797	2.4	ug/L	7	Standard
	Ag	107	1333172.8	4.4	**98.3490**	2.867	2.9	ug/L	66	Standard
	Cd	111	512750.1	3.2	**98.5804**	1.671	1.7	mg/L	527	Standard
	Cd	114	1283753.3	3.1	**98.9039**	1.713	1.7	ug/L	1273	Standard
>	**In**	115	760016.9	1.5				ug/L	755896	Standard
	Sn	118	872001.2	3.6	**99.2961**	2.202	2.2	ug/L	404	Standard
	Sb	123	1232143.0	3.2	**99.7493**	1.785	1.8	ug/L	34	Standard
	Ba	135	529605.0	2.7	**99.8040**	1.360	1.4	ug/L	45	Standard
	Ce	140	406.7	3.7				ug/L	52	Standard
>	**Tb**	159	898632.1	0.3				ug/L	861974	Standard
	Ho	165	26.7	30.3				ug/L	9	Standard
	Tl	203	1925740.6	1.0	**100.1824**	0.759	0.8	ug/L	5	Standard
	Tl	205	4576955.3	0.5	**99.4558**	0.967	1.0	ug/L	15	Standard
	Pb	206	1488699.0	1.6	**98.8511**	1.194	1.2	ug/L	297	Standard
	Pb	207	1241351.8	2.5	**98.8622**	1.876	1.9	ug/L	266	Standard
	Pb	208	5879141.6	1.8	**99.7044**	1.218	1.2	ug/L	1205	Standard
	U	238	3420697.6	2.9	**103.0777**	2.366	2.3	ug/L	4	Standard
>	**Bi**	209	468601.1	1.3				ug/L	470254	Standard
	Na	23	27271.2	1.9	**10.0116**	0.039	0.4	mg/L	98	Standard
	Mg	24	2197682.1	4.1	**10.0262**	0.440	4.4	mg/L	171	Standard

	K	39	85023.9	1.4	**9.9498**	0.158	1.6	mg/L	367	Standard
	Ca	43	5533.0	2.6	**10.0194**	0.389	3.9	mg/L	58	Standard
	Fe	54	64905.0	3.5	**10.0422**	0.330	3.3	mg/L	955	Standard
	Fe	57	1895380.0	3.6	**10.0025**	0.418	4.2	mg/L	5344	Standard
>	**Sc-1**	45	344564.5	2.0				mg/L	340292	Standard
	Cl	35	50438.8	0.8				ug/L	43576	Standard
	Kr	83	79.8	9.2				ug/L	78	Standard
	Br	81	18967.5	2.6				ug/L	19680	Standard
	P	31	95989.5	1.8				ug/L	84050	Standard
	S	34	870183.0	1.9				ug/L	907587	Standard
	Sr	88	22018.0	2.0				ug/L	383	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			
	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			

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│	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

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Monday, May 07, 2012 15:35:30
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	17953.0	0.5	**-37.9286**	20.112	53.0	ug/L	18451	Standard
	Be	9	192419.5	0.6	**48.6962**	0.701	1.4	ug/L	7	Standard
	Al	27	1033819.8	1.5	**51.2359**	0.699	1.4	ug/L	28447	Standard
>	**Sc**	45	352130.0	1.8				ug/L	340292	Standard
	Ti	47	204017.2	1.2	**100.8082**	1.134	1.1	ug/L	116	Standard
	V	51	968863.8	2.8	**51.0446**	1.299	2.5	ug/L	4654	Standard
	Cr	52	740676.2	2.2	**50.7545**	0.865	1.7	ug/L	14933	Standard
	Cr	53	114192.9	2.7	**50.7575**	1.033	2.0	ug/L	342	Standard
	Mn	55	1319249.9	0.4	**52.1453**	0.182	0.3	ug/L	1267	Standard
	Co	59	965141.4	0.9	**50.3691**	0.727	1.4	ug/L	140	Standard
	Ni	60	203084.4	0.8	**50.2608**	0.275	0.5	ug/L	75	Standard
	Cu	65	178896.6	0.8	**50.8151**	0.076	0.1	ug/L	239	Standard
	Zn	66	76915.4	0.8	**50.5746**	0.177	0.4	ug/L	226	Standard
>	**Ge**	72	289970.9	0.7				ug/L	288220	Standard
	As	75	81943.4	0.8	**50.6893**	0.279	0.6	ug/L	-236	Standard
	Se	82	10643.8	1.6	**52.2188**	0.623	1.2	ug/L	48	Standard
	Se-1	77	5207.2	1.6	**50.3321**	1.003	2.0	ug/L	96	Standard
	Ga	71	268260.0	0.7				mg/L	267913	Standard
	Rb	85	1759.4	1.0				ug/L	31	Standard
>	**Y**	89	303650.8	1.1				ug/L	301679	Standard
	Rh	103	60.0	12.0				ug/L	1	Standard
	Mo	98	581671.5	2.3	**100.3293**	2.248	2.2	ug/L	7	Standard
	Ag	107	686619.7	2.1	**50.8753**	0.886	1.7	ug/L	66	Standard
	Cd	111	259282.8	0.4	**50.0194**	0.388	0.8	mg/L	527	Standard
	Cd	114	647354.4	0.3	**50.0423**	0.250	0.5	ug/L	1273	Standard
>	**In**	115	756831.1	0.7				ug/L	755896	Standard
	Sn	118	447282.2	0.6	**51.1331**	0.480	0.9	ug/L	404	Standard
	Sb	123	623300.4	0.2	**50.6806**	0.290	0.6	ug/L	34	Standard
	Ba	135	269768.9	1.1	**51.0565**	0.758	1.5	ug/L	45	Standard
	Ce	140	1084.0	4.8				ug/L	52	Standard
>	**Tb**	159	895723.3	0.8				ug/L	861974	Standard
	Ho	165	20.7	5.6				ug/L	9	Standard
	Tl	203	973269.0	1.1	**49.1478**	1.338	2.7	ug/L	5	Standard
	Tl	205	2370012.3	1.0	**49.9857**	1.217	2.4	ug/L	15	Standard
	Pb	206	764599.9	1.8	**49.2751**	1.661	3.4	ug/L	297	Standard
	Pb	207	637886.7	1.2	**49.3064**	1.390	2.8	ug/L	266	Standard
	Pb	208	2982139.9	1.3	**49.0851**	1.449	3.0	ug/L	1205	Standard
	U	238	1642659.2	1.2	**48.0547**	1.347	2.8	ug/L	4	Standard
>	**Bi**	209	482883.2	1.7				ug/L	470254	Standard
	Na	23	13589.4	3.2	**4.8632**	0.150	3.1	mg/L	98	Standard
	Mg	24	1110986.1	1.2	**4.9584**	0.064	1.3	mg/L	171	Standard

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K	39	43705.0	1.4	**4.9839**	0.111	2.2	mg/L	367	Standard
Ca	43	2862.9	2.9	**5.0269**	0.238	4.7	mg/L	58	Standard
Fe	54	32913.8	1.7	**4.9100**	0.098	2.0	mg/L	955	Standard
Fe	57	956388.7	0.8	**4.9238**	0.071	1.4	mg/L	5344	Standard
Sc-1	45	352130.0	1.8				mg/L	340292	Standard
Cl	35	49884.3	0.9				ug/L	43576	Standard
Kr	83	81.1	14.4				ug/L	78	Standard
Br	81	19284.3	3.2				ug/L	19680	Standard
P	31	93459.4	0.7				ug/L	84050	Standard
S	34	853279.3	1.3				ug/L	907587	Standard
Sr	88	974.7	0.5				ug/L	383	Standard

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
Li	7			
Be	9	97.392		
Al	27	102.472		
Sc	45			
Ti	47	100.808		
V	51	102.089		
Cr	52	101.509		
Cr	53	101.515		
Mn	55	104.291		
Co	59	100.738		
Ni	60	100.522		
Cu	65	101.630		
Zn	66	101.149		
Ge	72		100.607	
As	75	101.379		
Se	82	104.438		
Se-1	77	100.664		
Ga	71			
Rb	85			
Y	89		100.654	
Rh	103			
Mo	98	100.329		
Ag	107	101.751		
Cd	111	100.039		
Cd	114			
In	115		100.124	
Sn	118	102.266		
Sb	123	101.361		
Ba	135	102.113		
Ce	140			
Tb	159		103.915	
Ho	165			
Tl	203	98.296		
Tl	205			
Pb	206	98.550		

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	Pb	207	98.613	
	Pb	208	98.170	
	U	238	96.109	
>	Bi	209		102.686
	Na	23	97.264	
	Mg	24	99.168	
	K	39	99.678	
	Ca	43	100.538	
	Fe	54	98.201	
	Fe	57	98.476	
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 1
Report Date/Time: Monday, May 07, 2012 15:37:58
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Method 6020 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Monday, May 07, 2012 15:38:19
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	17843.2	1.5	**28.7943**	12.578	43.7	ug/L	18451	Standard
	Be	9	14.7	15.7	**-0.0026**	0.001	21.3	ug/L	7	Standard
	Al	27	13440.0	1.7	**-0.1472**	0.026	17.8	ug/L	28447	Standard
>	**Sc**	45	332738.1	1.9				ug/L	340292	Standard
	Ti	47	118.7	15.9	**0.0072**	0.010	134.9	ug/L	116	Standard
	V	51	4133.9	1.8	**-0.0181**	0.003	15.2	ug/L	4654	Standard
	Cr	52	13100.7	1.5	**-0.0905**	0.005	5.2	ug/L	14933	Standard
	Cr	53	262.7	12.7	**-0.0225**	0.014	60.5	ug/L	342	Standard
	Mn	55	1544.1	8.1	**-0.0410**	0.004	10.0	ug/L	1267	Standard
	Co	59	109.0	9.0	**-0.0016**	0.001	39.3	ug/L	140	Standard
	Ni	60	135.0	17.2	**0.0116**	0.005	46.9	ug/L	75	Standard
	Cu	65	1096.7	5.2	**0.2754**	0.011	4.1	ug/L	239	Standard
	Zn	66	1228.4	3.8	**0.6680**	0.027	4.0	ug/L	226	Standard
>	**Ge**	72	276334.0	1.8				ug/L	288220	Standard
	As	75	-246.1	21.4	**-0.0137**	0.034	250.4	ug/L	-236	Standard
	Se	82	36.2	29.6	**-0.0252**	0.053	210.8	ug/L	48	Standard
	Se-1	77	98.0	6.2	**0.0195**	0.082	420.3	ug/L	96	Standard
	Ga	71	256841.1	1.8				mg/L	267913	Standard
	Rb	85	31.3	3.7				ug/L	31	Standard
>	**Y**	89	288290.8	1.9				ug/L	301679	Standard
	Rh	103	2.0	173.2				ug/L	1	Standard
	Mo	98	136.2	37.7	**0.0228**	0.009	41.1	ug/L	7	Standard
	Ag	107	126.3	17.0	**0.0026**	0.002	71.9	ug/L	66	Standard
	Cd	111	454.8	5.9	**-0.0084**	0.007	82.9	mg/L	527	Standard
	Cd	114	1203.2	2.3	**-0.0039**	0.002	55.4	ug/L	1273	Standard
>	**In**	115	717668.2	1.7				ug/L	755896	Standard
	Sn	118	1101.4	4.0	**0.0793**	0.008	9.7	ug/L	404	Standard
	Sb	123	406.2	34.8	**0.0314**	0.012	38.5	ug/L	34	Standard
	Ba	135	65.7	28.8	**0.0047**	0.004	84.3	ug/L	45	Standard
	Ce	140	44.0	12.0				ug/L	52	Standard
>	**Tb**	159	848972.1	1.2				ug/L	861974	Standard
	Ho	165	11.3	10.2				ug/L	9	Standard
	Tl	203	63.0	39.7	**0.0029**	0.001	45.1	ug/L	5	Standard
	Tl	205	148.0	26.1	**0.0028**	0.001	29.6	ug/L	15	Standard
	Pb	206	445.0	3.6	**0.0078**	0.001	8.7	ug/L	297	Standard
	Pb	207	372.3	3.3	**0.0094**	0.001	8.7	ug/L	266	Standard
	Pb	208	1742.4	3.5	**0.0096**	0.001	7.3	ug/L	1205	Standard
	U	238	83.0	10.7	**0.0057**	0.000	5.1	ug/L	4	Standard
>	**Bi**	209	473068.4	1.5				ug/L	470254	Standard
	Na	23	100.7	10.2	**0.0017**	0.004	220.0	mg/L	98	Standard
	Mg	24	135.7	6.7	**-0.0008**	0.000	4.8	mg/L	171	Standard

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K	39	354.0	6.4	**0.0008**	0.004	425.9	mg/L	367	Standard
Ca	43	52.7	21.6	**0.0049**	0.022	447.0	mg/L	58	Standard
Fe	54	857.1	4.2	**-0.0062**	0.007	105.6	mg/L	955	Standard
Fe	57	5014.8	4.2	**-0.0008**	0.001	173.2	mg/L	5344	Standard
Sc-1	45	332738.1	1.9				mg/L	340292	Standard
Cl	35	47537.8	1.5				ug/L	43576	Standard
Kr	83	74.4	9.6				ug/L	78	Standard
Br	81	18763.0	3.3				ug/L	19680	Standard
P	31	77635.5	2.4				ug/L	84050	Standard
S	34	820182.6	1.4				ug/L	907587	Standard
Sr	88	330.0	7.9				ug/L	383	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		95.876	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		95.562	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		94.943	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		98.492	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	100.598
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Monday, May 07, 2012 15:41:09
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	18018.4	1.6	**-2.8931**	43.742	1511.9	ug/L	18451	Standard
	Be	9	10.0	34.6	**-0.0039**	0.001	21.6	ug/L	7	Standard
	Al	27	18878.4	4.0	**0.1097**	0.053	48.6	ug/L	28447	Standard
>	**Sc**	45	344142.2	1.7				ug/L	340292	Standard
	Ti	47	118.7	27.2	**0.0060**	0.017	287.6	ug/L	116	Standard
	V	51	11189.6	3.1	**0.3609**	0.029	8.1	ug/L	4654	Standard
	Cr	52	24359.6	2.2	**0.6983**	0.070	10.1	ug/L	14933	Standard
	Cr	53	1985.5	6.0	**0.7644**	0.070	9.2	ug/L	342	Standard
	Mn	55	13623.8	5.5	**0.4494**	0.040	8.8	ug/L	1267	Standard
	Co	59	7333.8	8.7	**0.3859**	0.041	10.6	ug/L	140	Standard
	Ni	60	6117.6	6.9	**1.5335**	0.134	8.7	ug/L	75	Standard
	Cu	65	2818.3	6.0	**0.7719**	0.063	8.2	ug/L	239	Standard
	Zn	66	8928.6	5.3	**5.8723**	0.428	7.3	ug/L	226	Standard
>	**Ge**	72	282415.6	1.8				ug/L	288220	Standard
	As	75	388.8	5.2	**0.3921**	0.017	4.3	ug/L	-236	Standard
	Se	82	115.4	5.4	**0.3720**	0.036	9.7	ug/L	48	Standard
	Se-1	77	138.3	2.9	**0.4057**	0.066	16.2	ug/L	96	Standard
	Ga	71	265243.2	2.6				mg/L	267913	Standard
	Rb	85	26.0	33.5				ug/L	31	Standard
>	**Y**	89	297268.5	1.8				ug/L	301679	Standard
	Rh	103	1.3	173.2				ug/L	1	Standard
	Mo	98	46.9	16.9	**0.0064**	0.001	20.5	ug/L	7	Standard
	Ag	107	5459.0	3.6	**0.4111**	0.007	1.8	ug/L	66	Standard
	Cd	111	1717.0	3.2	**0.2422**	0.006	2.4	mg/L	527	Standard
	Cd	114	4093.4	1.7	**0.2258**	0.001	0.5	ug/L	1273	Standard
>	**In**	115	731578.3	1.9				ug/L	755896	Standard
	Sn	118	467.0	0.8	**0.0016**	0.001	45.3	ug/L	404	Standard
	Sb	123	4778.6	1.1	**0.3986**	0.003	0.8	ug/L	34	Standard
	Ba	135	3797.5	2.4	**0.7352**	0.007	1.0	ug/L	45	Standard
	Ce	140	61.3	18.5				ug/L	52	Standard
>	**Tb**	159	849426.6	4.2				ug/L	861974	Standard
	Ho	165	9.3	89.2				ug/L	9	Standard
	Tl	203	1509.1	2.6	**0.0781**	0.001	0.9	ug/L	5	Standard
	Tl	205	3457.7	2.5	**0.0748**	0.000	0.3	ug/L	15	Standard
	Pb	206	3228.7	4.7	**0.1928**	0.005	2.8	ug/L	297	Standard
	Pb	207	2725.9	2.3	**0.1971**	0.003	1.7	ug/L	266	Standard
	Pb	208	12663.4	3.6	**0.1950**	0.003	1.5	ug/L	1205	Standard
	U	238	12652.0	3.2	**0.3843**	0.004	1.1	ug/L	4	Standard
>	**Bi**	209	468737.8	2.2				ug/L	470254	Standard
	Na	23	96.7	19.6	**-0.0009**	0.008	799.8	mg/L	98	Standard
	Mg	24	190.0	8.3	**-0.0005**	0.000	14.0	mg/L	171	Standard

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K	39	398.7	5.4	**0.0047**	0.003	70.3	mg/L	367	Standard
Ca	43	43.3	14.8	**-0.0156**	0.011	72.7	mg/L	58	Standard
Fe	54	978.6	3.1	**0.0083**	0.007	81.5	mg/L	955	Standard
Fe	57	5036.2	2.4	**-0.0016**	0.001	61.6	mg/L	5344	Standard
Sc-1	45	344142.2	1.7				mg/L	340292	Standard
Cl	35	44819.9	1.2				ug/L	43576	Standard
Kr	83	74.7	17.0				ug/L	78	Standard
Br	81	19414.8	5.6				ug/L	19680	Standard
P	31	87351.5	1.8				ug/L	84050	Standard
S	34	825014.9	1.6				ug/L	907587	Standard
Sr	88	316.0	9.2				ug/L	383	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	90.215		
Cr	52	87.283		
Cr	53			
Mn	55	89.876		
Co	59	96.479		
Ni	60	95.841		
Cu	65	96.484		
Zn	66	93.957		
Ge	72		97.986	
As	75	98.037		
Se	82	92.992		
Se-1	77	101.421		
Ga	71			
Rb	85			
Y	89		98.538	
Rh	103			
Mo	98			
Ag	107	102.780		
Cd	111	100.906		
Cd	114			
In	115		96.783	
Sn	118			
Sb	123	99.643		
Ba	135	98.021		
Ce	140			
Tb	159		98.544	
Ho	165			
Tl	203	97.628		
Tl	205			
Pb	206			

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│	Pb	207		
│	Pb	208	97.512	
│	U	238	96.073	
└>	Bi	209		99.678
┌	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		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 3
Report Date/Time: Monday, May 07, 2012 15:43:37
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Method 6020 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Monday, May 07, 2012 15:43:57
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	20132.0	2.4	**64.6385**	3.403	5.3	ug/L	18451	Standard
	Be	9	10.0	60.0	**-0.0041**	0.001	36.0	ug/L	7	Standard
	Al	27	93277931.5	0.7	**4525.8890**	73.802	1.6	ug/L	28447	Standard
>	**Sc**	45	365727.4	2.2				ug/L	340292	Standard
	Ti	47	241078.5	1.8	**116.5292**	1.249	1.1	ug/L	116	Standard
	V	51	5896.0	5.0	**0.0579**	0.022	38.6	ug/L	4654	Standard
	Cr	52	17559.8	1.1	**0.1499**	0.040	26.6	ug/L	14933	Standard
	Cr	53	3168.3	3.3	**1.2360**	0.014	1.1	ug/L	342	Standard
	Mn	55	3612.4	1.7	**0.0349**	0.001	3.9	ug/L	1267	Standard
	Co	59	585.0	4.4	**0.0223**	0.001	2.7	ug/L	140	Standard
	Ni	60	2041.5	6.8	**0.4706**	0.023	4.8	ug/L	75	Standard
	Cu	65	854.7	8.5	**0.1858**	0.015	7.8	ug/L	239	Standard
	Zn	66	1241.4	4.0	**0.6187**	0.028	4.5	ug/L	226	Standard
>	**Ge**	72	296476.3	2.4				ug/L	288220	Standard
	As	75	-258.1	14.8	**-0.0104**	0.026	252.7	ug/L	-236	Standard
	Se	82	59.2	19.2	**0.0733**	0.054	73.4	ug/L	48	Standard
	Se-1	77	277.7	12.0	**1.6865**	0.366	21.7	ug/L	96	Standard
	Ga	71	268362.3	3.5				mg/L	267913	Standard
	Rb	85	6255.3	4.2				ug/L	31	Standard
>	**Y**	89	310132.2	5.5				ug/L	301679	Standard
	Rh	103	7.3	63.0				ug/L	1	Standard
	Mo	98	610821.0	2.7	**103.6746**	1.576	1.5	ug/L	7	Standard
	Ag	107	227.7	11.2	**0.0093**	0.002	17.1	ug/L	66	Standard
	Cd	111	913.2	9.0	**0.0727**	0.017	23.2	mg/L	527	Standard
	Cd	114	4278.8	1.2	**0.2240**	0.007	3.0	ug/L	1273	Standard
>	**In**	115	769035.6	1.5				ug/L	755896	Standard
	Sn	118	837.0	1.2	**0.0406**	0.002	4.4	ug/L	404	Standard
	Sb	123	641.2	4.8	**0.0478**	0.002	3.6	ug/L	34	Standard
	Ba	135	236.7	9.5	**0.0357**	0.005	13.1	ug/L	45	Standard
	Ce	140	2359.5	1.4				ug/L	52	Standard
>	**Tb**	159	939004.9	1.0				ug/L	861974	Standard
	Ho	165	16.7	18.3				ug/L	9	Standard
	Tl	203	427.3	1.9	**0.0217**	0.000	1.9	ug/L	5	Standard
	Tl	205	1010.7	3.1	**0.0215**	0.001	3.7	ug/L	15	Standard
	Pb	206	807.4	5.6	**0.0318**	0.003	8.1	ug/L	297	Standard
	Pb	207	695.3	1.3	**0.0350**	0.001	3.3	ug/L	266	Standard
	Pb	208	3221.8	1.8	**0.0346**	0.001	1.9	ug/L	1205	Standard
	U	238	42.3	11.7	**0.0045**	0.000	3.1	ug/L	4	Standard
>	**Bi**	209	471845.4	0.8				ug/L	470254	Standard
	Na	23	33494.3	1.2	**11.5928**	0.194	1.7	mg/L	98	Standard
	Mg	24	1141064.1	0.7	**4.9046**	0.126	2.6	mg/L	171	Standard

	K	39	44025.9	1.6	**4.8341**	0.174	3.6	mg/L	367	Standard
	Ca	43	8565.1	1.3	**14.6550**	0.374	2.5	mg/L	58	Standard
	Fe	54	81308.1	1.6	**11.8834**	0.411	3.5	mg/L	955	Standard
	Fe	57	2210661.1	1.0	**10.9944**	0.244	2.2	mg/L	5344	Standard
>	**Sc-1**	45	365727.4	2.2				mg/L	340292	Standard
	Cl	35	9325566.8	2.1				ug/L	43576	Standard
	Kr	83	82.0	7.3				ug/L	78	Standard
	Br	81	20462.8	3.8				ug/L	19680	Standard
	P	31	7019663.6	1.9				ug/L	84050	Standard
	S	34	1768507.3	3.0				ug/L	907587	Standard
	Sr	88	1863.4	2.9				ug/L	383	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	90.518		
>	Sc	45			
	Ti	47	116.529		
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		102.865	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		102.802	
	Rh	103			
	Mo	98	103.675		
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		101.738	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		108.937	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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Pb	207		
Pb	208		
U	238		
Bi	209		100.338
Na	23	92.743	
Mg	24	98.091	
K	39	96.681	
Ca	43	97.700	
Fe	54	95.067	
Fe	57	87.955	
Sc-1	45		
Cl	35		
Kr	83		
Br	81		
P	31		
S	34		
Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	Se-1	77	

Method 6020 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Monday, May 07, 2012 15:51:33
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	20689.1	0.7	**71.3631**	29.538	41.4	ug/L	18451	Standard
	Be	9	425859.0	1.8	**101.4258**	0.610	0.6	ug/L	7	Standard
	Al	27	85919072.0	4.0	**4073.2354**	107.376	2.6	ug/L	28447	Standard
>	**Sc**	45	374123.5	1.4				ug/L	340292	Standard
	Ti	47	223586.6	3.9	**105.1515**	3.460	3.3	ug/L	116	Standard
	V	51	1904555.5	1.4	**95.7420**	1.900	2.0	ug/L	4654	Standard
	Cr	52	1513333.2	2.1	**99.7076**	1.672	1.7	ug/L	14933	Standard
	Cr	53	234843.8	3.1	**99.5053**	2.629	2.6	ug/L	342	Standard
	Mn	55	2566379.4	3.0	**96.6400**	2.367	2.4	ug/L	1267	Standard
	Co	59	1938068.3	2.6	**96.2738**	1.933	2.0	ug/L	140	Standard
	Ni	60	416951.0	4.6	**98.2352**	4.061	4.1	ug/L	75	Standard
	Cu	65	361504.1	3.3	**97.7846**	2.717	2.8	ug/L	239	Standard
	Zn	66	159355.1	2.9	**99.9126**	2.491	2.5	ug/L	226	Standard
>	**Ge**	72	304622.5	0.6				ug/L	288220	Standard
	As	75	169027.3	2.6	**99.3813**	1.999	2.0	ug/L	-236	Standard
	Se	82	21940.2	2.6	**102.6618**	2.087	2.0	ug/L	48	Standard
	Se-1	77	10790.5	2.2	**100.2377**	1.631	1.6	ug/L	96	Standard
	Ga	71	282231.2	1.2				mg/L	267913	Standard
	Rb	85	6057.9	2.9				ug/L	31	Standard
>	**Y**	89	329943.2	0.7				ug/L	301679	Standard
	Rh	103	136.7	11.2				ug/L	1	Standard
	Mo	98	574196.8	4.6	**93.4805**	5.064	5.4	ug/L	7	Standard
	Ag	107	1260936.7	3.5	**88.1845**	3.627	4.1	ug/L	66	Standard
	Cd	111	536071.5	2.0	**97.6799**	2.033	2.1	mg/L	527	Standard
	Cd	114	1318262.9	2.7	**96.2478**	2.265	2.4	ug/L	1273	Standard
>	**In**	115	802085.0	1.2				ug/L	755896	Standard
	Sn	118	1008.7	5.7	**0.0552**	0.005	9.0	ug/L	404	Standard
	Sb	123	1301212.7	0.9	**99.8381**	0.966	1.0	ug/L	34	Standard
	Ba	135	552259.4	2.1	**98.6371**	2.474	2.5	ug/L	45	Standard
	Ce	140	2103.5	3.8				ug/L	52	Standard
>	**Tb**	159	959439.9	0.7				ug/L	861974	Standard
	Ho	165	24.7	20.4				ug/L	9	Standard
	Tl	203	1935418.0	1.5	**95.9711**	1.613	1.7	ug/L	5	Standard
	Tl	205	4635656.4	1.2	**96.0104**	1.316	1.4	ug/L	15	Standard
	Pb	206	1508986.0	2.3	**95.5080**	2.387	2.5	ug/L	297	Standard
	Pb	207	1311111.9	3.0	**99.5372**	3.156	3.2	ug/L	266	Standard
	Pb	208	6107910.1	2.9	**98.7394**	3.026	3.1	ug/L	1205	Standard
	U	238	3433379.6	2.8	**98.6261**	2.904	2.9	ug/L	4	Standard
>	**Bi**	209	491613.6	0.2				ug/L	470254	Standard
	Na	23	30942.2	1.4	**10.4640**	0.142	1.4	mg/L	98	Standard
	Mg	24	1029425.5	2.7	**4.3232**	0.064	1.5	mg/L	171	Standard

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	K	39	40001.4	1.7	**4.2866**	0.023	0.5	mg/L	367	Standard
	Ca	43	7764.0	1.5	**12.9711**	0.047	0.4	mg/L	58	Standard
	Fe	54	73000.3	2.4	**10.4060**	0.118	1.1	mg/L	955	Standard
	Fe	57	1969440.7	3.2	**9.5669**	0.185	1.9	mg/L	5344	Standard
>	**Sc-1**	45	374123.5	1.4				mg/L	340292	Standard
	Cl	35	8608862.6	1.7				ug/L	43576	Standard
	Kr	83	106.7	7.6				ug/L	78	Standard
	Br	81	21328.0	2.2				ug/L	19680	Standard
	P	31	6500211.3	2.4				ug/L	84050	Standard
	S	34	1723576.0	3.7				ug/L	907587	Standard
	Sr	88	2260.8	3.1				ug/L	383	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	81.465		
>	Sc	45			
	Ti	47	105.152		
	V	51	95.742		
	Cr	52	99.708		
	Cr	53			
	Mn	55	96.640		
	Co	59	96.274		
	Ni	60	98.235		
	Cu	65	97.785		
	Zn	66	99.913		
>	Ge	72		105.691	
	As	75	99.381		
	Se	82	102.662		
	Se-1	77	100.238		
	Ga	71			
	Rb	85			
>	Y	89		109.369	
	Rh	103			
	Mo	98	93.481		
	Ag	107	88.185		
	Cd	111	97.680		
	Cd	114			
>	In	115		106.110	
	Sn	118			
	Sb	123	99.838		
	Ba	135	98.637		
	Ce	140			
>	Tb	159		111.307	
	Ho	165			
	Tl	203	95.971		
	Tl	205			
	Pb	206	95.508		

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	Pb	207	99.537	
	Pb	208	98.739	
	U	238	98.626	
>	Bi	209		104.542
	Na	23	83.712	
	Mg	24	86.463	
	K	39	85.732	
	Ca	43	86.474	
	Fe	54	83.248	
	Fe	57	76.535	
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	Fe	57	

Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Monday, May 07, 2012 15:54:47
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	19181.8	3.7	**-11.8140**	21.612	182.9	ug/L	18451	Standard
	Be	9	209191.6	3.8	**50.5508**	0.746	1.5	ug/L	7	Standard
	Al	27	1034687.8	2.6	**48.9474**	1.190	2.4	ug/L	28447	Standard
>	**Sc**	45	368720.7	3.5				ug/L	340292	Standard
	Ti	47	210283.1	2.5	**101.3425**	1.114	1.1	ug/L	116	Standard
	V	51	1011981.4	2.2	**52.0098**	0.148	0.3	ug/L	4654	Standard
	Cr	52	784943.4	4.3	**52.4862**	1.216	2.3	ug/L	14933	Standard
	Cr	53	117048.6	2.9	**50.7454**	0.516	1.0	ug/L	342	Standard
	Mn	55	1368808.3	3.1	**52.7667**	0.730	1.4	ug/L	1267	Standard
	Co	59	994032.1	2.8	**50.5940**	0.694	1.4	ug/L	140	Standard
	Ni	60	209393.6	2.6	**50.5440**	0.503	1.0	ug/L	75	Standard
	Cu	65	182172.0	3.8	**50.4622**	1.144	2.3	ug/L	239	Standard
	Zn	66	78625.2	1.8	**50.4284**	0.314	0.6	ug/L	226	Standard
>	**Ge**	72	297285.9	2.0				ug/L	288220	Standard
	As	75	84398.8	3.5	**50.9126**	0.752	1.5	ug/L	-236	Standard
	Se	82	11111.9	4.7	**53.1600**	1.458	2.7	ug/L	48	Standard
	Se-1	77	5302.6	1.6	**49.9860**	0.259	0.5	ug/L	96	Standard
	Ga	71	274859.3	2.8				mg/L	267913	Standard
	Rb	85	1765.4	3.2				ug/L	31	Standard
>	**Y**	89	326632.4	3.8				ug/L	301679	Standard
	Rh	103	58.0	15.8				ug/L	1	Standard
	Mo	98	628286.4	3.4	**101.6953**	2.159	2.1	ug/L	7	Standard
	Ag	107	776915.2	4.5	**54.0171**	1.759	3.3	ug/L	66	Standard
	Cd	111	275717.5	1.6	**49.9202**	0.291	0.6	mg/L	527	Standard
	Cd	114	683952.3	0.7	**49.6244**	0.295	0.6	ug/L	1273	Standard
>	**In**	115	806360.7	1.3				ug/L	755896	Standard
	Sn	118	465643.4	1.3	**49.9595**	0.135	0.3	ug/L	404	Standard
	Sb	123	656482.4	2.0	**50.0957**	0.348	0.7	ug/L	34	Standard
	Ba	135	280857.9	2.0	**49.8852**	0.537	1.1	ug/L	45	Standard
	Ce	140	1085.4	0.9				ug/L	52	Standard
>	**Tb**	159	946986.4	2.7				ug/L	861974	Standard
	Ho	165	26.0	35.3				ug/L	9	Standard
	Tl	203	993926.4	2.4	**49.4684**	0.658	1.3	ug/L	5	Standard
	Tl	205	2445328.4	2.2	**50.8348**	0.566	1.1	ug/L	15	Standard
	Pb	206	782255.7	2.5	**49.6837**	0.739	1.5	ug/L	297	Standard
	Pb	207	655529.0	2.4	**49.9405**	0.686	1.4	ug/L	266	Standard
	Pb	208	3061840.6	2.4	**49.6703**	0.667	1.3	ug/L	1205	Standard
	U	238	1716714.5	3.7	**49.4952**	1.385	2.8	ug/L	4	Standard
>	**Bi**	209	489739.2	1.1				ug/L	470254	Standard
	Na	23	13658.2	1.6	**4.6693**	0.161	3.5	mg/L	98	Standard
	Mg	24	1140843.7	2.4	**4.8646**	0.153	3.1	mg/L	171	Standard

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	K	39	43627.4	1.0	**4.7510**	0.118	2.5	mg/L	367	Standard
	Ca	43	2901.6	1.8	**4.8651**	0.238	4.9	mg/L	58	Standard
	Fe	54	33155.7	1.6	**4.7195**	0.091	1.9	mg/L	955	Standard
	Fe	57	959807.2	2.2	**4.7193**	0.122	2.6	mg/L	5344	Standard
>	**Sc-1**	45	368720.7	3.5				mg/L	340292	Standard
	Cl	35	118689.0	39.0				ug/L	43576	Standard
	Kr	83	82.9	5.2				ug/L	78	Standard
	Br	81	20586.0	3.9				ug/L	19680	Standard
	P	31	91048.5	2.7				ug/L	84050	Standard
	S	34	842892.2	3.7				ug/L	907587	Standard
	Sr	88	4582.0	5.7				ug/L	383	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	97.895		
>	Sc	45			
	Ti	47	101.343		
	V	51	104.020		
	Cr	52	104.972		
	Cr	53			
	Mn	55	105.533		
	Co	59	101.188		
	Ni	60	101.088		
	Cu	65	100.924		
	Zn	66	100.857		
>	Ge	72		103.145	
	As	75	101.825		
	Se	82	106.320		
	Se-1	77	99.972		
	Ga	71			
	Rb	85			
>	Y	89		108.271	
	Rh	103			
	Mo	98	101.695		
	Ag	107	108.034		
	Cd	111	99.840		
	Cd	114			
>	In	115		106.676	
	Sn	118	99.919		
	Sb	123	100.191		
	Ba	135	99.770		
	Ce	140			
>	Tb	159		109.863	
	Ho	165			
	Tl	203	98.937		
	Tl	205			
	Pb	206	99.367		

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Pb	207	99.881		
Pb	208	99.341		
U	238	98.990		
Bi	209		104.144	
Na	23	93.387		
Mg	24	97.292		
K	39	95.020		
Ca	43	97.302		
Fe	54	94.390		
Fe	57	94.386		
Sc-1	45			
Cl	35			
Kr	83			
Br	81			
P	31			
S	34			
Sr	88			

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, May 07, 2012 15:58:03
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	18840.7	1.4	**15.5768**	44.243	284.0	ug/L	18451	Standard
	Be	9	32.7	100.2	**0.0016**	0.008	494.8	ug/L	7	Standard
	Al	27	31568.2	57.9	**0.7086**	0.894	126.2	ug/L	28447	Standard
>	**Sc**	45	354918.1	1.9				ug/L	340292	Standard
	Ti	47	126.0	22.2	**0.0084**	0.014	167.6	ug/L	116	Standard
	V	51	5140.3	22.6	**0.0261**	0.060	231.0	ug/L	4654	Standard
	Cr	52	14688.8	4.9	**-0.0176**	0.045	257.0	ug/L	14933	Standard
	Cr	53	354.7	7.1	**0.0139**	0.010	71.9	ug/L	342	Standard
	Mn	55	1786.1	8.7	**-0.0339**	0.006	16.6	ug/L	1267	Standard
	Co	59	145.0	27.8	**0.0000**	0.002	9722.3	ug/L	140	Standard
	Ni	60	122.0	2.2	**0.0070**	0.001	8.0	ug/L	75	Standard
	Cu	65	752.7	4.4	**0.1638**	0.008	4.8	ug/L	239	Standard
	Zn	66	860.4	2.4	**0.3891**	0.012	3.1	ug/L	226	Standard
>	**Ge**	72	287966.2	0.8				ug/L	288220	Standard
	As	75	-253.1	6.9	**-0.0115**	0.011	94.7	ug/L	-236	Standard
	Se	82	37.7	28.2	**-0.0250**	0.052	208.1	ug/L	48	Standard
	Se-1	77	102.3	13.1	**0.0199**	0.126	630.7	ug/L	96	Standard
	Ga	71	268608.8	2.2				mg/L	267913	Standard
	Rb	85	37.3	27.5				ug/L	31	Standard
>	**Y**	89	303387.0	1.3				ug/L	301679	Standard
	Rh	103	3.3	69.3				ug/L	1	Standard
	Mo	98	103.5	46.5	**0.0157**	0.008	51.0	ug/L	7	Standard
	Ag	107	150.7	41.1	**0.0038**	0.004	117.2	ug/L	66	Standard
	Cd	111	487.5	8.2	**-0.0075**	0.006	78.9	mg/L	527	Standard
	Cd	114	1215.9	9.0	**-0.0085**	0.008	94.3	ug/L	1273	Standard
>	**In**	115	761002.0	2.1				ug/L	755896	Standard
	Sn	118	876.4	3.9	**0.0461**	0.006	12.3	ug/L	404	Standard
	Sb	123	490.1	20.2	**0.0361**	0.007	20.5	ug/L	34	Standard
	Ba	135	51.0	9.0	**0.0012**	0.001	57.6	ug/L	45	Standard
	Ce	140	50.7	21.7				ug/L	52	Standard
>	**Tb**	159	891282.8	0.5				ug/L	861974	Standard
	Ho	165	9.3	24.7				ug/L	9	Standard
	Tl	203	74.3	52.7	**0.0034**	0.002	58.1	ug/L	5	Standard
	Tl	205	610.7	133.3	**0.0125**	0.017	136.7	ug/L	15	Standard
	Pb	206	791.4	78.9	**0.0295**	0.040	135.6	ug/L	297	Standard
	Pb	207	744.0	91.6	**0.0375**	0.052	139.9	ug/L	266	Standard
	Pb	208	3575.3	93.3	**0.0392**	0.055	139.6	ug/L	1205	Standard
	U	238	547.0	156.0	**0.0192**	0.025	129.9	ug/L	4	Standard
>	**Bi**	209	481774.3	0.8				ug/L	470254	Standard
	Na	23	108.0	14.7	**0.0020**	0.006	307.5	mg/L	98	Standard
	Mg	24	404.7	104.5	**0.0004**	0.002	489.6	mg/L	171	Standard

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K	39	392.7	9.1	**0.0025**	0.004	148.3	mg/L	367	Standard
Ca	43	41.3	12.2	**-0.0214**	0.010	47.3	mg/L	58	Standard
Fe	54	927.9	6.9	**-0.0041**	0.012	301.3	mg/L	955	Standard
Fe	57	5278.3	10.5	**-0.0012**	0.003	222.6	mg/L	5344	Standard
Sc-1	45	354918.1	1.9				mg/L	340292	Standard
Cl	35	67472.8	4.7				ug/L	43576	Standard
Kr	83	79.3	11.7				ug/L	78	Standard
Br	81	20295.3	5.0				ug/L	19680	Standard
P	31	83854.4	0.1				ug/L	84050	Standard
S	34	841241.0	1.2				ug/L	907587	Standard
Sr	88	366.7	6.9				ug/L	383	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		99.912	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		100.566	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		100.675	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		103.400	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: QC Std 7
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│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	102.450
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: PBW 40 WG396746-02
Sample Date/Time: Monday, May 07, 2012 16:01:09
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	18432.5	2.5	**14.6494**	18.234	124.5	ug/L	18451	Standard
	Be	9	15.0	11.5	**-0.0026**	0.001	18.9	ug/L	7	Standard
	Al	27	39353.1	3.7	**1.1475**	0.104	9.0	ug/L	28447	Standard
>	**Sc**	45	347439.0	3.8				ug/L	340292	Standard
	Ti	47	107.3	19.7	**-0.0004**	0.010	2418.1	ug/L	116	Standard
	V	51	4519.2	2.5	**-0.0039**	0.006	148.8	ug/L	4654	Standard
	Cr	52	14256.0	1.9	**-0.0359**	0.020	54.8	ug/L	14933	Standard
	Cr	53	327.3	3.4	**0.0034**	0.002	59.9	ug/L	342	Standard
	Mn	55	2829.6	4.3	**0.0091**	0.006	62.8	ug/L	1267	Standard
	Co	59	109.3	19.0	**-0.0018**	0.001	59.0	ug/L	140	Standard
	Ni	60	239.7	14.4	**0.0370**	0.008	21.9	ug/L	75	Standard
	Cu	65	1395.1	7.3	**0.3523**	0.023	6.6	ug/L	239	Standard
	Zn	66	4609.0	2.6	**2.9178**	0.121	4.1	ug/L	226	Standard
>	**Ge**	72	284590.0	2.2				ug/L	288220	Standard
	As	75	-244.8	26.9	**-0.0080**	0.041	511.8	ug/L	-236	Standard
	Se	82	38.8	28.2	**-0.0170**	0.055	325.5	ug/L	48	Standard
	Se-1	77	107.7	3.8	**0.0861**	0.028	32.3	ug/L	96	Standard
	Ga	71	264917.7	3.5				mg/L	267913	Standard
	Rb	85	53.3	22.9				ug/L	31	Standard
>	**Y**	89	299490.6	3.4				ug/L	301679	Standard
	Rh	103	2.0	100.0				ug/L	1	Standard
	Mo	98	196.6	14.3	**0.0317**	0.005	17.2	ug/L	7	Standard
	Ag	107	127.3	38.8	**0.0021**	0.004	183.8	ug/L	66	Standard
	Cd	111	469.3	4.1	**-0.0110**	0.006	51.2	mg/L	527	Standard
	Cd	114	1206.3	4.7	**-0.0095**	0.002	24.3	ug/L	1273	Standard
>	**In**	115	762693.1	2.3				ug/L	755896	Standard
	Sn	118	1085.0	1.8	**0.0696**	0.005	6.5	ug/L	404	Standard
	Sb	123	295.5	13.1	**0.0204**	0.004	17.4	ug/L	34	Standard
	Ba	135	64.7	20.9	**0.0038**	0.003	74.5	ug/L	45	Standard
	Ce	140	74.0	13.5				ug/L	52	Standard
>	**Tb**	159	877536.5	3.3				ug/L	861974	Standard
	Ho	165	9.3	12.4				ug/L	9	Standard
	Tl	203	41.3	29.1	**0.0017**	0.001	36.6	ug/L	5	Standard
	Tl	205	96.7	34.1	**0.0017**	0.001	42.1	ug/L	15	Standard
	Pb	206	462.7	2.9	**0.0084**	0.001	14.3	ug/L	297	Standard
	Pb	207	397.3	1.6	**0.0107**	0.001	6.5	ug/L	266	Standard
	Pb	208	1831.7	2.0	**0.0105**	0.001	7.1	ug/L	1205	Standard
	U	238	33.7	34.7	**0.0042**	0.000	7.9	ug/L	4	Standard
>	**Bi**	209	482527.1	1.2				ug/L	470254	Standard
	Na	23	116.7	13.8	**0.0059**	0.005	82.8	mg/L	98	Standard
	Mg	24	167.3	4.2	**-0.0006**	0.000	9.3	mg/L	171	Standard

K	39	392.0	7.1	**0.0034**	0.003	88.8	mg/L	367	Standard
Ca	43	54.0	20.6	**0.0036**	0.024	668.9	mg/L	58	Standard
Fe	54	903.0	2.1	**-0.0049**	0.008	159.4	mg/L	955	Standard
Fe	57	5249.6	3.4	**-0.0008**	0.000	25.0	mg/L	5344	Standard
Sc-1	45	347439.0	3.8				mg/L	340292	Standard
Cl	35	61076.2	0.6				ug/L	43576	Standard
Kr	83	77.1	11.0				ug/L	78	Standard
Br	81	20141.1	5.7				ug/L	19680	Standard
P	31	80627.4	8.9				ug/L	84050	Standard
S	34	840850.8	4.5				ug/L	907587	Standard
Sr	88	496.7	7.3				ug/L	383	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		98.740	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		99.274	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		100.899	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		101.805	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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Pb	207	
Pb	208	
U	238	
Bi	209	102.610
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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: LCSW 40 WG396746-03

Sample Date/Time: Monday, May 07, 2012 16:03:56
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	20724.8	1.1	**0.9807**	51.414	5242.9	ug/L	18451	Standard
	Be	9	103165.8	1.9	**23.3055**	1.293	5.5	ug/L	7	Standard
	Al	27	642902.4	1.0	**28.0613**	1.464	5.2	ug/L	28447	Standard
>	**Sc**	45	394940.4	4.2				ug/L	340292	Standard
	Ti	47	216.7	18.3	**0.0436**	0.020	45.5	ug/L	116	Standard
	V	51	532579.4	1.1	**25.4979**	0.504	2.0	ug/L	4654	Standard
	Cr	52	425508.4	2.3	**26.1283**	0.921	3.5	ug/L	14933	Standard
	Cr	53	64542.6	2.1	**26.1232**	0.389	1.5	ug/L	342	Standard
	Mn	55	743427.9	1.1	**26.7787**	0.426	1.6	ug/L	1267	Standard
	Co	59	527774.8	2.5	**25.1436**	0.696	2.8	ug/L	140	Standard
	Ni	60	111489.1	2.1	**25.1820**	0.628	2.5	ug/L	75	Standard
	Cu	65	99163.2	1.8	**25.6902**	0.344	1.3	ug/L	239	Standard
	Zn	66	41173.9	0.9	**24.6251**	0.234	1.0	ug/L	226	Standard
>	**Ge**	72	317630.5	1.8				ug/L	288220	Standard
	As	75	43136.0	1.5	**24.4372**	0.263	1.1	ug/L	-236	Standard
	Se	82	5829.5	1.3	**26.0057**	0.150	0.6	ug/L	48	Standard
	Se-1	77	2650.2	1.4	**22.8593**	0.685	3.0	ug/L	96	Standard
	Ga	71	300443.7	2.0				mg/L	267913	Standard
	Rb	85	152.7	11.4				ug/L	31	Standard
>	**Y**	89	367489.3	1.6				ug/L	301679	Standard
	Rh	103	40.7	15.8				ug/L	1	Standard
	Mo	98	126.4	19.4	**0.0180**	0.004	21.6	ug/L	7	Standard
	Ag	107	420755.1	1.3	**28.6014**	0.266	0.9	ug/L	66	Standard
	Cd	111	135192.9	0.4	**23.8759**	0.078	0.3	mg/L	527	Standard
	Cd	114	325804.9	0.4	**23.0529**	0.134	0.6	ug/L	1273	Standard
>	**In**	115	824870.5	0.3				ug/L	755896	Standard
	Sn	118	996.0	2.8	**0.0509**	0.003	5.3	ug/L	404	Standard
	Sb	123	317404.5	0.6	**23.6771**	0.173	0.7	ug/L	34	Standard
	Ba	135	141491.3	1.4	**24.5644**	0.354	1.4	ug/L	45	Standard
	Ce	140	200.7	10.0				ug/L	52	Standard
>	**Tb**	159	960870.7	1.3				ug/L	861974	Standard
	Ho	165	12.0	57.7				ug/L	9	Standard
	Tl	203	506645.4	1.0	**24.3980**	0.612	2.5	ug/L	5	Standard
	Tl	205	1188695.2	0.9	**23.9085**	0.554	2.3	ug/L	15	Standard
	Pb	206	399703.8	1.3	**24.5529**	0.673	2.7	ug/L	297	Standard
	Pb	207	343099.9	1.3	**25.2815**	0.695	2.7	ug/L	266	Standard
	Pb	208	1588535.3	1.1	**24.9241**	0.623	2.5	ug/L	1205	Standard
	U	238	868964.8	0.7	**24.2404**	0.323	1.3	ug/L	4	Standard
>	**Bi**	209	506331.8	1.5				ug/L	470254	Standard
	Na	23	180.7	3.9	**0.0214**	0.001	2.6	mg/L	98	Standard
	Mg	24	964.7	4.8	**0.0024**	0.000	1.3	mg/L	171	Standard

	K	39	375.3	7.1	**-0.0038**	0.003	79.0	mg/L	367	Standard
	Ca	43	72.0	19.4	**0.0195**	0.019	96.3	mg/L	58	Standard
	Fe	54	1285.0	4.7	**0.0306**	0.011	35.4	mg/L	955	Standard
	Fe	57	5721.7	1.0	**-0.0019**	0.001	55.2	mg/L	5344	Standard
>	**Sc-1**	45	394940.4	4.2				mg/L	340292	Standard
	Cl	35	82546.3	0.9				ug/L	43576	Standard
	Kr	83	90.4	17.1				ug/L	78	Standard
	Br	81	26094.1	2.6				ug/L	19680	Standard
	P	31	133107.2	3.3				ug/L	84050	Standard
	S	34	931362.4	3.9				ug/L	907587	Standard
	Sr	88	2088.8	2.8				ug/L	383	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		110.204	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		121.815	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		109.125	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		111.473	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	107.672
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Y 89 Int Std for sample	Y	89	Rerun sample

Method 6020 - Summary Report

Sample ID: L1205001301
Sample Date/Time: Monday, May 07, 2012 16:06:43
Number of Replicates: 3
Autosampler Position: 207
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	442529.6	3.4	**31847.1731**	598.607	1.9	ug/L	18451	Standard
	Be	9	15.7	9.8	**-0.0024**	0.000	14.6	ug/L	7	Standard
	Al	27	53419.4	1.8	**1.9441**	0.020	1.0	ug/L	28447	Standard
>	**Sc**	45	337528.1	1.6				ug/L	340292	Standard
	Ti	47	315.3	10.7	**0.1106**	0.017	15.1	ug/L	116	Standard
	V	51	5408.8	1.0	**0.0554**	0.005	9.7	ug/L	4654	Standard
	Cr	52	16110.6	2.2	**0.1406**	0.024	17.4	ug/L	14933	Standard
	Cr	53	860.7	11.2	**0.2606**	0.043	16.4	ug/L	342	Standard
	Mn	55	11991.4	2.2	**0.3976**	0.012	2.9	ug/L	1267	Standard
	Co	59	855.0	8.0	**0.0397**	0.004	10.7	ug/L	140	Standard
	Ni	60	4120.9	2.4	**1.0565**	0.027	2.5	ug/L	75	Standard
	Cu	65	1722.1	8.1	**0.4664**	0.038	8.2	ug/L	239	Standard
	Zn	66	4219.9	4.2	**2.7641**	0.100	3.6	ug/L	226	Standard
>	**Ge**	72	273982.1	0.9				ug/L	288220	Standard
	As	75	501.2	52.0	**0.4725**	0.169	35.8	ug/L	-236	Standard
	Se	82	466.2	19.6	**2.2175**	0.467	21.0	ug/L	48	Standard
	Se-1	77	262.3	1.3	**1.7416**	0.038	2.2	ug/L	96	Standard
	Ga	71	244130.5	1.0				mg/L	267913	Standard
	Rb	85	8397.7	2.1				ug/L	31	Standard
>	**Y**	89	273866.7	2.6				ug/L	301679	Standard
	Rh	103	294.0	5.9				ug/L	1	Standard
	Mo	98	789.4	7.2	**0.1354**	0.015	11.0	ug/L	7	Standard
	Ag	107	181.3	11.5	**0.0062**	0.001	17.3	ug/L	66	Standard
	Cd	111	607.8	4.0	**0.0173**	0.008	44.8	mg/L	527	Standard
	Cd	114	1453.6	4.2	**0.0111**	0.001	6.6	ug/L	1273	Standard
>	**In**	115	751968.3	4.3				ug/L	755896	Standard
	Sn	118	365.7	11.7	**-0.0116**	0.004	33.7	ug/L	404	Standard
	Sb	123	256.5	5.1	**0.0176**	0.001	8.5	ug/L	34	Standard
	Ba	135	6152.6	0.8	**1.1654**	0.061	5.2	ug/L	45	Standard
	Ce	140	1601.4	4.8				ug/L	52	Standard
>	**Tb**	159	884956.4	1.8				ug/L	861974	Standard
	Ho	165	94.0	17.4				ug/L	9	Standard
	Tl	203	510.7	2.9	**0.0286**	0.001	2.6	ug/L	5	Standard
	Tl	205	1195.4	4.8	**0.0279**	0.001	4.6	ug/L	15	Standard
	Pb	206	412.3	5.1	**0.0083**	0.001	17.5	ug/L	297	Standard
	Pb	207	356.7	6.2	**0.0109**	0.002	16.7	ug/L	266	Standard
	Pb	208	1633.4	0.6	**0.0105**	0.000	0.8	ug/L	1205	Standard
	U	238	99780.6	2.1	**3.2778**	0.065	2.0	ug/L	4	Standard
>	**Bi**	209	430274.0	0.4				ug/L	470254	Standard
	Na	23	218086.5	1.3	**81.9979**	0.617	0.8	mg/L	98	Standard
	Mg	24	3605951.7	1.6	**16.7915**	0.031	0.2	mg/L	171	Standard

K	39	5134.9	3.1	**0.5736**	0.012	2.0	mg/L	367	Standard
Ca	43	13688.2	1.1	**25.4408**	0.292	1.1	mg/L	58	Standard
Fe	54	450.1	6.7	**-0.0734**	0.005	7.4	mg/L	955	Standard
Fe	57	18972.5	2.1	**0.0741**	0.001	1.1	mg/L	5344	Standard
Sc-1	45	337528.1	1.6				mg/L	340292	Standard
Cl	35	1505011.3	3.4				ug/L	43576	Standard
Kr	83	93.3	7.7				ug/L	78	Standard
Br	81	50673.3	3.4				ug/L	19680	Standard
P	31	37117.8	2.5				ug/L	84050	Standard
S	34	15996799.9	2.6				ug/L	907587	Standard
Sr	88	8732295.4	1.5				ug/L	383	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		95.060	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		90.781	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		99.480	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		102.666	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	91.498
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: L1205001302 WG396746-01
Sample Date/Time: Monday, May 07, 2012 16:10:03
Number of Replicates: 3
Autosampler Position: 208
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	215918.4	1.1	**14563.0614**	127.804	0.9	ug/L	18451	Standard
	Be	9	26.0	73.4	**0.0003**	0.005	1766.7	ug/L	7	Standard
	Al	27	19934.4	0.3	**0.1645**	0.014	8.5	ug/L	28447	Standard
>	**Sc**	45	343892.8	1.6				ug/L	340292	Standard
	Ti	47	252.0	6.8	**0.0724**	0.009	13.1	ug/L	116	Standard
	V	51	7916.3	2.1	**0.1787**	0.011	6.0	ug/L	4654	Standard
	Cr	52	17751.1	1.0	**0.2111**	0.016	7.8	ug/L	14933	Standard
	Cr	53	845.4	2.2	**0.2381**	0.006	2.7	ug/L	342	Standard
	Mn	55	6506.4	1.2	**0.1571**	0.001	0.9	ug/L	1267	Standard
	Co	59	622.3	3.3	**0.0255**	0.001	4.3	ug/L	140	Standard
	Ni	60	2989.6	2.9	**0.7296**	0.019	2.6	ug/L	75	Standard
	Cu	65	1065.7	6.2	**0.2566**	0.019	7.5	ug/L	239	Standard
	Zn	66	3679.8	1.5	**2.2878**	0.034	1.5	ug/L	226	Standard
>	**Ge**	72	285028.4	0.7				ug/L	288220	Standard
	As	75	603.6	18.6	**0.5243**	0.070	13.3	ug/L	-236	Standard
	Se	82	549.9	3.5	**2.5437**	0.087	3.4	ug/L	48	Standard
	Se-1	77	331.0	5.4	**2.3240**	0.176	7.6	ug/L	96	Standard
	Ga	71	252277.8	1.3				mg/L	267913	Standard
	Rb	85	1960.1	2.7				ug/L	31	Standard
>	**Y**	89	277088.1	2.2				ug/L	301679	Standard
	Rh	103	172.7	3.7				ug/L	1	Standard
	Mo	98	782.0	4.0	**0.1256**	0.005	4.0	ug/L	7	Standard
	Ag	107	114.3	5.3	**0.0007**	0.000	56.8	ug/L	66	Standard
	Cd	111	1016.5	5.7	**0.0848**	0.011	12.4	mg/L	527	Standard
	Cd	114	2556.4	0.0	**0.0852**	0.001	0.9	ug/L	1273	Standard
>	**In**	115	799839.6	0.4				ug/L	755896	Standard
	Sn	118	417.3	3.0	**-0.0085**	0.001	14.9	ug/L	404	Standard
	Sb	123	299.3	4.3	**0.0196**	0.001	5.2	ug/L	34	Standard
	Ba	135	11745.9	1.6	**2.0953**	0.033	1.6	ug/L	45	Standard
	Ce	140	382.7	11.0				ug/L	52	Standard
>	**Tb**	159	928853.4	0.3				ug/L	861974	Standard
	Ho	165	28.0	65.5				ug/L	9	Standard
	Tl	203	486.3	7.4	**0.0243**	0.002	8.3	ug/L	5	Standard
	Tl	205	1123.4	5.6	**0.0235**	0.001	6.0	ug/L	15	Standard
	Pb	206	415.7	3.6	**0.0055**	0.001	21.0	ug/L	297	Standard
	Pb	207	356.3	7.7	**0.0077**	0.002	29.7	ug/L	266	Standard
	Pb	208	1610.4	1.7	**0.0070**	0.001	8.7	ug/L	1205	Standard
	U	238	50152.9	0.8	**1.4785**	0.011	0.7	ug/L	4	Standard
>	**Bi**	209	480062.5	0.8				ug/L	470254	Standard
	Na	23	50459.2	1.0	**18.5945**	0.327	1.8	mg/L	98	Standard
	Mg	24	2203712.8	0.5	**10.0734**	0.204	2.0	mg/L	171	Standard

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K	39	1342.1	2.4	**0.1157**	0.002	1.3	mg/L	367	Standard
Ca	43	10434.9	1.6	**19.0159**	0.593	3.1	mg/L	58	Standard
Fe	54	466.3	9.1	**-0.0723**	0.006	8.4	mg/L	955	Standard
Fe	57	16338.8	1.5	**0.0583**	0.002	3.2	mg/L	5344	Standard
Sc-1	45	343892.8	1.6				mg/L	340292	Standard
Cl	35	635441.8	1.5				ug/L	43576	Standard
Kr	83	77.6	5.5				ug/L	78	Standard
Br	81	38864.8	1.0				ug/L	19680	Standard
P	31	46970.4	4.3				ug/L	84050	Standard
S	34	5953567.6	2.3				ug/L	907587	Standard
Sr	88	4585931.3	0.6				ug/L	383	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		98.893	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		91.849	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		105.813	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		107.759	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	102.086
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: L1205001302S WG396746-04
Sample Date/Time: Monday, May 07, 2012 16:12:51
Number of Replicates: 3
Autosampler Position: 209
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	208206.9	1.0	**14059.7712**	261.664	1.9	ug/L	18451	Standard
	Be	9	24461.4	0.7	**6.3591**	0.090	1.4	ug/L	7	Standard
	Al	27	129759.3	0.6	**5.8592**	0.034	0.6	ug/L	28447	Standard
>	**Sc**	45	342460.4	0.7				ug/L	340292	Standard
	Ti	47	246.7	18.7	**0.0692**	0.025	35.6	ug/L	116	Standard
	V	51	102208.3	0.9	**5.2336**	0.165	3.1	ug/L	4654	Standard
	Cr	52	89570.0	1.6	**5.2933**	0.150	2.8	ug/L	14933	Standard
	Cr	53	11657.8	0.7	**5.1205**	0.212	4.1	ug/L	342	Standard
	Mn	55	130469.3	0.5	**5.1306**	0.211	4.1	ug/L	1267	Standard
	Co	59	88701.6	1.3	**4.6834**	0.203	4.3	ug/L	140	Standard
	Ni	60	21253.6	0.5	**5.3076**	0.175	3.3	ug/L	75	Standard
	Cu	65	17337.6	0.8	**4.9438**	0.223	4.5	ug/L	239	Standard
	Zn	66	11329.2	2.0	**7.3958**	0.432	5.8	ug/L	226	Standard
>	**Ge**	72	286478.5	3.8				ug/L	288220	Standard
	As	75	9271.8	0.9	**5.9409**	0.260	4.4	ug/L	-236	Standard
	Se	82	1624.2	3.5	**7.8941**	0.415	5.3	ug/L	48	Standard
	Se-1	77	917.4	3.1	**8.1597**	0.184	2.3	ug/L	96	Standard
	Ga	71	255369.3	3.7				mg/L	267913	Standard
	Rb	85	1840.1	2.1				ug/L	31	Standard
>	**Y**	89	282758.5	2.6				ug/L	301679	Standard
	Rh	103	184.0	15.1				ug/L	1	Standard
	Mo	98	719.8	2.9	**0.1169**	0.002	1.4	ug/L	7	Standard
	Ag	107	59883.2	3.2	**4.2445**	0.189	4.4	ug/L	66	Standard
	Cd	111	30318.9	1.8	**5.5136**	0.199	3.6	mg/L	527	Standard
	Cd	114	76096.0	1.8	**5.5440**	0.156	2.8	ug/L	1273	Standard
>	**In**	115	790302.3	1.9				ug/L	755896	Standard
	Sn	118	398.7	3.8	**-0.0100**	0.002	16.0	ug/L	404	Standard
	Sb	123	71496.7	0.5	**5.5656**	0.134	2.4	ug/L	34	Standard
	Ba	135	38447.4	1.1	**6.9633**	0.208	3.0	ug/L	45	Standard
	Ce	140	331.3	8.0				ug/L	52	Standard
>	**Tb**	159	905290.5	0.8				ug/L	861974	Standard
	Ho	165	24.0	22.0				ug/L	9	Standard
	Tl	203	95768.4	1.4	**5.0637**	0.195	3.9	ug/L	5	Standard
	Tl	205	224626.1	2.4	**4.9622**	0.261	5.3	ug/L	15	Standard
	Pb	206	75024.0	0.6	**5.0432**	0.183	3.6	ug/L	297	Standard
	Pb	207	64606.1	0.6	**5.2111**	0.186	3.6	ug/L	266	Standard
	Pb	208	297631.8	1.1	**5.1124**	0.206	4.0	ug/L	1205	Standard
	U	238	212610.7	0.3	**6.5147**	0.194	3.0	ug/L	4	Standard
>	**Bi**	209	461340.9	3.0				ug/L	470254	Standard
	Na	23	49465.3	0.7	**18.3014**	0.154	0.8	mg/L	98	Standard
	Mg	24	2177647.8	0.6	**9.9941**	0.105	1.1	mg/L	171	Standard

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	K	39	1264.1	4.5	**0.1072**	0.007	6.6	mg/L	367	Standard
	Ca	43	10116.7	2.9	**18.5034**	0.457	2.5	mg/L	58	Standard
	Fe	54	458.1	8.9	**-0.0733**	0.006	8.4	mg/L	955	Standard
	Fe	57	16707.9	0.5	**0.0606**	0.000	0.6	mg/L	5344	Standard
>	**Sc-1**	45	342460.4	0.7				mg/L	340292	Standard
	Cl	35	615182.9	0.9				ug/L	43576	Standard
	Kr	83	73.1	5.6				ug/L	78	Standard
	Br	81	37561.9	3.3				ug/L	19680	Standard
	P	31	46310.0	3.1				ug/L	84050	Standard
	S	34	5780686.5	1.9				ug/L	907587	Standard
	Sr	88	4225696.0	3.7				ug/L	383	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		99.396	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		93.728	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		104.552	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		105.025	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1205001302S WG396746-04
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Pb	207	
Pb	208	
U	238	
Bi	209	98.105
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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: L1205001302SD WG396746-05
Sample Date/Time: Monday, May 07, 2012 16:15:39
Number of Replicates: 3
Autosampler Position: 210
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	211606.0	1.6	**14074.0252**	298.816	2.1	ug/L	18451	Standard
	Be	9	24459.4	1.9	**6.2622**	0.137	2.2	ug/L	7	Standard
	Al	27	138010.4	0.4	**6.1787**	0.051	0.8	ug/L	28447	Standard
>	**Sc**	45	347718.1	0.3				ug/L	340292	Standard
	Ti	47	276.7	17.1	**0.0873**	0.025	28.8	ug/L	116	Standard
	V	51	101357.4	1.3	**5.3068**	0.092	1.7	ug/L	4654	Standard
	Cr	52	88614.7	0.9	**5.3637**	0.038	0.7	ug/L	14933	Standard
	Cr	53	11828.6	1.9	**5.3133**	0.132	2.5	ug/L	342	Standard
	Mn	55	133188.2	1.5	**5.3553**	0.116	2.2	ug/L	1267	Standard
	Co	59	89820.8	1.9	**4.8454**	0.127	2.6	ug/L	140	Standard
	Ni	60	21854.1	0.5	**5.5776**	0.057	1.0	ug/L	75	Standard
	Cu	65	17497.4	1.0	**5.0982**	0.075	1.5	ug/L	239	Standard
	Zn	66	11531.1	1.1	**7.6934**	0.028	0.4	ug/L	226	Standard
>	**Ge**	72	280152.8	0.9				ug/L	288220	Standard
	As	75	9389.0	0.1	**6.1402**	0.049	0.8	ug/L	-236	Standard
	Se	82	1629.3	2.9	**8.0968**	0.290	3.6	ug/L	48	Standard
	Se-1	77	943.0	2.7	**8.6268**	0.314	3.6	ug/L	96	Standard
	Ga	71	251716.4	0.4				mg/L	267913	Standard
	Rb	85	1886.8	6.7				ug/L	31	Standard
>	**Y**	89	269545.2	3.0				ug/L	301679	Standard
	Rh	103	169.3	11.9				ug/L	1	Standard
	Mo	98	748.8	4.4	**0.1214**	0.006	5.3	ug/L	7	Standard
	Ag	107	58672.5	3.0	**4.1435**	0.104	2.5	ug/L	66	Standard
	Cd	111	30645.9	0.9	**5.5549**	0.107	1.9	mg/L	527	Standard
	Cd	114	76316.7	1.8	**5.5421**	0.142	2.6	ug/L	1273	Standard
>	**In**	115	792757.9	1.1				ug/L	755896	Standard
	Sn	118	389.0	7.5	**-0.0112**	0.003	30.8	ug/L	404	Standard
	Sb	123	71473.0	1.7	**5.5449**	0.073	1.3	ug/L	34	Standard
	Ba	135	38559.0	2.1	**6.9588**	0.072	1.0	ug/L	45	Standard
	Ce	140	605.3	5.3				ug/L	52	Standard
>	**Tb**	159	934707.6	3.1				ug/L	861974	Standard
	Ho	165	30.0	29.1				ug/L	9	Standard
	Tl	203	96509.5	2.1	**4.8666**	0.113	2.3	ug/L	5	Standard
	Tl	205	226636.7	1.5	**4.7737**	0.101	2.1	ug/L	15	Standard
	Pb	206	74271.9	1.1	**4.7612**	0.130	2.7	ug/L	297	Standard
	Pb	207	64076.2	1.7	**4.9299**	0.185	3.8	ug/L	266	Standard
	Pb	208	294651.6	0.7	**4.8265**	0.132	2.7	ug/L	1205	Standard
	U	238	211193.5	1.3	**6.1738**	0.168	2.7	ug/L	4	Standard
>	**Bi**	209	483466.4	2.1				ug/L	470254	Standard
	Na	23	50219.8	1.3	**18.2996**	0.261	1.4	mg/L	98	Standard
	Mg	24	2162580.9	1.1	**9.7743**	0.073	0.7	mg/L	171	Standard

Sample ID: L1205001302SD WG396746-05
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K	39	1322.7	3.3	**0.1117**	0.005	4.2	mg/L	367	Standard
Ca	43	10080.0	1.7	**18.1573**	0.338	1.9	mg/L	58	Standard
Fe	54	484.3	2.7	**-0.0703**	0.002	3.1	mg/L	955	Standard
Fe	57	18227.0	2.3	**0.0672**	0.002	3.3	mg/L	5344	Standard
Sc-1	45	347718.1	0.3				mg/L	340292	Standard
Cl	35	613102.4	0.6				ug/L	43576	Standard
Kr	83	86.4	7.7				ug/L	78	Standard
Br	81	36405.4	1.5				ug/L	19680	Standard
P	31	47494.7	1.5				ug/L	84050	Standard
S	34	5845977.6	0.6				ug/L	907587	Standard
Sr	88	4315040.5	2.8				ug/L	383	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		97.201	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		89.348	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		104.877	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		108.438	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205001302SD WG396746-05
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	102.810
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: L1205001701
Sample Date/Time: Monday, May 07, 2012 16:18:27
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	81726.5	1.4	**2788.3349**	117.328	4.2	ug/L	18451	Standard
	Be	9	739.0	3.0	**0.1246**	0.006	4.5	ug/L	7	Standard
	Al	27	20528516.8	3.6	**723.6900**	5.550	0.8	ug/L	28447	Standard
>	**Sc**	45	502805.3	4.0				ug/L	340292	Standard
	Ti	47	23625.8	4.7	**9.9526**	0.291	2.9	ug/L	116	Standard
	V	51	37739.0	3.4	**1.4643**	0.024	1.6	ug/L	4654	Standard
	Cr	52	50493.1	4.3	**1.9740**	0.071	3.6	ug/L	14933	Standard
	Cr	53	6209.9	7.7	**2.2258**	0.140	6.3	ug/L	342	Standard
	Mn	55	290242.0	3.9	**9.7445**	0.201	2.1	ug/L	1267	Standard
	Co	59	16410.6	2.6	**0.7264**	0.004	0.6	ug/L	140	Standard
	Ni	60	7915.4	0.9	**1.6566**	0.021	1.2	ug/L	75	Standard
	Cu	65	2434.5	6.1	**0.5414**	0.028	5.1	ug/L	239	Standard
	Zn	66	37611.3	3.3	**21.0871**	0.405	1.9	ug/L	226	Standard
>	**Ge**	72	338334.5	2.0				ug/L	288220	Standard
	As	75	43.6	159.2	**0.1684**	0.036	21.7	ug/L	-236	Standard
	Se	82	157.1	14.0	**0.4503**	0.083	18.4	ug/L	48	Standard
	Se-1	77	181.0	6.5	**0.5335**	0.082	15.4	ug/L	96	Standard
	Ga	71	325334.1	2.8				mg/L	267913	Standard
	Rb	85	81327.3	4.6				ug/L	31	Standard
>	**Y**	89	420267.9	3.9				ug/L	301679	Standard
	Rh	103	14.0	14.3				ug/L	1	Standard
	Mo	98	274.6	3.4	**0.0372**	0.001	3.3	ug/L	7	Standard
	Ag	107	345.0	7.7	**0.0138**	0.001	10.4	ug/L	66	Standard
	Cd	111	906.5	5.7	**0.0438**	0.008	18.5	mg/L	527	Standard
	Cd	114	2407.4	3.2	**0.0520**	0.006	11.1	ug/L	1273	Standard
>	**In**	115	915227.8	0.9				ug/L	755896	Standard
	Sn	118	4949.1	0.6	**0.4146**	0.001	0.3	ug/L	404	Standard
	Sb	123	292.7	5.8	**0.0162**	0.001	5.9	ug/L	34	Standard
	Ba	135	70686.2	2.2	**11.0547**	0.146	1.3	ug/L	45	Standard
	Ce	140	293141.6	1.4				ug/L	52	Standard
>	**Tb**	159	1071782.8	0.1				ug/L	861974	Standard
	Ho	165	5140.9	4.1				ug/L	9	Standard
	Tl	203	580.3	6.6	**0.0260**	0.002	7.1	ug/L	5	Standard
	Tl	205	1341.4	4.8	**0.0251**	0.001	5.4	ug/L	15	Standard
	Pb	206	8650.8	1.4	**0.4808**	0.007	1.5	ug/L	297	Standard
	Pb	207	7129.0	1.8	**0.4765**	0.013	2.7	ug/L	266	Standard
	Pb	208	33812.5	1.6	**0.4818**	0.007	1.5	ug/L	1205	Standard
	U	238	3534.7	6.4	**0.0963**	0.006	6.0	ug/L	4	Standard
>	**Bi**	209	536023.4	1.5				ug/L	470254	Standard
	Na	23	8947.3	3.0	**2.2231**	0.024	1.1	mg/L	98	Standard
	Mg	24	94492.9	2.7	**0.2941**	0.004	1.4	mg/L	171	Standard

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	K	39	5098.2	0.9	**0.3686**	0.014	3.8	mg/L	367	Standard
	Ca	43	836.0	2.9	**0.9527**	0.035	3.7	mg/L	58	Standard
	Fe	54	7411.7	3.6	**0.6520**	0.026	3.9	mg/L	955	Standard
	Fe	57	190220.0	3.0	**0.6616**	0.008	1.2	mg/L	5344	Standard
>	**Sc-1**	45	502805.3	4.0				mg/L	340292	Standard
	Cl	35	801081.7	1.0				ug/L	43576	Standard
	Kr	83	97.1	11.7				ug/L	78	Standard
	Br	81	58413.0	5.7				ug/L	19680	Standard
	P	31	170207.0	5.1				ug/L	84050	Standard
	S	34	970781.3	7.8				ug/L	907587	Standard
	Sr	88	334997.5	6.2				ug/L	383	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		117.388	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		139.310	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		121.079	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		124.341	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	113.986
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Y 89 Int Std for sample	Y	89	Rerun sample
In 115 Int Std for sample	In	115	Rerun sample
Tb 159 Int Std for sample	Tb	159	Rerun sample

Method 6020 - Summary Report

Sample ID: L1205001701PS WG3967772-03
Sample Date/Time: Monday, May 07, 2012 16:21:13
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	80806.7	3.5	**2796.2372**	83.404	3.0	ug/L	18451	Standard
	Be	9	253661.7	3.5	**45.5861**	1.108	2.4	ug/L	7	Standard
	Al	27	21741620.8	4.8	**777.1195**	26.152	3.4	ug/L	28447	Standard
>	**Sc**	45	495727.4	1.6				ug/L	340292	Standard
	Ti	47	22978.1	4.7	**9.4965**	0.348	3.7	ug/L	116	Standard
	V	51	1247900.3	2.9	**55.3137**	1.636	3.0	ug/L	4654	Standard
	Cr	52	989984.9	3.9	**57.1807**	2.136	3.7	ug/L	14933	Standard
	Cr	53	150209.8	4.2	**56.1606**	2.009	3.6	ug/L	342	Standard
	Mn	55	1897227.3	1.3	**63.0856**	0.599	0.9	ug/L	1267	Standard
	Co	59	1191949.4	3.1	**52.3057**	1.322	2.5	ug/L	140	Standard
	Ni	60	255465.7	3.4	**53.1669**	1.587	3.0	ug/L	75	Standard
	Cu	65	219605.1	3.3	**52.4583**	1.597	3.0	ug/L	239	Standard
	Zn	66	126130.5	3.1	**69.8096**	1.768	2.5	ug/L	226	Standard
>	**Ge**	72	344812.4	1.1				ug/L	288220	Standard
	As	75	95653.4	3.2	**49.7569**	1.242	2.5	ug/L	-236	Standard
	Se	82	12647.8	3.6	**52.1738**	1.327	2.5	ug/L	48	Standard
	Se-1	77	5901.8	3.4	**47.9184**	1.298	2.7	ug/L	96	Standard
	Ga	71	334580.4	1.6				mg/L	267913	Standard
	Rb	85	79617.3	6.7				ug/L	31	Standard
>	**Y**	89	432017.9	5.8				ug/L	301679	Standard
	Rh	103	93.3	6.9				ug/L	1	Standard
	Mo	98	454.2	2.0	**0.0620**	0.003	4.3	ug/L	7	Standard
	Ag	107	910148.1	4.7	**55.0527**	1.815	3.3	ug/L	66	Standard
	Cd	111	307629.7	3.1	**48.4495**	1.015	2.1	mg/L	527	Standard
	Cd	114	751761.0	2.9	**47.4444**	1.044	2.2	ug/L	1273	Standard
>	**In**	115	926950.0	2.3				ug/L	755896	Standard
	Sn	118	5613.0	2.9	**0.4707**	0.004	0.9	ug/L	404	Standard
	Sb	123	737264.1	3.2	**48.9437**	1.121	2.3	ug/L	34	Standard
	Ba	135	390652.5	3.3	**60.3616**	1.236	2.0	ug/L	45	Standard
	Ce	140	289192.9	3.7				ug/L	52	Standard
>	**Tb**	159	1067653.8	1.4				ug/L	861974	Standard
	Ho	165	5044.2	1.3				ug/L	9	Standard
	Tl	203	1135263.8	2.6	**50.7031**	0.556	1.1	ug/L	5	Standard
	Tl	205	2770552.7	3.2	**51.6793**	0.845	1.6	ug/L	15	Standard
	Pb	206	888684.9	3.5	**50.6458**	0.979	1.9	ug/L	297	Standard
	Pb	207	769684.0	3.1	**52.6166**	0.764	1.5	ug/L	266	Standard
	Pb	208	3553354.8	3.2	**51.7242**	0.825	1.6	ug/L	1205	Standard
	U	238	1996791.9	5.6	**51.6498**	2.158	4.2	ug/L	4	Standard
>	**Bi**	209	545755.8	1.6				ug/L	470254	Standard
	Na	23	8722.5	4.9	**2.1966**	0.081	3.7	mg/L	98	Standard
	Mg	24	94122.7	3.9	**0.2970**	0.007	2.5	mg/L	171	Standard

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	K	39	4860.1	5.3	**0.3545**	0.015	4.2	mg/L	367	Standard
	Ca	43	841.4	5.2	**0.9734**	0.041	4.2	mg/L	58	Standard
	Fe	54	7517.1	3.4	**0.6743**	0.016	2.3	mg/L	955	Standard
	Fe	57	193063.6	4.2	**0.6815**	0.019	2.8	mg/L	5344	Standard
>	**Sc-1**	45	495727.4	1.6				mg/L	340292	Standard
	Cl	35	788675.5	1.2				ug/L	43576	Standard
	Kr	83	104.4	9.8				ug/L	78	Standard
	Br	81	52192.8	3.9				ug/L	19680	Standard
	P	31	161798.0	4.2				ug/L	84050	Standard
	S	34	854878.9	4.8				ug/L	907587	Standard
	Sr	88	327900.9	6.8				ug/L	383	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		119.635	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		143.204	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		122.629	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		123.861	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	116.056
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Y 89 Int Std for sample	Y	89	Rerun sample
In 115 Int Std for sample	In	115	Rerun sample
Tb 159 Int Std for sample	Tb	159	Rerun sample

Method 6020 - Summary Report

Sample ID: L1205001701SDL WG396772-04
Sample Date/Time: Monday, May 07, 2012 16:24:00
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	34078.9	0.4	**797.2707**	10.847	1.4	ug/L	18451	Standard
	Be	9	181.3	4.5	**0.0333**	0.002	5.9	ug/L	7	Standard
	Al	27	4575153.8	1.5	**199.2191**	2.317	1.2	ug/L	28447	Standard
>	**Sc**	45	405743.8	0.7				ug/L	340292	Standard
	Ti	47	4994.2	2.3	**2.1803**	0.098	4.5	ug/L	116	Standard
	V	51	11734.9	1.2	**0.3144**	0.016	5.0	ug/L	4654	Standard
	Cr	52	22576.1	0.9	**0.3769**	0.043	11.5	ug/L	14933	Standard
	Cr	53	1537.4	2.9	**0.4751**	0.031	6.6	ug/L	342	Standard
	Mn	55	63714.4	1.8	**2.1786**	0.088	4.0	ug/L	1267	Standard
	Co	59	3649.1	3.2	**0.1648**	0.008	5.0	ug/L	140	Standard
	Ni	60	1834.4	3.9	**0.3878**	0.025	6.4	ug/L	75	Standard
	Cu	65	1232.1	3.4	**0.2654**	0.017	6.5	ug/L	239	Standard
	Zn	66	11312.6	2.0	**6.5738**	0.280	4.3	ug/L	226	Standard
>	**Ge**	72	320582.4	2.2				ug/L	288220	Standard
	As	75	-232.3	5.8	**0.0161**	0.006	40.3	ug/L	-236	Standard
	Se	82	60.8	7.0	**0.0589**	0.024	40.2	ug/L	48	Standard
	Se-1	77	123.0	10.2	**0.1025**	0.125	122.0	ug/L	96	Standard
	Ga	71	300221.1	3.1				mg/L	267913	Standard
	Rb	85	16182.6	2.5				ug/L	31	Standard
>	**Y**	89	334670.6	0.9				ug/L	301679	Standard
	Rh	103	2.7	43.3				ug/L	1	Standard
	Mo	98	156.2	6.8	**0.0214**	0.001	6.6	ug/L	7	Standard
	Ag	107	156.3	8.1	**0.0028**	0.001	31.7	ug/L	66	Standard
	Cd	111	585.4	5.1	**-0.0029**	0.005	165.6	mg/L	527	Standard
	Cd	114	1477.3	5.5	**-0.0028**	0.006	215.8	ug/L	1273	Standard
>	**In**	115	871695.1	0.8				ug/L	755896	Standard
	Sn	118	1446.7	2.0	**0.0900**	0.002	2.6	ug/L	404	Standard
	Sb	123	1001.2	40.1	**0.0672**	0.028	42.3	ug/L	34	Standard
	Ba	135	15624.4	0.5	**2.5594**	0.026	1.0	ug/L	45	Standard
	Ce	140	65942.6	1.8				ug/L	52	Standard
>	**Tb**	159	980284.7	0.3				ug/L	861974	Standard
	Ho	165	1146.0	4.1				ug/L	9	Standard
	Tl	203	222.3	7.3	**0.0100**	0.001	8.1	ug/L	5	Standard
	Tl	205	496.0	7.1	**0.0094**	0.001	7.8	ug/L	15	Standard
	Pb	206	2294.2	2.4	**0.1158**	0.004	3.3	ug/L	297	Standard
	Pb	207	1909.5	2.3	**0.1170**	0.002	2.1	ug/L	266	Standard
	Pb	208	9032.1	2.4	**0.1184**	0.003	2.6	ug/L	1205	Standard
	U	238	805.4	6.9	**0.0251**	0.002	6.4	ug/L	4	Standard
>	**Bi**	209	520115.7	0.5				ug/L	470254	Standard
	Na	23	2057.5	4.8	**0.6070**	0.028	4.6	mg/L	98	Standard
	Mg	24	21955.6	3.1	**0.0837**	0.003	3.7	mg/L	171	Standard

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	K	39	1427.4	3.9	**0.1002**	0.006	5.8	mg/L	367	Standard
	Ca	43	232.7	5.7	**0.2662**	0.020	7.3	mg/L	58	Standard
	Fe	54	2329.1	4.2	**0.1648**	0.011	6.7	mg/L	955	Standard
	Fe	57	48100.9	1.7	**0.1878**	0.003	1.8	mg/L	5344	Standard
>	**Sc-1**	45	405743.8	0.7				mg/L	340292	Standard
	Cl	35	220043.5	1.4				ug/L	43576	Standard
	Kr	83	103.6	23.6				ug/L	78	Standard
	Br	81	27625.8	1.4				ug/L	19680	Standard
	P	31	90773.8	1.1				ug/L	84050	Standard
	S	34	758891.7	0.6				ug/L	907587	Standard
	Sr	88	67975.5	2.4				ug/L	383	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		111.228	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		110.936	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		115.319	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		113.726	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	110.603
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Monday, May 07, 2012 16:26:49
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	20633.7	2.7	**34.6422**	11.889	34.3	ug/L	18451	Standard
	Be	9	224811.2	4.3	**52.2735**	1.075	2.1	ug/L	7	Standard
	Al	27	1085126.1	4.5	**49.3793**	0.969	2.0	ug/L	28447	Standard
>	**Sc**	45	383147.5	3.2				ug/L	340292	Standard
	Ti	47	222313.7	6.6	**100.7754**	5.685	5.6	ug/L	116	Standard
	V	51	1056107.6	3.4	**51.0543**	0.905	1.8	ug/L	4654	Standard
	Cr	52	811762.6	4.7	**51.0377**	1.479	2.9	ug/L	14933	Standard
	Cr	53	123076.2	5.4	**50.2045**	2.558	5.1	ug/L	342	Standard
	Mn	55	1454428.3	4.0	**52.7567**	1.866	3.5	ug/L	1267	Standard
	Co	59	1039551.1	4.8	**49.7735**	1.846	3.7	ug/L	140	Standard
	Ni	60	217761.6	3.4	**49.4591**	1.558	3.1	ug/L	75	Standard
	Cu	65	188879.0	3.7	**49.2391**	1.827	3.7	ug/L	239	Standard
	Zn	66	81994.4	3.3	**49.4710**	1.233	2.5	ug/L	226	Standard
>	**Ge**	72	316025.8	2.8				ug/L	288220	Standard
	As	75	86903.7	2.9	**49.3299**	0.427	0.9	ug/L	-236	Standard
	Se	82	11082.8	2.9	**49.8837**	0.689	1.4	ug/L	48	Standard
	Se-1	77	5710.1	4.9	**50.6377**	1.820	3.6	ug/L	96	Standard
	Ga	71	291278.6	2.1				mg/L	267913	Standard
	Rb	85	1757.4	4.0				ug/L	31	Standard
>	**Y**	89	323967.9	2.1				ug/L	301679	Standard
	Rh	103	71.3	17.1				ug/L	1	Standard
	Mo	98	609893.3	4.1	**94.0803**	2.279	2.4	ug/L	7	Standard
	Ag	107	732725.1	3.0	**48.5623**	0.759	1.6	ug/L	66	Standard
	Cd	111	284608.6	2.8	**49.1068**	0.533	1.1	mg/L	527	Standard
	Cd	114	716944.6	3.4	**49.5667**	0.846	1.7	ug/L	1273	Standard
>	**In**	115	846050.9	1.9				ug/L	755896	Standard
	Sn	118	485288.2	3.9	**49.6122**	1.102	2.2	ug/L	404	Standard
	Sb	123	678950.0	3.0	**49.3761**	0.598	1.2	ug/L	34	Standard
	Ba	135	288542.2	3.3	**48.8395**	0.799	1.6	ug/L	45	Standard
	Ce	140	1128.0	9.2				ug/L	52	Standard
>	**Tb**	159	978226.1	1.5				ug/L	861974	Standard
	Ho	165	26.7	22.9				ug/L	9	Standard
	Tl	203	1014174.2	2.5	**49.5601**	0.750	1.5	ug/L	5	Standard
	Tl	205	2503846.7	2.3	**51.1054**	0.565	1.1	ug/L	15	Standard
	Pb	206	796114.7	2.1	**49.6472**	0.469	0.9	ug/L	297	Standard
	Pb	207	660607.2	2.9	**49.4080**	0.504	1.0	ug/L	266	Standard
	Pb	208	3093958.9	2.7	**49.2758**	0.421	0.9	ug/L	1205	Standard
	U	238	1713118.4	3.5	**48.4888**	0.884	1.8	ug/L	4	Standard
>	**Bi**	209	498841.6	2.0				ug/L	470254	Standard
	Na	23	14583.0	2.7	**4.7962**	0.066	1.4	mg/L	98	Standard
	Mg	24	1205409.0	4.4	**4.9436**	0.146	3.0	mg/L	171	Standard

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	K	39	45863.3	2.3	**4.8058**	0.106	2.2	mg/L	367	Standard
	Ca	43	3013.6	4.6	**4.8566**	0.126	2.6	mg/L	58	Standard
	Fe	54	34492.6	4.4	**4.7224**	0.113	2.4	mg/L	955	Standard
	Fe	57	1025149.5	4.8	**4.8487**	0.149	3.1	mg/L	5344	Standard
>	**Sc-1**	45	383147.5	3.2				mg/L	340292	Standard
	Cl	35	57945.3	1.8				ug/L	43576	Standard
	Kr	83	95.6	2.2				ug/L	78	Standard
	Br	81	21337.1	6.1				ug/L	19680	Standard
	P	31	90424.0	4.4				ug/L	84050	Standard
	S	34	893184.2	3.4				ug/L	907587	Standard
	Sr	88	2626.2	1.5				ug/L	383	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	98.759		
>	Sc	45			
	Ti	47	100.775		
	V	51	102.109		
	Cr	52	102.075		
	Cr	53			
	Mn	55	105.513		
	Co	59	99.547		
	Ni	60	98.918		
	Cu	65	98.478		
	Zn	66	98.942		
>	Ge	72		109.647	
	As	75	98.660		
	Se	82	99.767		
	Se-1	77	101.275		
	Ga	71			
	Rb	85			
>	Y	89		107.388	
	Rh	103			
	Mo	98	94.080		
	Ag	107	97.125		
	Cd	111	98.214		
	Cd	114			
>	In	115		111.927	
	Sn	118	99.224		
	Sb	123	98.752		
	Ba	135	97.679		
	Ce	140			
>	Tb	159		113.487	
	Ho	165			
	Tl	203	99.120		
	Tl	205			
	Pb	206	99.294		

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	Pb	207	98.816	
	Pb	208	98.552	
	U	238	96.978	
>	Bi	209		106.079
	Na	23	95.924	
	Mg	24	98.872	
	K	39	96.116	
	Ca	43	97.132	
	Fe	54	94.448	
	Fe	57	96.975	
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, May 07, 2012 16:29:36
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	19803.9	1.5	**38.6017**	15.255	39.5	ug/L	18451	Standard
	Be	9	10.7	32.9	**-0.0039**	0.001	21.6	ug/L	7	Standard
	Al	27	19937.1	4.2	**0.1009**	0.045	44.5	ug/L	28447	Standard
>	**Sc**	45	366617.2	0.6				ug/L	340292	Standard
	Ti	47	127.3	15.1	**0.0064**	0.010	154.6	ug/L	116	Standard
	V	51	4675.7	0.3	**-0.0089**	0.004	43.3	ug/L	4654	Standard
	Cr	52	15002.4	0.9	**-0.0397**	0.011	27.0	ug/L	14933	Standard
	Cr	53	313.3	13.5	**-0.0107**	0.016	153.6	ug/L	342	Standard
	Mn	55	1666.1	4.1	**-0.0415**	0.002	4.1	ug/L	1267	Standard
	Co	59	143.0	11.8	**-0.0004**	0.001	187.0	ug/L	140	Standard
	Ni	60	115.0	11.3	**0.0040**	0.003	67.8	ug/L	75	Standard
	Cu	65	555.7	4.1	**0.1007**	0.004	4.1	ug/L	239	Standard
	Zn	66	650.7	1.9	**0.2317**	0.013	5.8	ug/L	226	Standard
>	**Ge**	72	300602.0	1.4				ug/L	288220	Standard
	As	75	-237.3	25.1	**0.0048**	0.034	705.1	ug/L	-236	Standard
	Se	82	54.3	19.3	**0.0461**	0.052	113.6	ug/L	48	Standard
	Se-1	77	98.0	11.8	**-0.0640**	0.098	153.6	ug/L	96	Standard
	Ga	71	279522.2	2.0				mg/L	267913	Standard
	Rb	85	30.0	24.0				ug/L	31	Standard
>	**Y**	89	315451.6	3.7				ug/L	301679	Standard
	Rh	103	0.0					ug/L	1	Standard
	Mo	98	93.0	78.3	**0.0129**	0.012	89.0	ug/L	7	Standard
	Ag	107	116.0	17.3	**0.0007**	0.001	179.8	ug/L	66	Standard
	Cd	111	561.8	2.1	**0.0004**	0.003	750.4	mg/L	527	Standard
	Cd	114	1285.0	2.4	**-0.0091**	0.003	33.3	ug/L	1273	Standard
>	**In**	115	809673.7	1.2				ug/L	755896	Standard
	Sn	118	736.7	3.8	**0.0251**	0.002	8.4	ug/L	404	Standard
	Sb	123	288.6	34.5	**0.0184**	0.007	39.6	ug/L	34	Standard
	Ba	135	56.3	19.6	**0.0015**	0.002	118.4	ug/L	45	Standard
	Ce	140	52.0	16.8				ug/L	52	Standard
>	**Tb**	159	920749.7	2.6				ug/L	861974	Standard
	Ho	165	9.3	44.6				ug/L	9	Standard
	Tl	203	51.0	51.9	**0.0021**	0.001	59.6	ug/L	5	Standard
	Tl	205	108.0	35.3	**0.0018**	0.001	40.0	ug/L	15	Standard
	Pb	206	404.3	7.5	**0.0036**	0.002	46.8	ug/L	297	Standard
	Pb	207	337.7	12.4	**0.0051**	0.003	57.9	ug/L	266	Standard
	Pb	208	1567.7	6.6	**0.0051**	0.001	25.4	ug/L	1205	Standard
	U	238	58.7	81.0	**0.0048**	0.001	27.0	ug/L	4	Standard
>	**Bi**	209	502176.9	1.3				ug/L	470254	Standard
	Na	23	85.3	9.8	**-0.0071**	0.003	38.2	mg/L	98	Standard
	Mg	24	209.7	14.3	**-0.0005**	0.000	24.7	mg/L	171	Standard

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K	39	400.0	5.2	**0.0019**	0.002	111.2	mg/L	367	Standard
Ca	43	50.7	23.8	**-0.0078**	0.021	268.1	mg/L	58	Standard
Fe	54	939.3	1.7	**-0.0070**	0.003	40.3	mg/L	955	Standard
Fe	57	5387.0	1.6	**-0.0015**	0.001	35.5	mg/L	5344	Standard
Sc-1	45	366617.2	0.6				mg/L	340292	Standard
Cl	35	53247.4	2.6				ug/L	43576	Standard
Kr	83	80.7	13.3				ug/L	78	Standard
Br	81	20519.9	2.8				ug/L	19680	Standard
P	31	83948.7	2.1				ug/L	84050	Standard
S	34	866636.1	2.7				ug/L	907587	Standard
Sr	88	376.7	14.8				ug/L	383	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		104.296	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		104.565	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		107.114	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		106.819	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: QC Std 7
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│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	106.788
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: L1205001702
Sample Date/Time: Monday, May 07, 2012 16:32:25
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	28825.7	2.2	**375.5560**	46.478	12.4	ug/L	18451	Standard
	Be	9	601.3	4.4	**0.1187**	0.006	4.7	ug/L	7	Standard
	Al	27	3148127.5	2.5	**129.6104**	3.614	2.8	ug/L	28447	Standard
>	**Sc**	45	428163.2	0.5				ug/L	340292	Standard
	Ti	47	2635.6	7.9	**1.1212**	0.095	8.5	ug/L	116	Standard
	V	51	17744.2	2.0	**0.5999**	0.021	3.5	ug/L	4654	Standard
	Cr	52	26861.5	0.9	**0.6431**	0.023	3.6	ug/L	14933	Standard
	Cr	53	1618.1	3.0	**0.5056**	0.024	4.8	ug/L	342	Standard
	Mn	55	112138.9	1.7	**3.9016**	0.050	1.3	ug/L	1267	Standard
	Co	59	14136.9	1.1	**0.6581**	0.012	1.8	ug/L	140	Standard
	Ni	60	5896.1	1.5	**1.2938**	0.029	2.3	ug/L	75	Standard
	Cu	65	2881.6	1.2	**0.6875**	0.010	1.4	ug/L	239	Standard
	Zn	66	21011.9	1.6	**12.3269**	0.194	1.6	ug/L	226	Standard
>	**Ge**	72	321417.2	0.8				ug/L	288220	Standard
	As	75	433.0	8.0	**0.3866**	0.017	4.5	ug/L	-236	Standard
	Se	82	128.8	4.1	**0.3603**	0.021	5.8	ug/L	48	Standard
	Se-1	77	154.0	5.2	**0.3747**	0.081	21.6	ug/L	96	Standard
	Ga	71	300039.0	0.2				mg/L	267913	Standard
	Rb	85	197775.2	1.1				ug/L	31	Standard
>	**Y**	89	392901.0	2.8				ug/L	301679	Standard
	Rh	103	18.0	67.6				ug/L	1	Standard
	Mo	98	833.6	4.7	**0.1236**	0.005	3.8	ug/L	7	Standard
	Ag	107	210.0	10.2	**0.0063**	0.001	23.2	ug/L	66	Standard
	Cd	111	6778.9	1.9	**1.0437**	0.024	2.3	mg/L	527	Standard
	Cd	114	16363.6	1.7	**1.0052**	0.016	1.6	ug/L	1273	Standard
>	**In**	115	866300.6	1.2				ug/L	755896	Standard
	Sn	118	2482.5	0.9	**0.1945**	0.005	2.5	ug/L	404	Standard
	Sb	123	483.1	1.6	**0.0309**	0.001	2.8	ug/L	34	Standard
	Ba	135	101831.8	1.8	**16.8307**	0.233	1.4	ug/L	45	Standard
	Ce	140	210038.0	1.4				ug/L	52	Standard
>	**Tb**	159	994370.6	0.5				ug/L	861974	Standard
	Ho	165	8635.8	1.8				ug/L	9	Standard
	Tl	203	1023.0	1.1	**0.0482**	0.001	1.3	ug/L	5	Standard
	Tl	205	2419.5	2.6	**0.0477**	0.001	2.9	ug/L	15	Standard
	Pb	206	3780.5	3.1	**0.2078**	0.006	2.9	ug/L	297	Standard
	Pb	207	3095.0	4.6	**0.2051**	0.009	4.4	ug/L	266	Standard
	Pb	208	14610.1	2.7	**0.2066**	0.005	2.3	ug/L	1205	Standard
	U	238	3661.4	3.6	**0.1039**	0.003	3.0	ug/L	4	Standard
>	**Bi**	209	513159.1	0.6				ug/L	470254	Standard
	Na	23	16096.5	1.2	**4.7364**	0.080	1.7	mg/L	98	Standard
	Mg	24	164789.8	1.8	**0.6036**	0.012	2.0	mg/L	171	Standard

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	K	39	9076.1	2.2	**0.8160**	0.021	2.6	mg/L	367	Standard
	Ca	43	652.0	3.8	**0.8641**	0.042	4.9	mg/L	58	Standard
	Fe	54	6953.9	1.8	**0.7328**	0.018	2.5	mg/L	955	Standard
	Fe	57	182876.1	2.5	**0.7503**	0.020	2.6	mg/L	5344	Standard
>	**Sc-1**	45	428163.2	0.5				mg/L	340292	Standard
	Cl	35	304694.8	1.1				ug/L	43576	Standard
	Kr	83	97.6	12.0				ug/L	78	Standard
	Br	81	45682.8	1.4				ug/L	19680	Standard
	P	31	143435.9	3.3				ug/L	84050	Standard
	S	34	1383398.5	1.9				ug/L	907587	Standard
	Sr	88	363513.3	1.9				ug/L	383	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		111.518	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		130.238	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		114.606	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		115.360	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	109.124
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Y 89 Int Std for sample	Y	89	Rerun sample

Method 6020 - Summary Report

Sample ID: L1205001703
Sample Date/Time: Monday, May 07, 2012 16:35:12
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	26507.8	1.4	**272.3421**	29.206	10.7	ug/L	18451	Standard
	Be	9	27.0	19.6	**-0.0007**	0.001	161.9	ug/L	7	Standard
	Al	27	109489.1	3.3	**3.7702**	0.081	2.1	ug/L	28447	Standard
>	**Sc**	45	419175.5	2.3				ug/L	340292	Standard
	Ti	47	1414.1	1.2	**0.6157**	0.009	1.5	ug/L	116	Standard
	V	51	21670.6	2.4	**0.8519**	0.028	3.3	ug/L	4654	Standard
	Cr	52	21478.2	3.0	**0.3878**	0.041	10.5	ug/L	14933	Standard
	Cr	53	1078.0	7.4	**0.3155**	0.036	11.4	ug/L	342	Standard
	Mn	55	813464.5	1.1	**30.7743**	0.445	1.4	ug/L	1267	Standard
	Co	59	135228.5	1.3	**6.7573**	0.110	1.6	ug/L	140	Standard
	Ni	60	57218.9	1.5	**13.5559**	0.256	1.9	ug/L	75	Standard
	Cu	65	933.7	1.7	**0.2028**	0.006	2.7	ug/L	239	Standard
	Zn	66	5993.2	0.3	**3.6080**	0.017	0.5	ug/L	226	Standard
>	**Ge**	72	302547.2	0.4				ug/L	288220	Standard
	As	75	39543.9	1.0	**23.5226**	0.188	0.8	ug/L	-236	Standard
	Se	82	167.5	1.7	**0.5788**	0.014	2.4	ug/L	48	Standard
	Se-1	77	153.0	3.3	**0.4503**	0.049	10.9	ug/L	96	Standard
	Ga	71	279727.5	1.3				mg/L	267913	Standard
	Rb	85	51589.1	3.7				ug/L	31	Standard
>	**Y**	89	324639.8	2.5				ug/L	301679	Standard
	Rh	103	111.3	4.5				ug/L	1	Standard
	Mo	98	19593.3	0.8	**3.0856**	0.061	2.0	ug/L	7	Standard
	Ag	107	129.7	13.0	**0.0015**	0.001	76.4	ug/L	66	Standard
	Cd	111	921.8	3.2	**0.0616**	0.003	4.8	mg/L	527	Standard
	Cd	114	2270.5	2.8	**0.0584**	0.002	4.1	ug/L	1273	Standard
>	**In**	115	828556.0	1.4				ug/L	755896	Standard
	Sn	118	783.7	2.2	**0.0282**	0.001	3.7	ug/L	404	Standard
	Sb	123	14288.4	1.5	**1.0578**	0.006	0.6	ug/L	34	Standard
	Ba	135	171260.2	1.1	**29.6027**	0.124	0.4	ug/L	45	Standard
	Ce	140	9389.6	1.8				ug/L	52	Standard
>	**Tb**	159	959064.4	0.6				ug/L	861974	Standard
	Ho	165	156.0	16.8				ug/L	9	Standard
	Tl	203	446.7	0.9	**0.0222**	0.000	0.5	ug/L	5	Standard
	Tl	205	1059.4	4.2	**0.0220**	0.001	4.9	ug/L	15	Standard
	Pb	206	1556.7	6.4	**0.0791**	0.007	9.0	ug/L	297	Standard
	Pb	207	1310.7	3.4	**0.0815**	0.003	3.4	ug/L	266	Standard
	Pb	208	6049.5	0.8	**0.0801**	0.000	0.1	ug/L	1205	Standard
	U	238	215853.1	2.1	**6.3269**	0.140	2.2	ug/L	4	Standard
>	**Bi**	209	482017.5	0.7				ug/L	470254	Standard
	Na	23	14194.0	1.3	**4.2644**	0.147	3.4	mg/L	98	Standard
	Mg	24	693767.1	1.3	**2.6008**	0.049	1.9	mg/L	171	Standard

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	K	39	5202.9	3.4	**0.4606**	0.026	5.6	mg/L	367	Standard
	Ca	43	24732.2	0.1	**37.0666**	0.866	2.3	mg/L	58	Standard
	Fe	54	3817.6	1.2	**0.3472**	0.015	4.4	mg/L	955	Standard
	Fe	57	114417.8	1.9	**0.4693**	0.005	1.1	mg/L	5344	Standard
>	**Sc-1**	45	419175.5	2.3				mg/L	340292	Standard
	Cl	35	733004.5	1.7				ug/L	43576	Standard
	Kr	83	87.1	3.2				ug/L	78	Standard
	Br	81	51906.1	2.7				ug/L	19680	Standard
	P	31	127464.0	1.3				ug/L	84050	Standard
	S	34	1255998.2	2.2				ug/L	907587	Standard
	Sr	88	2914806.5	2.5				ug/L	383	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		104.971	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		107.611	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		109.612	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		111.264	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	102.502
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: L1205001704
Sample Date/Time: Monday, May 07, 2012 16:38:00
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	174280.0	1.0	**8389.6605**	29.882	0.4	ug/L	18451	Standard
	Be	9	85.3	8.0	**0.0102**	0.001	12.5	ug/L	7	Standard
	Al	27	5854967.1	2.7	**228.0147**	4.294	1.9	ug/L	28447	Standard
>	**Sc**	45	453871.3	0.9				ug/L	340292	Standard
	Ti	47	7767.3	5.7	**3.5184**	0.212	6.0	ug/L	116	Standard
	V	51	26839.4	2.1	**1.0743**	0.033	3.0	ug/L	4654	Standard
	Cr	52	26458.4	1.7	**0.6698**	0.037	5.5	ug/L	14933	Standard
	Cr	53	2598.9	7.5	**0.9328**	0.085	9.1	ug/L	342	Standard
	Mn	55	1696920.2	2.1	**62.4236**	1.510	2.4	ug/L	1267	Standard
	Co	59	3969.9	2.2	**0.1852**	0.005	2.6	ug/L	140	Standard
	Ni	60	5161.2	3.1	**1.1656**	0.041	3.5	ug/L	75	Standard
	Cu	65	1525.4	4.9	**0.3519**	0.021	6.0	ug/L	239	Standard
	Zn	66	15489.9	2.0	**9.3278**	0.227	2.4	ug/L	226	Standard
>	**Ge**	72	311684.6	0.4				ug/L	288220	Standard
	As	75	1670.3	2.5	**1.1042**	0.027	2.4	ug/L	-236	Standard
	Se	82	330.6	1.9	**1.3031**	0.034	2.6	ug/L	48	Standard
	Se-1	77	166.0	3.8	**0.5273**	0.063	11.9	ug/L	96	Standard
	Ga	71	285816.7	0.5				mg/L	267913	Standard
	Rb	85	58265.8	1.9				ug/L	31	Standard
>	**Y**	89	347549.8	1.0				ug/L	301679	Standard
	Rh	103	137.3	16.0				ug/L	1	Standard
	Mo	98	2729.7	1.9	**0.4205**	0.007	1.6	ug/L	7	Standard
	Ag	107	125.7	4.8	**0.0010**	0.000	40.7	ug/L	66	Standard
	Cd	111	805.2	5.3	**0.0385**	0.007	17.5	mg/L	527	Standard
	Cd	114	1969.4	2.4	**0.0347**	0.003	8.3	ug/L	1273	Standard
>	**In**	115	843488.7	0.5				ug/L	755896	Standard
	Sn	118	2710.9	2.2	**0.2246**	0.005	2.2	ug/L	404	Standard
	Sb	123	1008.2	3.8	**0.0701**	0.002	3.5	ug/L	34	Standard
	Ba	135	428507.0	2.3	**72.7633**	1.410	1.9	ug/L	45	Standard
	Ce	140	100485.6	2.2				ug/L	52	Standard
>	**Tb**	159	983513.0	0.4				ug/L	861974	Standard
	Ho	165	1914.1	6.3				ug/L	9	Standard
	Tl	203	439.3	3.5	**0.0211**	0.001	3.1	ug/L	5	Standard
	Tl	205	1025.4	2.1	**0.0206**	0.001	2.5	ug/L	15	Standard
	Pb	206	8142.2	1.3	**0.4872**	0.010	2.0	ug/L	297	Standard
	Pb	207	6757.2	1.4	**0.4863**	0.008	1.7	ug/L	266	Standard
	Pb	208	31761.1	1.0	**0.4871**	0.006	1.3	ug/L	1205	Standard
	U	238	3675.1	4.0	**0.1074**	0.004	4.1	ug/L	4	Standard
>	**Bi**	209	498184.6	0.6				ug/L	470254	Standard
	Na	23	23763.3	2.2	**6.6099**	0.088	1.3	mg/L	98	Standard
	Mg	24	555353.7	2.3	**1.9217**	0.028	1.5	mg/L	171	Standard

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K	39	14250.7	1.3	**1.2290**	0.010	0.8	mg/L	367	Standard
Ca	43	11744.6	2.7	**16.1955**	0.295	1.8	mg/L	58	Standard
Fe	54	4441.6	7.7	**0.3834**	0.036	9.5	mg/L	955	Standard
Fe	57	120252.4	3.5	**0.4546**	0.013	2.8	mg/L	5344	Standard
Sc-1	45	453871.3	0.9				mg/L	340292	Standard
Cl	35	1055357.8	0.4				ug/L	43576	Standard
Kr	83	99.8	5.6				ug/L	78	Standard
Br	81	160807.5	3.4				ug/L	19680	Standard
P	31	155832.5	3.3				ug/L	84050	Standard
S	34	1423657.6	1.7				ug/L	907587	Standard
Sr	88	3796879.7	2.2				ug/L	383	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		108.141	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		115.205	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		111.588	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		114.100	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	105.939
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: L1205001705
Sample Date/Time: Monday, May 07, 2012 16:40:46
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	28760.9	1.6	**384.6998**	21.167	5.5	ug/L	18451	Standard
	Be	9	56.7	8.3	**0.0054**	0.001	18.8	ug/L	7	Standard
	Al	27	1278538.7	4.4	**52.5062**	1.134	2.2	ug/L	28447	Standard
>	**Sc**	45	424949.4	2.4				ug/L	340292	Standard
	Ti	47	3715.8	14.6	**1.6907**	0.234	13.8	ug/L	116	Standard
	V	51	44382.2	4.2	**1.9862**	0.071	3.6	ug/L	4654	Standard
	Cr	52	30396.8	2.4	**0.9698**	0.038	3.9	ug/L	14933	Standard
	Cr	53	2368.9	5.6	**0.8587**	0.047	5.4	ug/L	342	Standard
	Mn	55	3929583.7	3.0	**147.8728**	2.709	1.8	ug/L	1267	Standard
	Co	59	13693.5	3.6	**0.6719**	0.017	2.6	ug/L	140	Standard
	Ni	60	17026.9	4.3	**3.9849**	0.138	3.5	ug/L	75	Standard
	Cu	65	7398.5	5.4	**1.9482**	0.088	4.5	ug/L	239	Standard
	Zn	66	17528.5	2.4	**10.8162**	0.133	1.2	ug/L	226	Standard
>	**Ge**	72	304928.1	1.2				ug/L	288220	Standard
	As	75	3577.4	3.5	**2.2437**	0.048	2.1	ug/L	-236	Standard
	Se	82	145.3	17.4	**0.4682**	0.112	24.0	ug/L	48	Standard
	Se-1	77	144.0	4.9	**0.3545**	0.057	16.2	ug/L	96	Standard
	Ga	71	283955.5	0.6				mg/L	267913	Standard
	Rb	85	99166.9	2.2				ug/L	31	Standard
>	**Y**	89	342500.0	1.8				ug/L	301679	Standard
	Rh	103	197.3	9.4				ug/L	1	Standard
	Mo	98	8107.5	1.4	**1.2721**	0.013	1.0	ug/L	7	Standard
	Ag	107	238.7	4.6	**0.0088**	0.000	4.9	ug/L	66	Standard
	Cd	111	858.6	5.7	**0.0500**	0.007	13.7	mg/L	527	Standard
	Cd	114	2122.2	3.6	**0.0476**	0.004	8.5	ug/L	1273	Standard
>	**In**	115	830800.0	2.1				ug/L	755896	Standard
	Sn	118	967.0	5.9	**0.0471**	0.005	9.8	ug/L	404	Standard
	Sb	123	52248.3	3.1	**3.8666**	0.079	2.0	ug/L	34	Standard
	Ba	135	313021.3	2.1	**53.9692**	0.820	1.5	ug/L	45	Standard
	Ce	140	69764.3	2.6				ug/L	52	Standard
>	**Tb**	159	984220.1	1.1				ug/L	861974	Standard
	Ho	165	1238.7	3.0				ug/L	9	Standard
	Tl	203	497.7	2.2	**0.0248**	0.001	3.1	ug/L	5	Standard
	Tl	205	1148.0	2.4	**0.0239**	0.001	3.4	ug/L	15	Standard
	Pb	206	91252.7	1.7	**5.8599**	0.059	1.0	ug/L	297	Standard
	Pb	207	74922.5	2.6	**5.7715**	0.096	1.7	ug/L	266	Standard
	Pb	208	351030.1	2.3	**5.7585**	0.080	1.4	ug/L	1205	Standard
	U	238	33141.2	2.9	**0.9723**	0.019	2.0	ug/L	4	Standard
>	**Bi**	209	482855.4	1.0				ug/L	470254	Standard
	Na	23	15239.7	1.0	**4.5178**	0.105	2.3	mg/L	98	Standard
	Mg	24	1226101.9	3.0	**4.5335**	0.037	0.8	mg/L	171	Standard

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	K	39	11468.3	3.2	**1.0502**	0.009	0.9	mg/L	367	Standard
	Ca	43	30767.9	2.7	**45.4899**	0.303	0.7	mg/L	58	Standard
	Fe	54	16927.9	4.0	**2.0082**	0.035	1.7	mg/L	955	Standard
	Fe	57	523379.6	2.9	**2.2168**	0.011	0.5	mg/L	5344	Standard
>	**Sc-1**	45	424949.4	2.4				mg/L	340292	Standard
	Cl	35	773170.0	2.0				ug/L	43576	Standard
	Kr	83	92.2	12.3				ug/L	78	Standard
	Br	81	52056.5	6.8				ug/L	19680	Standard
	P	31	174501.3	3.7				ug/L	84050	Standard
	S	34	2036485.4	2.5				ug/L	907587	Standard
	Sr	88	5082464.8	1.6				ug/L	383	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		105.797	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		113.531	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		109.909	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		114.182	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	102.680
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Method 6020 - Summary Report

Sample ID: L1205001706
Sample Date/Time: Monday, May 07, 2012 16:43:34
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	33584.5	2.1	**839.1289**	44.780	5.3	ug/L	18451	Standard
	Be	9	287.0	6.5	**0.0587**	0.002	3.6	ug/L	7	Standard
	Al	27	2522649.2	3.2	**113.3172**	4.847	4.3	ug/L	28447	Standard
>	**Sc**	45	392333.2	4.0				ug/L	340292	Standard
	Ti	47	4885.5	2.1	**2.2834**	0.076	3.3	ug/L	116	Standard
	V	51	20445.2	3.7	**0.8000**	0.049	6.1	ug/L	4654	Standard
	Cr	52	27815.9	3.1	**0.8314**	0.083	10.0	ug/L	14933	Standard
	Cr	53	3630.4	5.5	**1.4215**	0.100	7.0	ug/L	342	Standard
	Mn	55	1362111.0	2.9	**52.1083**	1.904	3.7	ug/L	1267	Standard
	Co	59	92981.1	1.5	**4.6902**	0.162	3.5	ug/L	140	Standard
	Ni	60	30077.5	3.2	**7.1816**	0.123	1.7	ug/L	75	Standard
	Cu	65	1401.7	1.2	**0.3340**	0.006	1.7	ug/L	239	Standard
	Zn	66	24256.7	3.0	**15.3088**	0.513	3.4	ug/L	226	Standard
>	**Ge**	72	299717.1	2.7				ug/L	288220	Standard
	As	75	7191.8	0.8	**4.4389**	0.081	1.8	ug/L	-236	Standard
	Se	82	654.5	2.3	**2.9073**	0.027	0.9	ug/L	48	Standard
	Se-1	77	366.0	10.5	**2.4956**	0.363	14.6	ug/L	96	Standard
	Ga	71	270915.6	3.9				mg/L	267913	Standard
	Rb	85	98243.1	3.5				ug/L	31	Standard
>	**Y**	89	501930.1	4.1				ug/L	301679	Standard
	Rh	103	168.0	9.4				ug/L	1	Standard
	Mo	98	839.2	7.0	**0.1352**	0.008	5.9	ug/L	7	Standard
	Ag	107	122.0	9.2	**0.0013**	0.001	68.4	ug/L	66	Standard
	Cd	111	733.8	2.7	**0.0333**	0.005	14.1	mg/L	527	Standard
	Cd	114	1929.1	5.1	**0.0394**	0.006	15.7	ug/L	1273	Standard
>	**In**	115	798478.5	1.3				ug/L	755896	Standard
	Sn	118	3767.5	3.4	**0.3549**	0.009	2.4	ug/L	404	Standard
	Sb	123	487.8	6.3	**0.0341**	0.002	5.5	ug/L	34	Standard
	Ba	135	394879.7	3.3	**70.8305**	1.837	2.6	ug/L	45	Standard
	Ce	140	816948.4	4.4				ug/L	52	Standard
>	**Tb**	159	988974.1	2.3				ug/L	861974	Standard
	Ho	165	33833.8	3.5				ug/L	9	Standard
	Tl	203	909.0	4.8	**0.0483**	0.003	7.1	ug/L	5	Standard
	Tl	205	2290.8	6.2	**0.0510**	0.005	9.4	ug/L	15	Standard
	Pb	206	3957.5	3.7	**0.2489**	0.001	0.4	ug/L	297	Standard
	Pb	207	3374.0	2.1	**0.2566**	0.007	2.7	ug/L	266	Standard
	Pb	208	15586.8	2.7	**0.2524**	0.002	0.9	ug/L	1205	Standard
	U	238	2525.9	2.1	**0.0815**	0.001	1.8	ug/L	4	Standard
>	**Bi**	209	455497.0	3.5				ug/L	470254	Standard
	Na	23	88373.8	3.1	**28.5845**	1.269	4.4	mg/L	98	Standard
	Mg	24	1130987.0	2.4	**4.5327**	0.138	3.0	mg/L	171	Standard

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	K	39	13676.8	1.1	**1.3709**	0.066	4.8	mg/L	367	Standard
	Ca	43	20155.4	3.1	**32.2815**	1.569	4.9	mg/L	58	Standard
	Fe	54	126165.8	4.7	**17.2616**	1.029	6.0	mg/L	955	Standard
	Fe	57	3454618.8	3.4	**16.0360**	0.684	4.3	mg/L	5344	Standard
>	**Sc-1**	45	392333.2	4.0				mg/L	340292	Standard
	Cl	35	7272688.0	1.2				ug/L	43576	Standard
	Kr	83	132.2	7.3				ug/L	78	Standard
	Br	81	304153.7	1.0				ug/L	19680	Standard
	P	31	151975.6	3.3				ug/L	84050	Standard
	S	34	1955755.4	0.5				ug/L	907587	Standard
	Sr	88	6236285.3	3.6				ug/L	383	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		103.989	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		166.379	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		105.633	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		114.734	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	96.862
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Y 89 Int Std for sample	Y	89	Rerun sample

Method 6020 - Summary Report

Sample ID: L1205001707
Sample Date/Time: Monday, May 07, 2012 16:46:22
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	58899.6	1.3	**1702.7196**	52.675	3.1	ug/L	18451	Standard
	Be	9	1442.7	3.4	**0.2550**	0.010	4.1	ug/L	7	Standard
	Al	27	38217430.2	2.7	**1378.0726**	38.865	2.8	ug/L	28447	Standard
>	**Sc**	45	491806.3	0.7				ug/L	340292	Standard
	Ti	47	31333.7	2.5	**13.7500**	0.333	2.4	ug/L	116	Standard
	V	51	78675.5	1.7	**3.4642**	0.068	2.0	ug/L	4654	Standard
	Cr	52	60963.8	2.4	**2.7478**	0.075	2.7	ug/L	14933	Standard
	Cr	53	12680.6	2.2	**4.8927**	0.124	2.5	ug/L	342	Standard
	Mn	55	564389.4	0.9	**19.8160**	0.325	1.6	ug/L	1267	Standard
	Co	59	33580.2	2.6	**1.5541**	0.028	1.8	ug/L	140	Standard
	Ni	60	16207.0	1.7	**3.5524**	0.019	0.5	ug/L	75	Standard
	Cu	65	4820.4	2.4	**1.1696**	0.020	1.7	ug/L	239	Standard
	Zn	66	109267.9	0.4	**64.0779**	0.691	1.1	ug/L	226	Standard
>	**Ge**	72	325403.1	1.2				ug/L	288220	Standard
	As	75	2719.7	2.8	**1.6406**	0.041	2.5	ug/L	-236	Standard
	Se	82	952.0	1.9	**3.9672**	0.080	2.0	ug/L	48	Standard
	Se-1	77	375.7	1.9	**2.3049**	0.082	3.5	ug/L	96	Standard
	Ga	71	307099.4	2.3				mg/L	267913	Standard
	Rb	85	325746.0	4.0				ug/L	31	Standard
>	**Y**	89	446687.5	2.8				ug/L	301679	Standard
	Rh	103	44.7	34.2				ug/L	1	Standard
	Mo	98	836.5	1.2	**0.1226**	0.001	0.6	ug/L	7	Standard
	Ag	107	265.7	9.5	**0.0097**	0.002	15.5	ug/L	66	Standard
	Cd	111	1029.1	5.8	**0.0706**	0.009	12.7	mg/L	527	Standard
	Cd	114	2717.5	3.9	**0.0796**	0.007	8.4	ug/L	1273	Standard
>	**In**	115	876251.0	0.9				ug/L	755896	Standard
	Sn	118	9049.4	2.3	**0.8406**	0.013	1.6	ug/L	404	Standard
	Sb	123	1273.8	2.6	**0.0860**	0.002	2.4	ug/L	34	Standard
	Ba	135	334252.6	2.3	**54.6325**	0.815	1.5	ug/L	45	Standard
	Ce	140	689687.0	2.6				ug/L	52	Standard
>	**Tb**	159	1030951.9	0.3				ug/L	861974	Standard
	Ho	165	12521.2	1.1				ug/L	9	Standard
	Tl	203	2084.8	2.4	**0.1026**	0.003	2.7	ug/L	5	Standard
	Tl	205	4856.8	1.9	**0.0998**	0.002	1.5	ug/L	15	Standard
	Pb	206	30825.7	3.0	**1.9216**	0.052	2.7	ug/L	297	Standard
	Pb	207	25560.2	2.3	**1.9125**	0.037	1.9	ug/L	266	Standard
	Pb	208	119570.1	2.1	**1.9054**	0.035	1.9	ug/L	1205	Standard
	U	238	10204.1	2.9	**0.2951**	0.008	2.8	ug/L	4	Standard
>	**Bi**	209	493695.4	0.5				ug/L	470254	Standard
	Na	23	103891.7	1.1	**26.7834**	0.389	1.5	mg/L	98	Standard
	Mg	24	538930.5	2.2	**1.7211**	0.039	2.3	mg/L	171	Standard

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K	39	40915.8	1.6	**3.3262**	0.055	1.7	mg/L	367	Standard
Ca	43	1859.4	4.4	**2.2852**	0.087	3.8	mg/L	58	Standard
Fe	54	12325.9	3.1	**1.2098**	0.040	3.3	mg/L	955	Standard
Fe	57	357858.5	2.5	**1.2982**	0.034	2.6	mg/L	5344	Standard
Sc-1	45	491806.3	0.7				mg/L	340292	Standard
Cl	35	5383606.8	0.5				ug/L	43576	Standard
Kr	83	102.2	2.9				ug/L	78	Standard
Br	81	446416.3	1.9				ug/L	19680	Standard
P	31	178419.5	1.5				ug/L	84050	Standard
S	34	1964402.1	2.0				ug/L	907587	Standard
Sr	88	1067332.3	3.5				ug/L	383	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		112.901	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		148.067	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		115.922	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		119.604	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	104.985
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Y 89 Int Std for sample	Y	89	Rerun sample

Method 6020 - Summary Report

Sample ID: L1205001708
Sample Date/Time: Monday, May 07, 2012 16:49:10
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	108371.9	0.4	**4491.3807**	171.223	3.8	ug/L	18451	Standard
	Be	9	421.0	5.4	**0.0730**	0.003	3.5	ug/L	7	Standard
	Al	27	5364747.2	2.8	**201.0614**	5.188	2.6	ug/L	28447	Standard
>	**Sc**	45	471515.2	2.6				ug/L	340292	Standard
	Ti	47	10315.5	1.8	**4.3930**	0.119	2.7	ug/L	116	Standard
	V	51	17256.4	1.6	**0.5490**	0.020	3.6	ug/L	4654	Standard
	Cr	52	27268.9	1.5	**0.6113**	0.041	6.7	ug/L	14933	Standard
	Cr	53	2091.5	4.5	**0.6680**	0.043	6.5	ug/L	342	Standard
	Mn	55	5591068.9	1.6	**193.0031**	4.758	2.5	ug/L	1267	Standard
	Co	59	97269.9	1.5	**4.4197**	0.101	2.3	ug/L	140	Standard
	Ni	60	12132.2	1.9	**2.5959**	0.048	1.8	ug/L	75	Standard
	Cu	65	1577.1	3.8	**0.3393**	0.011	3.4	ug/L	239	Standard
	Zn	66	26043.4	2.8	**14.8051**	0.512	3.5	ug/L	226	Standard
>	**Ge**	72	332556.2	0.9				ug/L	288220	Standard
	As	75	854.0	7.3	**0.6048**	0.030	4.9	ug/L	-236	Standard
	Se	82	122.8	11.4	**0.3150**	0.057	18.2	ug/L	48	Standard
	Se-1	77	165.3	17.2	**0.4262**	0.245	57.6	ug/L	96	Standard
	Ga	71	311805.8	0.8				mg/L	267913	Standard
	Rb	85	47628.8	1.3				ug/L	31	Standard
>	**Y**	89	411094.9	1.2				ug/L	301679	Standard
	Rh	103	141.3	14.0				ug/L	1	Standard
	Mo	98	949.8	4.3	**0.1393**	0.006	4.3	ug/L	7	Standard
	Ag	107	124.7	7.4	**0.0007**	0.001	96.0	ug/L	66	Standard
	Cd	111	1047.6	1.7	**0.0735**	0.001	1.7	mg/L	527	Standard
	Cd	114	2646.3	3.9	**0.0746**	0.006	8.2	ug/L	1273	Standard
>	**In**	115	877456.3	1.8				ug/L	755896	Standard
	Sn	118	5167.5	0.9	**0.4564**	0.005	1.0	ug/L	404	Standard
	Sb	123	336.4	6.2	**0.0201**	0.001	5.2	ug/L	34	Standard
	Ba	135	362412.6	0.9	**59.1769**	1.512	2.6	ug/L	45	Standard
	Ce	140	261811.7	1.8				ug/L	52	Standard
>	**Tb**	159	1025103.6	1.0				ug/L	861974	Standard
	Ho	165	5391.6	1.6				ug/L	9	Standard
	Tl	203	439.3	8.0	**0.0203**	0.002	9.0	ug/L	5	Standard
	Tl	205	1034.7	4.5	**0.0200**	0.001	5.3	ug/L	15	Standard
	Pb	206	5396.6	0.7	**0.3030**	0.005	1.6	ug/L	297	Standard
	Pb	207	4436.3	2.2	**0.3000**	0.010	3.2	ug/L	266	Standard
	Pb	208	20925.7	1.5	**0.3017**	0.007	2.5	ug/L	1205	Standard
	U	238	2692.9	7.1	**0.0767**	0.006	7.3	ug/L	4	Standard
>	**Bi**	209	517572.7	0.9				ug/L	470254	Standard
	Na	23	14059.2	1.5	**3.7506**	0.118	3.2	mg/L	98	Standard
	Mg	24	395585.6	2.8	**1.3175**	0.033	2.5	mg/L	171	Standard

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K	39	6266.6	0.7	**0.4960**	0.010	2.1	mg/L	367	Standard
Ca	43	12497.2	2.3	**16.5974**	0.453	2.7	mg/L	58	Standard
Fe	54	5729.4	2.8	**0.5119**	0.026	5.1	mg/L	955	Standard
Fe	57	151935.9	3.4	**0.5591**	0.015	2.6	mg/L	5344	Standard
Sc-1	45	471515.2	2.6				mg/L	340292	Standard
Cl	35	807761.5	3.1				ug/L	43576	Standard
Kr	83	96.9	6.0				ug/L	78	Standard
Br	81	52282.9	6.0				ug/L	19680	Standard
P	31	183995.2	1.1				ug/L	84050	Standard
S	34	1918700.8	2.6				ug/L	907587	Standard
Sr	88	4198316.8	1.9				ug/L	383	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		115.383	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		136.269	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		116.082	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		118.925	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	110.062
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Y 89 Int Std for sample	Y	89	Rerun sample

Method 6020 - Summary Report

Sample ID: L1205001709
Sample Date/Time: Monday, May 07, 2012 16:51:57
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	184616.8	1.6	**8757.4118**	193.137	2.2	ug/L	18451	Standard
	Be	9	63.7	23.0	**0.0057**	0.003	44.9	ug/L	7	Standard
	Al	27	3068897.8	1.4	**116.6778**	1.497	1.3	ug/L	28447	Standard
>	**Sc**	45	463364.0	2.3				ug/L	340292	Standard
	Ti	47	9566.4	2.3	**4.2299**	0.079	1.9	ug/L	116	Standard
	V	51	17840.1	2.1	**0.6079**	0.014	2.4	ug/L	4654	Standard
	Cr	52	25633.3	1.8	**0.5722**	0.020	3.5	ug/L	14933	Standard
	Cr	53	1818.1	0.9	**0.5890**	0.002	0.3	ug/L	342	Standard
	Mn	55	413007.7	0.4	**14.7136**	0.049	0.3	ug/L	1267	Standard
	Co	59	2214.8	2.2	**0.0971**	0.002	1.8	ug/L	140	Standard
	Ni	60	4164.9	2.3	**0.9109**	0.024	2.7	ug/L	75	Standard
	Cu	65	1571.1	4.9	**0.3530**	0.018	5.2	ug/L	239	Standard
	Zn	66	17102.0	1.4	**10.0417**	0.156	1.6	ug/L	226	Standard
>	**Ge**	72	320083.0	0.6				ug/L	288220	Standard
	As	75	615.5	2.6	**0.4896**	0.007	1.4	ug/L	-236	Standard
	Se	82	83.2	14.6	**0.1592**	0.056	35.1	ug/L	48	Standard
	Se-1	77	140.0	8.2	**0.2547**	0.096	37.8	ug/L	96	Standard
	Ga	71	298575.3	0.9				mg/L	267913	Standard
	Rb	85	25156.2	2.1				ug/L	31	Standard
>	**Y**	89	337098.3	1.1				ug/L	301679	Standard
	Rh	103	119.3	10.9				ug/L	1	Standard
	Mo	98	4605.6	2.6	**0.6934**	0.012	1.8	ug/L	7	Standard
	Ag	107	106.0	11.6	**-0.0004**	0.001	189.0	ug/L	66	Standard
	Cd	111	778.6	2.4	**0.0306**	0.004	14.4	mg/L	527	Standard
	Cd	114	2055.0	1.0	**0.0372**	0.003	7.6	ug/L	1273	Standard
>	**In**	115	864574.2	1.1				ug/L	755896	Standard
	Sn	118	3746.8	1.9	**0.3217**	0.011	3.5	ug/L	404	Standard
	Sb	123	840.4	5.5	**0.0564**	0.004	6.9	ug/L	34	Standard
	Ba	135	354771.8	1.1	**58.7831**	1.241	2.1	ug/L	45	Standard
	Ce	140	59852.0	1.2				ug/L	52	Standard
>	**Tb**	159	997795.9	1.5				ug/L	861974	Standard
	Ho	165	694.0	8.2				ug/L	9	Standard
	Tl	203	166.0	10.0	**0.0076**	0.001	11.5	ug/L	5	Standard
	Tl	205	375.3	6.4	**0.0072**	0.001	8.3	ug/L	15	Standard
	Pb	206	3733.1	0.9	**0.2084**	0.005	2.5	ug/L	297	Standard
	Pb	207	3067.0	2.7	**0.2065**	0.005	2.3	ug/L	266	Standard
	Pb	208	14524.1	0.5	**0.2088**	0.002	1.2	ug/L	1205	Standard
	U	238	5130.5	2.6	**0.1466**	0.005	3.3	ug/L	4	Standard
>	**Bi**	209	505410.6	1.6				ug/L	470254	Standard
	Na	23	9685.8	1.8	**2.6178**	0.067	2.6	mg/L	98	Standard
	Mg	24	479423.8	1.1	**1.6252**	0.019	1.2	mg/L	171	Standard

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K	39	9615.7	1.9	**0.7980**	0.004	0.5	mg/L	367	Standard
Ca	43	11064.7	1.5	**14.9417**	0.140	0.9	mg/L	58	Standard
Fe	54	2623.4	3.5	**0.1609**	0.017	10.8	mg/L	955	Standard
Fe	57	63245.1	0.9	**0.2206**	0.004	1.7	mg/L	5344	Standard
Sc-1	45	463364.0	2.3				mg/L	340292	Standard
Cl	35	327513.8	1.6				ug/L	43576	Standard
Kr	83	80.7	3.6				ug/L	78	Standard
Br	81	32627.4	2.3				ug/L	19680	Standard
P	31	135399.6	2.9				ug/L	84050	Standard
S	34	1275967.1	1.6				ug/L	907587	Standard
Sr	88	4227940.7	0.8				ug/L	383	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		111.055	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		111.741	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		114.377	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		115.757	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205001709
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│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	107.476
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: L1205001710
Sample Date/Time: Monday, May 07, 2012 16:54:45
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	31671.7	1.1	**588.4662**	11.363	1.9	ug/L	18451	Standard
	Be	9	134.3	1.1	**0.0221**	0.000	2.3	ug/L	7	Standard
	Al	27	5062057.6	1.3	**213.9693**	4.358	2.0	ug/L	28447	Standard
>	**Sc**	45	418149.5	0.9				ug/L	340292	Standard
	Ti	47	3777.1	1.8	**1.6267**	0.045	2.8	ug/L	116	Standard
	V	51	17955.2	1.0	**0.6079**	0.008	1.3	ug/L	4654	Standard
	Cr	52	25476.4	1.2	**0.5521**	0.031	5.6	ug/L	14933	Standard
	Cr	53	2443.5	2.5	**0.8351**	0.014	1.7	ug/L	342	Standard
	Mn	55	88717.7	1.1	**3.0581**	0.074	2.4	ug/L	1267	Standard
	Co	59	2505.9	2.3	**0.1101**	0.003	2.5	ug/L	140	Standard
	Ni	60	2415.2	0.8	**0.5150**	0.013	2.5	ug/L	75	Standard
	Cu	65	1578.1	2.6	**0.3522**	0.007	2.1	ug/L	239	Standard
	Zn	66	16033.5	0.8	**9.3417**	0.121	1.3	ug/L	226	Standard
>	**Ge**	72	322174.6	1.7				ug/L	288220	Standard
	As	75	375.0	19.1	**0.3538**	0.039	10.9	ug/L	-236	Standard
	Se	82	139.5	7.8	**0.4066**	0.053	12.9	ug/L	48	Standard
	Se-1	77	146.3	10.5	**0.3045**	0.153	50.2	ug/L	96	Standard
	Ga	71	302487.9	1.2				mg/L	267913	Standard
	Rb	85	63630.8	3.9				ug/L	31	Standard
>	**Y**	89	337607.2	3.3				ug/L	301679	Standard
	Rh	103	13.3	37.7				ug/L	1	Standard
	Mo	98	662.6	3.9	**0.0990**	0.002	2.5	ug/L	7	Standard
	Ag	107	85.3	4.7	**-0.0017**	0.000	11.0	ug/L	66	Standard
	Cd	111	666.4	5.7	**0.0126**	0.005	39.4	mg/L	527	Standard
	Cd	114	1664.4	0.4	**0.0117**	0.002	17.9	ug/L	1273	Standard
>	**In**	115	856664.6	1.6				ug/L	755896	Standard
	Sn	118	2249.5	3.4	**0.1738**	0.010	5.8	ug/L	404	Standard
	Sb	123	336.6	5.6	**0.0207**	0.001	7.2	ug/L	34	Standard
	Ba	135	81783.1	0.5	**13.6692**	0.158	1.2	ug/L	45	Standard
	Ce	140	43207.5	0.6				ug/L	52	Standard
>	**Tb**	159	979885.6	1.9				ug/L	861974	Standard
	Ho	165	586.0	2.7				ug/L	9	Standard
	Tl	203	462.7	3.0	**0.0218**	0.001	3.7	ug/L	5	Standard
	Tl	205	1084.0	4.5	**0.0214**	0.001	4.3	ug/L	15	Standard
	Pb	206	4884.8	0.7	**0.2780**	0.000	0.0	ug/L	297	Standard
	Pb	207	4091.2	2.7	**0.2808**	0.006	2.3	ug/L	266	Standard
	Pb	208	19128.1	0.5	**0.2798**	0.001	0.3	ug/L	1205	Standard
	U	238	949.0	5.1	**0.0296**	0.001	4.2	ug/L	4	Standard
>	**Bi**	209	507684.0	0.7				ug/L	470254	Standard
	Na	23	11262.2	0.6	**3.3828**	0.014	0.4	mg/L	98	Standard
	Mg	24	233132.3	1.1	**0.8750**	0.002	0.3	mg/L	171	Standard

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K	39	12531.8	1.6	**1.1712**	0.025	2.1	mg/L	367	Standard
Ca	43	2357.5	3.5	**3.4544**	0.096	2.8	mg/L	58	Standard
Fe	54	4878.3	1.1	**0.4853**	0.002	0.4	mg/L	955	Standard
Fe	57	120650.5	1.2	**0.4977**	0.002	0.3	mg/L	5344	Standard
Sc-1	45	418149.5	0.9				mg/L	340292	Standard
Cl	35	934004.4	0.3				ug/L	43576	Standard
Kr	83	82.0	12.0				ug/L	78	Standard
Br	81	58259.2	3.5				ug/L	19680	Standard
P	31	139151.2	2.0				ug/L	84050	Standard
S	34	1185071.7	1.2				ug/L	907587	Standard
Sr	88	547420.8	2.0				ug/L	383	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		111.781	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		111.909	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		113.331	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		113.679	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	107.960
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: L1205001711
Sample Date/Time: Monday, May 07, 2012 16:57:32
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	29951.9	2.3	**535.2640**	34.153	6.4	ug/L	18451	Standard
	Be	9	128.3	37.6	**0.0216**	0.011	49.2	ug/L	7	Standard
	Al	27	2699159.6	4.3	**116.8333**	1.655	1.4	ug/L	28447	Standard
>	**Sc**	45	406938.5	4.2				ug/L	340292	Standard
	Ti	47	4486.0	6.9	**2.0345**	0.106	5.2	ug/L	116	Standard
	V	51	18366.3	5.0	**0.6683**	0.028	4.2	ug/L	4654	Standard
	Cr	52	27570.7	2.9	**0.7652**	0.019	2.4	ug/L	14933	Standard
	Cr	53	2100.1	2.3	**0.7371**	0.011	1.5	ug/L	342	Standard
	Mn	55	5675206.9	5.5	**211.6315**	7.695	3.6	ug/L	1267	Standard
	Co	59	11159.1	5.0	**0.5411**	0.017	3.1	ug/L	140	Standard
	Ni	60	6858.2	5.9	**1.5761**	0.063	4.0	ug/L	75	Standard
	Cu	65	2069.8	3.6	**0.5029**	0.011	2.1	ug/L	239	Standard
	Zn	66	22349.2	4.0	**13.7136**	0.291	2.1	ug/L	226	Standard
>	**Ge**	72	307680.8	2.0				ug/L	288220	Standard
	As	75	5646.9	2.8	**3.4280**	0.026	0.8	ug/L	-236	Standard
	Se	82	122.9	14.5	**0.3578**	0.074	20.6	ug/L	48	Standard
	Se-1	77	131.3	12.4	**0.2232**	0.128	57.2	ug/L	96	Standard
	Ga	71	282905.9	2.6				mg/L	267913	Standard
	Rb	85	372195.9	4.5				ug/L	31	Standard
>	**Y**	89	320018.7	3.8				ug/L	301679	Standard
	Rh	103	65.3	32.2				ug/L	1	Standard
	Mo	98	886.8	7.4	**0.1384**	0.010	7.3	ug/L	7	Standard
	Ag	107	141.0	10.7	**0.0023**	0.001	37.4	ug/L	66	Standard
	Cd	111	658.7	0.8	**0.0158**	0.003	20.1	mg/L	527	Standard
	Cd	114	1665.4	4.3	**0.0162**	0.003	16.7	ug/L	1273	Standard
>	**In**	115	824574.7	2.2				ug/L	755896	Standard
	Sn	118	2363.5	3.2	**0.1945**	0.003	1.4	ug/L	404	Standard
	Sb	123	687.1	0.5	**0.0478**	0.001	1.9	ug/L	34	Standard
	Ba	135	161572.9	3.4	**28.0578**	0.467	1.7	ug/L	45	Standard
	Ce	140	51456.0	4.5				ug/L	52	Standard
>	**Tb**	159	954526.1	1.7				ug/L	861974	Standard
	Ho	165	951.4	5.6				ug/L	9	Standard
	Tl	203	325.3	4.4	**0.0160**	0.001	4.1	ug/L	5	Standard
	Tl	205	742.0	3.6	**0.0153**	0.000	3.1	ug/L	15	Standard
	Pb	206	6358.0	3.8	**0.3881**	0.010	2.5	ug/L	297	Standard
	Pb	207	5221.9	4.0	**0.3834**	0.010	2.7	ug/L	266	Standard
	Pb	208	24449.7	2.6	**0.3826**	0.005	1.2	ug/L	1205	Standard
	U	238	3506.7	3.0	**0.1057**	0.002	1.6	ug/L	4	Standard
>	**Bi**	209	483050.7	1.4				ug/L	470254	Standard
	Na	23	21845.1	1.8	**6.7832**	0.171	2.5	mg/L	98	Standard
	Mg	24	952352.7	5.2	**3.6770**	0.096	2.6	mg/L	171	Standard

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	K	39	80664.9	1.6	**7.9892**	0.208	2.6	mg/L	367	Standard
	Ca	43	10954.0	4.2	**16.8529**	0.047	0.3	mg/L	58	Standard
	Fe	54	11732.2	5.5	**1.4132**	0.038	2.7	mg/L	955	Standard
	Fe	57	339469.1	4.8	**1.4923**	0.024	1.6	mg/L	5344	Standard
>	**Sc-1**	45	406938.5	4.2				mg/L	340292	Standard
	Cl	35	876529.6	2.1				ug/L	43576	Standard
	Kr	83	86.7	1.5				ug/L	78	Standard
	Br	81	52173.7	2.4				ug/L	19680	Standard
	P	31	664383.7	3.7				ug/L	84050	Standard
	S	34	1224255.3	3.3				ug/L	907587	Standard
	Sr	88	2135811.7	4.5				ug/L	383	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		106.752	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		106.079	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		109.086	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		110.737	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	102.721
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Monday, May 07, 2012 17:00:23
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	20297.3	2.5	**46.8106**	25.485	54.4	ug/L	18451	Standard
	Be	9	220276.2	2.8	**52.5442**	1.059	2.0	ug/L	7	Standard
	Al	27	1083828.0	3.6	**50.6194**	1.396	2.8	ug/L	28447	Standard
>	**Sc**	45	373492.2	0.9				ug/L	340292	Standard
	Ti	47	212363.0	2.3	**99.4588**	1.620	1.6	ug/L	116	Standard
	V	51	1053333.9	2.9	**52.6063**	0.953	1.8	ug/L	4654	Standard
	Cr	52	813523.0	3.6	**52.8810**	1.528	2.9	ug/L	14933	Standard
	Cr	53	119092.4	2.6	**50.1838**	1.373	2.7	ug/L	342	Standard
	Mn	55	1393828.4	2.3	**52.2270**	1.388	2.7	ug/L	1267	Standard
	Co	59	1002616.7	0.8	**49.6060**	1.156	2.3	ug/L	140	Standard
	Ni	60	210570.9	1.2	**49.4163**	1.643	3.3	ug/L	75	Standard
	Cu	65	185696.1	3.1	**49.9889**	0.894	1.8	ug/L	239	Standard
	Zn	66	79545.0	2.9	**49.5650**	0.466	0.9	ug/L	226	Standard
>	**Ge**	72	305959.9	2.5				ug/L	288220	Standard
	As	75	83533.7	2.8	**48.9815**	1.012	2.1	ug/L	-236	Standard
	Se	82	10661.6	2.8	**49.5737**	1.382	2.8	ug/L	48	Standard
	Se-1	77	5543.0	2.4	**50.7909**	1.015	2.0	ug/L	96	Standard
	Ga	71	283970.8	2.5				mg/L	267913	Standard
	Rb	85	1744.1	2.6				ug/L	31	Standard
>	**Y**	89	311748.7	4.1				ug/L	301679	Standard
	Rh	103	61.3	24.5				ug/L	1	Standard
	Mo	98	597122.6	4.0	**92.6576**	3.129	3.4	ug/L	7	Standard
	Ag	107	717178.4	2.3	**47.8181**	1.318	2.8	ug/L	66	Standard
	Cd	111	282985.7	2.8	**49.1112**	1.056	2.2	mg/L	527	Standard
	Cd	114	710245.8	3.2	**49.3892**	1.046	2.1	ug/L	1273	Standard
>	**In**	115	841293.3	2.4				ug/L	755896	Standard
	Sn	118	479025.6	3.1	**49.2656**	1.341	2.7	ug/L	404	Standard
	Sb	123	666925.1	2.6	**48.7935**	1.397	2.9	ug/L	34	Standard
	Ba	135	286027.7	3.8	**48.7105**	2.065	4.2	ug/L	45	Standard
	Ce	140	1096.7	10.7				ug/L	52	Standard
>	**Tb**	159	969912.4	2.5				ug/L	861974	Standard
	Ho	165	28.0	46.8				ug/L	9	Standard
	Tl	203	1011826.7	2.0	**49.5526**	0.515	1.0	ug/L	5	Standard
	Tl	205	2499919.1	2.9	**51.1345**	1.090	2.1	ug/L	15	Standard
	Pb	206	782101.5	2.4	**48.8780**	0.806	1.6	ug/L	297	Standard
	Pb	207	653224.9	2.7	**48.9669**	0.967	2.0	ug/L	266	Standard
	Pb	208	3058405.9	2.4	**48.8200**	0.843	1.7	ug/L	1205	Standard
	U	238	1681623.3	2.7	**47.7081**	0.880	1.8	ug/L	4	Standard
>	**Bi**	209	497727.6	1.0				ug/L	470254	Standard
	Na	23	14455.6	2.5	**4.8765**	0.078	1.6	mg/L	98	Standard
	Mg	24	1185835.1	3.3	**4.9885**	0.123	2.5	mg/L	171	Standard

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	K	39	45383.9	2.9	**4.8769**	0.098	2.0	mg/L	367	Standard
	Ca	43	2967.0	2.4	**4.9070**	0.135	2.8	mg/L	58	Standard
	Fe	54	34923.5	3.4	**4.9106**	0.132	2.7	mg/L	955	Standard
	Fe	57	1016078.4	3.6	**4.9305**	0.134	2.7	mg/L	5344	Standard
>	**Sc-1**	45	373492.2	0.9				mg/L	340292	Standard
	Cl	35	74602.2	8.8				ug/L	43576	Standard
	Kr	83	77.3	2.3				ug/L	78	Standard
	Br	81	22457.6	2.7				ug/L	19680	Standard
	P	31	105391.0	1.7				ug/L	84050	Standard
	S	34	1008780.8	2.8				ug/L	907587	Standard
	Sr	88	2612.9	9.0				ug/L	383	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	101.239		
>	Sc	45			
	Ti	47	99.459		
	V	51	105.213		
	Cr	52	105.762		
	Cr	53			
	Mn	55	104.454		
	Co	59	99.212		
	Ni	60	98.833		
	Cu	65	99.978		
	Zn	66	99.130		
>	Ge	72		106.155	
	As	75	97.963		
	Se	82	99.147		
	Se-1	77	101.582		
	Ga	71			
	Rb	85			
>	Y	89		103.338	
	Rh	103			
	Mo	98	92.658		
	Ag	107	95.636		
	Cd	111	98.222		
	Cd	114			
>	In	115		111.297	
	Sn	118	98.531		
	Sb	123	97.587		
	Ba	135	97.421		
	Ce	140			
>	Tb	159		112.522	
	Ho	165			
	Tl	203	99.105		
	Tl	205			
	Pb	206	97.756		

Sample ID: QC Std 6
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	Pb	207	97.934	
	Pb	208	97.640	
	U	238	95.416	
>	Bi	209		105.842
	Na	23	97.531	
	Mg	24	99.770	
	K	39	97.539	
	Ca	43	98.141	
	Fe	54	98.211	
	Fe	57	98.609	
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, May 07, 2012 17:03:11
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	19655.7	0.5	**74.7979**	13.728	18.4	ug/L	18451	Standard
	Be	9	17.0	71.3	**-0.0023**	0.003	132.2	ug/L	7	Standard
	Al	27	20439.8	3.7	**0.1587**	0.030	19.0	ug/L	28447	Standard
>	**Sc**	45	354521.7	1.2				ug/L	340292	Standard
	Ti	47	108.0	22.8	**-0.0020**	0.012	609.5	ug/L	116	Standard
	V	51	4594.1	2.2	**-0.0091**	0.005	58.4	ug/L	4654	Standard
	Cr	52	14759.5	2.2	**-0.0392**	0.013	32.0	ug/L	14933	Standard
	Cr	53	315.3	8.9	**-0.0073**	0.013	171.7	ug/L	342	Standard
	Mn	55	1764.1	0.6	**-0.0365**	0.001	2.4	ug/L	1267	Standard
	Co	59	142.0	3.9	**-0.0003**	0.000	112.4	ug/L	140	Standard
	Ni	60	105.7	10.9	**0.0022**	0.003	113.4	ug/L	75	Standard
	Cu	65	505.0	5.4	**0.0892**	0.006	7.1	ug/L	239	Standard
	Zn	66	595.7	2.1	**0.2031**	0.005	2.3	ug/L	226	Standard
>	**Ge**	72	295527.5	1.1				ug/L	288220	Standard
	As	75	-237.4	12.5	**0.0019**	0.019	999.6	ug/L	-236	Standard
	Se	82	47.5	6.2	**0.0173**	0.012	71.5	ug/L	48	Standard
	Se-1	77	109.7	7.9	**0.0651**	0.073	112.5	ug/L	96	Standard
	Ga	71	276002.6	0.8				mg/L	267913	Standard
	Rb	85	53.3	22.9				ug/L	31	Standard
>	**Y**	89	303314.5	4.1				ug/L	301679	Standard
	Rh	103	1.3	86.6				ug/L	1	Standard
	Mo	98	92.6	47.3	**0.0132**	0.007	54.0	ug/L	7	Standard
	Ag	107	97.7	11.0	**-0.0004**	0.001	168.0	ug/L	66	Standard
	Cd	111	518.5	4.3	**-0.0060**	0.004	72.2	mg/L	527	Standard
	Cd	114	1337.1	4.7	**-0.0039**	0.004	113.2	ug/L	1273	Standard
>	**In**	115	797440.5	0.4				ug/L	755896	Standard
	Sn	118	730.0	3.0	**0.0256**	0.002	9.2	ug/L	404	Standard
	Sb	123	206.4	37.5	**0.0125**	0.006	47.4	ug/L	34	Standard
	Ba	135	69.7	6.0	**0.0041**	0.001	18.2	ug/L	45	Standard
	Ce	140	62.7	15.1				ug/L	52	Standard
>	**Tb**	159	926707.6	3.2				ug/L	861974	Standard
	Ho	165	12.0	16.7				ug/L	9	Standard
	Tl	203	62.0	24.4	**0.0026**	0.001	28.4	ug/L	5	Standard
	Tl	205	133.3	24.1	**0.0024**	0.001	27.8	ug/L	15	Standard
	Pb	206	411.3	6.7	**0.0040**	0.002	43.3	ug/L	297	Standard
	Pb	207	322.3	2.7	**0.0039**	0.001	19.1	ug/L	266	Standard
	Pb	208	1558.4	3.0	**0.0050**	0.001	16.4	ug/L	1205	Standard
	U	238	92.0	43.6	**0.0058**	0.001	19.6	ug/L	4	Standard
>	**Bi**	209	502999.8	0.5				ug/L	470254	Standard
	Na	23	91.3	6.7	**-0.0040**	0.002	59.1	mg/L	98	Standard
	Mg	24	280.3	16.4	**-0.0002**	0.000	131.4	mg/L	171	Standard

Sample ID: QC Std 7
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	K	39	408.0	9.6	**0.0043**	0.004	92.1	mg/L	367	Standard
	Ca	43	53.3	17.3	**-0.0001**	0.017	23426.9	mg/L	58	Standard
	Fe	54	1009.8	5.1	**0.0085**	0.008	99.7	mg/L	955	Standard
	Fe	57	5446.3	2.5	**-0.0003**	0.000	121.2	mg/L	5344	Standard
>	**Sc-1**	45	354521.7	1.2				mg/L	340292	Standard
	Cl	35	62916.0	1.6				ug/L	43576	Standard
	Kr	83	70.9	11.0				ug/L	78	Standard
	Br	81	20823.3	1.1				ug/L	19680	Standard
	P	31	96033.7	0.8				ug/L	84050	Standard
	S	34	975956.3	1.2				ug/L	907587	Standard
	Sr	88	562.0	6.5				ug/L	383	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		102.535	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		100.542	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		105.496	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		107.510	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	106.963
	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Monday, May 07, 2012 17:06:01
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	20305.9	2.3	**76.2463**	10.068	13.2	ug/L	18451	Standard
	Be	9	17.0	32.8	**-0.0023**	0.001	60.0	ug/L	7	Standard
	Al	27	21853.8	2.9	**0.1964**	0.051	25.9	ug/L	28447	Standard
>	**Sc**	45	365893.1	3.0				ug/L	340292	Standard
	Ti	47	144.0	33.2	**0.0140**	0.023	164.3	ug/L	116	Standard
	V	51	12762.3	1.9	**0.4007**	0.014	3.5	ug/L	4654	Standard
	Cr	52	27355.0	0.8	**0.7842**	0.015	1.9	ug/L	14933	Standard
	Cr	53	2196.8	3.5	**0.7947**	0.037	4.7	ug/L	342	Standard
	Mn	55	15588.0	1.6	**0.4874**	0.010	2.1	ug/L	1267	Standard
	Co	59	8002.1	1.8	**0.3932**	0.008	2.0	ug/L	140	Standard
	Ni	60	6676.5	0.2	**1.5631**	0.005	0.3	ug/L	75	Standard
	Cu	65	3143.0	1.4	**0.8060**	0.011	1.3	ug/L	239	Standard
	Zn	66	9774.5	0.5	**6.0077**	0.037	0.6	ug/L	226	Standard
>	**Ge**	72	302151.4	0.5				ug/L	288220	Standard
	As	75	401.8	11.8	**0.3835**	0.027	7.0	ug/L	-236	Standard
	Se	82	127.1	6.1	**0.3886**	0.036	9.2	ug/L	48	Standard
	Se-1	77	144.3	3.8	**0.3702**	0.051	13.9	ug/L	96	Standard
	Ga	71	281343.6	1.1				mg/L	267913	Standard
	Rb	85	36.7	25.8				ug/L	31	Standard
>	**Y**	89	323812.3	1.8				ug/L	301679	Standard
	Rh	103	1.3	86.6				ug/L	1	Standard
	Mo	98	40.8	35.9	**0.0046**	0.002	50.3	ug/L	7	Standard
	Ag	107	5934.2	2.2	**0.4051**	0.013	3.2	ug/L	66	Standard
	Cd	111	1871.4	3.0	**0.2380**	0.010	4.3	mg/L	527	Standard
	Cd	114	4571.4	2.3	**0.2298**	0.005	2.3	ug/L	1273	Standard
>	**In**	115	807214.3	1.0				ug/L	755896	Standard
	Sn	118	472.0	0.4	**-0.0031**	0.001	21.4	ug/L	404	Standard
	Sb	123	5188.7	0.2	**0.3922**	0.004	1.0	ug/L	34	Standard
	Ba	135	4170.2	1.5	**0.7316**	0.004	0.6	ug/L	45	Standard
	Ce	140	81.3	5.7				ug/L	52	Standard
>	**Tb**	159	918246.8	1.5				ug/L	861974	Standard
	Ho	165	10.0	20.0				ug/L	9	Standard
	Tl	203	1594.4	0.9	**0.0780**	0.001	1.0	ug/L	5	Standard
	Tl	205	3806.5	4.1	**0.0778**	0.003	3.7	ug/L	15	Standard
	Pb	206	3471.1	1.9	**0.1963**	0.003	1.4	ug/L	297	Standard
	Pb	207	2917.6	0.6	**0.1995**	0.002	1.2	ug/L	266	Standard
	Pb	208	13592.4	1.1	**0.1981**	0.002	1.1	ug/L	1205	Standard
	U	238	13312.5	1.5	**0.3821**	0.005	1.2	ug/L	4	Standard
>	**Bi**	209	496127.7	1.0				ug/L	470254	Standard
	Na	23	89.3	19.3	**-0.0057**	0.006	104.3	mg/L	98	Standard
	Mg	24	300.3	26.4	**-0.0001**	0.000	326.8	mg/L	171	Standard

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	K	39	388.7	5.2	**0.0008**	0.003	422.8	mg/L	367	Standard
	Ca	43	59.3	13.6	**0.0074**	0.016	213.1	mg/L	58	Standard
	Fe	54	1024.4	3.1	**0.0059**	0.006	98.9	mg/L	955	Standard
	Fe	57	5569.7	2.6	**-0.0006**	0.001	114.3	mg/L	5344	Standard
>	**Sc-1**	45	365893.1	3.0				mg/L	340292	Standard
	Cl	35	59914.6	1.1				ug/L	43576	Standard
	Kr	83	73.8	12.3				ug/L	78	Standard
	Br	81	21335.3	2.0				ug/L	19680	Standard
	P	31	97641.0	1.0				ug/L	84050	Standard
	S	34	978316.7	0.9				ug/L	907587	Standard
	Sr	88	655.3	40.6				ug/L	383	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	100.181		
	Cr	52	98.029		
	Cr	53			
	Mn	55	97.481		
	Co	59	98.310		
	Ni	60	97.691		
	Cu	65	100.746		
	Zn	66	96.123		
>	Ge	72		104.834	
	As	75	95.864		
	Se	82	97.157		
	Se-1	77	92.550		
	Ga	71			
	Rb	85			
>	Y	89		107.337	
	Rh	103			
	Mo	98			
	Ag	107	101.273		
	Cd	111	99.175		
	Cd	114			
>	In	115		106.789	
	Sn	118			
	Sb	123	98.039		
	Ba	135	97.553		
	Ce	140			
>	Tb	159		106.528	
	Ho	165			
	Tl	203	97.460		
	Tl	205			
	Pb	206			

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	Pb	207		
	Pb	208	99.050	
	U	238	95.525	
>	Bi	209		105.502
	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		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: PBW 76 WG396987-02
Sample Date/Time: Monday, May 07, 2012 17:08:50
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	20057.3	1.4	**73.0968**	26.597	36.4	ug/L	18451	Standard
	Be	9	7.7	52.7	**-0.0046**	0.001	21.0	ug/L	7	Standard
	Al	27	20343.7	3.5	**0.1323**	0.032	24.3	ug/L	28447	Standard
>	**Sc**	45	362212.4	1.1				ug/L	340292	Standard
	Ti	47	144.7	36.1	**0.0154**	0.024	159.1	ug/L	116	Standard
	V	51	4834.1	1.5	**0.0024**	0.004	175.5	ug/L	4654	Standard
	Cr	52	15504.9	0.9	**0.0080**	0.008	96.0	ug/L	14933	Standard
	Cr	53	384.0	8.1	**0.0221**	0.013	59.3	ug/L	342	Standard
	Mn	55	1986.8	1.6	**-0.0282**	0.000	1.7	ug/L	1267	Standard
	Co	59	122.7	1.7	**-0.0013**	0.000	8.5	ug/L	140	Standard
	Ni	60	110.0	8.8	**0.0032**	0.002	74.9	ug/L	75	Standard
	Cu	65	226.0	5.8	**0.0112**	0.004	37.0	ug/L	239	Standard
	Zn	66	2067.8	2.4	**1.1511**	0.021	1.8	ug/L	226	Standard
>	**Ge**	72	296663.7	0.9				ug/L	288220	Standard
	As	75	-309.1	10.7	**-0.0407**	0.020	50.3	ug/L	-236	Standard
	Se	82	29.7	52.6	**-0.0692**	0.074	106.8	ug/L	48	Standard
	Se-1	77	97.7	6.6	**-0.0540**	0.064	119.4	ug/L	96	Standard
	Ga	71	276554.2	1.6				mg/L	267913	Standard
	Rb	85	38.7	15.8				ug/L	31	Standard
>	**Y**	89	313166.2	3.2				ug/L	301679	Standard
	Rh	103	2.0	100.0				ug/L	1	Standard
	Mo	98	64.9	10.4	**0.0084**	0.001	12.6	ug/L	7	Standard
	Ag	107	61.3	18.5	**-0.0031**	0.001	25.3	ug/L	66	Standard
	Cd	111	543.2	7.4	**-0.0034**	0.007	207.8	mg/L	527	Standard
	Cd	114	1410.8	5.6	**-0.0004**	0.006	1391.9	ug/L	1273	Standard
>	**In**	115	812896.3	0.3				ug/L	755896	Standard
	Sn	118	567.7	4.4	**0.0068**	0.003	38.3	ug/L	404	Standard
	Sb	123	106.8	4.9	**0.0046**	0.000	8.3	ug/L	34	Standard
	Ba	135	77.0	10.6	**0.0052**	0.001	28.5	ug/L	45	Standard
	Ce	140	77.3	15.6				ug/L	52	Standard
>	**Tb**	159	922621.0	1.9				ug/L	861974	Standard
	Ho	165	11.3	36.7				ug/L	9	Standard
	Tl	203	12.7	29.9	**0.0002**	0.000	73.7	ug/L	5	Standard
	Tl	205	36.0	19.2	**0.0004**	0.000	36.2	ug/L	15	Standard
	Pb	206	395.7	6.1	**0.0033**	0.001	44.1	ug/L	297	Standard
	Pb	207	308.0	5.2	**0.0031**	0.001	33.0	ug/L	266	Standard
	Pb	208	1510.0	1.1	**0.0045**	0.000	1.8	ug/L	1205	Standard
	U	238	10.0	69.3	**0.0035**	0.000	5.6	ug/L	4	Standard
>	**Bi**	209	496879.6	0.8				ug/L	470254	Standard
	Na	23	89.3	2.6	**-0.0054**	0.001	17.7	mg/L	98	Standard
	Mg	24	312.3	3.4	**-0.0000**	0.000	107.4	mg/L	171	Standard

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K	39	363.3	10.9	**-0.0016**	0.005	294.2	mg/L	367	Standard
Ca	43	74.7	13.2	**0.0350**	0.018	50.5	mg/L	58	Standard
Fe	54	1045.6	1.6	**0.0105**	0.001	8.2	mg/L	955	Standard
Fe	57	5519.7	3.9	**-0.0005**	0.001	227.1	mg/L	5344	Standard
Sc-1	45	362212.4	1.1				mg/L	340292	Standard
Cl	35	58535.9	1.5				ug/L	43576	Standard
Kr	83	77.1	12.4				ug/L	78	Standard
Br	81	21080.7	2.5				ug/L	19680	Standard
P	31	95565.3	3.1				ug/L	84050	Standard
S	34	989718.7	2.9				ug/L	907587	Standard
Sr	88	575.3	7.5				ug/L	383	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		102.930	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		103.808	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		107.541	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		107.036	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	105.662
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: LCSW 76 WG396987-03
Sample Date/Time: Monday, May 07, 2012 17:11:37
Number of Replicates: 3
Autosampler Position: 225
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	21568.4	4.1	**41.8251**	34.778	83.2	ug/L	18451	Standard
	Be	9	105210.3	3.2	**23.5314**	0.347	1.5	ug/L	7	Standard
	Al	27	652342.7	3.8	**28.1973**	0.807	2.9	ug/L	28447	Standard
>	**Sc**	45	398253.1	1.8				ug/L	340292	Standard
	Ti	47	226.7	17.9	**0.0482**	0.018	37.4	ug/L	116	Standard
	V	51	544110.1	4.7	**26.1136**	0.866	3.3	ug/L	4654	Standard
	Cr	52	434319.1	6.2	**26.7411**	1.226	4.6	ug/L	14933	Standard
	Cr	53	63052.4	4.3	**25.5753**	0.533	2.1	ug/L	342	Standard
	Mn	55	735140.5	3.6	**26.5409**	0.467	1.8	ug/L	1267	Standard
	Co	59	523354.7	3.8	**24.9920**	0.602	2.4	ug/L	140	Standard
	Ni	60	109468.0	3.6	**24.7813**	0.385	1.6	ug/L	75	Standard
	Cu	65	97249.6	4.7	**25.2491**	0.632	2.5	ug/L	239	Standard
	Zn	66	40126.4	3.6	**24.0503**	0.360	1.5	ug/L	226	Standard
>	**Ge**	72	316816.2	2.6				ug/L	288220	Standard
	As	75	41680.1	4.9	**23.6665**	0.537	2.3	ug/L	-236	Standard
	Se	82	5517.7	6.5	**24.6497**	1.026	4.2	ug/L	48	Standard
	Se-1	77	2586.6	3.3	**22.3391**	0.508	2.3	ug/L	96	Standard
	Ga	71	299606.7	2.1				mg/L	267913	Standard
	Rb	85	81.3	28.0				ug/L	31	Standard
>	**Y**	89	352563.8	1.2				ug/L	301679	Standard
	Rh	103	40.7	32.0				ug/L	1	Standard
	Mo	98	67.8	2.7	**0.0085**	0.000	2.2	ug/L	7	Standard
	Ag	107	396559.5	2.2	**26.3270**	0.166	0.6	ug/L	66	Standard
	Cd	111	136129.7	1.2	**23.4808**	0.160	0.7	mg/L	527	Standard
	Cd	114	331396.5	1.6	**22.9016**	0.142	0.6	ug/L	1273	Standard
>	**In**	115	844557.9	1.8				ug/L	755896	Standard
	Sn	118	2403.2	4.1	**0.1927**	0.007	3.9	ug/L	404	Standard
	Sb	123	317943.2	2.6	**23.1624**	0.290	1.3	ug/L	34	Standard
	Ba	135	143443.6	1.8	**24.3226**	0.118	0.5	ug/L	45	Standard
	Ce	140	211.3	11.8				ug/L	52	Standard
>	**Tb**	159	973460.1	1.1				ug/L	861974	Standard
	Ho	165	13.3	22.9				ug/L	9	Standard
	Tl	203	512060.0	1.3	**24.5172**	0.302	1.2	ug/L	5	Standard
	Tl	205	1177135.2	1.2	**23.5431**	0.481	2.0	ug/L	15	Standard
	Pb	206	398283.8	2.4	**24.3206**	0.179	0.7	ug/L	297	Standard
	Pb	207	341618.4	3.0	**25.0202**	0.147	0.6	ug/L	266	Standard
	Pb	208	1574493.6	2.9	**24.5552**	0.110	0.4	ug/L	1205	Standard
	U	238	849135.8	4.4	**23.5427**	0.469	2.0	ug/L	4	Standard
>	**Bi**	209	509228.3	2.5				ug/L	470254	Standard
	Na	23	112.7	16.1	**-0.0008**	0.005	644.0	mg/L	98	Standard
	Mg	24	584.0	10.7	**0.0009**	0.000	25.3	mg/L	171	Standard

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K	39	388.0	7.3	**-0.0028**	0.003	97.8	mg/L	367	Standard
Ca	43	50.0	27.7	**-0.0160**	0.021	131.1	mg/L	58	Standard
Fe	54	1457.1	1.1	**0.0523**	0.004	7.8	mg/L	955	Standard
Fe	57	6169.3	2.0	**-0.0001**	0.001	752.4	mg/L	5344	Standard
Sc-1	45	398253.1	1.8				mg/L	340292	Standard
Cl	35	105802.1	0.5				ug/L	43576	Standard
Kr	83	88.4	7.0				ug/L	78	Standard
Br	81	25589.3	6.8				ug/L	19680	Standard
P	31	146004.1	6.6				ug/L	84050	Standard
S	34	1009998.3	5.1				ug/L	907587	Standard
Sr	88	1710.1	6.9				ug/L	383	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		109.922	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		116.867	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		111.729	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		112.934	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	108.288
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: L1205010802 WG396987-01
Sample Date/Time: Monday, May 07, 2012 17:14:25
Number of Replicates: 3
Autosampler Position: 226
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	56675.2	2.7	**2056.0468**	64.762	3.1	ug/L	18451	Standard
	Be	9	475.3	2.0	**0.0935**	0.004	3.8	ug/L	7	Standard
	Al	27	648989.8	2.9	**26.3196**	1.110	4.2	ug/L	28447	Standard
>	**Sc**	45	423849.9	2.6				ug/L	340292	Standard
	Ti	47	1339.4	8.8	**0.5432**	0.043	7.9	ug/L	116	Standard
	V	51	7537.9	3.9	**0.1127**	0.011	10.2	ug/L	4654	Standard
	Cr	52	20771.9	2.1	**0.2606**	0.045	17.1	ug/L	14933	Standard
	Cr	53	1992.8	9.7	**0.6557**	0.047	7.2	ug/L	342	Standard
	Mn	55	4568228.2	2.9	**163.3133**	4.330	2.7	ug/L	1267	Standard
	Co	59	286490.7	3.6	**13.4947**	0.261	1.9	ug/L	140	Standard
	Ni	60	17198.8	5.3	**3.8199**	0.082	2.1	ug/L	75	Standard
	Cu	65	752.7	3.9	**0.1415**	0.002	1.3	ug/L	239	Standard
	Zn	66	14075.2	3.8	**8.2084**	0.358	4.4	ug/L	226	Standard
>	**Ge**	72	321257.8	4.6				ug/L	288220	Standard
	As	75	190.4	13.1	**0.2515**	0.010	4.0	ug/L	-236	Standard
	Se	82	231.0	5.4	**0.8147**	0.010	1.2	ug/L	48	Standard
	Se-1	77	187.3	6.7	**0.6705**	0.039	5.8	ug/L	96	Standard
	Ga	71	298519.8	4.8				mg/L	267913	Standard
	Rb	85	105354.8	4.5				ug/L	31	Standard
>	**Y**	89	382020.3	4.5				ug/L	301679	Standard
	Rh	103	59.3	23.9				ug/L	1	Standard
	Mo	98	82.4	22.1	**0.0106**	0.002	22.3	ug/L	7	Standard
	Ag	107	141.7	10.3	**0.0021**	0.001	61.3	ug/L	66	Standard
	Cd	111	799.2	3.3	**0.0369**	0.008	22.9	mg/L	527	Standard
	Cd	114	2047.3	6.5	**0.0393**	0.006	14.3	ug/L	1273	Standard
>	**In**	115	848063.8	3.8				ug/L	755896	Standard
	Sn	118	950.0	3.5	**0.0433**	0.003	6.9	ug/L	404	Standard
	Sb	123	185.2	12.3	**0.0100**	0.001	12.6	ug/L	34	Standard
	Ba	135	246482.9	2.6	**41.6428**	0.800	1.9	ug/L	45	Standard
	Ce	140	49948.3	3.7				ug/L	52	Standard
>	**Tb**	159	983770.6	4.9				ug/L	861974	Standard
	Ho	165	4665.4	2.9				ug/L	9	Standard
	Tl	203	1284.4	1.7	**0.0612**	0.001	1.4	ug/L	5	Standard
	Tl	205	2963.0	1.8	**0.0590**	0.001	1.7	ug/L	15	Standard
	Pb	206	710.7	3.5	**0.0220**	0.002	7.3	ug/L	297	Standard
	Pb	207	607.7	6.1	**0.0246**	0.002	9.7	ug/L	266	Standard
	Pb	208	2850.8	1.4	**0.0249**	0.001	2.6	ug/L	1205	Standard
	U	238	675.3	4.1	**0.0219**	0.001	3.3	ug/L	4	Standard
>	**Bi**	209	508708.3	0.9				ug/L	470254	Standard
	Na	23	15056.8	2.9	**4.4769**	0.228	5.1	mg/L	98	Standard
	Mg	24	439823.7	2.0	**1.6304**	0.053	3.2	mg/L	171	Standard

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K	39	16994.2	2.5	**1.5819**	0.060	3.8	mg/L	367	Standard
Ca	43	3747.1	6.7	**5.4767**	0.450	8.2	mg/L	58	Standard
Fe	54	1147.2	5.1	**0.0008**	0.007	875.6	mg/L	955	Standard
Fe	57	11344.2	3.1	**0.0205**	0.003	13.8	mg/L	5344	Standard
Sc-1	45	423849.9	2.6				mg/L	340292	Standard
Cl	35	1389767.1	2.8				ug/L	43576	Standard
Kr	83	83.6	13.6				ug/L	78	Standard
Br	81	96271.7	7.7				ug/L	19680	Standard
P	31	115018.1	2.5				ug/L	84050	Standard
S	34	1935512.6	1.2				ug/L	907587	Standard
Sr	88	1477004.4	3.8				ug/L	383	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		111.463	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		126.631	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		112.193	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		114.130	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Pb	207	
Pb	208	
U	238	
Bi	209	108.177
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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Y 89 Int Std for sample	Y	89	Rerun sample

Method 6020 - Summary Report

Sample ID: L1205010802S WG396987-04
Sample Date/Time: Monday, May 07, 2012 17:17:13
Number of Replicates: 3
Autosampler Position: 227
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	57203.1	1.5	**2016.7584**	46.566	2.3	ug/L	18451	Standard
	Be	9	115034.4	1.4	**23.6801**	0.282	1.2	ug/L	7	Standard
	Al	27	1250407.7	1.6	**50.4006**	0.084	0.2	ug/L	28447	Standard
>	**Sc**	45	432812.6	1.7				ug/L	340292	Standard
	Ti	47	1337.4	2.0	**0.5212**	0.015	2.9	ug/L	116	Standard
	V	51	562180.6	1.1	**25.6611**	0.354	1.4	ug/L	4654	Standard
	Cr	52	449638.4	1.7	**26.3264**	0.510	1.9	ug/L	14933	Standard
	Cr	53	65220.7	0.4	**25.1654**	0.285	1.1	ug/L	342	Standard
	Mn	55	5312938.9	0.7	**183.0720**	2.639	1.4	ug/L	1267	Standard
	Co	59	827451.4	1.3	**37.5894**	0.784	2.1	ug/L	140	Standard
	Ni	60	128928.6	0.7	**27.7658**	0.342	1.2	ug/L	75	Standard
	Cu	65	99058.8	0.9	**24.4661**	0.176	0.7	ug/L	239	Standard
	Zn	66	54858.5	2.8	**31.3260**	0.625	2.0	ug/L	226	Standard
>	**Ge**	72	333125.8	0.9				ug/L	288220	Standard
	As	75	46573.2	1.9	**25.1496**	0.248	1.0	ug/L	-236	Standard
	Se	82	6218.9	1.5	**26.4537**	0.228	0.9	ug/L	48	Standard
	Se-1	77	3058.6	1.8	**25.2452**	0.243	1.0	ug/L	96	Standard
	Ga	71	308329.7	1.9				mg/L	267913	Standard
	Rb	85	106365.0	3.3				ug/L	31	Standard
>	**Y**	89	387278.9	2.4				ug/L	301679	Standard
	Rh	103	86.0	6.2				ug/L	1	Standard
	Mo	98	111.3	6.4	**0.0144**	0.001	4.9	ug/L	7	Standard
	Ag	107	399056.9	3.3	**25.3232**	0.033	0.1	ug/L	66	Standard
	Cd	111	147955.2	2.0	**24.4033**	0.411	1.7	mg/L	527	Standard
	Cd	114	360727.3	1.7	**23.8398**	0.439	1.8	ug/L	1273	Standard
>	**In**	115	883626.9	3.5				ug/L	755896	Standard
	Sn	118	858.0	5.3	**0.0304**	0.005	17.0	ug/L	404	Standard
	Sb	123	346643.5	0.9	**24.1555**	0.750	3.1	ug/L	34	Standard
	Ba	135	396924.2	0.3	**64.3963**	2.385	3.7	ug/L	45	Standard
	Ce	140	50145.5	1.9				ug/L	52	Standard
>	**Tb**	159	1006272.2	2.4				ug/L	861974	Standard
	Ho	165	4595.4	2.4				ug/L	9	Standard
	Tl	203	522797.6	0.9	**24.9605**	0.239	1.0	ug/L	5	Standard
	Tl	205	1216564.5	2.1	**24.2605**	0.523	2.2	ug/L	15	Standard
	Pb	206	406847.3	2.4	**24.7776**	0.597	2.4	ug/L	297	Standard
	Pb	207	350046.8	2.0	**25.5723**	0.523	2.0	ug/L	266	Standard
	Pb	208	1615282.1	1.5	**25.1271**	0.376	1.5	ug/L	1205	Standard
	U	238	871355.8	1.8	**24.1025**	0.438	1.8	ug/L	4	Standard
>	**Bi**	209	510574.5	0.2				ug/L	470254	Standard
	Na	23	14674.4	1.1	**4.2687**	0.093	2.2	mg/L	98	Standard
	Mg	24	434638.5	0.9	**1.5772**	0.014	0.9	mg/L	171	Standard

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K	39	16818.7	1.2	**1.5311**	0.009	0.6	mg/L	367	Standard
Ca	43	3755.1	2.0	**5.3698**	0.195	3.6	mg/L	58	Standard
Fe	54	1103.9	1.4	**-0.0076**	0.004	53.4	mg/L	955	Standard
Fe	57	9554.3	2.1	**0.0119**	0.000	4.1	mg/L	5344	Standard
Sc-1	45	432812.6	1.7				mg/L	340292	Standard
Cl	35	1365162.6	0.5				ug/L	43576	Standard
Kr	83	89.1	2.8				ug/L	78	Standard
Br	81	88449.1	1.4				ug/L	19680	Standard
P	31	115175.2	2.0				ug/L	84050	Standard
S	34	1955708.1	1.6				ug/L	907587	Standard
Sr	88	1520942.4	3.3				ug/L	383	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		115.580	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		128.374	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		116.898	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		116.740	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	108.574
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Y 89 Int Std for sample	Y	89	Rerun sample

Method 6020 - Summary Report

Sample ID: L1205010802SD WG396987-05
Sample Date/Time: Monday, May 07, 2012 17:20:00
Number of Replicates: 3
Autosampler Position: 228
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	59919.3	2.3	**2152.6527**	136.032	6.3	ug/L	18451	Standard
	Be	9	120451.2	3.0	**24.6268**	0.842	3.4	ug/L	7	Standard
	Al	27	1563696.2	2.7	**62.8126**	1.973	3.1	ug/L	28447	Standard
>	**Sc**	45	436265.9	5.8				ug/L	340292	Standard
	Ti	47	1531.4	4.3	**0.6166**	0.028	4.5	ug/L	116	Standard
	V	51	584044.1	3.7	**27.1502**	0.687	2.5	ug/L	4654	Standard
	Cr	52	461790.1	3.1	**27.5722**	0.628	2.3	ug/L	14933	Standard
	Cr	53	68088.3	5.7	**26.7455**	1.189	4.4	ug/L	342	Standard
	Mn	55	5444642.5	3.7	**190.9628**	4.718	2.5	ug/L	1267	Standard
	Co	59	843564.1	4.3	**39.0008**	1.137	2.9	ug/L	140	Standard
	Ni	60	132096.1	4.6	**28.9539**	0.914	3.2	ug/L	75	Standard
	Cu	65	100667.2	2.9	**25.3118**	0.399	1.6	ug/L	239	Standard
	Zn	66	57334.3	2.3	**33.3457**	0.282	0.8	ug/L	226	Standard
>	**Ge**	72	327196.3	1.4				ug/L	288220	Standard
	As	75	48054.2	1.7	**26.4135**	0.176	0.7	ug/L	-236	Standard
	Se	82	6361.1	3.6	**27.5530**	0.625	2.3	ug/L	48	Standard
	Se-1	77	3163.0	0.5	**26.6371**	0.385	1.4	ug/L	96	Standard
	Ga	71	301589.8	1.6				mg/L	267913	Standard
	Rb	85	111209.4	5.4				ug/L	31	Standard
>	**Y**	89	395409.4	2.2				ug/L	301679	Standard
	Rh	103	88.7	9.4				ug/L	1	Standard
	Mo	98	125.7	7.1	**0.0165**	0.002	9.4	ug/L	7	Standard
	Ag	107	412108.9	3.3	**26.0500**	0.404	1.5	ug/L	66	Standard
	Cd	111	153659.5	1.7	**25.2459**	0.078	0.3	mg/L	527	Standard
	Cd	114	377437.2	1.9	**24.8462**	0.083	0.3	ug/L	1273	Standard
>	**In**	115	886896.2	1.9				ug/L	755896	Standard
	Sn	118	989.4	3.0	**0.0429**	0.002	4.0	ug/L	404	Standard
	Sb	123	361734.8	1.8	**25.0972**	0.053	0.2	ug/L	34	Standard
	Ba	135	407928.6	2.0	**65.8803**	0.087	0.1	ug/L	45	Standard
	Ce	140	55354.3	2.5				ug/L	52	Standard
>	**Tb**	159	1017112.4	1.9				ug/L	861974	Standard
	Ho	165	4840.1	1.3				ug/L	9	Standard
	Tl	203	537851.8	2.3	**25.4823**	0.351	1.4	ug/L	5	Standard
	Tl	205	1268387.6	2.5	**25.0996**	0.394	1.6	ug/L	15	Standard
	Pb	206	421397.2	2.5	**25.4669**	0.352	1.4	ug/L	297	Standard
	Pb	207	361765.7	2.0	**26.2272**	0.345	1.3	ug/L	266	Standard
	Pb	208	1669138.8	1.9	**25.7669**	0.217	0.8	ug/L	1205	Standard
	U	238	905949.9	3.4	**24.8636**	0.515	2.1	ug/L	4	Standard
>	**Bi**	209	514494.9	1.4				ug/L	470254	Standard
	Na	23	15378.5	2.9	**4.4436**	0.134	3.0	mg/L	98	Standard
	Mg	24	454375.8	2.5	**1.6379**	0.059	3.6	mg/L	171	Standard

Sample ID: L1205010802SD WG396987-05
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	K	39	17366.0	3.7	**1.5707**	0.035	2.2	mg/L	367	Standard
	Ca	43	3828.5	3.1	**5.4425**	0.363	6.7	mg/L	58	Standard
	Fe	54	1347.0	2.3	**0.0216**	0.006	27.4	mg/L	955	Standard
	Fe	57	17295.9	2.2	**0.0441**	0.003	6.6	mg/L	5344	Standard
>	**Sc-1**	45	436265.9	5.8				mg/L	340292	Standard
	Cl	35	1589587.8	3.6				ug/L	43576	Standard
	Kr	83	81.1	3.9				ug/L	78	Standard
	Br	81	112343.0	5.0				ug/L	19680	Standard
	P	31	120477.6	6.9				ug/L	84050	Standard
	S	34	2004391.2	3.6				ug/L	907587	Standard
	Sr	88	1556024.4	3.4				ug/L	383	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		113.523	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		131.069	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		117.330	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		117.998	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1205010802SD WG396987-05
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│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	109.408
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Y 89 Int Std for sample	Y	89	Rerun sample

Method 6020 - Summary Report

Sample ID: L1205008501
Sample Date/Time: Monday, May 07, 2012 17:22:47
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	28199.9	0.9	**220.9325**	22.647	10.3	ug/L	18451	Standard
	Be	9	160.7	6.0	**0.0246**	0.002	8.2	ug/L	7	Standard
	Al	27	1932223.8	2.2	**73.5805**	2.465	3.4	ug/L	28447	Standard
>	**Sc**	45	460666.4	1.1				ug/L	340292	Standard
	Ti	47	16101.9	2.5	**7.0837**	0.276	3.9	ug/L	116	Standard
	V	51	32236.3	2.1	**1.2824**	0.043	3.3	ug/L	4654	Standard
	Cr	52	26173.9	3.2	**0.5895**	0.069	11.7	ug/L	14933	Standard
	Cr	53	1034.7	5.6	**0.2684**	0.028	10.4	ug/L	342	Standard
	Mn	55	10379268.8	0.2	**368.4223**	4.829	1.3	ug/L	1267	Standard
	Co	59	76968.7	1.1	**3.5935**	0.015	0.4	ug/L	140	Standard
	Ni	60	3018.0	2.6	**0.6465**	0.022	3.4	ug/L	75	Standard
	Cu	65	2589.6	2.1	**0.6085**	0.019	3.2	ug/L	239	Standard
	Zn	66	7575.9	1.9	**4.2987**	0.052	1.2	ug/L	226	Standard
>	**Ge**	72	323488.6	1.4				ug/L	288220	Standard
	As	75	196.9	28.8	**0.2547**	0.032	12.7	ug/L	-236	Standard
	Se	82	282.2	2.5	**1.0343**	0.035	3.4	ug/L	48	Standard
	Se-1	77	205.3	9.2	**0.8193**	0.168	20.5	ug/L	96	Standard
	Ga	71	301604.6	1.2				mg/L	267913	Standard
	Rb	85	14742.5	2.7				ug/L	31	Standard
>	**Y**	89	358747.3	1.4				ug/L	301679	Standard
	Rh	103	116.7	6.0				ug/L	1	Standard
	Mo	98	159.0	10.6	**0.0218**	0.003	12.2	ug/L	7	Standard
	Ag	107	241.3	4.6	**0.0082**	0.001	6.4	ug/L	66	Standard
	Cd	111	909.7	3.9	**0.0512**	0.004	7.7	mg/L	527	Standard
	Cd	114	2390.6	3.7	**0.0583**	0.006	10.7	ug/L	1273	Standard
>	**In**	115	873141.8	1.3				ug/L	755896	Standard
	Sn	118	1079.7	1.1	**0.0534**	0.000	0.5	ug/L	404	Standard
	Sb	123	208.0	6.3	**0.0112**	0.001	7.1	ug/L	34	Standard
	Ba	135	308735.6	0.8	**50.6533**	0.994	2.0	ug/L	45	Standard
	Ce	140	15567.3	2.0				ug/L	52	Standard
>	**Tb**	159	1004011.0	1.6				ug/L	861974	Standard
	Ho	165	825.4	5.5				ug/L	9	Standard
	Tl	203	291.0	4.9	**0.0134**	0.000	3.4	ug/L	5	Standard
	Tl	205	712.7	3.1	**0.0138**	0.000	2.7	ug/L	15	Standard
	Pb	206	1004.0	0.6	**0.0394**	0.001	2.0	ug/L	297	Standard
	Pb	207	861.0	4.3	**0.0426**	0.003	8.1	ug/L	266	Standard
	Pb	208	3954.5	1.5	**0.0416**	0.000	0.5	ug/L	1205	Standard
	U	238	411.3	6.8	**0.0145**	0.001	4.5	ug/L	4	Standard
>	**Bi**	209	513307.4	1.7				ug/L	470254	Standard
	Na	23	9744.5	1.8	**2.6489**	0.049	1.8	mg/L	98	Standard
	Mg	24	1010100.0	0.1	**3.4455**	0.039	1.1	mg/L	171	Standard

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	K	39	3477.1	2.7	**0.2634**	0.009	3.4	mg/L	367	Standard
	Ca	43	7493.9	0.8	**10.1484**	0.170	1.7	mg/L	58	Standard
	Fe	54	2083.9	1.9	**0.0991**	0.007	7.3	mg/L	955	Standard
	Fe	57	40455.3	1.0	**0.1318**	0.001	0.5	mg/L	5344	Standard
>	**Sc-1**	45	460666.4	1.1				mg/L	340292	Standard
	Cl	35	337038.7	1.6				ug/L	43576	Standard
	Kr	83	90.0	2.6				ug/L	78	Standard
	Br	81	60643.5	1.7				ug/L	19680	Standard
	P	31	114486.1	2.5				ug/L	84050	Standard
	S	34	2522102.7	0.7				ug/L	907587	Standard
	Sr	88	3153784.4	1.1				ug/L	383	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		112.237	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		118.917	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		115.511	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		116.478	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	109.155
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Method 6020 - Summary Report

Sample ID: L1205008502
Sample Date/Time: Monday, May 07, 2012 17:25:35
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	23747.9	1.1	**32.6474**	9.657	29.6	ug/L	18451	Standard
	Be	9	42.7	2.7	**0.0021**	0.000	13.4	ug/L	7	Standard
	Al	27	467242.2	4.1	**17.9078**	0.587	3.3	ug/L	28447	Standard
>	**Sc**	45	441588.5	1.5				ug/L	340292	Standard
	Ti	47	2277.5	5.6	**0.9471**	0.063	6.6	ug/L	116	Standard
	V	51	30631.1	3.4	**1.1939**	0.023	2.0	ug/L	4654	Standard
	Cr	52	29067.9	5.2	**0.7550**	0.059	7.8	ug/L	14933	Standard
	Cr	53	1432.7	3.6	**0.4225**	0.010	2.3	ug/L	342	Standard
	Mn	55	27640056.7	3.4	**973.1705**	24.526	2.5	ug/L	1267	Standard
	Co	59	88401.2	1.1	**4.0956**	0.079	1.9	ug/L	140	Standard
	Ni	60	4859.1	2.8	**1.0463**	0.018	1.8	ug/L	75	Standard
	Cu	65	1502.7	2.8	**0.3282**	0.004	1.2	ug/L	239	Standard
	Zn	66	5161.2	1.2	**2.8464**	0.071	2.5	ug/L	226	Standard
>	**Ge**	72	326137.6	2.0				ug/L	288220	Standard
	As	75	1720.1	3.0	**1.0889**	0.010	1.0	ug/L	-236	Standard
	Se	82	418.0	5.5	**1.6179**	0.076	4.7	ug/L	48	Standard
	Se-1	77	173.3	5.2	**0.5233**	0.051	9.8	ug/L	96	Standard
	Ga	71	302096.7	2.0				mg/L	267913	Standard
	Rb	85	155684.6	1.7				ug/L	31	Standard
>	**Y**	89	365507.5	1.6				ug/L	301679	Standard
	Rh	103	184.7	10.3				ug/L	1	Standard
	Mo	98	2548.4	0.4	**0.3882**	0.004	1.0	ug/L	7	Standard
	Ag	107	141.3	9.9	**0.0020**	0.001	43.4	ug/L	66	Standard
	Cd	111	909.5	5.2	**0.0550**	0.009	16.6	mg/L	527	Standard
	Cd	114	2294.2	0.6	**0.0556**	0.002	3.8	ug/L	1273	Standard
>	**In**	115	852632.8	0.7				ug/L	755896	Standard
	Sn	118	1367.1	0.9	**0.0852**	0.002	2.3	ug/L	404	Standard
	Sb	123	238.3	2.5	**0.0138**	0.000	3.0	ug/L	34	Standard
	Ba	135	920659.8	1.0	**154.6807**	1.918	1.2	ug/L	45	Standard
	Ce	140	61973.2	1.6				ug/L	52	Standard
>	**Tb**	159	1044744.9	0.2				ug/L	861974	Standard
	Ho	165	1442.7	5.0				ug/L	9	Standard
	Tl	203	539.3	3.5	**0.0264**	0.001	2.7	ug/L	5	Standard
	Tl	205	1195.4	2.3	**0.0245**	0.000	1.5	ug/L	15	Standard
	Pb	206	1539.4	4.8	**0.0763**	0.005	6.9	ug/L	297	Standard
	Pb	207	1319.4	3.0	**0.0805**	0.004	4.4	ug/L	266	Standard
	Pb	208	6044.8	2.9	**0.0784**	0.003	4.0	ug/L	1205	Standard
	U	238	6114.2	1.3	**0.1793**	0.003	1.5	ug/L	4	Standard
>	**Bi**	209	490153.8	0.9				ug/L	470254	Standard
	Na	23	28947.6	0.6	**8.2865**	0.071	0.9	mg/L	98	Standard
	Mg	24	1770126.7	3.1	**6.2994**	0.169	2.7	mg/L	171	Standard

	K	39	27369.4	1.5	**2.4673**	0.040	1.6	mg/L	367	Standard
	Ca	43	8423.7	1.0	**11.9183**	0.292	2.5	mg/L	58	Standard
	Fe	54	160290.6	1.8	**19.4868**	0.374	1.9	mg/L	955	Standard
	Fe	57	4244515.8	3.7	**17.4947**	0.606	3.5	mg/L	5344	Standard
>	**Sc-1**	45	441588.5	1.5				mg/L	340292	Standard
	Cl	35	1920138.7	0.6				ug/L	43576	Standard
	Kr	83	98.2	9.0				ug/L	78	Standard
	Br	81	209371.4	0.8				ug/L	19680	Standard
	P	31	254067.1	1.5				ug/L	84050	Standard
	S	34	1095445.6	1.4				ug/L	907587	Standard
	Sr	88	5778649.8	1.3				ug/L	383	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		113.156	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		121.158	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		112.798	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		121.204	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	104.232
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Y 89 Int Std for sample	Y	89	Rerun sample
Ba 135 Upper, S, EEE	Ba	135	
Tb 159 Int Std for sample	Tb	159	Rerun sample

Method 6020 - Summary Report

Sample ID: L1205008502PS WG397161-01
Sample Date/Time: Monday, May 07, 2012 17:28:22
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	23601.0	2.3	**38.7392**	29.438	76.0	ug/L	18451	Standard
	Be	9	233635.3	2.5	**47.6465**	0.947	2.0	ug/L	7	Standard
	Al	27	1674018.0	3.8	**67.0972**	0.588	0.9	ug/L	28447	Standard
>	**Sc**	45	437137.2	4.2				ug/L	340292	Standard
	Ti	47	2427.5	10.3	**1.0270**	0.082	7.9	ug/L	116	Standard
	V	51	1265119.2	4.7	**60.1732**	0.921	1.5	ug/L	4654	Standard
	Cr	52	965700.1	3.0	**59.9065**	0.147	0.2	ug/L	14933	Standard
	Cr	53	140568.5	4.2	**56.3955**	0.995	1.8	ug/L	342	Standard
	Mn	55	30576341.0	3.3	**1092.6703**	2.322	0.2	ug/L	1267	Standard
	Co	59	1260914.0	4.2	**59.3668**	0.624	1.1	ug/L	140	Standard
	Ni	60	247079.4	5.3	**55.1598**	1.384	2.5	ug/L	75	Standard
	Cu	65	207634.4	4.7	**53.2073**	0.862	1.6	ug/L	239	Standard
	Zn	66	87334.8	5.5	**51.8007**	1.293	2.5	ug/L	226	Standard
>	**Ge**	72	321337.7	3.2				ug/L	288220	Standard
	As	75	91743.8	3.4	**51.2090**	0.151	0.3	ug/L	-236	Standard
	Se	82	11457.9	2.2	**50.7329**	0.593	1.2	ug/L	48	Standard
	Se-1	77	5756.4	2.4	**50.2155**	0.750	1.5	ug/L	96	Standard
	Ga	71	297548.3	3.0				mg/L	267913	Standard
	Rb	85	167523.4	4.2				ug/L	31	Standard
>	**Y**	89	363445.2	2.0				ug/L	301679	Standard
	Rh	103	280.7	8.5				ug/L	1	Standard
	Mo	98	2911.8	3.5	**0.4484**	0.011	2.4	ug/L	7	Standard
	Ag	107	750290.9	1.8	**49.8595**	0.556	1.1	ug/L	66	Standard
	Cd	111	299296.5	3.3	**51.7703**	0.516	1.0	mg/L	527	Standard
	Cd	114	735695.4	3.0	**50.9946**	0.473	0.9	ug/L	1273	Standard
>	**In**	115	844013.8	2.6				ug/L	755896	Standard
	Sn	118	1565.7	4.1	**0.1070**	0.007	6.5	ug/L	404	Standard
	Sb	123	719591.6	3.1	**52.4604**	0.358	0.7	ug/L	34	Standard
	Ba	135	1301480.2	2.9	**220.8833**	1.517	0.7	ug/L	45	Standard
	Ce	140	65690.8	2.9				ug/L	52	Standard
>	**Tb**	159	1015809.7	1.6				ug/L	861974	Standard
	Ho	165	1594.1	5.3				ug/L	9	Standard
	Tl	203	1111024.1	2.7	**56.0500**	0.971	1.7	ug/L	5	Standard
	Tl	205	2770340.9	3.0	**58.3739**	1.205	2.1	ug/L	15	Standard
	Pb	206	859804.7	3.4	**55.3535**	1.370	2.5	ug/L	297	Standard
	Pb	207	736134.2	2.6	**56.8486**	0.931	1.6	ug/L	266	Standard
	Pb	208	3403198.3	3.0	**55.9615**	1.163	2.1	ug/L	1205	Standard
	U	238	1932607.6	2.3	**56.4829**	0.740	1.3	ug/L	4	Standard
>	**Bi**	209	483147.1	1.0				ug/L	470254	Standard
	Na	23	30582.9	3.0	**8.8526**	0.341	3.8	mg/L	98	Standard
	Mg	24	1872491.8	2.6	**6.7349**	0.116	1.7	mg/L	171	Standard

K	39	29639.0	1.7	**2.7050**	0.074	2.7	mg/L	367	Standard
Ca	43	9074.7	1.2	**12.9955**	0.708	5.5	mg/L	58	Standard
Fe	54	173320.9	4.6	**21.2979**	0.427	2.0	mg/L	955	Standard
Fe	57	4502885.7	3.1	**18.7573**	0.274	1.5	mg/L	5344	Standard
Sc-1	45	437137.2	4.2				mg/L	340292	Standard
Cl	35	1836139.0	1.8				ug/L	43576	Standard
Kr	83	92.2	6.0				ug/L	78	Standard
Br	81	203534.7	1.2				ug/L	19680	Standard
P	31	256537.5	4.3				ug/L	84050	Standard
S	34	1060761.3	2.8				ug/L	907587	Standard
Sr	88	6212302.6	4.7				ug/L	383	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		111.490	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		120.474	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		111.657	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		117.847	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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Report Date/Time: Monday, May 07, 2012 17:30:49
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│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	102.742
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Y 89 Int Std for sample	Y	89	Rerun sample
Ba 135 Upper, S, EEE	Ba	135	

Method 6020 - Summary Report

Sample ID: L1205008502SDL WG397161-02
Sample Date/Time: Monday, May 07, 2012 17:31:09
Number of Replicates: 3
Autosampler Position: 232
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	18429.2	1.2	**116.5927**	17.184	14.7	ug/L	18451	Standard
	Be	9	18.7	16.4	**-0.0013**	0.001	67.7	ug/L	7	Standard
	Al	27	100403.7	2.7	**4.6568**	0.203	4.4	ug/L	28447	Standard
>	**Sc**	45	322777.5	1.2				ug/L	340292	Standard
	Ti	47	414.7	15.6	**0.1591**	0.030	18.6	ug/L	116	Standard
	V	51	8065.2	1.1	**0.1977**	0.003	1.8	ug/L	4654	Standard
	Cr	52	13978.4	1.1	**-0.0320**	0.017	53.1	ug/L	14933	Standard
	Cr	53	351.3	3.1	**0.0181**	0.003	14.5	ug/L	342	Standard
	Mn	55	4402842.7	1.3	**181.8458**	4.773	2.6	ug/L	1267	Standard
	Co	59	14401.5	1.0	**0.7767**	0.021	2.6	ug/L	140	Standard
	Ni	60	849.4	4.9	**0.1959**	0.007	3.5	ug/L	75	Standard
	Cu	65	439.3	4.9	**0.0787**	0.008	10.3	ug/L	239	Standard
	Zn	66	3781.8	0.4	**2.4211**	0.034	1.4	ug/L	226	Standard
>	**Ge**	72	277974.9	1.7				ug/L	288220	Standard
	As	75	142.6	26.4	**0.2377**	0.026	10.8	ug/L	-236	Standard
	Se	82	85.9	9.5	**0.2293**	0.044	19.1	ug/L	48	Standard
	Se-1	77	106.7	2.9	**0.1020**	0.043	42.4	ug/L	96	Standard
	Ga	71	245571.0	1.4				mg/L	267913	Standard
	Rb	85	23989.0	1.4				ug/L	31	Standard
>	**Y**	89	266203.8	1.5				ug/L	301679	Standard
	Rh	103	25.3	12.1				ug/L	1	Standard
	Mo	98	390.6	6.3	**0.0648**	0.005	8.3	ug/L	7	Standard
	Ag	107	404.3	3.9	**0.0224**	0.001	2.6	ug/L	66	Standard
	Cd	111	274.6	5.5	**-0.0485**	0.003	5.7	mg/L	527	Standard
	Cd	114	713.8	8.2	**-0.0474**	0.005	10.5	ug/L	1273	Standard
>	**In**	115	763846.4	2.2				ug/L	755896	Standard
	Sn	118	456.3	4.2	**-0.0020**	0.002	93.9	ug/L	404	Standard
	Sb	123	716.5	25.8	**0.0543**	0.015	28.0	ug/L	34	Standard
	Ba	135	162904.5	1.1	**30.5524**	0.722	2.4	ug/L	45	Standard
	Ce	140	10834.5	1.0				ug/L	52	Standard
>	**Tb**	159	879738.1	1.7				ug/L	861974	Standard
	Ho	165	256.0	16.3				ug/L	9	Standard
	Tl	203	324.0	3.3	**0.0162**	0.001	3.6	ug/L	5	Standard
	Tl	205	722.7	5.3	**0.0151**	0.001	6.9	ug/L	15	Standard
	Pb	206	634.7	4.9	**0.0201**	0.002	10.0	ug/L	297	Standard
	Pb	207	498.7	0.4	**0.0191**	0.001	4.2	ug/L	266	Standard
	Pb	208	2367.7	0.2	**0.0199**	0.001	3.2	ug/L	1205	Standard
	U	238	1134.7	6.8	**0.0369**	0.002	6.4	ug/L	4	Standard
>	**Bi**	209	475474.2	1.8				ug/L	470254	Standard
	Na	23	5487.7	2.0	**2.1217**	0.026	1.2	mg/L	98	Standard
	Mg	24	328581.9	1.0	**1.5988**	0.017	1.1	mg/L	171	Standard

	K	39	5515.7	2.0	**0.6497**	0.019	2.9	mg/L	367	Standard
	Ca	43	1631.4	5.5	**3.0865**	0.143	4.6	mg/L	58	Standard
	Fe	54	28887.3	1.9	**4.6954**	0.139	3.0	mg/L	955	Standard
	Fe	57	871017.2	2.1	**4.8910**	0.067	1.4	mg/L	5344	Standard
>	**Sc-1**	45	322777.5	1.2				mg/L	340292	Standard
	Cl	35	397116.4	1.9				ug/L	43576	Standard
	Kr	83	66.9	6.1				ug/L	78	Standard
	Br	81	44939.2	0.5				ug/L	19680	Standard
	P	31	66612.2	3.0				ug/L	84050	Standard
	S	34	825280.6	3.5				ug/L	907587	Standard
	Sr	88	929986.8	1.2				ug/L	383	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		96.445	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		88.241	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		101.052	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		102.061	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	101.110
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Monday, May 07, 2012 17:33:58
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	20022.6	2.2	**72.9156**	28.038	38.5	ug/L	18451	Standard
	Be	9	212030.0	1.9	**52.2516**	1.294	2.5	ug/L	7	Standard
	Al	27	1072339.1	3.3	**51.7505**	1.261	2.4	ug/L	28447	Standard
>	**Sc**	45	361783.4	4.0				ug/L	340292	Standard
	Ti	47	209729.3	2.2	**102.6547**	2.019	2.0	ug/L	116	Standard
	V	51	1022814.7	2.0	**53.3889**	0.532	1.0	ug/L	4654	Standard
	Cr	52	785902.2	1.4	**53.4013**	0.323	0.6	ug/L	14933	Standard
	Cr	53	116518.0	3.3	**51.2961**	0.702	1.4	ug/L	342	Standard
	Mn	55	1337868.5	2.4	**52.3763**	0.563	1.1	ug/L	1267	Standard
	Co	59	950262.9	1.9	**49.1188**	0.312	0.6	ug/L	140	Standard
	Ni	60	201291.5	1.7	**49.3466**	0.610	1.2	ug/L	75	Standard
	Cu	65	176174.7	1.0	**49.5761**	0.993	2.0	ug/L	239	Standard
	Zn	66	75966.6	0.4	**49.4817**	0.771	1.6	ug/L	226	Standard
>	**Ge**	72	292757.0	2.0				ug/L	288220	Standard
	As	75	81285.1	1.7	**49.8085**	0.328	0.7	ug/L	-236	Standard
	Se	82	10424.5	2.1	**50.6509**	0.324	0.6	ug/L	48	Standard
	Se-1	77	5275.3	2.0	**50.5043**	0.028	0.1	ug/L	96	Standard
	Ga	71	270483.8	2.4				mg/L	267913	Standard
	Rb	85	1664.1	6.6				ug/L	31	Standard
>	**Y**	89	309500.8	3.4				ug/L	301679	Standard
	Rh	103	62.0	19.4				ug/L	1	Standard
	Mo	98	580880.1	2.3	**95.1561**	0.728	0.8	ug/L	7	Standard
	Ag	107	679119.1	1.6	**47.7989**	0.789	1.7	ug/L	66	Standard
	Cd	111	270635.2	1.6	**49.5866**	0.290	0.6	mg/L	527	Standard
	Cd	114	679777.7	1.4	**49.9116**	0.384	0.8	ug/L	1273	Standard
>	**In**	115	796883.0	2.1				ug/L	755896	Standard
	Sn	118	461392.0	1.4	**50.1003**	0.767	1.5	ug/L	404	Standard
	Sb	123	648059.4	0.8	**50.0554**	0.866	1.7	ug/L	34	Standard
	Ba	135	278276.9	2.1	**50.0185**	0.474	0.9	ug/L	45	Standard
	Ce	140	1048.7	5.2				ug/L	52	Standard
>	**Tb**	159	941350.4	2.1				ug/L	861974	Standard
	Ho	165	24.0	36.3				ug/L	9	Standard
	Tl	203	978486.8	2.0	**49.7972**	0.781	1.6	ug/L	5	Standard
	Tl	205	2444712.3	1.7	**51.9649**	0.479	0.9	ug/L	15	Standard
	Pb	206	769192.2	1.4	**49.9543**	0.036	0.1	ug/L	297	Standard
	Pb	207	637742.1	1.0	**49.6813**	0.295	0.6	ug/L	266	Standard
	Pb	208	2977993.5	0.9	**49.4001**	0.307	0.6	ug/L	1205	Standard
	U	238	1673069.3	1.3	**49.3268**	0.352	0.7	ug/L	4	Standard
>	**Bi**	209	479007.1	1.5				ug/L	470254	Standard
	Na	23	14541.6	1.9	**5.0700**	0.158	3.1	mg/L	98	Standard
	Mg	24	1177390.5	2.3	**5.1177**	0.164	3.2	mg/L	171	Standard

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	K	39	44789.5	2.0	**4.9742**	0.174	3.5	mg/L	367	Standard
	Ca	43	3082.3	3.2	**5.2708**	0.083	1.6	mg/L	58	Standard
	Fe	54	33731.9	2.1	**4.9001**	0.144	2.9	mg/L	955	Standard
	Fe	57	999439.0	1.9	**5.0114**	0.145	2.9	mg/L	5344	Standard
>	**Sc-1**	45	361783.4	4.0				mg/L	340292	Standard
	Cl	35	68822.7	8.5				ug/L	43576	Standard
	Kr	83	78.2	8.4				ug/L	78	Standard
	Br	81	21178.2	6.0				ug/L	19680	Standard
	P	31	103606.9	6.2				ug/L	84050	Standard
	S	34	979631.3	3.4				ug/L	907587	Standard
	Sr	88	2487.5	5.9				ug/L	383	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	103.501		
>	Sc	45			
	Ti	47	102.655		
	V	51	106.778		
	Cr	52	106.803		
	Cr	53			
	Mn	55	104.753		
	Co	59	98.238		
	Ni	60	98.693		
	Cu	65	99.152		
	Zn	66	98.963		
>	Ge	72		101.574	
	As	75	99.617		
	Se	82	101.302		
	Se-1	77	101.009		
	Ga	71			
	Rb	85			
>	Y	89		102.593	
	Rh	103			
	Mo	98	95.156		
	Ag	107	95.598		
	Cd	111	99.173		
	Cd	114			
>	In	115		105.422	
	Sn	118	100.201		
	Sb	123	100.111		
	Ba	135	100.037		
	Ce	140			
>	Tb	159		109.209	
	Ho	165			
	Tl	203	99.594		
	Tl	205			
	Pb	206	99.909		

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│	Pb	207	99.363	
│	Pb	208	98.800	
│	U	238	98.654	
└>	Bi	209		101.861
┌	Na	23	101.401	
│	Mg	24	102.353	
│	K	39	99.484	
│	Ca	43	105.417	
│	Fe	54	98.003	
│	Fe	57	100.227	
└>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, May 07, 2012 17:36:45
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	18722.2	2.6	**61.0862**	24.866	40.7	ug/L	18451	Standard
	Be	9	19.3	34.4	**-0.0015**	0.002	119.4	ug/L	7	Standard
	Al	27	19044.6	1.3	**0.1271**	0.025	19.4	ug/L	28447	Standard
>	**Sc**	45	340980.1	1.6				ug/L	340292	Standard
	Ti	47	116.7	8.6	**0.0047**	0.005	99.6	ug/L	116	Standard
	V	51	4473.5	1.5	**-0.0049**	0.003	59.8	ug/L	4654	Standard
	Cr	52	14399.5	0.8	**-0.0195**	0.015	76.0	ug/L	14933	Standard
	Cr	53	314.0	11.3	**-0.0018**	0.016	888.6	ug/L	342	Standard
	Mn	55	1810.4	6.5	**-0.0316**	0.005	15.7	ug/L	1267	Standard
	Co	59	136.0	9.2	**-0.0003**	0.001	273.5	ug/L	140	Standard
	Ni	60	100.7	1.5	**0.0021**	0.001	44.7	ug/L	75	Standard
	Cu	65	487.7	3.3	**0.0906**	0.008	8.5	ug/L	239	Standard
	Zn	66	594.0	6.9	**0.2193**	0.028	13.0	ug/L	226	Standard
>	**Ge**	72	282907.0	2.2				ug/L	288220	Standard
	As	75	-223.7	25.3	**0.0038**	0.039	1009.9	ug/L	-236	Standard
	Se	82	39.9	49.3	**-0.0119**	0.097	812.5	ug/L	48	Standard
	Se-1	77	93.0	7.8	**-0.0560**	0.061	108.7	ug/L	96	Standard
	Ga	71	264119.9	1.7				mg/L	267913	Standard
	Rb	85	46.7	22.0				ug/L	31	Standard
>	**Y**	89	291807.2	0.3				ug/L	301679	Standard
	Rh	103	0.7	173.2				ug/L	1	Standard
	Mo	98	90.9	61.0	**0.0134**	0.009	70.6	ug/L	7	Standard
	Ag	107	144.3	13.2	**0.0032**	0.001	45.0	ug/L	66	Standard
	Cd	111	504.2	6.1	**-0.0055**	0.006	100.0	mg/L	527	Standard
	Cd	114	1322.0	4.4	**-0.0017**	0.005	293.2	ug/L	1273	Standard
>	**In**	115	771245.6	0.5				ug/L	755896	Standard
	Sn	118	722.0	3.3	**0.0274**	0.003	11.0	ug/L	404	Standard
	Sb	123	286.3	24.4	**0.0194**	0.006	29.4	ug/L	34	Standard
	Ba	135	68.3	9.7	**0.0043**	0.001	27.7	ug/L	45	Standard
	Ce	140	52.0	7.7				ug/L	52	Standard
>	**Tb**	159	878068.5	0.9				ug/L	861974	Standard
	Ho	165	10.7	39.0				ug/L	9	Standard
	Tl	203	50.7	15.3	**0.0022**	0.000	18.0	ug/L	5	Standard
	Tl	205	112.0	34.1	**0.0021**	0.001	40.2	ug/L	15	Standard
	Pb	206	407.3	5.8	**0.0053**	0.002	30.4	ug/L	297	Standard
	Pb	207	314.0	8.0	**0.0048**	0.002	40.8	ug/L	266	Standard
	Pb	208	1495.4	3.1	**0.0055**	0.001	15.1	ug/L	1205	Standard
	U	238	69.0	21.6	**0.0053**	0.000	8.4	ug/L	4	Standard
>	**Bi**	209	472585.8	0.6				ug/L	470254	Standard
	Na	23	77.3	13.3	**-0.0079**	0.004	52.2	mg/L	98	Standard
	Mg	24	218.7	1.4	**-0.0004**	0.000	6.1	mg/L	171	Standard

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K	39	384.7	7.8	**0.0034**	0.003	95.1	mg/L	367	Standard
Ca	43	53.3	18.9	**0.0038**	0.020	524.8	mg/L	58	Standard
Fe	54	919.6	2.9	**0.0003**	0.006	2022.9	mg/L	955	Standard
Fe	57	5237.6	0.9	**-0.0003**	0.000	126.2	mg/L	5344	Standard
Sc-1	45	340980.1	1.6				mg/L	340292	Standard
Cl	35	59217.5	1.6				ug/L	43576	Standard
Kr	83	72.4	14.0				ug/L	78	Standard
Br	81	19918.8	2.9				ug/L	19680	Standard
P	31	90733.9	2.0				ug/L	84050	Standard
S	34	948682.5	2.0				ug/L	907587	Standard
Sr	88	413.3	3.2				ug/L	383	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		98.157	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		96.728	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		102.031	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		101.867	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: QC Std 7
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│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	100.496
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: L1205008503
Sample Date/Time: Monday, May 07, 2012 17:39:34
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	32088.6	1.4	**646.2082**	17.227	2.7	ug/L	18451	Standard
	Be	9	27.7	25.4	**-0.0005**	0.001	268.5	ug/L	7	Standard
	Al	27	590462.1	3.2	**24.6142**	0.888	3.6	ug/L	28447	Standard
>	**Sc**	45	411295.2	1.8				ug/L	340292	Standard
	Ti	47	5096.2	6.4	**2.6112**	0.196	7.5	ug/L	116	Standard
	V	51	18102.9	3.0	**0.7656**	0.014	1.8	ug/L	4654	Standard
	Cr	52	38216.2	4.5	**1.7738**	0.085	4.8	ug/L	14933	Standard
	Cr	53	2910.9	9.1	**1.2281**	0.141	11.5	ug/L	342	Standard
	Mn	55	40062647.4	2.5	**1677.5780**	17.887	1.1	ug/L	1267	Standard
	Co	59	91587.0	1.3	**5.0473**	0.019	0.4	ug/L	140	Standard
	Ni	60	15054.5	4.7	**3.9174**	0.143	3.6	ug/L	75	Standard
	Cu	65	1597.4	1.8	**0.4286**	0.008	1.8	ug/L	239	Standard
	Zn	66	4384.3	6.5	**2.8782**	0.223	7.7	ug/L	226	Standard
>	**Ge**	72	274223.4	1.7				ug/L	288220	Standard
	As	75	506.8	11.9	**0.4767**	0.044	9.3	ug/L	-236	Standard
	Se	82	296.6	7.0	**1.3339**	0.126	9.5	ug/L	48	Standard
	Se-1	77	218.7	1.6	**1.2841**	0.020	1.5	ug/L	96	Standard
	Ga	71	253001.5	0.6				mg/L	267913	Standard
	Rb	85	3091.0	4.7				ug/L	31	Standard
>	**Y**	89	282506.5	1.6				ug/L	301679	Standard
	Rh	103	323.3	7.6				ug/L	1	Standard
	Mo	98	1221.8	4.0	**0.2068**	0.007	3.2	ug/L	7	Standard
	Ag	107	152.0	20.6	**0.0039**	0.002	59.8	ug/L	66	Standard
	Cd	111	687.4	5.4	**0.0304**	0.006	19.3	mg/L	527	Standard
	Cd	114	1766.6	2.6	**0.0334**	0.003	8.8	ug/L	1273	Standard
>	**In**	115	763953.8	0.9				ug/L	755896	Standard
	Sn	118	4182.2	2.2	**0.4204**	0.006	1.4	ug/L	404	Standard
	Sb	123	393.8	13.8	**0.0283**	0.004	15.1	ug/L	34	Standard
	Ba	135	50530.1	2.4	**9.4660**	0.138	1.5	ug/L	45	Standard
	Ce	140	9596.4	2.9				ug/L	52	Standard
>	**Tb**	159	896502.8	1.6				ug/L	861974	Standard
	Ho	165	22.7	53.9				ug/L	9	Standard
	Tl	203	650.0	10.3	**0.0362**	0.004	11.2	ug/L	5	Standard
	Tl	205	1545.4	7.2	**0.0359**	0.003	7.1	ug/L	15	Standard
	Pb	206	512.0	5.9	**0.0153**	0.002	14.2	ug/L	297	Standard
	Pb	207	413.3	5.2	**0.0156**	0.002	14.5	ug/L	266	Standard
	Pb	208	1964.7	8.1	**0.0163**	0.003	19.1	ug/L	1205	Standard
	U	238	17944.0	3.8	**0.5872**	0.018	3.1	ug/L	4	Standard
>	**Bi**	209	433845.5	1.8				ug/L	470254	Standard
	Na	23	49808.4	1.1	**15.3409**	0.296	1.9	mg/L	98	Standard
	Mg	24	9557265.8	2.2	**36.5268**	0.717	2.0	mg/L	171	Standard

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	K	39	7637.3	1.7	**0.7097**	0.019	2.6	mg/L	367	Standard
	Ca	43	19609.4	2.3	**29.9268**	0.712	2.4	mg/L	58	Standard
	Fe	54	1891.8	2.8	**0.1032**	0.008	7.9	mg/L	955	Standard
	Fe	57	54708.6	2.6	**0.2142**	0.007	3.3	mg/L	5344	Standard
>	**Sc-1**	45	411295.2	1.8				mg/L	340292	Standard
	Cl	35	4196510.2	1.2				ug/L	43576	Standard
	Kr	83	78.7	4.7				ug/L	78	Standard
	Br	81	159594.5	0.8				ug/L	19680	Standard
	P	31	142783.8	2.2				ug/L	84050	Standard
	S	34	1797803.6	0.7				ug/L	907587	Standard
	Sr	88	8473550.9	4.3				ug/L	383	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		95.144	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		93.645	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		101.066	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		104.006	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	92.258
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Method 6020 - Summary Report

Sample ID: L1205008504
Sample Date/Time: Monday, May 07, 2012 17:42:22
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	629660.1	5.0	**29797.6410**	468.506	1.6	ug/L	18451	Standard
	Be	9	77.3	9.1	**0.0070**	0.002	25.9	ug/L	7	Standard
	Al	27	3212848.3	5.7	**110.4606**	2.136	1.9	ug/L	28447	Standard
>	**Sc**	45	511936.5	4.5				ug/L	340292	Standard
	Ti	47	28549.6	5.1	**13.9462**	0.454	3.3	ug/L	116	Standard
	V	51	33006.4	4.8	**1.4857**	0.049	3.3	ug/L	4654	Standard
	Cr	52	32375.6	5.6	**1.1943**	0.088	7.4	ug/L	14933	Standard
	Cr	53	1384.7	12.2	**0.4664**	0.062	13.3	ug/L	342	Standard
	Mn	55	93290633.9	4.6	**3665.1159**	93.172	2.5	ug/L	1267	Standard
	Co	59	379621.9	3.5	**19.6500**	0.223	1.1	ug/L	140	Standard
	Ni	60	7457.8	4.9	**1.8084**	0.056	3.1	ug/L	75	Standard
	Cu	65	3533.7	2.9	**0.9453**	0.005	0.5	ug/L	239	Standard
	Zn	66	5654.1	1.5	**3.5204**	0.042	1.2	ug/L	226	Standard
>	**Ge**	72	292222.5	2.4				ug/L	288220	Standard
	As	75	809.7	1.1	**0.6414**	0.012	1.9	ug/L	-236	Standard
	Se	82	77.1	16.2	**0.1642**	0.055	33.2	ug/L	48	Standard
	Se-1	77	105.3	13.8	**0.0333**	0.119	357.1	ug/L	96	Standard
	Ga	71	265749.5	3.5				mg/L	267913	Standard
	Rb	85	83450.9	5.3				ug/L	31	Standard
>	**Y**	89	304593.7	4.4				ug/L	301679	Standard
	Rh	103	70.0	2.9				ug/L	1	Standard
	Mo	98	7698.1	6.6	**1.2709**	0.051	4.0	ug/L	7	Standard
	Ag	107	152.3	12.5	**0.0035**	0.001	34.4	ug/L	66	Standard
	Cd	111	643.4	3.9	**0.0181**	0.002	12.1	mg/L	527	Standard
	Cd	114	1734.1	3.4	**0.0267**	0.002	7.6	ug/L	1273	Standard
>	**In**	115	789024.8	3.1				ug/L	755896	Standard
	Sn	118	1141.7	4.0	**0.0716**	0.001	2.1	ug/L	404	Standard
	Sb	123	1355.4	3.5	**0.1023**	0.001	0.6	ug/L	34	Standard
	Ba	135	44953.4	4.9	**8.1505**	0.169	2.1	ug/L	45	Standard
	Ce	140	21443.2	5.2				ug/L	52	Standard
>	**Tb**	159	951585.9	2.1				ug/L	861974	Standard
	Ho	165	544.7	11.6				ug/L	9	Standard
	Tl	203	226.7	14.8	**0.0116**	0.002	13.5	ug/L	5	Standard
	Tl	205	530.0	15.7	**0.0114**	0.002	14.9	ug/L	15	Standard
	Pb	206	1176.7	6.3	**0.0581**	0.003	5.8	ug/L	297	Standard
	Pb	207	988.7	7.8	**0.0601**	0.005	7.5	ug/L	266	Standard
	Pb	208	4617.6	4.5	**0.0601**	0.002	3.0	ug/L	1205	Standard
	U	238	5665.4	4.1	**0.1770**	0.003	1.8	ug/L	4	Standard
>	**Bi**	209	460171.8	2.3				ug/L	470254	Standard
	Na	23	16731.9	4.3	**4.1134**	0.074	1.8	mg/L	98	Standard
	Mg	24	1833846.4	3.1	**5.6319**	0.109	1.9	mg/L	171	Standard

K	39	18114.8	3.7	**1.3909**	0.028	2.0	mg/L	367	Standard
Ca	43	16628.5	4.2	**20.3614**	0.501	2.5	mg/L	58	Standard
Fe	54	165655.4	6.2	**17.3460**	0.398	2.3	mg/L	955	Standard
Fe	57	4509451.9	4.4	**16.0314**	0.196	1.2	mg/L	5344	Standard
Sc-1	45	511936.5	4.5				mg/L	340292	Standard
Cl	35	422397.4	8.4				ug/L	43576	Standard
Kr	83	84.4	12.1				ug/L	78	Standard
Br	81	41253.6	7.0				ug/L	19680	Standard
P	31	583184.2	4.8				ug/L	84050	Standard
S	34	965627.1	5.0				ug/L	907587	Standard
Sr	88	2570520.4	5.4				ug/L	383	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		101.389	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		100.966	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		104.383	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		110.396	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	97.856
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Method 6020 - Summary Report

Sample ID: L1205008505
Sample Date/Time: Monday, May 07, 2012 17:45:09
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	30632.0	3.4	**432.3442**	14.999	3.5	ug/L	18451	Standard
	Be	9	67.0	14.4	**0.0071**	0.002	34.3	ug/L	7	Standard
	Al	27	7570793.4	3.7	**304.2266**	1.868	0.6	ug/L	28447	Standard
>	**Sc**	45	440292.4	3.4				ug/L	340292	Standard
	Ti	47	41188.7	5.4	**19.7159**	0.654	3.3	ug/L	116	Standard
	V	51	61736.3	3.8	**2.9268**	0.081	2.8	ug/L	4654	Standard
	Cr	52	32463.4	2.3	**1.1539**	0.040	3.5	ug/L	14933	Standard
	Cr	53	2100.1	1.9	**0.7645**	0.028	3.7	ug/L	342	Standard
	Mn	55	1208399.4	4.5	**46.3699**	1.178	2.5	ug/L	1267	Standard
	Co	59	5909.2	4.7	**0.2919**	0.008	2.7	ug/L	140	Standard
	Ni	60	6120.6	6.6	**1.4481**	0.079	5.4	ug/L	75	Standard
	Cu	65	6295.0	6.3	**1.6860**	0.077	4.6	ug/L	239	Standard
	Zn	66	33036.0	4.3	**20.9876**	0.479	2.3	ug/L	226	Standard
>	**Ge**	72	298556.8	2.9				ug/L	288220	Standard
	As	75	516.3	19.4	**0.4559**	0.065	14.3	ug/L	-236	Standard
	Se	82	96.6	18.8	**0.2508**	0.092	36.7	ug/L	48	Standard
	Se-1	77	132.7	2.2	**0.2752**	0.014	5.0	ug/L	96	Standard
	Ga	71	279153.1	3.2				mg/L	267913	Standard
	Rb	85	11465.0	3.7				ug/L	31	Standard
>	**Y**	89	326940.8	4.4				ug/L	301679	Standard
	Rh	103	74.0	9.7				ug/L	1	Standard
	Mo	98	1040.8	8.1	**0.1653**	0.010	6.3	ug/L	7	Standard
	Ag	107	253.3	3.3	**0.0102**	0.001	6.7	ug/L	66	Standard
	Cd	111	749.0	1.4	**0.0339**	0.001	4.1	mg/L	527	Standard
	Cd	114	1957.3	1.9	**0.0392**	0.005	11.9	ug/L	1273	Standard
>	**In**	115	811677.6	1.9				ug/L	755896	Standard
	Sn	118	3360.4	2.8	**0.3048**	0.006	1.9	ug/L	404	Standard
	Sb	123	712.0	2.8	**0.0505**	0.001	1.1	ug/L	34	Standard
	Ba	135	92156.6	3.1	**16.2541**	0.214	1.3	ug/L	45	Standard
	Ce	140	41224.8	5.2				ug/L	52	Standard
>	**Tb**	159	952967.0	3.5				ug/L	861974	Standard
	Ho	165	933.4	5.5				ug/L	9	Standard
	Tl	203	193.0	6.2	**0.0093**	0.000	4.3	ug/L	5	Standard
	Tl	205	450.7	2.4	**0.0092**	0.000	4.5	ug/L	15	Standard
	Pb	206	1700.8	5.5	**0.0879**	0.004	4.2	ug/L	297	Standard
	Pb	207	1425.7	5.7	**0.0900**	0.004	4.4	ug/L	266	Standard
	Pb	208	6665.9	4.7	**0.0898**	0.003	3.3	ug/L	1205	Standard
	U	238	3665.1	5.8	**0.1101**	0.004	3.9	ug/L	4	Standard
>	**Bi**	209	483674.0	2.1				ug/L	470254	Standard
	Na	23	10835.2	2.9	**3.0881**	0.038	1.2	mg/L	98	Standard
	Mg	24	1393300.3	4.6	**4.9721**	0.125	2.5	mg/L	171	Standard

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	K	39	6496.7	2.2	**0.5557**	0.028	5.0	mg/L	367	Standard
	Ca	43	8070.8	3.9	**11.4472**	0.287	2.5	mg/L	58	Standard
	Fe	54	5036.6	4.5	**0.4729**	0.011	2.3	mg/L	955	Standard
	Fe	57	136935.6	4.9	**0.5385**	0.009	1.7	mg/L	5344	Standard
>	**Sc-1**	45	440292.4	3.4				mg/L	340292	Standard
	Cl	35	271327.4	2.4				ug/L	43576	Standard
	Kr	83	84.2	15.0				ug/L	78	Standard
	Br	81	27850.6	4.1				ug/L	19680	Standard
	P	31	147086.6	4.8				ug/L	84050	Standard
	S	34	1835189.9	3.0				ug/L	907587	Standard
	Sr	88	2236697.1	6.7				ug/L	383	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		103.586	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		108.374	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		107.380	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		110.556	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	102.854
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: L1205008506
Sample Date/Time: Monday, May 07, 2012 17:47:56
Number of Replicates: 3
Autosampler Position: 236
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	31193.1	2.5	**476.8192**	43.343	9.1	ug/L	18451	Standard
	Be	9	27.3	36.6	**-0.0009**	0.002	226.8	ug/L	7	Standard
	Al	27	311158.4	1.5	**11.7681**	0.516	4.4	ug/L	28447	Standard
>	**Sc**	45	437541.3	4.2				ug/L	340292	Standard
	Ti	47	4055.9	4.0	**1.9613**	0.014	0.7	ug/L	116	Standard
	V	51	58068.5	1.1	**2.8457**	0.115	4.1	ug/L	4654	Standard
	Cr	52	26639.1	1.4	**0.8231**	0.081	9.8	ug/L	14933	Standard
	Cr	53	1164.7	9.0	**0.3761**	0.028	7.5	ug/L	342	Standard
	Mn	55	80573324.0	2.2	**3209.5030**	67.441	2.1	ug/L	1267	Standard
	Co	59	43045.8	2.6	**2.2517**	0.025	1.1	ug/L	140	Standard
	Ni	60	10207.4	3.6	**2.5177**	0.036	1.4	ug/L	75	Standard
	Cu	65	1735.1	3.8	**0.4443**	0.003	0.7	ug/L	239	Standard
	Zn	66	3934.8	3.5	**2.4280**	0.001	0.1	ug/L	226	Standard
>	**Ge**	72	288419.5	3.5				ug/L	288220	Standard
	As	75	343.3	14.9	**0.3581**	0.025	7.0	ug/L	-236	Standard
	Se	82	215.3	11.7	**0.8524**	0.092	10.7	ug/L	48	Standard
	Se-1	77	134.7	4.1	**0.3393**	0.014	4.0	ug/L	96	Standard
	Ga	71	265247.2	3.9				mg/L	267913	Standard
	Rb	85	3403.0	3.7				ug/L	31	Standard
>	**Y**	89	302977.8	3.6				ug/L	301679	Standard
	Rh	103	260.0	15.3				ug/L	1	Standard
	Mo	98	1427.3	3.9	**0.2340**	0.009	3.7	ug/L	7	Standard
	Ag	107	187.7	9.7	**0.0060**	0.001	20.3	ug/L	66	Standard
	Cd	111	631.0	2.1	**0.0158**	0.002	11.8	mg/L	527	Standard
	Cd	114	1553.4	6.0	**0.0131**	0.004	30.8	ug/L	1273	Standard
>	**In**	115	789782.1	2.7				ug/L	755896	Standard
	Sn	118	745.0	2.7	**0.0280**	0.004	14.3	ug/L	404	Standard
	Sb	123	238.5	8.6	**0.0151**	0.001	7.1	ug/L	34	Standard
	Ba	135	107062.3	1.2	**19.4164**	0.308	1.6	ug/L	45	Standard
	Ce	140	17585.5	1.1				ug/L	52	Standard
>	**Tb**	159	940373.4	2.4				ug/L	861974	Standard
	Ho	165	686.7	2.4				ug/L	9	Standard
	Tl	203	467.7	3.9	**0.0246**	0.000	1.9	ug/L	5	Standard
	Tl	205	1046.7	2.9	**0.0230**	0.000	1.2	ug/L	15	Standard
	Pb	206	535.0	3.2	**0.0150**	0.001	6.4	ug/L	297	Standard
	Pb	207	444.3	3.5	**0.0163**	0.001	7.9	ug/L	266	Standard
	Pb	208	2052.1	1.7	**0.0160**	0.000	2.5	ug/L	1205	Standard
	U	238	26367.9	1.4	**0.8188**	0.028	3.4	ug/L	4	Standard
>	**Bi**	209	456739.9	2.3				ug/L	470254	Standard
	Na	23	17447.4	3.2	**5.0291**	0.179	3.6	mg/L	98	Standard
	Mg	24	3958820.0	1.3	**14.2358**	0.577	4.1	mg/L	171	Standard

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K	39	6472.7	2.8	**0.5571**	0.020	3.5	mg/L	367	Standard
Ca	43	26502.5	2.0	**38.0702**	1.171	3.1	mg/L	58	Standard
Fe	54	4868.2	1.2	**0.4566**	0.018	4.0	mg/L	955	Standard
Fe	57	151338.1	1.1	**0.6028**	0.022	3.6	mg/L	5344	Standard
Sc-1	45	437541.3	4.2				mg/L	340292	Standard
Cl	35	1096324.1	3.2				ug/L	43576	Standard
Kr	83	89.3	5.2				ug/L	78	Standard
Br	81	105868.9	5.2				ug/L	19680	Standard
P	31	174116.4	3.3				ug/L	84050	Standard
S	34	2664660.5	2.9				ug/L	907587	Standard
Sr	88	7963091.5	2.2				ug/L	383	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		100.069	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		100.430	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		104.483	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		109.095	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	97.126
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Method 6020 - Summary Report

Sample ID: L1205008507
Sample Date/Time: Monday, May 07, 2012 17:50:44
Number of Replicates: 3
Autosampler Position: 237
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	40426.9	3.6	**980.2932**	25.392	2.6	ug/L	18451	Standard
	Be	9	37.3	1.5	**0.0010**	0.000	18.3	ug/L	7	Standard
	Al	27	630702.4	4.6	**24.3860**	0.563	2.3	ug/L	28447	Standard
>	**Sc**	45	443079.9	2.6				ug/L	340292	Standard
	Ti	47	3091.6	5.2	**1.4275**	0.108	7.6	ug/L	116	Standard
	V	51	39829.7	3.9	**1.7940**	0.041	2.3	ug/L	4654	Standard
	Cr	52	23611.7	2.9	**0.5473**	0.023	4.1	ug/L	14933	Standard
	Cr	53	1042.7	7.2	**0.3048**	0.029	9.7	ug/L	342	Standard
	Mn	55	825211.2	3.2	**31.5654**	1.492	4.7	ug/L	1267	Standard
	Co	59	1475.7	2.0	**0.0670**	0.002	3.6	ug/L	140	Standard
	Ni	60	5290.9	6.4	**1.2457**	0.086	6.9	ug/L	75	Standard
	Cu	65	2240.5	5.6	**0.5652**	0.028	5.0	ug/L	239	Standard
	Zn	66	7869.7	2.4	**4.8474**	0.098	2.0	ug/L	226	Standard
>	**Ge**	72	299475.5	3.4				ug/L	288220	Standard
	As	75	-114.5	45.7	**0.0767**	0.033	43.5	ug/L	-236	Standard
	Se	82	87.7	16.5	**0.2057**	0.061	29.8	ug/L	48	Standard
	Se-1	77	112.7	4.4	**0.0802**	0.031	39.1	ug/L	96	Standard
	Ga	71	278223.1	2.7				mg/L	267913	Standard
	Rb	85	4174.6	7.4				ug/L	31	Standard
>	**Y**	89	322830.0	4.4				ug/L	301679	Standard
	Rh	103	101.3	12.5				ug/L	1	Standard
	Mo	98	459.3	5.4	**0.0699**	0.002	2.5	ug/L	7	Standard
	Ag	107	201.3	4.6	**0.0063**	0.001	15.8	ug/L	66	Standard
	Cd	111	1002.8	2.3	**0.0749**	0.002	2.6	mg/L	527	Standard
	Cd	114	2444.5	1.4	**0.0698**	0.004	5.5	ug/L	1273	Standard
>	**In**	115	833428.6	3.2				ug/L	755896	Standard
	Sn	118	809.4	1.6	**0.0304**	0.001	4.4	ug/L	404	Standard
	Sb	123	176.5	9.9	**0.0096**	0.001	9.7	ug/L	34	Standard
	Ba	135	53621.1	2.5	**9.2115**	0.234	2.5	ug/L	45	Standard
	Ce	140	8749.9	3.7				ug/L	52	Standard
>	**Tb**	159	970649.5	3.3				ug/L	861974	Standard
	Ho	165	114.7	10.2				ug/L	9	Standard
	Tl	203	353.7	4.9	**0.0173**	0.001	4.4	ug/L	5	Standard
	Tl	205	777.4	4.8	**0.0159**	0.000	2.0	ug/L	15	Standard
	Pb	206	1112.7	3.3	**0.0495**	0.004	7.3	ug/L	297	Standard
	Pb	207	958.7	3.3	**0.0533**	0.004	6.9	ug/L	266	Standard
	Pb	208	4443.9	3.0	**0.0527**	0.001	1.5	ug/L	1205	Standard
	U	238	3633.1	2.7	**0.1083**	0.002	1.7	ug/L	4	Standard
>	**Bi**	209	488202.0	2.9				ug/L	470254	Standard
	Na	23	15604.0	3.5	**4.4340**	0.078	1.8	mg/L	98	Standard
	Mg	24	1859197.0	1.7	**6.5952**	0.059	0.9	mg/L	171	Standard

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K	39	8245.6	2.7	**0.7112**	0.010	1.4	mg/L	367	Standard
Ca	43	13590.8	1.7	**19.2235**	0.460	2.4	mg/L	58	Standard
Fe	54	1301.7	3.3	**0.0134**	0.008	59.8	mg/L	955	Standard
Fe	57	27601.1	4.4	**0.0852**	0.003	3.1	mg/L	5344	Standard
Sc-1	45	443079.9	2.6				mg/L	340292	Standard
Cl	35	492647.2	1.0				ug/L	43576	Standard
Kr	83	78.2	3.0				ug/L	78	Standard
Br	81	39546.7	6.0				ug/L	19680	Standard
P	31	147845.2	3.8				ug/L	84050	Standard
S	34	1323210.3	1.1				ug/L	907587	Standard
Sr	88	3570114.7	5.0				ug/L	383	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		103.905	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		107.011	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		110.257	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		112.608	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	103.817
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: L1205008508
Sample Date/Time: Monday, May 07, 2012 17:53:32
Number of Replicates: 3
Autosampler Position: 238
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	36757.2	3.6	**727.5788**	15.738	2.2	ug/L	18451	Standard
	Be	9	104.0	1.7	**0.0140**	0.000	3.5	ug/L	7	Standard
	Al	27	5707075.4	5.8	**222.8806**	7.573	3.4	ug/L	28447	Standard
>	**Sc**	45	452452.4	3.5				ug/L	340292	Standard
	Ti	47	32611.8	4.8	**16.1942**	0.435	2.7	ug/L	116	Standard
	V	51	47465.5	5.6	**2.2846**	0.094	4.1	ug/L	4654	Standard
	Cr	52	34764.6	6.3	**1.3981**	0.103	7.4	ug/L	14933	Standard
	Cr	53	1869.4	12.0	**0.6940**	0.087	12.5	ug/L	342	Standard
	Mn	55	81267517.0	4.8	**3243.6816**	85.841	2.6	ug/L	1267	Standard
	Co	59	43380.1	4.6	**2.2745**	0.066	2.9	ug/L	140	Standard
	Ni	60	10637.4	4.0	**2.6314**	0.055	2.1	ug/L	75	Standard
	Cu	65	10991.0	2.2	**3.0991**	0.012	0.4	ug/L	239	Standard
	Zn	66	16597.1	3.6	**10.8575**	0.159	1.5	ug/L	226	Standard
>	**Ge**	72	287614.0	2.2				ug/L	288220	Standard
	As	75	196.8	24.9	**0.2678**	0.029	10.7	ug/L	-236	Standard
	Se	82	216.9	5.1	**0.8651**	0.041	4.8	ug/L	48	Standard
	Se-1	77	168.7	6.1	**0.6829**	0.138	20.2	ug/L	96	Standard
	Ga	71	268475.0	2.1				mg/L	267913	Standard
	Rb	85	9346.9	2.2				ug/L	31	Standard
>	**Y**	89	372702.0	2.9				ug/L	301679	Standard
	Rh	103	338.0	8.3				ug/L	1	Standard
	Mo	98	435.8	3.3	**0.0684**	0.001	1.9	ug/L	7	Standard
	Ag	107	110.7	13.0	**0.0004**	0.001	243.4	ug/L	66	Standard
	Cd	111	4115.7	3.9	**0.6434**	0.020	3.1	mg/L	527	Standard
	Cd	114	10362.6	4.2	**0.6490**	0.019	2.9	ug/L	1273	Standard
>	**In**	115	808555.3	2.0				ug/L	755896	Standard
	Sn	118	2297.5	5.0	**0.1923**	0.010	5.1	ug/L	404	Standard
	Sb	123	335.4	1.9	**0.0221**	0.000	1.0	ug/L	34	Standard
	Ba	135	264299.6	2.6	**46.8142**	0.317	0.7	ug/L	45	Standard
	Ce	140	205963.4	3.2				ug/L	52	Standard
>	**Tb**	159	958187.2	3.0				ug/L	861974	Standard
	Ho	165	6006.5	4.0				ug/L	9	Standard
	Tl	203	588.7	4.3	**0.0305**	0.001	4.1	ug/L	5	Standard
	Tl	205	1341.4	2.7	**0.0291**	0.000	1.6	ug/L	15	Standard
	Pb	206	2290.8	3.9	**0.1321**	0.004	2.8	ug/L	297	Standard
	Pb	207	1803.8	4.8	**0.1250**	0.005	3.7	ug/L	266	Standard
	Pb	208	8488.9	3.2	**0.1257**	0.002	1.9	ug/L	1205	Standard
	U	238	8127.8	4.3	**0.2504**	0.006	2.5	ug/L	4	Standard
>	**Bi**	209	464129.3	1.8				ug/L	470254	Standard
	Na	23	47626.8	2.7	**13.3298**	0.126	0.9	mg/L	98	Standard
	Mg	24	2574533.6	4.2	**8.9419**	0.160	1.8	mg/L	171	Standard

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K	39	4075.9	4.9	**0.3224**	0.006	2.0	mg/L	367	Standard
Ca	43	16158.6	5.6	**22.3843**	0.758	3.4	mg/L	58	Standard
Fe	54	2921.1	4.3	**0.2035**	0.006	3.1	mg/L	955	Standard
Fe	57	84821.1	4.8	**0.3134**	0.007	2.1	mg/L	5344	Standard
Sc-1	45	452452.4	3.5				mg/L	340292	Standard
Cl	35	1543406.8	3.4				ug/L	43576	Standard
Kr	83	95.1	8.4				ug/L	78	Standard
Br	81	99948.5	3.7				ug/L	19680	Standard
P	31	202898.1	5.4				ug/L	84050	Standard
S	34	1129642.3	4.0				ug/L	907587	Standard
Sr	88	10330770.5	2.6				ug/L	383	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		99.790	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		123.542	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		106.966	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		111.162	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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Pb	207	
Pb	208	
U	238	
Bi	209	98.698
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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Y 89 Int Std for sample	Y	89	Rerun sample

Method 6020 - Summary Report

Sample ID: L1205008509
Sample Date/Time: Monday, May 07, 2012 17:56:19
Number of Replicates: 3
Autosampler Position: 239
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	28174.2	1.5	**292.5216**	15.226	5.2	ug/L	18451	Standard
	Be	9	225.7	3.8	**0.0392**	0.002	4.1	ug/L	7	Standard
	Al	27	2548392.3	3.6	**101.9124**	2.196	2.2	ug/L	28447	Standard
>	**Sc**	45	439891.8	1.5				ug/L	340292	Standard
	Ti	47	9414.9	3.4	**4.4017**	0.161	3.7	ug/L	116	Standard
	V	51	17650.0	0.7	**0.6469**	0.018	2.8	ug/L	4654	Standard
	Cr	52	27880.3	1.4	**0.8152**	0.052	6.4	ug/L	14933	Standard
	Cr	53	2294.2	3.9	**0.8338**	0.038	4.6	ug/L	342	Standard
	Mn	55	6191195.8	2.6	**234.7024**	9.181	3.9	ug/L	1267	Standard
	Co	59	86791.3	2.2	**4.3295**	0.127	2.9	ug/L	140	Standard
	Ni	60	4885.5	2.9	**1.1347**	0.040	3.5	ug/L	75	Standard
	Cu	65	4063.2	2.4	**1.0542**	0.013	1.3	ug/L	239	Standard
	Zn	66	23446.8	1.1	**14.6295**	0.139	1.0	ug/L	226	Standard
>	**Ge**	72	302932.3	1.8				ug/L	288220	Standard
	As	75	-145.1	13.4	**0.0601**	0.010	17.0	ug/L	-236	Standard
	Se	82	82.5	7.1	**0.1769**	0.023	12.7	ug/L	48	Standard
	Se-1	77	139.7	2.3	**0.3226**	0.011	3.3	ug/L	96	Standard
	Ga	71	279069.5	3.1				mg/L	267913	Standard
	Rb	85	14999.4	2.4				ug/L	31	Standard
>	**Y**	89	317254.7	1.3				ug/L	301679	Standard
	Rh	103	18.7	32.7				ug/L	1	Standard
	Mo	98	127.5	11.2	**0.0181**	0.002	10.1	ug/L	7	Standard
	Ag	107	121.0	12.5	**0.0009**	0.001	123.2	ug/L	66	Standard
	Cd	111	721.1	0.7	**0.0266**	0.003	11.5	mg/L	527	Standard
	Cd	114	1788.4	2.7	**0.0247**	0.003	10.3	ug/L	1273	Standard
>	**In**	115	826179.1	2.1				ug/L	755896	Standard
	Sn	118	2425.5	0.7	**0.2006**	0.004	2.1	ug/L	404	Standard
	Sb	123	167.5	10.6	**0.0090**	0.001	14.2	ug/L	34	Standard
	Ba	135	121066.4	3.2	**20.9805**	0.241	1.1	ug/L	45	Standard
	Ce	140	66412.0	3.6				ug/L	52	Standard
>	**Tb**	159	962788.3	3.5				ug/L	861974	Standard
	Ho	165	1003.4	5.9				ug/L	9	Standard
	Tl	203	375.3	13.0	**0.0181**	0.002	12.5	ug/L	5	Standard
	Tl	205	904.0	7.2	**0.0183**	0.001	6.4	ug/L	15	Standard
	Pb	206	2103.1	0.5	**0.1108**	0.001	0.6	ug/L	297	Standard
	Pb	207	1648.1	2.1	**0.1043**	0.002	1.9	ug/L	266	Standard
	Pb	208	7946.8	0.2	**0.1080**	0.001	0.8	ug/L	1205	Standard
	U	238	722.4	2.9	**0.0238**	0.001	2.6	ug/L	4	Standard
>	**Bi**	209	494912.1	0.9				ug/L	470254	Standard
	Na	23	15657.4	0.9	**4.4833**	0.110	2.4	mg/L	98	Standard
	Mg	24	275002.2	1.3	**0.9813**	0.006	0.6	mg/L	171	Standard

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	K	39	2292.8	1.4	**0.1688**	0.005	2.7	mg/L	367	Standard
	Ca	43	1214.0	3.6	**1.6425**	0.038	2.3	mg/L	58	Standard
	Fe	54	2754.7	4.5	**0.1930**	0.011	5.7	mg/L	955	Standard
	Fe	57	57478.2	1.9	**0.2099**	0.004	1.7	mg/L	5344	Standard
>	**Sc-1**	45	439891.8	1.5				mg/L	340292	Standard
	Cl	35	569734.1	0.4				ug/L	43576	Standard
	Kr	83	85.8	13.2				ug/L	78	Standard
	Br	81	41272.5	2.0				ug/L	19680	Standard
	P	31	121989.1	0.8				ug/L	84050	Standard
	S	34	1544113.4	1.0				ug/L	907587	Standard
	Sr	88	649098.4	2.9				ug/L	383	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		105.104	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		105.163	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		109.298	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		111.696	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	105.244
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Method 6020 - Summary Report

Sample ID: L1205008510
Sample Date/Time: Monday, May 07, 2012 17:59:06
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	20549.3	1.3	**8.8025**	24.346	276.6	ug/L	18451	Standard
	Be	9	9.3	52.9	**-0.0044**	0.001	25.7	ug/L	7	Standard
	Al	27	123432.7	4.4	**4.7648**	0.138	2.9	ug/L	28447	Standard
>	**Sc**	45	388993.2	2.3				ug/L	340292	Standard
	Ti	47	1473.4	3.5	**0.6934**	0.020	2.8	ug/L	116	Standard
	V	51	11151.4	3.7	**0.3586**	0.027	7.5	ug/L	4654	Standard
	Cr	52	25377.6	3.2	**0.7709**	0.074	9.6	ug/L	14933	Standard
	Cr	53	1496.7	12.3	**0.5394**	0.080	14.7	ug/L	342	Standard
	Mn	55	2604783.9	0.4	**105.8219**	1.305	1.2	ug/L	1267	Standard
	Co	59	5406.0	1.6	**0.2821**	0.007	2.4	ug/L	140	Standard
	Ni	60	5020.5	5.1	**1.2532**	0.072	5.7	ug/L	75	Standard
	Cu	65	1907.8	1.6	**0.5053**	0.013	2.5	ug/L	239	Standard
	Zn	66	2712.2	1.0	**1.6552**	0.028	1.7	ug/L	226	Standard
>	**Ge**	72	282427.1	0.9				ug/L	288220	Standard
	As	75	255.8	10.2	**0.3078**	0.018	5.8	ug/L	-236	Standard
	Se	82	210.8	8.6	**0.8544**	0.095	11.2	ug/L	48	Standard
	Se-1	77	142.0	12.4	**0.4416**	0.172	39.0	ug/L	96	Standard
	Ga	71	261422.9	1.3				mg/L	267913	Standard
	Rb	85	12557.9	0.5				ug/L	31	Standard
>	**Y**	89	292786.1	2.3				ug/L	301679	Standard
	Rh	103	142.0	2.8				ug/L	1	Standard
	Mo	98	156.7	2.2	**0.0239**	0.000	1.1	ug/L	7	Standard
	Ag	107	82.7	23.9	**-0.0014**	0.001	97.3	ug/L	66	Standard
	Cd	111	623.7	3.3	**0.0142**	0.003	21.9	mg/L	527	Standard
	Cd	114	1621.1	4.0	**0.0180**	0.004	22.1	ug/L	1273	Standard
>	**In**	115	790986.2	1.6				ug/L	755896	Standard
	Sn	118	783.4	3.0	**0.0321**	0.003	9.6	ug/L	404	Standard
	Sb	123	335.1	10.1	**0.0226**	0.002	10.6	ug/L	34	Standard
	Ba	135	472498.1	0.5	**85.5785**	1.315	1.5	ug/L	45	Standard
	Ce	140	6456.7	2.8				ug/L	52	Standard
>	**Tb**	159	905505.2	1.3				ug/L	861974	Standard
	Ho	165	146.0	9.0				ug/L	9	Standard
	Tl	203	495.0	7.0	**0.0257**	0.002	7.3	ug/L	5	Standard
	Tl	205	1189.4	7.7	**0.0258**	0.002	8.1	ug/L	15	Standard
	Pb	206	476.0	10.4	**0.0105**	0.003	32.7	ug/L	297	Standard
	Pb	207	404.0	3.3	**0.0125**	0.001	8.9	ug/L	266	Standard
	Pb	208	1852.0	5.2	**0.0121**	0.002	14.6	ug/L	1205	Standard
	U	238	3148.3	1.1	**0.0992**	0.001	1.3	ug/L	4	Standard
>	**Bi**	209	463250.3	0.4				ug/L	470254	Standard
	Na	23	27216.4	2.8	**8.8530**	0.459	5.2	mg/L	98	Standard
	Mg	24	1600813.0	0.5	**6.4697**	0.169	2.6	mg/L	171	Standard

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	K	39	39931.9	1.3	**4.1163**	0.149	3.6	mg/L	367	Standard
	Ca	43	15232.3	1.1	**24.5724**	0.834	3.4	mg/L	58	Standard
	Fe	54	1731.6	5.1	**0.0953**	0.015	15.4	mg/L	955	Standard
	Fe	57	42532.3	3.8	**0.1711**	0.010	6.1	mg/L	5344	Standard
>	**Sc-1**	45	388993.2	2.3				mg/L	340292	Standard
	Cl	35	1645605.1	1.3				ug/L	43576	Standard
	Kr	83	83.1	11.9				ug/L	78	Standard
	Br	81	108574.6	0.4				ug/L	19680	Standard
	P	31	102458.4	2.6				ug/L	84050	Standard
	S	34	1302201.2	0.7				ug/L	907587	Standard
	Sr	88	4629178.4	1.1				ug/L	383	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		97.990	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		97.052	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		104.642	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		105.050	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	98.511
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Method 6020 - Summary Report

Sample ID: L1205008511
Sample Date/Time: Monday, May 07, 2012 18:01:53
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	26651.8	2.1	**181.0255**	21.378	11.8	ug/L	18451	Standard
	Be	9	35.0	45.4	**0.0005**	0.003	656.2	ug/L	7	Standard
	Al	27	4777806.1	1.3	**188.8699**	0.997	0.5	ug/L	28447	Standard
>	**Sc**	45	446821.7	0.9				ug/L	340292	Standard
	Ti	47	15941.7	3.4	**7.5496**	0.343	4.5	ug/L	116	Standard
	V	51	239651.1	2.7	**11.9915**	0.393	3.3	ug/L	4654	Standard
	Cr	52	24318.2	1.2	**0.5886**	0.015	2.6	ug/L	14933	Standard
	Cr	53	1780.8	6.5	**0.6209**	0.059	9.5	ug/L	342	Standard
	Mn	55	913987.7	0.3	**34.8119**	0.372	1.1	ug/L	1267	Standard
	Co	59	4461.7	0.7	**0.2170**	0.004	2.1	ug/L	140	Standard
	Ni	60	5092.2	2.8	**1.1931**	0.050	4.2	ug/L	75	Standard
	Cu	65	4634.0	2.9	**1.2195**	0.049	4.0	ug/L	239	Standard
	Zn	66	4457.7	2.2	**2.6551**	0.082	3.1	ug/L	226	Standard
>	**Ge**	72	300644.5	1.3				ug/L	288220	Standard
	As	75	329.5	22.5	**0.3422**	0.047	13.8	ug/L	-236	Standard
	Se	82	125.2	13.4	**0.3838**	0.088	23.0	ug/L	48	Standard
	Se-1	77	126.3	9.1	**0.2053**	0.097	47.1	ug/L	96	Standard
	Ga	71	280132.6	2.0				mg/L	267913	Standard
	Rb	85	46818.2	1.2				ug/L	31	Standard
>	**Y**	89	322155.2	2.7				ug/L	301679	Standard
	Rh	103	79.3	16.4				ug/L	1	Standard
	Mo	98	10132.8	1.4	**1.5773**	0.032	2.0	ug/L	7	Standard
	Ag	107	106.0	5.0	**-0.0002**	0.000	217.6	ug/L	66	Standard
	Cd	111	714.1	6.6	**0.0236**	0.009	36.1	mg/L	527	Standard
	Cd	114	1771.9	1.5	**0.0219**	0.004	16.9	ug/L	1273	Standard
>	**In**	115	837697.8	1.6				ug/L	755896	Standard
	Sn	118	953.7	2.2	**0.0449**	0.003	6.3	ug/L	404	Standard
	Sb	123	2627.9	2.9	**0.1897**	0.008	4.0	ug/L	34	Standard
	Ba	135	40371.4	0.5	**6.8963**	0.089	1.3	ug/L	45	Standard
	Ce	140	34029.5	1.0				ug/L	52	Standard
>	**Tb**	159	964861.8	2.1				ug/L	861974	Standard
	Ho	165	304.7	10.4				ug/L	9	Standard
	Tl	203	281.0	8.2	**0.0136**	0.001	9.2	ug/L	5	Standard
	Tl	205	671.3	9.5	**0.0136**	0.001	9.4	ug/L	15	Standard
	Pb	206	5776.4	0.4	**0.3457**	0.004	1.3	ug/L	297	Standard
	Pb	207	4690.1	2.5	**0.3376**	0.007	2.2	ug/L	266	Standard
	Pb	208	21890.1	1.4	**0.3357**	0.005	1.4	ug/L	1205	Standard
	U	238	46291.6	1.0	**1.3384**	0.004	0.3	ug/L	4	Standard
>	**Bi**	209	489573.4	0.8				ug/L	470254	Standard
	Na	23	16648.5	3.2	**4.6932**	0.118	2.5	mg/L	98	Standard
	Mg	24	787167.9	1.2	**2.7677**	0.011	0.4	mg/L	171	Standard

K	39	10639.7	1.8	**0.9218**	0.011	1.2	mg/L	367	Standard
Ca	43	13225.1	0.9	**18.5421**	0.301	1.6	mg/L	58	Standard
Fe	54	3660.2	2.0	**0.2975**	0.012	4.1	mg/L	955	Standard
Fe	57	97627.0	2.3	**0.3700**	0.007	1.9	mg/L	5344	Standard
Sc-1	45	446821.7	0.9				mg/L	340292	Standard
Cl	35	585846.0	1.6				ug/L	43576	Standard
Kr	83	86.4	14.3				ug/L	78	Standard
Br	81	53677.9	2.2				ug/L	19680	Standard
P	31	156670.5	0.4				ug/L	84050	Standard
S	34	1348568.4	0.6				ug/L	907587	Standard
Sr	88	2306496.5	1.4				ug/L	383	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		104.311	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		106.787	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		110.822	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		111.936	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	104.108
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: L1205008512
Sample Date/Time: Monday, May 07, 2012 18:04:41
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	60500.6	1.1	**1765.3752**	44.716	2.5	ug/L	18451	Standard
	Be	9	439.3	3.3	**0.0726**	0.002	2.4	ug/L	7	Standard
	Al	27	84507995.1	2.8	**3028.3348**	43.668	1.4	ug/L	28447	Standard
>	**Sc**	45	495000.8	2.1				ug/L	340292	Standard
	Ti	47	842868.8	4.2	**404.3068**	17.047	4.2	ug/L	116	Standard
	V	51	260183.7	1.2	**13.1192**	0.158	1.2	ug/L	4654	Standard
	Cr	52	40827.6	3.5	**1.7192**	0.098	5.7	ug/L	14933	Standard
	Cr	53	4333.3	1.1	**1.7294**	0.024	1.4	ug/L	342	Standard
	Mn	55	3771071.6	3.8	**144.8332**	5.645	3.9	ug/L	1267	Standard
	Co	59	50679.3	3.4	**2.5593**	0.092	3.6	ug/L	140	Standard
	Ni	60	4430.6	2.6	**1.0412**	0.028	2.7	ug/L	75	Standard
	Cu	65	18349.8	2.6	**5.0115**	0.141	2.8	ug/L	239	Standard
	Zn	66	73376.3	1.1	**46.8062**	0.605	1.3	ug/L	226	Standard
>	**Ge**	72	298819.2	0.3				ug/L	288220	Standard
	As	75	-131.7	23.9	**0.0669**	0.019	28.0	ug/L	-236	Standard
	Se	82	61.9	9.3	**0.0839**	0.027	32.3	ug/L	48	Standard
	Se-1	77	140.7	4.3	**0.3504**	0.060	17.2	ug/L	96	Standard
	Ga	71	286603.4	0.7				mg/L	267913	Standard
	Rb	85	187396.7	4.6				ug/L	31	Standard
>	**Y**	89	365542.1	1.3				ug/L	301679	Standard
	Rh	103	66.7	13.9				ug/L	1	Standard
	Mo	98	505.1	7.9	**0.0778**	0.006	7.2	ug/L	7	Standard
	Ag	107	129.0	8.7	**0.0014**	0.001	45.4	ug/L	66	Standard
	Cd	111	747.1	1.7	**0.0312**	0.004	12.0	mg/L	527	Standard
	Cd	114	1854.0	2.5	**0.0295**	0.005	15.3	ug/L	1273	Standard
>	**In**	115	825757.7	1.2				ug/L	755896	Standard
	Sn	118	4378.6	2.0	**0.4056**	0.010	2.5	ug/L	404	Standard
	Sb	123	186.4	4.5	**0.0104**	0.001	6.2	ug/L	34	Standard
	Ba	135	498052.5	1.2	**86.3952**	0.330	0.4	ug/L	45	Standard
	Ce	140	537023.9	2.3				ug/L	52	Standard
>	**Tb**	159	962656.0	2.1				ug/L	861974	Standard
	Ho	165	7383.1	4.0				ug/L	9	Standard
	Tl	203	727.0	1.6	**0.0369**	0.001	1.5	ug/L	5	Standard
	Tl	205	1670.1	6.2	**0.0354**	0.002	6.3	ug/L	15	Standard
	Pb	206	16116.2	3.0	**1.0340**	0.033	3.2	ug/L	297	Standard
	Pb	207	13202.1	3.0	**1.0170**	0.033	3.2	ug/L	266	Standard
	Pb	208	61816.8	2.7	**1.0143**	0.029	2.8	ug/L	1205	Standard
	U	238	2560.2	6.4	**0.0793**	0.005	6.2	ug/L	4	Standard
>	**Bi**	209	475224.7	0.4				ug/L	470254	Standard
	Na	23	15656.1	2.8	**3.9784**	0.031	0.8	mg/L	98	Standard
	Mg	24	891654.9	2.6	**2.8298**	0.019	0.7	mg/L	171	Standard

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	K	39	19332.3	1.6	**1.5392**	0.027	1.7	mg/L	367	Standard
	Ca	43	2991.6	2.3	**3.7106**	0.066	1.8	mg/L	58	Standard
	Fe	54	35509.5	1.0	**3.7346**	0.050	1.3	mg/L	955	Standard
	Fe	57	1052606.2	2.8	**3.8480**	0.050	1.3	mg/L	5344	Standard
>	**Sc-1**	45	495000.8	2.1				mg/L	340292	Standard
	Cl	35	359563.2	1.7				ug/L	43576	Standard
	Kr	83	95.3	13.1				ug/L	78	Standard
	Br	81	26162.3	5.5				ug/L	19680	Standard
	P	31	262130.2	2.4				ug/L	84050	Standard
	S	34	939460.9	6.7				ug/L	907587	Standard
	Sr	88	2054057.9	4.8				ug/L	383	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		103.677	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		121.169	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		109.242	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		111.680	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	101.057
┌	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	

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	
Y 89 Int Std for sample	Y	89	Rerun sample

Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Monday, May 07, 2012 18:07:31
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	20040.9	3.7	**116.7064**	7.535	6.5	ug/L	18451	Standard
	Be	9	210724.5	5.9	**53.4727**	1.457	2.7	ug/L	7	Standard
	Al	27	1058356.6	4.2	**52.6388**	0.655	1.2	ug/L	28447	Standard
>	**Sc**	45	350929.5	3.2				ug/L	340292	Standard
	Ti	47	202590.9	4.9	**98.9188**	2.041	2.1	ug/L	116	Standard
	V	51	1003315.0	6.2	**52.2236**	1.466	2.8	ug/L	4654	Standard
	Cr	52	774379.1	6.0	**52.4581**	1.392	2.7	ug/L	14933	Standard
	Cr	53	114942.8	4.2	**50.4964**	0.382	0.8	ug/L	342	Standard
	Mn	55	1347557.9	3.6	**52.6480**	0.288	0.5	ug/L	1267	Standard
	Co	59	955263.1	3.7	**49.2715**	0.158	0.3	ug/L	140	Standard
	Ni	60	201530.1	5.5	**49.2812**	1.401	2.8	ug/L	75	Standard
	Cu	65	176449.6	4.1	**49.5345**	0.620	1.3	ug/L	239	Standard
	Zn	66	76051.3	4.7	**49.4109**	0.774	1.6	ug/L	226	Standard
>	**Ge**	72	293357.2	3.4				ug/L	288220	Standard
	As	75	79346.2	4.3	**48.5125**	0.429	0.9	ug/L	-236	Standard
	Se	82	9935.4	4.5	**48.1576**	0.881	1.8	ug/L	48	Standard
	Se-1	77	5299.9	4.0	**50.6323**	0.329	0.7	ug/L	96	Standard
	Ga	71	272086.8	3.1				mg/L	267913	Standard
	Rb	85	1649.4	6.1				ug/L	31	Standard
>	**Y**	89	295927.3	3.8				ug/L	301679	Standard
	Rh	103	58.0	21.5				ug/L	1	Standard
	Mo	98	555323.2	4.7	**90.7548**	3.800	4.2	ug/L	7	Standard
	Ag	107	642364.7	6.3	**45.0718**	1.963	4.4	ug/L	66	Standard
	Cd	111	270951.1	5.4	**49.4978**	1.591	3.2	mg/L	527	Standard
	Cd	114	686844.1	4.7	**50.2919**	1.523	3.0	ug/L	1273	Standard
>	**In**	115	798945.9	3.3				ug/L	755896	Standard
	Sn	118	465979.4	5.4	**50.4505**	1.836	3.6	ug/L	404	Standard
	Sb	123	649039.1	4.3	**49.9934**	1.551	3.1	ug/L	34	Standard
	Ba	135	278397.0	4.5	**49.9182**	1.890	3.8	ug/L	45	Standard
	Ce	140	1078.7	5.7				ug/L	52	Standard
>	**Tb**	159	919354.6	1.9				ug/L	861974	Standard
	Ho	165	25.3	12.1				ug/L	9	Standard
	Tl	203	976045.0	4.0	**50.4492**	1.705	3.4	ug/L	5	Standard
	Tl	205	2468970.6	4.6	**53.2997**	2.106	4.0	ug/L	15	Standard
	Pb	206	763074.8	4.9	**50.3236**	1.886	3.7	ug/L	297	Standard
	Pb	207	631523.2	4.0	**49.9585**	1.392	2.8	ug/L	266	Standard
	Pb	208	2954206.8	4.4	**49.7626**	1.639	3.3	ug/L	1205	Standard
	U	238	1601686.2	4.9	**47.9471**	1.627	3.4	ug/L	4	Standard
>	**Bi**	209	471596.6	1.7				ug/L	470254	Standard
	Na	23	14328.8	3.3	**5.1470**	0.027	0.5	mg/L	98	Standard
	Mg	24	1164665.0	4.3	**5.2141**	0.056	1.1	mg/L	171	Standard

Sample ID: QC Std 6
Report Date/Time: Monday, May 07, 2012 18:09:59
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	K	39	44651.1	3.2	**5.1093**	0.041	0.8	mg/L	367	Standard
	Ca	43	3022.3	4.0	**5.3268**	0.070	1.3	mg/L	58	Standard
	Fe	54	33773.9	4.4	**5.0578**	0.065	1.3	mg/L	955	Standard
	Fe	57	998640.1	4.6	**5.1581**	0.086	1.7	mg/L	5344	Standard
>	**Sc-1**	45	350929.5	3.2				mg/L	340292	Standard
	Cl	35	62850.1	1.8				ug/L	43576	Standard
	Kr	83	72.0	5.8				ug/L	78	Standard
	Br	81	19545.0	9.6				ug/L	19680	Standard
	P	31	97366.7	2.8				ug/L	84050	Standard
	S	34	938392.4	3.4				ug/L	907587	Standard
	Sr	88	2458.2	6.4				ug/L	383	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	105.278		
>	Sc	45			
	Ti	47	98.919		
	V	51	104.447		
	Cr	52	104.916		
	Cr	53			
	Mn	55	105.296		
	Co	59	98.543		
	Ni	60	98.562		
	Cu	65	99.069		
	Zn	66	98.822		
>	Ge	72		101.782	
	As	75	97.025		
	Se	82	96.315		
	Se-1	77	101.265		
	Ga	71			
	Rb	85			
>	Y	89		98.093	
	Rh	103			
	Mo	98	90.755		
	Ag	107	90.144		
	Cd	111	98.996		
	Cd	114			
>	In	115		105.695	
	Sn	118	100.901		
	Sb	123	99.987		
	Ba	135	99.836		
	Ce	140			
>	Tb	159		106.657	
	Ho	165			
	Tl	203	100.898		
	Tl	205			
	Pb	206	100.647		

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	Pb	207	99.917	
	Pb	208	99.525	
	U	238	95.894	
>	Bi	209		100.286
	Na	23	102.940	
	Mg	24	104.281	
	K	39	102.187	
	Ca	43	106.536	
	Fe	54	101.157	
	Fe	57	103.161	
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, May 07, 2012 18:10:19
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	19081.3	1.6	**86.1863**	75.184	87.2	ug/L	18451	Standard
	Be	9	11.7	27.6	**-0.0035**	0.001	22.5	ug/L	7	Standard
	Al	27	19569.3	4.5	**0.1520**	0.042	27.8	ug/L	28447	Standard
>	**Sc**	45	341850.1	4.0				ug/L	340292	Standard
	Ti	47	130.7	19.4	**0.0123**	0.012	101.4	ug/L	116	Standard
	V	51	4468.0	0.4	**-0.0033**	0.004	132.1	ug/L	4654	Standard
	Cr	52	14391.5	0.6	**-0.0117**	0.028	237.0	ug/L	14933	Standard
	Cr	53	328.0	5.9	**0.0059**	0.011	189.4	ug/L	342	Standard
	Mn	55	1687.4	4.0	**-0.0361**	0.002	4.9	ug/L	1267	Standard
	Co	59	131.0	13.6	**-0.0005**	0.001	149.9	ug/L	140	Standard
	Ni	60	98.7	8.3	**0.0018**	0.002	87.0	ug/L	75	Standard
	Cu	65	464.7	3.0	**0.0848**	0.002	2.0	ug/L	239	Standard
	Zn	66	560.3	7.3	**0.1993**	0.023	11.6	ug/L	226	Standard
>	**Ge**	72	280667.7	2.1				ug/L	288220	Standard
	As	75	-261.7	14.9	**-0.0208**	0.021	103.2	ug/L	-236	Standard
	Se	82	33.2	18.0	**-0.0425**	0.033	78.7	ug/L	48	Standard
	Se-1	77	92.3	6.2	**-0.0538**	0.077	142.7	ug/L	96	Standard
	Ga	71	263760.2	3.9				mg/L	267913	Standard
	Rb	85	33.3	3.5				ug/L	31	Standard
>	**Y**	89	284796.9	1.7				ug/L	301679	Standard
	Rh	103	1.3	86.6				ug/L	1	Standard
	Mo	98	87.2	66.0	**0.0127**	0.010	76.3	ug/L	7	Standard
	Ag	107	91.0	29.9	**-0.0007**	0.002	254.9	ug/L	66	Standard
	Cd	111	514.2	4.7	**-0.0041**	0.004	86.3	mg/L	527	Standard
	Cd	114	1269.0	1.9	**-0.0062**	0.000	7.9	ug/L	1273	Standard
>	**In**	115	775099.0	1.4				ug/L	755896	Standard
	Sn	118	686.0	6.9	**0.0229**	0.005	21.1	ug/L	404	Standard
	Sb	123	206.3	38.7	**0.0129**	0.006	48.8	ug/L	34	Standard
	Ba	135	57.3	14.0	**0.0022**	0.001	64.9	ug/L	45	Standard
	Ce	140	50.7	18.7				ug/L	52	Standard
>	**Tb**	159	871731.5	1.8				ug/L	861974	Standard
	Ho	165	8.0	43.3				ug/L	9	Standard
	Tl	203	42.3	44.9	**0.0018**	0.001	54.9	ug/L	5	Standard
	Tl	205	86.7	58.4	**0.0016**	0.001	72.6	ug/L	15	Standard
	Pb	206	371.7	6.1	**0.0033**	0.001	44.9	ug/L	297	Standard
	Pb	207	312.7	9.7	**0.0049**	0.002	47.2	ug/L	266	Standard
	Pb	208	1434.7	7.7	**0.0047**	0.002	37.3	ug/L	1205	Standard
	U	238	47.3	56.0	**0.0046**	0.001	17.6	ug/L	4	Standard
>	**Bi**	209	467736.4	2.3				ug/L	470254	Standard
	Na	23	78.0	11.8	**-0.0076**	0.005	59.7	mg/L	98	Standard
	Mg	24	183.7	12.2	**-0.0006**	0.000	13.1	mg/L	171	Standard

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K	39	374.7	3.6	**0.0022**	0.003	127.5	mg/L	367	Standard
Ca	43	54.0	3.7	**0.0047**	0.003	72.8	mg/L	58	Standard
Fe	54	953.9	5.6	**0.0054**	0.008	149.2	mg/L	955	Standard
Fe	57	5244.9	1.8	**-0.0003**	0.001	261.4	mg/L	5344	Standard
> **Sc-1**	45	341850.1	4.0				mg/L	340292	Standard
Cl	35	57699.8	3.8				ug/L	43576	Standard
Kr	83	75.3	11.5				ug/L	78	Standard
Br	81	18999.2	2.0				ug/L	19680	Standard
P	31	89247.8	4.7				ug/L	84050	Standard
S	34	930532.7	4.7				ug/L	907587	Standard
Sr	88	354.7	21.4				ug/L	383	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		97.380	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
> Y	89		94.404	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
> In	115		102.540	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
> Tb	159		101.132	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	99.465
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: L1205008513
Sample Date/Time: Monday, May 07, 2012 18:13:09
Number of Replicates: 3
Autosampler Position: 243
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	24894.4	2.6	**115.7091**	36.854	31.9	ug/L	18451	Standard
	Be	9	11.0	18.2	**-0.0043**	0.000	8.5	ug/L	7	Standard
	Al	27	691302.2	3.3	**27.2486**	0.619	2.3	ug/L	28447	Standard
>	**Sc**	45	436362.4	2.8				ug/L	340292	Standard
	Ti	47	8066.1	0.9	**4.0888**	0.039	0.9	ug/L	116	Standard
	V	51	80444.4	3.1	**4.1769**	0.121	2.9	ug/L	4654	Standard
	Cr	52	30163.0	3.2	**1.1400**	0.072	6.3	ug/L	14933	Standard
	Cr	53	1195.4	8.2	**0.4080**	0.037	9.1	ug/L	342	Standard
	Mn	55	1319176.9	2.4	**54.1767**	1.214	2.2	ug/L	1267	Standard
	Co	59	3877.2	6.2	**0.2026**	0.010	5.1	ug/L	140	Standard
	Ni	60	7321.1	3.7	**1.8594**	0.045	2.4	ug/L	75	Standard
	Cu	65	1536.1	4.1	**0.4020**	0.012	3.0	ug/L	239	Standard
	Zn	66	2792.6	3.6	**1.7317**	0.049	2.8	ug/L	226	Standard
>	**Ge**	72	279113.1	1.5				ug/L	288220	Standard
	As	75	-92.2	37.4	**0.0864**	0.023	26.6	ug/L	-236	Standard
	Se	82	96.0	6.4	**0.2788**	0.024	8.6	ug/L	48	Standard
	Se-1	77	122.0	1.6	**0.2545**	0.033	13.1	ug/L	96	Standard
	Ga	71	256282.8	1.2				mg/L	267913	Standard
	Rb	85	2676.2	0.7				ug/L	31	Standard
>	**Y**	89	290268.1	2.8				ug/L	301679	Standard
	Rh	103	177.3	7.7				ug/L	1	Standard
	Mo	98	906.1	6.1	**0.1492**	0.006	3.8	ug/L	7	Standard
	Ag	107	108.7	4.7	**0.0005**	0.000	99.9	ug/L	66	Standard
	Cd	111	713.3	4.1	**0.0322**	0.002	6.3	mg/L	527	Standard
	Cd	114	1733.5	7.6	**0.0277**	0.008	27.6	ug/L	1273	Standard
>	**In**	115	782105.5	2.6				ug/L	755896	Standard
	Sn	118	718.4	8.0	**0.0259**	0.006	24.9	ug/L	404	Standard
	Sb	123	307.2	1.8	**0.0207**	0.000	2.2	ug/L	34	Standard
	Ba	135	207784.3	3.1	**38.0516**	0.733	1.9	ug/L	45	Standard
	Ce	140	3998.5	2.0				ug/L	52	Standard
>	**Tb**	159	914250.1	3.5				ug/L	861974	Standard
	Ho	165	49.3	31.0				ug/L	9	Standard
	Tl	203	271.0	9.9	**0.0142**	0.001	8.4	ug/L	5	Standard
	Tl	205	656.0	9.8	**0.0144**	0.001	7.8	ug/L	15	Standard
	Pb	206	394.3	3.4	**0.0056**	0.001	15.8	ug/L	297	Standard
	Pb	207	336.0	0.8	**0.0077**	0.001	10.7	ug/L	266	Standard
	Pb	208	1565.4	4.5	**0.0078**	0.001	9.6	ug/L	1205	Standard
	U	238	25435.3	2.7	**0.7962**	0.004	0.6	ug/L	4	Standard
>	**Bi**	209	452874.7	2.3				ug/L	470254	Standard
	Na	23	35328.5	2.9	**10.2421**	0.115	1.1	mg/L	98	Standard
	Mg	24	5168278.3	2.6	**18.6166**	0.181	1.0	mg/L	171	Standard

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K	39	5531.0	1.7	**0.4711**	0.013	2.9	mg/L	367	Standard
Ca	43	14370.8	2.4	**20.6450**	0.475	2.3	mg/L	58	Standard
Fe	54	1501.5	0.6	**0.0406**	0.005	13.2	mg/L	955	Standard
Fe	57	34308.2	3.0	**0.1150**	0.001	1.3	mg/L	5344	Standard
Sc-1	45	436362.4	2.8				mg/L	340292	Standard
Cl	35	489182.4	2.9				ug/L	43576	Standard
Kr	83	73.8	7.7				ug/L	78	Standard
Br	81	34891.1	2.7				ug/L	19680	Standard
P	31	170152.7	3.0				ug/L	84050	Standard
S	34	1953423.7	2.1				ug/L	907587	Standard
Sr	88	4284449.2	1.3				ug/L	383	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		96.840	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		96.217	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		103.467	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		106.065	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

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│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	96.304
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: L1205008514
Sample Date/Time: Monday, May 07, 2012 18:15:56
Number of Replicates: 3
Autosampler Position: 244
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	29825.0	0.9	**611.4268**	12.761	2.1	ug/L	18451	Standard
	Be	9	69.0	10.9	**0.0093**	0.002	17.5	ug/L	7	Standard
	Al	27	5923676.8	1.0	**269.3011**	5.299	2.0	ug/L	28447	Standard
>	**Sc**	45	389113.5	1.0				ug/L	340292	Standard
	Ti	47	19299.6	1.4	**9.6366**	0.166	1.7	ug/L	116	Standard
	V	51	38704.1	2.8	**1.8331**	0.040	2.2	ug/L	4654	Standard
	Cr	52	27355.0	1.9	**0.8912**	0.032	3.6	ug/L	14933	Standard
	Cr	53	3211.7	3.2	**1.3086**	0.027	2.1	ug/L	342	Standard
	Mn	55	2927041.1	1.5	**117.6288**	0.598	0.5	ug/L	1267	Standard
	Co	59	8900.6	1.6	**0.4642**	0.004	0.9	ug/L	140	Standard
	Ni	60	4621.0	0.2	**1.1388**	0.017	1.5	ug/L	75	Standard
	Cu	65	4437.3	1.8	**1.2299**	0.030	2.5	ug/L	239	Standard
	Zn	66	21882.1	1.0	**14.4833**	0.059	0.4	ug/L	226	Standard
>	**Ge**	72	285518.4	1.3				ug/L	288220	Standard
	As	75	222.6	28.5	**0.2848**	0.038	13.3	ug/L	-236	Standard
	Se	82	132.6	11.4	**0.4507**	0.069	15.4	ug/L	48	Standard
	Se-1	77	150.0	4.1	**0.5061**	0.043	8.5	ug/L	96	Standard
	Ga	71	263987.1	1.9				mg/L	267913	Standard
	Rb	85	43500.4	1.7				ug/L	31	Standard
>	**Y**	89	294135.2	2.9				ug/L	301679	Standard
	Rh	103	46.0	28.5				ug/L	1	Standard
	Mo	98	2357.7	3.0	**0.3935**	0.011	2.8	ug/L	7	Standard
	Ag	107	202.3	7.2	**0.0073**	0.001	13.0	ug/L	66	Standard
	Cd	111	820.5	4.2	**0.0531**	0.007	12.5	mg/L	527	Standard
	Cd	114	2150.7	1.1	**0.0598**	0.002	3.7	ug/L	1273	Standard
>	**In**	115	778156.1	0.7				ug/L	755896	Standard
	Sn	118	2367.2	3.2	**0.2098**	0.009	4.2	ug/L	404	Standard
	Sb	123	934.9	0.9	**0.0705**	0.000	0.2	ug/L	34	Standard
	Ba	135	91381.8	0.8	**16.8146**	0.113	0.7	ug/L	45	Standard
	Ce	140	56956.2	0.7				ug/L	52	Standard
>	**Tb**	159	894879.2	1.1				ug/L	861974	Standard
	Ho	165	740.0	4.4				ug/L	9	Standard
	Tl	203	411.7	2.4	**0.0213**	0.001	2.9	ug/L	5	Standard
	Tl	205	960.0	5.4	**0.0208**	0.001	6.2	ug/L	15	Standard
	Pb	206	6186.6	1.1	**0.3948**	0.003	0.8	ug/L	297	Standard
	Pb	207	5095.9	2.2	**0.3913**	0.005	1.4	ug/L	266	Standard
	Pb	208	23894.0	0.5	**0.3910**	0.002	0.5	ug/L	1205	Standard
	U	238	1026.4	0.7	**0.0345**	0.000	1.3	ug/L	4	Standard
>	**Bi**	209	462470.9	0.9				ug/L	470254	Standard
	Na	23	23102.9	0.3	**7.5017**	0.090	1.2	mg/L	98	Standard
	Mg	24	502882.3	0.4	**2.0301**	0.020	1.0	mg/L	171	Standard

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	K	39	15297.1	1.0	**1.5496**	0.031	2.0	mg/L	367	Standard
	Ca	43	3617.1	1.8	**5.7575**	0.050	0.9	mg/L	58	Standard
	Fe	54	5305.8	2.8	**0.5918**	0.018	3.0	mg/L	955	Standard
	Fe	57	136295.6	0.8	**0.6102**	0.004	0.6	mg/L	5344	Standard
>	**Sc-1**	45	389113.5	1.0				mg/L	340292	Standard
	Cl	35	828026.9	1.2				ug/L	43576	Standard
	Kr	83	75.3	10.0				ug/L	78	Standard
	Br	81	66446.1	3.1				ug/L	19680	Standard
	P	31	185513.8	3.1				ug/L	84050	Standard
	S	34	1360318.5	1.4				ug/L	907587	Standard
	Sr	88	1509173.9	3.1				ug/L	383	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		99.063	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		97.499	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		102.945	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		103.817	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	98.345
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Method 6020 - Summary Report

Sample ID: L1205008515
Sample Date/Time: Monday, May 07, 2012 18:18:44
Number of Replicates: 3
Autosampler Position: 245
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	28251.3	2.9	**434.1633**	32.226	7.4	ug/L	18451	Standard
	Be	9	38.7	17.2	**0.0020**	0.002	75.2	ug/L	7	Standard
	Al	27	1686331.9	2.5	**72.9211**	2.192	3.0	ug/L	28447	Standard
>	**Sc**	45	405590.6	1.0				ug/L	340292	Standard
	Ti	47	9020.7	12.2	**4.3002**	0.489	11.4	ug/L	116	Standard
	V	51	23105.4	2.5	**0.9478**	0.043	4.6	ug/L	4654	Standard
	Cr	52	19663.1	2.2	**0.2919**	0.033	11.2	ug/L	14933	Standard
	Cr	53	1272.7	2.7	**0.4092**	0.017	4.2	ug/L	342	Standard
	Mn	55	1212762.7	1.3	**46.8271**	0.478	1.0	ug/L	1267	Standard
	Co	59	3087.6	1.9	**0.1499**	0.000	0.3	ug/L	140	Standard
	Ni	60	1248.7	3.9	**0.2786**	0.007	2.5	ug/L	75	Standard
	Cu	65	1876.8	1.8	**0.4699**	0.019	4.1	ug/L	239	Standard
	Zn	66	2875.6	0.4	**1.6718**	0.037	2.2	ug/L	226	Standard
>	**Ge**	72	296799.8	2.0				ug/L	288220	Standard
	As	75	-28.7	19.4	**0.1284**	0.004	2.8	ug/L	-236	Standard
	Se	82	69.4	20.9	**0.1213**	0.064	53.0	ug/L	48	Standard
	Se-1	77	119.0	10.9	**0.1495**	0.104	69.6	ug/L	96	Standard
	Ga	71	274392.6	2.4				mg/L	267913	Standard
	Rb	85	32333.2	4.4				ug/L	31	Standard
>	**Y**	89	310994.8	1.1				ug/L	301679	Standard
	Rh	103	59.3	5.1				ug/L	1	Standard
	Mo	98	888.3	2.9	**0.1406**	0.002	1.8	ug/L	7	Standard
	Ag	107	70.3	20.5	**-0.0025**	0.001	37.9	ug/L	66	Standard
	Cd	111	586.0	4.2	**0.0043**	0.005	111.1	mg/L	527	Standard
	Cd	114	1536.7	3.8	**0.0086**	0.005	53.7	ug/L	1273	Standard
>	**In**	115	813112.9	1.4				ug/L	755896	Standard
	Sn	118	698.7	3.1	**0.0207**	0.002	8.4	ug/L	404	Standard
	Sb	123	269.3	5.5	**0.0169**	0.001	8.1	ug/L	34	Standard
	Ba	135	77418.1	2.9	**13.6294**	0.219	1.6	ug/L	45	Standard
	Ce	140	32862.3	1.5				ug/L	52	Standard
>	**Tb**	159	937559.4	1.3				ug/L	861974	Standard
	Ho	165	412.7	4.5				ug/L	9	Standard
	Tl	203	252.3	16.6	**0.0123**	0.002	16.7	ug/L	5	Standard
	Tl	205	557.3	6.9	**0.0114**	0.001	6.5	ug/L	15	Standard
	Pb	206	1932.5	2.2	**0.1028**	0.002	2.1	ug/L	297	Standard
	Pb	207	1653.4	3.0	**0.1075**	0.003	2.5	ug/L	266	Standard
	Pb	208	7525.4	2.9	**0.1039**	0.002	2.4	ug/L	1205	Standard
	U	238	678.3	13.6	**0.0230**	0.003	11.5	ug/L	4	Standard
>	**Bi**	209	483876.5	0.9				ug/L	470254	Standard
	Na	23	9369.6	2.8	**2.8961**	0.071	2.5	mg/L	98	Standard
	Mg	24	380813.7	1.6	**1.4745**	0.026	1.7	mg/L	171	Standard

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	K	39	8265.6	1.6	**0.7829**	0.014	1.8	mg/L	367	Standard
	Ca	43	2644.9	4.3	**4.0117**	0.199	5.0	mg/L	58	Standard
	Fe	54	3202.9	2.6	**0.2815**	0.013	4.5	mg/L	955	Standard
	Fe	57	72300.8	1.0	**0.2967**	0.006	2.0	mg/L	5344	Standard
>	**Sc-1**	45	405590.6	1.0				mg/L	340292	Standard
	Cl	35	335651.9	1.4				ug/L	43576	Standard
	Kr	83	73.6	14.5				ug/L	78	Standard
	Br	81	30455.9	2.3				ug/L	19680	Standard
	P	31	119604.3	3.8				ug/L	84050	Standard
	S	34	1072890.6	2.3				ug/L	907587	Standard
	Sr	88	1572580.0	2.2				ug/L	383	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		102.977	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		103.088	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		107.569	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		108.769	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	102.897
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: L1205010801
Sample Date/Time: Monday, May 07, 2012 18:21:31
Number of Replicates: 3
Autosampler Position: 246
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	69990.0	1.2	**2535.3617**	51.839	2.0	ug/L	18451	Standard
	Be	9	996.7	3.1	**0.1872**	0.001	0.7	ug/L	7	Standard
	Al	27	6772168.5	2.5	**261.3611**	11.193	4.3	ug/L	28447	Standard
>	**Sc**	45	458545.3	2.5				ug/L	340292	Standard
	Ti	47	9452.9	1.2	**4.3866**	0.028	0.6	ug/L	116	Standard
	V	51	60759.6	2.6	**2.8092**	0.079	2.8	ug/L	4654	Standard
	Cr	52	56382.4	2.4	**2.6957**	0.081	3.0	ug/L	14933	Standard
	Cr	53	6252.6	0.8	**2.5037**	0.025	1.0	ug/L	342	Standard
	Mn	55	1356724.3	1.2	**50.9566**	0.315	0.6	ug/L	1267	Standard
	Co	59	61563.5	1.8	**3.0457**	0.036	1.2	ug/L	140	Standard
	Ni	60	17585.5	2.2	**4.1141**	0.063	1.5	ug/L	75	Standard
	Cu	65	19613.0	1.2	**5.2477**	0.026	0.5	ug/L	239	Standard
	Zn	66	46444.7	0.3	**28.9447**	0.306	1.1	ug/L	226	Standard
>	**Ge**	72	305139.1	0.7				ug/L	288220	Standard
	As	75	1700.8	1.8	**1.1426**	0.015	1.3	ug/L	-236	Standard
	Se	82	141.8	4.7	**0.4515**	0.027	5.9	ug/L	48	Standard
	Se-1	77	238.0	4.8	**1.2337**	0.092	7.5	ug/L	96	Standard
	Ga	71	287079.1	1.4				mg/L	267913	Standard
	Rb	85	135730.0	1.6				ug/L	31	Standard
>	**Y**	89	788781.2	2.5				ug/L	301679	Standard
	Rh	103	61.3	1.9				ug/L	1	Standard
	Mo	98	1210.2	1.8	**0.1850**	0.002	1.3	ug/L	7	Standard
	Ag	107	330.0	4.6	**0.0146**	0.001	5.9	ug/L	66	Standard
	Cd	111	1103.4	3.6	**0.0899**	0.008	8.7	mg/L	527	Standard
	Cd	114	2856.5	0.9	**0.0960**	0.001	0.6	ug/L	1273	Standard
>	**In**	115	844909.2	0.7				ug/L	755896	Standard
	Sn	118	2253.5	0.8	**0.1773**	0.003	1.9	ug/L	404	Standard
	Sb	123	1303.9	1.8	**0.0915**	0.002	2.6	ug/L	34	Standard
	Ba	135	256720.8	1.1	**43.5203**	0.611	1.4	ug/L	45	Standard
	Ce	140	1196230.2	1.9				ug/L	52	Standard
>	**Tb**	159	1027653.9	1.3				ug/L	861974	Standard
	Ho	165	56824.4	1.4				ug/L	9	Standard
	Tl	203	863.4	4.8	**0.0419**	0.001	3.5	ug/L	5	Standard
	Tl	205	1996.8	2.1	**0.0406**	0.001	2.5	ug/L	15	Standard
	Pb	206	9269.5	1.0	**0.5589**	0.017	3.1	ug/L	297	Standard
	Pb	207	7805.3	0.8	**0.5661**	0.013	2.4	ug/L	266	Standard
	Pb	208	36101.8	1.3	**0.5575**	0.014	2.5	ug/L	1205	Standard
	U	238	11380.3	0.2	**0.3265**	0.008	2.5	ug/L	4	Standard
>	**Bi**	209	497334.1	2.7				ug/L	470254	Standard
	Na	23	9288.2	0.8	**2.5357**	0.047	1.9	mg/L	98	Standard
	Mg	24	784576.9	0.7	**2.6894**	0.081	3.0	mg/L	171	Standard

K	39	26927.2	1.4	**2.3357**	0.026	1.1	mg/L	367	Standard
Ca	43	6543.4	1.3	**8.8924**	0.198	2.2	mg/L	58	Standard
Fe	54	17193.0	2.8	**1.8836**	0.097	5.1	mg/L	955	Standard
Fe	57	495598.1	1.9	**1.9434**	0.083	4.3	mg/L	5344	Standard
Sc-1	45	458545.3	2.5				mg/L	340292	Standard
Cl	35	471167.1	1.7				ug/L	43576	Standard
Kr	83	168.9	10.7				ug/L	78	Standard
Br	81	27761.1	2.8				ug/L	19680	Standard
P	31	256546.5	1.1				ug/L	84050	Standard
S	34	2291148.1	1.5				ug/L	907587	Standard
Sr	88	1774715.8	1.3				ug/L	383	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		105.870	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		261.463	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		111.776	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		119.221	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Pb	207	
Pb	208	
U	238	
Bi	209	105.759
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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Y 89 Int Std for sample	Y	89	Rerun sample

Method 6020 - Summary Report

Sample ID: L1205010803
Sample Date/Time: Monday, May 07, 2012 18:24:17
Number of Replicates: 3
Autosampler Position: 247
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	138743.1	1.0	**6355.8119**	103.910	1.6	ug/L	18451	Standard
	Be	9	2945.6	2.9	**0.5678**	0.011	1.9	ug/L	7	Standard
	Al	27	5513639.1	1.0	**213.2789**	5.928	2.8	ug/L	28447	Standard
>	**Sc**	45	457022.7	1.8				ug/L	340292	Standard
	Ti	47	4934.1	10.1	**2.1719**	0.245	11.3	ug/L	116	Standard
	V	51	14524.7	0.4	**0.4537**	0.009	1.9	ug/L	4654	Standard
	Cr	52	22497.7	0.4	**0.3833**	0.018	4.6	ug/L	14933	Standard
	Cr	53	2039.5	5.5	**0.6841**	0.048	7.0	ug/L	342	Standard
	Mn	55	342666.6	1.3	**12.2733**	0.124	1.0	ug/L	1267	Standard
	Co	59	81454.4	1.9	**3.8700**	0.060	1.6	ug/L	140	Standard
	Ni	60	22709.3	0.4	**5.1053**	0.041	0.8	ug/L	75	Standard
	Cu	65	689.7	6.9	**0.1273**	0.014	10.9	ug/L	239	Standard
	Zn	66	29687.7	2.1	**17.6856**	0.279	1.6	ug/L	226	Standard
>	**Ge**	72	317921.0	0.9				ug/L	288220	Standard
	As	75	51.2	67.4	**0.1746**	0.020	11.3	ug/L	-236	Standard
	Se	82	99.0	7.5	**0.2331**	0.037	16.0	ug/L	48	Standard
	Se-1	77	150.0	6.4	**0.3532**	0.080	22.5	ug/L	96	Standard
	Ga	71	295588.3	1.0				mg/L	267913	Standard
	Rb	85	141383.6	2.8				ug/L	31	Standard
>	**Y**	89	346398.3	1.6				ug/L	301679	Standard
	Rh	103	18.7	30.9				ug/L	1	Standard
	Mo	98	108.2	3.7	**0.0142**	0.001	7.4	ug/L	7	Standard
	Ag	107	84.7	6.5	**-0.0019**	0.001	27.7	ug/L	66	Standard
	Cd	111	1374.5	1.3	**0.1296**	0.009	7.3	mg/L	527	Standard
	Cd	114	3473.7	0.5	**0.1315**	0.007	5.7	ug/L	1273	Standard
>	**In**	115	872120.0	2.9				ug/L	755896	Standard
	Sn	118	770.7	2.4	**0.0228**	0.002	9.3	ug/L	404	Standard
	Sb	123	108.5	8.2	**0.0042**	0.001	14.2	ug/L	34	Standard
	Ba	135	287359.8	0.7	**47.2247**	1.631	3.5	ug/L	45	Standard
	Ce	140	136909.8	1.2				ug/L	52	Standard
>	**Tb**	159	975338.8	2.4				ug/L	861974	Standard
	Ho	165	2850.9	1.1				ug/L	9	Standard
	Tl	203	417.7	8.1	**0.0194**	0.002	8.1	ug/L	5	Standard
	Tl	205	994.0	3.4	**0.0193**	0.001	3.3	ug/L	15	Standard
	Pb	206	3379.0	1.5	**0.1827**	0.002	1.3	ug/L	297	Standard
	Pb	207	2776.3	0.3	**0.1812**	0.001	0.4	ug/L	266	Standard
	Pb	208	13170.9	1.1	**0.1836**	0.002	0.9	ug/L	1205	Standard
	U	238	2495.5	3.1	**0.0716**	0.002	3.0	ug/L	4	Standard
>	**Bi**	209	515031.6	0.3				ug/L	470254	Standard
	Na	23	8784.5	2.5	**2.4036**	0.046	1.9	mg/L	98	Standard
	Mg	24	247792.5	1.6	**0.8512**	0.029	3.4	mg/L	171	Standard

Sample ID: L1205010803
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K	39	9559.0	1.1	**0.8048**	0.023	2.8	mg/L	367	Standard
Ca	43	1006.0	4.7	**1.2921**	0.089	6.9	mg/L	58	Standard
Fe	54	8820.9	1.7	**0.8985**	0.027	3.0	mg/L	955	Standard
Fe	57	239205.7	1.5	**0.9262**	0.032	3.5	mg/L	5344	Standard
Sc-1	45	457022.7	1.8				mg/L	340292	Standard
Cl	35	826747.5	1.0				ug/L	43576	Standard
Kr	83	82.0	5.7				ug/L	78	Standard
Br	81	41730.1	0.6				ug/L	19680	Standard
P	31	107385.5	0.3				ug/L	84050	Standard
S	34	1591581.4	2.7				ug/L	907587	Standard
Sr	88	723671.6	1.7				ug/L	383	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		110.305	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		114.823	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		115.376	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		113.152	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

Sample ID: L1205010803
Report Date/Time: Monday, May 07, 2012 18:26:45
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│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	109.522
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: L1205010804
Sample Date/Time: Monday, May 07, 2012 18:27:04
Number of Replicates: 3
Autosampler Position: 248
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	78009.0	1.7	**3297.4520**	163.724	5.0	ug/L	18451	Standard
	Be	9	235.0	4.1	**0.0426**	0.003	6.4	ug/L	7	Standard
	Al	27	5139626.2	1.8	**212.7539**	4.137	1.9	ug/L	28447	Standard
>	**Sc**	45	427014.9	2.4				ug/L	340292	Standard
	Ti	47	8825.9	9.2	**3.9041**	0.278	7.1	ug/L	116	Standard
	V	51	21726.5	1.7	**0.7969**	0.011	1.4	ug/L	4654	Standard
	Cr	52	24839.3	0.6	**0.5261**	0.024	4.6	ug/L	14933	Standard
	Cr	53	2063.5	1.1	**0.6903**	0.013	1.8	ug/L	342	Standard
	Mn	55	361264.2	0.2	**12.8922**	0.265	2.1	ug/L	1267	Standard
	Co	59	11886.0	0.8	**0.5559**	0.012	2.1	ug/L	140	Standard
	Ni	60	5393.6	0.8	**1.1899**	0.036	3.0	ug/L	75	Standard
	Cu	65	1149.7	3.8	**0.2451**	0.005	2.1	ug/L	239	Standard
	Zn	66	7223.7	2.3	**4.1466**	0.055	1.3	ug/L	226	Standard
>	**Ge**	72	319307.5	2.2				ug/L	288220	Standard
	As	75	674.8	5.5	**0.5236**	0.017	3.2	ug/L	-236	Standard
	Se	82	88.3	6.7	**0.1832**	0.030	16.6	ug/L	48	Standard
	Se-1	77	144.0	2.8	**0.2938**	0.012	3.9	ug/L	96	Standard
	Ga	71	296513.8	2.5				mg/L	267913	Standard
	Rb	85	69278.1	3.0				ug/L	31	Standard
>	**Y**	89	337959.1	1.0				ug/L	301679	Standard
	Rh	103	15.3	19.9				ug/L	1	Standard
	Mo	98	250.4	7.7	**0.0352**	0.003	7.7	ug/L	7	Standard
	Ag	107	160.3	1.3	**0.0029**	0.000	1.8	ug/L	66	Standard
	Cd	111	675.2	3.3	**0.0112**	0.004	38.7	mg/L	527	Standard
	Cd	114	1677.4	2.8	**0.0096**	0.004	36.4	ug/L	1273	Standard
>	**In**	115	879699.4	1.3				ug/L	755896	Standard
	Sn	118	1070.7	4.4	**0.0517**	0.006	11.3	ug/L	404	Standard
	Sb	123	168.4	10.5	**0.0083**	0.001	14.4	ug/L	34	Standard
	Ba	135	133015.4	1.6	**21.6519**	0.073	0.3	ug/L	45	Standard
	Ce	140	62431.8	3.4				ug/L	52	Standard
>	**Tb**	159	987767.3	1.3				ug/L	861974	Standard
	Ho	165	976.7	5.9				ug/L	9	Standard
	Tl	203	413.3	3.9	**0.0189**	0.001	2.7	ug/L	5	Standard
	Tl	205	966.7	3.0	**0.0185**	0.000	1.7	ug/L	15	Standard
	Pb	206	4468.0	1.8	**0.2452**	0.003	1.0	ug/L	297	Standard
	Pb	207	3694.1	2.9	**0.2444**	0.004	1.7	ug/L	266	Standard
	Pb	208	17460.6	1.6	**0.2465**	0.001	0.3	ug/L	1205	Standard
	U	238	1129.0	3.5	**0.0338**	0.001	2.2	ug/L	4	Standard
>	**Bi**	209	521389.7	1.4				ug/L	470254	Standard
	Na	23	3510.4	5.2	**1.0073**	0.058	5.8	mg/L	98	Standard
	Mg	24	174294.5	0.9	**0.6404**	0.015	2.3	mg/L	171	Standard

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K	39	9501.6	0.7	**0.8591**	0.028	3.2	mg/L	367	Standard
Ca	43	1248.1	3.2	**1.7455**	0.052	3.0	mg/L	58	Standard
Fe	54	8166.2	1.7	**0.8888**	0.009	1.0	mg/L	955	Standard
Fe	57	222449.8	0.5	**0.9217**	0.022	2.4	mg/L	5344	Standard
Sc-1	45	427014.9	2.4				mg/L	340292	Standard
Cl	35	483095.7	1.6				ug/L	43576	Standard
Kr	83	88.0	4.0				ug/L	78	Standard
Br	81	40651.1	1.2				ug/L	19680	Standard
P	31	129149.2	1.7				ug/L	84050	Standard
S	34	1330112.3	3.5				ug/L	907587	Standard
Sr	88	500608.4	1.2				ug/L	383	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		110.786	
As	75			
Se	82			
Se-1	77			
Ga	71			
Rb	85			
Y	89		112.026	
Rh	103			
Mo	98			
Ag	107			
Cd	111			
Cd	114			
In	115		116.378	
Sn	118			
Sb	123			
Ba	135			
Ce	140			
Tb	159		114.594	
Ho	165			
Tl	203			
Tl	205			
Pb	206			

│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	110.874
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Monday, May 07, 2012 18:29:53
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	19967.2	1.6	**136.9734**	25.239	18.4	ug/L	18451	Standard
	Be	9	208974.9	1.8	**53.9970**	1.033	1.9	ug/L	7	Standard
	Al	27	1046205.5	0.6	**52.9705**	0.402	0.8	ug/L	28447	Standard
>	**Sc**	45	344839.7	0.2				ug/L	340292	Standard
	Ti	47	200453.1	2.3	**100.0359**	4.275	4.3	ug/L	116	Standard
	V	51	998438.3	1.9	**53.1364**	1.986	3.7	ug/L	4654	Standard
	Cr	52	768237.6	1.2	**53.2134**	1.683	3.2	ug/L	14933	Standard
	Cr	53	111680.9	2.4	**50.1345**	1.959	3.9	ug/L	342	Standard
	Mn	55	1320815.6	1.1	**52.7166**	1.369	2.6	ug/L	1267	Standard
	Co	59	931261.9	0.6	**49.0675**	0.900	1.8	ug/L	140	Standard
	Ni	60	193261.3	1.6	**48.2918**	1.213	2.5	ug/L	75	Standard
	Cu	65	170472.8	1.4	**48.8859**	0.913	1.9	ug/L	239	Standard
	Zn	66	74294.0	0.9	**49.3174**	0.861	1.7	ug/L	226	Standard
>	**Ge**	72	287264.4	2.0				ug/L	288220	Standard
	As	75	77346.1	0.5	**48.3149**	0.899	1.9	ug/L	-236	Standard
	Se	82	9345.1	1.1	**46.2662**	0.847	1.8	ug/L	48	Standard
	Se-1	77	5244.6	2.3	**51.1939**	1.353	2.6	ug/L	96	Standard
	Ga	71	264392.9	2.1				mg/L	267913	Standard
	Rb	85	1462.1	4.0				ug/L	31	Standard
>	**Y**	89	290851.5	2.5				ug/L	301679	Standard
	Rh	103	52.7	15.3				ug/L	1	Standard
	Mo	98	537650.5	1.6	**87.1380**	1.356	1.6	ug/L	7	Standard
	Ag	107	624021.4	2.2	**43.4586**	1.587	3.7	ug/L	66	Standard
	Cd	111	269742.8	0.8	**48.8959**	0.820	1.7	mg/L	527	Standard
	Cd	114	686458.7	1.4	**49.8594**	0.513	1.0	ug/L	1273	Standard
>	**In**	115	805505.3	1.5				ug/L	755896	Standard
	Sn	118	461737.1	1.6	**49.6024**	1.232	2.5	ug/L	404	Standard
	Sb	123	642343.8	1.1	**49.0774**	0.813	1.7	ug/L	34	Standard
	Ba	135	275239.7	1.3	**48.9488**	0.996	2.0	ug/L	45	Standard
	Ce	140	1060.0	5.4				ug/L	52	Standard
>	**Tb**	159	917647.3	0.4				ug/L	861974	Standard
	Ho	165	30.0	35.3				ug/L	9	Standard
	Tl	203	954504.4	0.9	**49.3072**	1.092	2.2	ug/L	5	Standard
	Tl	205	2441786.0	1.2	**52.6844**	1.224	2.3	ug/L	15	Standard
	Pb	206	751405.6	0.9	**49.5336**	1.073	2.2	ug/L	297	Standard
	Pb	207	625101.0	0.8	**49.4256**	0.927	1.9	ug/L	266	Standard
	Pb	208	2927378.4	0.6	**49.2877**	0.921	1.9	ug/L	1205	Standard
	U	238	1569655.8	1.5	**46.9757**	1.309	2.8	ug/L	4	Standard
>	**Bi**	209	471987.9	1.3				ug/L	470254	Standard
	Na	23	14332.8	2.5	**5.2402**	0.140	2.7	mg/L	98	Standard
	Mg	24	1155930.1	1.3	**5.2676**	0.079	1.5	mg/L	171	Standard

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	K	39	44857.0	1.4	**5.2245**	0.081	1.5	mg/L	367	Standard
	Ca	43	2951.6	0.8	**5.2942**	0.044	0.8	mg/L	58	Standard
	Fe	54	33360.7	1.5	**5.0864**	0.081	1.6	mg/L	955	Standard
	Fe	57	995936.3	1.4	**5.2369**	0.079	1.5	mg/L	5344	Standard
>	**Sc-1**	45	344839.7	0.2				mg/L	340292	Standard
	Cl	35	60816.8	1.1				ug/L	43576	Standard
	Kr	83	74.4	12.9				ug/L	78	Standard
	Br	81	19157.5	4.9				ug/L	19680	Standard
	P	31	92092.5	6.7				ug/L	84050	Standard
	S	34	882952.6	4.9				ug/L	907587	Standard
	Sr	88	2396.2	6.1				ug/L	383	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	105.941		
>	Sc	45			
	Ti	47	100.036		
	V	51	106.273		
	Cr	52	106.427		
	Cr	53			
	Mn	55	105.433		
	Co	59	98.135		
	Ni	60	96.584		
	Cu	65	97.772		
	Zn	66	98.635		
>	Ge	72		99.668	
	As	75	96.630		
	Se	82	92.532		
	Se-1	77	102.388		
	Ga	71			
	Rb	85			
>	Y	89		96.411	
	Rh	103			
	Mo	98	87.138		
	Ag	107	86.917		
	Cd	111	97.792		
	Cd	114			
>	In	115		106.563	
	Sn	118	99.205		
	Sb	123	98.155		
	Ba	135	97.898		
	Ce	140			
>	Tb	159		106.459	
	Ho	165			
	Tl	203	98.614		
	Tl	205			
	Pb	206	99.067		

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	Pb	207	98.851	
	Pb	208	98.575	
	U	238	93.951	
>	Bi	209		100.369
	Na	23	104.805	
	Mg	24	105.353	
	K	39	104.489	
	Ca	43	105.885	
	Fe	54	101.727	
	Fe	57	104.737	
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Mo	98	
QC Std 6	Ag	107	

Method 6020 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, May 07, 2012 18:32:41
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	19411.4	1.8	**105.1183**	44.591	42.4	ug/L	18451	Standard
	Be	9	23.3	65.6	**-0.0004**	0.004	1102.6	ug/L	7	Standard
	Al	27	19877.0	3.0	**0.1651**	0.046	27.7	ug/L	28447	Standard
>	**Sc**	45	342815.4	2.2				ug/L	340292	Standard
	Ti	47	116.7	12.4	**0.0052**	0.008	160.2	ug/L	116	Standard
	V	51	4621.7	2.7	**0.0046**	0.004	94.9	ug/L	4654	Standard
	Cr	52	14670.1	1.6	**0.0062**	0.008	126.4	ug/L	14933	Standard
	Cr	53	344.7	7.9	**0.0132**	0.011	83.7	ug/L	342	Standard
	Mn	55	1708.1	6.5	**-0.0353**	0.005	13.5	ug/L	1267	Standard
	Co	59	140.0	17.6	**-0.0000**	0.001	2828.1	ug/L	140	Standard
	Ni	60	104.3	4.8	**0.0032**	0.001	22.1	ug/L	75	Standard
	Cu	65	500.7	4.1	**0.0951**	0.005	5.8	ug/L	239	Standard
	Zn	66	553.7	4.2	**0.1944**	0.021	10.7	ug/L	226	Standard
>	**Ge**	72	281195.6	2.4				ug/L	288220	Standard
	As	75	-269.3	12.7	**-0.0260**	0.026	100.5	ug/L	-236	Standard
	Se	82	37.4	34.1	**-0.0225**	0.062	273.2	ug/L	48	Standard
	Se-1	77	100.3	14.2	**0.0232**	0.126	542.7	ug/L	96	Standard
	Ga	71	264706.3	0.4				mg/L	267913	Standard
	Rb	85	26.0	20.4				ug/L	31	Standard
>	**Y**	89	284355.9	3.7				ug/L	301679	Standard
	Rh	103	2.0	0.0				ug/L	1	Standard
	Mo	98	91.6	66.6	**0.0129**	0.009	73.2	ug/L	7	Standard
	Ag	107	89.0	31.3	**-0.0011**	0.002	166.0	ug/L	66	Standard
	Cd	111	529.8	5.3	**-0.0035**	0.004	114.7	mg/L	527	Standard
	Cd	114	1279.5	5.1	**-0.0077**	0.004	53.8	ug/L	1273	Standard
>	**In**	115	793629.8	3.3				ug/L	755896	Standard
	Sn	118	717.4	2.9	**0.0246**	0.001	2.9	ug/L	404	Standard
	Sb	123	204.2	40.7	**0.0123**	0.006	48.0	ug/L	34	Standard
	Ba	135	55.7	11.4	**0.0016**	0.001	72.5	ug/L	45	Standard
	Ce	140	71.3	13.8				ug/L	52	Standard
>	**Tb**	159	889204.3	1.6				ug/L	861974	Standard
	Ho	165	10.0	34.6				ug/L	9	Standard
	Tl	203	49.7	65.2	**0.0022**	0.002	74.5	ug/L	5	Standard
	Tl	205	105.3	48.6	**0.0019**	0.001	55.6	ug/L	15	Standard
	Pb	206	390.3	6.6	**0.0042**	0.001	30.1	ug/L	297	Standard
	Pb	207	307.0	11.1	**0.0042**	0.002	54.2	ug/L	266	Standard
	Pb	208	1471.4	5.9	**0.0051**	0.001	20.9	ug/L	1205	Standard
	U	238	116.0	62.0	**0.0067**	0.002	32.8	ug/L	4	Standard
>	**Bi**	209	471989.0	1.6				ug/L	470254	Standard
	Na	23	85.3	8.2	**-0.0051**	0.003	55.7	mg/L	98	Standard
	Mg	24	288.3	62.2	**-0.0001**	0.001	1244.1	mg/L	171	Standard

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	K	39	408.0	5.3	**0.0060**	0.003	58.5	mg/L	367	Standard
	Ca	43	56.0	9.4	**0.0079**	0.008	98.0	mg/L	58	Standard
	Fe	54	991.5	2.5	**0.0109**	0.007	68.3	mg/L	955	Standard
	Fe	57	5539.0	2.1	**0.0011**	0.001	106.9	mg/L	5344	Standard
>	**Sc-1**	45	342815.4	2.2				mg/L	340292	Standard
	Cl	35	55737.7	2.9				ug/L	43576	Standard
	Kr	83	73.6	10.9				ug/L	78	Standard
	Br	81	18268.0	3.2				ug/L	19680	Standard
	P	31	91437.9	2.8				ug/L	84050	Standard
	S	34	923556.3	1.6				ug/L	907587	Standard
	Sr	88	322.0	12.0				ug/L	383	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		97.563	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		94.258	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		104.992	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		103.159	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: QC Std 7
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│	Pb	207	
│	Pb	208	
│	U	238	
└>	Bi	209	100.369
┌	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	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Method 6020 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Monday, May 07, 2012 18:35:30
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	20400.4	1.3	**102.6530**	7.672	7.5	ug/L	18451	Standard
	Be	9	7.0	42.9	**-0.0048**	0.001	16.2	ug/L	7	Standard
	Al	27	20805.6	3.3	**0.1588**	0.017	10.6	ug/L	28447	Standard
>	**Sc**	45	360782.3	1.7				ug/L	340292	Standard
	Ti	47	125.3	35.6	**0.0065**	0.021	326.0	ug/L	116	Standard
	V	51	12785.5	1.9	**0.4188**	0.006	1.5	ug/L	4654	Standard
	Cr	52	27450.5	1.8	**0.8386**	0.016	1.9	ug/L	14933	Standard
	Cr	53	2136.8	3.3	**0.7927**	0.023	2.9	ug/L	342	Standard
	Mn	55	15204.3	1.6	**0.4879**	0.004	0.9	ug/L	1267	Standard
	Co	59	7707.0	3.0	**0.3885**	0.009	2.2	ug/L	140	Standard
	Ni	60	6391.3	2.7	**1.5348**	0.029	1.9	ug/L	75	Standard
	Cu	65	3003.3	3.1	**0.7891**	0.018	2.3	ug/L	239	Standard
	Zn	66	9539.3	1.7	**6.0161**	0.045	0.8	ug/L	226	Standard
>	**Ge**	72	294465.7	0.9				ug/L	288220	Standard
	As	75	342.7	17.9	**0.3536**	0.036	10.1	ug/L	-236	Standard
	Se	82	121.6	4.3	**0.3777**	0.027	7.1	ug/L	48	Standard
	Se-1	77	153.7	8.1	**0.4959**	0.109	22.0	ug/L	96	Standard
	Ga	71	275363.8	2.1				mg/L	267913	Standard
	Rb	85	31.3	19.5				ug/L	31	Standard
>	**Y**	89	298969.0	1.1				ug/L	301679	Standard
	Rh	103	1.3	173.2				ug/L	1	Standard
	Mo	98	37.2	21.3	**0.0040**	0.001	33.4	ug/L	7	Standard
	Ag	107	5429.3	0.1	**0.3685**	0.008	2.3	ug/L	66	Standard
	Cd	111	1879.7	4.8	**0.2380**	0.009	3.8	mg/L	527	Standard
	Cd	114	4582.9	2.5	**0.2293**	0.001	0.4	ug/L	1273	Standard
>	**In**	115	810504.1	2.2				ug/L	755896	Standard
	Sn	118	463.0	3.0	**-0.0042**	0.001	21.2	ug/L	404	Standard
	Sb	123	5148.4	1.4	**0.3875**	0.006	1.6	ug/L	34	Standard
	Ba	135	4158.9	3.2	**0.7267**	0.022	3.0	ug/L	45	Standard
	Ce	140	51.3	6.0				ug/L	52	Standard
>	**Tb**	159	907919.8	1.7				ug/L	861974	Standard
	Ho	165	15.3	19.9				ug/L	9	Standard
	Tl	203	1530.4	1.5	**0.0759**	0.002	2.0	ug/L	5	Standard
	Tl	205	3559.8	4.9	**0.0737**	0.002	3.0	ug/L	15	Standard
	Pb	206	3347.0	2.3	**0.1914**	0.005	2.5	ug/L	297	Standard
	Pb	207	2889.6	1.4	**0.2004**	0.005	2.4	ug/L	266	Standard
	Pb	208	13270.3	2.6	**0.1959**	0.005	2.7	ug/L	1205	Standard
	U	238	12724.3	4.0	**0.3703**	0.012	3.1	ug/L	4	Standard
>	**Bi**	209	489455.8	2.3				ug/L	470254	Standard
	Na	23	85.3	3.6	**-0.0067**	0.001	10.1	mg/L	98	Standard
	Mg	24	224.7	3.3	**-0.0004**	0.000	6.7	mg/L	171	Standard

Sample ID: QC Std 8
Report Date/Time: Monday, May 07, 2012 18:37:57
Page 1

K	39	370.0	7.8	**-0.0008**	0.003	330.0	mg/L	367	Standard
Ca	43	52.0	10.2	**-0.0040**	0.010	252.3	mg/L	58	Standard
Fe	54	1079.1	6.6	**0.0163**	0.013	80.6	mg/L	955	Standard
Fe	57	5861.8	1.4	**0.0013**	0.001	70.5	mg/L	5344	Standard
Sc-1	45	360782.3	1.7				mg/L	340292	Standard
Cl	35	53155.4	2.4				ug/L	43576	Standard
Kr	83	74.4	2.7				ug/L	78	Standard
Br	81	20408.1	3.4				ug/L	19680	Standard
P	31	96656.9	5.5				ug/L	84050	Standard
S	34	927569.7	1.9				ug/L	907587	Standard
Sr	88	446.7	38.3				ug/L	383	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	104.697		
Cr	52	104.827		
Cr	53			
Mn	55	97.573		
Co	59	97.118		
Ni	60	95.924		
Cu	65	98.642		
Zn	66	96.258		
Ge	72		102.167	
As	75	88.405		
Se	82	94.414		
Se-1	77	123.965		
Ga	71			
Rb	85			
Y	89		99.102	
Rh	103			
Mo	98			
Ag	107	92.132		
Cd	111	99.172		
Cd	114			
In	115		107.224	
Sn	118			
Sb	123	96.883		
Ba	135	96.898		
Ce	140			
Tb	159		105.330	
Ho	165			
Tl	203	94.829		
Tl	205			
Pb	206			

Sample ID: QC Std 8
Report Date/Time: Monday, May 07, 2012 18:37:57
Page 2

│	Pb	207		
│	Pb	208	97.931	
│	U	238	92.571	
└>	Bi	209		104.083
┌	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		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 8
Report Date/Time: Monday, May 07, 2012 18:37:57
Page 3

2.3.3 Metals CVAA Data (Mercury)

2.3.3.1 Summary Data

Login Number: L12050011
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: WG397020 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

Narrative ID: 45901
Approved By: Sheri Pfalzgraf

Microbac

Lab Report #: L12050011
Lab Project #: 2736.061
Project Name: DOW WATERLOO GW
Lab Contact: Kathy Albertson

Certificate of Analysis

Sample #:	L12050011-01	**PrePrep Method:**	N/A	**Instrument:**	HYDRA
Client ID:	MW-29-043012	**Prep Method:**	7470A	**Prep Date:**	05/02/2012 09:16
Matrix:	Water	**Analytical Method:**	7470A	**Cal Date:**	05/04/2012 13:23
Workgroup #:	WG397020	**Analyst:**	PDM	**Run Date:**	05/04/2012 14:09
Collect Date:	04/30/2012 13:07	**Dilution:**	1	**File ID:**	HY.050412.140934
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 #:	L12050011-02	**PrePrep Method:**	N/A	**Instrument:**	HYDRA
Client ID:	MW-29-043012	**Prep Method:**	7470A	**Prep Date:**	05/02/2012 09:16
Matrix:	Water	**Analytical Method:**	7470A	**Cal Date:**	05/04/2012 13:23
Workgroup #:	WG397020	**Analyst:**	PDM	**Run Date:**	05/04/2012 14:14
Collect Date:	04/30/2012 13:07	**Dilution:**	1	**File ID:**	HY.050412.141457
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 #:	L12050011-03	**PrePrep Method:**	N/A	**Instrument:**	HYDRA
Client ID:	DUP-GW-043012	**Prep Method:**	7470A	**Prep Date:**	05/02/2012 09:16
Matrix:	Water	**Analytical Method:**	7470A	**Cal Date:**	05/04/2012 13:23
Workgroup #:	WG397020	**Analyst:**	PDM	**Run Date:**	05/04/2012 14:16
Collect Date:	04/30/2012 14:00	**Dilution:**	1	**File ID:**	HY.050412.141639
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.

Certificate of Analysis

Sample #:	L12050011-04	**PrePrep Method:**	N/A	**Instrument:**	HYDRA
Client ID:	DUP-GW-043012	**Prep Method:**	7470A	**Prep Date:**	05/02/2012 09:16
Matrix:	Water	**Analytical Method:**	7470A	**Cal Date:**	05/04/2012 13:23
Workgroup #:	WG397020	**Analyst:**	PDM	**Run Date:**	05/04/2012 14:21
Collect Date:	04/30/2012 14:00	**Dilution:**	1	**File ID:**	HY.050412.142131
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 #:	L12050011-05	**PrePrep Method:**	N/A	**Instrument:**	HYDRA
Client ID:	EB-043012-GW	**Prep Method:**	7470A	**Prep Date:**	05/02/2012 09:16
Matrix:	Water	**Analytical Method:**	7470A	**Cal Date:**	05/04/2012 13:23
Workgroup #:	WG397020	**Analyst:**	PDM	**Run Date:**	05/04/2012 14:23
Collect Date:	04/30/2012 14:15	**Dilution:**	1	**File ID:**	HY.050412.142314
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.

2.3.3.2 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:	**Example:**
Cs = Concentration computed by the data system (ug/L)	0.1
Vf = Diluted to Volume (mL)	40
Vi = Aliquot Volume (mL)	40
D = Manual dilution factor, if required (10X = 10)	1
Cx = Concentration of element in ppb (ug/L)	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:	**Example:**
Cs = Concentration computed by the data system (ug/L)	0.1
Vf = Diluted to volume (mL)	40
Ws = Aliquot weight (g)	0.6
D = Manual dilution factor	1
Cx = Concentration of element in ug/kg	6.67

4.0 Adjusting the concentration to dry weight:

$$Cdry = \frac{Cx \times 100}{Px}$$

1 Cx = Concentration calculated as received (wet basis)	6.67
Px = Percent solids of sample (%wt)	80
$Cdry$ = Concentration calculated as dry weight (ug/kg)	8.33

8.33 ug/kg = 0.00833 mg/kg

Microbac Laboratories Inc.
Metals Digest Log

Workgroup: WG396771
Analyst: REK
Spike Analyst: REK
Method: 7470A
Run Date: 05/02/2012 09:16
Hotblock Start Temp: 94.6 @ 09:05
Hotblock End Temp: 95.3 @ 11:05

SOP: ME404 Revison 13
Spike Solution: STD51439
Spike Witness: VC
H2SO4 Lot #: COA16022
HNO3 Lot #: COA16033
Digestion Tubes Lot #: COA16053
K2S2O8 1:1 Lot #: RGT16987
KMnO4 1:1 Lot #: RGT17201
Mercury Water ICV Lot #: STD51441
HG H2O STDS 10PPM Lot #: STD51447

	SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Spike Amount	Due Date
1	WG396771-02	BLANK	1	40 mL	40 mL		
2	WG396758-01	FBLK	17	4 mL	40 mL		
3	WG396771-03	LCS	1	40 mL	40 mL	4 mL	
4	L12040781-02	SAMP	17	4 mL	40 mL		05/04/12
5	L12040898-01	SAMP	1	40 mL	40 mL		05/10/12
6	L12040898-02	SAMP	1	40 mL	40 mL		05/10/12
7	L12040924-03	SAMP	17	4 mL	40 mL		05/04/12
8	L12050011-01	SAMP	1	40 mL	40 mL		05/15/12
9	L12050011-02	SAMP	1	40 mL	40 mL		05/15/12
10	L12050011-03	SAMP	1	40 mL	40 mL		05/15/12
11	L12050011-04	SAMP	1	40 mL	40 mL		05/15/12
12	L12050011-05	SAMP	1	40 mL	40 mL		05/15/12
13	WG396771-01	REF	1	40 mL	40 mL		
14	L12050013-01	SAMP	1	40 mL	40 mL		05/11/12
15	L12050013-02	SAMP	1	40 mL	40 mL		05/11/12
16	L12050022-01	SAMP	17	4 mL	40 mL		05/04/12
17	WG396771-04	MS	1	36 mL	40 mL	4 mL	
18	WG396771-05	MSD	1	36 mL	40 mL	4 mL	

Analyst: [signature]

Reviewer: Brenda Gregory

HB_DIG - Modified 09/30/2009
PDF ID: 2399744
Report generated: 05/02/2012 11:35

Microbac

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HYDRA
Dataset: 050412C.PRN
Analyst1: PDM
Analyst2: N/A
Method: 7470
SOP: ME404
Rev: 13
Maintenance Log ID: 41602

Calibration Std: STD51447
ICV Std: STD51441
Post Spike: STD51447
ICSA: N/A
ICSAB: N/A
Int. Std:
CCV:
LLCCV:

Workgroups: 397020

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	HY.050412.131433	WG397086-01	Calibration Point		1		05/04/12 13:14
2	HY.050412.131618	WG397086-02	Calibration Point		1		05/04/12 13:16
3	HY.050412.131800	WG397086-03	Calibration Point		1		05/04/12 13:18
4	HY.050412.131953	WG397086-04	Calibration Point		1		05/04/12 13:19
5	HY.050412.132135	WG397086-05	Calibration Point		1		05/04/12 13:21
6	HY.050412.132331	WG397086-06	Calibration Point		1		05/04/12 13:23
7	HY.050412.133232	WG397086-07	Initial Calibration Verification		1		05/04/12 13:32
8	HY.050412.133414	WG397086-08	Initial Calib Blank		1		05/04/12 13:34
9	HY.050412.133556	WG397086-09	CCV		1		05/04/12 13:35
10	HY.050412.133739	WG397086-10	CCB		1		05/04/12 13:37
11	HY.050412.134534	WG397086-11	Initial Calibration Verification		1		05/04/12 13:45
12	HY.050412.134729	WG397086-12	Initial Calib Blank		1		05/04/12 13:47
13	HY.050412.134922	WG397086-13	CCV		1		05/04/12 13:49
14	HY.050412.135107	WG397086-14	CCB		1		05/04/12 13:51
15	HY.050412.135253	WG396771-02	Method/Prep Blank	40/40	1		05/04/12 13:52
16	HY.050412.135454	WG396771-03	Laboratory Control S	40/40	1		05/04/12 13:54
17	HY.050412.135647	WG396758-01	Fluid Blank		1		05/04/12 13:56
18	HY.050412.135834	L12040781-02	GT120013	4/40	1		05/04/12 13:58
19	HY.050412.140026	WG397020-01	Post Digestion Spike		1	L12040781-02	05/04/12 14:00
20	HY.050412.140219	L12040898-01	MW-21-042512	40/40	1		05/04/12 14:02
21	HY.050412.140400	WG397020-02	Post Digestion Spike		1	L12040898-01	05/04/12 14:04
22	HY.050412.140554	L12040898-02	MW-21-042512	40/40	1		05/04/12 14:05
23	HY.050412.140739	L12040924-03	1204-01491-002	4/40	1		05/04/12 14:07
24	HY.050412.140934	L12050011-01	MW-29-043012	40/40	1		05/04/12 14:09
25	HY.050412.141120	WG397086-15	CCV		1		05/04/12 14:11
26	HY.050412.141303	WG397086-16	CCB		1		05/04/12 14:13
27	HY.050412.141457	L12050011-02	MW-29-043012	40/40	1		05/04/12 14:14
28	HY.050412.141639	L12050011-03	DUP-GW-043012	40/40	1		05/04/12 14:16
29	HY.050412.142131	L12050011-04	DUP-GW-043012	40/40	1		05/04/12 14:21
30	HY.050412.142314	L12050011-05	EB-043012-GW	40/40	1		05/04/12 14:23
31	HY.050412.142457	WG396771-04	Matrix Spike	36/40	1	L12050013-01	05/04/12 14:24
32	HY.050412.142640	WG396771-05	Matrix Spike Duplica	36/40	1	L12050013-01	05/04/12 14:26
33	HY.050412.142912	WG396771-01	Reference Sample	40/40	1	L12050013-01	05/04/12 14:29
34	HY.050412.143054	L12050013-02	CLAMW24-120429	40/40	1		05/04/12 14:30

Page: 1 Approved: May 04, 2012

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HYDRA
Dataset: 050412C.PRN
Analyst1: PDM
Analyst2: N/A
Method: 7470
SOP: ME404
Rev: 13
Maintenance Log ID: 41602

Calibration Std: STD51447
ICV Std: STD51441
Post Spike: STD51447
ICSA: N/A
ICSAB: N/A
Int. Std:
CCV:
LLCCV:

Workgroups: 397020

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
35	HY.050412.143241	L12050022-01	EXTERIOR TANK \#4/ SPEN	4/40	1		05/04/12 14:32
36	HY.050412.143448	WG397086-17	CCV		1		05/04/12 14:34
37	HY.050412.143641	WG397086-18	CCB		1		05/04/12 14:36

Comments

Seq.	Rerun	Dil.	Reason	Analytes
7			Reanalyzed due to noncompliant results.	
8			reanalyzed with a compliant ICV	
9			reanalyzed with a compliant ICV	
10			reanalyzed with a compliant ICV	

Page: 2 Approved: May 04, 2012

Microbac Laboratories Inc.

Data Checklist

Date: 04-MAY-2012
Analyst: PDM
Analyst: NA
Method: 7470
Instrument: HYDRA
Curve Workgroup: 397086
Runlog ID: 46554
Analytical Workgroups: 397020

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	0898,0011,0013,0924
Client Forms	X
Level X	
Level 3	
Level 4	0898,0011,0013
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	SLP
Comments	

Primary Reviewer:
04-MAY-2012
Pierce Morris

Secondary Reviewer:
04-MAY-2012
Sheri L. Babcock

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-04-2012 16:07:40

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 7470A

AAB#: WG397020

Login Number: L12050011

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
MW-29-043012	01	04/30/12					05/02/12	1.8	28		05/04/12	4	28	
DUP-GW-043012	03	04/30/12					05/02/12	1.8	28		05/04/12	4	28	
EB-043012-GW	05	04/30/12					05/02/12	1.8	28		05/04/12	4	28	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2402867
Report generated 05/04/2012 15:55

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 7470A

AAB#: WG397020

Login Number: L12050011

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
MW-29-043012	02	04/30/12					05/02/12	1.8	28		05/04/12	4	28	
DUP-GW-043012	04	04/30/12					05/02/12	1.8	28		05/04/12	4	28	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2405270
Report generated 05/08/2012 10:03

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12050011
Blank File ID: HY.050412.135253
Prep Date: 05/02/12 09:16
Analyzed Date: 05/04/12 13:52
Analyst: PDM

Work Group: WG397020
Blank Sample ID: WG396771-02
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	WG396771-03	HY.050412.135454	05/04/12 13:54	01
MW-29-043012	L12050011-01	HY.050412.140934	05/04/12 14:09	01
MW-29-043012	L12050011-02	HY.050412.141457	05/04/12 14:14	01
DUP-GW-043012	L12050011-03	HY.050412.141639	05/04/12 14:16	01
DUP-GW-043012	L12050011-04	HY.050412.142131	05/04/12 14:21	01
EB-043012-GW	L12050011-05	HY.050412.142314	05/04/12 14:23	01

Report Name: BLANK_SUMMARY
PDF File ID: 2402868
Report generated 05/04/2012 15:55

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12050011
Blank File ID: HY.050412.135253
Prep Date: 05/02/12 09:16
Analyzed Date: 05/04/12 13:52
Analyst: PDM

Work Group: WG397020
Blank Sample ID: WG396771-02
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	WG396771-03	HY.050412.135454	05/04/12 13:54	01
MW-29-043012	L12050011-01	HY.050412.140934	05/04/12 14:09	01
MW-29-043012	L12050011-02	HY.050412.141457	05/04/12 14:14	01
DUP-GW-043012	L12050011-03	HY.050412.141639	05/04/12 14:16	01
DUP-GW-043012	L12050011-04	HY.050412.142131	05/04/12 14:21	01
EB-043012-GW	L12050011-05	HY.050412.142314	05/04/12 14:23	01

Report Name: BLANK_SUMMARY
PDF File ID: 2405271
Report generated 05/08/2012 10:03

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050011 Prep Date: 05/02/12 09:16 Sample ID: WG396771-02
Instrument ID: HYDRA Run Date: 05/04/12 13:52 Prep Method: 7470A
File ID: HY.050412.135253 Analyst: PDM Method: 7470A
Workgroup (AAB#): WG397020 Matrix: Water Units: mg/L
Contract #: Cal ID: HYDRA-04-MAY-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Mercury	0.000100	0.000200	-0.000135	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: 2402869
04-MAY-2012 15:55

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050011 Prep Date: 05/02/12 09:16 Sample ID: WG396771-02
Instrument ID: HYDRA Run Date: 05/04/12 13:52 Prep Method: 7470A
File ID: HY.050412.135253 Analyst: PDM Method: 7470A
Workgroup (AAB#): WG397020 Matrix: Water Units: mg/L
Contract #: Cal ID: HYDRA-04-MAY-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Mercury, Dissolved	0.000100	0.000200	-0.000135	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: 2405272
08-MAY-2012 10:03

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050011 Run Date: 05/04/2012 Sample ID: WG396771-03
Instrument ID: HYDRA Run Time: 13:54 Prep Method: 7470A
File ID: HY.050412.135454 Analyst: PDM Method: 7470A
Workgroup (AAB#): WG397020 Matrix: Water Units: mg/L
QC Key: WATERLOO Lot#: STD51439 Cal ID: HYDRA-04-MAY-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Mercury	0.00400	0.00408	102	85 - 115	

LCS - Modified 03/06/2008
PDF File ID: 2402870
Report generated: 05/04/2012 15:55

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050011 Run Date: 05/04/2012 Sample ID: WG396771-03
Instrument ID: HYDRA Run Time: 13:54 Prep Method: 7470A
File ID: HY.050412.135454 Analyst: PDM Method: 7470A
Workgroup (AAB#): WG397020 Matrix: Water Units: mg/L
QC Key: WATERLOO Lot#: STD51439 Cal ID: HYDRA-04-MAY-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Mercury, Dissolved	0.00400	0.00408	102	85 - 115	

LCS - Modified 03/06/2008
PDF File ID: 2405273
Report generated: 05/08/2012 10:03

Microbac Laboratories Inc.
MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

Loginnum: L12050011 Cal ID: HYDRA- Worknum: WG397020
Instrument ID: HYDRA Contract #: Method: 7470A
Parent ID: WG396771-01 File ID: HY.050412.142912 Dil: 1 Matrix: WATER
Sample ID: WG396771-04 MS File ID: HY.050412.142457 Dil: 1 Units: mg/L
Sample ID: WG396771-05 MSD File ID: HY.050412.142640 Dil: 1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Mercury	0.00399	0.00444	0.0000167	-89.4	0.00444	0.00473	16.7	199	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: 2405260
Report generated 05/08/2012 10:02

Microbac Laboratories Inc.
MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

Loginnum: L12050011 Cal ID: HYDRA- Worknum: WG397020
Instrument ID: HYDRA Contract #: Method: 7470A
Parent ID: WG396771-01 File ID: HY.050412.142912 Dil: 1 Matrix: WATER
Sample ID: WG396771-04 MS File ID: HY.050412.142457 Dil: 1 Units: mg/L
Sample ID: WG396771-05 MSD File ID: HY.050412.142640 Dil: 1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Mercury, Dissolved	0.00399	0.00444	0.0000167	-89.4	0.00444	0.00473	16.7	199	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: 2405274
Report generated 05/08/2012 10:03

Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L12050011 **Worknum:** WG397020
Instrument ID: HYDRA **Method:** 7470A
Post Spike ID: WG397020-01 **File ID:** HY.050412.140026 **Dil:** 1 **Units:** ug/L
Sample ID: L12040781-02 **File ID:** HY.050412.135834 **Dil:** 1 **Matrix:** Water

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
MERCURY	1.02		0	U	1	102.0	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: 2402866
Report generated: 05/04/2012 15:55

Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L12050011 **Worknum:** WG397020
Instrument ID: HYDRA **Method:** 7470A
Post Spike ID: WG397020-01 **File ID:** HY.050412.140026 **Dil:** 1 **Units:** ug/L
Sample ID: L12040781-02 **File ID:** HY.050412.135834 **Dil:** 1 **Matrix:** Water

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
MERCURY	1.02		0	U	1	102.0	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: 2405269
Report generated: 05/08/2012 10:03

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L12050011
Analytical Method: 7470A
ICAL Worknum: WG397086

Workgroup (AAB#): WG397020
Instrument ID: HYDRA
Initial Calibration Date: 05/04/2012 13:23

Analyte	WG397086-01		WG397086-02		WG397086-03		WG397086-04		WG397086-05		WG397086-06	
	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT
Mercury	0	-269	0.200	618	1.00	3291	2.00	6517	5.00	16392	10.0	30985

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: 2402871
Report generated 05/04/2012 15:55

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L12050011
Analytical Method: 7470A
ICAL Worknum: WG397086

Workgroup (AAB#): WG397020
Instrument ID: HYDRA
Initial Calibration Date: 05/04/2012 13:23

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: 2402871
Report generated 05/04/2012 15:55

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L12050011
Analytical Method: 7470A
ICAL Worknum: WG397086

Workgroup (AAB#): WG397020
Instrument ID: HYDRA
Initial Calibration Date: 05/04/2012 13:23

Analyte	WG397086-01		WG397086-02		WG397086-03		WG397086-04		WG397086-05		WG397086-06	
	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT
Mercury	0	-269	0.200	618	1.00	3291	2.00	6517	5.00	16392	10.0	30985

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: 2405275
Report generated 05/08/2012 10:03

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L12050011
Analytical Method: 7470A
ICAL Worknum: WG397086

Workgroup (AAB#): WG397020
Instrument ID: HYDRA
Initial Calibration Date: 05/04/2012 13:23

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: 2405275
Report generated 05/08/2012 10:03

Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L12050011
Instrument ID: HYDRA
File ID: HY.050412.134729
Workgroup (AAB#): WG397020
Matrix: WATER

Run Date: 05/04/2012
Run Time: 13:47
Analyst: PDM
Cal ID: HYDRA - 04-MAY-12

Sample ID: WG397086-12
Method: 7470A
Units: ug/L

Analytes	MDL	RDL	Concentration	Qualifier
MERCURY	.1	.2	.1	U

ICB - Modified 07/14/2009
PDF File ID: 2402873
Report generated 05/04/2012 15:55

Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L12050011
Instrument ID: HYDRA
File ID: HY.050412.134729
Workgroup (AAB#): WG397020
Matrix: WATER

Run Date: 05/04/2012
Run Time: 13:47
Analyst: PDM
Cal ID: HYDRA - 04-MAY-12

Sample ID: WG397086-12
Method: 7470A
Units: ug/L

Analytes	MDL	RDL	Concentration	Qualifier
MERCURY	.1	.2	.1	U

ICB - Modified 07/14/2009
PDF File ID: 2405277
Report generated 05/08/2012 10:03

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050011
Run Date: 05/04/2012
Sample ID: WG397086-14
Instrument ID: HYDRA
Run Time: 13:51
Method: 7470A
File ID: HY.050412.135107
Analyst: PDM
Units: ug/L
Workgroup (AAB#): WG397020
Cal ID: HYDRA - 04-MAY-12
Matrix: WATER
QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	-0.102	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: 2402875
Report generated 05/04/2012 15:55

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050011
Run Date: 05/04/2012
Sample ID: WG397086-16
Instrument ID: HYDRA
Run Time: 14:13
Method: 7470A
File ID: HY.050412.141303
Analyst: PDM
Units: ug/L
Workgroup (AAB#): WG397020
Cal ID: HYDRA - 04-MAY-12
Matrix: WATER
QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	-0.166	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: 2402875
Report generated 05/04/2012 15:55

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050011
Run Date: 05/04/2012
Sample ID: WG397086-18
Instrument ID: HYDRA
Run Time: 14:36
Method: 7470A
File ID: HY.050412.143641
Analyst: PDM
Units: ug/L
Workgroup (AAB#): WG397020
Cal ID: HYDRA - 04-MAY-12
Matrix: WATER
QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	-0.128	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: 2402875
Report generated 05/04/2012 15:55

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050011
Run Date: 05/04/2012
Sample ID: WG397086-14
Instrument ID: HYDRA
Run Time: 13:51
Method: 7470A
File ID: HY.050412.135107
Analyst: PDM
Units: ug/L
Workgroup (AAB#): WG397020
Cal ID: HYDRA - 04-MAY-12
Matrix: WATER
QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	-0.102	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: 2405279
Report generated 05/08/2012 10:03

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050011 Run Date: 05/04/2012 Sample ID: WG397086-16

Instrument ID: HYDRA Run Time: 14:13 Method: 7470A

File ID: HY.050412.141303 Analyst: PDM Units: ug/L

Workgroup (AAB#): WG397020 Cal ID: HYDRA - 04-MAY-12

Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	-0.166	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: 2405279
Report generated 05/08/2012 10:03

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050011
Run Date: 05/04/2012
Sample ID: WG397086-18
Instrument ID: HYDRA
Run Time: 14:36
Method: 7470A
File ID: HY.050412.143641
Analyst: PDM
Units: ug/L
Workgroup (AAB#): WG397020
Cal ID: HYDRA - 04-MAY-12
Matrix: WATER
QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	-0.128	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: 2405279
Report generated 05/08/2012 10:03

Microbac Laboratories Inc.

INITIAL CALIBRATION VERIFICATION (ICV)
(Alternate Source)

Login Number: L12050011 Run Date: 05/04/2012 Sample ID: WG397086-11
Instrument ID: HYDRA Run Time: 13:45 Method: 7470A
File ID: HY.050412.134534 Analyst: PDM Units: ug/L
Workgroup (AAB#): WG397020 Cal ID: HYDRA - 04-MAY-12
QC Key: WATERLOO

Analyte		Expected	Found	%REC	LIMITS	Q
Mercury		2	2.00	100	90 - 110	

* Exceeds LIMITS Limit

ICV - Modified 03/06/2008
PDF File ID: 2402872
Report generated 05/04/2012 15:55

Microbac Laboratories Inc.

INITIAL CALIBRATION VERIFICATION (ICV)
(Alternate Source)

Login Number: L12050011 Run Date: 05/04/2012 Sample ID: WG397086-11
Instrument ID: HYDRA Run Time: 13:45 Method: 7470A
File ID: HY.050412.134534 Analyst: PDM Units: ug/L
Workgroup (AAB#): WG397020 Cal ID: HYDRA - 04-MAY-12
QC Key: WATERLOO

Analyte		Expected	Found	%REC	LIMITS	Q
Mercury		2	2.00	100	90 - 110	

* Exceeds LIMITS Limit

ICV - Modified 03/06/2008
PDF File ID: 2405276
Report generated 05/08/2012 10:03

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050011
Run Date: 05/04/2012
Sample ID: WG397086-13
Instrument ID: HYDRA
Run Time: 13:49
Method: 7470A
File ID: HY.050412.134922
Analyst: PDM
QC Key: WATERLOO
Workgroup (AAB#): WG397020
Cal ID: HYDRA - 04-MAY-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: 2402874
Report generated 05/04/2012 15:55

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050011
Run Date: 05/04/2012
Sample ID: WG397086-15
Instrument ID: HYDRA
Run Time: 14:11
Method: 7470A
File ID: HY.050412.141120
Analyst: PDM
QC Key: WATERLOO
Workgroup (AAB#): WG397020
Cal ID: HYDRA - 04-MAY-12
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00163	mg/L	81.5	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
PDF File ID: 2402874
Report generated 05/04/2012 15:55

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050011
Run Date: 05/04/2012
Sample ID: WG397086-17
Instrument ID: HYDRA
Run Time: 14:34
Method: 7470A
File ID: HY.050412.143448
Analyst: PDM
QC Key: WATERLOO
Workgroup (AAB#): WG397020
Cal ID: HYDRA - 04-MAY-12
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00180	mg/L	90.0	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
PDF File ID: 2402874
Report generated 05/04/2012 15:55

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050011
Run Date: 05/04/2012
Sample ID: WG397086-13
Instrument ID: HYDRA
Run Time: 13:49
Method: 7470A
File ID: HY.050412.134922
Analyst: PDM
QC Key: WATERLOO
Workgroup (AAB#): WG397020
Cal ID: HYDRA - 04-MAY-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: 2405278
Report generated 05/08/2012 10:03

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050011
Run Date: 05/04/2012
Sample ID: WG397086-15
Instrument ID: HYDRA
Run Time: 14:11
Method: 7470A
File ID: HY.050412.141120
Analyst: PDM
QC Key: WATERLOO
Workgroup (AAB#): WG397020
Cal ID: HYDRA - 04-MAY-12
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00163	mg/L	81.5	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
PDF File ID: 2405278
Report generated 05/08/2012 10:03

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050011
Run Date: 05/04/2012
Sample ID: WG397086-17
Instrument ID: HYDRA
Run Time: 14:34
Method: 7470A
File ID: HY.050412.143448
Analyst: PDM
QC Key: WATERLOO
Workgroup (AAB#): WG397020
Cal ID: HYDRA - 04-MAY-12
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00180	mg/L	90.0	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
PDF File ID: 2405278
Report generated 05/08/2012 10:03

2.3.3.3 Raw Data

Protocol: standard

POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Standard: 1 Rep: 1 Seq: 1 13:14:33 04 May 12 HG

Hg .000 ppb -269

*** Standard: 2 Rep: 1 Seq: 2 13:16:18 04 May 12 HG

Hg .200 ppb 618

*** Standard: 3 Rep: 1 Seq: 3 13:18:00 04 May 12 HG

Hg 1.00 ppb 3291

*** Standard: 4 Rep: 1 Seq: 4 13:19:53 04 May 12 HG

Hg 2.00 ppb 6517

*** Standard: 5 Rep: 1 Seq: 5 13:21:35 04 May 12 HG

Hg 5.00 ppb 16392

*** Standard: 6 Rep: 1 Seq: 6 13:23:31 04 May 12 HG

Hg 10.0 ppb 30985

*** Check Standard: 2 Ck2ICV Seq: 7 13:32:32 04 May 12 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg	H	125.	2.49	2.00	ppb	.000

*** Check Standard: 3 Ck3ICB Seq: 8 13:34:14 04 May 12 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		-7.63	-.015	.200	ppb	.000

*** Check Standard: 4 Ck4CCV Seq: 9 13:35:56 04 May 12 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		103.	2.06	2.00	ppb	.000

*** Check Standard: 5 Ck5CCB Seq: 10 13:37:39 04 May 12 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		-4.27	-.009	.200	ppb	.000

*** Check Standard: 2 Ck2ICV Seq: 11 13:45:34 04 May 12 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		99.8	2.00	2.00	ppb	.000

*** Check Standard: 3 Ck3ICB Seq: 12 13:47:29 04 May 12 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		-14.7	-.029	.200	ppb	.000

Approved: 05/04/2012 16:00

Pierce Morris

Protocol: standard
POST-RUN REPORT

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
--------------------------------------------------------------------------------

*** Check Standard: 4  Ck4CCV       Seq:  13      13:49:22 04 May 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          99.5     1.99    2.00   ppb        .000

*** Check Standard: 5  Ck5CCB       Seq:  14      13:51:07 04 May 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg         -50.8    -.102    .200   ppb        .000

*** Sample ID: WG39677102 050412C    Seq:  15     13:52:53 04 May 12   HG
                           PBW 2C
Hg   -.135    ppb       .000     -.135

================================================================================
*** Sample ID: WG39677103 050412C    Seq:  16     13:54:54 04 May 12   HG
                           LCSW 2C
Hg    4.08    ppb       .000      4.08
                                                                              =
================================================================================
*** Sample ID: WG39675801 050412C    Seq:  17     13:56:47 04 May 12   HG
                           TCLP BLANK
Hg   -.064    ppb       .000     -.064
                                                                              =
================================================================================
*** Sample ID: 1204078102 050412C    Seq:  18     13:58:34 04 May 12   HG

Hg   -.018    ppb       .000     -.018
                                                                              =
================================================================================
*** Sample ID: WG39702001 050412C    Seq:  19     14:00:26 04 May 12   HG
                           1204078102PS.9
Hg    1.02    ppb       .000      1.02
                                                                              =
================================================================================
*** Sample ID: 1204089801 050412C    Seq:  20     14:02:19 04 May 12   HG

Hg    .223    ppb       .000      .223
                                                                              =
================================================================================
*** Sample ID: WG39702002 050412C    Seq:  21     14:04:00 04 May 12   HG
                           1204089801PS.9
Hg    1.21    ppb       .000      1.21
                                                                              =
================================================================================
*** Sample ID: 1204089802 050412C    Seq:  22     14:05:54 04 May 12   HG

Hg    .188    ppb       .000      .188
                                                                              =
================================================================================
```

Approved: 05/04/2012 16:00

Pierce Morris

POST-RUN REPORT

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
--------------------------------------------------------------------------------

*** Sample ID: 1204092403 050412C    Seq:  23     14:07:39 04 May 12   HG

Hg   -.073    ppb       .000     -.073
                                                                              =
================================================================================
*** Sample ID: 1205001101 050412C    Seq:  24     14:09:34 04 May 12   HG

Hg    .025    ppb       .000      .025
                                                                              =
*** Check Standard: 4  Ck4CCV       Seq:  25     14:11:20 04 May 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          81.3     1.63    2.00   ppb        .000
                                                                              =
*** Check Standard: 5  Ck5CCB       Seq:  26     14:13:03 04 May 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg         -82.9    -.166    .200   ppb        .000
                                                                              =
*** Sample ID: 1205001102 050412C    Seq:  27     14:14:57 04 May 12   HG

Hg   -.074    ppb       .000     -.074
                                                                              =
================================================================================
*** Sample ID: 1205001103            Seq:  28     14:16:39 04 May 12   HG

Hg   -.021    ppb       .000     -.021
                                                                              =
================================================================================
*** Sample ID: 1205001104            Seq:  29     14:21:31 04 May 12   HG

Hg   -.182    ppb       .000     -.182
                                                                              =
================================================================================
*** Sample ID: 1205001105            Seq:  30     14:23:14 04 May 12   HG
                           WG39677101
Hg    .015    ppb       .000      .015
                                                                              =
================================================================================
*** Sample ID: WG39677104            Seq:  31     14:24:57 04 May 12   HG
                           1205001105S
Hg    .015    ppb       .000      .015
                                                                              =
================================================================================
*** Sample ID: WG39677105            Seq:  32     14:26:40 04 May 12   HG
                           1205001105SD
Hg    4.26    ppb       .000      4.26
                                                                              =
================================================================================
```

Approved: 05/04/2012 16:00

Pierce Morris

Protocol: standard

POST-RUN REPORT

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
--------------------------------------------------------------------------------

*** Sample ID: 1205001301            Seq:  33     14:29:12 04 May 12   HG

Hg    3.99    ppb       .000      3.99
                                                                                =
================================================================================
*** Sample ID: 1205001302            Seq:  34     14:30:54 04 May 12   HG

Hg    .036    ppb       .000      .036
                                                                                =
================================================================================
*** Sample ID: 1205002201            Seq:  35     14:32:41 04 May 12   HG

Hg   -.143    ppb       .000     -.143
                                                                                =
*** Check Standard: 4  Ck4CCV        Seq:  36     14:34:48 04 May 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          90.2     1.80    2.00   ppb        .000
                                                                                =
*** Check Standard: 5  Ck5CCB        Seq:  37     14:36:41 04 May 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg         -64.2    -.128    .200   ppb        .000
                                                                                =
```

Approved: 05/04/2012 16:00

Pierce Morris

2.4 General Chemistry Data

2.4.1 Alkalinity Data

2.4.1.1 Summary Data

Login Number: L12050011
Department: Conventionals
Analyst: Deanna Hesson

METHOD

Analysis EPA 310.2 (Alkalinity)

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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: 46368
Approved By: Deanna Hesson

Microbac

Lab Report #: L12050011
Lab Project #: 2736.061
Project Name: DOW WATERLOO GW
Lab Contact: Kathy Albertson

Certificate of Analysis

Sample #:	L12050011-01	**PrePrep Method:**	N/A	**Instrument:**	SMARTCHEM
Client ID:	MW-29-043012	**Prep Method:**	310.2	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	310.2	**Cal Date:**	05/04/2012 15:58
Workgroup #:	WG397067	**Analyst:**	DIH	**Run Date:**	05/04/2012 16:07
Collect Date:	04/30/2012 13:07	**Dilution:**	2	**File ID:**	SC120504006.023
Sample Tag:	DL01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Alkalinity, Total (as CaCO3)		359		40.0	20.0

Sample #:	L12050011-03	**PrePrep Method:**	N/A	**Instrument:**	SMARTCHEM
Client ID:	DUP-GW-043012	**Prep Method:**	310.2	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	310.2	**Cal Date:**	05/04/2012 15:58
Workgroup #:	WG397067	**Analyst:**	DIH	**Run Date:**	05/04/2012 16:08
Collect Date:	04/30/2012 14:00	**Dilution:**	2	**File ID:**	SC120504006.024
Sample Tag:	DL01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Alkalinity, Total (as CaCO3)		361		40.0	20.0

2.4.1.2 QC Summary Data

Example Calculations for Visible Spectrophotometric Methods

Linear Calibration Model

Step 1 - Retrieve Curve Data from ICAL

m = slope of the linear equation
b = intercept from the linear equation
y = instrument response as absorbance or OD
x = concentration of analyte (mg/L)
y = mx + b

Step 2: Calculate the instrument concentration, x

Where:

x = (y - b)/m

Step 3: Solve for analyte concentration in sample, Cx

Cx = (x) (D)

Example Calculation (LCS):

Value of m from plot:	7.809	
Value of b from plot:	0.0004135	
Absorbance of unknown from quantitation report (y):	0.31	
Calculated concentration (x):	0.03964483	
Dilution factor (D):	1.00	
Concentration of analyte in sample, Cy:	0.0396	mg/L

SmartChem Autoanalyzer - Quadratic Calibration for Chloride and Sulfate

Step 1 - Retrieve Curve Data from Smartchem ICAL

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

x = instrument response as absorbance or OD

y = concentration of analyte (mg/L)

Step 2: Calculate the instrument concentration, y

Where:

y = Ax^2 + Bx + C

Step 3: Solve for analyte concentration in sample, Cy

Cy = (y) (D)

Example Calculation (LCS):

Value of A from plot:	101.2796	
Value of B from plot:	318.9056	
Value of C from plot:	-2.2712	
Absorbance of unknown from quantitation report (x):	0.1583	
Calculated concentration (y):	50.7495108	
Dilution factor (D):	1.00	
Concentration of analyte in sample, Cy:	50.75	mg/L

Microbac Laboratories Inc.

Data Checklist

Date: 04-MAY-2012
Analyst: DIH
Analyst: NA
Method: ALK
Instrument: SC
Curve Workgroup: NA
Runlog ID:
Analytical Workgroups: WG397057 WG397067 WG397079 WG397052

Calibration/Linearity	5/4/2012
Second Source Check	X
ICV/CCV (std)	X
ICB/CCB	X
Blank	X
LCS/LCS Dup	X
MS/MSD	X
Duplicate	X
Upload Results	X
Client Forms	X
QC Violation Sheet	X
Case Narratives	X
Signed Raw Data	X
STD/LCS on benchsheet	X
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	DIH
Secondary Reviewer	DIH
Comments	

Primary Reviewer:
05-MAY-2012

Secondary Reviewer:
05-MAY-2012

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-05-2012 11:49:21

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 310.2 AAB#: WG397067

Login Number: L12050011

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
MW-29-043012	01	04/30/12							14		05/04/12	4.1	14	
DUP-GW-043012	03	04/30/12							14		05/04/12	4.1	14	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2403297
Report generated 05/05/2012 10:12

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12050011
Blank File ID: SC120504006.010
Prep Date: 05/04/12 15:59
Analyzed Date: 05/04/12 15:59
Analyst: DIH

Work Group: WG397067
Blank Sample ID: WG397067-01
Instrument ID: SMARTCHEM
Method: 310.2

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG397067-02	SC120504006.011	05/04/12 16:00	01
LCS2	WG397067-03	SC120504006.012	05/04/12 16:01	01
MW-29-043012	L12050011-01	SC120504006.023	05/04/12 16:07	DL01
DUP-GW-043012	L12050011-03	SC120504006.024	05/04/12 16:08	DL01
DUP	WG397067-05	SC120504006.037	05/04/12 16:15	01

Report Name: BLANK_SUMMARY
PDF File ID: 2403298
Report generated 05/05/2012 10:12

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050011 Prep Date: 05/04/12 15:59 Sample ID: WG397067-01
Instrument ID: SMARTCHEM Run Date: 05/04/12 15:59 Prep Method: 310.2
File ID: SC120504006.010 Analyst: DIH Method: 310.2
Workgroup (AAB#): WG397067 Matrix: Water Units: mg/L
Contract #: Cal ID: SMARTC-04-MAY-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Alkalinity, Total (as CaCO3)	10.0	20.0	10.0	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: 2403299
05-MAY-2012 10:12

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050011 Analyst: DIH Prep Method: 310.2
Instrument ID: SMARTCHEM Matrix: Water Method: 310.2
Workgroup (AAB#): WG397067 Units: mg/L
QC Key: WATERLOO Lot #: STD51238

Sample ID: WG397067-02 LCS File ID: SC120504006.011 Run Date: 05/04/2012 16:00
Sample ID: WG397067-03 LCS2 File ID: SC120504006.012 Run Date: 05/04/2012 16:01

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Alkalinity, Total (as CaCO3)	200	209	104	200	216	108	3.47	85 - 115	25	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 2403300
Report generated: 05/05/2012 10:12

2.4.1.3 Raw Data

WORKGROUP: WG397052 A

B 397057
C 397067
D 397079

SMARTCHEM RUN LOG

Daily Check

- [x] Lamp On
- [x] Probe Rinse Full
- [x] DI Water > ½ Full
- [x] Wash Solution > ½ Full
- [ ] NO3 Reagent bottle connected / purged
- [ ] NO3 pH adj to pH 5-9
- [x] WBL Run
- [x] Reagents Full
- [x] Dilution H_2O Full
- [x] Waste Container Check

Syringe filter lot # _____

1) **Workgroup** A
Plan # 20120504003
2) **Workgroup** B
Plan # 20120504004
3) **Workgroup** C
Plan # 20120504006
D 20120504007

Analyte		1	2	3
		ALK		
Run1		Dilution		
SC Prepared Curve				
Position				
1-1	ICV 250			
1-2	BLK			
1-3	LCS 200			
1-4	LCSDUP			
1-5	04-932-02	1/5		color
1-6	03	1/5		
1-7	05	1/5		
1-8	06	1/5		
1-9	08	1/5		
1-10	09	1/5		
1-11	04-913-01			
1-12	05-018-02	1/5		color
1-13	03	1/5		
1-14	05	1/5		
1-15	06	1/5		
1-16	07	1/100		
1-17	04-898-01	1/100		color
1-18	03	1/4		
1-19	05	1/5		
1-20	08	1/4		
1-21	10	~~1/4~~	1/50	color
1-22	12	1/4		
2-1	04-928-01	1/5		
2-2	MS 08	1/5		
2-3	MSD 10	1/5		

NOTES:
* Run NO2 std on NO3 runs
* LCS/LCS Dup all parameters
*MS(10% sample): NO3, TKN, NH3

2-4 04928-03 1/2
2-5 DUP 928-01 1/5

Position	Analyte	1	2	3
	Run 2			
2-4 1	ICV			
2-5 2	BLK			
2-6 3	LCS 200			
2-7 4	LCSDUP			
2-8 5	04-963-01	1/2		
2-9 6	03			
2-10 7	05	1/100		color
2-11 8	07	1/2		
2-12 9	05-010-01			
2-13 10	DUP 01			
2-14 11	MS 02			
2-15 12	MSD 03			
2-16 13	04			
2-17 14	MS 05			
2-18 15	MSD 06			
2-19 16	07			
2-20 17	MS 08			
2-21 18	MSD 09			
2-22 19	10			
2-23 20	11			
2-24 21	12			
2-25 22	13			
2-26 1	14			
3-1 2	15			
3-2 3	05-052-01	~~1/2~~	~~1/3~~	
4	02			
5	03			
6	04			
7	05			
8	06	1/3		
9	07			
10				
11				

DCN#90758

Pg 1

WORKGROUP: WG397052

SMARTCHEM RUN LOG

Position	Analyte	1	2	3
	Run3			
3-3 1	ICV250			
3-4 2	BLK			
3-5 3	LCS200			
3-6 4	LCSDUP			
3-7 5	05-052-08			
3-8 6	09	~~dm 1/2~~	—	
3-9 7	10			
3-10 8	11			
3-11 9	14	1/3		
3-12 10	15			
3-13 11	16			
3-14 12	17	1/3		
3-15 13	05-011-01	~~dm 1/4~~	1/2	

Position	Analyte	1	2	3
3-16/14	05-011-03	~~dm 1/4~~	1/2	
3-17/15	05-089-01	1/4		
3-18/16	02			
3-19/17	03	1/50		color
3-20/18	04	~~dm 1/4~~	—	
3-21/19	06	1/3		color
3-22/20	07	1/3		
3-23/21	08			
3-24/22	11			
3-25 1	12	~~1/2 dm~~	1/10	color
3-26 2	13			
3-27 3	DUP 13			
3-28 4				

- [ ] Chloride — EPA 325.2/SM 4500-Cl⁻E
- [ ] Sulfate — EPA 375.4/SM 426C(15th)
- [x] Alkalinity — EPA 310.2
- [ ] Nitrate-Nitrite — EPA 353.2/SM 4500-NO3 F
- [ ] Ammonia — EPA 350.1/SM 4500-NH3 B
- [ ] TKN — EPA 351.2
- [ ] Phos — EPA 365.4

Analyte	ALK		Reagents
SOP & Revision	12 3102 R14		RGt17318
Curve Stock (SC made)	std 50178		
Curve ID (user made)	~~std 50179 dm~~ 5/4/12		
ICV	std 51237		
CCV	std 51236		
LCS	std 51238		
MS	std 50179 Dilution 0.4/5(2500)=100		

Comments: _____

Analyst: Deanna Hasson Date: 5/4/12

DCN#90758

pg 2

WORKGROUP: WG397052

SMARTCHEM RUN LOG

Daily Check

- [ ] Lamp On
- [ ] Probe Rinse Full
- [ ] DI Water > ½ Full
- [ ] Wash Solution > ½ Full
- [ ] NO3 Reagent bottle connected / purged
- [ ] NO3 pH adj to pH 5-9
- [ ] WBL Run
- [ ] Reagents Full
- [ ] Dilution H_2O Full
- [ ] Waste Container Check

Syringe filter lot # _____

1) **Workgroup** _____
   Plan # _____
2) **Workgroup** _____
   Plan # _____
3) **Workgroup** _____
   Plan # _____

Analyte		1	2	3
Run 4		Dilution		
SC Prepared Curve				
Position				
1-1	ICV 250			
1-2	BLK			
1-3	LCS 200			
1-4	LCS DUP			
1-5	04-963-03	1/2		
1-6	05-052-03	1/2		
1-7	05-089-14	1/50		color
1-8	05-050-01			
1-9	03			
1-10	05	1/5		
1-11	07			
1-12	05-099-01	1/2		
1-13	03	~~1/2~~ 5M		
1-14	05			
1-15	07	1/2		
1-16	09			
1-17	DUP 0905			
1-18	05-152-02	1/5		color
1-19	03	1/5		
1-20	05	1/5		
1-21	06	1/5		
1-22	08	1/25	Flow/Filter	
2-1	09	1/5		
2-2 R	BLK			
2-3				

Analyte		1	2	3
Position				
2-4				
2-5				
2-6				
2-7				
2-8				
2-9				
2-10				
2-11				
2-12				
2-13				
2-14				
2-15				
2-16				
2-17				
2-18				
2-19				
2-20				
2-21				
2-22				
2-23				
2-24				
2-25				
2-26				
3-1				
3-2				

NOTES:
* Run NO2 std on NO3 runs
* LCS/LCS Dup all parameters
*MS(10% sample): NO3, TKN, NH3

DCN#90758

pg 3

MICROBAC (OVD)

SMARTCHEM REPORT (VER3.0.53)

NH3, TKN, NO3NO2 (MG/L N)

ALK (MG/L CaCO3) CL, SO4 (MG/L)

Method : WALK - ALKALINITY EPA 310.2

Smp#/[Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag	Analysis Time
DIL-1	RBL	0.0	0.7342	0.00		1:04:21 PM
DIL-1	RBL	0.0	0.7426	0.00		1:04:39 PM
DIL-1	RBL	0.0	0.7382	0.00		1:05:33 PM
DIL-1	Std-1	0.0	-0.0016	0.00		1:05:52 PM
SR5-1	Std-2	10.0	-0.0118	0.00		1:06:46 PM
SR5-2	Std-3	20.0	-0.0229	0.00		1:07:04 PM
SR5-3	Std-4	50.0	-0.0666	0.00		1:07:58 PM
SR5-4	Std-5	100.0	-0.1386	0.00		1:08:16 PM
SR5-5	Std-6	200.0	-0.3196	0.00		1:09:10 PM
SR5-6	Std-7	250.0	-0.3898	0.00		1:09:28 PM
SR5-7	Std-8	300.0	-0.4694	0.00		1:10:22 PM
1	ICV 250	250.0	-0.3898	0.00		1:10:40 PM
2	WG397052-01 BLK	-8.8	0.0183	0.00	INV,><,LL	1:11:34 PM
3	WG397052-02 LCS	200.1	-0.3077	0.00		1:11:52 PM
4	WG397052-03 LCSDUP	203.9	-0.3138	0.00		1:12:46 PM
5	L12040932-02 (5)	249.2	-0.3886	0.00		1:13:04 PM
6	L12040932-03 (5)	157.5	-0.2388	0.00		1:13:58 PM
7	L12040932-05 (5)	199.3	-0.3063	0.00		1:14:16 PM
8	L12040932-06 (5)	175.2	-0.2673	0.00		1:15:10 PM
9	L12040932-08 (5)	206.1	-0.3175	0.00		1:15:28 PM
10	L12040932-09 (5)	151.0	-0.2285	0.00		1:16:22 PM
ST-2	CCV (150 mg/L)	154.5	-0.2341	103.01		1:16:40 PM
ST-3	CCB (0 mg/L)	4.4	-0.0015	0.00		1:17:34 PM
11	L12040913-01	356.6	-0.5722	0.00	><,LH	1:17:52 PM
12	L12050018-02 (5)	255.8	-0.3995	0.00		1:18:46 PM
13	L12050018-03 (5)	172.7	-0.2632	0.00		1:19:04 PM
14	L12050018-05 (5)	183.6	-0.2808	0.00		1:19:58 PM
15	L12050018-06 (5)	148.7	-0.2248	0.00		1:20:16 PM
16	L12050018-07 (100)	111.6	-0.1661	0.00		1:21:10 PM
17	L12040898-01 (100)	161.0	-0.2444	0.00		1:21:28 PM
18	L12040898-03 (4)	89.2	-0.1312	0.00		1:22:22 PM
19	L12040898-05 (5)	196.0	-0.3010	0.00		1:22:40 PM

Report Date :05/04/2012 **Run Date :5/4/2012** **Operator : WESTCO** **Plan # :20120504003**

Plan Description : ALK-A-DIH/5/4/2012

MICROBAC (OVD)

SMARTCHEM REPORT (VER3.0.53)

NH3, TKN, NO3NO2 (MG/L N)

ALK (MG/L CaCO3) CL, SO4 (MG/L)

Method : WALK - ALKALINITY EPA 310.2

Smp#/[Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag	Analysis Time
20	L12040898-08 (4)	170.1	-0.2591	0.00		1:23:34 PM
ST-2	CCV (150 mg/L)	162.5	-0.2468	108.30		1:23:52 PM
ST-3	CCB (0 mg/L)	6.6	-0.0048	0.00		1:24:46 PM
21	L12040898-10 ~~(4)~~ (50)	76.4	-0.1113	0.00		1:25:04 PM
22	L12040898-12 (4)	176.1	-0.2688	0.00		1:25:58 PM
23	L12040928-01 (5)	145.3	-0.2194	0.00		1:26:16 PM
24	L12040928-08 (5) MS	158.7	-0.2408	0.00		1:27:10 PM
25	L12040928-10 (5)	154.9	-0.2347	0.00		1:27:28 PM
26	L12040928-03 (2)	202.3	-0.3113	0.00		1:28:22 PM
27	WG397052-05 (5) DUP	139.3	-0.2099	0.00		1:28:40 PM
28	ID 28	11.9	-0.0128	0.00		1:29:34 PM
29	ID 29	6.5	-0.0047	0.00		1:29:52 PM
ST-2	CCV (150 mg/L)	163.7	-0.2488	109.13		1:30:46 PM
ST-3	CCB (0 mg/L)	13.1	-0.0146	0.00		1:31:05 PM
11-[1/2]	L12040913-01	481.6	-0.3746	0.00	LH	1:38:45 PM
ST-2	CCV (150 mg/L)	165.8	-0.2521	110.50		1:38:45 PM
ST-3	CCB (0 mg/L)	16.9	-0.0204	0.00		1:39:39 PM

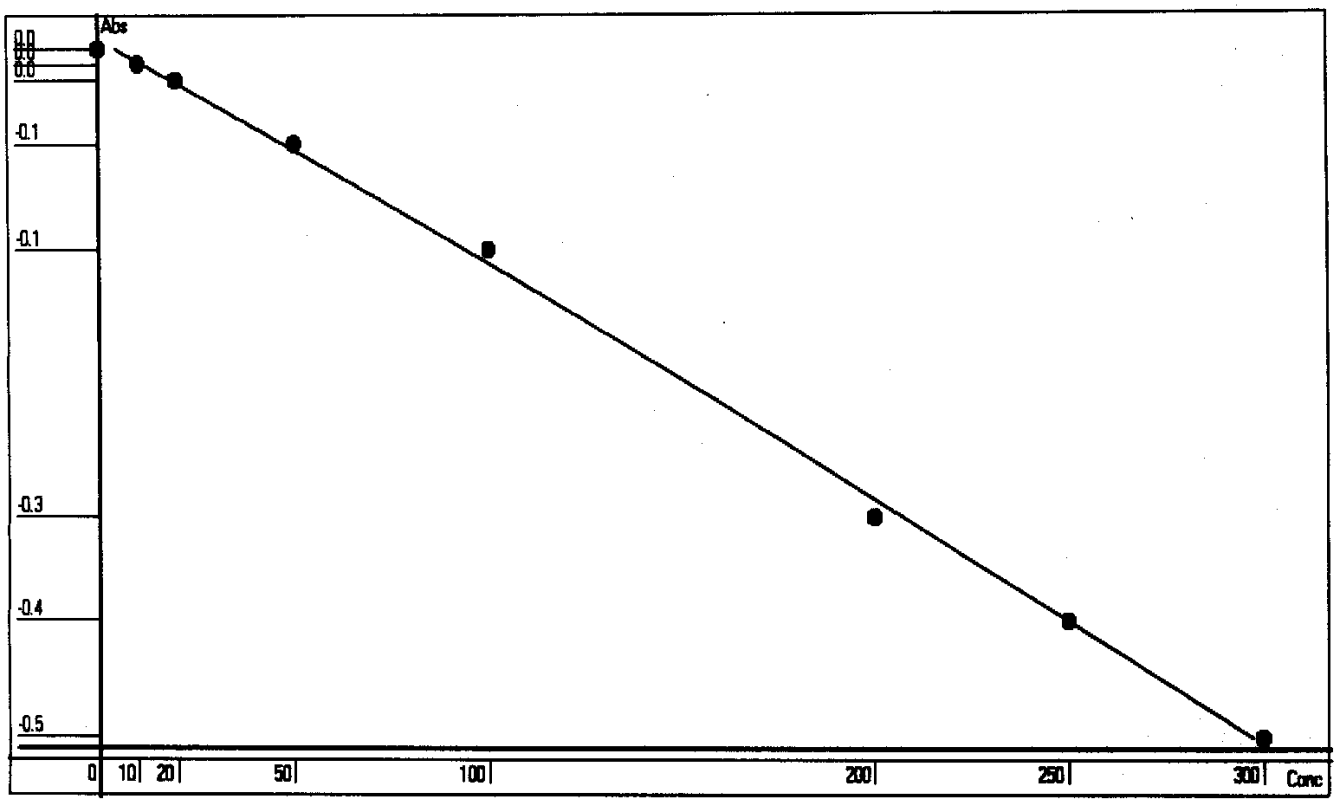
Report Date :05/04/2012 **Run Date :5/4/2012** **Operator : WESTCO** **Plan # :20120504003**

Plan Description : ALK-A-DIH/5/4/2012

Calibrant Report - WALK -

Calib Lot #:010104 Exp Date:6/21/2020 User:MICROBAC

Plan # : 20120504003 Description : [ALK-A-DIH/5/4/2012]



Point	OD	Conc	Recalc Conc	% Error
1	-0.0016	0	4.4266	442.66
2	-0.0118	10	11.2015	12.02
3	-0.0229	20	18.5543	-7.23
4	-0.0666	50	47.3008	-5.40
5	-0.1386	100	93.9642	-6.04
6	-0.3196	200	207.4272	3.71
7	-0.3898	250	249.9531	-0.02
8	-0.4694	300	297.1725	-0.94

Conc= -83.9371*Abso^2 -665.3272*Abso +3.3623 R^2=0.9987

RBL
0.7362
0

Report Date 5/4/2012 Run Date 5/4/2012

MICROBAC (OVD)

SMARTCHEM REPORT (VER3.0.53)

NH3, TKN, NO3NO2 (MG/L N)

ALK (MG/L CaCO3) CL, SO4 (MG/L)

Method : WALK - ALKALINITY EPA 310.2

Smp#/[Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag	Analysis Time
DIL-1	RBL	0.0	0.6646	0.00		1:55:47 PM
DIL-1	RBL	0.0	0.6664	0.00		1:56:05 PM
DIL-1	RBL	0.0	0.6628	0.00		1:56:59 PM
DIL-1	Std-1	0.0	-0.0021	0.00		1:57:17 PM
SR5-1	Std-2	10.0	-0.0123	0.00		1:58:11 PM
SR5-2	Std-3	20.0	-0.0187	0.00		1:58:29 PM
SR5-3	Std-4	50.0	-0.0638	0.00		1:59:23 PM
SR5-4	Std-5	100.0	-0.1313	0.00		1:59:41 PM
SR5-5	Std-6	200.0	-0.2859	0.00		2:00:36 PM
SR5-6	Std-7	250.0	-0.3598	0.00		2:00:53 PM
SR5-7	Std-8	300.0	-0.4329	0.00		2:01:48 PM
1	ICV ~~150~~ 250 amn5/5/12	257.3	-0.3689	0.00		2:02:05 PM
2	WG397057-01 BLK	-11.8	0.0193	0.00	INV,><,LL	2:03:00 PM
3	WG397057-02 LCS	200.1	-0.2816	0.00		2:03:18 PM
4	WG397057-03 LCSDUP	203.5	-0.2868	0.00		2:04:12 PM
5	L12040963-01 (2)	197.8	-0.2782	0.00		2:04:30 PM
6	L12040963-03	323.3X	-0.4734	0.00	><,LH	2:05:24 PM
7	L12040963-05 (100)	28.7	-0.0359	0.00		2:05:42 PM
8	L12040963-07 (2)	197.7	-0.2780	0.00		2:06:36 PM
9	L12050010-01	17.7	-0.0208	0.00		2:06:54 PM
10	WG397057-05 DUP	16.2	-0.0187	0.00		2:07:48 PM
ST-2	CCV (150 mg/L)	151.1	-0.2091	100.72		2:08:06 PM
ST-3	CCB (0 mg/L)	-2.2	0.0063	0.00	INV,><,LL	2:09:00 PM
11	L12050010-02 MS	102.5	-0.1390	0.00		2:09:18 PM
12	L12050010-03 MSD	104.4	-0.1418	0.00		2:10:12 PM
13	L12050010-04	79.4	-0.1063	0.00		2:10:30 PM
14	L12050010-05 MS	160.7	-0.2232	0.00		2:11:24 PM
15	L12050010-06 MSD	160.8	-0.2233	0.00		2:11:42 PM
16	L12050010-07	176.2	-0.2461	0.00		2:12:36 PM
17	L12050010-08 MS	251.4	-0.3597	0.00		2:12:54 PM
18	L12050010-09 MSD	249.0	-0.3560	0.00		2:13:48 PM
19	L12050010-10	187.8	-0.2633	0.00		2:14:06 PM

Report Date :05/04/2012 **Run Date :5/4/2012** **Operator : WESTCO** **Plan # :20120504004**

Plan Description : ALK-B-DIH/5/4/2012

MICROBAC (OVD)

SMARTCHEM REPORT (VER3.0.53)

NH3, TKN, NO3NO2 (MG/L N)

ALK (MG/L CaCO3) CL, SO4 (MG/L)

Method : WALK - ALKALINITY EPA 310.2

Smp#/[Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag	Analysis Time
20	L12050010-11	136.1	-0.1873	0.00		2:15:00 PM
ST-2	CCV (150 mg/L)	156.5	-0.2171	104.36		2:15:18 PM
ST-3	CCB (0 mg/L)	12.9	-0.0142	0.00		2:16:12 PM
21	L12050010-12	64.5	-0.0855	0.00		2:16:30 PM
22	L12050010-13	114.9	-0.1567	0.00		2:17:24 PM
23	L12050010-14	117.9	-0.1611	0.00		2:17:42 PM
24	L12050010-15	157.6	-0.2186	0.00		2:18:36 PM
25	L12050052-01 (5)	101.6	-0.1378	0.00		2:18:54 PM
26	L12050052-02	64.5	-0.0854	0.00		2:19:48 PM
27	L12050052-03	352.6 X	-0.5213	0.00	>,LH	2:20:06 PM
28	L12050052-04	140.6	-0.1938	0.00		2:21:00 PM
29	L12050052-05	131.6	-0.1808	0.00		2:21:18 PM
30	L12050052-06 (3)	148.9	-0.2059	0.00		2:22:12 PM
ST-2	CCV (150 mg/L)	163.0	-0.2265	108.63		2:22:30 PM
ST-3	CCB (0 mg/L)	10.3	-0.0107	0.00		2:23:24 PM
31	L12050052-07	36.6	-0.0467	0.00		2:23:42 PM
32	ID 32	21.1 X	-0.0254	0.00		2:24:37 PM
33	ID 33	24.2 X	-0.0297	0.00		2:24:54 PM
ST-2	CCV (150 mg/L)	164.2	-0.2283	109.45		2:25:48 PM
ST-3	CCB (0 mg/L)	16.2	-0.0188	0.00		2:26:07 PM
6-[1/2]	L12040963-03	395.6 X	-0.2782	0.00	LH	2:33:47 PM
27-[1/2]	L12050052-03	495.5 X	-0.3541	0.00	LH	2:34:59 PM
ST-2	CCV (150 mg/L)	176.3 X	-0.2462	117.54		2:34:59 PM
ST-3	CCB (0 mg/L)	30.4 X	-0.0382	0.00		2:35:53 PM

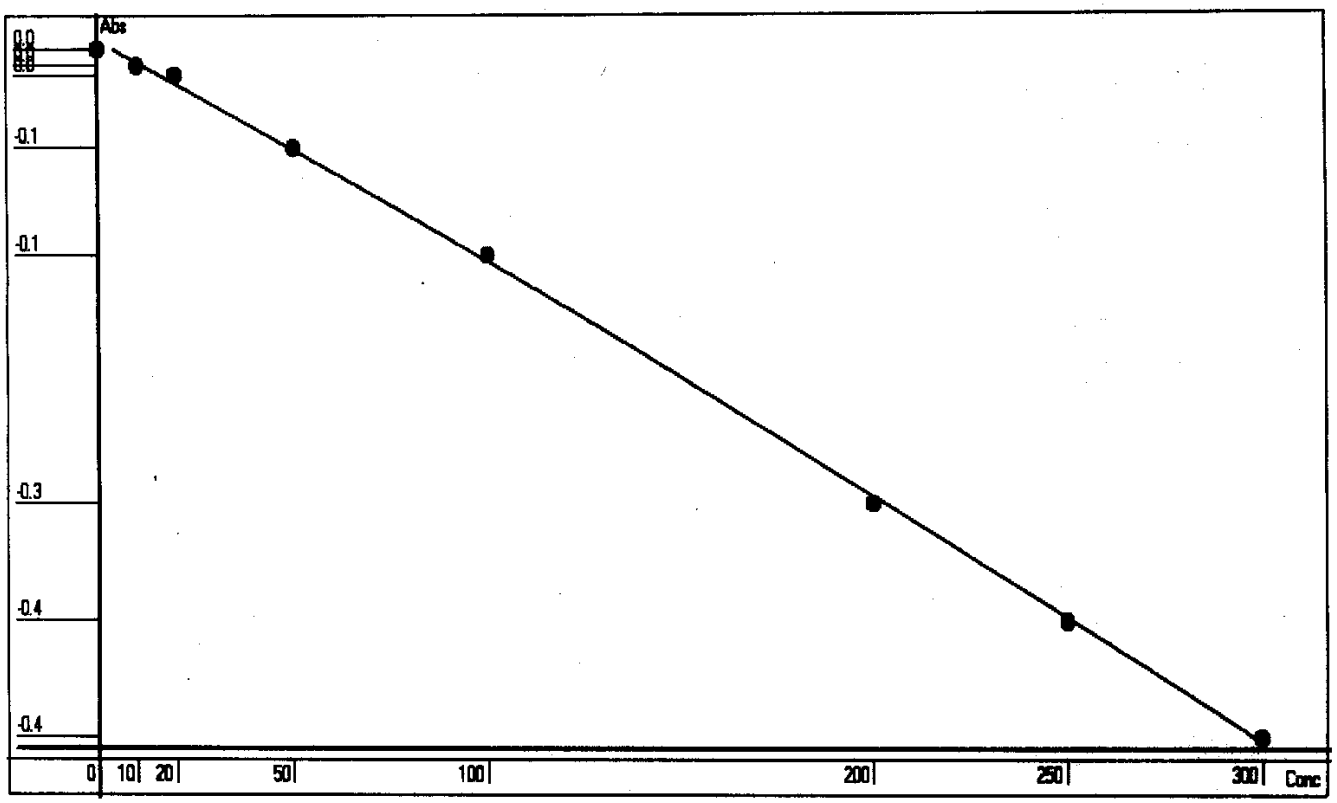
Report Date :05/04/2012 **Run Date :5/4/2012** **Operator : WESTCO** **Plan # :20120504004**

Plan Description : ALK-B-DIH/5/4/2012

Calibrant Report - WALK -

Calib Lot #:010104 Exp Date:6/21/2020 User:MICROBAC

Plan # : 20120504004 Description : [ALK-B-DIH/5/4/2012]



Point	OD	Conc	Recalc Conc	% Error
1	-0.0021	0	3.9760	397.60
2	-0.0123	10	11.4757	14.76
3	-0.0187	20	16.1681	-19.16
4	-0.0638	50	48.9442	-2.11
5	-0.1313	100	97.0478	-2.95
6	-0.2859	200	202.9238	1.46
7	-0.3598	250	251.4193	0.57
8	-0.4329	300	298.0445	-0.65

Conc= -125.197*Abso^2 -737.071*Abso +2.4287 R^2=0.9994

RBL
0.0655
0

Report Date 5/4/2012 Run Date 5/4/2012

MICROBAC (OVD)

SMARTCHEM REPORT (VER3.0.53)

NH3, TKN, NO3NO2 (MG/L N)

ALK (MG/L CaCO3) CL, SO4 (MG/L)

Method : WALK - ALKALINITY EPA 310.2

Smp#/[Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag	Analysis Time
DIL-1	RBL	0.0	0.5302	0.00		3:52:36 PM
DIL-1	RBL	0.0	0.5257	0.00		3:52:54 PM
DIL-1	RBL	0.0	0.5339	0.00		3:53:48 PM
DIL-1	Std-1	0.0	-0.0027	0.00		3:54:06 PM
SR5-1	Std-2	10.0	-0.0114	0.00		3:55:00 PM
SR5-2	Std-3	20.0	-0.0186	0.00		3:55:18 PM
SR5-3	Std-4	50.0	-0.0464	0.00		3:56:12 PM
SR5-4	Std-5	100.0	-0.1007	0.00		3:56:30 PM
SR5-5	Std-6	200.0	-0.2282	0.00		3:57:24 PM
SR5-6	Std-7	250.0	-0.2930	0.00		3:57:42 PM
SR5-7	Std-8	300.0	-0.3445	0.00		3:58:36 PM
1	ICV 25	248.8	-0.2843	0.00		3:58:54 PM
2	WG397067-01 BLK	-9.4	0.0114	0.00	INV,><,LL	3:59:48 PM
3	WG397067-02 LCS	208.9	-0.2344	0.00		4:00:06 PM
4	WG397067-03 LCSDUP	216.3	-0.2435	0.00		4:01:00 PM
5	L12050052-08	118.3	-0.1273	0.00		4:01:19 PM
6	L12050052-09	64.6	-0.0674	0.00		4:02:13 PM
7	L12050052-10	133.7	-0.1449	0.00		4:02:31 PM
8	L12050052-11	46.0	-0.0472	0.00		4:03:25 PM
9	L12050052-14 (3)	261.1	-0.3001	0.00		4:03:43 PM
10	L12050052-15	84.0	-0.0888	0.00		4:04:37 PM
ST-2	CCV (150 mg/L)	163.7	-0.1799	109.13		4:04:55 PM
ST-3	CCB (0 mg/L)	10.0	-0.0089	0.00		4:05:49 PM
11	L12050052-16	88.4	-0.0937	0.00		4:06:07 PM
12	L12050052-17 (3)	163.8	-0.1800	0.00		4:07:01 PM
13	L12050011-01 (2)	179.5	-0.1987	0.00		4:07:19 PM
14	L12050011-03 (2)	180.6	-0.2000	0.00		4:08:13 PM
15	L12050089-01 (4)	189.3	-0.2105	0.00		4:08:31 PM
16	L12050089-02	237.8	-0.2704	0.00		4:09:25 PM
17	L12050089-03 (50)	30.4	-0.0304	0.00		4:09:43 PM
18	L12050089-04	67.0	-0.0700	0.00		4:10:37 PM
19	L12050~~09~~-06 (3)	167.1	-0.1839	0.00		4:10:55 PM

JLM 5/15/12 8

Report Date :05/04/2012 Run Date :5/4/2012 Operator : WESTCO Plan # :20120504006

Plan Description : ALK-D-DIH/5/4/2012

MICROBAC (OVD)

SMARTCHEM REPORT (VER3.0.53)

NH3, TKN, NO3NO2 (MG/L N)

ALK (MG/L CaCO3) CL, SO4 (MG/L)

Method : WALK - ALKALINITY EPA 310.2

Smp#/[Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag	Analysis Time
20	L12050089-07 (3)	110.4	-0.1183	0.00		4:11:49 PM
ST-2	CCV (150 mg/L)	169.2	-0.1864	112.79		4:12:07 PM
ST-3	CCB (0 mg/L)	14.9	-0.0139	0.00		4:13:01 PM
21	L12050089-08	285.4	-0.3319	0.00		4:13:19 PM
22	L12050089-11	263.2	-0.3029	0.00		4:14:13 PM
23	L12050089-12 (10)	57.1	-0.0592	0.00		4:14:31 PM
24	L12050089-13	57.9	-0.0601	0.00		4:15:25 PM
25	WG397067-05 DUP	52.1	-0.0538	0.00		4:15:43 PM
26	ID 26	13.0 X	-0.0120	0.00		4:16:37 PM
27	ID 27	10.9 X	-0.0098	0.00		4:16:55 PM
ST-2	CCV (150 mg/L)	173.7	-0.1918	115.82		4:17:49 PM
ST-3	CCB (0 mg/L)	7.2	-0.0060	0.00		4:18:07 PM

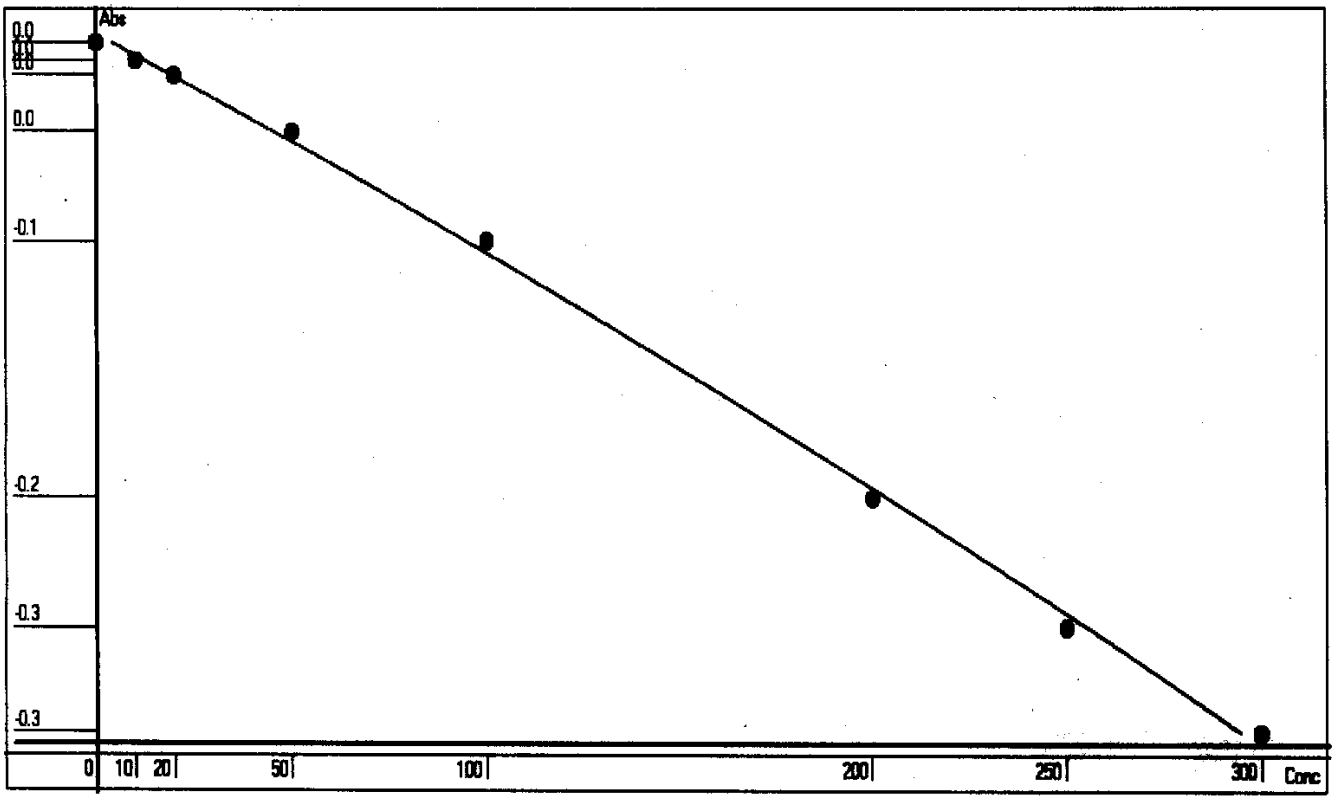
Report Date :05/04/2012 **Run Date :5/4/2012** **Operator : WESTCO** **Plan # :20120504006**

Plan Description : ALK-D-DIH/5/4/2012

Calibrant Report - WALK -

Calib Lot #:010104 Exp Date:6/21/2020 User:MICROBAC

Plan # : 20120504006 Description : [ALK-D-DIH/5/4/2012]



Point	OD	Conc	Recalc Conc	% Error
1	-0.0027	0	4.1498	414.98
2	-0.0114	10	12.4314	24.31
3	-0.0186	20	19.2503	-3.75
4	-0.0464	50	45.2826	-9.43
5	-0.1007	100	94.7724	-5.23
6	-0.2282	200	203.9207	1.96
7	-0.2930	250	255.5999	2.24
8	-0.3445	300	294.8485	-1.72

Conc= -304.4592*Abso^2 -956.2017*Abso +1.5703 R^2=0.9985

RBL
0.5321
0

Report Date 5/4/2012 Run Date 5/4/2012

MICROBAC (OVD)

SMARTCHEM REPORT (VER3.0.53)

NH3, TKN, NO3NO2 (MG/L N)

ALK (MG/L CaCO3) CL, SO4 (MG/L)

Method : WALK - ALKALINITY EPA 310.2

Smp#/[Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag	Analysis Time
DIL-1	RBL	0.0	0.4640	0.00		4:42:25 PM
DIL-1	RBL	0.0	0.4621	0.00		4:42:43 PM
DIL-1	RBL	0.0	0.4624	0.00		4:43:37 PM
DIL-1	Std-1	0.0	-0.0010	0.00		4:43:55 PM
SR5-1	Std-2	10.0	-0.0115	0.00		4:44:49 PM
SR5-2	Std-3	20.0	-0.0254	0.00		4:45:07 PM
SR5-3	Std-4	50.0	-0.0507	0.00		4:46:01 PM
SR5-4	Std-5	100.0	-0.0988	0.00		4:46:19 PM
SR5-5	Std-6	200.0	-0.2095	0.00		4:47:13 PM
SR5-6	Std-7	250.0	-0.2637	0.00		4:47:31 PM
SR5-7	Std-8	300.0	-0.3091	0.00		4:48:25 PM
1	ICV 250	254.7	-0.2647	0.00		4:48:43 PM
2	WG397079-01 BLK	-18.1 X	0.0171	0.00	INV,><,LL	4:49:38 PM
3	WG397079-02 LCS	200.9	-0.2083	0.00		4:49:56 PM
4	WG397079-03 LCSDUP	200.0	-0.2073	0.00		4:50:50 PM
5	L12040963-03 (2)	170.8	-0.1769	0.00		4:51:08 PM
6	L12050052-03 (2)	211.6	-0.2194	0.00		4:52:02 PM
7	L12050089-14 (50)	3.8	-0.0051	0.00		4:52:20 PM
8	L12050050-01	304.3 X	-0.3171	0.00	><,LH	4:53:14 PM
9	L12050050-03	313.6 X	-0.3269	0.00	><,LH	4:53:32 PM
10	L12050050-05 (5)	382.3 X	-0.4003	0.00	><,LH	4:54:26 PM
ST-2	CCV (150 mg/L)	154.3	-0.1597	102.85		4:54:44 PM
ST-3	CCB (0 mg/L)	-14.5	0.0135	0.00	INV,><,LL	4:55:38 PM
11	L12050050-07	165.6	-0.1715	0.00		4:55:56 PM
12	L12050099-01 (2)	152.8	-0.1582	0.00		4:56:50 PM
13	L12050099-03	263.4	-0.2738	0.00		4:57:08 PM
14	L12050099-05	182.2	-0.1887	0.00		4:58:02 PM
15	L12050099-07 (2)	195.0	-0.2021	0.00		4:58:20 PM
16	L12050099-09	263.0	-0.2734	0.00		4:59:14 PM
17	WG397079-05 DUP	180.0	-0.1865	0.00		4:59:32 PM
18	05-152-02 (5)	92.9	-0.0963	0.00		5:00:26 PM
19	152-03 (5)	60.6	-0.0631	0.00		5:00:44 PM

Report Date :05/04/2012 **Run Date :5/4/2012** **Operator : WESTCO** **Plan # :20120504007**

Plan Description : ALK-E-DIH/5/4/2012

MICROBAC (OVD)

SMARTCHEM REPORT (VER3.0.53)

NH3, TKN, NO3NO2 (MG/L N)

ALK (MG/L CaCO3) CL, SO4 (MG/L)

Method : WALK - ALKALINITY EPA 310.2

Smp#/[Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag	Analysis Time
20 05-152	-05 (5)	194.8	-0.2019	0.00		5:01:38 PM
ST-2	CCV (150 mg/L)	157.2	-0.1627	104.77		5:01:56 PM
ST-3	CCB (0 mg/L)	-7.2	0.0061	0.00	INV,><,LL	5:02:50 PM
21 05-152	-06 (5)	84.3	-0.0875	0.00		5:03:08 PM
22 152	-08 ~~(5)~~ (25)	39.6	-0.0417	0.00		5:04:02 PM
23 152	-09 (5)	121.4	-0.1257	0.00		5:04:20 PM
24	ID 24 Blank	-6.5	0.0053	0.00	INV,><,LL	5:05:14 PM
25	ID 25	-9.2	0.0080	0.00	INV,><,LL	5:05:32 PM
ST-2	CCV (150 mg/L)	157.5	-0.1631	105.03		5:06:26 PM
ST-3	CCB (0 mg/L)	-4.5	0.0033	0.00	INV,><,LL	5:06:44 PM
8-[1/2]	L12050050-01	344.2	-0.1782	0.00	LH	5:14:24 PM
9-[1/2]	L12050050-03	358.4	-0.1856	0.00	LH	5:15:36 PM
10-[1/2]	L12050050-05 (5)	689.1	-0.3599	0.00	><,LH	5:16:48 PM
ST-2	CCV (150 mg/L)	155.9	-0.1614	103.94		5:16:48 PM
ST-3	CCB (0 mg/L)	-6.6	0.0053	0.00	INV,><,LL	5:17:42 PM
10-[1/4]	L12050050-05 (5)	874.9	-0.2269	0.00	LH	5:25:23 PM
ST-2	CCV (150 mg/L)	160.0	-0.1657	106.70		5:25:23 PM
ST-3	CCB (0 mg/L)	-1.6	0.0003	0.00	INV,><,LL	5:26:17 PM

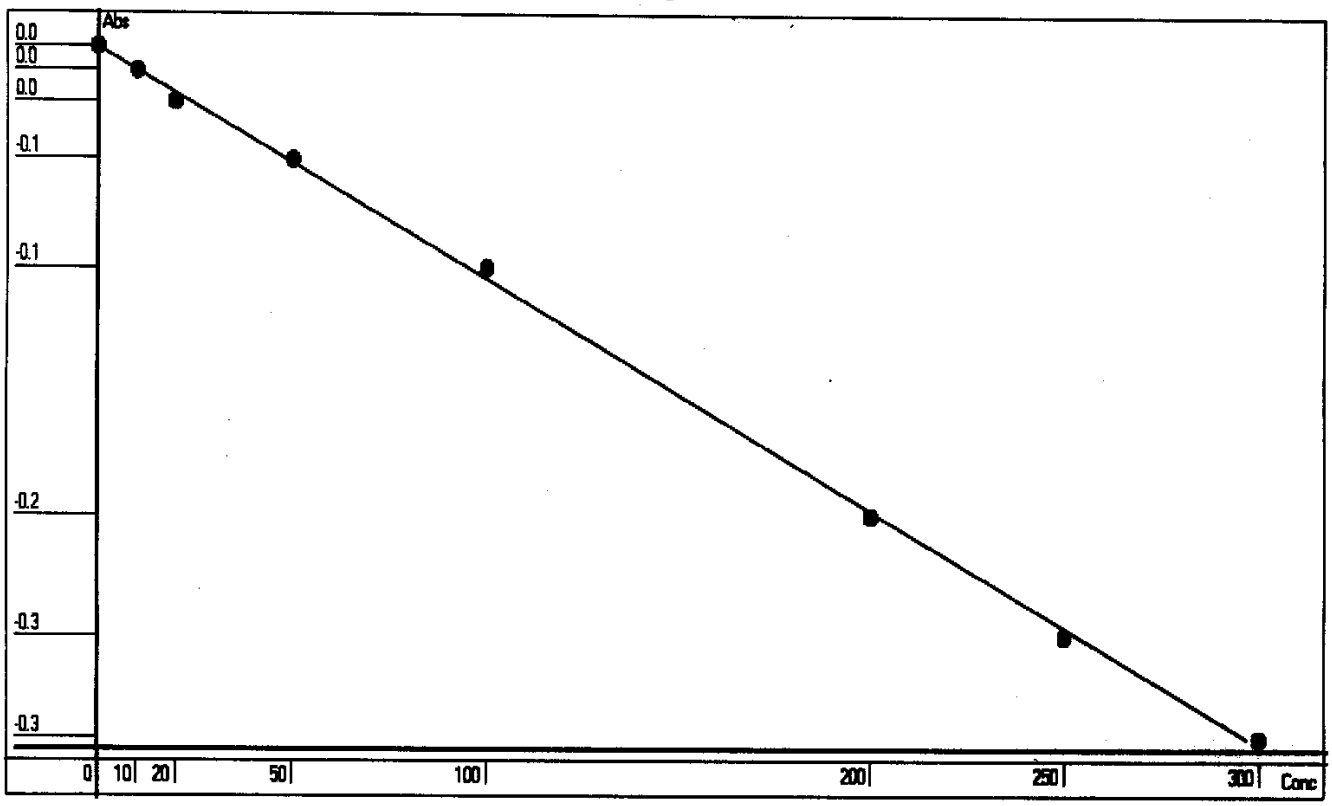
Report Date :05/04/2012 **Run Date :5/4/2012** **Operator : WESTCO** **Plan # :20120504007**

Plan Description : ALK-E-DIH/5/4/2012

Calibrant Report - WALK -

Calib Lot #:010104 Exp Date:6/21/2020 User:MICROBAC

Plan # : 20120504007 Description : [ALK-E-DIH/5/4/2012]



Point	OD	Conc	Recalc Conc	% Error
1	-0.0010	0	-0.2946	-29.46
2	-0.0115	10	10.0381	0.38
3	-0.0254	20	23.6941	18.47
4	-0.0507	50	48.4842	-3.03
5	-0.0988	100	95.3808	-4.62
6	-0.2095	200	202.1461	1.07
7	-0.2637	250	253.8272	1.53
8	-0.3091	300	296.8176	-1.06

Conc= -66.2797*Abso^2 -984.8902*Abso -1.2794 R^2=0.9993

RBL
0.4623
0

Report Date 5/4/2012 Run Date 5/4/2012

2.4.2 Nitrate Data

2.4.2.1 Summary Data

Login Number: L12050011
Department: Conventionals
Analyst: Deanna Hesson

METHOD

Analysis EPA 353.2/SM4500-NO3 F (Nitrate)

HOLDING TIMES

Sample Analysis: Nitrate is reported as the difference of nitrate-nitrite (28 day hold) and nitrite (48 hour hold). Both analysis were analyzed within the appropriate hold time. The nitrate hold time is within compliance.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

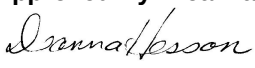
Duplicates: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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: 46371
Approved By: Deanna Hesson



Microbac

Lab Report #: L12050011
Lab Project #: 2736.061
Project Name: DOW WATERLOO GW
Lab Contact: Kathy Albertson

Certificate of Analysis

Sample #:	L12050011-01	**PrePrep Method:**	N/A	**Instrument:**	SMARTCHEM
Client ID:	MW-29-043012	**Prep Method:**	353.2	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	353.2	**Cal Date:**	05/01/2012 15:43
Workgroup #:	WG396738	**Analyst:**	DIH	**Run Date:**	05/02/2012 11:35
Collect Date:	04/30/2012 13:07	**Dilution:**	1	**File ID:**	SC12050709061601
Sample Tag:		**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8	0.270		0.0500	0.0250

Sample #:	L12050011-03	**PrePrep Method:**	N/A	**Instrument:**	SMARTCHEM
Client ID:	DUP-GW-043012	**Prep Method:**	353.2	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	353.2	**Cal Date:**	05/01/2012 15:43
Workgroup #:	WG396738	**Analyst:**	DIH	**Run Date:**	05/02/2012 11:35
Collect Date:	04/30/2012 14:00	**Dilution:**	1	**File ID:**	SC12050709062401
Sample Tag:		**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8	0.0370		0.0500	0.0250

2.4.2.2 QC Summary Data

Example Calculations for Visible Spectrophotometric Methods

Linear Calibration Model

Step 1 - Retrieve Curve Data from ICAL

m = slope of the linear equation
b = intercept from the linear equation
y = instrument response as absorbance or OD
x = concentration of analyte (mg/L)
y = mx + b

Step 2: Calculate the instrument concentration, x

Where:

x = (y - b)/m

Step 3: Solve for analyte concentration in sample, Cx

Cx = (x) (D)

Example Calculation (LCS):

Value of m from plot:	7.809	
Value of b from plot:	0.0004135	
Absorbance of unknown from quantitation report (y):	0.31	
Calculated concentration (x):	0.03964483	
Dilution factor (D):	1.00	
Concentration of analyte in sample, Cy:	0.0396	mg/L

SmartChem Autoanalyzer - Quadratic Calibration for Chloride and Sulfate

Step 1 - Retrieve Curve Data from Smartchem ICAL

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

x = instrument response as absorbance or OD

y = concentration of analyte (mg/L)

Step 2: Calculate the instrument concentration, y

Where:

y = Ax^2 + Bx + C

Step 3: Solve for analyte concentration in sample, Cy

Cy = (y) (D)

Example Calculation (LCS):

Value of A from plot:	101.2796	
Value of B from plot:	318.9056	
Value of C from plot:	-2.2712	
Absorbance of unknown from quantitation report (x):	0.1583	
Calculated concentration (y):	50.7495108	
Dilution factor (D):	1.00	
Concentration of analyte in sample, Cy:	50.75	mg/L

Microbac Laboratories Inc.

Data Checklist

Date: 02-MAY-2012
Analyst: DIH
Analyst: NA
Method: NO3
Instrument: SC
Curve Workgroup: NA
Runlog ID:
Analytical Workgroups: WG396739 WG396816 WG396738

Calibration/Linearity	5/2/2012
Second Source Check	X
ICV/CCV (std)	X
ICB/CCB	X
Blank	X
LCS/LCS Dup	X
MS/MSD	X
Duplicate	X
Upload Results	X
Client Forms	X
QC Violation Sheet	
Case Narratives	X
Signed Raw Data	X
STD/LCS on benchsheet	X
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	DIH
Secondary Reviewer	DIH
Comments	

Primary Reviewer:
05-MAY-2012

Secondary Reviewer:
05-MAY-2012

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-05-2012 11:49:23

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 353.2 AAB#: WG396738

Login Number: L12050011

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
MW-29-043012	01	04/30/12							2		05/02/12	1.9	2	
DUP-GW-043012	03	04/30/12							2		05/02/12	1.9	2	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2405003
Report generated 05/08/2012 08:24

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12050011
Blank File ID: SC12050709000501
Prep Date: 05/02/12 11:35
Analyzed Date: 05/02/12 11:35
Analyst: DIH

Work Group: WG396738
Blank Sample ID: WG396738-01
Instrument ID: SMARTCHEM
Method: 353.2

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
DUP	WG396738-05	SC12050709004301	05/02/12 11:35	
LCS2	WG396738-03	SC12050709002301	05/02/12 11:35	
LCS	WG396738-02	SC12050709001701	05/02/12 11:35	
MW-29-043012	L12050011-01	SC12050709061601	05/02/12 11:35	
DUP-GW-043012	L12050011-03	SC12050709062401	05/02/12 11:35	

Report Name: BLANK_SUMMARY
PDF File ID: 2405004
Report generated 05/08/2012 08:24

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050011 Prep Date: 05/02/12 11:35 Sample ID: WG396738-01
Instrument ID: SMARTCHEM Run Date: 05/02/12 11:35 Prep Method: 353.2
File ID: SC12050709000501 Analyst: DIH Method: 353.2
Workgroup (AAB#): WG396738 Matrix: Water Units: mg/L
Contract #: Cal ID: SMARTC-01-MAY-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Nitrate (as N)	0.0250	0.0500	0.0250	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: 2405005
08-MAY-2012 08:24

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050011 Analyst: DIH Prep Method: 353.2
Instrument ID: SMARTCHEM Matrix: Water Method: 353.2
Workgroup (AAB#): WG396738 Units: mg/L
QC Key: WATERLOO Lot #: STD51196

Sample ID: WG396738-02 LCS File ID: SC12050709001701 Run Date: 05/02/2012 11:35
Sample ID: WG396738-03 LCS2 File ID: SC12050709002301 Run Date: 05/02/2012 11:35

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Nitrate (as N)	1.00	1.07	107	1.00	1.05	105	1.70	90 - 110	15	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 2405006
Report generated: 05/08/2012 08:24

2.4.2.3 Raw Data

WORKGROUP: WG396738

396739
396816

SMARTCHEM RUN LOG

Daily Check

- [x] Lamp On
- [x] Probe Rinse Full
- [x] DI Water > ½ Full
- [x] Wash Solution > ½ Full
- [x] NO3 Reagent bottle connected / purged
- [x] NO3 pH adj to pH 5-9
- [x] WBL Run
- [x] Reagents Full
- [x] Dilution H_2O Full
- [x] Waste Container Check

Syringe filter lot # 141872

1) **Workgroup** A
Plan # 20120502001
2) **Workgroup** _____
Plan # _____
3) **Workgroup** B
Plan # 20120502002

Analyte	NO3		
	Dilution		
SC Prepared Curve			
Position			
1-1	ICV 1.5		
1-2	BLK		
1-3	LCS 1		
1-4	LCSDUP		
1-5	NO2 1		
1-6	05-009-01	1/4	
1-7	02		
1-8	03	1/10	
1-9	04	1/4	
1-10	05		
1-11	04-898-01	~~1/50~~ 1/100	* color
1-12	03	~~1/25~~ *	1/5
1-13	* 05	1/25	
1-14	* 08	~~1/25~~	color
1-15	10	1/50	color
1-16	12	1/5	color
1-17	04-928-01	1/20	*
1-18	MS 08	1/20	*
1-19	MSD 10	1/20	*
1-20	03	1/4	
1-21	04-963-01		
1-22	03		
2-1	07		
2-2	05-011-01		
2-3	03		

Position	Analyte	1	2	3
2-4	05-018-08	1/5		color
2-5	09	1/50		↓
2-6	DUP 009-01		1/4	
2-7	MS ↓		1/4	
2-8	BLK			
2-9	LCS			
2-10	LCSDUP			
2-11	04-897-01	1/5		color
2-12	02	1/5		↓
2-13	03	1/5		
2-14	04-963-05	1/25	*	
2-15	DUP 897-01	1/5		
2-16	MS ↓	1/5		
2-17	05-028-01			
2-18				
2-19	Run 2			
2-20				
2-21 1	ICV 1.5			
2-22 2	BLK			
2-23 3	LCS 1			
2-24 4	LCS 1			
2-25 5	NO2 1			
2-26 6	~~05-05~~ A	05-051-01		
3-1 7	B		02	
3-2 8	C		03	
9	D		04	
10	E		05	

NOTES:
* Run NO2 std on NO3 runs
* LCS/LCS Dup all parameters
*MS(10% sample): NO3, TKN, NH3

* matrix interference

DCN#90724

SMARTCHEM RUN LOG

Position	Analyte	1	2	3
3-3 11	F 05-051-06			
3-4 12	G 07			
3-5 13	H 08			
3-6 14	I 11			
3-7 15	J 12			
3-8 16	K 13			
3-9 17	05-050201	1/2		
3-10 18	03	1/4		
3-11 19	05	1/15		
3-12 20	07	1/5		
3-13 21	DUP ↓	1/5		
3-14 22	MS ↓	1/5		
3-15 ~~23~~	MS R 051-13			

Position	Analyte	1	2	3
3-16				
3-17				
3-18				
3-19				
3-20				
3-21				
3-22				
3-23				
3-24				
3-25				
3-26				
3-27				
3-28				

- [ ] Chloride — EPA 325.2/SM 4500-Cl⁻E
- [ ] Sulfate — EPA 375.4/SM 426C(15th)
- [ ] Alkalinity — EPA 310.2
- [x] Nitrate-Nitrite — EPA 353.2/SM 4500-NO3 F
- [ ] Ammonia — EPA 350.1/SM 4500-NH3 B
- [ ] TKN — EPA 351.2
- [ ] Phos — EPA 365.4

Analyte	NO3		Reagents
SOP & Revision	K 3532 R		Rot 17254
Curve Stock (SC made)	std 50996		Rot 17239
Curve ID (user made) NO2	std 51363		
ICV	std 50998		
CCV	std 50997		
LCS	std 51196		
MS	std 48249 Dilution 0.1/5(25)=0.5		

Comments:

Analyst: Diane Hesson Date: 5/2/12

DCN#90724

MICROBAC (OVD)

SMARTCHEM REPORT (VER3.0.53)

NH3, TKN, NO3NO2 (MG/L N)

ALK (MG/L CaCO3) CL, SO4 (MG/L)

Method : WNO3 - EPA 353.2 Nitrate-Nitrite

Smp#/[Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag		Analysis Time
DIL-1	RBL	0.000	0.0239	0.00			11:23:10 AM
DIL-1	RBL	0.000	0.0173	0.00			11:24:22 AM
DIL-1	RBL	0.000	0.0190	0.00			11:25:34 AM
DIL-1	RBL	0.000	0.0209	0.00			11:26:46 AM
DIL-1	Std-1	0.000	0.0007	0.00			11:27:58 AM
SR5-1	Std-2	0.040	0.0081	0.00			11:29:10 AM
SR5-2	Std-3	0.100	0.0296	0.00			11:30:22 AM
SR5-3	Std-4	0.500	0.1532	0.00			11:31:34 AM
SR5-4	Std-5	1.000	0.3265	0.00			11:32:46 AM
ST-1	Std-6	2.000	0.6357	0.00			11:33:58 AM
1	ICV 1.5	1.596	0.5093	0.00			11:35:10 AM
2	WG396738-01 BLK	0.007	0.0001	0.00	><		11:36:22 AM
3	WG396738-02 LCS	1.067	0.3397	0.00			11:37:34 AM
4	WG396738-03 LCSDUP	1.049	0.3340	0.00			11:38:46 AM
5	NO2 1	1.020	0.3246	0.00			11:39:58 AM
6	L12050009-01 (4)	2.026	0.6471	0.00	><,LH		11:41:10 AM
7	L12050009-02	1.227	0.3910	0.00		0	11:42:22 AM
8	L12050009-03 (10)	1.303	0.4154	0.00		0	11:43:34 AM
9	L12050009-04 (4)	1.037	0.3302	0.00			11:44:46 AM
10	L12050009-05	1.485	0.4738	0.00			11:45:58 AM
ST-2	CCV (1 mg/L)	0.995	0.3167	99.49			11:47:10 AM
ST-3	CCB (0 mg/L)	-0.002	-0.0026	0.00	INV,><,LL		11:48:22 AM
11	L12040898-01 (100)	0.008	0.0004	0.00	><	<2	11:49:35 AM
12	L12040898-03 ~~(2)~~ (5)	1.811	0.5780	0.00		0	11:50:46 AM
13	L12040898-05 (25)	0.013	0.0020	0.00		0	11:51:59 AM
14	L12040898-08 ~~(25)~~ (200)	0.004	-0.0009	0.00	INV,><	0	11:53:11 AM
15	L12040898-10 (50)	0.012	0.0018	0.00		0	11:54:23 AM
16	L12040898-12 ~~(5)~~ ~~(4)~~ (5)	0.002	-0.0014	0.00	INV,><	0	11:55:35 AM
17	L12040928-01 (20)	0.016	0.0031	0.00		0.007	11:56:47 AM
18	L12040928-08 (20) MS	0.044	0.0121	0.00			11:57:59 AM
19	L12040928-10 (20) MS	0.036	0.0094	0.00			11:59:11 AM
20	L12040928-03 (4)	0.748	0.2377	0.00		0.009	12:00:23 PM

Report Date :05/02/2012 Run Date :5/2/2012 Operator : WESTCO Plan # :20120502001

Plan Description : NO3-A-DIH/5/2/2012

MICROBAC (OVD)

SMARTCHEM REPORT (VER3.0.53)

NH3, TKN, NO3NO2 (MG/L N)

ALK (MG/L CaCO3) CL, SO4 (MG/L)

Method : WNO3 - EPA 353.2 Nitrate-Nitrite

Smp#/[Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag	Analysis Time
ST-2	CCV (1 mg/L)	0.969	0.3149	98.93		12:01:35 PM
ST-3	CCB (0 mg/L)	0.013	0.0021	0.00		12:02:47 PM
21	L12040963-01	0.834	0.2650	0.00	0	12:03:59 PM
22	L12040963-03	0.070	0.0203	0.00	0	12:05:11 PM
23	L12040963-07	0.015	0.0028	0.00	0	12:06:23 PM
24	L12050011-01	0.027	0.0065	0.00	0	12:07:35 PM
25	L12050011-03	0.037	0.0096	0.00		12:08:47 PM
26	L12050018-08 (5)	0.310	0.0973	0.00	0.189	12:09:59 PM
27	L12050018-09 (50)	1.956	0.6245	0.00	0.061	12:11:11 PM
28	DUP 009-01 (4)	1.931	0.6165	0.00		12:12:23 PM
29	MS 009-01 (4)	2.006 X	0.6407	0.00	>,LH	12:13:35 PM
30	WG396739-01 BLK	0.010	0.0010	0.00		12:14:47 PM
ST-2	CCV (1 mg/L)	0.985	0.3134	98.46		12:15:59 PM
ST-3	CCB (0 mg/L)	0.012	0.0017	0.00		12:17:11 PM
31	WG396739-02 LCS	1.021	0.3250	0.00		12:18:23 PM
32	WG396739-03 LCSDUP	1.052	0.3348	0.00		12:19:35 PM
33	L12040897-01 (5)	0.009	0.0008	0.00		12:20:47 PM
34	L12040897-02 (5)	0.019	0.0039	0.00		12:21:59 PM
35	L12040897-03 (5)	0.005	-0.0004	0.00	INV,>	12:23:11 PM
36	L12040963-05 (25)	0.004	-0.0006	0.00	INV,>	12:24:23 PM
37	DUP 897-01 (5)	0.081	0.0238	0.00		12:25:36 PM
38	MS 897-01 (5)	0.103	0.0308	0.00		12:26:48 PM
39	DP004 05-028-01	0.291	0.0912	0.00		12:28:00 PM
40	ID 40	0.003 X	-0.0013	0.00	INV,>	12:29:12 PM
ST-2	CCV (1 mg/L)	0.971	0.3090	97.09		12:30:24 PM
ST-3	CCB (0 mg/L)	0.004	-0.0007	0.00	INV,>	12:31:36 PM
6-[1/4]	L12050009-01 (4)	2.154	0.1705	0.00	LH	12:40:46 PM
29-[1/4]	MS 009-01 (4)	2.172	0.1719	0.00	LH	12:42:52 PM
ST-2	CCV (1 mg/L)	0.944	0.3003	94.38		12:43:46 PM
ST-3	CCB (0 mg/L)	0.015	0.0029	0.00		12:44:58 PM

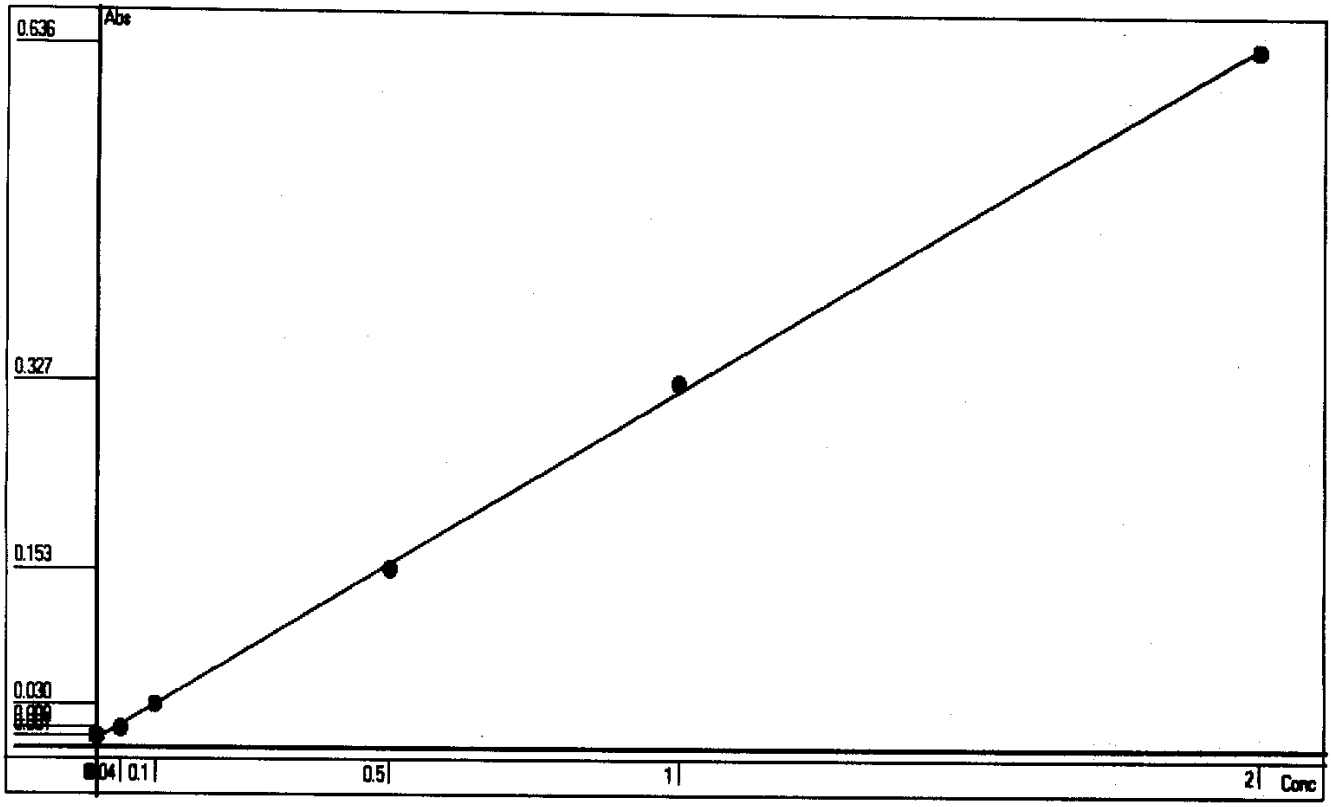
Report Date :05/02/2012 **Run Date :5/2/2012** **Operator : WESTCO** **Plan # :20120502001**

Plan Description : NO3-A-DIH/5/2/2012

Calibrant Report - WNO3 -

Calib Lot #:010104 Exp Date:6/17/2020 User:MICROBAC

Plan # : 20120502001 Description : [NO3-A-DIH/5/2/2012]



Point	OD	Conc	Recalc Conc	% Error
1	0.0007	0	0.0087	0.87
2	0.0081	0.04	0.0318	-20.50
3	0.0296	0.1	0.0989	-1.10
4	0.1532	0.5	0.4847	-3.06
5	0.3265	1	1.0257	2.57
6	0.6357	2	1.9910	-0.45

Conc= +3.1217*Abso +0.0065 R^2=0.9996

RBL
0.02
0

Report Date 5/2/2012 Run Date 5/2/2012

MICROBAC (OVD)

SMARTCHEM REPORT (VER3.0.53)

NH3, TKN, NO3NO2 (MG/L N)

ALK (MG/L CaCO3) CL, SO4 (MG/L)

Method : WNO3 - EPA 353.2 Nitrate-Nitrite

Smp#/[Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag		Analysis Time
DIL-1	RBL	0.000	0.0293	0.00			1:51:43 PM
DIL-1	RBL	0.000	0.0143	0.00			1:52:55 PM
DIL-1	RBL	0.000	0.0175	0.00			1:54:07 PM
DIL-1	RBL	0.000	0.0171	0.00			1:55:19 PM
DIL-1	Std-1	0.000	0.0010	0.00			1:56:31 PM
SR5-1	Std-2	0.040	0.0108	0.00			1:57:43 PM
SR5-2	Std-3	0.100	0.0303	0.00			1:58:55 PM
SR5-3	Std-4	0.500	0.1530	0.00			2:00:07 PM
SR5-4	Std-5	1.000	0.3204	0.00			2:01:19 PM
ST-1	Std-6	2.000	0.6772	0.00			2:02:31 PM
1	ICV 1.5	1.487	0.4965	0.00			2:03:43 PM
2	WG396816-01 BLK	0.022	0.0011	0.00			2:04:55 PM
3	WG396816-02 LCS	0.977	0.3239	0.00			2:06:07 PM
4	WG396816-03 LCSDUP	0.972	0.3222	0.00			2:07:19 PM
5	NO2 1	1.001	0.3321	0.00			2:08:31 PM
6	A 05-051-01	0.101	0.0277	0.00		0	2:09:43 PM
7	B 02	0.149	0.0441	0.00		0	2:10:55 PM
8	C 03	0.225	0.0697	0.00		0.010	2:12:07 PM
9	D 04	0.090	0.0241	0.00		0.011	2:13:19 PM
10	E 05	0.241	0.0751	0.00		0.013	2:14:31 PM
ST-2	CCV (1 mg/L)	0.945	0.3132	94.51			2:15:43 PM
ST-3	CCB (0 mg/L)	0.019	0.0002	0.00	><		2:16:55 PM
11	F 05-051-06	0.052	0.0111	0.00		0.023	2:18:07 PM
12	G 07	0.154	0.0459	0.00		0.019	2:19:20 PM
13	H 08	2.726 X	0.9153	0.00	><,LH		2:20:32 PM
14	I 11	2.090 X	0.7004	0.00	><,LH		2:21:44 PM
15	J 12	4.011 X	1.3495	0.00	><,LH		2:22:56 PM
16	K 13	4.032 X	1.3566	0.00	><,LH		2:24:08 PM
17	L12050050-01	0.083	0.0216	0.00		0	2:25:20 PM
18	L12050050-03	0.115	0.0324	0.00		0	2:26:32 PM
19	L12050050-05	0.027	0.0028	0.00		0.011	2:27:44 PM
20	L12050050-07	0.107	0.0298	0.00		0	2:28:56 PM

Report Date :05/02/2012 **Run Date :5/2/2012** **Operator : WESTCO** **Plan # :20120502002**

Plan Description : NO3-B-DIH/5/2/2012

MICROBAC (OVD)

SMARTCHEM REPORT (VER3.0.53)

NH3, TKN, NO3NO2 (MG/L N)

ALK (MG/L CaCO3) CL, SO4 (MG/L)

Method : WNO3 - EPA 353.2 Nitrate-Nitrite

Smp#/[Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag		Analysis Time
ST-2	CCV (1 mg/L)	0.926	0.3067	92.59			2:30:08 PM
ST-3	CCB (0 mg/L)	0.025	0.0021	0.00			2:31:20 PM
21	DUP 050-07	0.122	0.0350	0.00			2:32:32 PM
22	MS 050-07	0.107	0.0300	0.00			2:33:44 PM
23	ID 23 MS 051-13	4.516 X	1.5203	0.00	>,LH		2:34:56 PM
24	ID 24	0.016 Y	-0.0010	0.00	INV,<		2:36:08 PM
25	ID 25	0.955 X	0.3164	0.00			2:37:20 PM
ST-2	CCV (1 mg/L)	0.930	0.3080	92.97			2:38:32 PM
ST-3	CCB (0 mg/L)	0.029	0.0036	0.00			2:39:44 PM
13-[1/4]	H 05-051-08	2.978	0.2454	0.00	LH	0.048	2:48:55 PM
14-[1/4]	I 11	2.337	0.1912	0.00	LH	0	2:51:00 PM
15-[1/4]	J 12	4.280	0.3554	0.00	LH	0	2:53:06 PM
16-[1/4]	K 13	4.498	0.3738	0.00	LH		2:55:12 PM
23-[1/4]	ID 23 MS 13	4.890	0.4070	0.00	LH		2:57:18 PM
ST-2	CCV (1 mg/L)	0.942	0.3121	94.19			2:58:12 PM
ST-3	CCB (0 mg/L)	0.029	0.0036	0.00			2:59:24 PM

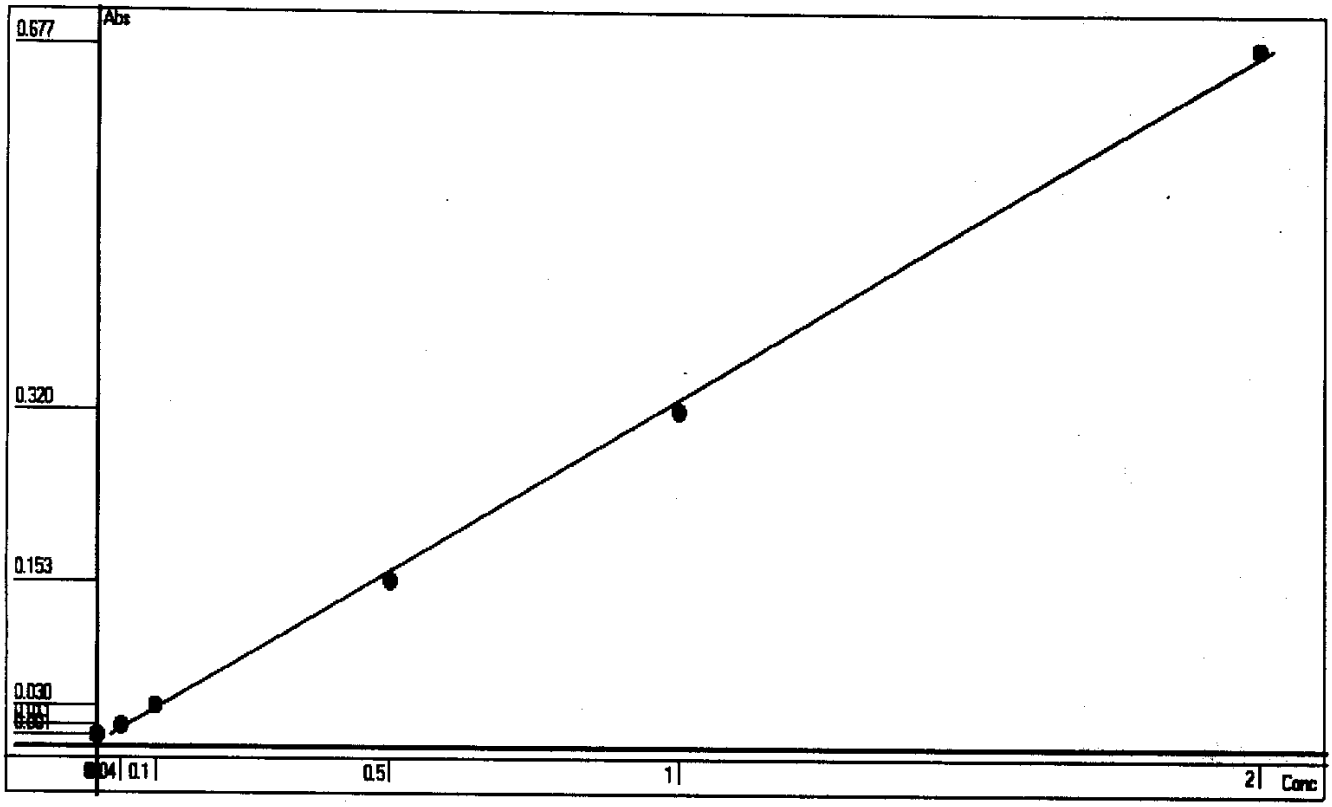
Report Date :05/02/2012 **Run Date :5/2/2012** **Operator : WESTCO** **Plan # :20120502002**

Plan Description : NO3-B-DIH/5/2/2012

Calibrant Report - WNO3 -

Calib Lot #:010104 Exp Date:6/17/2020 User:MICROBAC

Plan # : 20120502002 Description : [NO3-B-DIH/5/2/2012]



Point	OD	Conc	Recalc Conc	% Error
1	0.0010	0	0.0217	2.17
2	0.0108	0.04	0.0506	26.50
3	0.0303	0.1	0.1083	8.30
4	0.1530	0.5	0.4713	-5.74
5	0.3204	1	0.9664	-3.36
6	0.6772	2	2.0219	1.10

Conc= +2.958*Abso +0.0187 R^2=0.9990

RBL
0.0173
0

Report Date 5/2/2012 Run Date 5/2/2012

2.4.3 Phosphorus Data

2.4.3.1 Summary Data

Login Number: L12050011
Department: Conventionals
Analyst: Deanna Hesson

METHOD

Analysis EPA 365.4 (Phosphorus)

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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: 46369
Approved By: Deanna Hesson

Certificate of Analysis

Sample #:	L12050011-01	**PrePrep Method:**	N/A	**Instrument:**	SMARTCHEM
Client ID:	MW-29-043012	**Prep Method:**	365.4	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	365.4	**Cal Date:**	05/08/2012 12:37
Workgroup #:	WG397261	**Analyst:**	DIH	**Run Date:**	05/08/2012 12:42
Collect Date:	04/30/2012 13:07	**Dilution:**	1	**File ID:**	SC120508004.015
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Phosphorus, Total	7723-14-0		U	0.200	0.100

U	Not detected at or above adjusted sample detection limit.

Sample #:	L12050011-03	**PrePrep Method:**	N/A	**Instrument:**	SMARTCHEM
Client ID:	DUP-GW-043012	**Prep Method:**	365.4	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	365.4	**Cal Date:**	05/08/2012 12:37
Workgroup #:	WG397261	**Analyst:**	DIH	**Run Date:**	05/08/2012 12:43
Collect Date:	04/30/2012 14:00	**Dilution:**	1	**File ID:**	SC120508004.016
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Phosphorus, Total	7723-14-0		U	0.200	0.100

U	Not detected at or above adjusted sample detection limit.

2.4.3.2 QC Summary Data

Example Calculations for Visible Spectrophotometric Methods

Linear Calibration Model

Step 1 - Retrieve Curve Data from ICAL

m = slope of the linear equation
b = intercept from the linear equation
y = instrument response as absorbance or OD
x = concentration of analyte (mg/L)
y = mx + b

Step 2: Calculate the instrument concentration, x

Where:

x = (y - b)/m

Step 3: Solve for analyte concentration in sample, Cx

Cx = (x) (D)

Example Calculation (LCS):

Value of m from plot:	7.809	
Value of b from plot:	0.0004135	
Absorbance of unknown from quantitation report (y):	0.31	
Calculated concentration (x):	0.03964483	
Dilution factor (D):	1.00	
Concentration of analyte in sample, Cy:	0.0396	mg/L

SmartChem Autoanalyzer - Quadratic Calibration for Chloride and Sulfate

Step 1 - Retrieve Curve Data from Smartchem ICAL

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

x = instrument response as absorbance or OD

y = concentration of analyte (mg/L)

Step 2: Calculate the instrument concentration, y

Where:

y = Ax^2 + Bx + C

Step 3: Solve for analyte concentration in sample, Cy

Cy = (y) (D)

Example Calculation (LCS):

Value of A from plot:	101.2796	
Value of B from plot:	318.9056	
Value of C from plot:	-2.2712	
Absorbance of unknown from quantitation report (x):	0.1583	
Calculated concentration (y):	50.7495108	
Dilution factor (D):	1.00	
Concentration of analyte in sample, Cy:	50.75	mg/L

Microbac Laboratories Inc.

Data Checklist

Date: 08-MAY-2012
Analyst: DIH
Analyst: NA
Method: PHOS
Instrument: SC
Curve Workgroup: NA
Runlog ID:
Analytical Workgroups: WG397261

Calibration/Linearity	5/8/2012
Second Source Check	X
ICV/CCV (std)	X
ICB/CCB	X
Blank	X
LCS/LCS Dup	X
MS/MSD	X
Duplicate	X
Upload Results	X
Client Forms	X
QC Violation Sheet	
Case Narratives	X
Signed Raw Data	X
STD/LCS on benchsheet	X
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	DIH
Secondary Reviewer	DIH
Comments	

Primary Reviewer:
09-MAY-2012

Secondary Reviewer:
09-MAY-2012

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-09-2012 12:52:36

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 365.4 AAB#: WG397261

Login Number: L12050011

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
MW-29-043012	01	04/30/12							28		05/08/12	8	28	
DUP-GW-043012	03	04/30/12							28		05/08/12	7.9	28	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2407556
Report generated 05/09/2012 12:30

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12050011
Blank File ID: SC120508004.008
Prep Date: 05/08/12 12:38
Analyzed Date: 05/08/12 12:38
Analyst: DIH

Work Group: WG397261
Blank Sample ID: WG397261-01
Instrument ID: SMARTCHEM
Method: 365.4

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG397261-02	SC120508004.009	05/08/12 12:38	01
MW-29-043012	L12050011-01	SC120508004.015	05/08/12 12:42	01
DUP-GW-043012	L12050011-03	SC120508004.016	05/08/12 12:43	01
DUP	WG397261-04	SC120508004.025	05/08/12 12:48	01

Report Name: BLANK_SUMMARY
PDF File ID: 2407557
Report generated 05/09/2012 12:31

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050011 Prep Date: 05/08/12 12:38 Sample ID: WG397261-01
Instrument ID: SMARTCHEM Run Date: 05/08/12 12:38 Prep Method: 365.4
File ID: SC120508004.008 Analyst: DIH Method: 365.4
Workgroup (AAB#): WG397261 Matrix: Water Units: mg/L
Contract #: Cal ID: SMARTC-08-MAY-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Phosphorus, Total	0.100	0.200	0.100	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: 2407558
09-MAY-2012 12:31

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050011 Run Date: 05/08/2012 Sample ID: WG397261-02
Instrument ID: SMARTCHEM Run Time: 12:38 Prep Method: 365.4
File ID: SC120508004.009 Analyst: DIH Method: 365.4
Workgroup (AAB#): WG397261 Matrix: Water Units: mg/L
QC Key: WATERLOO Lot#: STD51133 Cal ID: SMARTC-08-MAY-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Phosphorus, Total	1.00	0.870	87.0	70 - 130	

LCS - Modified 03/06/2008
PDF File ID: 2407559
Report generated: 05/09/2012 12:31

2.4.3.3 Raw Data

SMARTCHEM RUN LOG

Daily Check

- [x] Lamp On
- [x] Probe Rinse Full
- [x] DI Water > ½ Full
- [x] Wash Solution > ½ Full
- [ ] NO3 Reagent bottle connected / purged
- [ ] NO3 pH adj to pH 5-9
- [x] WBL Run
- [x] Reagents Full
- [x] Dilution H_2O Full
- [x] Waste Container Check

Syringe filter lot # _____

1) **Workgroup** _____ **Plan #** 201205 08004
2) **Workgroup** _____ **Plan #** _____
3) **Workgroup** _____ **Plan #** _____

Analyte		1	2	3
		PhO3		
		Dilution		
SC Prepared Curve				
Position				
1-1	ICV 1.5			
1-2	BLK			
1-3	LCS 1			
1-4	05-150-30			
1-5	05-164-04			
1-6	05-103-01			
1-7	02			
1-8	03			
1-9	05-011-01			
1-10	03			
1-11	05-140-02			
1-12	05-050-01			
1-13	03			
1-14	05			
1-15	07			
1-16	05-096-02	1/2		
1-17 4	DUP 103-01			
1-18 5	MS 103-01			
1-19 6	ref 010-07			
1-20 7	MS ↓			
1-21				
1-22				
2-1				
2-2				
2-3				

Position	Analyte	1	2	3
2-4				
2-5				
2-6				
2-7				
2-8				
2-9				
2-10				
2-11				
2-12				
2-13				
2-14				
2-15				
2-16				
2-17				
2-18				
2-19				
2-20				
2-21				
2-22				
2-23				
2-24				
2-25				
2-26				
3-1				
3-2				

NOTES:
* Run NO2 std on NO3 runs
* LCS/LCS Dup all parameters
*MS(10% sample): NO3, TKN, NH3

DCN#90790

SMARTCHEM RUN LOG

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

Position	Analyte	1	2	3
3-16				
3-17				
3-18				
3-19				
3-20				
3-21				
3-22				
3-23				
3-24				
3-25				
3-26				
3-27				
3-28				

- [ ] Chloride — EPA 325.2/SM 4500-Cl⁻ E
- [ ] Sulfate — EPA 375.4/SM 426C(15th)
- [ ] Alkalinity — EPA 310.2
- [ ] Nitrate-Nitrite — EPA 353.2/SM 4500-NO3 F
- [ ] Ammonia — EPA 350.1/SM 4500-NH3 B
- [ ] TKN — EPA 351.2
- [x] Phos — EPA 365.4

Analyte	Phos		Reagents
SOP & Revision	R 3654 R 16		Rot 16897
Curve Stock (SC made)			Rot 17276
Curve ID (user made)			Rot 173~~0~~26
ICV			
CCV	See digest		
LCS			
MS	Dilution log		

Comments:

Analyst: Deanna Brown Date: 5/8/12

DCN#90790

TKN/Phosphorus Digestion Log

TKN WG: 397257
TKN Std: std 51519
TKN CCV: ↓ 1/2(5)=2.5
TKN ICV: std 51194
TKN LCS: std 51195

Phos WG: 397261
Phos Std: std 51519
Phos CCV: ↓ 1/2(2)=1
Phos ICV: std 51132
Phos LCS: std 51133

MS/MSD: std 51384
Daily Dilution: 1/25(25)=1

Block Digester Temperature: 380 °C
Digest Reagent: RGT 17224

	Sample	Volume	TKN Dilution	Phos Dilution		Sample	Volume	TKN Dilution	Phos Dilution
1	std		5	2	26	DUP ~~164-04~~ 103-01		✓	✓
2	CCV		2.5	1	27	MS ↓ 103-01		✓	✓
3	BLK		✓	✓	28	05-052-01		✓	
4	ICV T		✓2		29	02		✓	
5	ICV P			1.5	30	03		✓	
6	LCS T		1		31	05-011-01			✓
7	LCS P			1	32	03			✓
8	05-010-07		✓	calc	33	04-140-02			✓
9	MS 08		✓	calc	34	04-050-01			✓
10	MSD 09		✓		35	03			✓
11	12		✓		36	05			✓
12	13		✓		37	07			✓
13	14		✓		38	04-096-02			✓
14	15		✓		39				
15	05-046-01		✓		40				
16	05-152-02		1/50 ✓		41				
17	05		1/50 ✓		42				
18	08		1/50 ✓		43				
19	05-163-01		1/10 ✓ cloudy		44				
20	05-164-03		1/5 ✓		45				
21	04		~~1/50~~	✓	46				
22	05-150-30		-	✓	47				
23	05-103-01		✓	✓	48				
24	02		✓	✓	49				
25	03		✓	✓	50				

Analyst: [signature] Date: 5/7/12/1315

MICROBAC (OVD)

SMARTCHEM REPORT (VER3.0.53)

NH3, TKN, NO3NO2 (MG/L N)

ALK (MG/L CaCO3) CL, SO4 (MG/L)

Method : WTPH - EPA 365,4 TOTAL PHOSPHORUS

Smp#/[Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag	Analysis Time
DIL-1	RBL	0.000	0.0156	0.00		12:32:17 PM
DIL-1	RBL	0.000	0.0188	0.00		12:32:35 PM
DIL-1	RBL	0.000	0.0196	0.00		12:33:30 PM
SR5-1	Std-1	0.010	0.0007	0.00		12:33:47 PM
SR5-2	Std-2	0.200	0.0335	0.00		12:34:42 PM
SR5-3	Std-3	0.500	0.0810	0.00		12:34:59 PM
SR5-4	Std-4	1.000	0.1528	0.00		12:35:54 PM
SR5-5	Std-5	1.500	0.2181	0.00		12:36:11 PM
ST-1	Std-6	2.000	0.2948	0.00		12:37:06 PM
1	ICV 1.5	1.358	0.2014	0.00		12:37:23 PM
2	WG397261-01 BLK	-0.009	0.0024	0.00	LL	12:38:18 PM
3	WG397261-02 LCS	0.870	0.1304	0.00		12:38:35 PM
4	L12050150-30	1.029	0.1535	0.00		12:39:30 PM
5	L12050164-04	0.870	0.1304	0.00		12:39:47 PM
6	L12050103-01	0.097	0.0179	0.00		12:40:42 PM
7	L12050103-02	0.141	0.0243	0.00		12:40:59 PM
8	L12050103-03	0.080	0.0154	0.00		12:41:54 PM
9	L12050011-01	0.021	0.0068	0.00		12:42:12 PM
10	L12050011-03	0.056	0.0118	0.00		12:43:06 PM
ST-2	CCV (1 mg/L)	0.992	0.1482	99.23		12:43:24 PM
ST-3	CCB (0 mg/L)	0.013	0.0056	0.00		12:44:18 PM
11	L12050140-02	1.001	0.1494	0.00		12:44:36 PM
12	L12050050-01	-0.050	-0.0035	0.00	INV,><,LL	12:45:30 PM
13	L12050050-03	-0.076	-0.0073	0.00	INV,><,LL	12:45:48 PM
14	L12050050-05	0.302	0.0477	0.00		12:46:42 PM
15	L12050050-07	-0.034	-0.0012	0.00	INV,><,LL	12:47:00 PM
16	L12050096-02 (2)	1.557	0.2304	0.00		12:47:54 PM
17	WG397261-04 DUP	0.098	0.0180	0.00		12:48:12 PM
18	WG397261-05 MS	0.953	0.1424	0.00		12:49:06 PM
19	WG397261-06	0.132	0.0229	0.00		12:49:24 PM
20	WG397261-07 MS	1.116	0.1662	0.00		12:50:18 PM
ST-2	CCV (1 mg/L)	0.995	0.1486	99.50		12:50:36 PM

Report Date :05/08/2012 **Run Date :5/8/2012** **Operator : WESTCO** **Plan # :20120508004**

Plan Description : PHOS-A-DIH/5/8/2012

MICROBAC (OVD)
SMARTCHEM REPORT (VER3.0.53)
NH3, TKN, NO3NO2 (MG/L N)
ALK (MG/L CaCO3) CL, SO4 (MG/L)

Method : WTPH - EPA 365.4 TOTAL PHOSPHORUS

Smp#/[Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag	Analysis Time
ST-3	**CCB (0 mg/L)**	**0.023**	**0.0071**	**0.00**		**12:51:30 PM**

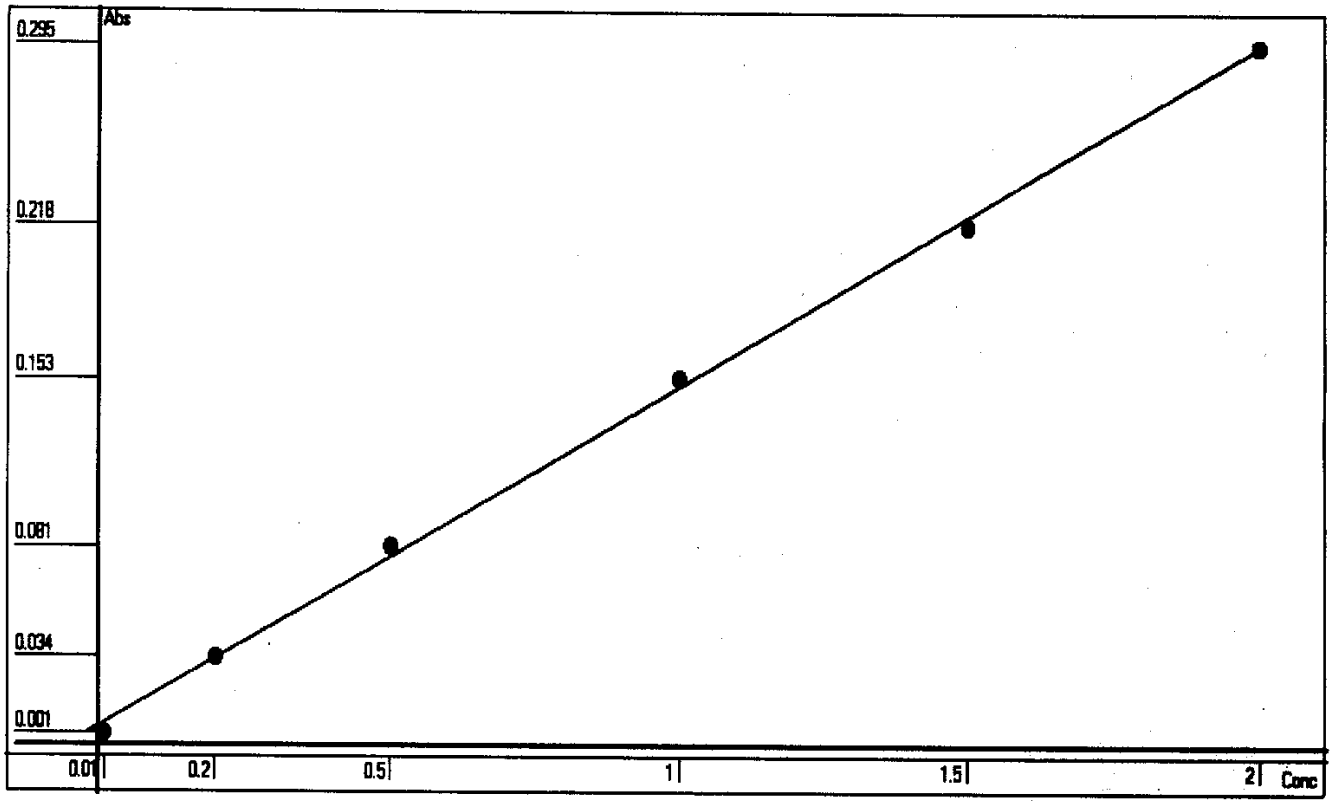
Report Date :05/08/2012 **Run Date :5/8/2012** **Operator : WESTCO** **Plan # :20120508004**

Plan Description : PHOS-A-DIH/5/8/2012

Calibrant Report - WTPH -

Calib Lot #:010104 Exp Date:6/18/2020 User:MICROBAC

Plan # : 20120508004 Description : [PHOS-A-DIH/5/8/2012]



Point	OD	Conc	Recalc Conc	% Error
1	0.0007	0.01	-0.0207	-307.00
2	0.0335	0.2	0.2046	2.30
3	0.0810	0.5	0.5308	6.16
4	0.1528	1	1.0239	2.39
5	0.2181	1.5	1.4724	-1.84
6	0.2948	2	1.9992	-0.04

Conc= +6.868*Abso -0.0255 R^2=0.9989

RBL
0.0192
0

Report Date 5/8/2012 Run Date 5/8/2012

2.4.4 Sulfate Data

2.4.4.1 Summary Data

Login Number: L12050011
Department: Conventionals
Analyst: Deanna Hesson

METHOD

Analysis EPA 375.4/SM426C(15th ed) (Sulfate)

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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: 46370
Approved By: Deanna Hesson

Microbac

Lab Report #: L12050011
Lab Project #: 2736.061
Project Name: DOW WATERLOO GW
Lab Contact: Kathy Albertson

Certificate of Analysis

Sample #:	L12050011-01	**PrePrep Method:**	N/A	**Instrument:**	SMARTCHEM
Client ID:	MW-29-043012	**Prep Method:**	375.4	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	375.4	**Cal Date:**	05/03/2012 07:30
Workgroup #:	WG396805	**Analyst:**	DIH	**Run Date:**	05/03/2012 07:49
Collect Date:	04/30/2012 13:07	**Dilution:**	20	**File ID:**	SC120503001.040
Sample Tag:	DL01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	459		100	50.0

Sample #:	L12050011-03	**PrePrep Method:**	N/A	**Instrument:**	SMARTCHEM
Client ID:	DUP-GW-043012	**Prep Method:**	375.4	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	375.4	**Cal Date:**	05/03/2012 07:30
Workgroup #:	WG396805	**Analyst:**	DIH	**Run Date:**	05/03/2012 08:08
Collect Date:	04/30/2012 14:00	**Dilution:**	20	**File ID:**	SC120503001.059
Sample Tag:	DL01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	428		100	50.0

2.4.4.2 QC Summary Data

Example Calculations for Visible Spectrophotometric Methods

Linear Calibration Model

Step 1 - Retrieve Curve Data from ICAL

m = slope of the linear equation
b = intercept from the linear equation
y = instrument response as absorbance or OD
x = concentration of analyte (mg/L)
y = mx + b

Step 2: Calculate the instrument concentration, x

Where:

x = (y - b)/m

Step 3: Solve for analyte concentration in sample, Cx

Cx = (x) (D)

Example Calculation (LCS):

Value of m from plot:	7.809	
Value of b from plot:	0.0004135	
Absorbance of unknown from quantitation report (y):	0.31	
Calculated concentration (x):	0.03964483	
Dilution factor (D):	1.00	
Concentration of analyte in sample, Cy:	0.0396	mg/L

SmartChem Autoanalyzer - Quadratic Calibration for Chloride and Sulfate

Step 1 - Retrieve Curve Data from Smartchem ICAL

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

x = instrument response as absorbance or OD

y = concentration of analyte (mg/L)

Step 2: Calculate the instrument concentration, y

Where:

y = Ax^2 + Bx + C

Step 3: Solve for analyte concentration in sample, Cy

Cy = (y) (D)

Example Calculation (LCS):

Value of A from plot:	101.2796	
Value of B from plot:	318.9056	
Value of C from plot:	-2.2712	
Absorbance of unknown from quantitation report (x):	0.1583	
Calculated concentration (y):	50.7495108	
Dilution factor (D):	1.00	
Concentration of analyte in sample, Cy:	50.75	mg/L

Microbac Laboratories Inc.

Data Checklist

Date: 03-MAY-2012
Analyst: DIH
Analyst: NA
Method: SO4
Instrument: SC
Curve Workgroup: NA
Runlog ID:
Analytical Workgroups: WG396835 WG396805

Calibration/Linearity	5/3/2012
Second Source Check	X
ICV/CCV (std)	X
ICB/CCB	X
Blank	X
LCS/LCS Dup	X
MS/MSD	X
Duplicate	X
Upload Results	X
Client Forms	X
QC Violation Sheet	X
Case Narratives	X
Signed Raw Data	X
STD/LCS on benchsheet	X
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	DIH
Secondary Reviewer	DIH
Comments	

Primary Reviewer:
03-MAY-2012

Secondary Reviewer:
05-MAY-2012

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-05-2012 11:57:07

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 375.4 AAB#: WG396805

Login Number: L12050011

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
MW-29-043012	01	04/30/12							28		05/03/12	2.8	28	
DUP-GW-043012	03	04/30/12							28		05/03/12	2.8	28	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2401475
Report generated 05/03/2012 15:22

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12050011
Blank File ID: SC120503001.010
Prep Date: 05/03/12 07:31
Analyzed Date: 05/03/12 07:31
Analyst: DIH

Work Group: WG396805
Blank Sample ID: WG396805-01
Instrument ID: SMARTCHEM
Method: 375.4

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG396805-02	SC120503001.011	05/03/12 07:31	01
LCS2	WG396805-03	SC120503001.012	05/03/12 07:32	01
DUP	WG396805-05	SC120503001.031	05/03/12 07:43	01
MW-29-043012	L12050011-01	SC120503001.040	05/03/12 07:49	DL01
DUP-GW-043012	L12050011-03	SC120503001.059	05/03/12 08:08	DL01

Report Name: BLANK_SUMMARY
PDF File ID: 2401476
Report generated 05/03/2012 15:22

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050011 Prep Date: 05/03/12 07:31 Sample ID: WG396805-01
Instrument ID: SMARTCHEM Run Date: 05/03/12 07:31 Prep Method: 375.4
File ID: SC120503001.010 Analyst: DIH Method: 375.4
Workgroup (AAB#): WG396805 Matrix: Water Units: mg/L
Contract #: Cal ID: SMARTC-03-MAY-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Sulfate	2.50	5.00	2.50	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: 2401477
03-MAY-2012 15:22

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050011 Analyst: DIH Prep Method: 375.4
Instrument ID: SMARTCHEM Matrix: Water Method: 375.4
Workgroup (AAB#): WG396805 Units: mg/L
QC Key: WATERLOO Lot #: STD51193

Sample ID: WG396805-02 LCS File ID: SC120503001.011 Run Date: 05/03/2012 07:31
Sample ID: WG396805-03 LCS2 File ID: SC120503001.012 Run Date: 05/03/2012 07:32

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Sulfate	20.0	19.6	98.1	20.0	19.7	98.7	0.673	85 - 115	10	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 2401478
Report generated: 05/03/2012 15:22

2.4.4.3 Raw Data

WORKGROUP: WG396805

396835

SMARTCHEM RUN LOG

Daily Check

- [x] Lamp On
- [x] Probe Rinse Full
- [x] DI Water > ½ Full
- [x] Wash Solution > ½ Full
- [ ] NO3 Reagent bottle connected / purged
- [ ] NO3 pH adj to pH 5-9
- [x] WBL Run
- [x] Reagents Full
- [x] Dilution H_2O Full
- [x] Waste Container Check

Syringe filter lot # _____

1) **Workgroup** _____
Plan # 20120503a1
2) **Workgroup** _____
Plan # _____
3) **Workgroup** _____
Plan # _____

	Analyte	1	2	3
		SO4		
		Dilution		
SC Prepared Curve				
Position				
1-1	ICV 30			
1-2	BLK			
1-3	LCS 20			
1-4	LCSDUP			
1-5	04-835-02	1/500	color	
1-6	06	1/100	↓	
1-7	04-844-01	1/4		
1-8	03	~~1/5~~	1/2	
1-9	05	~~1/4~~	1/2	
1-10	05-044-02	1/500	color	
1-11	06	1/100	↓	
1-12	04-898-01	1/100	color	
1-13	03	~~1/100~~	1/20	
1-14	05	1/100		
1-15	08	1/10		
1-16	10	1/50	color	
1-17	12	1/10		
1-18	04-928-01	~~1/2~~	–	
1-19	DUP 01	~~1/2~~	–	
1-20	MS 08	~~1/2~~	–	
1-21	MSD 10	~~1/2~~	–	
1-22	03	1/3		
2-1	04-963-01		1/2	
2-2	03	1/2		
2-3	07	1/3		

Position	Analyte	1	2	3
2-4	05-011-01	1/20 ~~auto 1/2~~		
2-5	03	1/10 ~~auto 1/2~~		
2-6	BLK			
2-7	LCS			?
2-8	LCSDUP			?
2-9	05-050-01	~~1/8~~	1/4	
2-10	03	1/5		
2-11	05	1/10		
2-12	07	~~1/5~~	1/4	
2-13	DUP	~~1/5~~	1/4	
2-14	MS ↓	~~1/5~~	1/4	
2-15	RR LCS			
2-16	RR BLK			
2-17	RR LCS			
2-18	RR LCS			
2-19				
2-20				
2-21				
2-22				
2-23				
2-24				
2-25				
2-26				
3-1				
3-2				

NOTES:
* Run NO2 std on NO3 runs
* LCS/LCS Dup all parameters
*MS(10% sample): NO3, TKN, NH3

~~*poured out NO3 LCS for 2nd wg + rerun~~ 5/3/12

DCN#90728

SMARTCHEM RUN LOG

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

Analyte		1	2	3
Position				
3-16				
3-17				
3-18				
3-19				
3-20				
3-21				
3-22				
3-23				
3-24				
3-25				
3-26				
3-27				
3-28				

- [ ] Chloride — EPA 325.2/SM 4500-Cl⁻ E
- [x] Sulfate — EPA 375.4/SM 426C(15th)
- [ ] Alkalinity — EPA 310.2
- [ ] Nitrate-Nitrite — EPA 353.2/SM 4500-NO3 F
- [ ] Ammonia — EPA 350.1/SM 4500-NH3 B
- [ ] TKN — EPA 351.2
- [ ] Phos — EPA 365.4

Analyte	504		Reagents
SOP & Revision	R3754 16		R6f17164
Curve Stock (SC made)	std50590		R6f16922
Curve ID (user made)			
ICV	std51192		
CCV	std51191		
LCS	std51193		
MS	std 49132 Dilution 0.1/10 (1000) = 10		

Comments: _____

Analyst: Deanne Hesson Date: 5/3/12

DCN#90728

MICROBAC (OVD)

SMARTCHEM REPORT (VER3.0.53)

NH3, TKN, NO3NO2 (MG/L N)

ALK (MG/L CaCO3) CL, SO4 (MG/L)

Method : WSO4 - EPA 375.4/SM 426 C (15TH)

Smp#/[Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag	Analysis Time
DIL-1	RBL	0.00	0.0032	0.00		7:24:04 AM
DIL-1	RBL	0.00	0.0017	0.00		7:24:22 AM
DIL-1	RBL	0.00	0.0016	0.00		7:25:16 AM
DIL-1	Std-1	0.00	0.0003	0.00		7:25:34 AM
SR5-1	Std-2	5.00	0.0224	0.00		7:26:28 AM
SR5-2	Std-3	10.00	0.0542	0.00		7:26:47 AM
SR5-3	Std-4	15.00	0.0853	0.00		7:27:40 AM
SR5-4	Std-5	20.00	0.1068	0.00		7:27:58 AM
SR5-5	Std-6	25.00	0.1292	0.00		7:28:52 AM
SR5-6	Std-7	30.00	0.1508	0.00		7:29:10 AM
SR5-7	Std-8	35.00	0.1649	0.00		7:30:04 AM
1	ICV 30	29.90	0.1481	0.00		7:30:22 AM
2	WG396805-01 BLK	0.59	-0.0013	0.00	INV,><	7:31:16 AM
3	WG396805-02 LCS	19.61	0.1047	0.00		7:31:34 AM
4	WG396805-03 LCSDUP	19.74	0.1053	0.00		7:32:28 AM
R-3	CCV (30 mg/L)	30.33	0.1498	101.11		7:32:46 AM
5	L12040835-02 (500)	23.42	0.1215	0.00		7:33:40 AM
6	L12040835-06 (100)	4.30	0.0238	0.00		7:33:58 AM
7	L12040844-01 (4)	19.63	0.1048	0.00		7:34:52 AM
8	L12040844-03 (2)	28.24	0.1415	0.00		7:35:10 AM
R-3	CCV (30 mg/L)	30.16	0.1491	100.52		7:36:04 AM
9	L12040844-05 (2)	26.96	0.1363	0.00		7:36:22 AM
10	L12050044-02 (500)	22.98	0.1196	0.00		7:37:16 AM
11	L12050044-06 (100)	3.52	0.0188	0.00		7:37:34 AM
12	L12040898-01 (100)	7.36	0.0423	0.00		7:38:28 AM
R-3	CCV (30 mg/L)	29.04	0.1447	96.81		7:38:46 AM
13	L12040898-03 (20)	12.97	0.0728	0.00		7:39:40 AM
14	L12040898-05 (100)	14.38	0.0799	0.00		7:39:58 AM
15	L12040898-08 (10)	25.84	0.1317	0.00		7:40:53 AM
16	L12040898-10 (50)	10.14	0.0579	0.00		7:41:11 AM
R-3	CCV (30 mg/L)	29.40	0.1461	97.98		7:42:05 AM
17	L12040898-12 (10)	28.19	0.1413	0.00		7:42:23 AM

Report Date :05/03/2012 **Run Date :5/3/2012** **Operator : WESTCO** **Plan # :20120503001**

Plan Description : SO4-A-DIH/5/3/2012

MICROBAC (OVD)

SMARTCHEM REPORT (VER3.0.53)

NH3, TKN, NO3NO2 (MG/L N)

ALK (MG/L CaCO3) CL, SO4 (MG/L)

Method : WSO4 - EPA 375.4/SM 426 C (15TH)

Smp#/[Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag	Analysis Time
18	L12040928-01	9.45	0.0541	0.00		7:43:17 AM
19	WG396805-05 DUP	8.96	0.0514	0.00		7:43:35 AM
20	L12040928-08 MS	22.06	0.1156	0.00		7:44:29 AM
R-3	CCV (30 mg/L)	29.40	0.1461	97.98		7:44:47 AM
21	L12040928-10 MSD	21.70	0.1140	0.00		7:45:41 AM
22	L12040928-03 (3)	33.26	0.1611	0.00		7:45:59 AM
23	L12040963-01 (2)	23.31	0.1210	0.00		7:46:53 AM
24	L12040963-03 (2)	34.94	0.1674	0.00	><	7:47:11 AM
R-3	CCV (30 mg/L)	28.94	0.1443	96.47		7:48:10 AM
25	L12040963-07 (3)	21.54	0.1133	0.00		7:48:28 AM
26	L12050011-01 (20)	22.96	0.1195	0.00		7:49:20 AM
27	L12050011-03 (10)	45.76 X	0.2056	0.00	><,LH	7:49:38 AM
28	WG396835-01 BLK	0.53	-0.0017	0.00	INV,><	7:50:32 AM
R-3	CCV (30 mg/L)	31.02	0.1525	103.42		7:50:50 AM
29	WG396835-02 LCS	19.77	0.1054	0.00		7:51:44 AM
30	WG396835-03 LCSDUP	19.20	0.1028	0.00		7:52:02 AM
31	L12050050-01 (4)	20.88	0.1104	0.00		7:52:56 AM
32	L12050050-03 (5)	29.75	0.1475	0.00		7:53:14 AM
R-3	CCV (30 mg/L)	29.62	0.1470	98.74		7:54:08 AM
33	L12050050-05 (10)	26.47	0.1343	0.00		7:54:26 AM
34	L12050050-07 (4)	18.15	0.0980	0.00		7:55:20 AM
35	WG396835-05 (4) DUP	18.20	0.0982	0.00		7:55:38 AM
36	WG396835-06 (4) MS	14.69	0.0814	0.00		7:56:32 AM
R-3	CCV (30 mg/L)	28.69	0.1433	95.64		7:56:50 AM
37	ID 37	0.43 X	-0.0024	0.00	INV,><	7:57:44 AM
38	ID 38	0.57 X	-0.0014	0.00	INV,><	7:58:02 AM
39	ID 39	0.59 X	-0.0013	0.00	INV,><	7:58:56 AM
40	ID 40	0.54 X	-0.0016	0.00	INV,><	7:59:14 AM
R-3	CCV (30 mg/L)	29.80	0.1477	99.33		8:00:08 AM
27-[1/2]	L12050011-03 (10)	42.80	0.1127	0.00	LH	8:08:06 AM
R-3	CCV (30 mg/L)	30.00	0.1485	100.01		8:08:06 AM

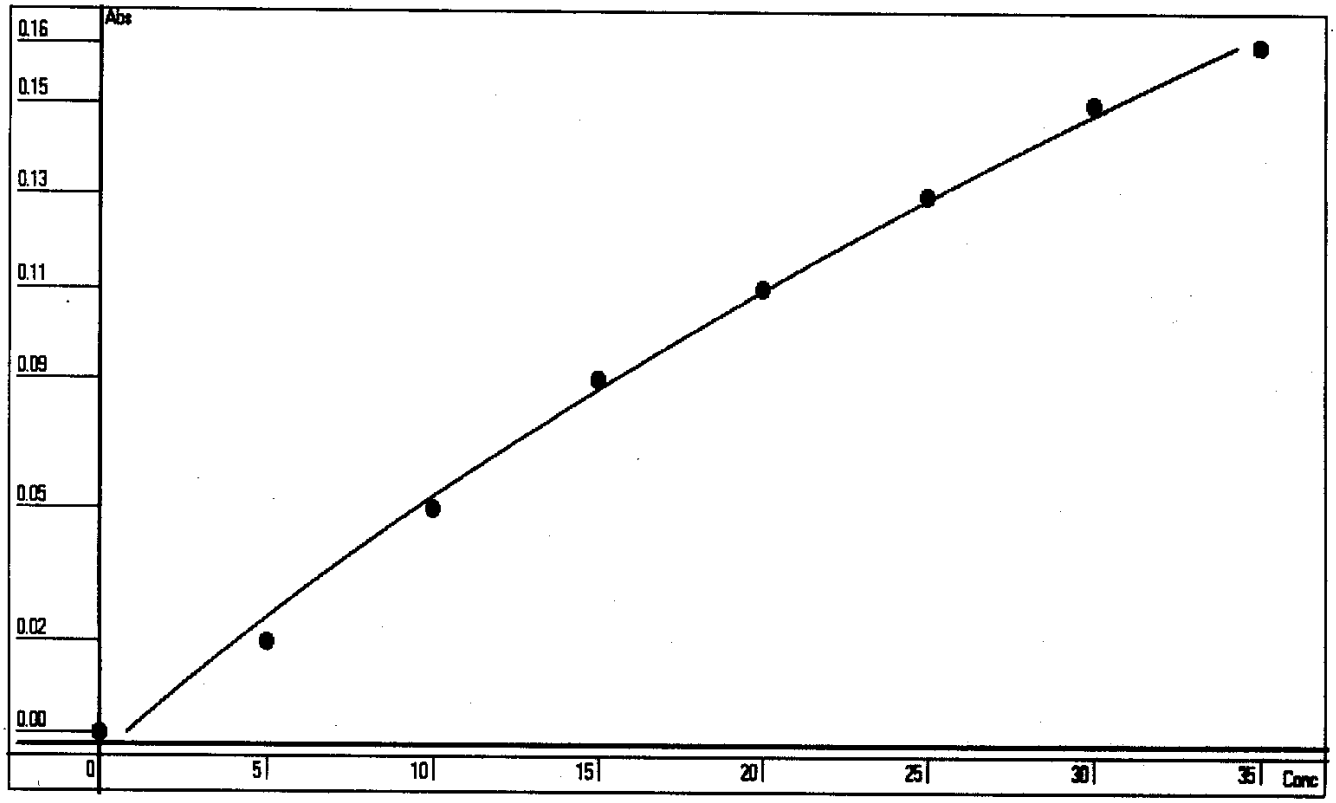
Report Date :05/03/2012 **Run Date :5/3/2012** **Operator : WESTCO** **Plan # :20120503001**

Plan Description : SO4-A-DIH/5/3/2012

Calibrant Report - WSO4 -

Calib Lot #:010104 Exp Date:6/17/2020 User:MICROBAC

Plan # : 20120503001 Description : [SO4-A-DIH/5/3/2012]



Point	OD	Conc	Recalc Conc	% Error
1	0.0003	0	0.8019	80.19
2	0.0224	5	4.0869	-18.26
3	0.0542	10	9.4728	-5.27
4	0.0853	15	15.4920	3.28
5	0.1068	20	20.0880	0.44
6	0.1292	25	25.2544	1.02
7	0.1508	30	30.6017	2.01
8	0.1649	35	34.2858	-2.04

Conc= +384.4338*Abso^2 +139.9174*Abso +0.7599 R^2=0.9972

RBL
0.0017
0

Report Date 5/3/2012 Run Date 5/3/2012

2.4.5 Total Organic Carbon Data

2.4.5.1 Summary Data

Login Number: L12050011
Department: Conventionals
Analyst: Jeremy Kinney

METHOD

Analysis Water: EPA 415.1/SM5310C/SW846 9060 (Total Organic Carbon)
Soil: Lloyd-Khan Methodology

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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: 46372
Approved By: Deanna Hesson

Microbac

Lab Report #: L12050011
Lab Project #: 2736.061
Project Name: DOW WATERLOO GW
Lab Contact: Kathy Albertson

Certificate of Analysis

Sample #:	L12050011-01	**PrePrep Method:**	N/A	**Instrument:**	TOC-VWP
Client ID:	MW-29-043012	**Prep Method:**	415.1	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	415.1	**Cal Date:**	12/06/2011 09:40
Workgroup #:	WG397189	**Analyst:**	JBK	**Run Date:**	05/08/2012 11:12
Collect Date:	04/30/2012 13:07	**Dilution:**	1	**File ID:**	TC05072012.037
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		2.70		1.00	0.500

Sample #:	L12050011-03	**PrePrep Method:**	N/A	**Instrument:**	TOC-VWP
Client ID:	DUP-GW-043012	**Prep Method:**	415.1	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	415.1	**Cal Date:**	12/06/2011 09:40
Workgroup #:	WG397189	**Analyst:**	JBK	**Run Date:**	05/08/2012 11:26
Collect Date:	04/30/2012 14:00	**Dilution:**	1	**File ID:**	TC05072012.038
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		3.03		1.00	0.500

2.4.5.2 QC Summary Data

Total Organic Carbon Example Calculations
(Direct Readout Parameter)

(Readout)/(dilution) = mg/L

where:

Readout = direct readout from the instrument
dilution = dilution in decimal form (ex. 1/5 dilution = 0.2)

Microbac Laboratories Inc.

Data Checklist

Date: 07-MAY-2012
Analyst: JBK
Analyst: NA
Method: TOC
Instrument: TOC
Curve Workgroup: NA
Runlog ID:
Analytical Workgroups: WG397188 WG397189 WG397191

Calibration/Linearity	12/06/2011
Second Source Check	X
ICV/CCV (std)	X
ICB/CCB	X
Blank	X
LCS/LCS Dup	X
MS/MSD	X
Duplicate	X
Upload Results	X
Client Forms	X
QC Violation Sheet	X
Case Narratives	
Signed Raw Data	X
STD/LCS on benchsheet	X
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	JBK
Secondary Reviewer	DIH
Comments	

Primary Reviewer:
09-MAY-2012

Secondary Reviewer:
09-MAY-2012

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-09-2012 18:22:50

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 415.1 AAB#: WG397189

Login Number: L12050011

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
MW-29-043012	01	04/30/12							28		05/08/12	7.9	28	
DUP-GW-043012	03	04/30/12							28		05/08/12	7.9	28	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2408539
Report generated 05/09/2012 18:08

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12050011
Blank File ID: TC05072012.034
Prep Date: 05/08/12 10:35
Analyzed Date: 05/08/12 10:35
Analyst: JBK

Work Group: WG397189
Blank Sample ID: WG397189-01
Instrument ID: TOC-VWP
Method: 415.1

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG397189-02	TC05072012.035	05/08/12 10:46	01
LCS2	WG397189-03	TC05072012.036	05/08/12 10:59	01
MW-29-043012	L12050011-01	TC05072012.037	05/08/12 11:12	01
DUP-GW-043012	L12050011-03	TC05072012.038	05/08/12 11:26	01
DUP	WG397189-05	TC05072012.059	05/08/12 15:44	01

Report Name: BLANK_SUMMARY
PDF File ID: 2408540
Report generated 05/09/2012 18:08

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050011 Prep Date: 05/08/12 10:35 Sample ID: WG397189-01
Instrument ID: TOC-VWP Run Date: 05/08/12 10:35 Prep Method: 415.1
File ID: TC05072012.034 Analyst: JBK Method: 415.1
Workgroup (AAB#): WG397189 Matrix: Water Units: mg/L
Contract #: Cal ID: TOC-VW-06-DEC-11

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Total Organic Carbon	0.500	1.00	0.500	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: 2408541
09-MAY-2012 18:08

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050011 Analyst: JBK Prep Method: 415.1
Instrument ID: TOC-VWP Matrix: Water Method: 415.1
Workgroup (AAB#): WG397189 Units: mg/L
QC Key: WATERLOO Lot #: STD50986

Sample ID: WG397189-02 LCS File ID: TC05072012.035 Run Date: 05/08/2012 10:46
Sample ID: WG397189-03 LCS2 File ID: TC05072012.036 Run Date: 05/08/2012 10:59

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Total Organic Carbon	25.0	22.9	91.6	25.0	22.8	91.0	0.570	85 - 115	15	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 2408542
Report generated: 05/09/2012 18:08

2.4.5.3 Raw Data

WG384145

TC/TIC CURVES

Total Organic Carbon

MAKE DAILY

CCV (TOC): _____ (5/200)(1000) = 25mg/L

LCS (TOC): _____ (5/200)(1000) = 25mg/L

CCV (TIC): _____ (5/200)(1000) = 25mg/L

See Below

MS (TOC): _____

Calibration Curve Date: _____

Reagent: RGT 16590 RGT 16642

☑ SM5310-C : Matrix 2 WG_____

☐ EPA 415.1/9060A(mod): Matrix 1 WG_____ WG_____

SOP: K 4151 Rev. 13

Instrument: Shimadza TOC-VWP/ASI

DAILY CHECK

☑ drain reservoir filled
☑ ASI water bottle full
☑ dilution water bottle full
☑ 3rd bottle full
☑ sufficient gas
☑ sufficient persulfate
☑ sufficient acid
☑ waste container

Position	Sample ID	Dilution	Position	Sample ID	Dilution	Position	Sample ID	Dilution
1	TC Curve		26	TC Curve		51		
2	TIC Curve		27	STD 47222		52		
3	TC ICV		28			53	See SOP for	
4	TIC ICV		29	TIC Curve		54	Curve points	
5			30	STD 47189		55		
6			31			56		
7			32			57		
8			33			58		
9			34			59		
10			35			60		
11			36			61		
12			37	TC ICV		62		
13			38	STD 47544		63	5/200(1000)	
14			39			64	= 25 mg/L	
15			40	TIC ICV		65		
16			41	STD 47190		66		
17			42			67		
18			43			68		
19	All points analyzed		44			69		
20	in duplicate		45			70		
21			46			71		
22			47			72		
23			48			73		
24			49			74		
25			50			75		

Analyst: _____ Date/Time: 12/04/2011

DCN#89227

C:\TOC3201\Data\CURVES-12-06-2011.t32

	Analyst	Sample Name	Result	Status	Date / Time	Vial
1	TC	TC CURVE		Complet	12/06/2011 09:46:27 AM	0, 1, 2, 3, 4, 5
2	IC	TIC CURVE		Complet	12/06/2011 05:00:56 PM	0, 6, 7, 8, 9, 10
3	TC	TC ICV	✓ 93.08% TC:23.27mg/L	Complet	12/06/2011 05:13:38 PM	11
4	IC	TIC ICV	✓ 104.84% IC:26.21mg/L	Complet	12/06/2011 05:25:50 PM	12

12/07/2011 08:14:31 AM 1/1

Instr.Information

System TOCVW ASI
Detector Wet Chemical

Cal. Curve

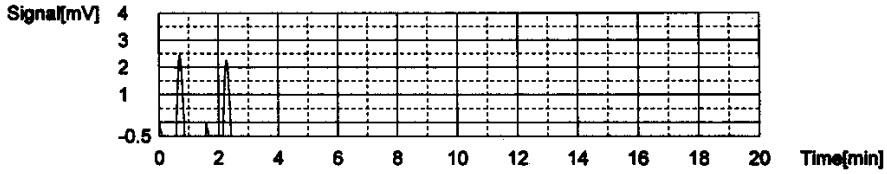
Sample Name: TC CURVE
Sample ID: Untitled
Cal. Curve: TCCURVE-12-06-2011.2011_12_06_08_40_57.cal
Status Completed

Type	Anal.
Standard	TC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	6.123	500uL	1	*******		12/06/2011 08:44:40 AM
2	5.308	500uL	1	*******		12/06/2011 08:48:33 AM

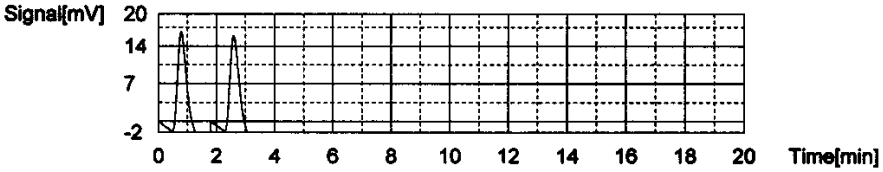
Acid Add. 0.000%
Mean Area 5.716



Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	39.77	500uL	1	*******		12/06/2011 08:54:04 AM
2	39.18	500uL	1	*******		12/06/2011 08:58:10 AM

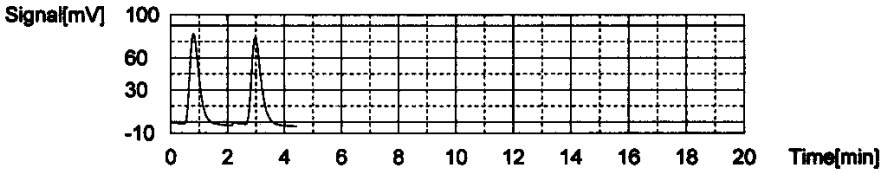
Acid Add. 0.000%
Mean Area 39.48



Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	191.7	500uL	1	*******		12/06/2011 09:04:17 AM
2	189.4	500uL	1	*******		12/06/2011 09:08:49 AM

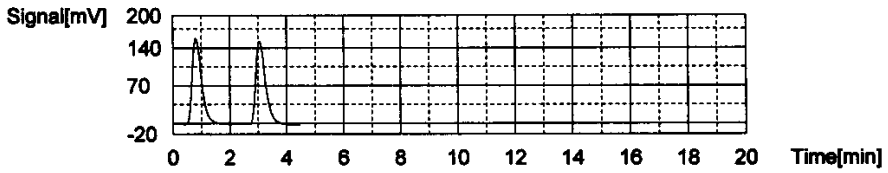
Acid Add. 0.000%
Mean Area 190.6



Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	367.0	500uL	1	*******		12/06/2011 09:15:00 AM
2	367.7	500uL	1	*******		12/06/2011 09:20:26 AM

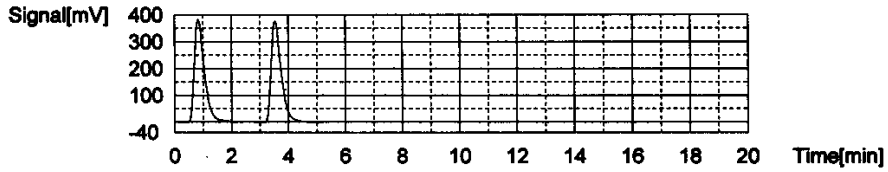
Acid Add. 0.000%
Mean Area 367.4



Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	938.7	500uL	1	*******		12/06/2011 09:27:05 AM
2	928.1	500uL	1	*******		12/06/2011 09:31:51 AM

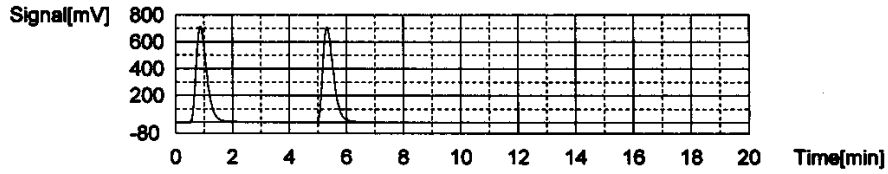
Acid Add. 0.000%
Mean Area 933.4



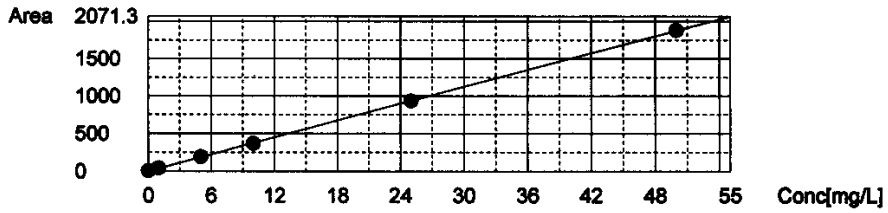
Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	1902	500uL	1	*******		12/06/2011 09:40:15 AM
2	1864	500uL	1	*******		12/06/2011 09:46:27 AM

Acid Add. 0.000%
Mean Area 1883



Slope: 37.57
Intercept 0.09333
r^2 0.999936 ✓
Zero Shift No



Cal. Curve

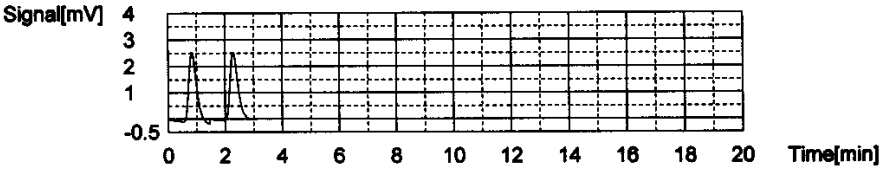
Sample Name: TIC CURVE
Sample ID: Untitled
Cal. Curve: TICCURVE-12-06-2011B.2011_12_06_15_47_44.cal
Status Completed

Type	Anal.
Standard	IC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	5.003	500uL	1	*******		12/06/2011 03:51:39 PM
2	4.762	500uL	1	*******		12/06/2011 03:55:32 PM

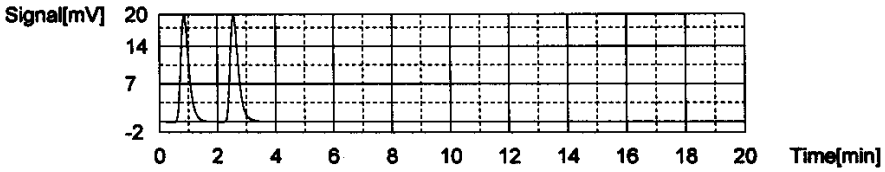
Acid Add. 10.00%
Mean Area 4.883



Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	38.88	500uL	1	*******		12/06/2011 04:02:55 PM
2	38.91	500uL	1	*******		12/06/2011 04:07:20 PM

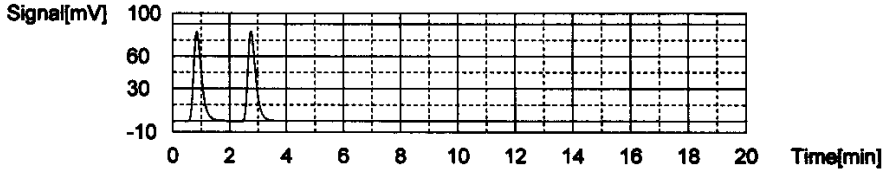
Acid Add. 10.00%
Mean Area 38.90



Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	160.3	500uL	1	*******		12/06/2011 04:15:09 PM
2	162.3	500uL	1	*******		12/06/2011 04:19:53 PM

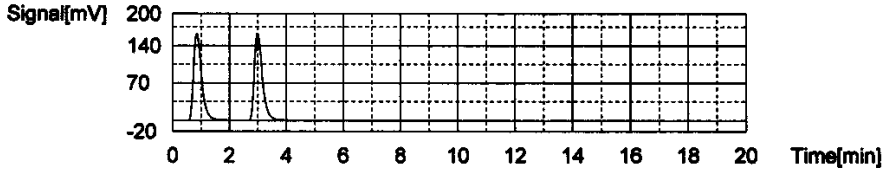
Acid Add. 10.00%
Mean Area 161.3



Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	317.9	500uL	1	*******		12/06/2011 04:28:01 PM
2	319.9	500uL	1	*******		12/06/2011 04:33:00 PM

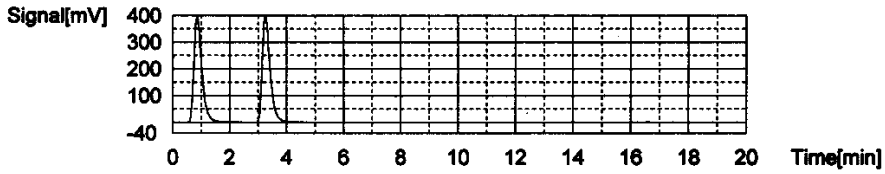
Acid Add. 10.00%
Mean Area 318.9



Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	765.1	500uL	1	*******		12/06/2011 04:41:31 PM
2	765.8	500uL	1	*******		12/06/2011 04:46:44 PM

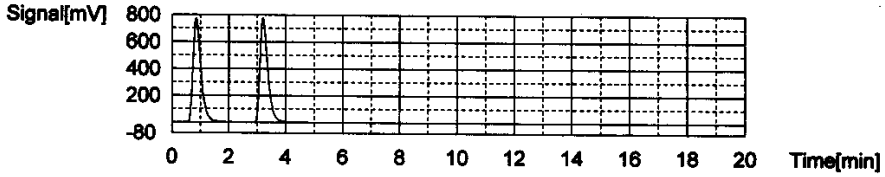
Acid Add. 10.00%
Mean Area 765.5



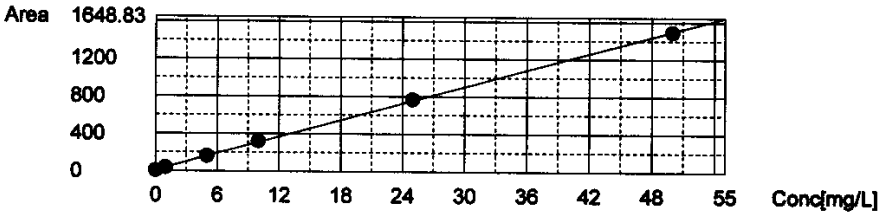
Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	1490	500uL	1	*******		12/06/2011 04:55:30 PM
2	1495	500uL	1	*******		12/06/2011 05:00:56 PM

Acid Add. 10.00%
Mean Area 1493



Slope: 29.72
Intercept 12.89
r^2 0.999826 ✓
Zero Shift No



Sample

Sample Name: TC ICV
Sample ID: Untitled
Origin: TCCURVE-12-06-2011.cal
Status Completed
Chk. Result

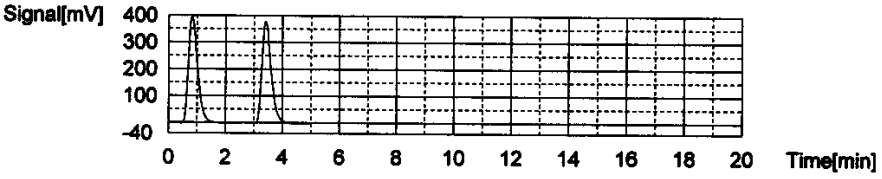
Type	Anal.	Dil.	Result
Unknown	TC	1.000	TC:23.27mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	889.3	23.67mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	12/06/2011 05:08:57 PM
2	859.5	22.87mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	12/06/2011 05:13:38 PM

Mean Area 874.4
Mean Conc. 23.27mg/L



Sample

Sample Name: TIC ICV
Sample ID: Untitled
Origin: TICCURVE-12-06-2011B.cal
Status Completed
Chk. Result

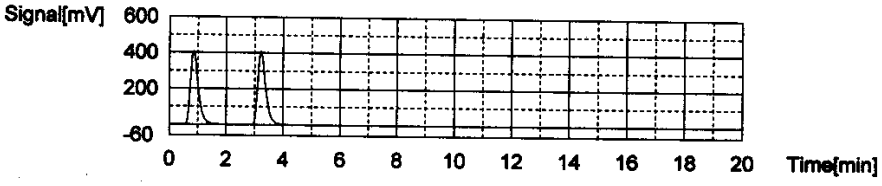
Type	Anal.	Dil.	Result
Unknown	IC	1.000	IC:26.21mg/L

1. Det

Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	788.9	26.11mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	12/06/2011 05:20:43 PM
2	794.9	26.31mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	12/06/2011 05:25:50 PM

Mean Area 791.9
Mean Conc. 26.21mg/L



WORKGROUP: WG397188
397189
397191

Total Organic Carbon

MAKE DAILY

CCV (TOC): STD 49750 (5/200)(1000) = 25mg/L

LCS (TOC): STD 50984 (5/200)(1000) = 25mg/L

CCV (TIC): STD 50244 (5/200)(1000) = 25mg/L

MS (TOC): STD 50984 0.4/40(1000)=10

Calibration Curve Date: 12/04/11

Reagent: RGT 17216 RGT17230

☑ SM5310-C : Matrix 2 WG 397191

☑ EPA 415.1/9060A(mod): Matrix 1 WG 397188 SOP: K 4151 Rev. 14

WG 397189 Instrument: Shimadza TOC-VWP/ASI

DAILY CHECK

☑ drain reservoir filled
☑ ASI water bottle full
☑ dilution water bottle full

☑ 3rd bottle full
☑ sufficient gas
☑ sufficient persulfate

☑ sufficient acid
☑ waste container

Position	Sample ID	Dilution
1	CCV 25	
2	TIC 25	
3	Blank	
4	LCS25	
5	LCSDup	
6	05-052-13	
7	-14	1/5
8	-15	
9	-16	
10	-17	1/5
11	05-059-01	1/50
12	-02	1/2
13	-03	1/25
14	CCV	
15	CCB	
16	05-059-04	1/5
17	-05	1/2
18	-06	1/3
19	-07	1/250
20	-08	
21	-09	1/25
22	-10	
23	-11	1/2
24	-12	1/25
25	-13	

CCV* → CCB

Position	Sample ID	Dilution
26	CCV	
27	CCB	
28	05-089-14	1/25
29	05-102-01	
30	Dup	
31	MS	
32	Blank	
33	LCS 25	
34	LCSDup	
35	05-011-01	
36	-03	
37	05-140-01	
38	CCV	
39	CCB	
40	05-140-02	
41	05-151-01	
42	-02	
43	-03	
44	-04	1/10
45	-05	1/3
46	-06	1/3
47	-07	1/15
48	-08	
49	-09	
50	CCV	

Position	Sample ID	Dilution
51	CCB	
52	05-151-10	1/10
53	-11	1/600
54	-12	
55	-13	1/25
56	-14	
57	Dup 140-02	
58	MS	
59	Blank	
60	LCS 25	
61	LCSDup	
62	CCV	
63	CCB	
64	05-119-01	
65	-02	
66	-03	
67	05-147-01	
68	-03	
69	05-148-01	
70	Dup 147-01	
71	MS	
~~72~~	~~CCV~~ 04-176-01	(32)
73	~~CCB~~ CCV	(1)
74	CCB	(0)
75		

Analyst: [signature] Date/Time: 5/7/12

* PC failure during analysis. PC repaired and analysis resumed.

DCN#90777

WORKGROUP: WG397188

Total Organic Carbon

MAKE DAILY

CCV (TOC): _____ (5/200)(1000) = 25mg/L

LCS (TOC): _____ (5/200)(1000) = 25mg/L

CCV (TIC): _____ (5/200)(1000) = 25mg/L

MS (TOC): _____

Calibration Curve Date: _____

Reagent: _____

☐ SM5310-C : Matrix 2 WG_____

☐ EPA 415.1/9060A(mod): Matrix 1 WG_____ SOP: K _____ Rev. _____

WG_____ Instrument: Shimadza TOC-VWP/ASI

DAILY CHECK

☐ drain reservoir filled
☐ ASI water bottle full
☐ dilution water bottle full

☐ 3rd bottle full
☐ sufficient gas
☐ sufficient persulfate

☐ sufficient acid
☐ waste container

Position	Sample ID	Dilution	Position	Sample ID	Dilution	Position	Sample ID	Dilution
1	05-052-13	1/10	26			51		
2	-14	1/2	27			52		
3	-17	1/5	28			53		
4	05-089-01	1/10	29			54		
5	-03	1/10	30			55		
6	-05	1/5	31			56		
7	-07	1/50	32			57		
8	05-157-08	1/3	33			58		
9	05-157-10	1/20	34			59		
10	-11	1/50	35			60		
11	CCV		36			61		
12	CCB		37			62		
13	05-220-01	1/100*	38			63		
14	CCV		39			64		
15	CCB		40			65		
16			41			66		
17			42			67		
18			43			68		
19			44			69		
20			45			70		
21			46			71		
22			47			72		
23			48			73		
24			49			74		
25			50			75		

Analyst: ABK (pg. 2) 5/8/12 Date/Time: _____

* 05-220-01: 5x is brine wash. Dil'n due to matrix interference. (Cl ≈ 115,000 ppm verified by HACH titrator strip)

DCN#90777

C:\TOC3201\Data\05-07-2012-JBK-TOC.t32

	Analysi	Sample Name	Result	Status	Date / Time	Vial
1	TOC	CCV 25	!!Error!! TOC:23.65mg/L TC:23.41mg/L IC:-0.2350mg/L	Completed	05/07/2012 04:45:42 F	1
2	TOC	TIC25	TOC:2.200mg/L TC:26.09mg/L IC:23.89mg/L	Completed	05/07/2012 04:58:55 F	2
3	TOC	WG397188-01 BLANK	!!Error!! TOC:0.4013mg/L TC:0.2483mg/L IC:-0.1530mg/	Completed	05/07/2012 05:07:42 F	0
4	TOC	WG397188-02 LCS25	!!Error!! TOC:25.57mg/L TC:25.30mg/L IC:-0.2649mg/L	Completed	05/07/2012 05:20:16 F	4
5	TOC	WG397188-03 LCSDU	!!Error!! TOC:25.49mg/L TC:25.23mg/L IC:-0.2649mg/L	Completed	05/07/2012 05:33:21 F	5
6	TOC		TOC:60.21mg/L TC:154.9mg/L IC:94.72mg/L	Completed	05/07/2012 05:50:25 F	6
7	TOC		TOC:15.37mg/L TC:51.58mg/L IC:36.21mg/L	Completed	05/07/2012 06:03:53 F	7
8	TOC	L12050052-15	TOC:5.612mg/L TC:25.79mg/L IC:20.17mg/L	Completed	05/07/2012 06:17:24 F	8
9	TOC	L12050052-16	TOC:4.911mg/L TC:27.28mg/L IC:22.37mg/L	Completed	05/07/2012 06:30:41 F	9
10	TOC		!!Error!! TOC:-8.489mg/L TC:107.0mg/L IC:115.5mg/L	Completed	05/07/2012 06:47:55 F	10
11	TOC		TOC:2.610mg/L TC:5.800mg/L IC:3.190mg/L	Completed	05/07/2012 07:00:26 F	11
12	TOC	L12050089-02 (2)	TOC:5.085mg/L TC:29.14mg/L IC:24.06mg/L	Completed	05/07/2012 07:13:44 F	12
13	TOC		TOC:5.432mg/L TC:7.762mg/L IC:2.330mg/L	Completed	05/07/2012 07:26:26 F	13
14	TOC	CCV	!!Error!! TOC:25.92mg/L TC:25.72mg/L IC:-0.2011mg/L	Completed	05/07/2012 07:38:51 F	14
15	TOC	CCB	!!Error!! TOC:0.3505mg/L TC:0.1932mg/L IC:-0.1573mg/	Completed	05/07/2012 07:47:56 F	0
16	TOC	L12050089-04 (5)	TOC:5.195mg/L TC:18.65mg/L IC:13.46mg/L	Completed	05/07/2012 08:00:50 F	16
17	TOC		TOC:26.78mg/L TC:70.29mg/L IC:43.51mg/L	Completed	05/07/2012 08:16:13 F	17
18	TOC	L12050089-06 (3)	TOC:14.49mg/L TC:46.50mg/L IC:32.00mg/L	Completed	05/07/2012 08:30:07 F	18
19	TOC		TOC:5.543mg/L TC:5.568mg/L IC:0.02571mg/L	Completed	05/07/2012 08:42:11 F	19
20	TOC		TOC:7.366mg/L TC:83.68mg/L IC:76.31mg/L	Completed	05/07/2012 08:56:58 F	20
21	TOC	CCV	!!Error!! TOC:23.58mg/L TC:23.38mg/L IC:-0.2035mg/L	Completed	05/08/2012 08:07:25 A	14
22	TOC	CCB	!!Error!! TOC:0.3802mg/L TC:0.2106mg/L IC:-0.1696mg/	Completed	05/08/2012 08:16:29 A	0
23	TOC	L12050089-09 (25)	TOC:4.500mg/L TC:4.852mg/L IC:0.3528mg/L	Completed	05/08/2012 08:28:37 A	21
24	TOC	L12050089-10	TOC:20.33mg/L TC:36.78mg/L IC:16.45mg/L	Completed	05/08/2012 08:42:24 A	22
25	TOC	L12050089-11 (2)	TOC:4.778mg/L TC:28.61mg/L IC:23.83mg/L	Completed	05/08/2012 08:55:36 A	23
26	TOC	L12050089-12 (25)	TOC:5.715mg/L TC:6.045mg/L IC:0.3302mg/L	Completed	05/08/2012 09:07:46 A	24
27	TOC	L12050089-13	TOC:2.920mg/L TC:10.01mg/L IC:7.093mg/L	Completed	05/08/2012 09:20:24 A	25
28	TOC	CCV	!!Error!! TOC:23.86mg/L TC:23.71mg/L IC:-0.1497mg/L	Completed	05/08/2012 09:32:57 A	26
29	TOC	CCB	!!Error!! TOC:0.3624mg/L TC:0.1918mg/L IC:-0.1706mg/	Completed	05/08/2012 09:41:56 A	0
30	TOC	L12050089-14 (25)	TOC:12.41mg/L TC:12.76mg/L IC:0.3480mg/L	Completed	05/08/2012 09:55:01 A	28
31	TOC	L12050102-01	!!Error!! TOC:0.6154mg/L TC:0.4045mg/L IC:-0.2110mg/	Completed	05/08/2012 10:06:25 A	29
32	TOC	WG397188-05 DUP	!!Error!! TOC:0.5737mg/L TC:0.3970mg/L IC:-0.1767mg/	Completed	05/08/2012 10:17:40 A	30
33	TOC	WG397188-06 MS	!!Error!! TOC:9.537mg/L TC:9.311mg/L IC:-0.2266mg/L	Completed	05/08/2012 10:29:55 A	31
34	TOC	WG397189-01 BLANK	!!Error!! TOC:0.3369mg/L TC:0.1595mg/L IC:-0.1773mg/	Completed	05/08/2012 10:38:59 A	0
35	TOC	WG397189-02 LCS25	!!Error!! TOC:22.89mg/L TC:22.67mg/L IC:-0.2153mg/L	Completed	05/08/2012 10:51:14 A	33
36	TOC	WG397189-03 LCSDU	!!Error!! TOC:22.76mg/L TC:22.54mg/L IC:-0.2130mg/L	Completed	05/08/2012 11:03:24 A	34
37	TOC	L12050011-01	TOC:2.700mg/L TC:7.660mg/L IC:4.960mg/L	Completed	05/08/2012 11:16:58 A	35
38	TOC	L12050011-03	TOC:3.031mg/L TC:8.382mg/L IC:5.350mg/L	Completed	05/08/2012 11:30:59 A	36
39	TOC	L12050140-01	TOC:3.200mg/L TC:4.216mg/L IC:1.017mg/L	Completed	05/08/2012 11:44:44 A	37
40	TOC	CCV	!!Error!! TOC:24.05mg/L TC:23.85mg/L IC:-0.1992mg/L	Completed	05/08/2012 11:57:03 A	38
41	TOC	CCB	!!Error!! TOC:0.3490mg/L TC:0.1688mg/L IC:-0.1802mg/	Completed	05/08/2012 12:06:05 F	0
42	TOC	L12050140-02	TOC:2.828mg/L TC:3.926mg/L IC:1.098mg/L	Completed	05/08/2012 12:19:29 F	40
43	TOC	L12050151-01	TOC:2.482mg/L TC:4.049mg/L IC:1.567mg/L	Completed	05/08/2012 12:31:45 F	41
44	TOC	L12050151-02	TOC:1.549mg/L TC:2.439mg/L IC:0.8894mg/L	Completed	05/08/2012 12:43:44 F	42
45	TOC	L12050151-03	TOC:1.369mg/L TC:2.482mg/L IC:1.113mg/L	Completed	05/08/2012 12:56:41 F	43
46	TOC	L12050151-04 (10)	TOC:5.868mg/L TC:10.14mg/L IC:4.274mg/L	Completed	05/08/2012 01:08:24 F	44
47	TOC	L12050151-05 (3)	TOC:9.318mg/L TC:10.06mg/L IC:0.7434mg/L	Completed	05/08/2012 01:20:56 F	45
48	TOC	L12050151-06 (3)	TOC:7.486mg/L TC:8.022mg/L IC:0.5365mg/L	Completed	05/08/2012 01:33:16 F	46
49	TOC	L12050151-07 (15)	TOC:5.720mg/L TC:5.773mg/L IC:0.05364mg/L	Completed	05/08/2012 01:45:10 F	47
50	TOC	L12050151-08	TOC:11.44mg/L TC:17.39mg/L IC:5.949mg/L	Completed	05/08/2012 01:57:53 F	48
51	TOC	L12050151-09	TOC:10.36mg/L TC:13.64mg/L IC:3.278mg/L	Completed	05/08/2012 02:10:20 F	49
52	TOC	CCV	!!Error!! TOC:23.39mg/L TC:23.21mg/L IC:-0.1860mg/L	Completed	05/08/2012 02:22:43 F	50
53	TOC	CCB	!!Error!! TOC:0.3428mg/L TC:0.1625mg/L IC:-0.1803mg/	Completed	05/08/2012 02:31:42 F	0
54	TOC		TOC:44.21mg/L TC:55.04mg/L IC:10.83mg/L	Completed	05/08/2012 02:47:28 F	52
55	TOC		!!Error!! TOC:1.715mg/L TC:1.591mg/L IC:-0.1235mg/L	Completed	05/08/2012 02:59:18 F	53
56	TOC	L12050151-12	TOC:5.871mg/L TC:8.275mg/L IC:2.405mg/L	Completed	05/08/2012 03:12:11 F	54
57	TOC	L12050151-13 (25)	!!Error!! TOC:12.79mg/L TC:12.77mg/L IC:-0.02240mg/L	Completed	05/08/2012 03:24:19 F	55
58	TOC	L12050151-14	TOC:1.630mg/L TC:3.301mg/L IC:1.671mg/L	Completed	05/08/2012 03:36:19 F	56
59	TOC	WG397189-05 DUP	TOC:2.529mg/L TC:3.058mg/L IC:0.5294mg/L	Completed	05/08/2012 03:49:23 F	57
60	TOC	WG397189-06 MS	TOC:12.27mg/L TC:12.96mg/L IC:0.6902mg/L	Completed	05/08/2012 04:02:48 F	58
61	TOC	WG397191-01 BLANK	!!Error!! TOC:0.3520mg/L TC:0.1695mg/L IC:-0.1826mg/	Completed	05/08/2012 04:19:14 F	0
62	TOC	WG397191-02 LCS25	!!Error!! TOC:24.47mg/L TC:24.24mg/L IC:-0.2259mg/L	Completed	05/08/2012 04:46:14 F	60
63	TOC	WG397191-03 LCSDU	!!Error!! TOC:24.09mg/L TC:23.87mg/L IC:-0.2216mg/L	Completed	05/08/2012 05:07:13 F	61
64	TOC	CCV	!!Error!! TOC:23.80mg/L TC:23.59mg/L IC:-0.2114mg/L	Completed	05/08/2012 05:19:28 F	62
65	TOC	CCB	!!Error!! TOC:0.3870mg/L TC:0.1790mg/L IC:-0.2080mg/	Completed	05/08/2012 05:28:30 F	0
66	TOC	L12050119-01	TOC:1.199mg/L TC:1.920mg/L IC:0.7210mg/L	Completed	05/08/2012 05:51:00 F	64
67	TOC	L12050119-02	TOC:4.534mg/L TC:6.219mg/L IC:1.685mg/L	Completed	05/08/2012 06:18:32 F	65

C:\TOC3201\Data\05-07-2012-JBK-TOC.t32

	Analysi	Sample Name	Result	Status	Date / Time	Vial
68	TOC	L12050119-03	TOC:2.559mg/L TC:2.655mg/L IC:0.09603mg/L	Completed	05/08/2012 06:44:05 P	66
69	TOC	L12050147-01	!!Error!! TOC:3.296mg/L TC:3.250mg/L IC:-0.04578mg/L	Completed	05/08/2012 07:05:00 P	67
70	TOC	L12050147-03	!!Error!! TOC:4.902mg/L TC:4.854mg/L IC:-0.04831mg/L	Completed	05/08/2012 07:25:38 P	68
71	TOC	L12050148-01	TOC:9.401mg/L TC:38.87mg/L IC:29.47mg/L	Completed	05/08/2012 07:49:39 P	3
72	TOC	WG397191-05 DUP*	!!Error!! TOC:0.4515mg/L TC:0.3032mg/L IC:-0.1484mg/L	Completed	05/08/2012 08:08:19 P	15
73	TOC	WG397191-06 MS	TOC:12.30mg/L TC:12.95mg/L IC:0.6431mg/L	Completed	05/08/2012 08:29:45 P	27
74	TOC	L12050179-01	TOC:8.434mg/L TC:11.60mg/L IC:3.167mg/L	Completed	05/08/2012 08:53:28 P	32
75	TOC	CCV	!!Error!! TOC:26.35mg/L TC:26.11mg/L IC:-0.2439mg/L	Completed	05/08/2012 09:06:24 P	11
76	TOC	CCB	!!Error!! TOC:0.3672mg/L TC:0.1689mg/L IC:-0.1983mg/L	Completed	05/08/2012 09:15:26 P	0
77	TOC	L12050052-13 (10)	TOC:13.95mg/L TC:24.14mg/L IC:10.19mg/L	Completed	05/08/2012 09:28:46 P	1
78	TOC		TOC:21.44mg/L TC:84.29mg/L IC:62.85mg/L	Completed	05/08/2012 09:43:52 P	2
79	TOC	L12050052-17 (5)	TOC:16.32mg/L TC:29.04mg/L IC:12.71mg/L	Completed	05/08/2012 09:57:15 P	3
80	TOC	L12050089-01 (10)	TOC:9.657mg/L TC:23.13mg/L IC:13.48mg/L	Completed	05/08/2012 10:10:54 P	4
81	TOC	L12050089-03 (10)	TOC:12.00mg/L TC:18.39mg/L IC:6.383mg/L	Completed	05/08/2012 10:23:56 P	5
82	TOC	L12050089-05 (5)	TOC:10.79mg/L TC:27.81mg/L IC:17.03mg/L	Completed	05/08/2012 10:37:47 P	6
83	TOC	L12050089-07 (50)	TOC:21.73mg/L TC:21.83mg/L IC:0.1024mg/L	Completed	05/08/2012 10:50:10 P	7
84	TOC	L12050089-08 (3)	TOC:5.037mg/L TC:13.20mg/L IC:8.160mg/L	Completed	05/08/2012 11:02:56 P	8
85	TOC	L12050151-10 (20)	TOC:14.53mg/L TC:17.07mg/L IC:2.546mg/L	Completed	05/08/2012 11:16:12 P	9
86	TOC		TOC:85.42mg/L TC:114.7mg/L IC:29.27mg/L	Completed	05/08/2012 11:32:15 P	10
87	TOC	CCV	!!Error!! TOC:25.07mg/L TC:24.93mg/L IC:-0.1410mg/L	Completed	05/08/2012 11:44:33 P	11
88	TOC	CCB	!!Error!! TOC:0.3611mg/L TC:0.1786mg/L IC:-0.1825mg/L	Completed	05/08/2012 11:53:37 P	0
89	TOC	L12050220-01 (100)	!!Error!! TOC:4.505mg/L TC:4.328mg/L IC:-0.1772mg/L	Completed	05/09/2012 12:06:45 A	13
90	TOC	CCV	!!Error!! TOC:23.06mg/L TC:22.82mg/L IC:-0.2422mg/L	Completed	05/09/2012 12:18:48 A	14
91	TOC	CCB	!!Error!! TOC:0.3493mg/L TC:0.1523mg/L IC:-0.1970mg/L	Completed	05/09/2012 12:27:50 A	0

* Dup - empty vial LCS/LCS2 RPD = 1.6

05/09/2012 08:05:22 AM 2/2

Instr.Information

System TOCVW ASI
Detector Wet Chemical

Sample

Sample Name: CCV 25
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

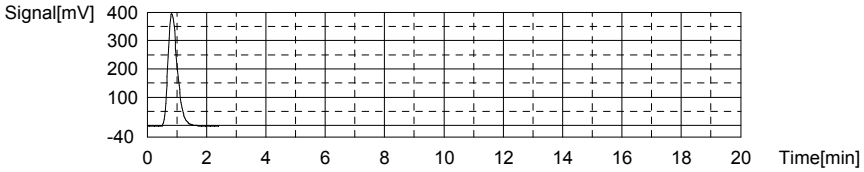
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.65mg/L TC:23.41mg/L IC:-0.2350mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	879.8	23.41mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/07/2012 04:41:18 PM

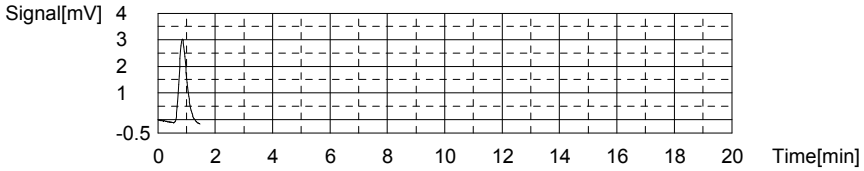
Mean Area 879.8
Mean Conc. 23.41mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.902	-0.2350mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/07/2012 04:45:42 PM

Mean Area 5.902
Mean Conc. -0.2350mg/L



Sample

Sample Name: TIC25
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

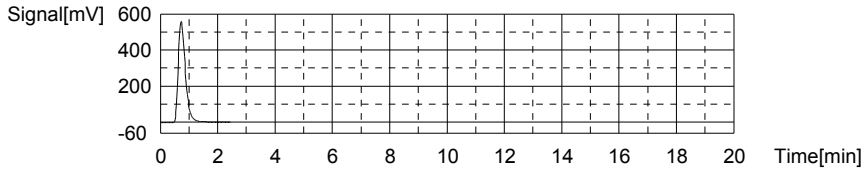
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:2.200mg/L TC:26.09mg/L IC:23.89mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	980.3	26.09mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/07/2012 04:53:35 PM

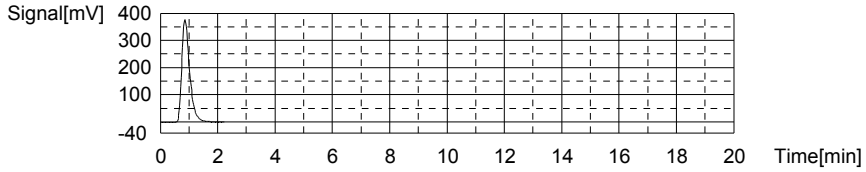
Mean Area 980.3
Mean Conc. 26.09mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	722.9	23.89mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/07/2012 04:58:55 PM

Mean Area 722.9
Mean Conc. 23.89mg/L



Sample

Sample Name: WG397188-01 BLANK
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

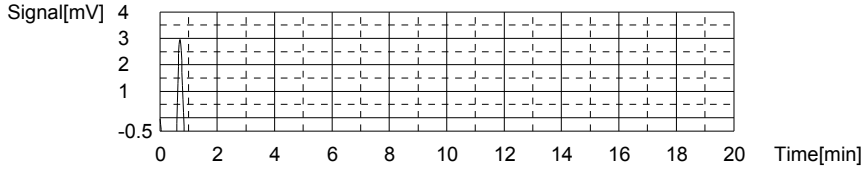
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.4013mg/L TC:0.2483mg/L IC:-0.1530mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.422	0.2483mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/07/2012 05:03:48 PM

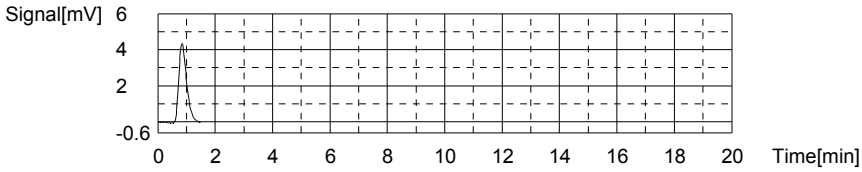
Mean Area 9.422
Mean Conc. 0.2483mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.339	-0.1530mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/07/2012 05:07:42 PM

Mean Area 8.339
Mean Conc. -0.1530mg/L



Sample

Sample Name: WG397188-02 LCS25
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

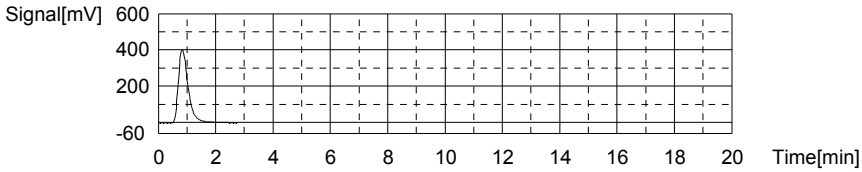
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:25.57mg/L TC:25.30mg/L IC:-0.2649mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	950.7	25.30mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/07/2012 05:15:54 PM

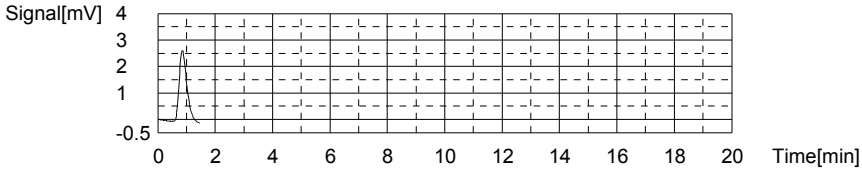
Mean Area 950.7
Mean Conc. 25.30mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.014	-0.2649mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/07/2012 05:20:16 PM

Mean Area 5.014
Mean Conc. -0.2649mg/L



Sample

Sample Name: WG397188-03 LCSDUP
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

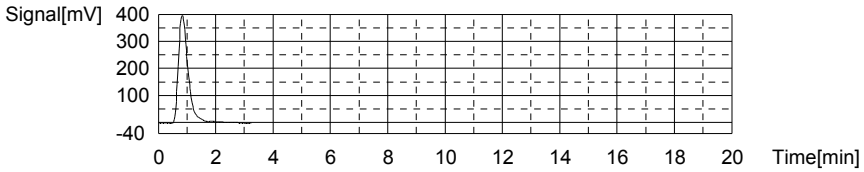
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:25.49mg/L TC:25.23mg/L IC:-0.2649mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	948.0	25.23mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/07/2012 05:28:56 PM

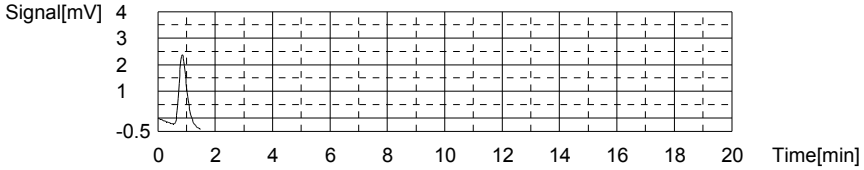
Mean Area 948.0
Mean Conc. 25.23mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.014	-0.2649mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/07/2012 05:33:21 PM

Mean Area 5.014
Mean Conc. -0.2649mg/L



Sample

Sample Name:
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

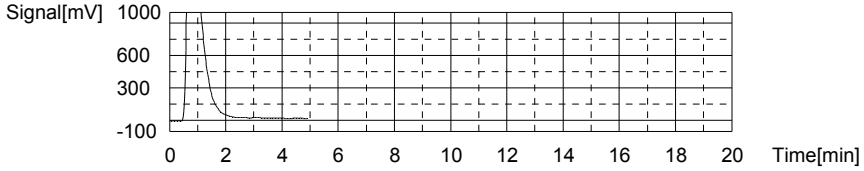
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:60.21mg/L TC:154.9mg/L IC:94.72mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5821	154.9mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/07/2012 05:43:42 PM

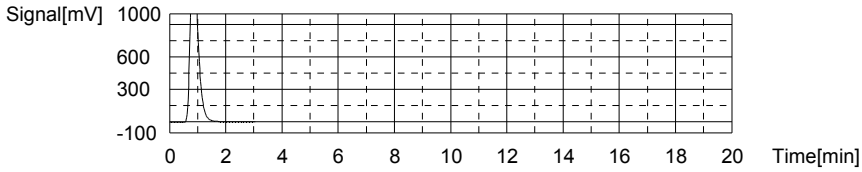
Mean Area 5821
Mean Conc. 154.9mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2828	94.72mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/07/2012 05:50:25 PM

Mean Area 2828
Mean Conc. 94.72mg/L



Sample

Sample Name:
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

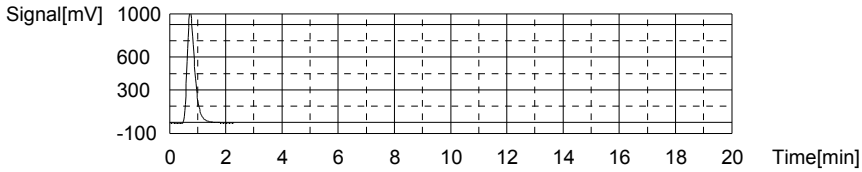
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:15.37mg/L TC:51.58mg/L IC:36.21mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1938	51.58mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/07/2012 05:58:08 PM

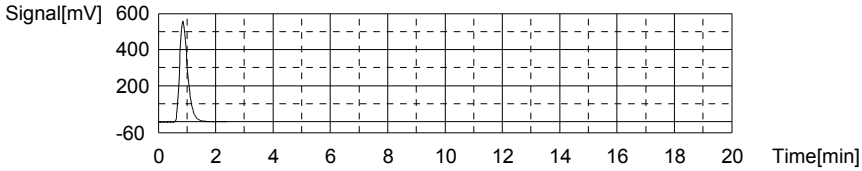
Mean Area 1938
Mean Conc. 51.58mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1089	36.21mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/07/2012 06:03:53 PM

Mean Area 1089
Mean Conc. 36.21mg/L



Sample

Sample Name: L12050052-15
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

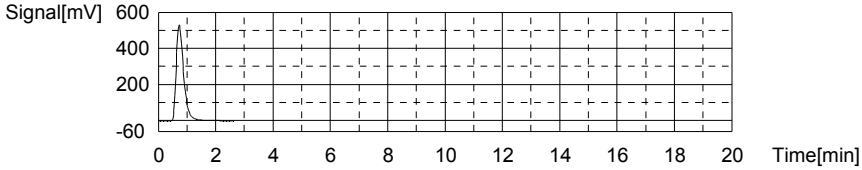
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.612mg/L TC:25.79mg/L IC:20.17mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	968.9	25.79mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/07/2012 06:11:58 PM

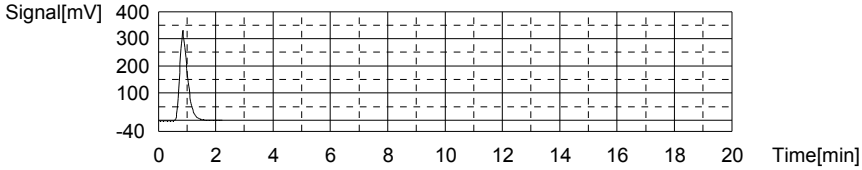
Mean Area 968.9
Mean Conc. 25.79mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	612.5	20.17mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/07/2012 06:17:24 PM

Mean Area 612.5
Mean Conc. 20.17mg/L



Sample

Sample Name: L12050052-16
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

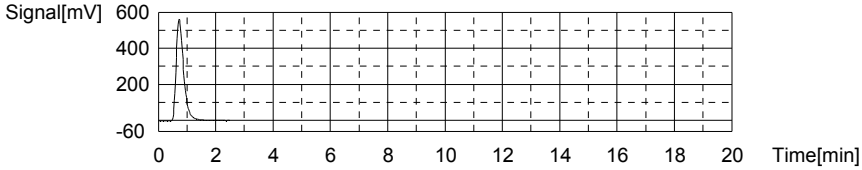
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:4.911mg/L TC:27.28mg/L IC:22.37mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1025	27.28mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/07/2012 06:25:20 PM

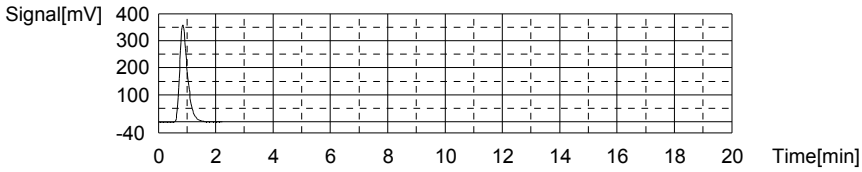
Mean Area 1025
Mean Conc. 27.28mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	677.7	22.37mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/07/2012 06:30:41 PM

Mean Area 677.7
Mean Conc. 22.37mg/L



Sample

Sample Name:
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

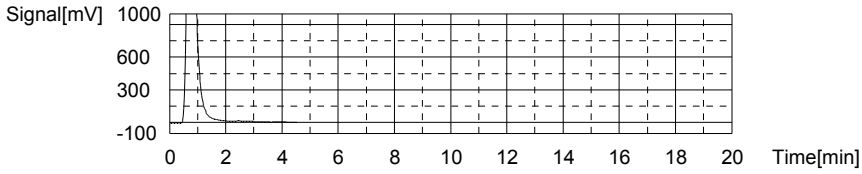
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:-8.489mg/L TC:107.0mg/L IC:115.5mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4021	107.0mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/07/2012 06:40:39 PM

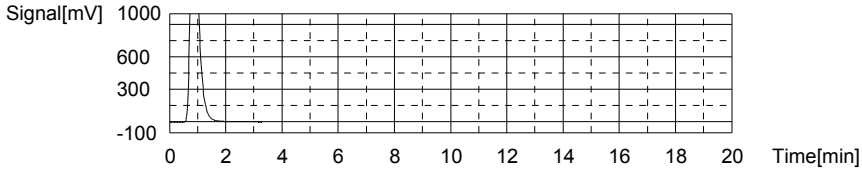
Mean Area 4021
Mean Conc. 107.0mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3446	115.5mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/07/2012 06:47:55 PM

Mean Area 3446
Mean Conc. 115.5mg/L



Sample

Sample Name:
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

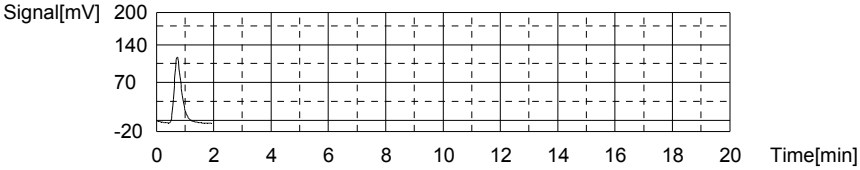
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:2.610mg/L TC:5.800mg/L IC:3.190mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	218.0	5.800mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/07/2012 06:55:17 PM

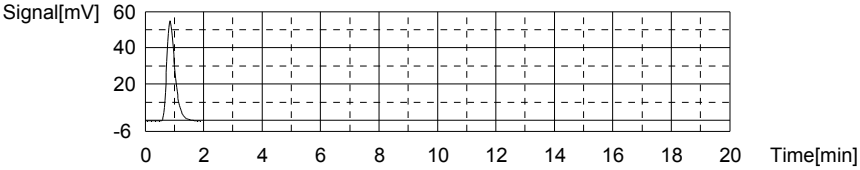
Mean Area 218.0
Mean Conc. 5.800mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	107.7	3.190mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/07/2012 07:00:26 PM

Mean Area 107.7
Mean Conc. 3.190mg/L



Sample

Sample Name: L12050089-02 (2)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

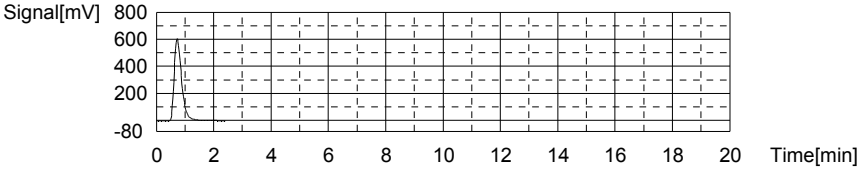
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.085mg/L TC:29.14mg/L IC:24.06mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1095	29.14mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/07/2012 07:08:16 PM

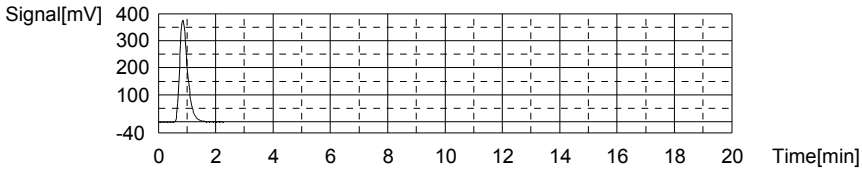
Mean Area 1095
Mean Conc. 29.14mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	727.9	24.06mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/07/2012 07:13:44 PM

Mean Area 727.9
Mean Conc. 24.06mg/L



Sample

Sample Name:
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

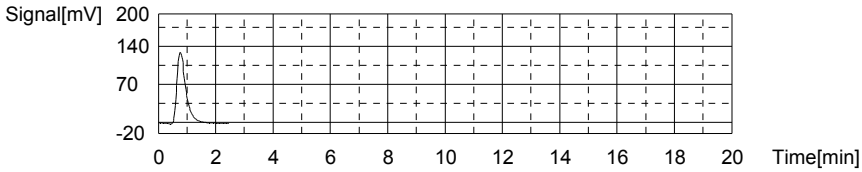
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.432mg/L TC:7.762mg/L IC:2.330mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	291.7	7.762mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/07/2012 07:21:38 PM

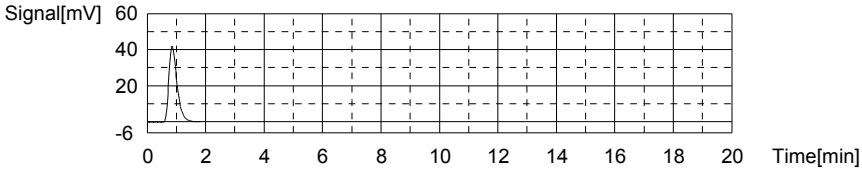
Mean Area 291.7
Mean Conc. 7.762mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	82.13	2.330mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/07/2012 07:26:26 PM

Mean Area 82.13
Mean Conc. 2.330mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

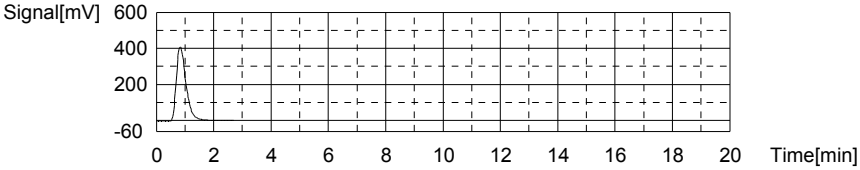
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:25.92mg/L TC:25.72mg/L IC:-0.2011mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	966.5	25.72mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/07/2012 07:34:33 PM

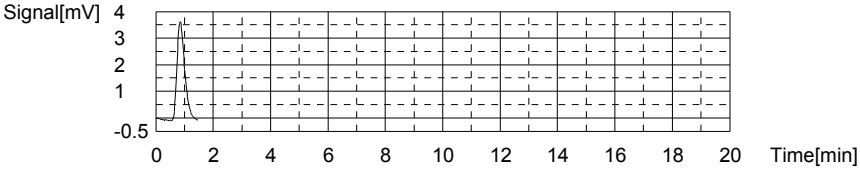
Mean Area 966.5
Mean Conc. 25.72mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.910	-0.2011mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/07/2012 07:38:51 PM

Mean Area 6.910
Mean Conc. -0.2011mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

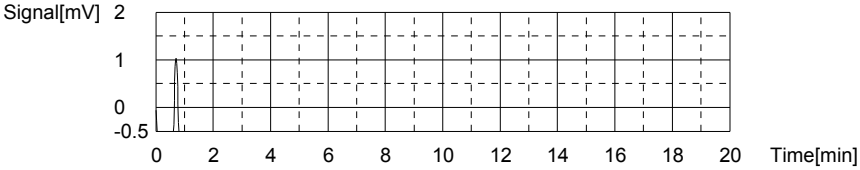
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3505mg/L TC:0.1932mg/L IC:-0.1573mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.351	0.1932mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/07/2012 07:43:58 PM

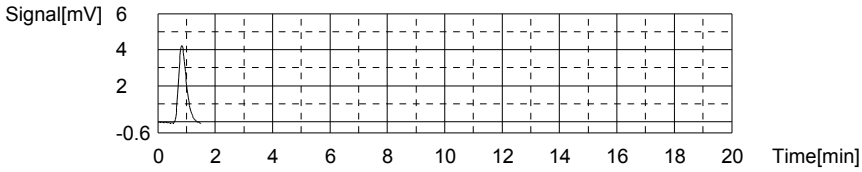
Mean Area 7.351
Mean Conc. 0.1932mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.211	-0.1573mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/07/2012 07:47:56 PM

Mean Area 8.211
Mean Conc. -0.1573mg/L



Sample

Sample Name: L12050089-04 (5)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

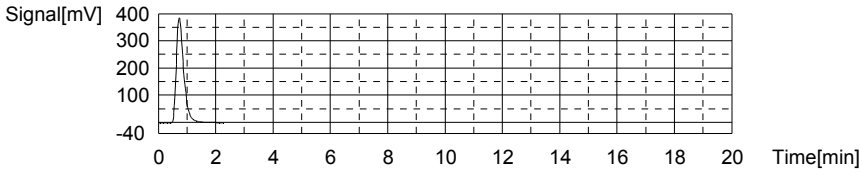
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.195mg/L TC:18.65mg/L IC:13.46mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	700.8	18.65mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/07/2012 07:55:39 PM

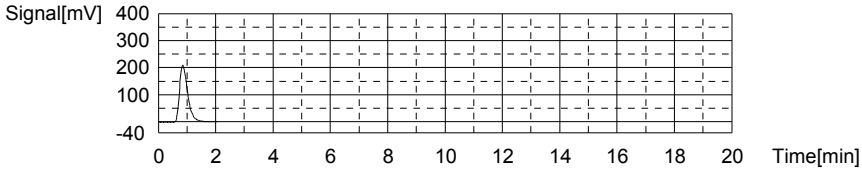
Mean Area 700.8
Mean Conc. 18.65mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	412.8	13.46mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/07/2012 08:00:50 PM

Mean Area 412.8
Mean Conc. 13.46mg/L



Sample

Sample Name:
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

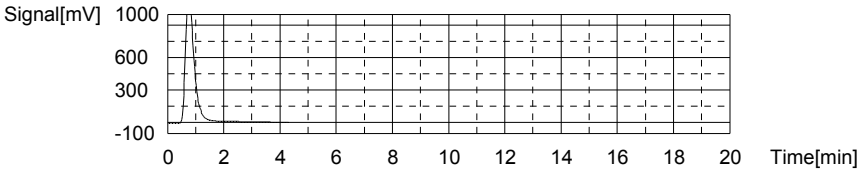
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:26.78mg/L TC:70.29mg/L IC:43.51mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2641	70.29mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/07/2012 08:10:34 PM

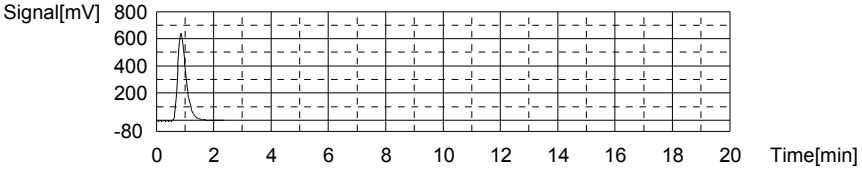
Mean Area 2641
Mean Conc. 70.29mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1306	43.51mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/07/2012 08:16:13 PM

Mean Area 1306
Mean Conc. 43.51mg/L



Sample

Sample Name: L12050089-06 (3)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

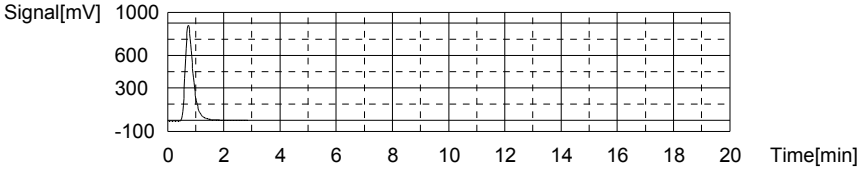
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:14.49mg/L TC:46.50mg/L IC:32.00mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1747	46.50mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/07/2012 08:24:31 PM

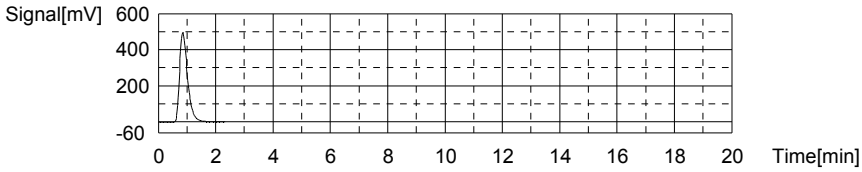
Mean Area 1747
Mean Conc. 46.50mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	964.1	32.00mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/07/2012 08:30:07 PM

Mean Area 964.1
Mean Conc. 32.00mg/L



Sample

Sample Name:
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

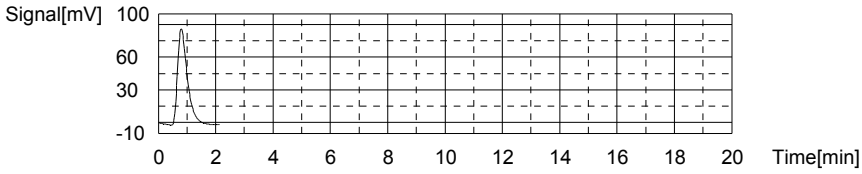
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.543mg/L TC:5.568mg/L IC:0.02571mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	209.3	5.568mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/07/2012 08:37:41 PM

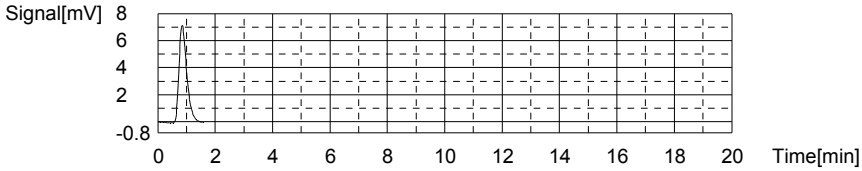
Mean Area 209.3
Mean Conc. 5.568mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.65	0.02571mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/07/2012 08:42:11 PM

Mean Area 13.65
Mean Conc. 0.02571mg/L



Sample

Sample Name:
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

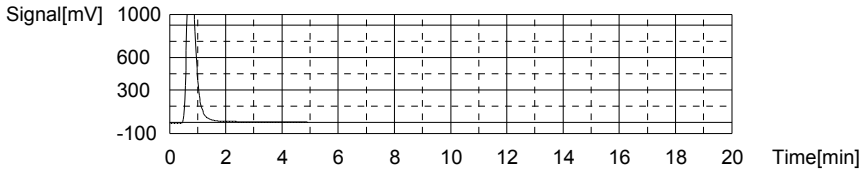
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:7.366mg/L TC:83.68mg/L IC:76.31mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3144	83.68mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/07/2012 08:52:32 PM

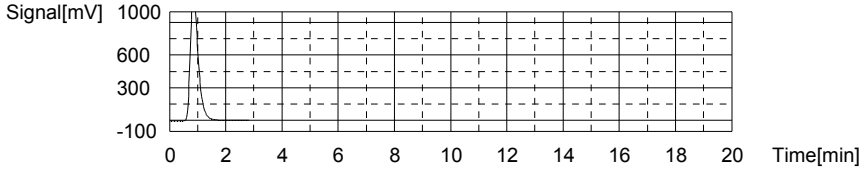
Mean Area 3144
Mean Conc. 83.68mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2281	76.31mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/07/2012 08:58:58 PM

Mean Area 2281
Mean Conc. 76.31mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

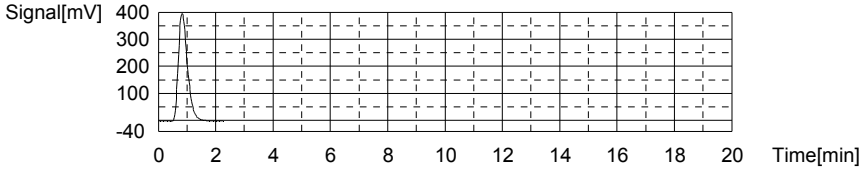
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.58mg/L TC:23.38mg/L IC:-0.2035mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	878.4	23.38mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 08:03:03 AM

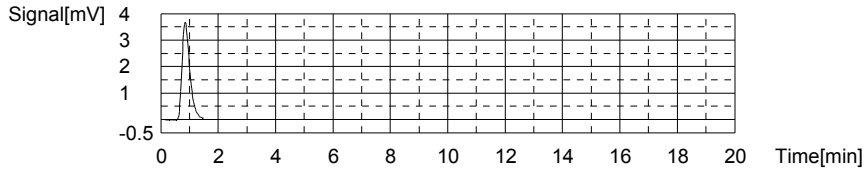
Mean Area 878.4
Mean Conc. 23.38mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.837	-0.2035mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 08:07:25 AM

Mean Area 6.837
Mean Conc. -0.2035mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

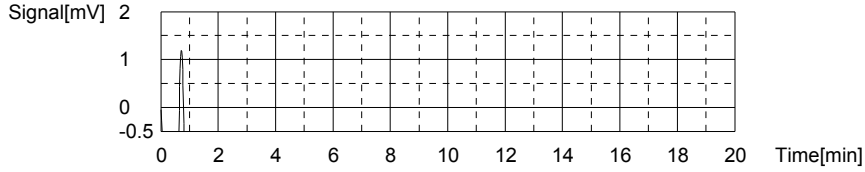
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3802mg/L TC:0.2106mg/L IC:-0.1696mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.006	0.2106mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 08:12:34 AM

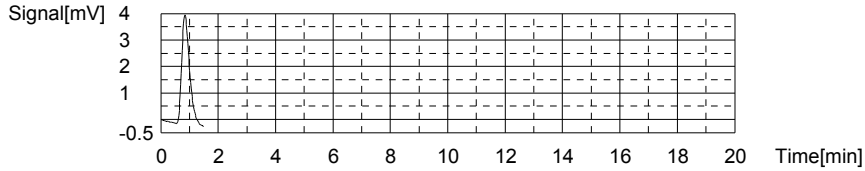
Mean Area 8.006
Mean Conc. 0.2106mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.846	-0.1696mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 08:16:29 AM

Mean Area 7.846
Mean Conc. -0.1696mg/L



Sample

Sample Name: L12050089-09 (25)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

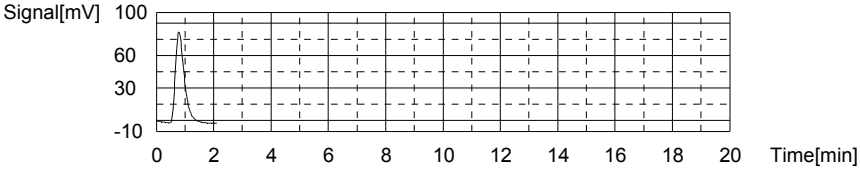
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:4.500mg/L TC:4.852mg/L IC:0.3528mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	182.4	4.852mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 08:24:05 AM

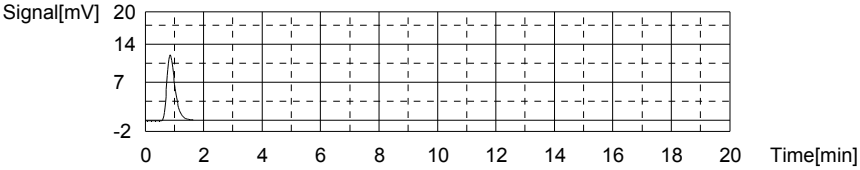
Mean Area 182.4
Mean Conc. 4.852mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	23.37	0.3528mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 08:28:37 AM

Mean Area 23.37
Mean Conc. 0.3528mg/L



Sample

Sample Name: L12050089-10
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

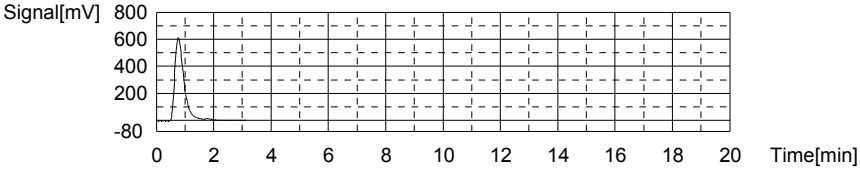
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:20.33mg/L TC:36.78mg/L IC:16.45mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1382	36.78mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 08:37:11 AM

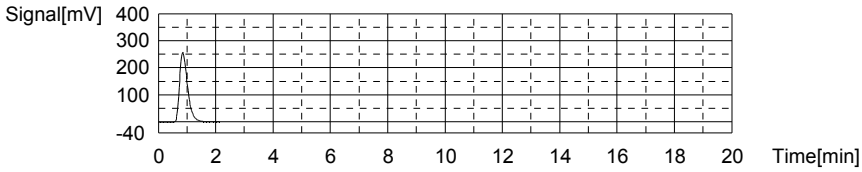
Mean Area 1382
Mean Conc. 36.78mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	501.9	16.45mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 08:42:24 AM

Mean Area 501.9
Mean Conc. 16.45mg/L



Sample

Sample Name: L12050089-11 (2)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

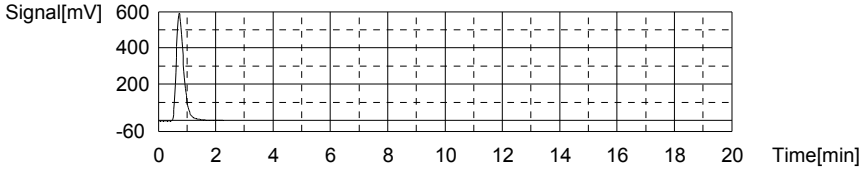
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:4.778mg/L TC:28.61mg/L IC:23.83mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1075	28.61mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 08:50:06 AM

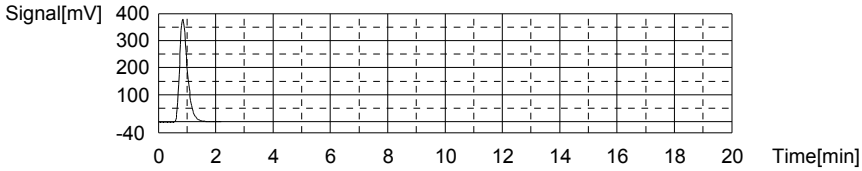
Mean Area 1075
Mean Conc. 28.61mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	721.2	23.83mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 08:55:36 AM

Mean Area 721.2
Mean Conc. 23.83mg/L



Sample

Sample Name: L12050089-12 (25)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

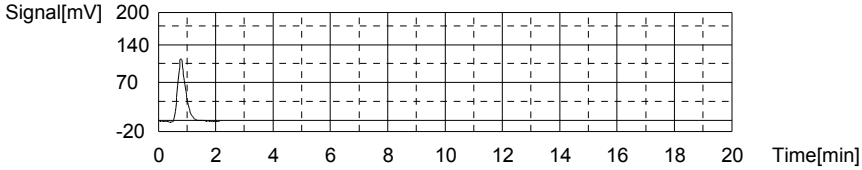
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.715mg/L TC:6.045mg/L IC:0.3302mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	227.2	6.045mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 09:03:09 AM

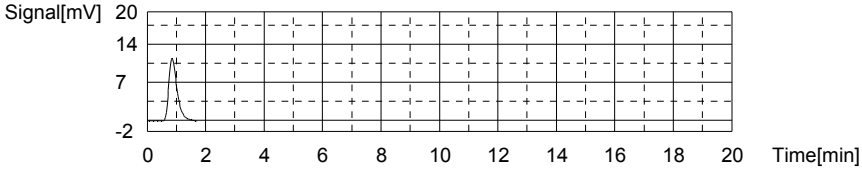
Mean Area 227.2
Mean Conc. 6.045mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	22.70	0.3302mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 09:07:46 AM

Mean Area 22.70
Mean Conc. 0.3302mg/L



Sample

Sample Name: L12050089-13
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

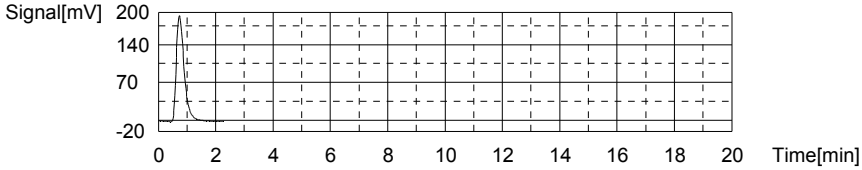
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:2.920mg/L TC:10.01mg/L IC:7.093mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	376.3	10.01mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 09:15:30 AM

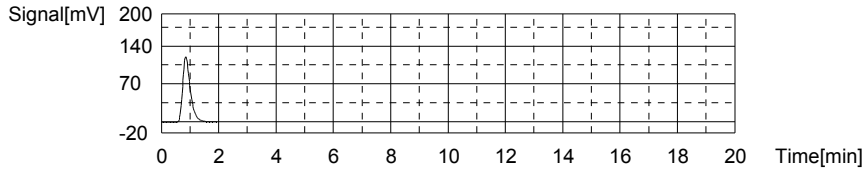
Mean Area 376.3
Mean Conc. 10.01mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	223.7	7.093mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 09:20:24 AM

Mean Area 223.7
Mean Conc. 7.093mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

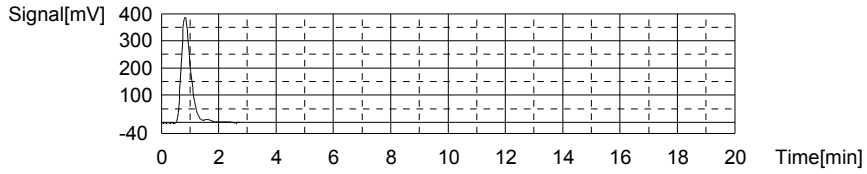
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.86mg/L TC:23.71mg/L IC:-0.1497mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	891.0	23.71mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 09:28:34 AM

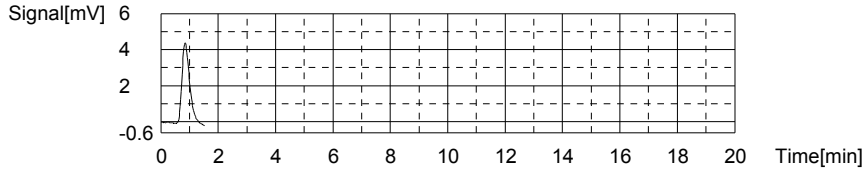
Mean Area 891.0
Mean Conc. 23.71mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.437	-0.1497mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 09:32:57 AM

Mean Area 8.437
Mean Conc. -0.1497mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

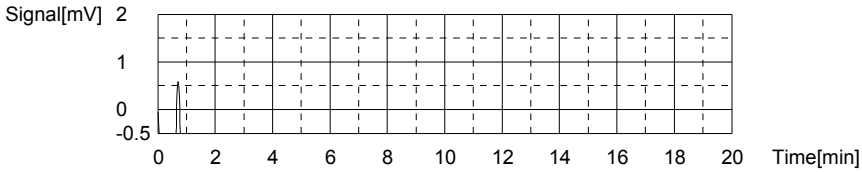
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3624mg/L TC:0.1918mg/L IC:-0.1706mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.300	0.1918mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 09:38:01 AM

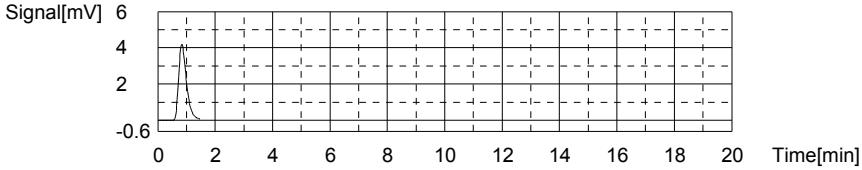
Mean Area 7.300
Mean Conc. 0.1918mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.815	-0.1706mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 09:41:56 AM

Mean Area 7.815
Mean Conc. -0.1706mg/L



Sample

Sample Name: L12050089-14 (25)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

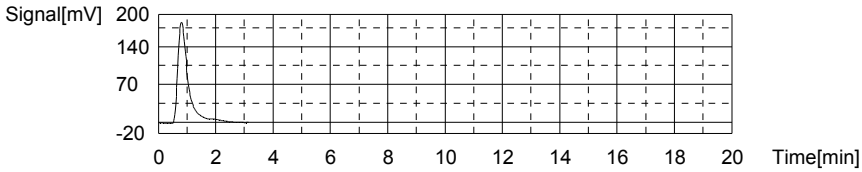
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:12.41mg/L TC:12.76mg/L IC:0.3480mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	479.6	12.76mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 09:50:31 AM

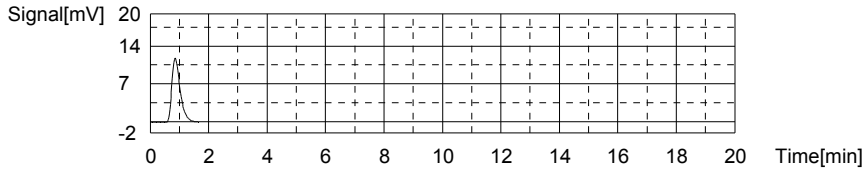
Mean Area 479.6
Mean Conc. 12.76mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	23.23	0.3480mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 09:55:01 AM

Mean Area 23.23
Mean Conc. 0.3480mg/L



Sample

Sample Name: L12050102-01
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

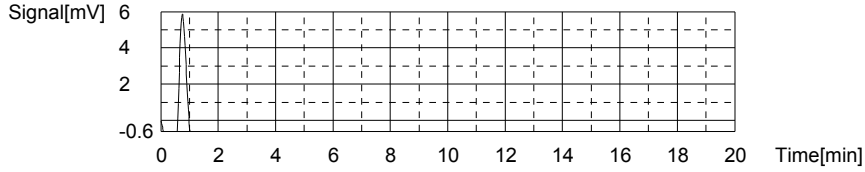
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.6154mg/L TC:0.4045mg/L IC:-0.2110mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	15.29	0.4045mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 10:02:04 AM

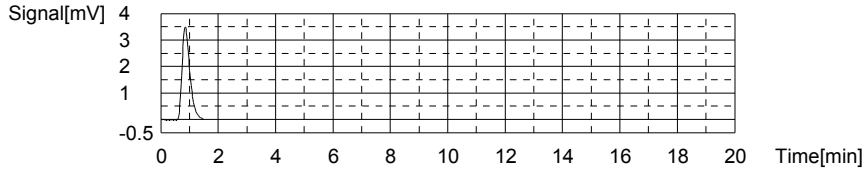
Mean Area 15.29
Mean Conc. 0.4045mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.616	-0.2110mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 10:06:25 AM

Mean Area 6.616
Mean Conc. -0.2110mg/L



Sample

Sample Name: WG397188-05 DUP
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

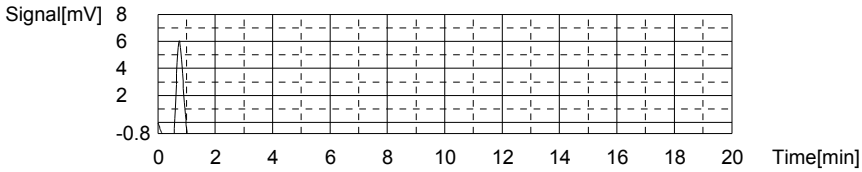
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.5737mg/L TC:0.3970mg/L IC:-0.1767mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	15.01	0.3970mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 10:13:25 AM

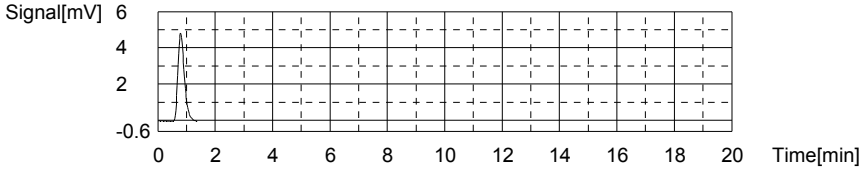
Mean Area 15.01
Mean Conc. 0.3970mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.634	-0.1767mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 10:17:40 AM

Mean Area 7.634
Mean Conc. -0.1767mg/L



Sample

Sample Name: WG397188-06 MS
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

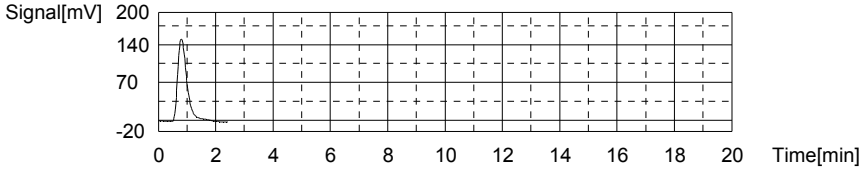
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:9.537mg/L TC:9.311mg/L IC:-0.2266mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	349.9	9.311mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 10:25:33 AM

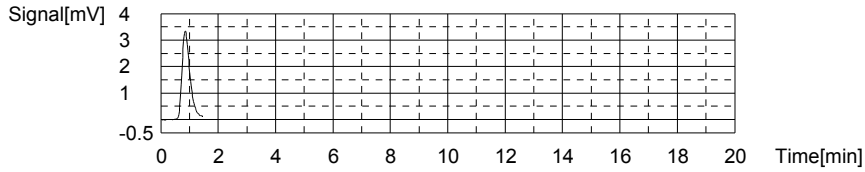
Mean Area 349.9
Mean Conc. 9.311mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.150	-0.2266mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 10:29:55 AM

Mean Area 6.150
Mean Conc. -0.2266mg/L



Sample

Sample Name: WG397189-01 BLANK
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

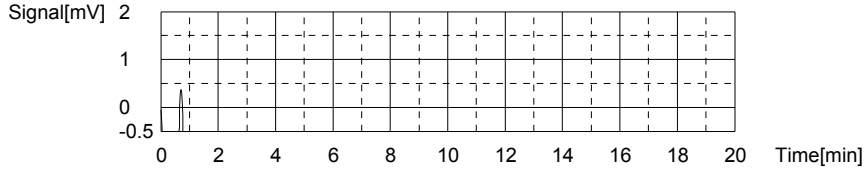
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3369mg/L TC:0.1595mg/L IC:-0.1773mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.087	0.1595mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 10:35:01 AM

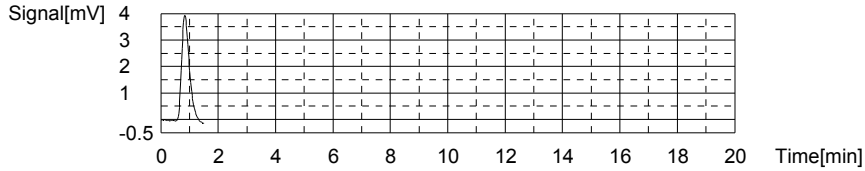
Mean Area 6.087
Mean Conc. 0.1595mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.615	-0.1773mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 10:38:59 AM

Mean Area 7.615
Mean Conc. -0.1773mg/L



Sample

Sample Name: WG397189-02 LCS25
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

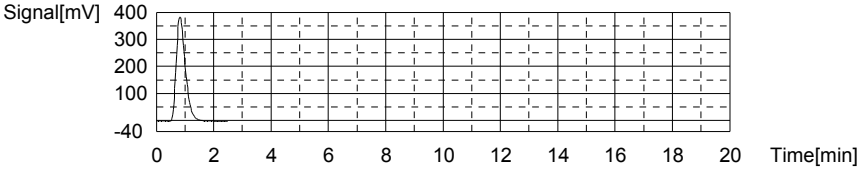
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:22.89mg/L TC:22.67mg/L IC:-0.2153mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	851.9	22.67mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 10:46:55 AM

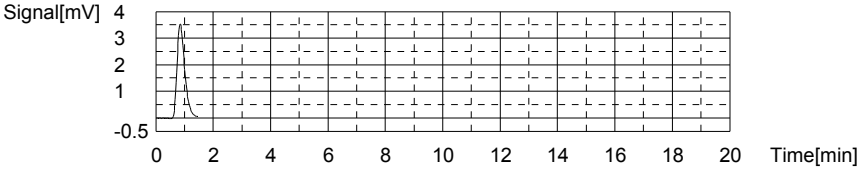
Mean Area 851.9
Mean Conc. 22.67mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.487	-0.2153mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 10:51:14 AM

Mean Area 6.487
Mean Conc. -0.2153mg/L



Sample

Sample Name: WG397189-03 LCSDUP
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

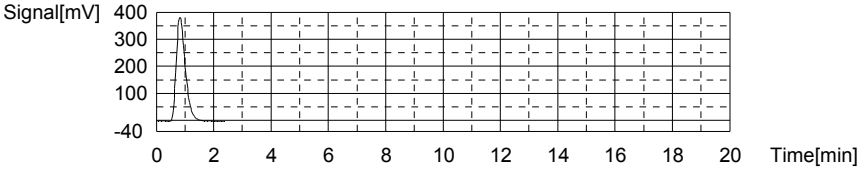
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:22.76mg/L TC:22.54mg/L IC:-0.2130mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	847.1	22.54mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 10:59:05 AM

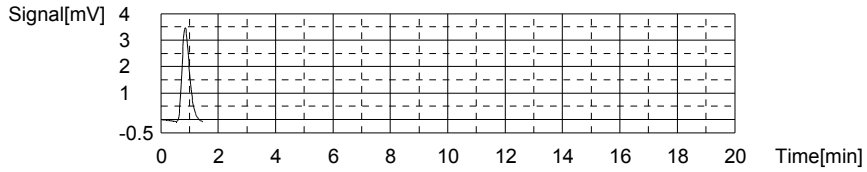
Mean Area 847.1
Mean Conc. 22.54mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.555	-0.2130mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 11:03:24 AM

Mean Area 6.555
Mean Conc. -0.2130mg/L



Sample

Sample Name: L12050011-01
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

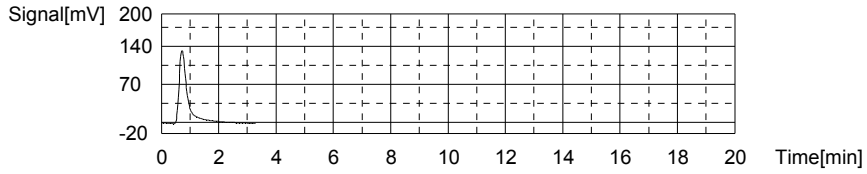
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:2.700mg/L TC:7.660mg/L IC:4.960mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	287.9	7.660mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 11:12:07 AM

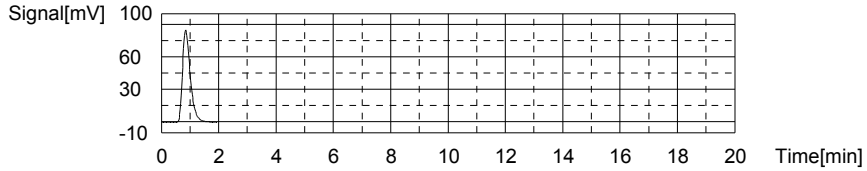
Mean Area 287.9
Mean Conc. 7.660mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	160.3	4.960mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 11:16:58 AM

Mean Area 160.3
Mean Conc. 4.960mg/L



Sample

Sample Name: L12050011-03
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

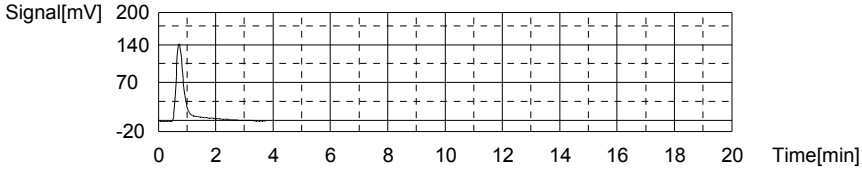
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.031mg/L TC:8.382mg/L IC:5.350mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	315.0	8.382mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 11:26:10 AM

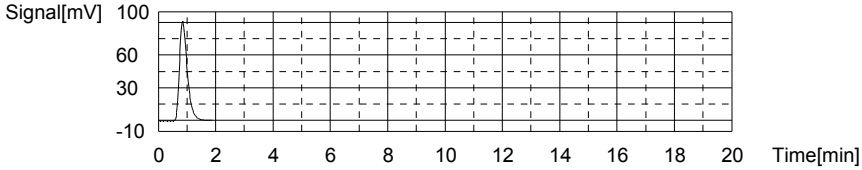
Mean Area 315.0
Mean Conc. 8.382mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	171.9	5.350mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 11:30:59 AM

Mean Area 171.9
Mean Conc. 5.350mg/L



Sample

Sample Name: L12050140-01
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

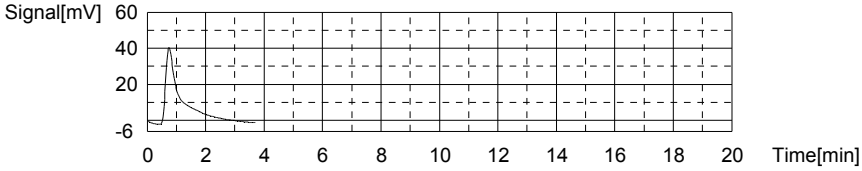
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.200mg/L TC:4.216mg/L IC:1.017mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	158.5	4.216mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 11:40:08 AM

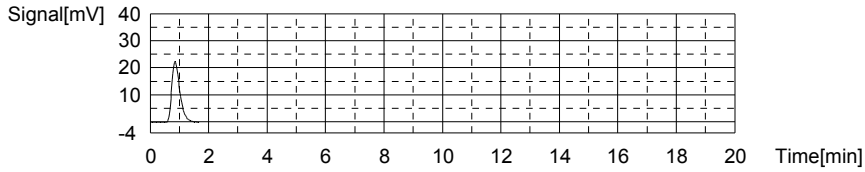
Mean Area 158.5
Mean Conc. 4.216mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	43.10	1.017mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 11:44:44 AM

Mean Area 43.10
Mean Conc. 1.017mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

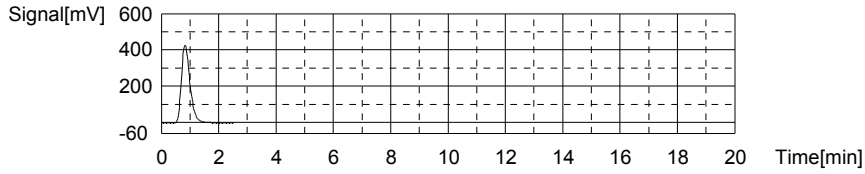
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:24.05mg/L TC:23.85mg/L IC:-0.1992mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	896.1	23.85mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 11:52:42 AM

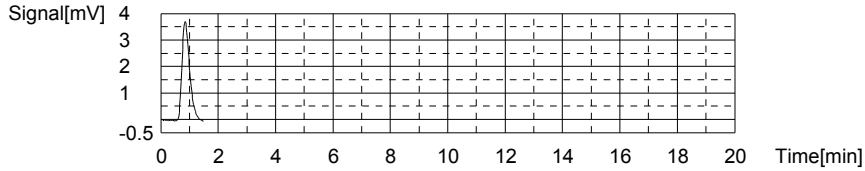
Mean Area 896.1
Mean Conc. 23.85mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.966	-0.1992mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 11:57:03 AM

Mean Area 6.966
Mean Conc. -0.1992mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

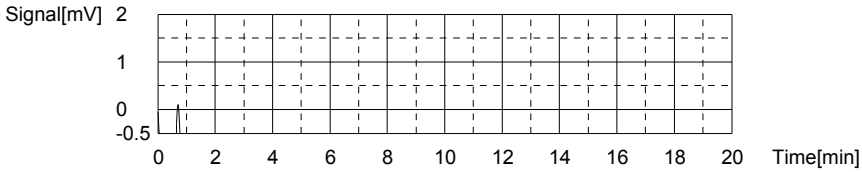
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3490mg/L TC:0.1688mg/L IC:-0.1802mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.434	0.1688mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 12:02:08 PM

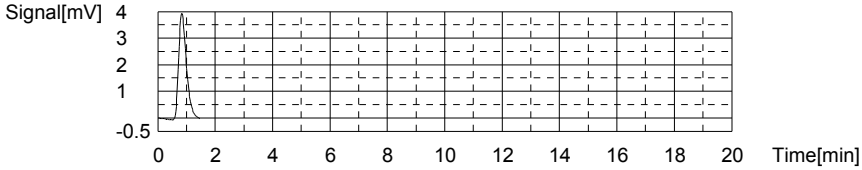
Mean Area 6.434
Mean Conc. 0.1688mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.530	-0.1802mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 12:06:05 PM

Mean Area 7.530
Mean Conc. -0.1802mg/L



Sample

Sample Name: L12050140-02
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

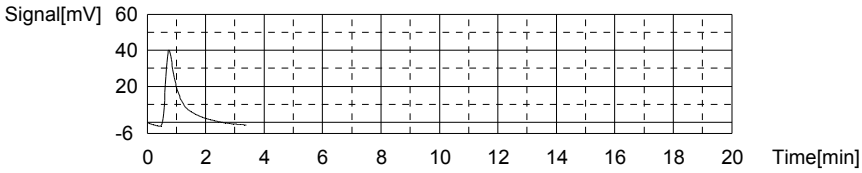
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:2.828mg/L TC:3.926mg/L IC:1.098mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	147.6	3.926mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 12:14:56 PM

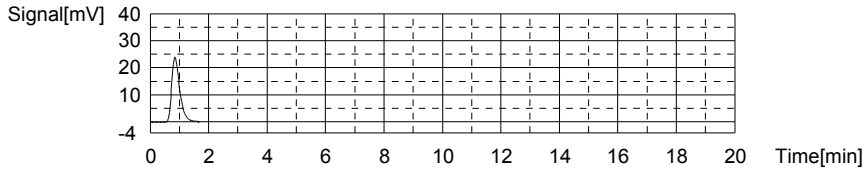
Mean Area 147.6
Mean Conc. 3.926mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	45.51	1.098mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 12:19:29 PM

Mean Area 45.51
Mean Conc. 1.098mg/L



Sample

Sample Name: L12050151-01
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

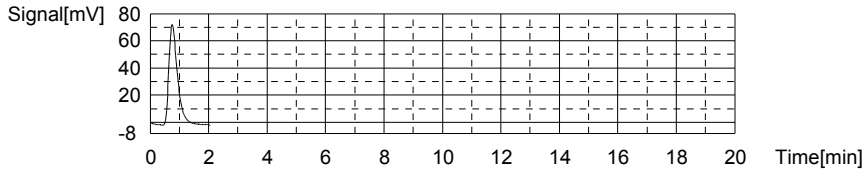
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:2.482mg/L TC:4.049mg/L IC:1.567mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	152.2	4.049mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 12:27:00 PM

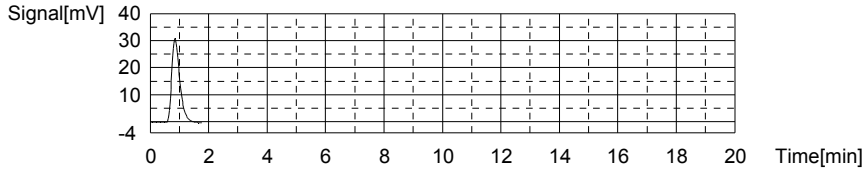
Mean Area 152.2
Mean Conc. 4.049mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	59.46	1.567mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 12:31:45 PM

Mean Area 59.46
Mean Conc. 1.567mg/L



Sample

Sample Name: L12050151-02
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

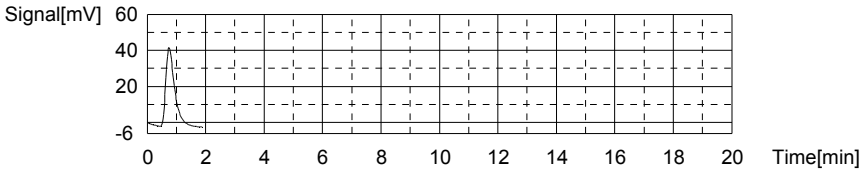
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.549mg/L TC:2.439mg/L IC:0.8894mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	91.72	2.439mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 12:39:06 PM

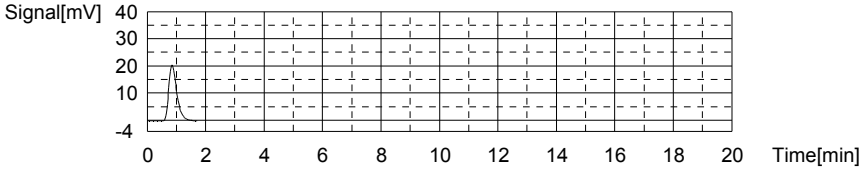
Mean Area 91.72
Mean Conc. 2.439mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	39.32	0.8894mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 12:43:44 PM

Mean Area 39.32
Mean Conc. 0.8894mg/L



Sample

Sample Name: L12050151-03
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

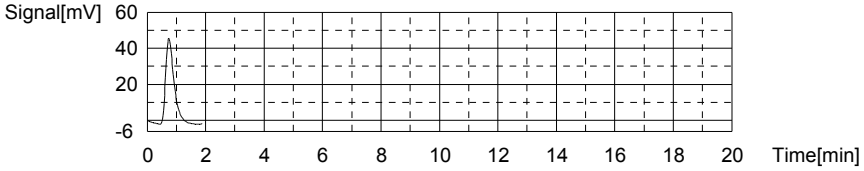
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.369mg/L TC:2.482mg/L IC:1.113mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	93.35	2.482mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 12:51:03 PM

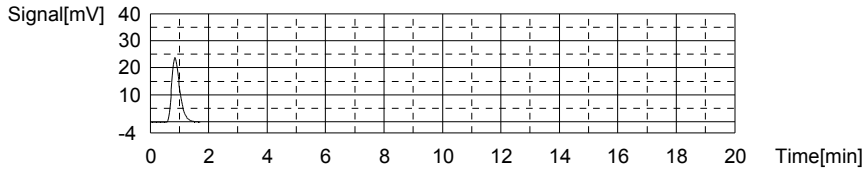
Mean Area 93.35
Mean Conc. 2.482mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	45.97	1.113mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 12:55:41 PM

Mean Area 45.97
Mean Conc. 1.113mg/L



Sample

Sample Name: L12050151-04 (10)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

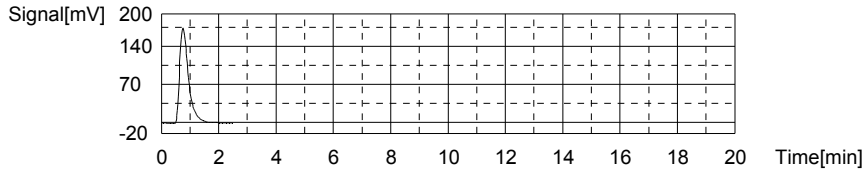
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.868mg/L TC:10.14mg/L IC:4.274mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	381.1	10.14mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 01:03:38 PM

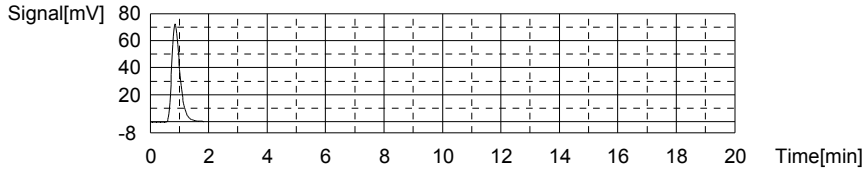
Mean Area 381.1
Mean Conc. 10.14mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	139.9	4.274mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 01:08:24 PM

Mean Area 139.9
Mean Conc. 4.274mg/L



Sample

Sample Name: L12050151-05 (3)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

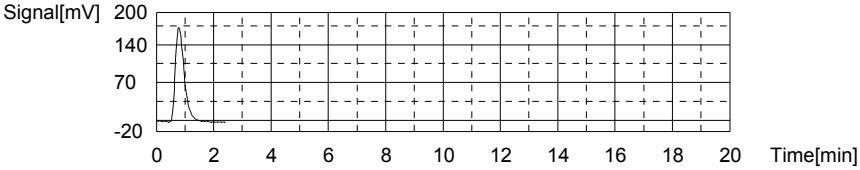
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:9.318mg/L TC:10.06mg/L IC:0.7434mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	378.1	10.06mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 01:16:16 PM

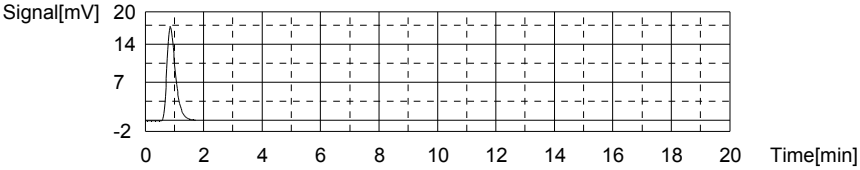
Mean Area 378.1
Mean Conc. 10.06mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	34.98	0.7434mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 01:20:56 PM

Mean Area 34.98
Mean Conc. 0.7434mg/L



Sample

Sample Name: L12050151-06 (3)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

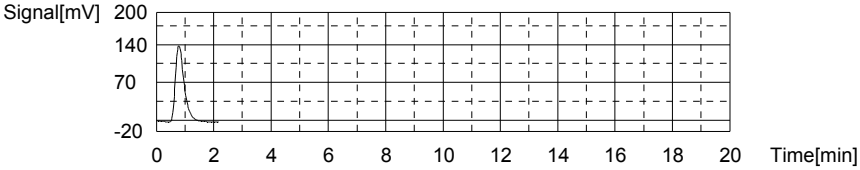
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:7.486mg/L TC:8.022mg/L IC:0.5365mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	301.5	8.022mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 01:28:34 PM

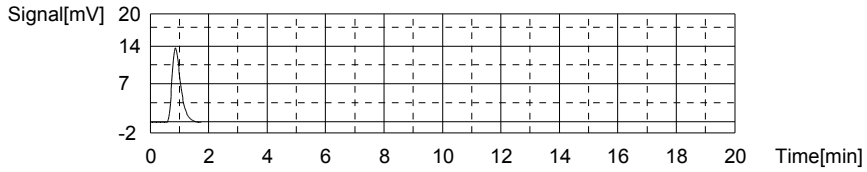
Mean Area 301.5
Mean Conc. 8.022mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	28.83	0.5365mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 01:33:16 PM

Mean Area 28.83
Mean Conc. 0.5365mg/L



Sample

Sample Name: L12050151-07 (15)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

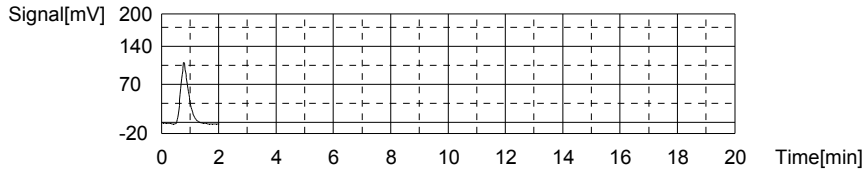
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.720mg/L TC:5.773mg/L IC:0.05364mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	217.0	5.773mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 01:40:45 PM

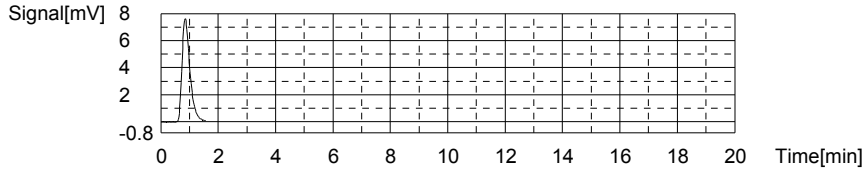
Mean Area 217.0
Mean Conc. 5.773mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	14.48	0.05364mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 01:45:10 PM

Mean Area 14.48
Mean Conc. 0.05364mg/L



Sample

Sample Name: L12050151-08
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

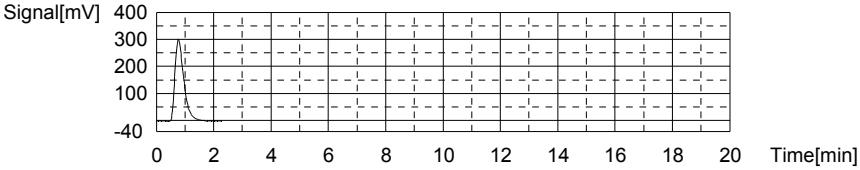
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:11.44mg/L TC:17.39mg/L IC:5.949mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	653.5	17.39mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 01:52:56 PM

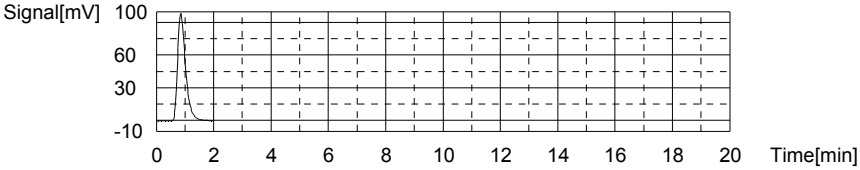
Mean Area 653.5
Mean Conc. 17.39mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	189.7	5.949mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 01:57:53 PM

Mean Area 189.7
Mean Conc. 5.949mg/L



Sample

Sample Name: L12050151-09
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

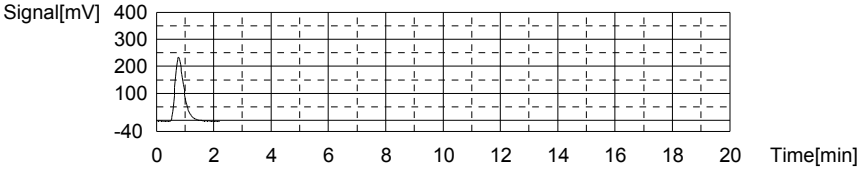
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:10.36mg/L TC:13.64mg/L IC:3.278mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	512.6	13.64mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 02:05:33 PM

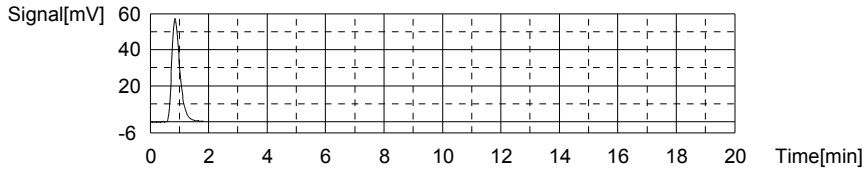
Mean Area 512.6
Mean Conc. 13.64mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	110.3	3.278mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 02:10:20 PM

Mean Area 110.3
Mean Conc. 3.278mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

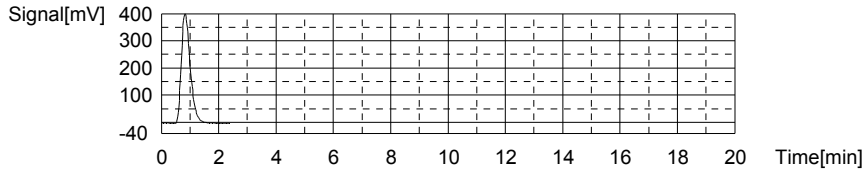
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.39mg/L TC:23.21mg/L IC:-0.1860mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	872.0	23.21mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 02:18:22 PM

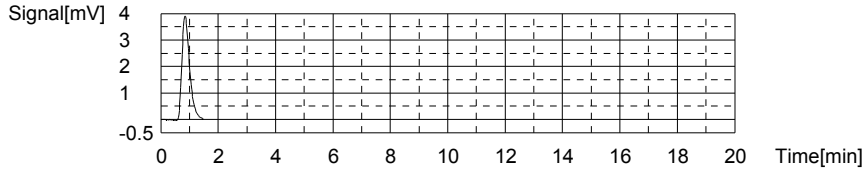
Mean Area 872.0
Mean Conc. 23.21mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.359	-0.1860mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 02:22:43 PM

Mean Area 7.359
Mean Conc. -0.1860mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

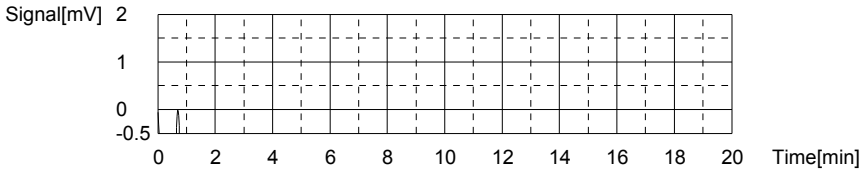
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3428mg/L TC:0.1625mg/L IC:-0.1803mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.197	0.1625mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 02:27:47 PM

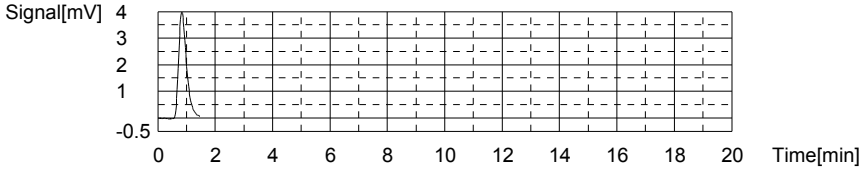
Mean Area 6.197
Mean Conc. 0.1625mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.527	-0.1803mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 02:31:42 PM

Mean Area 7.527
Mean Conc. -0.1803mg/L



Sample

Sample Name:
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

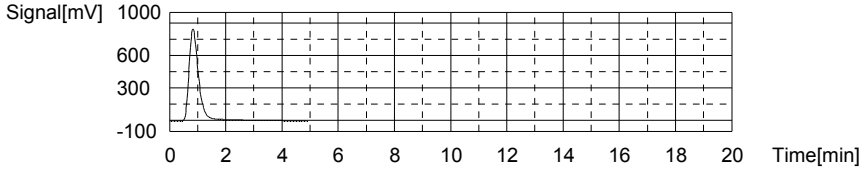
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:44.21mg/L TC:55.04mg/L IC:10.83mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2068	55.04mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 02:42:06 PM

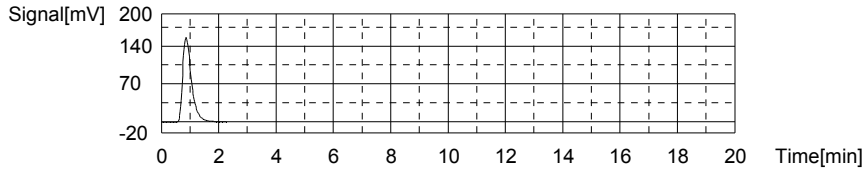
Mean Area 2068
Mean Conc. 55.04mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	334.8	10.83mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 02:47:28 PM

Mean Area 334.8
Mean Conc. 10.83mg/L



Sample

Sample Name:
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

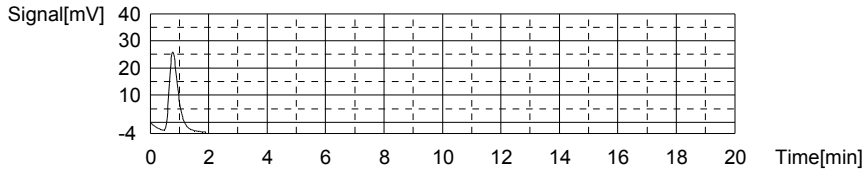
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:1.715mg/L TC:1.591mg/L IC:-0.1235mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	59.88	1.591mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 02:54:51 PM

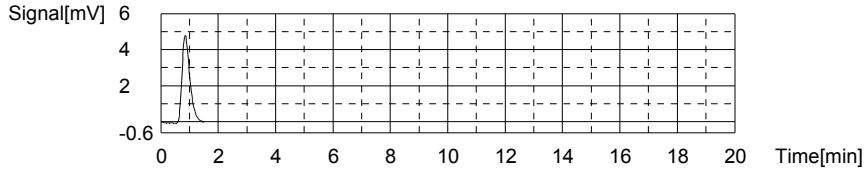
Mean Area 59.88
Mean Conc. 1.591mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.215	-0.1235mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 02:59:18 PM

Mean Area 9.215
Mean Conc. -0.1235mg/L



Sample

Sample Name: L12050151-12
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

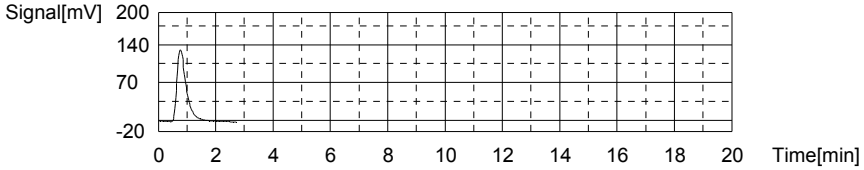
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.871mg/L TC:8.275mg/L IC:2.405mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	311.0	8.275mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 03:07:29 PM

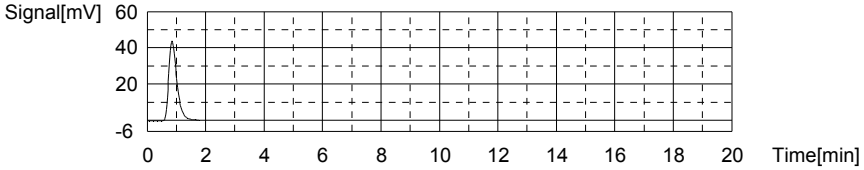
Mean Area 311.0
Mean Conc. 8.275mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	84.35	2.405mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 03:12:11 PM

Mean Area 84.35
Mean Conc. 2.405mg/L



Sample

Sample Name: L12050151-13 (25)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

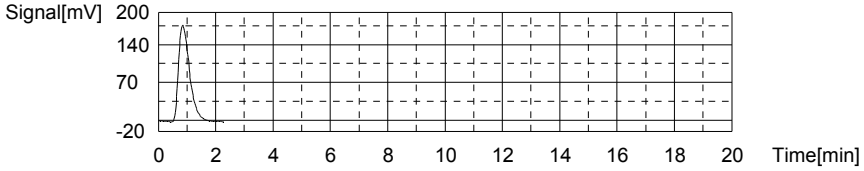
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:12.79mg/L TC:12.77mg/L IC:-0.02240mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	479.8	12.77mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 03:19:57 PM

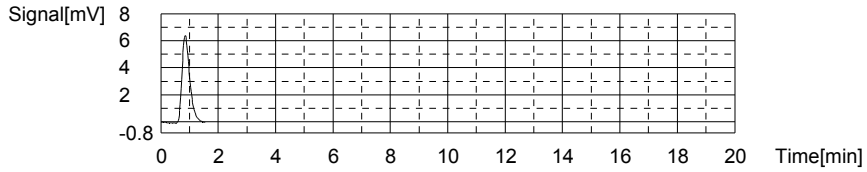
Mean Area 479.8
Mean Conc. 12.77mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.22	-0.02240mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 03:24:19 PM

Mean Area 12.22
Mean Conc. -0.02240mg/L



Sample

Sample Name: L12050151-14
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

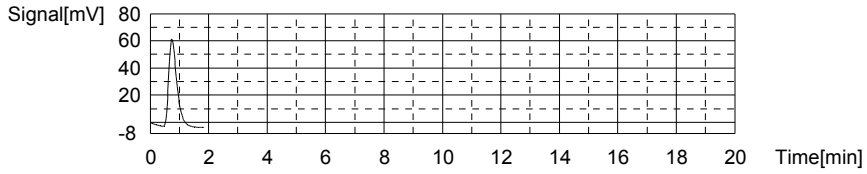
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.630mg/L TC:3.301mg/L IC:1.671mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	124.1	3.301mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 03:31:38 PM

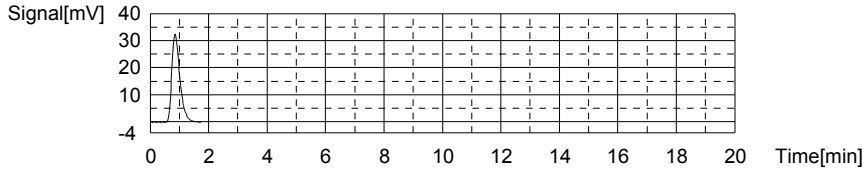
Mean Area 124.1
Mean Conc. 3.301mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	62.55	1.671mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 03:36:19 PM

Mean Area 62.55
Mean Conc. 1.671mg/L



Sample

Sample Name: WG397189-05 DUP
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

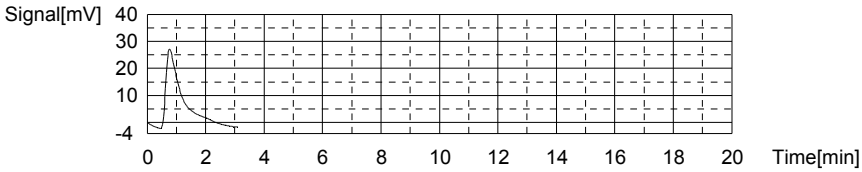
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:2.529mg/L TC:3.058mg/L IC:0.5294mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	115.0	3.058mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 03:44:54 PM

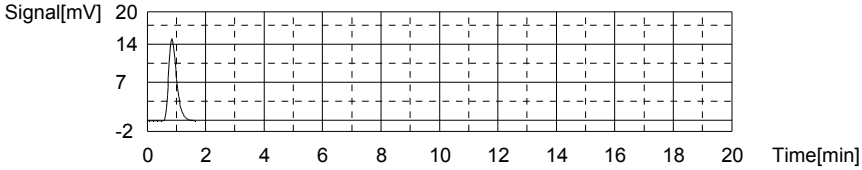
Mean Area 115.0
Mean Conc. 3.058mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	28.62	0.5294mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 03:49:23 PM

Mean Area 28.62
Mean Conc. 0.5294mg/L



Sample

Sample Name: WG397189-06 MS
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

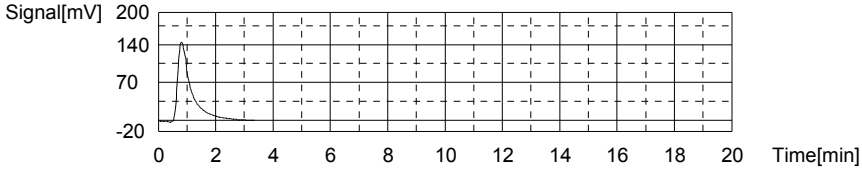
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:12.27mg/L TC:12.96mg/L IC:0.6902mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	486.9	12.96mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 03:58:13 PM

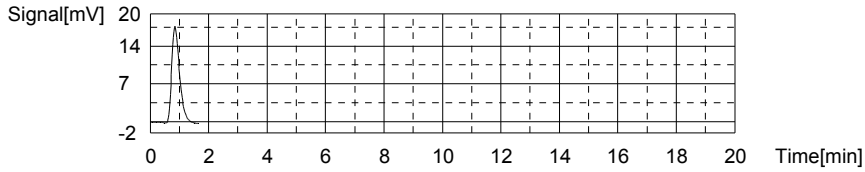
Mean Area 486.9
Mean Conc. 12.96mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	33.40	0.6902mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 04:02:48 PM

Mean Area 33.40
Mean Conc. 0.6902mg/L



Sample

Sample Name: WG397191-01 BLANK
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

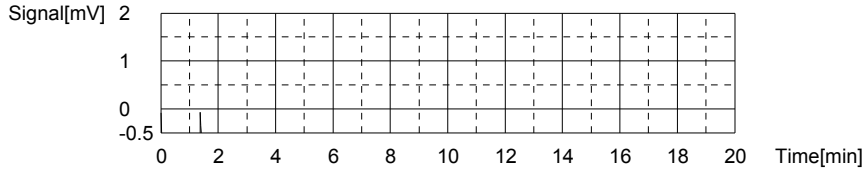
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3520mg/L TC:0.1695mg/L IC:-0.1826mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.920	0.1817mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 04:07:48 PM
2	6.000	0.1572mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 04:11:23 PM

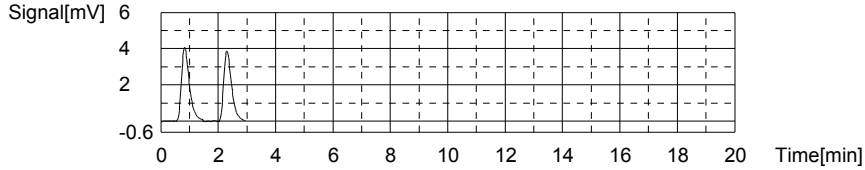
Mean Area 6.460
Mean Conc. 0.1695mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.640	-0.1765mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 04:15:16 PM
2	7.279	-0.1886mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 04:19:14 PM

Mean Area 7.460
Mean Conc. -0.1826mg/L



Sample

Sample Name: WG397191-02 LCS25
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

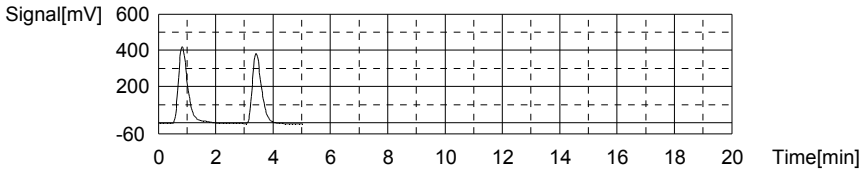
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:24.47mg/L TC:24.24mg/L IC:-0.2259mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	962.9	25.63mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 04:33:07 PM
2	858.7	22.85mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 04:37:51 PM

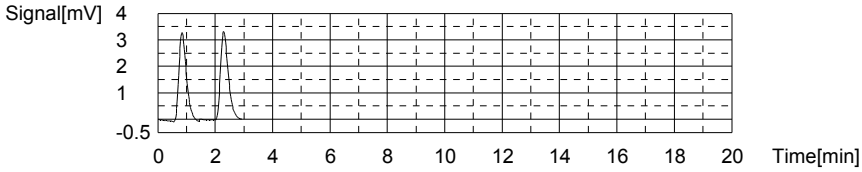
Mean Area 910.8
Mean Conc. 24.24mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.162	-0.2262mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 04:42:08 PM
2	6.181	-0.2256mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 04:46:14 PM

Mean Area 6.172
Mean Conc. -0.2259mg/L



Sample

Sample Name: WG397191-03 LCSDUP
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

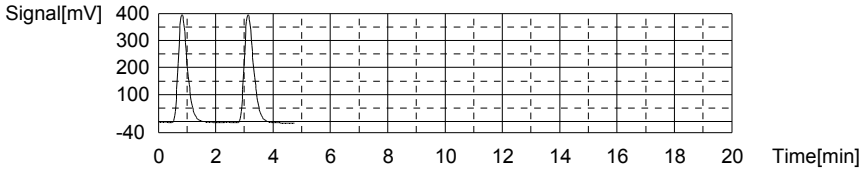
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:24.09mg/L TC:23.87mg/L IC:-0.2216mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	883.6	23.52mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 04:54:02 PM
2	910.0	24.22mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 04:58:51 PM

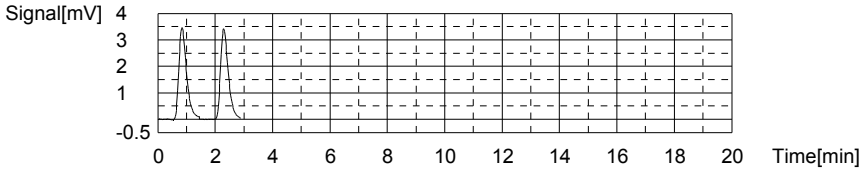
Mean Area 896.8
Mean Conc. 23.87mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.354	-0.2198mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 05:03:10 PM
2	6.247	-0.2234mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 05:07:13 PM

Mean Area 6.300
Mean Conc. -0.2216mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

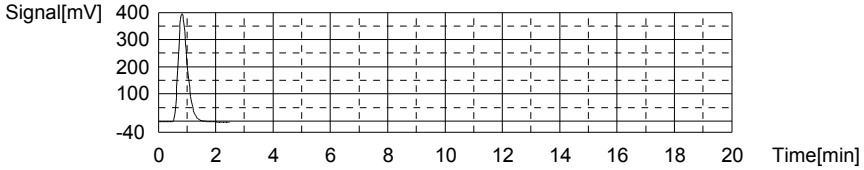
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.80mg/L TC:23.59mg/L IC:-0.2114mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	886.4	23.59mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 05:15:10 PM

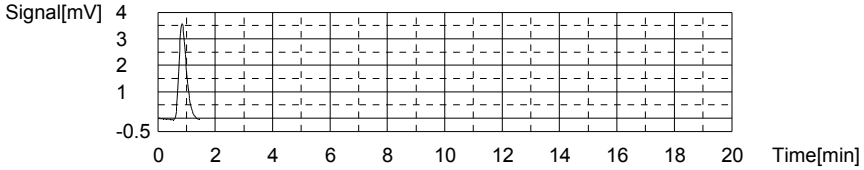
Mean Area 886.4
Mean Conc. 23.59mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.604	-0.2114mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 05:19:28 PM

Mean Area 6.604
Mean Conc. -0.2114mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

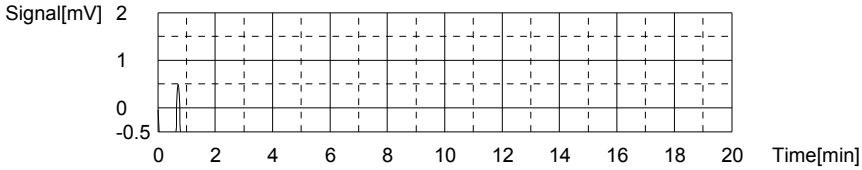
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3870mg/L TC:0.1790mg/L IC:-0.2080mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.819	0.1790mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 05:24:37 PM

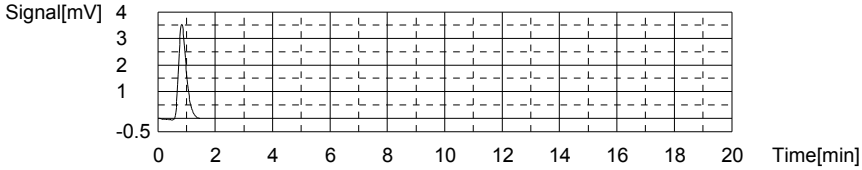
Mean Area 6.819
Mean Conc. 0.1790mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.704	-0.2080mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47_	05/08/2012 05:28:30 PM

Mean Area 6.704
Mean Conc. -0.2080mg/L



Sample

Sample Name: L12050119-01
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

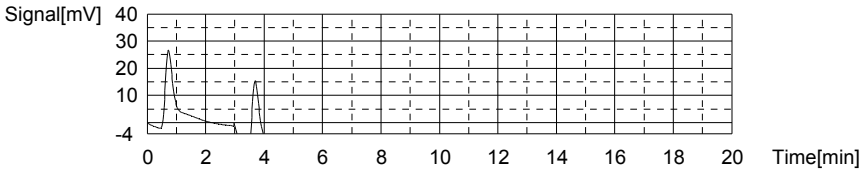
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.199mg/L TC:1.920mg/L IC:0.7210mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	79.77	2.121mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 05:36:59 PM
2	64.66	1.719mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 05:42:13 PM

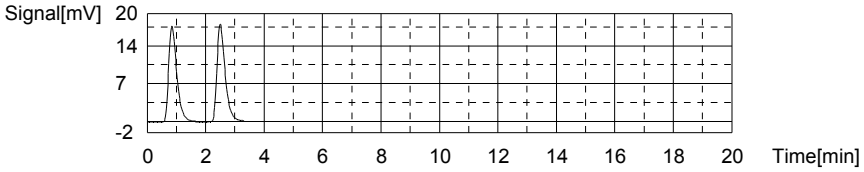
Mean Area 72.22
Mean Conc. 1.920mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	33.90	0.7070mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 05:46:43 PM
2	34.73	0.7350mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 05:51:00 PM

Mean Area 34.31
Mean Conc. 0.7210mg/L



Sample

Sample Name: L12050119-02
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

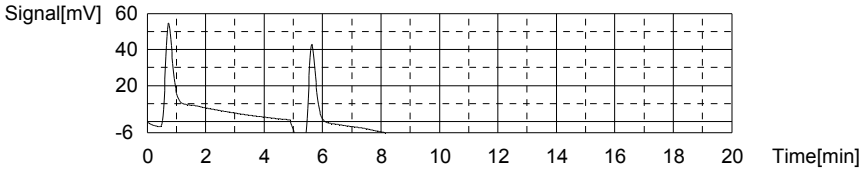
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:4.534mg/L TC:6.219mg/L IC:1.685mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	239.7	6.377mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 06:01:24 PM
2	227.8	6.061mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 06:09:28 PM

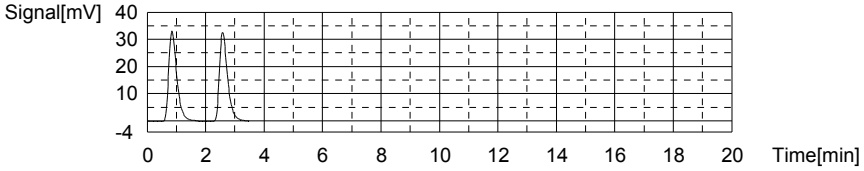
Mean Area 233.8
Mean Conc. 6.219mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	63.34	1.698mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 06:14:08 PM
2	62.62	1.673mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 06:18:32 PM

Mean Area 62.98
Mean Conc. 1.685mg/L



Sample

Sample Name: L12050119-03
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

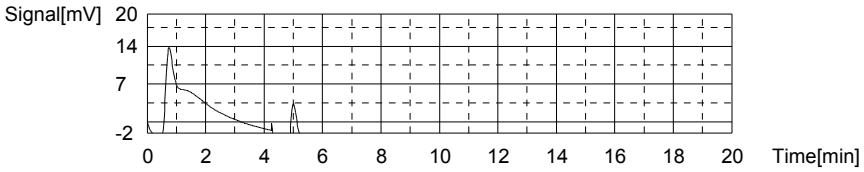
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:2.559mg/L TC:2.655mg/L IC:0.09603mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	113.3	3.013mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 06:28:16 PM
2	86.41	2.297mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 06:35:27 PM

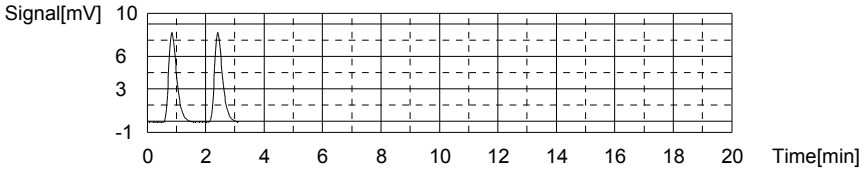
Mean Area 99.86
Mean Conc. 2.655mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	15.76	0.09671mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 06:39:52 PM
2	15.72	0.09536mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 06:44:05 PM

Mean Area 15.74
Mean Conc. 0.09603mg/L



Sample

Sample Name: L12050147-01
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

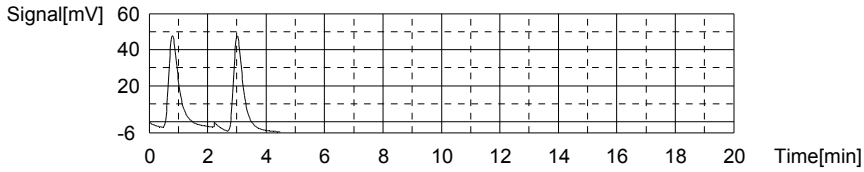
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:3.296mg/L TC:3.250mg/L IC:-0.04578mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	122.9	3.269mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 06:51:48 PM
2	121.5	3.231mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 06:56:26 PM

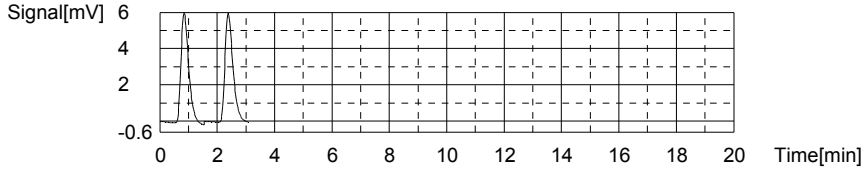
Mean Area 122.2
Mean Conc. 3.250mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.49	-0.04696mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 07:00:49 PM
2	11.56	-0.04461mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 07:05:00 PM

Mean Area 11.53
Mean Conc. -0.04578mg/L



Sample

Sample Name: L12050147-03
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

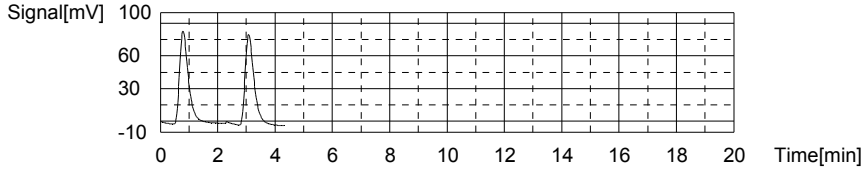
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:4.902mg/L TC:4.854mg/L IC:-0.04831mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	185.8	4.943mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 07:12:47 PM
2	179.1	4.765mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 07:17:06 PM

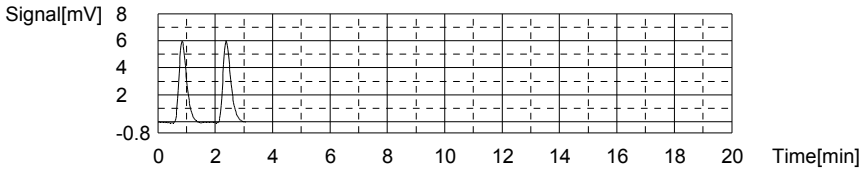
Mean Area 182.5
Mean Conc. 4.854mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.42	-0.04932mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 07:21:29 PM
2	11.48	-0.04730mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 07:25:38 PM

Mean Area 11.45
Mean Conc. -0.04831mg/L



Sample

Sample Name: L12050148-01
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

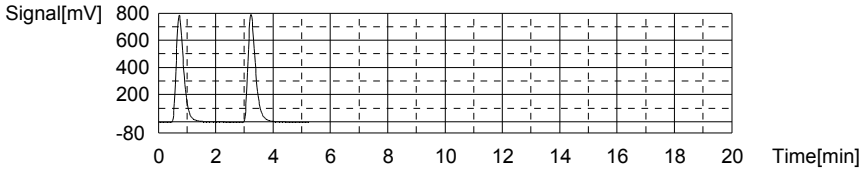
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:9.401mg/L TC:38.87mg/L IC:29.47mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1434	38.17mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 07:33:38 PM
2	1487	39.58mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 07:38:46 PM

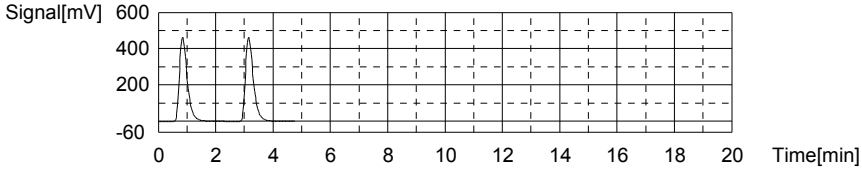
Mean Area 1461
Mean Conc. 38.87mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	885.3	29.35mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 07:44:14 PM
2	892.2	29.59mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 07:49:39 PM

Mean Area 888.8
Mean Conc. 29.47mg/L



Sample

Sample Name: WG397191-05 DUP
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

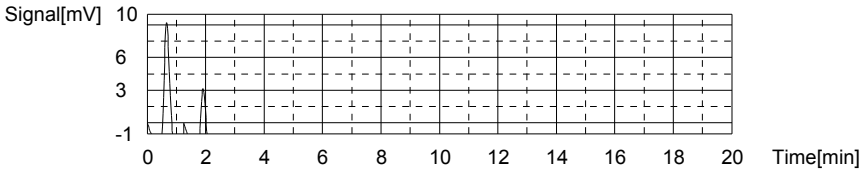
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.4515mg/L TC:0.3032mg/L IC:-0.1484mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	15.76	0.4170mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 07:56:28 PM
2	7.207	0.1893mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 08:00:03 PM

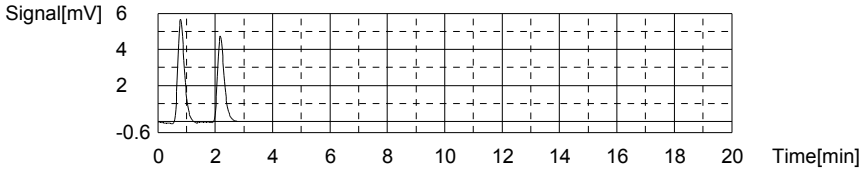
Mean Area 11.48
Mean Conc. 0.3032mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.252	-0.1223mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 08:04:19 PM
2	7.700	-0.1745mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 08:08:19 PM

Mean Area 8.476
Mean Conc. -0.1484mg/L



Sample

Sample Name: WG397191-06 MS
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

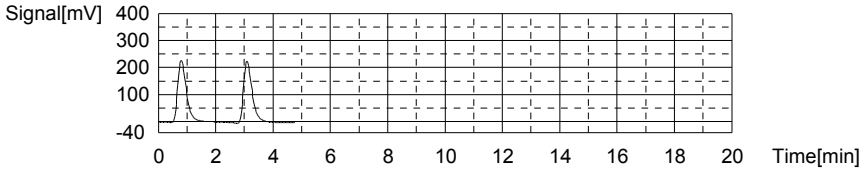
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:12.30mg/L TC:12.95mg/L IC:0.6431mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	486.9	12.96mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 08:16:11 PM
2	486.2	12.94mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 08:20:56 PM

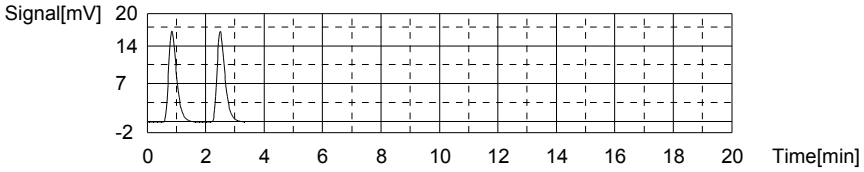
Mean Area 486.6
Mean Conc. 12.95mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	32.06	0.6451mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 08:25:27 PM
2	31.94	0.6411mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 08:29:45 PM

Mean Area 32.00
Mean Conc. 0.6431mg/L



Sample

Sample Name: L12050179-01
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

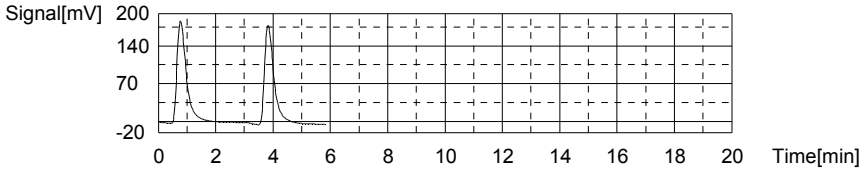
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:8.434mg/L TC:11.60mg/L IC:3.167mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	443.6	11.80mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 08:38:18 PM
2	428.3	11.40mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 08:44:15 PM

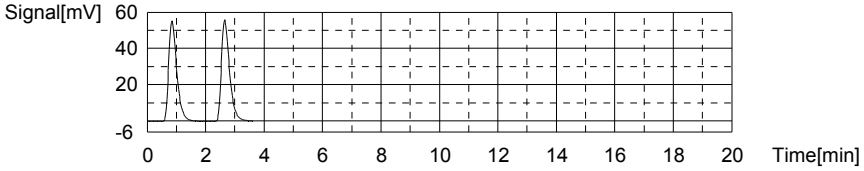
Mean Area 436.0
Mean Conc. 11.60mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	106.6	3.153mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 08:48:58 PM
2	107.4	3.180mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 08:53:28 PM

Mean Area 107.0
Mean Conc. 3.167mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

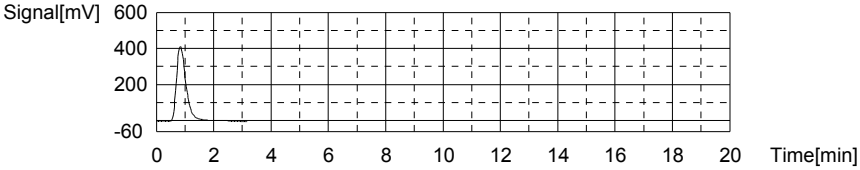
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:26.35mg/L TC:26.11mg/L IC:-0.2439mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	980.9	26.11mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 09:02:06 PM

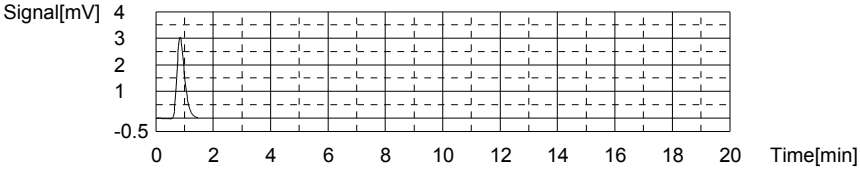
Mean Area 980.9
Mean Conc. 26.11mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.636	-0.2439mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 09:06:24 PM

Mean Area 5.636
Mean Conc. -0.2439mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

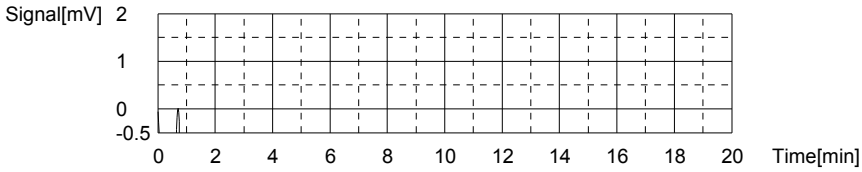
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3672mg/L TC:0.1689mg/L IC:-0.1983mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.439	0.1689mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 09:11:31 PM

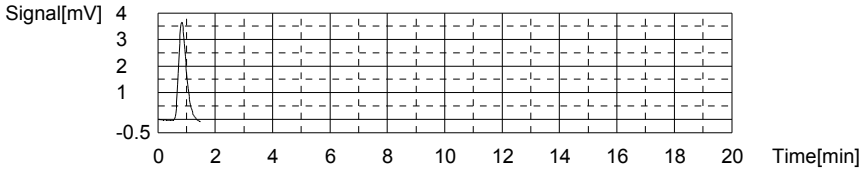
Mean Area 6.439
Mean Conc. 0.1689mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.993	-0.1983mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47_	05/08/2012 09:15:26 PM

Mean Area 6.993
Mean Conc. -0.1983mg/L



Sample

Sample Name: L12050052-13 (10)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

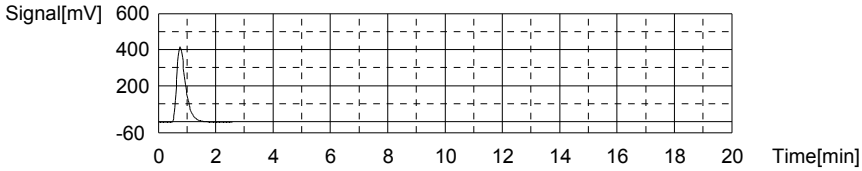
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:13.95mg/L TC:24.14mg/L IC:10.19mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	907.2	24.14mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 09:23:36 PM

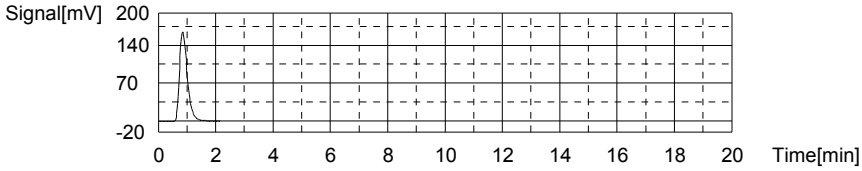
Mean Area 907.2
Mean Conc. 24.14mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	315.8	10.19mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47_	05/08/2012 09:28:46 PM

Mean Area 315.8
Mean Conc. 10.19mg/L



Sample

Sample Name:
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

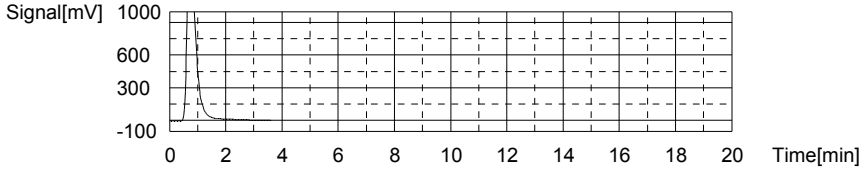
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:21.44mg/L TC:84.29mg/L IC:62.85mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3167	84.29mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 09:37:48 PM

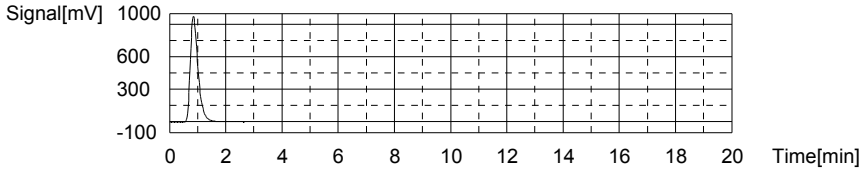
Mean Area 3167
Mean Conc. 84.29mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1881	62.85mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 09:43:52 PM

Mean Area 1881
Mean Conc. 62.85mg/L



Sample

Sample Name: L12050052-17 (5)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

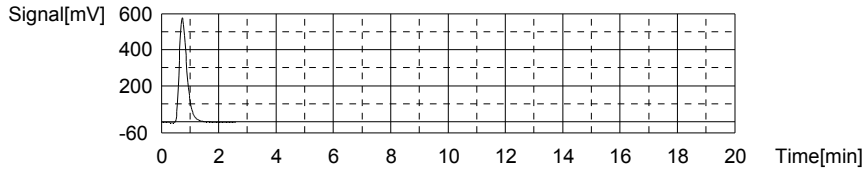
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:16.32mg/L TC:29.04mg/L IC:12.71mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1091	29.04mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 09:51:54 PM

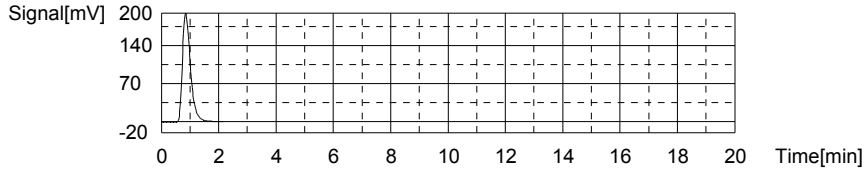
Mean Area 1091
Mean Conc. 29.04mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	390.7	12.71mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47_	05/08/2012 09:57:15 PM

Mean Area 390.7
Mean Conc. 12.71mg/L



Sample

Sample Name: L12050089-01 (10)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

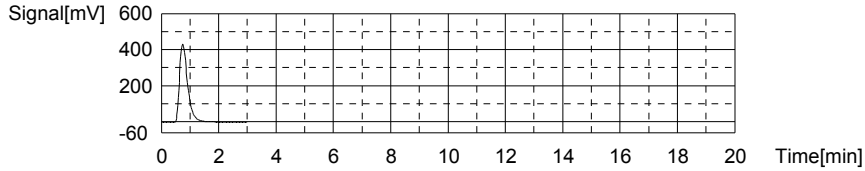
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:9.657mg/L TC:23.13mg/L IC:13.48mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	869.2	23.13mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 10:05:41 PM

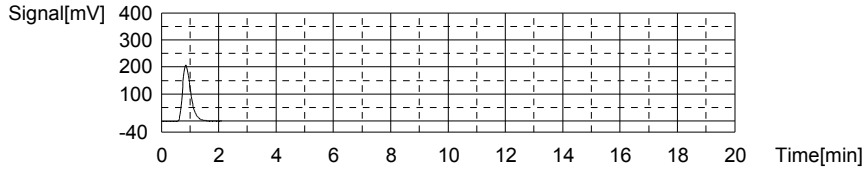
Mean Area 869.2
Mean Conc. 23.13mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	413.4	13.48mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47_	05/08/2012 10:10:54 PM

Mean Area 413.4
Mean Conc. 13.48mg/L



Sample

Sample Name: L12050089-03 (10)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

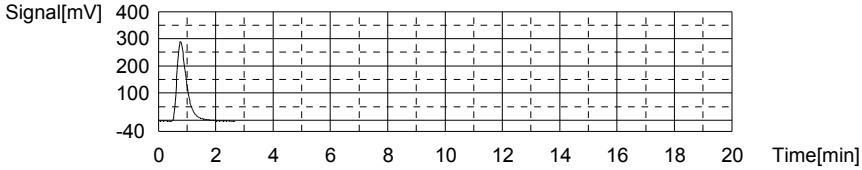
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:12.00mg/L TC:18.39mg/L IC:6.383mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	690.9	18.39mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 10:19:00 PM

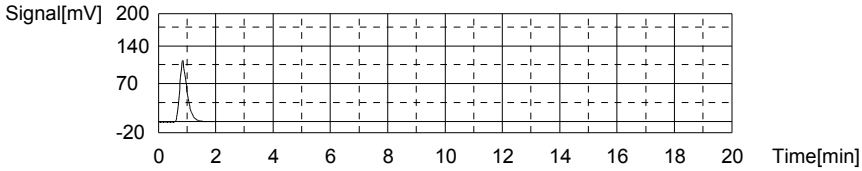
Mean Area 690.9
Mean Conc. 18.39mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	202.6	6.383mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 10:23:56 PM

Mean Area 202.6
Mean Conc. 6.383mg/L



Sample

Sample Name: L12050089-05 (5)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

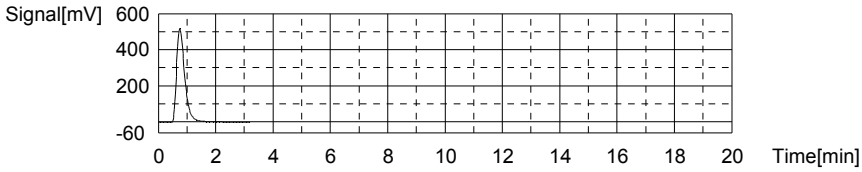
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:10.79mg/L TC:27.81mg/L IC:17.03mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1045	27.81mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 10:32:34 PM

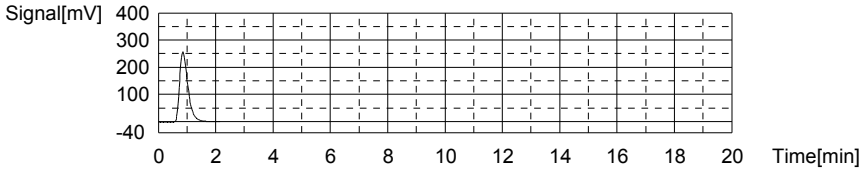
Mean Area 1045
Mean Conc. 27.81mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	518.9	17.03mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47_	05/08/2012 10:37:47 PM

Mean Area 518.9
Mean Conc. 17.03mg/L



Sample

Sample Name: L12050089-07 (50)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

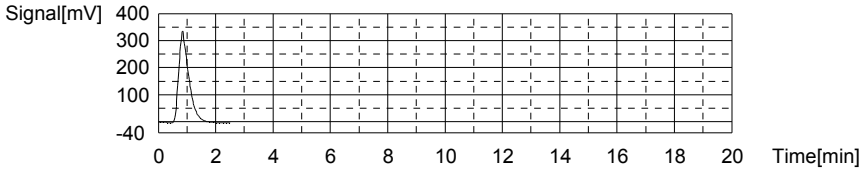
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:21.73mg/L TC:21.83mg/L IC:0.1024mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	820.3	21.83mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 10:45:43 PM

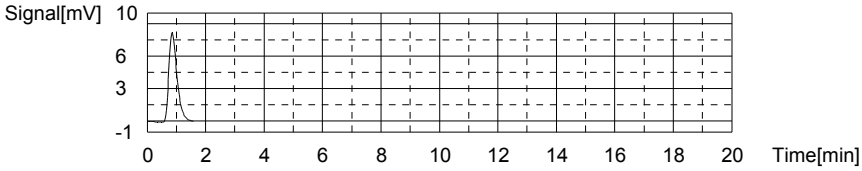
Mean Area 820.3
Mean Conc. 21.83mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	15.93	0.1024mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47_	05/08/2012 10:50:10 PM

Mean Area 15.93
Mean Conc. 0.1024mg/L



Sample

Sample Name: L12050089-08 (3)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

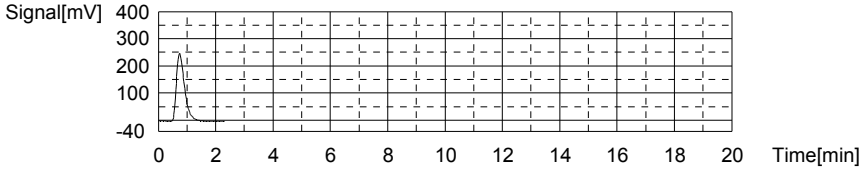
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.037mg/L TC:13.20mg/L IC:8.160mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	495.9	13.20mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 10:57:54 PM

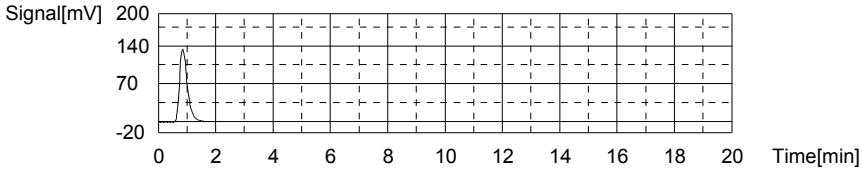
Mean Area 495.9
Mean Conc. 13.20mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	255.4	8.160mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 11:02:56 PM

Mean Area 255.4
Mean Conc. 8.160mg/L



Sample

Sample Name: L12050151-10 (20)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

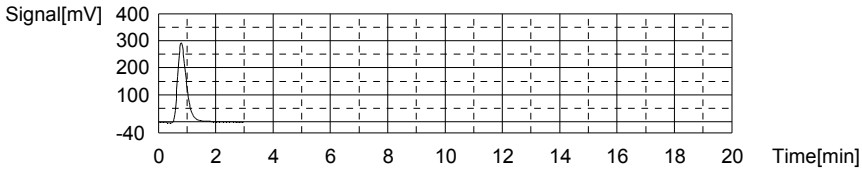
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:14.53mg/L TC:17.07mg/L IC:2.546mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	641.6	17.07mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 11:11:21 PM

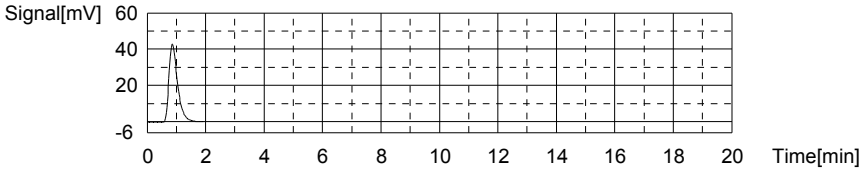
Mean Area 641.6
Mean Conc. 17.07mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	88.56	2.546mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47_	05/08/2012 11:16:12 PM

Mean Area 88.56
Mean Conc. 2.546mg/L



Sample

Sample Name:
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

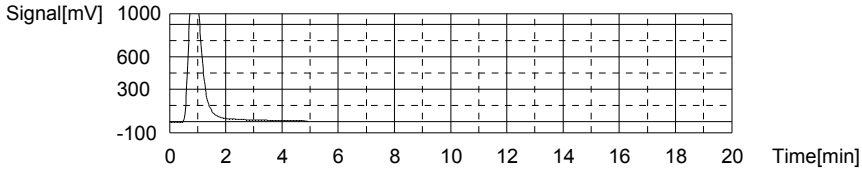
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:85.42mg/L TC:114.7mg/L IC:29.27mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4309	114.7mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 11:26:32 PM

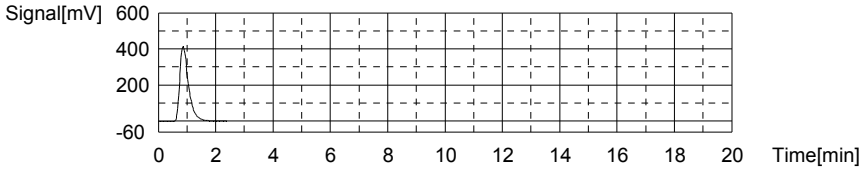
Mean Area 4309
Mean Conc. 114.7mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	882.7	29.27mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47_	05/08/2012 11:32:15 PM

Mean Area 882.7
Mean Conc. 29.27mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

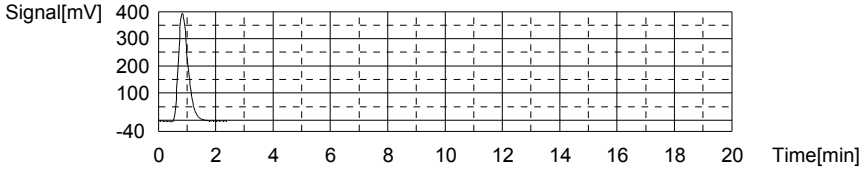
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:25.07mg/L TC:24.93mg/L IC:-0.1410mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	936.7	24.93mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 11:40:05 PM

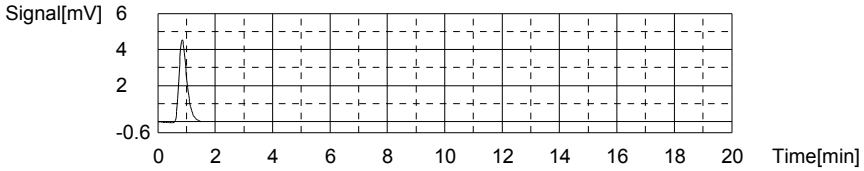
Mean Area 936.7
Mean Conc. 24.93mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.695	-0.1410mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/08/2012 11:44:33 PM

Mean Area 8.695
Mean Conc. -0.1410mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

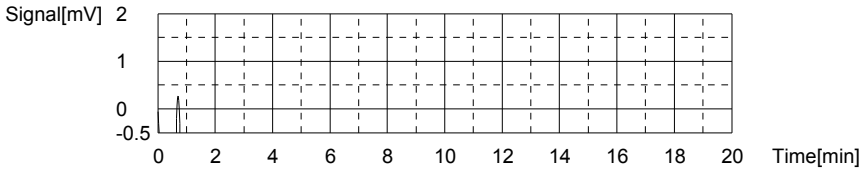
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3611mg/L TC:0.1786mg/L IC:-0.1825mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.804	0.1786mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/08/2012 11:49:42 PM

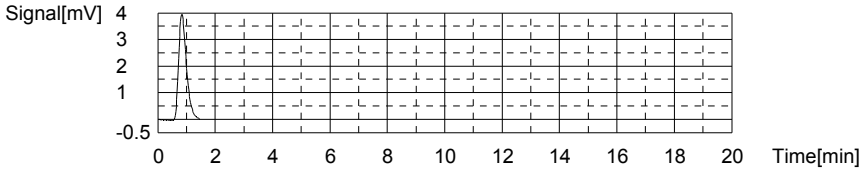
Mean Area 6.804
Mean Conc. 0.1786mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.461	-0.1825mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47_	05/08/2012 11:53:37 PM

Mean Area 7.461
Mean Conc. -0.1825mg/L



Sample

Sample Name: L12050220-01 (100)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

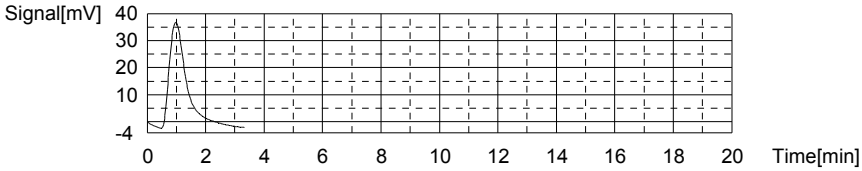
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:4.505mg/L TC:4.328mg/L IC:-0.1772mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	162.7	4.328mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/09/2012 12:02:23 AM

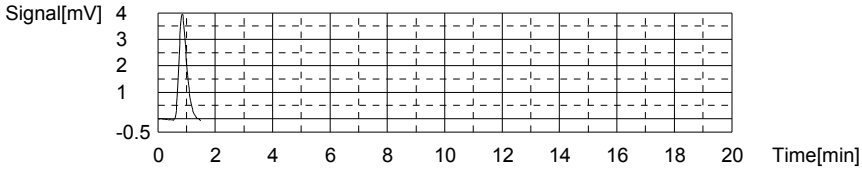
Mean Area 162.7
Mean Conc. 4.328mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.620	-0.1772mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47_	05/09/2012 12:06:45 AM

Mean Area 7.620
Mean Conc. -0.1772mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

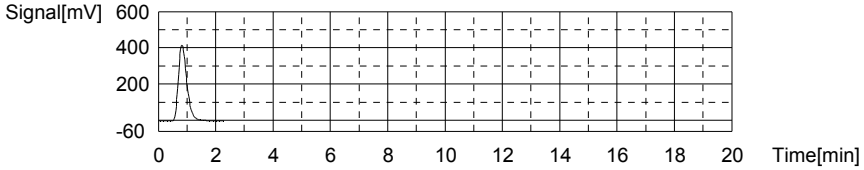
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.06mg/L TC:22.82mg/L IC:-0.2422mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	857.5	22.82mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/09/2012 12:14:29 AM

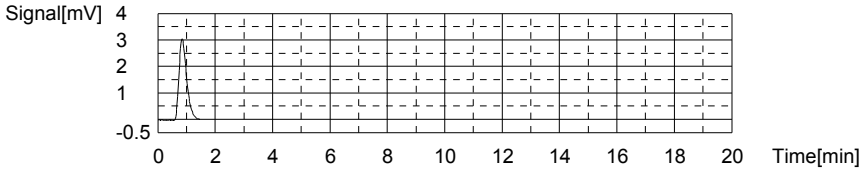
Mean Area 857.5
Mean Conc. 22.82mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.686	-0.2422mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/09/2012 12:18:48 AM

Mean Area 5.686
Mean Conc. -0.2422mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

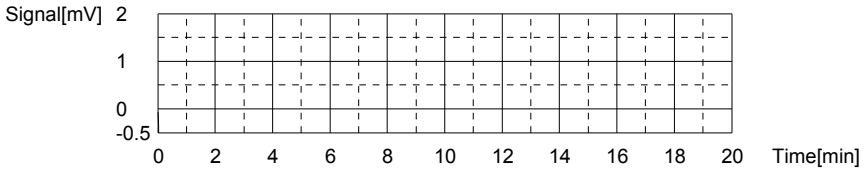
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3493mg/L TC:0.1523mg/L IC:-0.1970mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.817	0.1523mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/09/2012 12:23:57 AM

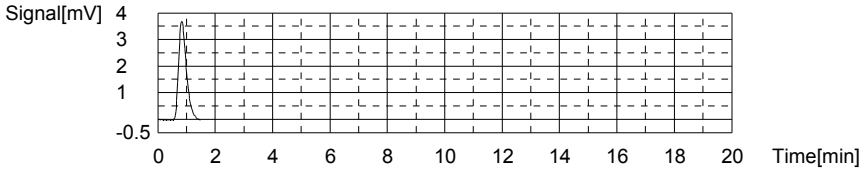
Mean Area 5.817
Mean Conc. 0.1523mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.031	-0.1970mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47_	05/09/2012 12:27:50 AM

Mean Area 7.031
Mean Conc. -0.1970mg/L



3.0 Attachments

Microbac Laboratories Inc.
Ohio Valley Division Analyst List
May 15, 2012

ADC - ANTHONY D. CANTER	AJF - AMANDA J. FICKIESEN	ALB - ANNIE L. BROWN
ALV - AMY L. VALENTINE	AML - TONY M. LONG	AZH - AFTER HOURS
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
CS - CODY M. STRAHLER	CSH - CHRIS S. HILL	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	JAL - JOHN A. LENT	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
PWD - PAUL W. DENT	QX - QIN XU	RAH - ROY A. HALSTEAD
REK - BOB E. KYER	RLB - BOB BUCHANAN	RLK - ROBIN L. KLINGER
RS - ROSEMARY SCOTT	RWC - RODNEY W. CAMPBELL	SJP - 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
May 15, 2012

Qualkey: WATERLOO

Qualifier	Description
*	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 present in 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

Microbac

Co.Name:	CH2M HILL	**TAT:**	Standard
Prj Contact:	Dave Newman	**Phone:**	973 316 9300
Prj Name:	Dow Waterloo	**Job Number:**	434426.01.GW.FS
Location:	Waterloo, NY	**Job Name:**	Waterloo

COC No. 043012-1

Sampler Print: Graham Sharkey, Alexandra Crane

Sampler Sign: G Sharkey

Sample ID	Comp	Grab	Date	Time	Hold	# of Containers	VOC_8260	SVOC_PAH	SVOC_8270	D_Gases_RSK	Alkalinity	PHOS_T, TOC, NO3,NO2	Nitrate_calc, SO4	Metals	Dissolved Metals		Notes:
MW-29-043012		X	4/30/12	13:07		15	X	X	X	X	X	X	X	X	X		
Dup-GW-043012		X	4/30/12	14:00		15	X	X	X	X	X	X	X	X	X		
EB-043012-GW		X	4/30/12	14:15		8	X	X	X					X			
TB-043012		X	4/30/12	8:05		2	X										

Relinquished By: G Sharkey
Date/Time 4/30/2012 @ 1700

Received By: FEDEx

Relinquished By:
Date/Time

Microbac OVD
Received: 05/01/2012 10:34
By: CARA STRICKLER 221000024599
Cara Strickler

Relinquished By
Date/Time:
Cooler Temp(s):

Received By:
Date/Time:
Comments:

Microbac Laboratories Inc.

Internal Chain of Custody Report

Login: L12050011
Account: 2736
Project: 2736.061
Samples: 6
Due Date: 15-MAY-2012

Samplenum	Container ID	Products
L12050011-01	965943	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	01-MAY-2012 12:45	CLS		<2
2	ANALYZ	V1	ORG4	02-MAY-2012 08:07	MRT	JKT	
Comments:Products cancelled.							
3	STORE	ORG4	A2	15-MAY-2012 10:09	JKT	MRT	
Comments:Products cancelled.							

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	01-MAY-2012 12:45	CLS		<2
2	ANALYZ	V1	ORG4	02-MAY-2012 08:07	MRT	JKT	
Comments:Products cancelled.							
3	STORE	ORG4	A2	15-MAY-2012 10:09	JKT	MRT	
Comments:Products cancelled.							

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	01-MAY-2012 12:45	CLS		<2
2	ANALYZ	V1	ORG4	02-MAY-2012 08:07	MRT	JKT	
Comments:Products cancelled.							
3	STORE	ORG4	A2	15-MAY-2012 10:09	JKT	MRT	
Comments:Products cancelled.							

Samplenum	Container ID	Products
L12050011-01	965944	826-SPE 827-PAHL 827-SPE-DIOX RSK175EXT

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	01-MAY-2012 12:45	CLS		
2	ANALYZ	V1	ORG4	02-MAY-2012 08:08	MRT	JKT	
3	STORE	ORG4	A2	15-MAY-2012 10:08	JKT	MRT	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	01-MAY-2012 12:45	CLS		
2	ANALYZ	V1	ORG4	02-MAY-2012 08:08	MRT	JKT	
3	STORE	ORG4	A2	15-MAY-2012 10:08	JKT	MRT	

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	01-MAY-2012 12:45	CLS		
2	ANALYZ	V1	ORG4	02-MAY-2012 08:08	MRT	JKT	
3	STORE	ORG4	A2	15-MAY-2012 10:08	JKT	MRT	

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: L12050011
Account: 2736
Project: 2736.061
Samples: 6
Due Date: 15-MAY-2012

Samplenum	Container ID	Products
L12050011-01	965945	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	01-MAY-2012 12:45	CLS		
2	PREP	W1	EXT	07-MAY-2012 13:31	CSH	CLS	
Comments:Products cancelled.							
3	DISP	EXT	DISP	08-MAY-2012 08:42	RLB	RLB	
Comments:Products cancelled.							

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	01-MAY-2012 12:45	CLS		
2	STORE	W1	A1	08-MAY-2012 08:10	BLG	BLG	
Comments:Products cancelled.							

Samplenum	Container ID	Products
L12050011-01	965946	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	01-MAY-2012 12:45	CLS		
2	PREP	W1	EXT	03-MAY-2012 06:46	CEB	AZH	
Comments:Products cancelled.							
3	DISP	EXT	DISP	03-MAY-2012 16:44	RLB	RLB	
Comments:Products cancelled.							

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	01-MAY-2012 12:45	CLS		
2	STORE	W1	A1	08-MAY-2012 08:10	BLG	BLG	
Comments:Products cancelled.							

Samplenum	Container ID	Products
L12050011-01	965947	ALK

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	01-MAY-2012 12:45	CLS		
2	ANALYZ	W1	WET	04-MAY-2012 07:55	DIH	RLK	
3	STORE	WET	A2	07-MAY-2012 08:22	RLK	DIH	

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login

Microbac Laboratories Inc.

Internal Chain of Custody Report

Login: L12050011
Account: 2736
Project: 2736.061
Samples: 6
Due Date: 15-MAY-2012

Samplenum	Container ID	Products
L12050011-01	965948	NO3 SO4

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	01-MAY-2012 12:45	CLS		
2	ANALYZ	W1	WET	01-MAY-2012 14:01	HJR	JKS	
3	STORE	WET	A2	04-MAY-2012 07:43	RLK	DIH	

Samplenum	Container ID	Products
L12050011-01	965949	PHOS TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	01-MAY-2012 12:45	CLS		<2
2	ANALYZ	W1	WET	02-MAY-2012 06:57	DIH	AZH	
3	STORE	WET	A2	10-MAY-2012 08:37	RLK	JBK	

Samplenum	Container ID	Products
L12050011-01	965950	AG AL AS-MS BA BE-AX CA CD-AX CO CR-AX CU FE H

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	01-MAY-2012 12:45	CLS		
2	PREP	W1	DIG	02-MAY-2012 04:39	REK	AZH	
3	ANALYZ*	DIG	METALS	02-MAY-2012 11:05	KHR	REK	
4	STORE	DIG	A2	02-MAY-2012 13:01	CLS	BRG	

Sample extract/digestate/leachate

Samplenum	Container ID	Products
L12050011-02	965951	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	01-MAY-2012 12:45	CLS		
2	PREP	W1	DIG	02-MAY-2012 04:39	REK	AZH	
3	ANALYZ*	DIG	METALS	02-MAY-2012 11:05	KHR	REK	
4	STORE	DIG	A2	02-MAY-2012 13:01	CLS	BRG	

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

Microbac Laboratories Inc.

Internal Chain of Custody Report

Login: L12050011
Account: 2736
Project: 2736.061
Samples: 6
Due Date: 15-MAY-2012

Samplenum	Container ID	Products
L12050011-03	965952	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	ORG4	01-MAY-2012 12:45	CLS		<2
2	STORE	ORG4	A2	15-MAY-2012 10:09	JKT	MRT	

Comments:Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	01-MAY-2012 12:45	CLS		<2
2	ANALYZ	V1	ORG4	02-MAY-2012 08:07	MRT	JKT	

Comments:Products cancelled.

3	STORE	ORG4	A2	15-MAY-2012 10:09	JKT	MRT	

Comments:Products cancelled.

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	01-MAY-2012 12:45	CLS		<2
2	ANALYZ	V1	ORG4	02-MAY-2012 08:07	MRT	JKT	

Comments:Products cancelled.

Samplenum	Container ID	Products
L12050011-03	965953	826-SPE 827-PAHL 827-SPE-DIOX RSK175EXT

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	01-MAY-2012 12:45	CLS		
2	ANALYZ	V1	ORG4	02-MAY-2012 08:09	MRT	JKT	
3	STORE	ORG4	A2	15-MAY-2012 10:08	JKT	MRT	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	01-MAY-2012 12:45	CLS		
2	ANALYZ	V1	ORG4	02-MAY-2012 08:09	MRT	JKT	
3	STORE	ORG4	A2	15-MAY-2012 10:08	JKT	MRT	

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	01-MAY-2012 12:45	CLS		
2	ANALYZ	V1	ORG4	02-MAY-2012 08:09	MRT	JKT	
3	STORE	ORG4	A2	15-MAY-2012 10:08	JKT	MRT	

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: L12050011
Account: 2736
Project: 2736.061
Samples: 6
Due Date: 15-MAY-2012

Samplenum	Container ID	Products
L12050011-03	965954	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	01-MAY-2012 12:45	CLS		
2	PREP	W1	EXT	07-MAY-2012 13:31	CSH	CLS	
Comments:Products cancelled.							
3	DISP	EXT	DISP	08-MAY-2012 08:41	RLB	RLB	
Comments:Products cancelled.							

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	01-MAY-2012 12:45	CLS		
2	STORE	W1	A1	08-MAY-2012 08:10	BLG	BLG	
Comments:Products cancelled.							

Samplenum	Container ID	Products
L12050011-03	965955	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	01-MAY-2012 12:45	CLS		
2	PREP	W1	EXT	03-MAY-2012 06:46	CEB	AZH	
Comments:Products cancelled.							
3	DISP	EXT	DISP	03-MAY-2012 16:45	RLB	RLB	
Comments:Products cancelled.							

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	01-MAY-2012 12:45	CLS		
2	STORE	W1	A1	08-MAY-2012 08:10	BLG	BLG	
Comments:Products cancelled.							

Samplenum	Container ID	Products
L12050011-03	965956	ALK

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	01-MAY-2012 12:45	CLS		
2	ANALYZ	W1	WET	04-MAY-2012 07:55	DIH	RLK	
3	STORE	WET	A2	07-MAY-2012 08:22	RLK	DIH	

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login

Microbac Laboratories Inc.

Internal Chain of Custody Report

Login: L12050011
Account: 2736
Project: 2736.061
Samples: 6
Due Date: 15-MAY-2012

Samplenum	Container ID	Products
L12050011-03	965957	NO3 SO4

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	01-MAY-2012 12:45	CLS		
2	ANALYZ	W1	WET	01-MAY-2012 14:01	HJR	JKS	
3	STORE	WET	A2	04-MAY-2012 07:43	RLK	DIH	

Samplenum	Container ID	Products
L12050011-03	965958	PHOS TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	01-MAY-2012 12:45	CLS		<2
2	ANALYZ	W1	WET	02-MAY-2012 06:57	DIH	AZH	
3	STORE	WET	A2	10-MAY-2012 08:37	RLK	JBK	

Samplenum	Container ID	Products
L12050011-03	965959	AG AL AS-MS BA BE-AX CA CD-AX CO CR-AX CU FE H

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	01-MAY-2012 12:45	CLS		
2	PREP	W1	DIG	02-MAY-2012 04:39	REK	AZH	
3	ANALYZ*	DIG	METALS	02-MAY-2012 11:05	KHR	REK	
4	STORE	DIG	A2	02-MAY-2012 13:01	CLS	BRG	

Sample extract/digestate/leachate

Samplenum	Container ID	Products
L12050011-04	965960	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	01-MAY-2012 12:45	CLS		
2	PREP	W1	DIG	02-MAY-2012 04:39	REK	AZH	
3	ANALYZ*	DIG	METALS	02-MAY-2012 11:05	KHR	REK	
4	STORE	DIG	A2	02-MAY-2012 13:01	CLS	BRG	

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: L12050011
Account: 2736
Project: 2736.061
Samples: 6
Due Date: 15-MAY-2012

Samplenum	Container ID	Products
L12050011-05	965961	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	01-MAY-2012 12:45	CLS		<2
2	ANALYZ	V1	ORG4	02-MAY-2012 08:07	MRT	JKT	
Comments:Products cancelled.							
3	STORE	ORG4	A2	15-MAY-2012 10:08	JKT	MRT	
Comments:Products cancelled.							

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	01-MAY-2012 12:45	CLS		<2
2	ANALYZ	V1	ORG4	02-MAY-2012 08:07	MRT	JKT	
Comments:Products cancelled.							
3	STORE	ORG4	A2	15-MAY-2012 10:08	JKT	MRT	
Comments:Products cancelled.							

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	01-MAY-2012 12:45	CLS		<2
2	ANALYZ	V1	ORG4	02-MAY-2012 08:07	MRT	JKT	
Comments:Products cancelled.							
3	STORE	ORG4	A2	15-MAY-2012 10:08	JKT	MRT	
Comments:Products cancelled.							

Samplenum	Container ID	Products
L12050011-05	965962	826-SPE 827-PAHL 827-SPE-DIOX

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	01-MAY-2012 12:45	CLS		
2	PREP	W1	EXT	03-MAY-2012 06:46	CEB	AZH	
3	DISP	EXT	DISP	03-MAY-2012 16:45	RLB	RLB	
4	ANALYZ*	EXT	SEMI	04-MAY-2012 09:03	CAA	CEB	
5	PREP	W1	EXT	07-MAY-2012 13:31	CSH	CLS	
6	DISP	EXT	DISP	08-MAY-2012 08:42	RLB	RLB	

Sample extract/digestate/leachate

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER		01-MAY-2012 12:45	CLS		

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

Microbac Laboratories Inc.

Internal Chain of Custody Report

Login: L12050011
Account: 2736
Project: 2736.061
Samples: 6
Due Date: 15-MAY-2012

Samplenum	Container ID	Products
L12050011-05	965963	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER		01-MAY-2012 12:45	CLS		

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER		01-MAY-2012 12:45	CLS		

Samplenum	Container ID	Products
L12050011-05	965964	AG AL AS-MS BA BE-AX CA CD-AX CO CR-AX CU FE H

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	01-MAY-2012 12:45	CLS		
2	PREP	W1	DIG	02-MAY-2012 04:39	REK	AZH	
3	ANALYZ*	DIG	METALS	02-MAY-2012 11:05	KHR	REK	
4	STORE	DIG	A2	02-MAY-2012 13:01	CLS	BRG	

Sample extract/digestate/leachate

Samplenum	Container ID	Products
L12050011-06	965965	826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	01-MAY-2012 12:45	CLS		<2
2	ANALYZ	V1	ORG4	02-MAY-2012 08:07	MRT	JKT	
3	STORE	ORG4	A2	15-MAY-2012 10:08	JKT	MRT	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	01-MAY-2012 12:45	CLS		<2
2	ANALYZ	V1	ORG4	02-MAY-2012 08:07	MRT	JKT	
3	STORE	ORG4	A2	15-MAY-2012 10:08	JKT	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 MSV0I/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 RSKOI/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 MSS0I/GC-MS

1-Methylnaphthalene
Benzaldehyde
Biphenyl
Caprolactam
Pentachloroethane

NELAP Accreditation by Laboratory SOP

SOLID AND HAZARDOUS CHEMICALS

OVL MSV0I/GC-MS

1.3-Butadiene
Cyclohexane
Cyclohexanone
Dimethyl disulfide
Dimethylsulfide
Ethyl-t-butylether (ETBE)
lsoprene
Methylacetate
Methylcyclohexane
n-Hexane
T-amylmethylether (TAME)