Microbac

Laboratory Report Number: L12050153

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 23 2012

David E. Vandenberg

David Vandenberg – Managing Director

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

Microbac

Lab Report #: L12050153
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 #
0017093	H	4.0		1015923880460004575000795763140216
0013647	H	2.0		1002239580460004575000872087763772
0015983	H	5.0		34575026110000007957631402276810

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 #: L12050153
Lab Project #: 2736.061
Project Name: DOW WATERLOO GW
Lab Contact: Kathy Albertson

Samples Received

Client ID	Laboratory ID	Date Collected	Date Received
MW-15-050312	L12050153-01	05/03/2012 10:45	05/04/2012 10:29
MW-15-050312	L12050153-02	05/03/2012 10:45	05/04/2012 10:29
MW-17-050312	L12050153-03	05/03/2012 11:30	05/04/2012 10:29
MW-17-050312	L12050153-04	05/03/2012 11:30	05/04/2012 10:29
MW-28050312	L12050153-05	05/03/2012 15:00	05/04/2012 10:29
MW-28050312	L12050153-06	05/03/2012 15:00	05/04/2012 10:29
TW-02-050312	L12050153-07	05/03/2012 13:30	05/04/2012 10:29
TW-02-050312	L12050153-08	05/03/2012 13:30	05/04/2012 10:29
TB-050312	L12050153-09	05/03/2012 08:05	05/04/2012 10:29

Microbac REPORT L12050153
PREPARED FOR CH2MHILL, Inc
WORK ID:

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1.0 Summary Data

1.1 Narratives

Login Number: L12050153
Department: Volatiles
Analyst: Tiffany Bailey

METHOD

Preparation SW-846 5030C/5035A

Analysis SW-846 8260B

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

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

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

Continuing Calibration and Tune: Recoveries out of range were observed for the following analytes: 2-Butanone, Acetone, Methyl acetate. 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: Dichlorodifluoromethane. Please see the applicable QC report for a detailed presentation of the failures.

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

SAMPLES

Internal Standards: All acceptance criteria were met.

Surrogates: All acceptance criteria were met.

Other: 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.

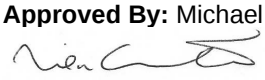
Reason #3: Improperly Integrated Isomers and/or coeluting compounds. This system often fails to distinguish coeluting compounds and or isomers. The integration areas and concentrations are wrong, and they must be corrected by manual integration. Prime examples are benzo(k)fluoranthene and benzo(b)fluoranthene 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: 46475
Approved By: Michael Albertson



Login Number: L12050153
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: The MS/MSD results were not associated with this sample delivery group (SDG), due to insufficient volume of sample. 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: 46093
Approved By: Michael Albertson

Login Number: L12050153
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 surrogate: Phenol-d5. 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: 46537
Approved By: Mike Cochran

Login Number: L12050153
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: 46194
Approved By: Mike Cochran

Login Number: L12050153
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: WG397367 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

Narrative ID: 46139
Approved By: Sheri Pfalzgraf

Login Number: L12050153
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: WG397345 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

Narrative ID: 46127
Approved By: Sheri Pfalzgraf

Login Number: L12050153
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: WG397594 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

Narrative ID: 46140
Approved By: Sheri Pfalzgraf

Login Number: L12050153
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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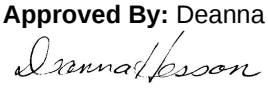
Narrative ID: 46691
Approved By: Deanna Hesson



Login Number: L12050153
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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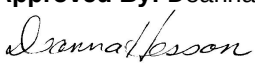
Narrative ID: 46694
Approved By: Deanna Hesson



Login Number: L12050153
Department: Conventionals
Analyst: Jeremy Kinney

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.

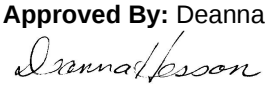
Duplicates: All acceptance criteria were met.

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: 46692
Approved By: Deanna Hesson



Login Number: L12050153
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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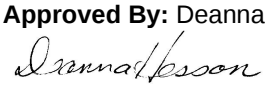
Narrative ID: 46693
Approved By: Deanna Hesson



Login Number: L12050153
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.

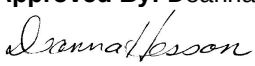
Matrix Spikes: All acceptance criteria were met.

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: 46695
Approved By: Deanna Hesson



1.2 Certificate of Analysis

Certificate of Analysis

Sample #:	L12050153-01	**PrePrep Method:**	N/A	**Instrument:**	HPMS8
Client ID:	MW-15-050312	**Prep Method:**	5030B/5030C/5035A	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	8260B	**Cal Date:**	03/27/2012 15:49
Workgroup #:	WG397692	**Analyst:**	TMB	**Run Date:**	05/11/2012 02:02
Collect Date:	05/03/2012 10:45	**Dilution:**	1	**File ID:**	8M378975
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

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	113	80	120	
Dibromofluoromethane	104	86	118	
p-Bromofluorobenzene	96.3	86	115	
Toluene-d8	99.1	88	110	

U	Not detected at or above adjusted sample detection limit.

Sample #: L12050153-01
Client ID: MW-15-050312
Matrix: Water
Workgroup #: WG397238
Collect Date: 05/03/2012 10:45
Sample Tag: 01

PrePrep Method: N/A
Prep Method: 5021
Analytical Method: RSK175
Analyst: FJB
Dilution: 1
Units: ug/L

Instrument: HP16
Prep Date: N/A
Cal Date: 04/30/2012 15:04
Run Date: 05/07/2012 18:24
File ID: 16G32267

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	4.23		5.00	1.00
Carbon Dioxide	124-38-9	38700		10000	2500

Certificate of Analysis

Sample #:	L12050153-01	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-15-050312	**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 22:24
Collect Date:	05/03/2012 10:45	**Dilution:**	1	**File ID:**	4M60836
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
1,1'-Biphenyl	92-52-4		U	22.2	2.78
1,3,5-Trinitrobenzene	99-35-4		U	5.56	2.78
1,3-Dinitrobenzene	99-65-0		U	5.56	2.78
1,4-Dioxane	123-91-1		U	11.1	5.56
2,4,5-Trichlorophenol	95-95-4		U	5.56	2.78
2,4,6-Trichlorophenol	88-06-2		U	5.56	2.78
2,4-Dichlorophenol	120-83-2		U	5.56	2.78
2,4-Dimethylphenol	105-67-9		U	5.56	2.78
2,4-Dinitrophenol	51-28-5		U	27.8	13.9
2,4-Dinitrotoluene	121-14-2		U	5.56	2.78
2,6-Dinitrotoluene	606-20-2		U	5.56	2.78
2-Chloronaphthalene	91-58-7		U	5.56	2.78
2-Chlorophenol	95-57-8		U	5.56	2.78
2-Methylnaphthalene	91-57-6		U	5.56	2.78
2-Methylphenol	95-48-7		U	5.56	2.78
2-Nitroaniline	88-74-4		U	27.8	13.9
2-Nitrophenol	88-75-5		U	5.56	2.78
3-Nitroaniline	99-09-2		U	27.8	13.9
3,3'-Dichlorobenzidine	91-94-1		U	5.56	2.78
3-,4-Methylphenol	106-44-5		U	5.56	2.78
4-Bromophenyl-phenylether	101-55-3		U	5.56	2.78
4-Chloroaniline	106-47-8		U	5.56	2.78
4-Nitrophenol	100-02-7		U	27.8	13.9
Acenaphthene	83-32-9		U	5.56	2.78
Acenaphthylene	208-96-8		U	5.56	2.78
Anthracene	120-12-7		U	5.56	2.78
Benzo(a)anthracene	56-55-3		U	5.56	2.78
Benzo(a)pyrene	50-32-8		U	5.56	2.78
Benzo(b)fluoranthene	205-99-2		U	5.56	2.78
Benzo(g,h,i)Perylene	191-24-2		U	5.56	2.78
Benzo(k)fluoranthene	207-08-9		U	5.56	2.78
Benzoic acid	65-85-0		U	22.2	11.1
Benzyl alcohol	100-51-6		U	5.56	2.78

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Bis(2-Chloroethyl)ether	111-44-4		U	5.56	2.78
Bis(2-Chloroethoxy)Methane	111-91-1		U	5.56	2.78
bis(2-Ethylhexyl)phthalate	117-81-7		U	5.56	2.78
Butylbenzylphthalate	85-68-7		U	5.56	2.78
Carbazole	86-74-8		U	22.2	2.78
Chrysene	218-01-9		U	5.56	2.78
Di-N-Butylphthalate	84-74-2		U	5.56	2.78
Di-n-octylphthalate	117-84-0		U	5.56	2.78
Dibenzo(a,h)Anthracene	53-70-3		U	5.56	2.78
Dibenzofuran	132-64-9		U	5.56	2.78
Diethylphthalate	84-66-2		U	5.56	2.78
Dimethylphthalate	131-11-3		U	5.56	2.78
Fluoranthene	206-44-0		U	5.56	2.78
Fluorene	86-73-7		U	5.56	2.78
Hexachlorobenzene	118-74-1		U	5.56	2.78
Hexachlorobutadiene	87-68-3		U	5.56	2.78
Hexachlorocyclopentadiene	77-47-4		U	5.56	2.78
Hexachloroethane	67-72-1		U	5.56	2.78
Indeno(1,2,3-cd)pyrene	193-39-5		U	5.56	2.78
Isophorone	78-59-1		U	5.56	2.78
N-Nitrosodiphenylamine	86-30-6		U	5.56	2.78
Naphthalene	91-20-3		U	5.56	2.78
Nitrobenzene	98-95-3		U	5.56	2.78
Pentachlorophenol	87-86-5		U	27.8	13.9
Phenanthrene	85-01-8		U	5.56	2.78
Phenol	108-95-2		U	5.56	2.78
Pyrene	129-00-0		U	5.56	2.78

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2,4,6-Tribromophenol	77.9	10	123	
2-Fluorobiphenyl	77.6	43	116	
2-Fluorophenol	69.2	21	100	
Nitrobenzene-d5	77.2	35	114	
p-Terphenyl-d14	80.5	33	141	
Phenol-d5	74.0	10	94	

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12050153-01	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-15-050312	**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 22:24
Collect Date:	05/03/2012 10:45	**Dilution:**	1	**File ID:**	4M60836
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
unknown		7.37		0.000	0.000
unknown		4.68		0.000	0.000
unknown		12.7		0.000	0.000
unknown		4.92		0.000	0.000
unknown		8.76		0.000	0.000
unknown		10.9		0.000	0.000
unknown		6.54		0.000	0.000
unknown		9.18		0.000	0.000
unknown		9.03		0.000	0.000
unknown		5.40		0.000	0.000

Sample #:	L12050153-01	**PrePrep Method:**	N/A	**Instrument:**	HPMS7
Client ID:	MW-15-050312	**Prep Method:**	3510C	**Prep Date:**	05/09/2012 11:00
Matrix:	Water	**Analytical Method:**	8270C	**Cal Date:**	04/04/2012 12:53
Workgroup #:	WG397601	**Analyst:**	CAA	**Run Date:**	05/10/2012 13:18
Collect Date:	05/03/2012 10:45	**Dilution:**	1	**File ID:**	7M54961
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
2-Methylnaphthalene	91-57-6		U	0.0549	0.0275
Acenaphthene	83-32-9		U	0.0549	0.0275
Acenaphthylene	208-96-8		U	0.0549	0.0275
Anthracene	120-12-7		U	0.0549	0.0275
Benzo(a)anthracene	56-55-3		U	0.0549	0.0275
Benzo(a)pyrene	50-32-8		U	0.0549	0.0275
Benzo(b)fluoranthene	205-99-2		U	0.0549	0.0275
Benzo(g,h,i)perylene	191-24-2		U	0.0549	0.0275
Benzo(k)fluoranthene	207-08-9		U	0.0549	0.0275
Chrysene	218-01-9		U	0.0549	0.0275
Dibenzo(a,h)anthracene	53-70-3		U	0.0549	0.0275
Fluoranthene	206-44-0		U	0.0549	0.0275
Fluorene	86-73-7		U	0.0549	0.0275
Indeno(1,2,3-cd)pyrene	193-39-5		U	0.0549	0.0275

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Naphthalene	91-20-3		U	0.0549	0.0275
Phenanthrene	85-01-8		U	0.0549	0.0275
Pyrene	129-00-0		U	0.0549	0.0275

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2-Fluorobiphenyl	68.8	43	116	
Nitrobenzene-d5	76.7	35	114	
p-Terphenyl-d14	86.5	33	141	

U	Not detected at or above adjusted sample detection limit.

Sample #: L12050153-01
Client ID: MW-15-050312
Matrix: Water
Workgroup #: WG397367
Collect Date: 05/03/2012 10:45
Sample Tag: 01

PrePrep Method: N/A
Prep Method: 3005A
Analytical Method: 6010B
Analyst: KHR
Dilution: 1
Units: mg/L

Instrument: PE-ICP2
Prep Date: 05/08/2012 13:08
Cal Date: 05/10/2012 09:21
Run Date: 05/10/2012 11:04
File ID: P2.051012.110419

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5		U	0.100	0.0500
Barium, Total	7440-39-3	0.0417		0.0100	0.00250
Beryllium, Total	7440-41-7		U	0.00200	0.000500
Cadmium, Total	7440-43-9	0.000373		0.000500	0.000250
Calcium, Total	7440-70-2	64.3		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	0.0129		0.0200	0.00500
Iron, Total	7439-89-6	0.0770		0.100	0.0250
Magnesium, Total	7439-95-4	14.2		0.500	0.250
Manganese, Total	7439-96-5	0.00503		0.0100	0.00500
Nickel, Total	7440-02-0		U	0.0400	0.00500
Potassium, Total	7440-09-7	3.16		1.00	0.250
Silver, Total	7440-22-4		U	0.0100	0.00500
Sodium, Total	7440-23-5	57.6		0.500	0.250
Vanadium, Total	7440-62-2	0.00794		0.0100	0.00500
Zinc, Total	7440-66-6	0.0815		0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12050153-01	**PrePrep Method:**	N/A	**Instrument:**	ICP-MS2
Client ID:	MW-15-050312	**Prep Method:**	3015	**Prep Date:**	05/07/2012 11:15
Matrix:	Water	**Analytical Method:**	6020	**Cal Date:**	05/10/2012 09:13
Workgroup #:	WG397345	**Analyst:**	JYH	**Run Date:**	05/10/2012 10:19
Collect Date:	05/03/2012 10:45	**Dilution:**	1	**File ID:**	NI.051012.101953
Sample Tag:	02	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		U	0.00100	0.000500
Arsenic, Total	7440-38-2	0.000699		0.00100	0.000500
Lead, Total	7439-92-1	0.00226		0.00100	0.000500
Selenium, Total	7782-49-2	0.00220		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 #:	L12050153-01	**PrePrep Method:**	N/A	**Instrument:**	HYDRA
Client ID:	MW-15-050312	**Prep Method:**	7470A	**Prep Date:**	05/08/2012 12:35
Matrix:	Water	**Analytical Method:**	7470A	**Cal Date:**	05/10/2012 09:40
Workgroup #:	WG397594	**Analyst:**	PDM	**Run Date:**	05/10/2012 11:35
Collect Date:	05/03/2012 10:45	**Dilution:**	1	**File ID:**	HY.051012.113521
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 #:	L12050153-01	**PrePrep Method:**	N/A	**Instrument:**	SMARTCHEM
Client ID:	MW-15-050312	**Prep Method:**	310.2	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	310.2	**Cal Date:**	05/14/2012 12:21
Workgroup #:	WG397895	**Analyst:**	DIH	**Run Date:**	05/14/2012 12:24
Collect Date:	05/03/2012 10:45	**Dilution:**	1	**File ID:**	SC120514002.013
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Alkalinity, Total (as CaCO3)		170		20.0	10.0

Certificate of Analysis

Sample #: L12050153-01 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-15-050312 **Prep Method:** 353.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 353.2 **Cal Date:** 05/07/2012 08:43
Workgroup #: WG397183 **Analyst:** DIH **Run Date:** 05/07/2012 11:15
Collect Date: 05/03/2012 10:45 **Dilution:** 1 **File ID:** SC12050910172001
Sample Tag: **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8	0.671		0.0500	0.0250

Sample #: L12050153-01 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-15-050312 **Prep Method:** 365.4 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 365.4 **Cal Date:** 05/15/2012 08:40
Workgroup #: WG397809 **Analyst:** JBK **Run Date:** 05/15/2012 08:46
Collect Date: 05/03/2012 10:45 **Dilution:** 1 **File ID:** SC120515001.016
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 #: L12050153-01 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-15-050312 **Prep Method:** 375.4 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 375.4 **Cal Date:** 05/07/2012 14:08
Workgroup #: WG397213 **Analyst:** DIH **Run Date:** 05/07/2012 14:16
Collect Date: 05/03/2012 10:45 **Dilution:** 2 **File ID:** SC120507003.021
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	53.8		10.0	5.00

Sample #: L12050153-01 **PrePrep Method:** N/A **Instrument:** TOC-VWP
Client ID: MW-15-050312 **Prep Method:** 415.1 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 415.1 **Cal Date:** 12/06/2011 09:40
Workgroup #: WG397595 **Analyst:** JBK **Run Date:** 05/10/2012 20:01
Collect Date: 05/03/2012 10:45 **Dilution:** 1 **File ID:** TC05102012.021
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		4.56		1.00	0.500

Certificate of Analysis

Sample #:	L12050153-02	**PrePrep Method:**	N/A	**Instrument:**	PE-ICP2
Client ID:	MW-15-050312	**Prep Method:**	3005A	**Prep Date:**	05/08/2012 13:08
Matrix:	Water	**Analytical Method:**	6010B	**Cal Date:**	05/10/2012 09:21
Workgroup #:	WG397367	**Analyst:**	KHR	**Run Date:**	05/10/2012 11:11
Collect Date:	05/03/2012 10:45	**Dilution:**	1	**File ID:**	P2.051012.111116
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	0.0414		0.0100	0.00250
Beryllium, Dissolved	7440-41-7		U	0.00200	0.000500
Cadmium, Dissolved	7440-43-9	0.000376		0.000500	0.000250
Calcium, Dissolved	7440-70-2	64.4		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	0.0123		0.0200	0.00500
Iron, Dissolved	7439-89-6		U	0.100	0.0250
Magnesium, Dissolved	7439-95-4	14.2		0.500	0.250
Manganese, Dissolved	7439-96-5		U	0.0100	0.00500
Nickel, Dissolved	7440-02-0		U	0.0400	0.00500
Potassium, Dissolved	7440-09-7	3.07		1.00	0.250
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Sodium, Dissolved	7440-23-5	58.1		0.500	0.250
Vanadium, Dissolved	7440-62-2	0.00698		0.0100	0.00500
Zinc, Dissolved	7440-66-6	0.0821		0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Sample #:	L12050153-02	**PrePrep Method:**	N/A	**Instrument:**	ICP-MS2
Client ID:	MW-15-050312	**Prep Method:**	3015	**Prep Date:**	05/07/2012 11:15
Matrix:	Water	**Analytical Method:**	6020	**Cal Date:**	05/10/2012 09:13
Workgroup #:	WG397345	**Analyst:**	JYH	**Run Date:**	05/10/2012 10:22
Collect Date:	05/03/2012 10:45	**Dilution:**	1	**File ID:**	NI.051012.102247
Sample Tag:	02	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Dissolved	7440-36-0		U	0.00100	0.000500
Arsenic, Dissolved	7440-38-2	0.000629		0.00100	0.000500
Lead, Dissolved	7439-92-1	0.000590		0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.00213		0.00100	0.000500
Thallium, Dissolved	7440-28-0		U	0.000200	0.000100

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12050153-02	**PrePrep Method:**	N/A	**Instrument:**	HYDRA
Client ID:	MW-15-050312	**Prep Method:**	7470A	**Prep Date:**	05/08/2012 12:35
Matrix:	Water	**Analytical Method:**	7470A	**Cal Date:**	05/10/2012 09:40
Workgroup #:	WG397594	**Analyst:**	PDM	**Run Date:**	05/10/2012 11:38
Collect Date:	05/03/2012 10:45	**Dilution:**	1	**File ID:**	HY.051012.113851
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 #:	L12050153-03	**PrePrep Method:**	N/A	**Instrument:**	HPMS8
Client ID:	MW-17-050312	**Prep Method:**	5030B/5030C/5035A	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	8260B	**Cal Date:**	03/27/2012 15:49
Workgroup #:	WG397692	**Analyst:**	TMB	**Run Date:**	05/11/2012 02:35
Collect Date:	05/03/2012 11:30	**Dilution:**	1	**File ID:**	8M378976
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

Certificate of Analysis

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

Surrogate	Recovery	Lower Limit	Upper Limit	Q
1,2-Dichloroethane-d4	114	80	120	
Dibromofluoromethane	102	86	118	
p-Bromofluorobenzene	96.6	86	115	
Toluene-d8	99.5	88	110	

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12050153-03	**PrePrep Method:**	N/A	**Instrument:**	HP16
Client ID:	MW-17-050312	**Prep Method:**	5021	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	RSK175	**Cal Date:**	04/30/2012 15:04
Workgroup #:	WG397238	**Analyst:**	FJB	**Run Date:**	05/07/2012 18:33
Collect Date:	05/03/2012 11:30	**Dilution:**	1	**File ID:**	16G32268
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	8.65		5.00	1.00
Carbon Dioxide	124-38-9	150000		10000	2500

Sample #:	L12050153-03	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-17-050312	**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 22:58
Collect Date:	05/03/2012 11:30	**Dilution:**	1	**File ID:**	4M60837
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

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
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
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

Certificate of Analysis

2,4,6-Tribromophenol	120	10	123	
2-Fluorobiphenyl	107	43	116	
2-Fluorophenol	87.0	21	100	
Nitrobenzene-d5	106	35	114	
p-Terphenyl-d14	131	33	141	
Phenol-d5	98.2	10	94	*

U	Not detected at or above adjusted sample detection limit.

Sample #: L12050153-03 **PrePrep Method:** N/A **Instrument:** HPMS4
Client ID: MW-17-050312 **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 22:58
Collect Date: 05/03/2012 11:30 **Dilution:** 1 **File ID:** 4M60837
Sample Tag: 01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
unknown		4.36		0.000	0.000
unknown		9.13		0.000	0.000
unknown		4.74		0.000	0.000
unknown		14.9		0.000	0.000
unknown		5.75		0.000	0.000
unknown		8.99		0.000	0.000
unknown		13.3		0.000	0.000
unknown		7.57		0.000	0.000
unknown		9.00		0.000	0.000
unknown		10.3		0.000	0.000
unknown		6.25		0.000	0.000

Sample #: L12050153-03 **PrePrep Method:** N/A **Instrument:** HPMS7
Client ID: MW-17-050312 **Prep Method:** 3510C **Prep Date:** 05/09/2012 11:00
Matrix: Water **Analytical Method:** 8270C **Cal Date:** 04/04/2012 12:53
Workgroup #: WG397601 **Analyst:** CAA **Run Date:** 05/10/2012 13:46
Collect Date: 05/03/2012 11:30 **Dilution:** 1 **File ID:** 7M54962
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

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
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	72.4	43	116	
Nitrobenzene-d5	80.0	35	114	
p-Terphenyl-d14	90.7	33	141	

U	Not detected at or above adjusted sample detection limit.

Sample #: L12050153-03
Client ID: MW-17-050312
Matrix: Water
Workgroup #: WG397367
Collect Date: 05/03/2012 11:30
Sample Tag: 01

PrePrep Method: N/A
Prep Method: 3005A
Analytical Method: 6010B
Analyst: KHR
Dilution: 1
Units: mg/L

Instrument: PE-ICP2
Prep Date: 05/08/2012 13:08
Cal Date: 05/10/2012 09:21
Run Date: 05/10/2012 11:18
File ID: P2.051012.111816

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5		U	0.100	0.0500
Barium, Total	7440-39-3	0.141		0.0100	0.00250
Beryllium, Total	7440-41-7		U	0.00200	0.000500
Cadmium, Total	7440-43-9	0.000638		0.000500	0.000250
Calcium, Total	7440-70-2	249		0.200	0.100
Chromium, Total	7440-47-3		U	0.00500	0.00250
Cobalt, Total	7440-48-4	0.00783		0.0200	0.00250
Copper, Total	7440-50-8		U	0.0200	0.00500
Iron, Total	7439-89-6	6.66		0.100	0.0250
Magnesium, Total	7439-95-4	45.0		0.500	0.250
Manganese, Total	7439-96-5	0.696		0.0100	0.00500
Nickel, Total	7440-02-0	0.00577		0.0400	0.00500
Potassium, Total	7440-09-7	6.63		1.00	0.250
Silver, Total	7440-22-4		U	0.0100	0.00500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Sodium, Total	7440-23-5	75.9		0.500	0.250
Vanadium, Total	7440-62-2	0.00976		0.0100	0.00500
Zinc, Total	7440-66-6	0.0177		0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Sample #: L12050153-03 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: MW-17-050312 **Prep Method:** 3015 **Prep Date:** 05/07/2012 11:15
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 05/10/2012 09:13
Workgroup #: WG397345 **Analyst:** JYH **Run Date:** 05/10/2012 10:25
Collect Date: 05/03/2012 11:30 **Dilution:** 1 **File ID:** NI.051012.102540
Sample Tag: 02 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		U	0.00100	0.000500
Arsenic, Total	7440-38-2	0.0150		0.00100	0.000500
Lead, Total	7439-92-1	0.000623		0.00100	0.000500
Selenium, Total	7782-49-2	0.00404		0.00100	0.000500
Thallium, Total	7440-28-0	0.000164		0.000200	0.000100

U	Not detected at or above adjusted sample detection limit.

Sample #: L12050153-03 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-17-050312 **Prep Method:** 7470A **Prep Date:** 05/08/2012 12:35
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 05/10/2012 09:40
Workgroup #: WG397594 **Analyst:** PDM **Run Date:** 05/10/2012 11:40
Collect Date: 05/03/2012 11:30 **Dilution:** 1 **File ID:** HY.051012.114045
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 #: L12050153-03 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-17-050312 **Prep Method:** 310.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 310.2 **Cal Date:** 05/14/2012 12:21
Workgroup #: WG397895 **Analyst:** DIH **Run Date:** 05/14/2012 12:25
Collect Date: 05/03/2012 11:30 **Dilution:** 3 **File ID:** SC120514002.014
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Alkalinity, Total (as CaCO3)		616		60.0	30.0

Certificate of Analysis

Sample #: L12050153-03 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-17-050312 **Prep Method:** 353.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 353.2 **Cal Date:** 05/07/2012 08:43
Workgroup #: WG397183 **Analyst:** DIH **Run Date:** 05/07/2012 11:15
Collect Date: 05/03/2012 11:30 **Dilution:** 1 **File ID:** SC12050910172301
Sample Tag: **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8	0.208		0.0500	0.0250

Sample #: L12050153-03 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-17-050312 **Prep Method:** 365.4 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 365.4 **Cal Date:** 05/15/2012 08:40
Workgroup #: WG397809 **Analyst:** JBK **Run Date:** 05/15/2012 08:48
Collect Date: 05/03/2012 11:30 **Dilution:** 1 **File ID:** SC120515001.019
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 #: L12050153-03 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-17-050312 **Prep Method:** 375.4 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 375.4 **Cal Date:** 05/07/2012 14:08
Workgroup #: WG397213 **Analyst:** DIH **Run Date:** 05/07/2012 14:17
Collect Date: 05/03/2012 11:30 **Dilution:** 10 **File ID:** SC120507003.022
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	244		50.0	25.0

Sample #: L12050153-03 **PrePrep Method:** N/A **Instrument:** TOC-VWP
Client ID: MW-17-050312 **Prep Method:** 415.1 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 415.1 **Cal Date:** 12/06/2011 09:40
Workgroup #: WG397595 **Analyst:** JBK **Run Date:** 05/10/2012 20:14
Collect Date: 05/03/2012 11:30 **Dilution:** 4 **File ID:** TC05102012.022
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		10.7		4.00	2.00

Certificate of Analysis

Sample #:	L12050153-04	**PrePrep Method:**	N/A	**Instrument:**	PE-ICP2
Client ID:	MW-17-050312	**Prep Method:**	3005A	**Prep Date:**	05/08/2012 13:08
Matrix:	Water	**Analytical Method:**	6010B	**Cal Date:**	05/10/2012 09:21
Workgroup #:	WG397367	**Analyst:**	KHR	**Run Date:**	05/10/2012 11:49
Collect Date:	05/03/2012 11:30	**Dilution:**	1	**File ID:**	P2.051012.114915
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	0.155		0.0100	0.00250
Beryllium, Dissolved	7440-41-7		U	0.00200	0.000500
Cadmium, Dissolved	7440-43-9	0.000784		0.000500	0.000250
Calcium, Dissolved	7440-70-2	252		0.200	0.100
Chromium, Dissolved	7440-47-3		U	0.00500	0.00250
Cobalt, Dissolved	7440-48-4	0.00780		0.0200	0.00250
Copper, Dissolved	7440-50-8		U	0.0200	0.00500
Iron, Dissolved	7439-89-6	7.28		0.100	0.0250
Magnesium, Dissolved	7439-95-4	46.6		0.500	0.250
Manganese, Dissolved	7439-96-5	0.677		0.0100	0.00500
Nickel, Dissolved	7440-02-0	0.00626		0.0400	0.00500
Potassium, Dissolved	7440-09-7	6.76		1.00	0.250
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Sodium, Dissolved	7440-23-5	79.2		0.500	0.250
Vanadium, Dissolved	7440-62-2	0.00881		0.0100	0.00500
Zinc, Dissolved	7440-66-6	0.0209		0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Sample #:	L12050153-04	**PrePrep Method:**	N/A	**Instrument:**	ICP-MS2
Client ID:	MW-17-050312	**Prep Method:**	3015	**Prep Date:**	05/07/2012 11:15
Matrix:	Water	**Analytical Method:**	6020	**Cal Date:**	05/10/2012 09:13
Workgroup #:	WG397345	**Analyst:**	JYH	**Run Date:**	05/10/2012 10:28
Collect Date:	05/03/2012 11:30	**Dilution:**	1	**File ID:**	NI.051012.102832
Sample Tag:	02	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Dissolved	7440-36-0		U	0.00100	0.000500
Arsenic, Dissolved	7440-38-2	0.0158		0.00100	0.000500
Lead, Dissolved	7439-92-1		U	0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.00392		0.00100	0.000500
Thallium, Dissolved	7440-28-0	0.000169		0.000200	0.000100

U	Not detected at or above adjusted sample detection limit.

Sample #: L12050153-04 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-17-050312 **Prep Method:** 7470A **Prep Date:** 05/08/2012 12:35
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 05/10/2012 09:40
Workgroup #: WG397594 **Analyst:** PDM **Run Date:** 05/10/2012 11:42
Collect Date: 05/03/2012 11:30 **Dilution:** 1 **File ID:** HY.051012.114238
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 #: L12050153-05 **PrePrep Method:** N/A **Instrument:** HPMS8
Client ID: MW-28050312 **Prep Method:** 5030B/5030C/5035A **Prep Date:** N/A
Matrix: Water **Analytical Method:** 8260B **Cal Date:** 03/27/2012 15:49
Workgroup #: WG397692 **Analyst:** TMB **Run Date:** 05/11/2012 03:07
Collect Date: 05/03/2012 15:00 **Dilution:** 1 **File ID:** 8M378977
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

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

Surrogate	Recovery	Lower Limit	Upper Limit	Q
1,2-Dichloroethane-d4	114	80	120	
Dibromofluoromethane	103	86	118	
p-Bromofluorobenzene	96.5	86	115	
Toluene-d8	97.6	88	110	

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12050153-05	**PrePrep Method:**	N/A	**Instrument:**	HP16
Client ID:	MW-28050312	**Prep Method:**	5021	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	RSK175	**Cal Date:**	04/30/2012 15:04
Workgroup #:	WG397238	**Analyst:**	FJB	**Run Date:**	05/07/2012 18:51
Collect Date:	05/03/2012 15:00	**Dilution:**	1	**File ID:**	16G32270
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	152		5.00	1.00
Carbon Dioxide	124-38-9	158000		10000	2500

Sample #:	L12050153-05	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-28050312	**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:**	MDC	**Run Date:**	05/13/2012 16:45
Collect Date:	05/03/2012 15:00	**Dilution:**	1	**File ID:**	4M60847
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
1,1'-Biphenyl	92-52-4		U	22.2	2.78
1,3,5-Trinitrobenzene	99-35-4		U	5.56	2.78
1,3-Dinitrobenzene	99-65-0		U	5.56	2.78
1,4-Dioxane	123-91-1		U	11.1	5.56
2,4,5-Trichlorophenol	95-95-4		U	5.56	2.78
2,4,6-Trichlorophenol	88-06-2		U	5.56	2.78
2,4-Dichlorophenol	120-83-2		U	5.56	2.78
2,4-Dimethylphenol	105-67-9		U	5.56	2.78
2,4-Dinitrophenol	51-28-5		U	27.8	13.9
2,4-Dinitrotoluene	121-14-2		U	5.56	2.78
2,6-Dinitrotoluene	606-20-2		U	5.56	2.78
2-Chloronaphthalene	91-58-7		U	5.56	2.78
2-Chlorophenol	95-57-8		U	5.56	2.78
2-Methylnaphthalene	91-57-6		U	5.56	2.78
2-Methylphenol	95-48-7		U	5.56	2.78
2-Nitroaniline	88-74-4		U	27.8	13.9
2-Nitrophenol	88-75-5		U	5.56	2.78
3-Nitroaniline	99-09-2		U	27.8	13.9
3,3'-Dichlorobenzidine	91-94-1		U	5.56	2.78
3-,4-Methylphenol	106-44-5		U	5.56	2.78
4-Bromophenyl-phenylether	101-55-3		U	5.56	2.78
4-Chloroaniline	106-47-8		U	5.56	2.78

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Analyte	CAS #	Result	Qual	RL	MDL
4-Nitrophenol	100-02-7		U	27.8	13.9
Acenaphthene	83-32-9		U	5.56	2.78
Acenaphthylene	208-96-8		U	5.56	2.78
Anthracene	120-12-7		U	5.56	2.78
Benzo(a)anthracene	56-55-3		U	5.56	2.78
Benzo(a)pyrene	50-32-8		U	5.56	2.78
Benzo(b)fluoranthene	205-99-2		U	5.56	2.78
Benzo(g,h,i)Perylene	191-24-2		U	5.56	2.78
Benzo(k)fluoranthene	207-08-9		U	5.56	2.78
Benzoic acid	65-85-0		U	22.2	11.1
Benzyl alcohol	100-51-6		U	5.56	2.78
Bis(2-Chloroethyl)ether	111-44-4		U	5.56	2.78
Bis(2-Chloroethoxy)Methane	111-91-1		U	5.56	2.78
bis(2-Ethylhexyl)phthalate	117-81-7		U	5.56	2.78
Butylbenzylphthalate	85-68-7		U	5.56	2.78
Carbazole	86-74-8		U	22.2	2.78
Chrysene	218-01-9		U	5.56	2.78
Di-N-Butylphthalate	84-74-2		U	5.56	2.78
Di-n-octylphthalate	117-84-0		U	5.56	2.78
Dibenzo(a,h)Anthracene	53-70-3		U	5.56	2.78
Dibenzofuran	132-64-9		U	5.56	2.78
Diethylphthalate	84-66-2		U	5.56	2.78
Dimethylphthalate	131-11-3		U	5.56	2.78
Fluoranthene	206-44-0		U	5.56	2.78
Fluorene	86-73-7		U	5.56	2.78
Hexachlorobenzene	118-74-1		U	5.56	2.78
Hexachlorobutadiene	87-68-3		U	5.56	2.78
Hexachlorocyclopentadiene	77-47-4		U	5.56	2.78
Hexachloroethane	67-72-1		U	5.56	2.78
Indeno(1,2,3-cd)pyrene	193-39-5		U	5.56	2.78
Isophorone	78-59-1		U	5.56	2.78
N-Nitrosodiphenylamine	86-30-6		U	5.56	2.78
Naphthalene	91-20-3		U	5.56	2.78
Nitrobenzene	98-95-3		U	5.56	2.78
Pentachlorophenol	87-86-5		U	27.8	13.9
Phenanthrene	85-01-8		U	5.56	2.78
Phenol	108-95-2		U	5.56	2.78
Pyrene	129-00-0		U	5.56	2.78

Surrogate	Recovery	Lower Limit	Upper Limit	Q

2,4,6-Tribromophenol	98.0	10	123	
2-Fluorobiphenyl	86.9	43	116	
2-Fluorophenol	80.4	21	100	
Nitrobenzene-d5	90.0	35	114	
p-Terphenyl-d14	120	33	141	
Phenol-d5	87.4	10	94	

U	Not detected at or above adjusted sample detection limit.

Sample #: L12050153-05 **PrePrep Method:** N/A **Instrument:** HPMS4
Client ID: MW-28050312 **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:** MDC **Run Date:** 05/13/2012 16:45
Collect Date: 05/03/2012 15:00 **Dilution:** 1 **File ID:** 4M60847
Sample Tag: 01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
unknown		5.10		0.000	0.000
unknown		9.16		0.000	0.000
unknown		8.13		0.000	0.000
unknown		12.6		0.000	0.000
unknown		5.37		0.000	0.000

Sample #: L12050153-05 **PrePrep Method:** N/A **Instrument:** HPMS7
Client ID: MW-28050312 **Prep Method:** 3510C **Prep Date:** 05/09/2012 11:00
Matrix: Water **Analytical Method:** 8270C **Cal Date:** 04/04/2012 12:53
Workgroup #: WG397601 **Analyst:** CAA **Run Date:** 05/10/2012 14:14
Collect Date: 05/03/2012 15:00 **Dilution:** 1 **File ID:** 7M54963
Sample Tag: 01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
2-Methylnaphthalene	91-57-6		U	0.0556	0.0278
Acenaphthene	83-32-9	0.0292		0.0556	0.0278
Acenaphthylene	208-96-8	0.0418		0.0556	0.0278
Anthracene	120-12-7	0.0605		0.0556	0.0278
Benzo(a)anthracene	56-55-3	0.105		0.0556	0.0278
Benzo(a)pyrene	50-32-8	0.0978		0.0556	0.0278
Benzo(b)fluoranthene	205-99-2	0.0672		0.0556	0.0278
Benzo(g,h,i)perylene	191-24-2	0.0503		0.0556	0.0278
Benzo(k)fluoranthene	207-08-9	0.0940		0.0556	0.0278
Chrysene	218-01-9	0.0957		0.0556	0.0278
Dibenzo(a,h)anthracene	53-70-3		U	0.0556	0.0278

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Fluoranthene	206-44-0	0.183		0.0556	0.0278
Fluorene	86-73-7	0.0865		0.0556	0.0278
Indeno(1,2,3-cd)pyrene	193-39-5	0.0511		0.0556	0.0278
Naphthalene	91-20-3	0.0308		0.0556	0.0278
Phenanthrene	85-01-8	0.138		0.0556	0.0278
Pyrene	129-00-0	0.156		0.0556	0.0278

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2-Fluorobiphenyl	72.9	43	116	
Nitrobenzene-d5	82.1	35	114	
p-Terphenyl-d14	91.4	33	141	

U	Not detected at or above adjusted sample detection limit.

Sample #: L12050153-05
Client ID: MW-28050312
Matrix: Water
Workgroup #: WG397367
Collect Date: 05/03/2012 15:00
Sample Tag: 01

PrePrep Method: N/A
Prep Method: 3005A
Analytical Method: 6010B
Analyst: KHR
Dilution: 1
Units: mg/L

Instrument: PE-ICP2
Prep Date: 05/08/2012 13:08
Cal Date: 05/10/2012 09:21
Run Date: 05/10/2012 11:55
File ID: P2.051012.115516

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	0.334		0.100	0.0500
Barium, Total	7440-39-3	0.113		0.0100	0.00250
Beryllium, Total	7440-41-7		U	0.00200	0.000500
Cadmium, Total	7440-43-9	0.00124		0.000500	0.000250
Calcium, Total	7440-70-2	138		0.200	0.100
Chromium, Total	7440-47-3		U	0.00500	0.00250
Cobalt, Total	7440-48-4	0.0499		0.0200	0.00250
Copper, Total	7440-50-8	0.0410		0.0200	0.00500
Iron, Total	7439-89-6	9.15		0.100	0.0250
Magnesium, Total	7439-95-4	24.7		0.500	0.250
Manganese, Total	7439-96-5	1.29		0.0100	0.00500
Nickel, Total	7440-02-0	0.0151		0.0400	0.00500
Potassium, Total	7440-09-7	3.33		1.00	0.250
Silver, Total	7440-22-4		U	0.0100	0.00500
Sodium, Total	7440-23-5	72.3		0.500	0.250
Vanadium, Total	7440-62-2	0.00966		0.0100	0.00500
Zinc, Total	7440-66-6	0.152		0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #: L12050153-05 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: MW-28050312 **Prep Method:** 3015 **Prep Date:** 05/07/2012 11:15
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 05/10/2012 09:13
Workgroup #: WG397345 **Analyst:** JYH **Run Date:** 05/10/2012 10:31
Collect Date: 05/03/2012 15:00 **Dilution:** 1 **File ID:** NI.051012.103125
Sample Tag: 02 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0	0.000643		0.00100	0.000500
Arsenic, Total	7440-38-2	0.00503		0.00100	0.000500
Lead, Total	7439-92-1	0.00323		0.00100	0.000500
Selenium, Total	7782-49-2	0.00219		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 #: L12050153-05 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-28050312 **Prep Method:** 7470A **Prep Date:** 05/08/2012 12:35
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 05/10/2012 09:40
Workgroup #: WG397594 **Analyst:** PDM **Run Date:** 05/10/2012 11:44
Collect Date: 05/03/2012 15:00 **Dilution:** 1 **File ID:** HY.051012.114426
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 #: L12050153-05 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-28050312 **Prep Method:** 310.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 310.2 **Cal Date:** 05/14/2012 15:48
Workgroup #: WG397939 **Analyst:** DIH **Run Date:** 05/14/2012 15:51
Collect Date: 05/03/2012 15:00 **Dilution:** 2 **File ID:** SC120514005.013
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Alkalinity, Total (as CaCO3)		355		40.0	20.0

Certificate of Analysis

Sample #: L12050153-05 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-28050312 **Prep Method:** 353.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 353.2 **Cal Date:** 05/07/2012 08:43
Workgroup #: WG397183 **Analyst:** DIH **Run Date:** 05/07/2012 11:15
Collect Date: 05/03/2012 15:00 **Dilution:** 1 **File ID:** SC12050910172601
Sample Tag: **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8	0.0340		0.0500	0.0250

Sample #: L12050153-05 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-28050312 **Prep Method:** 365.4 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 365.4 **Cal Date:** 05/15/2012 08:40
Workgroup #: WG397809 **Analyst:** JBK **Run Date:** 05/15/2012 08:49
Collect Date: 05/03/2012 15:00 **Dilution:** 1 **File ID:** SC120515001.020
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 #: L12050153-05 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-28050312 **Prep Method:** 375.4 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 375.4 **Cal Date:** 05/07/2012 14:08
Workgroup #: WG397213 **Analyst:** DIH **Run Date:** 05/07/2012 14:18
Collect Date: 05/03/2012 15:00 **Dilution:** 2 **File ID:** SC120507003.024
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	68.6		10.0	5.00

Sample #: L12050153-05 **PrePrep Method:** N/A **Instrument:** TOC-VWP
Client ID: MW-28050312 **Prep Method:** 415.1 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 415.1 **Cal Date:** 12/06/2011 09:40
Workgroup #: WG397767 **Analyst:** JBK **Run Date:** 05/13/2012 08:44
Collect Date: 05/03/2012 15:00 **Dilution:** 2 **File ID:** TC05122012.052
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		3.20		2.00	1.00

Certificate of Analysis

Sample #:	L12050153-06	**PrePrep Method:**	N/A	**Instrument:**	PE-ICP2
Client ID:	MW-28050312	**Prep Method:**	3005A	**Prep Date:**	05/08/2012 13:08
Matrix:	Water	**Analytical Method:**	6010B	**Cal Date:**	05/10/2012 09:21
Workgroup #:	WG397367	**Analyst:**	KHR	**Run Date:**	05/10/2012 12:01
Collect Date:	05/03/2012 15:00	**Dilution:**	1	**File ID:**	P2.051012.120114
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	0.107		0.0100	0.00250
Beryllium, Dissolved	7440-41-7		U	0.00200	0.000500
Cadmium, Dissolved	7440-43-9	0.000945		0.000500	0.000250
Calcium, Dissolved	7440-70-2	131		0.200	0.100
Chromium, Dissolved	7440-47-3		U	0.00500	0.00250
Cobalt, Dissolved	7440-48-4	0.0480		0.0200	0.00250
Copper, Dissolved	7440-50-8	0.0123		0.0200	0.00500
Iron, Dissolved	7439-89-6	8.56		0.100	0.0250
Magnesium, Dissolved	7439-95-4	24.6		0.500	0.250
Manganese, Dissolved	7439-96-5	1.24		0.0100	0.00500
Nickel, Dissolved	7440-02-0	0.0139		0.0400	0.00500
Potassium, Dissolved	7440-09-7	3.22		1.00	0.250
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Sodium, Dissolved	7440-23-5	69.9		0.500	0.250
Vanadium, Dissolved	7440-62-2	0.00715		0.0100	0.00500
Zinc, Dissolved	7440-66-6	0.136		0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Sample #:	L12050153-06	**PrePrep Method:**	N/A	**Instrument:**	ICP-MS2
Client ID:	MW-28050312	**Prep Method:**	3015	**Prep Date:**	05/07/2012 11:15
Matrix:	Water	**Analytical Method:**	6020	**Cal Date:**	05/10/2012 09:13
Workgroup #:	WG397345	**Analyst:**	JYH	**Run Date:**	05/10/2012 10:34
Collect Date:	05/03/2012 15:00	**Dilution:**	1	**File ID:**	NI.051012.103418
Sample Tag:	02	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Dissolved	7440-36-0	0.000550		0.00100	0.000500
Arsenic, Dissolved	7440-38-2	0.00466		0.00100	0.000500
Lead, Dissolved	7439-92-1		U	0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.00190		0.00100	0.000500
Thallium, Dissolved	7440-28-0		U	0.000200	0.000100

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12050153-06	**PrePrep Method:**	N/A	**Instrument:**	HYDRA
Client ID:	MW-28050312	**Prep Method:**	7470A	**Prep Date:**	05/08/2012 12:35
Matrix:	Water	**Analytical Method:**	7470A	**Cal Date:**	05/10/2012 09:40
Workgroup #:	WG397594	**Analyst:**	PDM	**Run Date:**	05/10/2012 11:46
Collect Date:	05/03/2012 15:00	**Dilution:**	1	**File ID:**	HY.051012.114611
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 #:	L12050153-07	**PrePrep Method:**	N/A	**Instrument:**	HPMS8
Client ID:	TW-02-050312	**Prep Method:**	5030B/5030C/5035A	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	8260B	**Cal Date:**	03/27/2012 15:49
Workgroup #:	WG397692	**Analyst:**	TMB	**Run Date:**	05/11/2012 03:39
Collect Date:	05/03/2012 13:30	**Dilution:**	1	**File ID:**	8M378978
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

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

Surrogate	Recovery	Lower Limit	Upper Limit	Q
1,2-Dichloroethane-d4	116	80	120	
Dibromofluoromethane	103	86	118	
p-Bromofluorobenzene	97.4	86	115	
Toluene-d8	98.7	88	110	

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12050153-07	**PrePrep Method:**	N/A	**Instrument:**	HP16
Client ID:	TW-02-050312	**Prep Method:**	5021	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	RSK175	**Cal Date:**	04/30/2012 15:04
Workgroup #:	WG397238	**Analyst:**	FJB	**Run Date:**	05/07/2012 19:01
Collect Date:	05/03/2012 13:30	**Dilution:**	1	**File ID:**	16G32271
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	133		5.00	1.00
Carbon Dioxide	124-38-9	139000		10000	2500

Sample #:	L12050153-07	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	TW-02-050312	**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:**	MDC	**Run Date:**	05/13/2012 17:19
Collect Date:	05/03/2012 13:30	**Dilution:**	1	**File ID:**	4M60848
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

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
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
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

Certificate of Analysis

2,4,6-Tribromophenol	107	10	123	
2-Fluorobiphenyl	103	43	116	
2-Fluorophenol	77.5	21	100	
Nitrobenzene-d5	102	35	114	
p-Terphenyl-d14	124	33	141	
Phenol-d5	82.9	10	94	

U	Not detected at or above adjusted sample detection limit.

Sample #: L12050153-07 **PrePrep Method:** N/A **Instrument:** HPMS4
Client ID: TW-02-050312 **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:** MDC **Run Date:** 05/13/2012 17:19
Collect Date: 05/03/2012 13:30 **Dilution:** 1 **File ID:** 4M60848
Sample Tag: 01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
unknown		5.03		0.000	0.000
unknown		8.98		0.000	0.000
unknown		4.07		0.000	0.000
unknown		11.1		0.000	0.000
unknown		4.76		0.000	0.000
unknown		17.6		0.000	0.000
unknown		5.63		0.000	0.000
unknown		11.8		0.000	0.000
unknown		7.15		0.000	0.000
unknown		4.39		0.000	0.000

Sample #: L12050153-07 **PrePrep Method:** N/A **Instrument:** HPMS7
Client ID: TW-02-050312 **Prep Method:** 3510C **Prep Date:** 05/09/2012 11:00
Matrix: Water **Analytical Method:** 8270C **Cal Date:** 04/04/2012 12:53
Workgroup #: WG397601 **Analyst:** CAA **Run Date:** 05/10/2012 14:42
Collect Date: 05/03/2012 13:30 **Dilution:** 1 **File ID:** 7M54964
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

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
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	0.0353		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	0.0278		0.0500	0.0250
Pyrene	129-00-0	0.0360		0.0500	0.0250

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2-Fluorobiphenyl	62.1	43	116	
Nitrobenzene-d5	70.2	35	114	
p-Terphenyl-d14	85.9	33	141	

U	Not detected at or above adjusted sample detection limit.

Sample #: L12050153-07
Client ID: TW-02-050312
Matrix: Water
Workgroup #: WG397367
Collect Date: 05/03/2012 13:30
Sample Tag: 01

PrePrep Method: N/A
Prep Method: 3005A
Analytical Method: 6010B
Analyst: KHR
Dilution: 1
Units: mg/L

Instrument: PE-ICP2
Prep Date: 05/08/2012 13:08
Cal Date: 05/10/2012 09:21
Run Date: 05/10/2012 12:07
File ID: P2.051012.120713

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	0.191		0.100	0.0500
Barium, Total	7440-39-3	0.217		0.0100	0.00250
Beryllium, Total	7440-41-7		U	0.00200	0.000500
Cadmium, Total	7440-43-9	0.000873		0.000500	0.000250
Calcium, Total	7440-70-2	285		0.200	0.100
Chromium, Total	7440-47-3	0.00252		0.00500	0.00250
Cobalt, Total	7440-48-4	0.00371		0.0200	0.00250
Copper, Total	7440-50-8		U	0.0200	0.00500
Iron, Total	7439-89-6	11.7		0.100	0.0250
Magnesium, Total	7439-95-4	68.1		0.500	0.250
Manganese, Total	7439-96-5	0.531		0.0100	0.00500
Nickel, Total	7440-02-0		U	0.0400	0.00500
Potassium, Total	7440-09-7	5.49		1.00	0.250
Silver, Total	7440-22-4		U	0.0100	0.00500
Sodium, Total	7440-23-5	144		0.500	0.250

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Vanadium, Total	7440-62-2	0.0108		0.0100	0.00500
Zinc, Total	7440-66-6	0.0551		0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Sample #: L12050153-07 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: TW-02-050312 **Prep Method:** 3015 **Prep Date:** 05/07/2012 11:15
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 05/10/2012 09:13
Workgroup #: WG397345 **Analyst:** JYH **Run Date:** 05/10/2012 10:37
Collect Date: 05/03/2012 13:30 **Dilution:** 1 **File ID:** NI.051012.103711
Sample Tag: 02 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		U	0.00100	0.000500
Arsenic, Total	7440-38-2	0.00711		0.00100	0.000500
Lead, Total	7439-92-1	0.0218		0.00100	0.000500
Selenium, Total	7782-49-2	0.00504		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 #: L12050153-07 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: TW-02-050312 **Prep Method:** 7470A **Prep Date:** 05/08/2012 12:35
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 05/10/2012 09:40
Workgroup #: WG397594 **Analyst:** PDM **Run Date:** 05/10/2012 11:47
Collect Date: 05/03/2012 13:30 **Dilution:** 1 **File ID:** HY.051012.114754
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 #: L12050153-07 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: TW-02-050312 **Prep Method:** 310.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 310.2 **Cal Date:** 05/14/2012 12:21
Workgroup #: WG397895 **Analyst:** DIH **Run Date:** 05/14/2012 12:26
Collect Date: 05/03/2012 13:30 **Dilution:** 4 **File ID:** SC120514002.016
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Alkalinity, Total (as CaCO3)		739		80.0	40.0

Certificate of Analysis

Sample #:	L12050153-07	**PrePrep Method:**	N/A	**Instrument:**	SMARTCHEM
Client ID:	TW-02-050312	**Prep Method:**	353.2	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	353.2	**Cal Date:**	05/07/2012 08:43
Workgroup #:	WG397183	**Analyst:**	DIH	**Run Date:**	05/07/2012 11:15
Collect Date:	05/03/2012 13:30	**Dilution:**	1	**File ID:**	SC12050910173001
Sample Tag:		**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8	0.161		0.0500	0.0250

Sample #:	L12050153-07	**PrePrep Method:**	N/A	**Instrument:**	SMARTCHEM
Client ID:	TW-02-050312	**Prep Method:**	365.4	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	365.4	**Cal Date:**	05/15/2012 08:40
Workgroup #:	WG397809	**Analyst:**	JBK	**Run Date:**	05/15/2012 08:49
Collect Date:	05/03/2012 13:30	**Dilution:**	1	**File ID:**	SC120515001.021
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 #:	L12050153-07	**PrePrep Method:**	N/A	**Instrument:**	SMARTCHEM
Client ID:	TW-02-050312	**Prep Method:**	375.4	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	375.4	**Cal Date:**	05/07/2012 14:08
Workgroup #:	WG397213	**Analyst:**	DIH	**Run Date:**	05/07/2012 14:33
Collect Date:	05/03/2012 13:30	**Dilution:**	10	**File ID:**	SC120507003.037
Sample Tag:	DL01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	277		50.0	25.0

Sample #:	L12050153-07	**PrePrep Method:**	N/A	**Instrument:**	TOC-VWP
Client ID:	TW-02-050312	**Prep Method:**	415.1	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	415.1	**Cal Date:**	12/06/2011 09:40
Workgroup #:	WG397767	**Analyst:**	JBK	**Run Date:**	05/13/2012 08:57
Collect Date:	05/03/2012 13:30	**Dilution:**	2	**File ID:**	TC05122012.053
Sample Tag:	DL01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		7.73		2.00	1.00

Certificate of Analysis

Sample #:	L12050153-08	**PrePrep Method:**	N/A	**Instrument:**	PE-ICP2
Client ID:	TW-02-050312	**Prep Method:**	3005A	**Prep Date:**	05/08/2012 13:08
Matrix:	Water	**Analytical Method:**	6010B	**Cal Date:**	05/10/2012 09:21
Workgroup #:	WG397367	**Analyst:**	KHR	**Run Date:**	05/10/2012 12:13
Collect Date:	05/03/2012 13:30	**Dilution:**	1	**File ID:**	P2.051012.121312
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	0.224		0.0100	0.00250
Beryllium, Dissolved	7440-41-7		U	0.00200	0.000500
Cadmium, Dissolved	7440-43-9	0.000724		0.000500	0.000250
Calcium, Dissolved	7440-70-2	285		0.200	0.100
Chromium, Dissolved	7440-47-3		U	0.00500	0.00250
Cobalt, Dissolved	7440-48-4	0.00380		0.0200	0.00250
Copper, Dissolved	7440-50-8		U	0.0200	0.00500
Iron, Dissolved	7439-89-6	11.7		0.100	0.0250
Magnesium, Dissolved	7439-95-4	67.0		0.500	0.250
Manganese, Dissolved	7439-96-5	0.526		0.0100	0.00500
Nickel, Dissolved	7440-02-0		U	0.0400	0.00500
Potassium, Dissolved	7440-09-7	5.59		1.00	0.250
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Sodium, Dissolved	7440-23-5	150		0.500	0.250
Vanadium, Dissolved	7440-62-2	0.0101		0.0100	0.00500
Zinc, Dissolved	7440-66-6	0.0453		0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Sample #:	L12050153-08	**PrePrep Method:**	N/A	**Instrument:**	ICP-MS2
Client ID:	TW-02-050312	**Prep Method:**	3015	**Prep Date:**	05/07/2012 11:15
Matrix:	Water	**Analytical Method:**	6020	**Cal Date:**	05/10/2012 09:13
Workgroup #:	WG397345	**Analyst:**	JYH	**Run Date:**	05/10/2012 10:40
Collect Date:	05/03/2012 13:30	**Dilution:**	1	**File ID:**	NI.051012.104004
Sample Tag:	02	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Dissolved	7440-36-0		U	0.00100	0.000500
Arsenic, Dissolved	7440-38-2	0.00640		0.00100	0.000500
Lead, Dissolved	7439-92-1	0.000840		0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.00500		0.00100	0.000500
Thallium, Dissolved	7440-28-0		U	0.000200	0.000100

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12050153-08	**PrePrep Method:**	N/A	**Instrument:**	HYDRA
Client ID:	TW-02-050312	**Prep Method:**	7470A	**Prep Date:**	05/08/2012 12:35
Matrix:	Water	**Analytical Method:**	7470A	**Cal Date:**	05/10/2012 09:40
Workgroup #:	WG397594	**Analyst:**	PDM	**Run Date:**	05/10/2012 11:53
Collect Date:	05/03/2012 13:30	**Dilution:**	1	**File ID:**	HY.051012.115351
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 #:	L12050153-09	**PrePrep Method:**	N/A	**Instrument:**	HPMS8
Client ID:	TB-050312	**Prep Method:**	5030B/5030C/5035A	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	8260B	**Cal Date:**	03/27/2012 15:49
Workgroup #:	WG397692	**Analyst:**	TMB	**Run Date:**	05/10/2012 23:22
Collect Date:	05/03/2012 08:05	**Dilution:**	1	**File ID:**	8M378970
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

Certificate of Analysis

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

Surrogate	Recovery	Lower Limit	Upper Limit	Q
1,2-Dichloroethane-d4	111	80	120	
Dibromofluoromethane	102	86	118	
p-Bromofluorobenzene	98.7	86	115	
Toluene-d8	100	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: L12050153
Department: Volatiles
Analyst: Tiffany Bailey

METHOD

Preparation SW-846 5030C/5035A

Analysis SW-846 8260B

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

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

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

Continuing Calibration and Tune: Recoveries out of range were observed for the following analytes: 2-Butanone, Acetone, Methyl acetate. 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: Dichlorodifluoromethane. Please see the applicable QC report for a detailed presentation of the failures.

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

SAMPLES

Internal Standards: All acceptance criteria were met.

Surrogates: All acceptance criteria were met.

Other: 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.

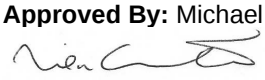
Reason #3: Improperly Integrated Isomers and/or coeluting compounds. This system often fails to distinguish coeluting compounds and or isomers. The integration areas and concentrations are wrong, and they must be corrected by manual integration. Prime examples are benzo(k)fluoranthene and benzo(b)fluoranthene 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: 46475
Approved By: Michael Albertson



Certificate of Analysis

Sample #:	L12050153-01	**PrePrep Method:**	N/A	**Instrument:**	HPMS8
Client ID:	MW-15-050312	**Prep Method:**	5030B/5030C/5035A	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	8260B	**Cal Date:**	03/27/2012 15:49
Workgroup #:	WG397692	**Analyst:**	TMB	**Run Date:**	05/11/2012 02:02
Collect Date:	05/03/2012 10:45	**Dilution:**	1	**File ID:**	8M378975
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

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	113	80	120	
Dibromofluoromethane	104	86	118	
p-Bromofluorobenzene	96.3	86	115	
Toluene-d8	99.1	88	110	

U	Not detected at or above adjusted sample detection limit.

Sample #: L12050153-03
Client ID: MW-17-050312
Matrix: Water
Workgroup #: WG397692
Collect Date: 05/03/2012 11:30
Sample Tag: 01

PrePrep Method: N/A
Prep Method: 5030B/5030C/5035A
Analytical Method: 8260B
Analyst: TMB
Dilution: 1
Units: ug/L

Instrument: HPMS8
Prep Date: N/A
Cal Date: 03/27/2012 15:49
Run Date: 05/11/2012 02:35
File ID: 8M378976

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

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
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
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

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
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	114	80	120	
Dibromofluoromethane	102	86	118	
p-Bromofluorobenzene	96.6	86	115	
Toluene-d8	99.5	88	110	

U	Not detected at or above adjusted sample detection limit.

Sample #: L12050153-05
Client ID: MW-28050312
Matrix: Water
Workgroup #: WG397692
Collect Date: 05/03/2012 15:00
Sample Tag: 01

PrePrep Method: N/A
Prep Method: 5030B/5030C/5035A
Analytical Method: 8260B
Analyst: TMB
Dilution: 1
Units: ug/L

Instrument: HPMS8
Prep Date: N/A
Cal Date: 03/27/2012 15:49
Run Date: 05/11/2012 03:07
File ID: 8M378977

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

Certificate of Analysis

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

Surrogate	Recovery	Lower Limit	Upper Limit	Q
1,2-Dichloroethane-d4	114	80	120	
Dibromofluoromethane	103	86	118	
p-Bromofluorobenzene	96.5	86	115	
Toluene-d8	97.6	88	110	

Certificate of Analysis

U	Not detected at or above adjusted sample detection limit.

Sample #: L12050153-07
Client ID: TW-02-050312
Matrix: Water
Workgroup #: WG397692
Collect Date: 05/03/2012 13:30
Sample Tag: 01

PrePrep Method: N/A
Prep Method: 5030B/5030C/5035A
Analytical Method: 8260B
Analyst: TMB
Dilution: 1
Units: ug/L

Instrument: HPMS8
Prep Date: N/A
Cal Date: 03/27/2012 15:49
Run Date: 05/11/2012 03:39
File ID: 8M378978

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

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Chloromethane	74-87-3		U	1.00	0.500
cis-1,3-Dichloropropene	10061-01-5		U	1.00	0.250
Cyclohexane	110-82-7		U	5.00	1.00
Dibromochloromethane	124-48-1		U	1.00	0.250
Dichlorodifluoromethane	75-71-8		U	1.00	0.250
Ethyl benzene	100-41-4		U	1.00	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
Methyl acetate	79-20-9		U	5.00	1.00
Methyl tert-butyl ether	1634-04-4		U	1.00	0.500
Methylcyclohexane	108-87-2		U	5.00	1.00
Methylene chloride	75-09-2		U	5.00	0.250
m,p-Xylene	179601-23-1		U	1.00	0.500
o-Xylene	95-47-6		U	1.00	0.250
Styrene	100-42-5		U	1.00	0.125
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
Trichloroethene	79-01-6		U	1.00	0.250
Trichlorofluoromethane	75-69-4		U	1.00	0.250
Vinyl chloride	75-01-4		U	1.00	0.250
Epichlorohydrin	106-89-8			0.000	0.000

Surrogate	Recovery	Lower Limit	Upper Limit	Q
1,2-Dichloroethane-d4	116	80	120	
Dibromofluoromethane	103	86	118	
p-Bromofluorobenzene	97.4	86	115	
Toluene-d8	98.7	88	110	

U	Not detected at or above adjusted sample detection limit.

Sample #: L12050153-09
Client ID: TB-050312
Matrix: Water
Workgroup #: WG397692
Collect Date: 05/03/2012 08:05
Sample Tag: 01

PrePrep Method: N/A
Prep Method: 5030B/5030C/5035A
Analytical Method: 8260B
Analyst: TMB
Dilution: 1
Units: ug/L

Instrument: HPMS8
Prep Date: N/A
Cal Date: 03/27/2012 15:49
Run Date: 05/10/2012 23:22
File ID: 8M378970

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

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
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
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

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
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	111	80	120	
Dibromofluoromethane	102	86	118	
p-Bromofluorobenzene	98.7	86	115	
Toluene-d8	100	88	110	

U	Not detected at or above adjusted sample detection limit.

2.1.1.2 QC Summary Data

Example 8260 Calculations

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

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

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: HPMS8 Dataset: 012512
Analyst1: ADC Analyst2: NA
Method: 8260B SOP: MSV01 Rev: 14
Method: 624 SOP: MSV10 Rev: 8
Method: 5030B/5030C/5035A SOP: PAT01 Rev: 13
Maintenance Log ID: 40490

Internal Standard: STD49574 Surrogate Standard: STD49574
CCV: STD49665 LCS: STD49523 MS/MSD: NA

Column 1 ID: RTX502.2 Column 2 ID: NA
Workgroups: WG387881(ICAL), WG387845

Comments:

File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
8M376554	WG387844-01 50ng BFB STD 8260	NA	1	1	STD49582	01/25/12 10:52
8M376555	WG387844-02 50ug/L CCV STD 8260	NA	1	1	STD49665	01/25/12 11:14
8M376556	WG387XXX-01 100ug/L A9 CCV STD 8260	NA	1	1	STD49484	01/25/12 11:43
8M376557	WG387845-01 VBLK0125 BLANK STD 826	NA	1	1		01/25/12 12:13
8M376558	WG387881-01 5ug/L A9FOO STD	NA	1	1	STD49721	01/25/12 12:43
8M376559	WG387881-02 20ug/L A9FOO STD	NA	1	1	STD49721	01/25/12 13:28
8M376560	WG387881-03 50ug/L A9FOO STD	NA	1	1	STD49721	01/25/12 13:58
8M376561	WG387881-04 100ug/L A9FOO STD	NA	1	1	STD49721	01/25/12 14:29
8M376562	WG387881-05 200ug/L A9FOO STD	NA	1	1	STD49721	01/25/12 14:59
8M376563	WG387881-06 300ug/L A9FOO STD	NA	1	1	STD49721	01/25/12 15:29
8M376564	WG387881-07 400ug/L A9FOO STD	NA	1	1	STD49721	01/25/12 15:59
8M376565	WG387881-08 100ug/L A9FOO ALT	NA	1	1	STD49721	01/25/12 16:29
8M376566	WG387845-02 100ug/L A9FOO LCS	NA	1	1	STD49721	01/25/12 16:59
8M376567	WG387845-03 100ug/L A9FOO LCSDUP	NA	1	1	STD49721	01/25/12 17:29
8M376568	WG387845-04 100ug/L A9FOO P\&A	NA	1	1	STD49721	01/25/12 17:59
8M376569	WG387845-05 100ug/L A9FOO P\&A	NA	1	1	STD49721	01/25/12 18:29

Approved: February 02, 2012

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Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS8 Dataset: 032712
Analyst1: ADC Analyst2: NA
Method: 8260B SOP: MSV01 Rev: 14
Method: 624 SOP: MSV10 Rev: 8
Method: 5030B/5030C/5035A SOP: PAT01 Rev: 13
Maintenance Log ID: 41161

Internal Standard: STD50587 Surrogate Standard: STD50587
CCV: STD50699 LCS: STD50665 MS/MSD: STD50665

Column 1 ID: RTX502.2 Column 2 ID: NA
Workgroups: WG393321 (ICAL)

Comments:

File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
8M377934	WG393321-01 BFB 50ng 8260	NA	1	1	STD50660	03/27/12 10:51
8M377935	WG393321-02 0.3 ug/L STD 8260	NA	1	1	STD50782	03/27/12 11:14
8M377936	WG393321-03 0.4 ug/L STD 8260	NA	1	1	STD50782	03/27/12 11:45
8M377937	WG393321-04 1.0 ug/L STD 8260	NA	1	1	STD50782	03/27/12 12:15
8M377938	WG393321-05 2.0 ug/L STD 8260	NA	1	1	STD50782	03/27/12 12:46
8M377939	WG393321-06 5.0 ug/L STD 8260	NA	1	1	STD50782	03/27/12 13:17
8M377940	WG393321-07 20.0 ug/L STD 8260	NA	1	1	STD50782	03/27/12 13:48
8M377941	WG393321-08 50.0 ug/L STD 8260	NA	1	1	STD50782	03/27/12 14:18
8M377942	WG393321-09 100.0 ug/L STD 8260	NA	1	1	STD50782	03/27/12 14:49
8M377943	WG393321-10 200.0 ug/L STD 8260	NA	1	1	STD50782	03/27/12 15:19
8M377944	WG393321-11 300.0 ug/L STD 8260	NA	1	1	STD50782	03/27/12 15:49
8M377945	RINSE	NA	1	1	STD50782	03/27/12 16:20
8M377946	WG393321-04 1.0 ug/L STD 8260	NA	1	1	STD50782	03/27/12 16:50
8M377947	WG393321-12 50.0 ug/L ALT SRC 8260	NA	1	1	STD50783	03/27/12 17:20

Comments

Seq.	Rerun	Dil.	Reason	Analytes
13				
File ID: 8M377946				
WG393321-04 1.0 STD RR not needed				

Approved: March 30, 2012

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Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS8 Dataset: 051012
Analyst1: ADC Analyst2: NA
Method: 8260B SOP: MSV01 Rev: 14
Method: 5030B/5030C/5035A SOP: PAT01 Rev: 13

Maintenance Log ID: 41688

Internal Standard: STD51487 Surrogate Standard: STD51487
CCV: STD51371 LCS: STD51372 MS/MSD: NA

Column 1 ID: RTX502.2 Column 2 ID: NA
Workgroups: WG397572

Comments:

File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
8M378938	WG397571-01 BFB 50ng 8260	NA	1	1	STD51241	05/10/12 06:25
8M378939	WG397571-02 50ug/L CCV 8260	NA	1	1	STD51468	05/10/12 06:47
8M378940	WG397793-01 100ug/L CCV A9	NA	1	1	STD51412	05/10/12 07:19
8M378941	WG397572-01 VBLK0510 BLANK 8260	NA	1	1		05/10/12 07:52
8M378942	WG397572-02 20ug/L LCS 8260	NA	1	1	STD51372	05/10/12 08:24
8M378943	WG397572-03 20ug/L LCS DUP 8260	NA	1	1	STD51372	05/10/12 08:56
8M378944	L12050150-20 B 826-SPE	<2	1	1		05/10/12 09:29
8M378945	L12050150-18 B 826-SPE	<2	1	1		05/10/12 10:01
8M378946	L12050150-19 A 826-SPE	<2	1	1		05/10/12 10:33
8M378947	L12050150-21 A 826-SPE	<2	1	1		05/10/12 11:06
8M378948	L12050150-22 A 826-SPE	<2	1	1		05/10/12 11:38
8M378949	L12050150-23 A 826-SPE	<2	1	1		05/10/12 12:10
8M378950	L12050150-24 A 826-SPE	<2	1	1		05/10/12 12:43
8M378951	L12050150-25 A 826-SPE	<2	1	1		05/10/12 13:15
8M378952	L12050150-26 A 826-SPE	<2	1	1		05/10/12 13:48
8M378953	L12050150-27 A 826-SPE	<2	1	1		05/10/12 14:20
8M378954	L12050150-28 A 826-SPE	<2	1	1		05/10/12 14:53
8M378955	L12050150-29 A 826-SPE	<2	1	1		05/10/12 15:25
8M378956	L12050150-30 B 826-SPE	7	1	1		05/10/12 15:57
8M378957	L12050127-01 A 826-SPE	<2	1	1		05/10/12 16:30
8M378958	L12050127-02 A 826-SPE	<2	1	1		05/10/12 17:02
8M378959	L12050127-03 A 826-SPE	<2	1	1		05/10/12 17:35
8M378960	L12050127-04 A 826-SPE	<2	1	1		05/10/12 18:06
8M378961	L12050127-05 A 826-SPE	<2	1	1		05/10/12 18:39
8M378962	WG397691-01 50ng BFB STD 8260	NA	1	1	STD51241	05/10/12 19:13
8M378963	WG397691-02 50ug/L CCV STD 8260	NA	1	1	STD51468	05/10/12 19:35
8M378965	WG397692-01 VBLK0510 BLANK STD 826	NA	1	1		05/10/12 20:40
8M378966	WG397692-02 20ug/L LCS STD 8260	NA	1	1	STD51427	05/10/12 21:13
8M378967	WG397692-03 20ug/L LCSDUP STD 8260	NA	1	1	STD51427	05/10/12 21:45
8M378968	WG397693-01 100ug/L A9/FOO CCV STD 8	NA	1	1	STD51412	05/10/12 22:18
8M378969	L12050155-04 A 826-A9	<2	1	1		05/10/12 22:50
8M378970	L12050153-09 A 826-SPE	<2	1	1		05/10/12 23:22
8M378971	L12050171-09 A 826-SPE	<2	1	1		05/10/12 23:55
8M378972	L12050100-09 A 826-SPE	<2	1	1		05/11/12 00:27

Approved: May 15, 2012

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Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS8 Dataset: 051012
Analyst1: ADC Analyst2: NA
Method: 8260B SOP: MSV01 Rev: 14
Method: 5030B/5030C/5035A SOP: PAT01 Rev: 13

Maintenance Log ID: 41688

Internal Standard: STD51487 Surrogate Standard: STD51487
CCV: STD51371 LCS: STD51372 MS/MSD: NA

Column 1 ID: RTX502.2 Column 2 ID: NA
Workgroups: WG397572

Comments:

File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
8M378973	L12050127-05 B 826-SPE	<2	1	1		05/11/12 00:59
8M378974	L12050099-09 B 826-SPE	<2	1	1		05/11/12 01:31
8M378975	L12050153-01 A 826-SPE	<2	1	1		05/11/12 02:02
8M378976	L12050153-03 A 826-SPE	<2	1	1		05/11/12 02:35
8M378977	L12050153-05 A 826-SPE	<2	1	1		05/11/12 03:07
8M378978	L12050153-07 A 826-SPE	<2	1	1		05/11/12 03:39
8M378979	L12050171-07 A 826-SPE	7	1	1		05/11/12 04:11
8M378980	L12050155-01 A 826-A9	<2	1	1		05/11/12 04:43
8M378981	L12050155-02 A 826-A9	<2	1	1		05/11/12 05:15
8M378982	L12050155-03 A 826-A9	4	1	1		05/11/12 05:48
8M378983	L12050100-08 A 826-SPE	<2	1	1		05/11/12 06:19
8M378984	L12050100-07 A 50X 826-SPE	<2	1	50		05/11/12 06:52
8M378985	CCV	NA	1	1		05/11/12 07:24
8M378986	RINSE	NA	1	1		05/11/12 07:56
8M378987	RINSE	NA	1	1		05/11/12 08:29

Comments

Seq.	Rerun	Dil.	Reason	Analytes
24	X			
File ID: 8M378961				
L12050127-05 MT DNR RR STR				
43	X	25	Over Calibration Range	11DCA, CIS 12
File ID: 8M378981				
L12050155-02				
44	X		Carry-over contamination	
File ID: 8M378982				
L12050155-03 RR STR DNR				
45	X	5	Over Calibration Range	TOL
File ID: 8M378983				
L12050100-08				
46	X	10	Analyzed too dilute	
File ID: 8M378984				
L12050100-07 DNR				

Approved: May 15, 2012

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Microbac Laboratories Inc.

Data Checklist

Date: 25-JAN-2012
Analyst: ADC
Analyst: NA
Method: 8260
Instrument: HPMS8
Curve Workgroup: WG387881
Runlog ID: 44940
Analytical Workgroups: WG387845

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	X
Samples	NA
TCL Hits	NA
Spectra of TCL Hits	NA
Surrogates	NA
Internal Standards Criteria	X
Library Searches	NA
Calculations & Correct Factors	X
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:
02-FEB-2012

Secondary Reviewer:
02-FEB-2012

CHECKLIST1 - Modified 03/05/2008
Generated: FEB-02-2012 15:04:22

Microbac Laboratories Inc.

Data Checklist

Date: 27-MAR-2012
Analyst: ADC
Analyst: NA
Method: 8260/624
Instrument: HPMS8
Curve Workgroup: WG393321
Runlog ID: 45930
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)	NA
Recoveries	NA
Surrogates	NA
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-MAR-2012

Secondary Reviewer:
30-MAR-2012

CHECKLIST1 - Modified 03/05/2008
Generated: MAR-30-2012 12:40:25

Microbac Laboratories Inc.

Data Checklist

Date: 10-MAY-2012
Analyst: ADC
Analyst: NA
Method: 8260
Instrument: HPMS8
Curve Workgroup: NA
Runlog ID: 46705
Analytical Workgroups: WG397572, WG397692

System Performance Check	NA
BFB	X
Initial Calibration	X
Average RF	X
Linear Reg or Higher Order Curve	X
Second Source standard % Difference	X
Continuing Calibration /Check Standards	X
Project/Client Specific Requirements	X
Special Standards	NA
Blanks	X
TCL's	X
Surrogates	X
LCS (Laboratory Control Sample)	X
Recoveries	X
Surrogates	X
MS/MSD/Duplicates	NA
Samples	X
TCL Hits	X
Spectra of TCL Hits	ADC
Surrogates	X
Internal Standards Criteria	X
Library Searches	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	ADC
Secondary Reviewer	MDA
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Check the reasonableness of the results	X

Primary Reviewer:
14-MAY-2012

Secondary Reviewer:
15-MAY-2012

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-16-2012 13:26:23

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 8260B **AAB#:** WG397692

Login Number: L12050153

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-15-050312	01	05/03/12							14		05/11/12	7.6	14	
MW-17-050312	03	05/03/12							14		05/11/12	7.6	14	
MW-28050312	05	05/03/12							14		05/11/12	7.5	14	
TW-02-050312	07	05/03/12							14		05/11/12	7.6	14	
TB-050312	09	05/03/12							14		05/10/12	7.6	14	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2417118
Report generated 05/16/2012 14:29

Microbac Laboratories Inc.
SURROGATE STANDARDS

Login Number: L12050153 **Method:** 8260
Instrument Id: HPMS8 **CAL ID:** HPMS8-27-MAR-12
Workgroup (AAB#): WG397692 **Matrix:** Water

Sample Number	Dilution	Tag	1	2	3	4
L12050153-01	1.00	01	113	104	96.3	99.1
L12050153-03	1.00	01	114	102	96.6	99.5
L12050153-05	1.00	01	114	103	96.5	97.6
L12050153-07	1.00	01	116	103	97.4	98.7
L12050153-09	1.00	01	111	102	98.7	100
WG397692-01	1.00	01	113	103	97.7	97.8
WG397692-02	1.00	01	112	104	98.8	101
WG397692-03	1.00	01	109	100	97.2	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: 2416733
Report generated: 05/16/2012 14:29

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number:	L12050153	**Work Group:**	WG397692
Blank File ID:	8M378965	**Blank Sample ID:**	WG397692-01
Prep Date:	05/10/12 20:40	**Instrument ID:**	HPMS8
Analyzed Date:	05/10/12 20:40	**Method:**	8260B
Analyst:	TMB		

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG397692-02	8M378966	05/10/12 21:13	01
LCS2	WG397692-03	8M378967	05/10/12 21:45	01
TB-050312	L12050153-09	8M378970	05/10/12 23:22	01
MW-15-050312	L12050153-01	8M378975	05/11/12 02:02	01
MW-17-050312	L12050153-03	8M378976	05/11/12 02:35	01
MW-28050312	L12050153-05	8M378977	05/11/12 03:07	01
TW-02-050312	L12050153-07	8M378978	05/11/12 03:39	01

Report Name: BLANK_SUMMARY
PDF File ID: 2417119
Report generated 05/16/2012 14:29

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050153 Prep Date: 05/10/12 20:40 Sample ID: WG397692-01
Instrument ID: HPMS8 Run Date: 05/10/12 20:40 Prep Method: 5030B/5030C/503
File ID: 8M378965 Analyst: TMB Method: 8260B
Workgroup (AAB#): WG397692 Matrix: Water Units: ug/L
Contract #: Cal ID: HPMS8-27-MAR-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: 2417120
16-MAY-2012 14:29

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050153 Prep Date: 05/10/12 20:40 Sample ID: WG397692-01
Instrument ID: HPMS8 Run Date: 05/10/12 20:40 Prep Method: 5030B/5030C/503
File ID: 8M378965 Analyst: TMB Method: 8260B
Workgroup (AAB#): WG397692 Matrix: Water Units: ug/L
Contract #: Cal ID: HPMS8-27-MAR-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	113	80 - 120	PASS
Dibromofluoromethane	103	86 - 118	PASS
p-Bromofluorobenzene	97.7	86 - 115	PASS
Toluene-d8	97.8	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: 2417120
16-MAY-2012 14:29

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050153 Analyst: TMB Prep Method: 5030B/5030C/503
Instrument ID: HPMS8 Matrix: Water Method: 8260B
Workgroup (AAB#): WG397692 Units: ug/L
QC Key: WATERLOO Lot #: STD51427

Sample ID: WG397692-02 LCS File ID: 8M378966 Run Date: 05/10/2012 21:13
Sample ID: WG397692-03 LCS2 File ID: 8M378967 Run Date: 05/10/2012 21:45

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
1,1,1-Trichloroethane	20.0	22.3	111	20.0	22.4	112	0.262	80 - 134	30	
1,1,2,2-Tetrachloroethane	20.0	17.7	88.6	20.0	18.1	90.3	1.93	79 - 125	30	
1,1,2-Trichloro-1,2,2-Trifluoroethane	20.0	19.7	98.7	20.0	19.7	98.6	0.0901	80 - 130	30	
1,1,2-Trichloroethane	20.0	19.8	99.2	20.0	20.0	100	0.947	80 - 125	30	
1,1-Dichloroethane	20.0	19.3	96.7	20.0	19.1	95.6	1.13	80 - 125	30	
1,1-Dichloroethene	20.0	20.6	103	20.0	21.2	106	2.49	80 - 132	30	
1,2,3-Trichlorobenzene	20.0	19.3	96.7	20.0	19.6	98.2	1.53	55 - 140	30	
1,2,4-Trichlorobenzene	20.0	18.6	93.1	20.0	18.9	94.7	1.68	65 - 135	30	
1,2-Dibromo-3-chloropropane	20.0	17.6	88.2	20.0	18.8	94.1	6.49	50 - 130	30	
1,2-Dibromoethane	20.0	19.7	98.6	20.0	19.4	96.8	1.87	80 - 125	30	
1,2-Dichlorobenzene	20.0	19.1	95.6	20.0	19.3	96.6	1.05	80 - 125	30	
1,2-Dichloroethane	20.0	22.3	111	20.0	22.2	111	0.400	80 - 129	30	
cis-1,2-Dichloroethene	20.0	19.8	99.0	20.0	19.8	98.9	0.0588	70 - 125	30	
trans-1,2-Dichloroethene	20.0	20.2	101	20.0	19.9	99.7	1.18	80 - 127	30	
1,2-Dichloropropane	20.0	19.0	95.2	20.0	19.2	95.9	0.695	80 - 120	30	
1,3-Dichlorobenzene	20.0	19.0	94.8	20.0	19.4	97.2	2.42	80 - 120	30	
1,4-Dichlorobenzene	20.0	19.1	95.3	20.0	19.2	95.9	0.678	80 - 120	30	
2-Butanone	20.0	16.8	83.8	20.0	17.6	88.1	4.96	30 - 150	30	
2-Hexanone	20.0	15.4	76.8	20.0	17.3	86.4	11.7	55 - 130	30	
4-Methyl-2-pentanone	20.0	17.0	84.8	20.0	18.3	91.3	7.28	64 - 140	30	
Acetone	20.0	17.5	87.3	20.0	17.7	88.3	1.16	40 - 142	30	
Benzene	20.0	19.0	95.1	20.0	19.6	97.9	2.89	80 - 121	30	
Bromochloromethane	20.0	21.5	107	20.0	21.4	107	0.172	65 - 130	30	
Bromodichloromethane	20.0	21.8	109	20.0	22.1	111	1.49	80 - 131	30	
Bromoform	20.0	21.7	109	20.0	22.1	111	1.80	70 - 130	30	
Bromomethane	20.0	19.0	95.1	20.0	19.3	96.7	1.60	30 - 145	30	
Carbon disulfide	20.0	19.7	98.4	20.0	18.7	93.7	4.84	58 - 138	30	
Carbon tetrachloride	20.0	22.6	113	20.0	23.1	116	2.16	65 - 140	30	
Chlorobenzene	20.0	19.0	95.2	20.0	19.5	97.7	2.53	80 - 120	30	
Chloroethane	20.0	18.6	92.8	20.0	19.8	99.1	6.66	60 - 135	30	
Chloroform	20.0	20.6	103	20.0	20.6	103	0.202	80 - 125	30	
Chloromethane	20.0	22.5	112	20.0	23.8	119	5.97	40 - 125	30	
cis-1,3-Dichloropropene	20.0	20.4	102	20.0	20.9	105	2.70	70 - 130	30	
Cyclohexane	20.0	18.1	90.4	20.0	18.4	91.9	1.71	80 - 130	30	
Dibromochloromethane	20.0	21.9	110	20.0	22.0	110	0.612	60 - 135	30	
Dichlorodifluoromethane	20.0	28.6	143	20.0	31.5	157	9.54	50 - 133	30	*
Ethyl benzene	20.0	19.5	97.3	20.0	19.9	99.6	2.37	80 - 122	30	
Isopropylbenzene	20.0	17.2	85.8	20.0	17.7	88.7	3.36	80 - 122	30	
Methyl acetate	20.0	16.8	83.8	20.0	16.9	84.6	0.902	80 - 130	30	
Methyl tert-butyl ether	20.0	20.0	100	20.0	19.6	98.2	1.93	65 - 125	30	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 2416730
Report generated: 05/16/2012 14:29

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050153 Analyst: TMB Prep Method: 5030B/5030C/503
Instrument ID: HPMS8 Matrix: Water Method: 8260B
Workgroup (AAB#): WG397692 Units: ug/L
QC Key: WATERLOO Lot #: STD51427

Sample ID: WG397692-02 LCS File ID: 8M378966 Run Date: 05/10/2012 21:13
Sample ID: WG397692-03 LCS2 File ID: 8M378967 Run Date: 05/10/2012 21:45

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Methylcyclohexane	20.0	17.6	88.2	20.0	19.1	95.3	7.75	80 - 130	30	
Methylene chloride	20.0	19.2	95.9	20.0	19.4	97.1	1.31	80 - 123	30	
m,p-Xylene	40.0	38.4	96.0	40.0	39.8	99.5	3.62	80 - 122	30	
o-Xylene	20.0	19.0	94.8	20.0	19.4	97.2	2.44	80 - 122	30	
Styrene	20.0	17.9	89.4	20.0	18.4	91.8	2.66	80 - 123	30	
Tetrachloroethene	20.0	19.7	98.5	20.0	20.5	103	4.18	80 - 124	30	
Toluene	20.0	18.2	90.8	20.0	18.4	92.2	1.60	80 - 124	30	
trans-1,3-Dichloropropene	20.0	18.2	90.9	20.0	18.6	93.0	2.25	80 - 130	30	
Trichloroethene	20.0	20.6	103	20.0	21.4	107	3.96	80 - 122	30	
Trichlorofluoromethane	20.0	23.6	118	20.0	24.9	124	5.21	62 - 151	30	
Vinyl chloride	20.0	22.7	113	20.0	24.3	122	7.01	65 - 140	30	

Surogates	LCS	LCS2	Surrogate Limits	Qualifier
	% Recovery	% Recovery		
1,2-Dichloroethane-d4	112	109	80 - 120	PASS
Dibromofluoromethane	104	100	86 - 118	PASS
p-Bromofluorobenzene	98.8	97.2	86 - 115	PASS
Toluene-d8	101	100	88 - 110	PASS

* EXCEEDS %REC LIMIT

EXCEEDS RPD LIMIT

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 2416730
Report generated: 05/16/2012 14:29

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

BFB

Login Number: L12050153
Instrument: HPMS8
Analyst: ADC
Workgroup: WG387844

Tune ID: WG387844-01
Run Date: 01/25/2012
Run Time: 10:52
File ID: 8M376554
Cal ID: HPMS8-12-DEC-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	19.8	8808	PASS
75.0	95.0	30.0	60.0	45.0	19993	PASS
95.0	95.0	100	100	100	44392	PASS
96.0	95.0	5.00	9.00	6.71	2979	PASS
173	174	0	2.00	0.970	324	PASS
174	95.0	50.0	100	75.3	33405	PASS
175	174	5.00	9.00	7.47	2495	PASS
176	174	95.0	101	97.5	32579	PASS
177	176	5.00	9.00	6.44	2099	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG387881-01	STD	01	01/25/2012 12:43	
WG387881-02	STD	01	01/25/2012 13:28	
WG387881-03	STD	01	01/25/2012 13:58	
WG387881-04	STD-CCV	01	01/25/2012 14:29	
WG387881-05	STD	01	01/25/2012 14:59	
WG387881-06	STD	01	01/25/2012 15:29	
WG387881-07	STD	01	01/25/2012 15:59	
WG387881-08	SSCV	01	01/25/2012 16:29	

* Sample past 12 hour tune limit

TUNE - Modified 03/06/2008
PDF File ID: 2417121
Report generated 05/16/2012 14:29

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

BFB

Login Number: L12050153
Instrument: HPMS8
Analyst: ADC
Workgroup: WG393321

Tune ID: WG393321-01
Run Date: 03/27/2012
Run Time: 10:51
File ID: 8M377934
Cal ID: HPMS8 -

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50.0	95.0	15.0	40.0	18.7	7999	PASS
75.0	95.0	30.0	60.0	43.5	18673	PASS
95.0	95.0	100	100	100	42882	PASS
96.0	95.0	5.00	9.00	6.92	2967	PASS
173	174	0	2.00	0.440	181	PASS
174	95.0	50.0	100	95.9	41120	PASS
175	174	5.00	9.00	7.61	3128	PASS
176	174	95.0	101	96.4	39648	PASS
177	176	5.00	9.00	7.04	2790	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG393321-02	STD	01	03/27/2012 11:14	
WG393321-03	STD	01	03/27/2012 11:45	
WG393321-04	STD	01	03/27/2012 12:15	
WG393321-05	STD	01	03/27/2012 12:46	
WG393321-06	STD	01	03/27/2012 13:17	
WG393321-07	STD	01	03/27/2012 13:48	
WG393321-08	STD-CCV	01	03/27/2012 14:18	
WG393321-09	STD	01	03/27/2012 14:49	
WG393321-10	STD	01	03/27/2012 15:19	
WG393321-11	STD	01	03/27/2012 15:49	
WG393321-12	SSCV	01	03/27/2012 17:20	

* Sample past 12 hour tune limit

TUNE - Modified 03/06/2008
PDF File ID: 2417121
Report generated 05/16/2012 14:29

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

BFB

Login Number: L12050153
Instrument: HPMS8
Analyst: FJB
Workgroup: WG397571

Tune ID: WG397571-01
Run Date: 05/10/2012
Run Time: 06:25
File ID: 8M378938
Cal ID: HPMS8-27-MAR-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	19.8	4193	PASS
75.0	95.0	30.0	60.0	45.4	9612	PASS
95.0	95.0	100	100	100	21149	PASS
96.0	95.0	5.00	9.00	6.78	1434	PASS
173	174	0	2.00	0	0	PASS
174	95.0	50.0	100	92.4	19551	PASS
175	174	5.00	9.00	7.63	1491	PASS
176	174	95.0	101	95.6	18691	PASS
177	176	5.00	9.00	6.81	1273	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG397793-01	CCV	01	05/10/2012 07:19	

* Sample past 12 hour tune limit

TUNE - Modified 03/06/2008
PDF File ID: 2417121
Report generated 05/16/2012 14:29

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

BFB

Login Number: L12050153
Instrument: HPMS8
Analyst: TMB
Workgroup: WG397691

Tune ID: WG397691-01
Run Date: 05/10/2012
Run Time: 19:13
File ID: 8M378962
Cal ID: HPMS8-27-MAR-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	19.3	5220	PASS
75.0	95.0	30.0	60.0	46.2	12471	PASS
95.0	95.0	100	100	100	27009	PASS
96.0	95.0	5.00	9.00	6.45	1741	PASS
173	174	0	2.00	0.467	116	PASS
174	95.0	50.0	100	92.0	24861	PASS
175	174	5.00	9.00	8.06	2005	PASS
176	174	95.0	101	97.1	24128	PASS
177	176	5.00	9.00	7.21	1740	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG397691-02	CCV	01	05/10/2012 19:35	
WG397692-01	BLANK	01	05/10/2012 20:40	
WG397692-01	BLANK	01	05/10/2012 20:40	
WG397692-02	LCS	01	05/10/2012 21:13	
WG397692-03	LCS2	01	05/10/2012 21:45	
WG397693-01	CCV	01	05/10/2012 22:18	
L12050153-09	TB-050312	01	05/10/2012 23:22	
L12050153-01	MW-15-050312	01	05/11/2012 02:02	
L12050153-03	MW-17-050312	01	05/11/2012 02:35	
L12050153-05	MW-28050312	01	05/11/2012 03:07	
L12050153-07	TW-02-050312	01	05/11/2012 03:39	

* Sample past 12 hour tune limit

TUNE - Modified 03/06/2008
PDF File ID: 2417121
Report generated 05/16/2012 14:29

Calibration Table Report
Method: A9FOOWT.M
Title: A9-FOO Water - IC: 01/25/12- HPMS8
Last Calibration: Wed Feb 01 15:35:09 2012
Curve: WG387881
Calibration Files

Compound	5 8M376558.D	20 8M376559.D	50 8M376560.D	100 8M376561.D	200 8M376562.D	300 8M376563.D	400 8M376564.D	500 8M367713.D	Avg	%RSD	Linear
Fluorobenzene	ISTD										
Acetonitrile	0.018	0.017	0.018	0.019	0.020	0.019	0.019		0.019	5.995	
3-Chloro-1-propene	0.376	0.390	0.392	0.395	0.408	0.388	0.382		0.390	2.658	
2-Chloro-1,3-butadiene	0.465	0.465	0.468	0.464	0.475	0.452	0.445		0.462	2.198	
Ethyl Acetate	0.125	0.125	0.128	0.137	0.138	0.133	0.126		0.130	4.168	
Methacrylonitrile	0.053	0.050	0.054	0.055	0.056	0.054	0.053		0.054	4.009	
Isobutyl Alcohol		0.005	0.006	0.006	0.006	0.006	0.006		0.006	7.894	
1-Butanol		0.001	0.002	0.003	0.003	0.003	0.003		0.003	23.485	0.996
Methyl methacrylate	0.141	0.155	0.162	0.167	0.172	0.164	0.159		0.160	6.259	
2-Nitropropane	0.043	0.051	0.055	0.059	0.063	0.060	0.058		0.056	11.690	
Chlorobenzene-d5	ISTD										
1,4-Dichlorobenzene-d4	ISTD										
Cyclohexanone		0.025	0.024	0.024	0.025	0.026	0.024		0.025	3.783	

Wed Feb 01 15:40:12 2012

Calibration Table Report
Method: 8260WT.M
Title: Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Calibration: Wed Mar 28 08:18:24 2012
Curve: WG393321
Calibration Files

Compound	0.3 8M377935.D	0.4 8M377936.D	1 8M377937.D	2 8M377938.D	5 8M377939.D	20 8M377940.D	50 8M377941.D	100 8M377942.D	200 8M377943.D	300 8M377944.D	Avg	%RSD	R^2 Linear	R^2 Quadratic
Fluorobenzene	ISTD													
Dichlorodifluoromethane			0.269	0.287	0.273	0.277	0.278	0.254	0.267		0.272	3.859		
Chloromethane			0.379	0.343	0.303	0.292	0.292	0.283	0.302		0.313	11.138		
Vinyl Chloride		0.302	0.289	0.275	0.268	0.252	0.240	0.230	0.234		0.261	10.221		
1,3-Butadiene				0.252	0.226	0.176	0.162	0.144	0.150	0.149	0.180	23.643	0.999	
Bromomethane			0.208	0.217	0.195	0.199	0.201	0.198	0.198		0.202	3.792		
Chloroethane			0.169	0.177	0.166	0.169	0.169	0.163	0.165		0.168	2.585		
Trichlorofluoromethane		0.393	0.387	0.409	0.385	0.392	0.371	0.344	0.406		0.386	5.391		
Diethyl ether			0.154	0.143	0.143	0.142	0.139	0.132		0.130	0.140	5.729		
Isoprene			0.336	0.308	0.305	0.309	0.303	0.283	0.280		0.304	6.121		
Acrolein					0.014	0.015	0.016	0.016	0.017	0.017	0.016	6.554		
1,1,2-Trichloro-1,2,2-Trifluoroet			0.259	0.237	0.232	0.232	0.221	0.211	0.228		0.232	6.353		
Acetone					0.034	0.037	0.040	0.037	0.037	0.036	0.037	5.697		
1,1-Dichloroethene		0.320	0.344	0.346	0.344	0.339	0.329	0.308	0.352		0.335	4.487		
Tert-Butyl Alcohol			0.006	0.007	0.010	0.010	0.011	0.011		0.012	0.010	21.931	0.997	
Dimethyl Sulfide			0.256	0.244	0.232	0.232	0.239	0.228	0.221		0.236	5.015		
Iodomethane			0.348	0.370	0.383	0.422	0.431	0.404	0.381		0.391	7.543		
Methyl acetate				0.113	0.116	0.117	0.117	0.114	0.120		0.116	1.988		
Methylene Chloride		0.240	0.280	0.262	0.251	0.243	0.249	0.235	0.235		0.249	6.205		
Carbon Disulfide		0.529	0.686	0.665	0.635	0.666	0.695	0.657	0.618		0.644	8.205		
Acrylonitrile					0.043	0.050	0.054	0.051	0.052	0.049	0.050	7.847		
Methyl Tert Butyl Ether			0.469	0.423	0.420	0.431	0.426	0.402	0.416		0.427	4.867		
trans-1,2-Dichloroethene		0.290	0.315	0.326	0.328	0.319	0.322	0.312	0.320		0.317	3.702		
n-Hexane			0.312	0.288	0.285	0.305	0.294	0.268	0.271		0.289	5.607		
Diisopropyl ether			0.825	0.810	0.766	0.774	0.764	0.712		0.695	0.764	6.181		
Vinyl Acetate					0.242	0.247	0.253	0.234	0.255	0.241	0.245	3.241		
1,1-Dichloroethane		0.423	0.400	0.426	0.414	0.391	0.401	0.386	0.397		0.405	3.605		
Ethyl-Tert-Butyl ether			0.650	0.656	0.615	0.636	0.639	0.596		0.589	0.626	4.198		
2-Butanone					0.050	0.053	0.058	0.056	0.057	0.056	0.055	5.311		
Propionitrile			0.006	0.013	0.016	0.018	0.020	0.018		0.019	0.016	31.177	0.999	
2,2-Dichloropropane		0.361	0.366	0.347	0.343	0.337	0.341	0.329	0.360		0.348	3.773		
cis-1,2-Dichloroethene		0.239	0.266	0.270	0.271	0.262	0.265	0.258	0.266		0.262	3.809		
Chloroform	0.466	0.409	0.417	0.429	0.421	0.394	0.407	0.399	0.412		0.417	5.067		
1-Bromopropane			0.042	0.055	0.052	0.055	0.056	0.055	0.058	0.053	0.053	9.033		
Bromochloromethane		0.170	0.161	0.173	0.171	0.169	0.172	0.166	0.168		0.169	2.397		
Tetrahydrofuran			0.038	0.036	0.035	0.037	0.039	0.037		0.037	0.037	3.524		
Dibromofluoromethane				0.280	0.270	0.247	0.256	0.249	0.254		0.259	5.073		
1,1,1-Trichloroethane		0.385	0.361	0.392	0.387	0.375	0.378	0.367	0.387		0.379	2.881		
Cyclohexane			0.396	0.385	0.376	0.377	0.375	0.353	0.358		0.374	3.963		
1,1-Dichloropropene		0.318	0.344	0.324	0.331	0.325	0.330	0.315	0.326		0.326	2.710		
Tert-Amyl-Methyl ether			0.541	0.530	0.507	0.512	0.520	0.489		0.486	0.512	3.968		
Carbon Tetrachloride		0.34	0.358	0.381	0.361	0.348	0.351	0.341	0.357		0.3545	3.6603		
1,2-Dichloroethane-d4					0.207	0.194	0.2	0.196	0.201		0.1997	2.5664		
Heptane											0	0		
1,2-Dichloroethane		0.238	0.257	0.279	0.257	0.249	0.258	0.252	0.263		0.2566	4.6046		
Benzene		1.06	1.046	1.002	0.952	0.922	0.927	0.883	0.871		0.958	7.4203		
Trichloroethene		0.285	0.33	0.338	0.323	0.316	0.32	0.309	0.312		0.3167	5.0898		
Methylcyclohexane			0.404	0.365	0.361	0.368	0.364	0.346	0.353		0.366	5.0531		
1,2-Dichloropropane		0.22	0.236	0.237	0.23	0.233	0.239	0.232	0.237		0.2331	2.6045		
Bromodichloromethane		0.266	0.32	0.309	0.305	0.289	0.305	0.302	0.309		0.3007	5.4743		
1,4-Dioxane						0.001	0.001	0.001		0.001	0.0013	5.1493	fail	
Dibromomethane		0.087	0.126	0.123	0.123	0.123	0.13	0.124	0.13		0.1207	11.438		
2-Chloroethyl Vinyl Ether			0.094	0.101	0.104	0.109	0.116	0.111	0.111	0.11	0.107	6.5203		
4-Methyl-2-Pentanone					0.044	0.048	0.052	0.049	0.048	0.049	0.0484	5.279		
cis-1,3-Dichloropropene		0.34	0.355	0.346	0.35	0.35	0.371	0.357	0.362		0.3539	2.6624		
Dimethyl Disulfide			0.343	0.343	0.365	0.405	0.435	0.425	0.428		0.3919	10.429		
Chlorobenzene-d5	ISTD													
Toluene-d8					1.212	1.157	1.182	1.121	1.1		1.1543	3.9255		
Toluene		1.791	1.494	1.419	1.349	1.277	1.291	1.222	1.187		1.3787	14.101		
Ethyl Methacrylate			0.241	0.248	0.23	0.244	0.252	0.236	0.233		0.2405	3.2848		
Paraldehyde					0.002	0.004	0.005	0.004		0.004	0.004	30.883	0.998	
trans-1,3-Dichloropropene		0.382	0.405	0.371	0.379	0.375	0.393	0.377	0.378		0.3825	2.9359		
1,1,2-Trichloroethane		0.184	0.219	0.225	0.223	0.214	0.221	0.21	0.208		0.2131	6.1664		
2-Hexanone					0.051	0.053	0.056	0.053	0.053	0.054	0.0535	3.3461		
1,3-Dichloropropane		0.355	0.377	0.351	0.341	0.342	0.353	0.339	0.334		0.349	3.8631		
Tetrachloroethene		0.309	0.311	0.326	0.325	0.308	0.31	0.297	0.3		0.3108	3.3366		
Dibromochloromethane		0.26	0.315	0.32	0.321	0.314	0.335	0.322	0.318		0.3133	7.2056		
1,2-Dibromoethane		0.219	0.244	0.233	0.228	0.227	0.237	0.225	0.224		0.2296	3.514		
1-Chlorohexane		0.571	0.495	0.463	0.429	0.44	0.442	0.421	0.422		0.4605	11.067		
Chlorobenzene		1.043	1.007	1.018	0.992	0.934	0.946	0.903	0.864		0.9633	6.3899		
1,1,1,2-Tetrachloroethane		0.351	0.364	0.362	0.351	0.345	0.357	0.345	0.33		0.3506	3.0965		
Ethylbenzene		0.543	0.515	0.542	0.526	0.495	0.509	0.488	0.475		0.5117	4.8711		
m-,p-Xylene		0.664	0.655	0.673	0.64	0.612	0.617	0.586	0.55		0.6247	6.7226		
o-Xylene		0.671	0.629	0.655	0.641	0.614	0.632	0.6	0.579		0.6276	4.6844		
Styrene		1.349	1.272	1.195	1.109	1.045	1.061	1.008	0.95		1.1235	12.205		
Bromoform			0.171	0.175	0.173	0.18	0.192	0.186	0.182		0.1797	4.1431		
Isopropylbenzene		1.705	1.623	1.691	1.645	1.542	1.558	1.469	1.387		1.5775	7.0053		
1,4-Dichlorobenzene-d4	ISTD													
1,1,2,2-Tetrachloroethane		0.386	0.392	0.419	0.416	0.405	0.414	0.391	0.391		0.4018	3.314		
p-Bromofluorobenzene					0.827	0.825	0.827	0.786	0.779		0.8087	2.9906		

1,2,3-Trichloropropane			0.12	0.142	0.137	0.132	0.137	0.131	0.131	0.1329	5.0728	
trans-1,4-Dichloro-2-Butene			0.107	0.104	0.11	0.123	0.128	0.121	0.123	0.1163	7.9526	
n-Propylbenzene		3.539	3.307	3.446	3.337	3.227	3.169	3.014	2.862	3.2378	6.8545	
Bromobenzene	0.797	0.773	0.826	0.844	0.844	0.808	0.802	0.782	0.769	0.8049	3.5278	
1,3,5-Trimethylbenzene		2.47	2.464	2.549	2.501	2.42	2.389	2.302	2.222	2.4146	4.4722	
2-Chlorotoluene		2.211	2.172	2.303	2.201	1.999	1.96	1.889	1.742	2.0596	9.3231	
4-Chlorotoluene		2.262	2.094	1.972	1.863	1.9	1.899	1.823	1.761	1.9469	8.3088	
a-Methylstyrene			1.483	1.451	1.368	1.497	1.463	1.423	1.365	1.4357	3.6809	
tert-Butylbenzene		0.524	0.503	0.578	0.56	0.532	0.532	0.519	0.523	0.5339	4.459	
1,2,4-Trimethylbenzene		4.31	2.922	2.856	2.658	2.486	2.451	2.368	2.254	2.7881	23.568	0.999
sec-Butylbenzene		3.361	3.024	3.094	3.003	2.89	2.849	2.742	2.657	2.9525	7.4692	
p-Isopropyltoluene		2.753	2.762	2.802	2.775	2.633	2.631	2.524	2.439	2.6648	4.9336	
1,3-Dichlorobenzene		1.664	1.659	1.692	1.622	1.542	1.555	1.507	1.467	1.5885	5.1664	
1,4-Dichlorobenzene	1.718	1.658	1.641	1.675	1.601	1.548	1.555	1.5	1.451	1.5942	5.4856	
n-Butylbenzene		2.227	2.14	2.168	2.137	2.029	2.028	1.978	1.959	2.0832	4.6789	
1,2-Dichlorobenzene	1.523	1.348	1.488	1.476	1.448	1.388	1.407	1.356	1.311	1.416	5.0772	
1,2-Dibromo-3-Chloropropane				0.06	0.071	0.068	0.074	0.07	0.073	0.0692	7.0271	
1,2,4-Trichlorobenzene		1.007	0.989	1.008	0.954	0.925	0.931	0.902	0.914	0.9535	4.4381	
Hexachlorobutadiene		0.3	0.308	0.346	0.341	0.339	0.345	0.352	0.381	0.3388	7.4606	
Naphthalene		1.934	2.055	1.983	1.905	1.811	1.841	1.725	1.674	1.866	6.9016	
1,2,3-Trichlorobenzene	0.91	0.776	0.843	0.842	0.825	0.8	0.8	0.775	0.783	0.8172	5.3389	

Fri Mar 30 11:20:43 2012

Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number:L12050153 Run Date:03/27/2012 Sample ID:WG393321-12
Instrument ID:HPMS8 Run Time:17:20 Method:8260B
File ID:8M377947 Analyst:ADC QC Key:WATERLOO
ICal Workgroup:WG393321 Cal ID: HPMS8 - 27-MAR-12

Analyte		Expected	Found	Units	RF	%D	UCL	Q
1,1-Dichloroethene	CCC	50.0	48.8	ug/L	0.327	2.40	25	
1,2-Dichloropropane	CCC	50.0	52.6	ug/L	0.245	5.20	25	
Chloroform	CCC	50.0	48.3	ug/L	0.403	3.50	25	
Ethylbenzene	CCC	50.0	51.1	ug/L	0.523	2.20	25	
Toluene	CCC	50.0	48.3	ug/L	1.33	3.30	25	
Vinyl Chloride	CCC	50.0	54.2	ug/L	0.283	8.30	25	
1,1,2,2-Tetrachloroethane	SPCC	50.0	54.8	ug/L	0.440	9.60	25	
1,1-Dichloroethane	SPCC	50.0	49.7	ug/L	0.402	0.700	25	
Bromoform	SPCC	50.0	52.8	ug/L	0.190	5.70	25	
Chlorobenzene	SPCC	50.0	50.1	ug/L	0.966	0.300	25	
Chloromethane	SPCC	50.0	58.0	ug/L	0.364	16.0	25	
1,1,1-Trichloroethane		50.0	51.0	ug/L	0.386	1.90	25	
1,1,2-Trichloro-1,2,2-Trifluoroethane		50.0	51.6	ug/L	0.239	3.20	25	
1,1,2-Trichloroethane		50.0	53.7	ug/L	0.229	7.40	25	
1,2,3-Trichlorobenzene		50.0	50.7	ug/L	0.829	1.50	25	
1,2,4-Trichlorobenzene		50.0	48.8	ug/L	0.930	2.50	25	
1,2-Dibromo-3-Chloropropane		50.0	53.6	ug/L	0.0742	7.30	25	
1,2-Dibromoethane		50.0	53.0	ug/L	0.243	5.90	25	
1,2-Dichlorobenzene		50.0	51.2	ug/L	1.45	2.40	25	
1,2-Dichloroethane		50.0	51.1	ug/L	0.263	2.30	25	
cis-1,2-Dichloroethene		50.0	52.5	ug/L	0.275	5.10	25	
trans-1,2-Dichloroethene		50.0	51.7	ug/L	0.328	3.50	25	
1,3-Dichlorobenzene		50.0	50.4	ug/L	1.60	0.900	25	
1,4-Dichlorobenzene		50.0	50.9	ug/L	1.62	1.80	25	
2-Butanone		50.0	54.8	ug/L	0.0602	9.70	25	
2-Hexanone		50.0	56.2	ug/L	0.0600	12.3	25	
4-Methyl-2-Pentanone		50.0	53.7	ug/L	0.0519	7.30	25	
Acetone		50.0	53.8	ug/L	0.0397	7.70	25	
Benzene		50.0	49.8	ug/L	0.954	0.400	25	
Bromochloromethane		50.0	52.3	ug/L	0.177	4.60	25	
Bromodichloromethane		50.0	52.2	ug/L	0.314	4.30	25	
Bromomethane		50.0	54.8	ug/L	0.222	9.70	25	
Carbon Disulfide		50.0	51.1	ug/L	0.658	2.20	25	
Carbon Tetrachloride		50.0	51.2	ug/L	0.363	2.40	25	
Chloroethane		50.0	55.8	ug/L	0.188	11.7	25	
cis-1,3-Dichloropropene		50.0	55.8	ug/L	0.395	11.6	25	
Cyclohexane		50.0	51.5	ug/L	0.385	2.90	25	
Dibromochloromethane		50.0	54.5	ug/L	0.342	9.10	25	
Dichlorodifluoromethane		50.0	77.4	ug/L	0.421	54.9	25	*
Isopropylbenzene		50.0	44.8	ug/L	1.41	10.4	25	
Methyl acetate		50.0	56.8	ug/L	0.132	13.7	25	
Methyl Tert Butyl Ether		50.0	53.5	ug/L	0.457	7.00	25	

ALT - Modified 09/06/2007
Version 1.5 PDF File ID: 2416731
Report generated 05/16/2012 14:29

Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12050153 Run Date: 03/27/2012 Sample ID: WG393321-12
Instrument ID: HPMS8 Run Time: 17:20 Method: 8260B
File ID: 8M377947 Analyst: ADC QC Key: WATERLOO
ICal Workgroup: WG393321 Cal ID: HPMS8 - 27-MAR-12

Analyte		Expected	Found	Units	RF	%D	UCL	Q
Methylcyclohexane		50.0	51.8	ug/L	0.379	3.50	25	
Methylene Chloride		50.0	49.7	ug/L	0.248	0.600	25	
m-,p-Xylene		100	102	ug/L	0.638	2.10	25	
o-Xylene		50.0	51.2	ug/L	0.643	2.40	25	
Styrene		50.0	48.1	ug/L	1.08	3.80	25	
Tetrachloroethene		50.0	51.1	ug/L	0.318	2.20	25	
trans-1,3-Dichloropropene		50.0	49.1	ug/L	0.375	1.90	25	
Trichloroethene		50.0	52.2	ug/L	0.331	4.50	25	
Trichlorofluoromethane		50.0	52.3	ug/L	0.404	4.70	25	

* Exceeds %D Limit

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

ALT - Modified 09/06/2007
Version 1.5 PDF File ID: 2416731
Report generated 05/16/2012 14:29

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050153 Run Date: 05/10/2012 Sample ID: WG397691-02

Instrument ID: HPMS8 Run Time: 19:35 Method: 8260B

File ID: 8M378963 Analyst: TMB QC Key: WATERLOO

Workgroup (AAB#): WG397692 Cal ID: HPMS8 - 27-MAR-12

Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
1,1-Dichloroethene	CCC	50.0	48.8	ug/L	0.327	2.48	20	
1,2-Dichloropropane	CCC	50.0	45.0	ug/L	0.210	9.97	20	
Chloroform	CCC	50.0	47.9	ug/L	0.399	4.26	20	
Ethylbenzene	CCC	50.0	47.8	ug/L	0.490	4.34	20	
Toluene	CCC	50.0	43.8	ug/L	1.21	12.5	20	
Vinyl Chloride	CCC	50.0	49.5	ug/L	0.259	1.03	20	
1,1,2,2-Tetrachloroethane	SPCC	50.0	42.1	ug/L	0.338	15.8	20	
1,1-Dichloroethane	SPCC	50.0	44.9	ug/L	0.363	10.3	20	
Bromoform	SPCC	50.0	52.6	ug/L	0.189	5.12	20	
Chlorobenzene	SPCC	50.0	46.9	ug/L	0.903	6.27	20	
Chloromethane	SPCC	50.0	46.5	ug/L	0.291	7.07	20	
1,1,1-Trichloroethane		50.0	54.1	ug/L	0.410	8.30	20	
1,1,2-Trichloro-1,2,2-Trifluoroethane		50.0	48.3	ug/L	0.224	3.33	20	
1,1,2-Trichloroethane		50.0	45.9	ug/L	0.196	8.15	20	
1,2,3-Trichlorobenzene		50.0	45.3	ug/L	0.741	9.35	20	
1,2,4-Trichlorobenzene		50.0	45.4	ug/L	0.866	9.17	20	
1,2-Dibromo-3-Chloropropane		50.0	43.1	ug/L	0.0597	13.7	20	
1,2-Dibromoethane		50.0	46.6	ug/L	0.214	6.73	20	
1,2-Dichlorobenzene		50.0	46.7	ug/L	1.32	6.54	20	
1,2-Dichloroethane		50.0	52.4	ug/L	0.269	4.76	20	
cis-1,2-Dichloroethene		50.0	46.6	ug/L	0.244	6.80	20	
trans-1,2-Dichloroethene		50.0	48.4	ug/L	0.306	3.24	20	
1,3-Dichlorobenzene		50.0	47.0	ug/L	1.49	5.95	20	
1,4-Dichlorobenzene		50.0	47.4	ug/L	1.51	5.29	20	
2-Butanone		50.0	39.5	ug/L	0.0433	21.0	20	*
2-Hexanone		50.0	40.4	ug/L	0.0431	19.3	20	
4-Methyl-2-Pentanone		50.0	42.4	ug/L	0.0410	15.3	20	
Acetone		50.0	39.9	ug/L	0.0295	20.1	20	*
Benzene		50.0	45.0	ug/L	0.862	9.98	20	
Bromochloromethane		50.0	48.6	ug/L	0.164	2.73	20	
Bromodichloromethane		50.0	51.6	ug/L	0.311	3.28	20	
Bromomethane		50.0	44.3	ug/L	0.179	11.5	20	
Carbon Disulfide		50.0	48.3	ug/L	0.622	3.46	20	
Carbon Tetrachloride		50.0	55.8	ug/L	0.396	11.6	20	
Chloroethane		50.0	44.1	ug/L	0.148	11.8	20	
cis-1,3-Dichloropropene		50.0	50.1	ug/L	0.355	0.189	20	
Cyclohexane		50.0	46.7	ug/L	0.350	6.66	20	
Dibromochloromethane		50.0	53.2	ug/L	0.333	6.37	20	
Dichlorodifluoromethane		50.0	50.8	ug/L	0.276	1.60	20	
Isopropylbenzene		50.0	48.3	ug/L	1.52	3.42	20	
Methyl acetate		50.0	37.4	ug/L	0.0868	25.2	20	*
Methyl Tert Butyl Ether		50.0	45.4	ug/L	0.387	9.22	20	

CCV - Modified 03/05/2008

PDF File ID: 2416732

Report generated 05/16/2012 14:29

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050153 Run Date: 05/10/2012 Sample ID: WG397691-02
Instrument ID: HPMS8 Run Time: 19:35 Method: 8260B
File ID: 8M378963 Analyst: TMB QC Key: WATERLOO
Workgroup (AAB#): WG397692 Cal ID: HPMS8 - 27-MAR-12
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Methylcyclohexane		50.0	45.4	ug/L	0.332	9.29	20	
Methylene Chloride		50.0	43.7	ug/L	0.218	12.6	20	
m-,p-Xylene		100	95.6	ug/L	0.597	4.41	20	
o-Xylene		50.0	47.5	ug/L	0.596	5.00	20	
Styrene		50.0	43.9	ug/L	0.986	12.2	20	
Tetrachloroethene		50.0	49.8	ug/L	0.309	0.458	20	
trans-1,3-Dichloropropene		50.0	48.0	ug/L	0.368	3.92	20	
Trichloroethene		50.0	50.6	ug/L	0.321	1.22	20	
Trichlorofluoromethane		50.0	57.6	ug/L	0.444	15.2	20	
1,2-Dichloroethene		100	95.0	ug/L	0.275	5.02	20	
Xylenes		150	143	ug/L	0.597	4.61	20	

* Exceeds %D Criteria

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

CCV - Modified 03/05/2008
PDF File ID: 2416732
Report generated 05/16/2012 14:29

Microbac Laboratories Inc.

INTERNAL STANDARD AREA SUMMARY
(COMPARED TO CCV)

Login Number: L12050153
Instrument ID: HPMS8
Workgroup (AAB#): WG397692

CCV Number: WG397691-02
CAL ID: HPMS8-27-MAR-12
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG397691-02	NA	NA	334842	596078	689382
Upper Limit	NA	NA	669684	1192156	1378764
Lower Limit	NA	NA	167421	298039	344691
L12050153-01	1.00	01	314915	559796	629992
L12050153-03	1.00	01	316750	561374	631956
L12050153-05	1.00	01	318253	559449	616388
L12050153-07	1.00	01	315730	556363	619122
L12050153-09	1.00	01	316108	570271	653181
WG397692-01	1.00	01	324450	583069	643325
WG397692-02	1.00	01	330307	585399	682617
WG397692-03	1.00	01	336616	593528	675202

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: 2417122
Report generated 05/16/2012 14:29

Microbac Laboratories Inc.

INTERNAL STANDARD RETENTION TIME SUMMARY
(COMPARED TO CCV)

Login Number: L12050153
Instrument ID: HPMS8
Workgroup (AAB#): WG397692

CCV Number: WG397691-02
CAL ID: HPMS8-27-MAR-12
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG397691-02	NA	NA	17.06	14.05	10.19
Upper Limit	NA	NA	17.56	14.55	10.69
Lower Limit	NA	NA	16.56	13.55	9.69
L12050153-01	1.00	01	17.05	14.04	10.2
L12050153-03	1.00	01	17.05	14.04	10.19
L12050153-05	1.00	01	17.05	14.04	10.2
L12050153-07	1.00	01	17.05	14.04	10.19
L12050153-09	1.00	01	17.05	14.04	10.2
WG397692-01	1.00	01	17.05	14.04	10.2
WG397692-02	1.00	01	17.06	14.05	10.19
WG397692-03	1.00	01	17.05	14.04	10.19

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: 2417123
Report generated 05/16/2012 14:29

2.1.1.3 Sample Data

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\051012\8M378975.D Vial: 14
Acq On : 11 May 2012 2:02 Operator: TMB
Sample : L12050153-01 A 826-SPE Inst : HPMS8
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 15:04:09 2012 Quant Results File: 8260WT.RES

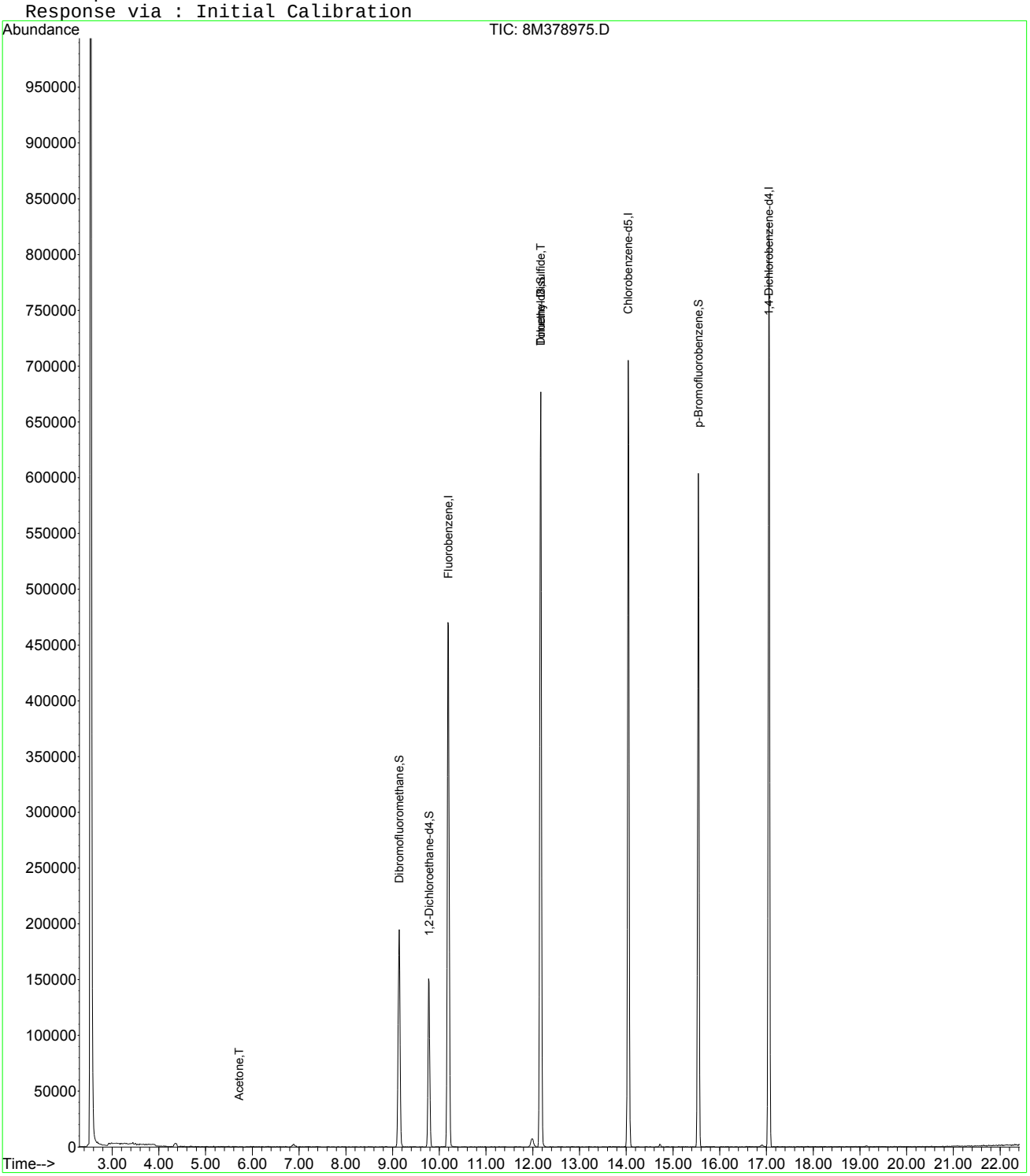
Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration
DataAcq Meth : 8260WT

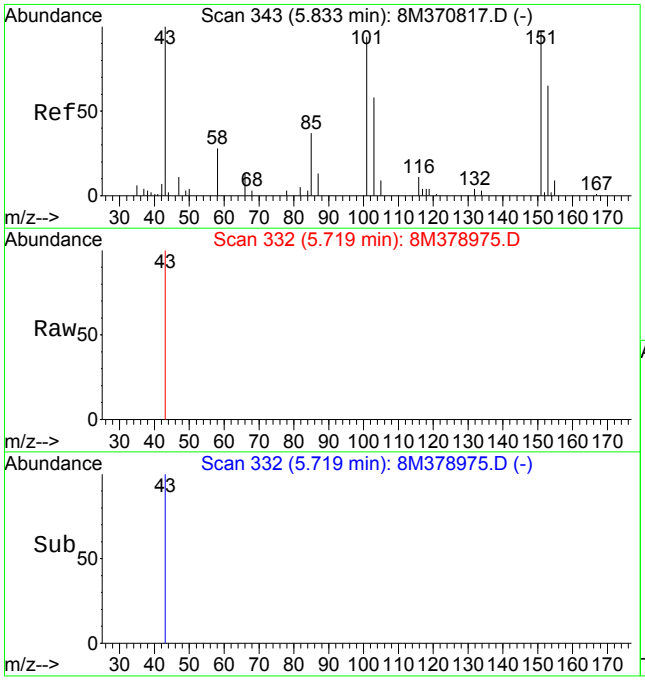
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.20	96	629992	25.00	ug/L	0.01
57) Chlorobenzene-d5	14.04	117	559796	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.05	152	314915	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.14	111	169588	25.9468	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 103.80%			
43) 1,2-Dichloroethane-d4	9.78	65	141662	28.1465	ug/L	0.01
Spiked Amount 25.000	Range 80 - 120		Recovery = 112.60%			
58) Toluene-d8	12.17	98	640124	24.7662	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 99.08%			
80) p-Bromofluorobenzene	15.54	95	245259	24.0751	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 96.32%			
Target Compounds						Qvalue
13) Acetone	5.72	43	207	0.2227	ug/L #	47
56) Dimethyl Disulfide	12.17	94	18072	1.8301	ug/L #	28

(#) = qualifier out of range (m) = manual integration
8M378975.D 8260WT.M Tue May 15 15:04:10 2012 Page 1

Data File : C:\MSDCHEM\1\DATA\051012\8M378975.D Vial: 14
Acq On : 11 May 2012 2:02 Operator: TMB
Sample : L12050153-01 A 826-SPE Inst : HPMS8
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 15:04 2012 Quant Results File: 8260WT.RES

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration

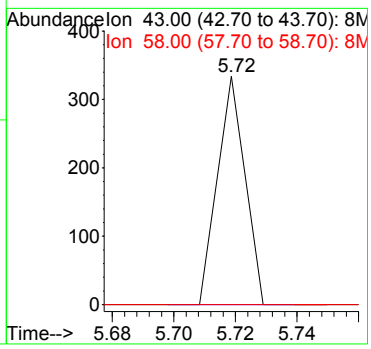


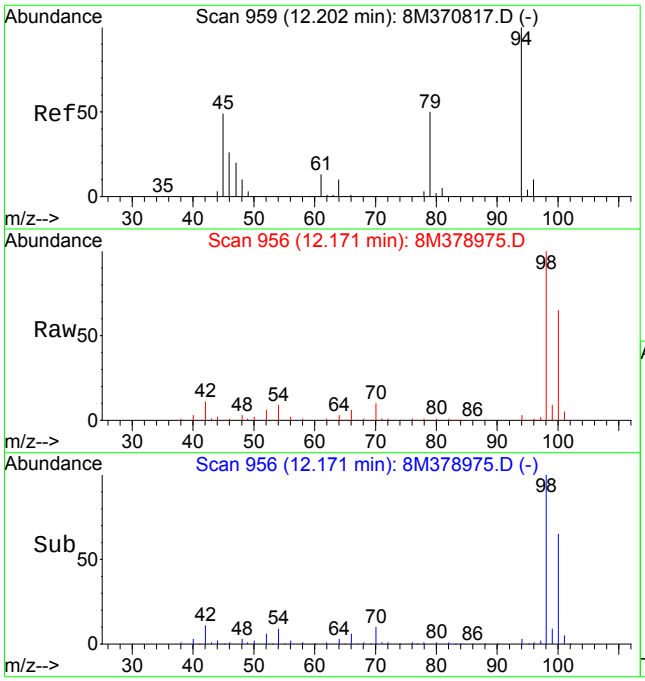


#13
Acetone
Concen: 0.22 ug/L
RT: 5.72 min Scan# 332
Delta R.T. 0.00 min
Lab File: 8M378975.D
Acq: 11 May 2012 2:02

Tgt Ion: 43 Resp: 207

Ion	Ratio	Lower	Upper
43	100		
58	0.0	16.9	39.3#

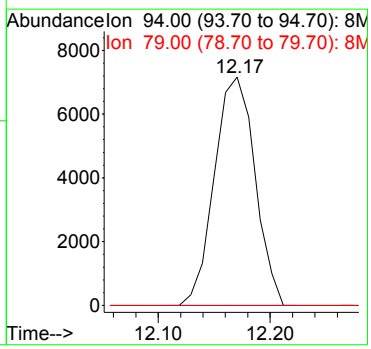




#56
Dimethyl Disulfide
Concen: 1.83 ug/L
RT: 12.17 min Scan# 956
Delta R.T. 0.09 min
Lab File: 8M378975.D
Acq: 11 May 2012 2:02

Tgt Ion: 94 Resp: 18072

Ion	Ratio	Lower	Upper
94	100		
79	0.0	29.2	68.0#



LSC Area Percent Report

Data File : K:\ORGANICS\VOLATILE\HPMS8\DATA\051012\8M378975.D Vial: 14
Acq On : 11 May 2012 2:02 Operator: TMB
Sample : L12050153-01 A 826-SPE Inst : HPMS8
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

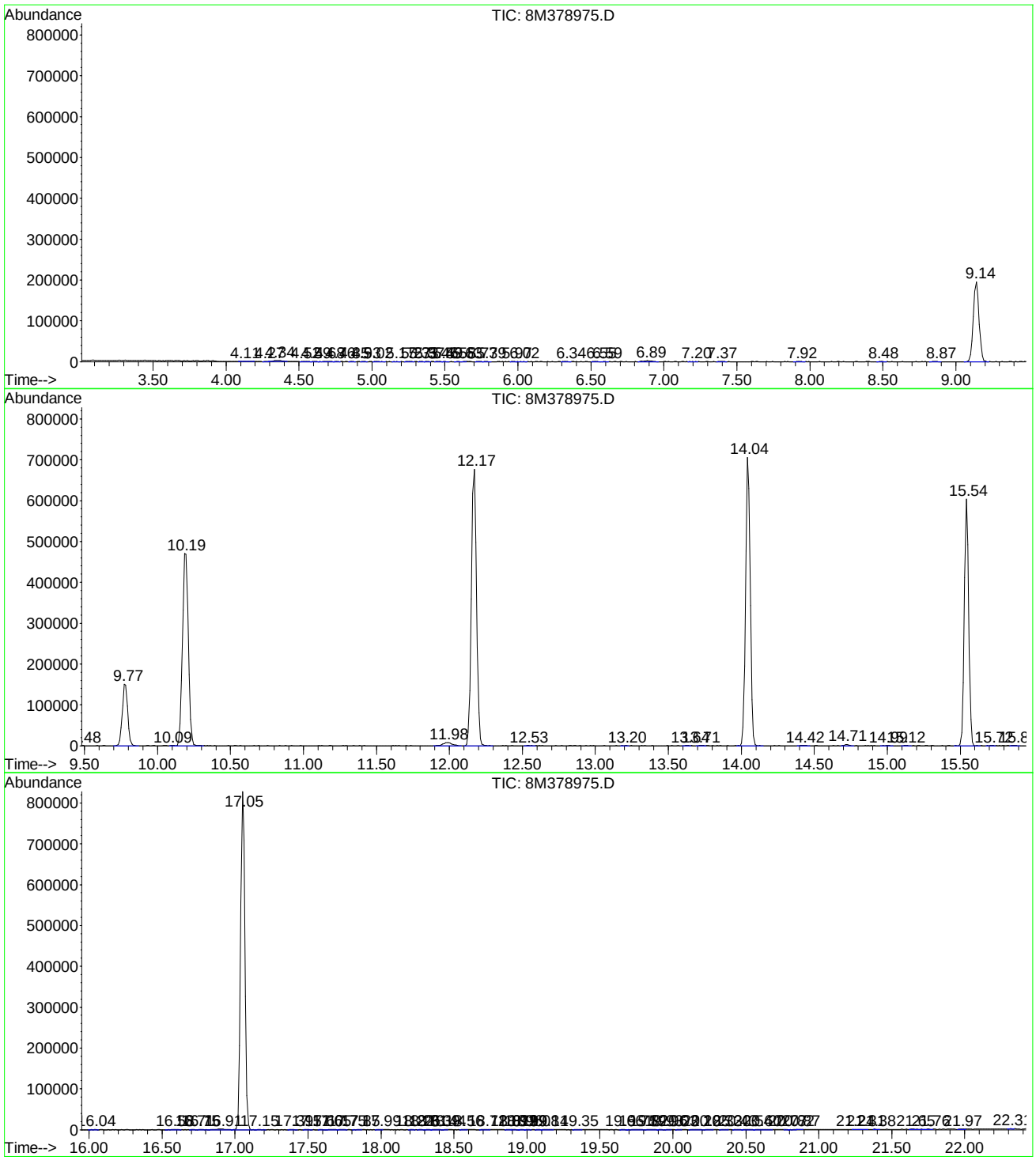
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.106	174	176	184	rVB	568	1370	0.08%	0.016%
2	4.271	190	192	194	rBV	771	1199	0.07%	0.014%
3	4.344	194	199	206	rVV4	3169	12461	0.73%	0.145%
4	4.519	215	216	222	rBB	829	2189	0.13%	0.026%
5	4.592	222	223	227	rBB	416	912	0.05%	0.011%
6	4.685	227	232	237	rBB	849	2654	0.15%	0.031%
7	4.757	237	239	241	rBB	352	617	0.04%	0.007%
8	4.850	247	248	251	rBB	497	786	0.05%	0.009%
9	4.933	255	256	259	rBB	430	702	0.04%	0.008%
10	5.016	263	264	271	rBB	680	1300	0.08%	0.015%
11	5.171	276	279	281	rBB	863	738	0.04%	0.009%
12	5.274	284	289	290	rBB	422	1169	0.07%	0.014%
13	5.326	293	294	297	rBB	443	723	0.04%	0.008%
14	5.367	297	298	301	rBB	454	743	0.04%	0.009%
15	5.460	304	307	309	rBB	508	952	0.06%	0.011%
16	5.491	309	310	313	rBB	797	910	0.05%	0.011%
17	5.584	317	319	321	rBB	704	633	0.04%	0.007%
18	5.626	322	323	325	rBV	766	883	0.05%	0.010%
19	5.729	331	333	336	rBB	376	843	0.05%	0.010%
20	5.791	336	339	341	rBB	410	694	0.04%	0.008%
21	5.967	354	356	358	rBB	740	842	0.05%	0.010%
22	6.019	358	361	365	rBB	653	828	0.05%	0.010%
23	6.339	388	392	394	rBB	690	1099	0.06%	0.013%
24	6.546	408	412	414	rBB	365	833	0.05%	0.010%
25	6.587	415	416	419	rBB	623	623	0.04%	0.007%
26	6.887	439	445	452	rBB	2584	9403	0.55%	0.110%
27	7.197	472	475	478	rBB	614	782	0.05%	0.009%
28	7.373	491	492	497	rBB	627	1300	0.08%	0.015%
29	7.921	542	545	549	rBB	393	827	0.05%	0.010%
30	8.479	597	599	603	rBB	356	637	0.04%	0.007%
31	8.872	632	637	639	rBB	537	1090	0.06%	0.013%
32	9.141	655	663	671	rBB	194851	533669	31.14%	6.229%
33	9.482	694	696	699	rBB	391	649	0.04%	0.008%
34	9.772	717	724	733	rBB	150814	380943	22.23%	4.446%
35	10.092	754	755	758	rBB	444	649	0.04%	0.008%
36	10.185	758	764	776	rBB	470350	1299241	75.81%	15.164%
37	11.984	929	938	947	rBB3	7484	31859	1.86%	0.372%
38	12.171	949	956	968	rBB	676875	1656384	96.65%	19.332%
39	12.532	989	991	996	rBB	361	626	0.04%	0.007%
40	13.204	1053	1056	1058	rBB	449	676	0.04%	0.008%
41	13.639	1094	1098	1099	rBB	380	685	0.04%	0.008%
42	13.711	1103	1105	1109	rBB	431	891	0.05%	0.010%

43	14.042	1130	1137	1147	rBB	705402	1577298	92.04%	18.409%
44	14.425	1170	1174	1178	rBB	379	1064	0.06%	0.012%
45	14.714	1199	1202	1207	rBB2	2509	5804	0.34%	0.068%
46	14.993	1225	1229	1233	rBB	377	841	0.05%	0.010%
47	15.117	1239	1241	1245	rBB	429	679	0.04%	0.008%
48	15.541	1274	1282	1291	rBB	603865	1240705	72.40%	14.481%
49	15.717	1295	1299	1301	rBB	438	919	0.05%	0.011%
50	15.882	1311	1315	1317	rBB	449	877	0.05%	0.010%
51	16.037	1326	1330	1332	rBB	373	661	0.04%	0.008%
52	16.575	1377	1382	1387	rBB	734	1799	0.10%	0.021%
53	16.710	1393	1395	1397	rBB	404	723	0.04%	0.008%
54	16.751	1398	1399	1405	rBB	397	1071	0.06%	0.013%
55	16.906	1406	1414	1421	rBB	1937	7650	0.45%	0.089%
56	17.051	1421	1428	1436	rBB	828363	1713768	100.00%	20.002%
57	17.154	1437	1438	1443	rBB	438	905	0.05%	0.011%
58	17.392	1458	1461	1464	rBB	356	817	0.05%	0.010%
59	17.506	1468	1472	1474	rBB	383	860	0.05%	0.010%
60	17.599	1478	1481	1483	rBB	414	712	0.04%	0.008%
61	17.650	1484	1486	1491	rBB	446	1352	0.08%	0.016%
62	17.754	1491	1496	1497	rBB	419	1068	0.06%	0.012%
63	17.847	1501	1505	1507	rBV	481	1166	0.07%	0.014%
64	17.992	1516	1519	1521	rBV	471	1132	0.07%	0.013%
65	18.219	1538	1541	1542	rBB	395	667	0.04%	0.008%
66	18.260	1544	1545	1548	rBB	453	737	0.04%	0.009%
67	18.312	1549	1550	1553	rBB	394	650	0.04%	0.008%
68	18.395	1553	1558	1560	rBB	457	1306	0.08%	0.015%
69	18.436	1561	1562	1564	rBV	369	643	0.04%	0.008%
70	18.560	1572	1574	1577	rBV	510	1115	0.07%	0.013%
71	18.715	1585	1589	1592	rBV	502	1542	0.09%	0.018%
72	18.870	1602	1604	1606	rBV	606	1016	0.06%	0.012%
73	18.922	1606	1609	1611	rVB	612	954	0.06%	0.011%
74	18.964	1611	1613	1615	rBB	492	689	0.04%	0.008%
75	18.995	1615	1616	1619	rBB	486	704	0.04%	0.008%
76	19.077	1622	1624	1626	rBB	421	692	0.04%	0.008%
77	19.139	1626	1630	1634	rBV	1167	3182	0.19%	0.037%
78	19.346	1647	1650	1653	rBV	493	1456	0.08%	0.017%
79	19.656	1678	1680	1683	rBB	544	815	0.05%	0.010%
80	19.749	1683	1689	1694	rBB	515	2256	0.13%	0.026%
81	19.822	1695	1696	1703	rBB	560	1913	0.11%	0.022%
82	19.925	1703	1706	1707	rBB	556	789	0.05%	0.009%
83	19.956	1708	1709	1712	rBV	478	953	0.06%	0.011%
84	20.029	1715	1716	1719	rBV	421	891	0.05%	0.010%
85	20.184	1724	1731	1733	rBB	518	1982	0.12%	0.023%
86	20.246	1734	1737	1740	rBV	518	1476	0.09%	0.017%
87	20.328	1744	1745	1750	rBV	470	1483	0.09%	0.017%
88	20.432	1753	1755	1759	rBB	489	1381	0.08%	0.016%
89	20.535	1759	1765	1767	rBB	859	2078	0.12%	0.024%
90	20.597	1767	1771	1779	rBV	474	2918	0.17%	0.034%
91	20.773	1787	1788	1790	rVB	888	739	0.04%	0.009%
92	20.825	1790	1793	1795	rBV	762	1213	0.07%	0.014%
93	20.866	1795	1797	1799	rVV	689	893	0.05%	0.010%
94	21.238	1832	1833	1836	rVB	658	956	0.06%	0.011%
95	21.311	1837	1840	1842	rVV2	579	1263	0.07%	0.015%
96	21.383	1846	1847	1850	rBV2	853	1228	0.07%	0.014%
97	21.652	1870	1873	1879	rVB2	1335	4027	0.23%	0.047%
98	21.755	1880	1883	1885	rBV2	820	1279	0.07%	0.015%
99	21.972	1902	1904	1907	rBV	1043	1522	0.09%	0.018%
100	22.314	1935	1937	1939	rBV2	1174	1649	0.10%	0.019%

Sum of corrected areas: 8567942

File : K:\ORGANICS\VOLATILE\HPMS8\DATA\051012\8M378975.D
Operator : TMB
Acquired : 11 May 2012 2:02 using AcqMethod 8260WT
Instrument : HPMS8
Sample Name: L12050153-01 A 826-SPE
Misc Info : 1,1
Vial Number: 14
Quant File :8260WT.RES (RTE Integrator)



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\051012\8M378976.D Vial: 15
Acq On : 11 May 2012 2:35 Operator: TMB
Sample : L12050153-03 A 826-SPE Inst : HPMS8
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 15:04:11 2012 Quant Results File: 8260WT.RES

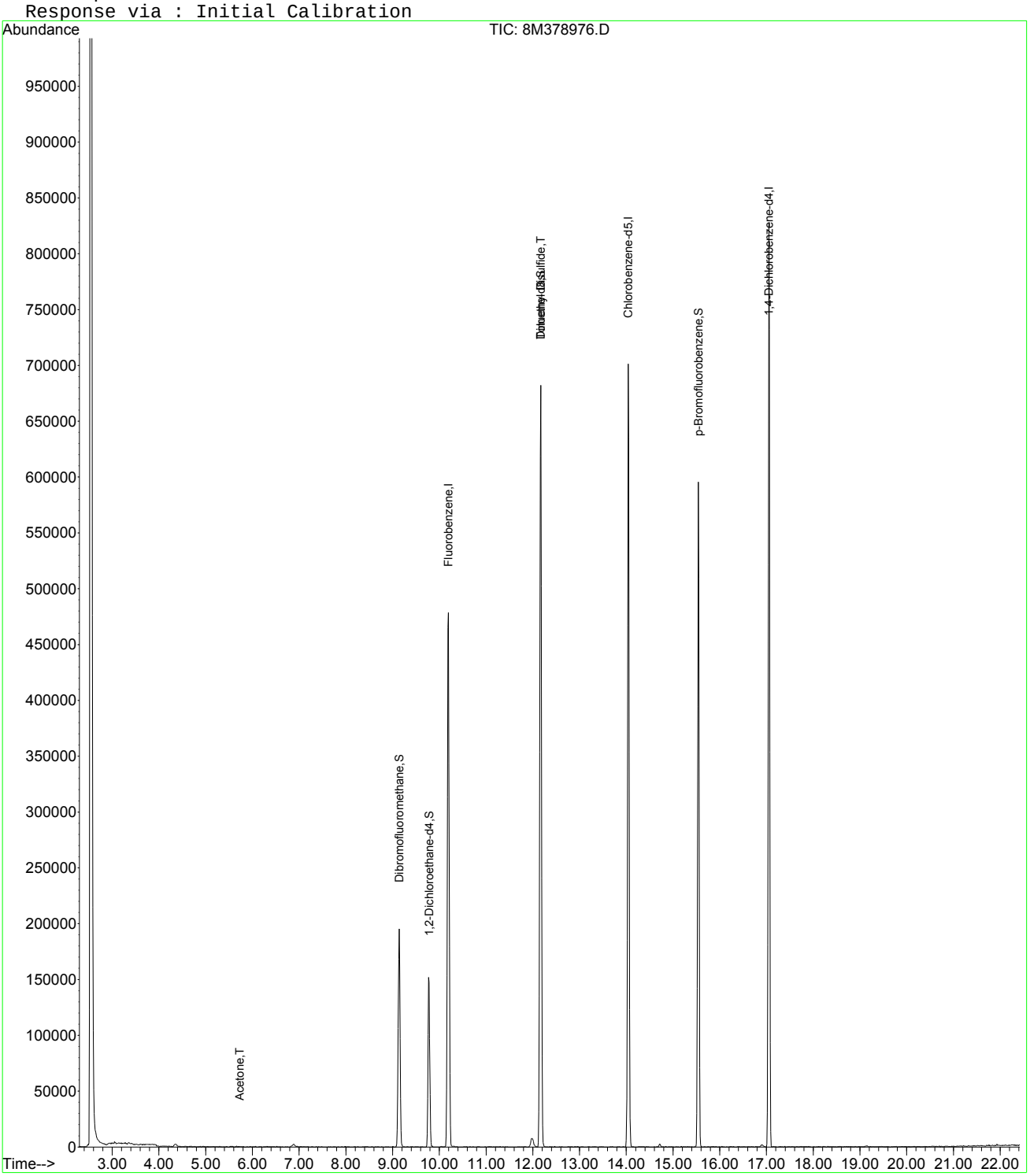
Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration
DataAcq Meth : 8260WT

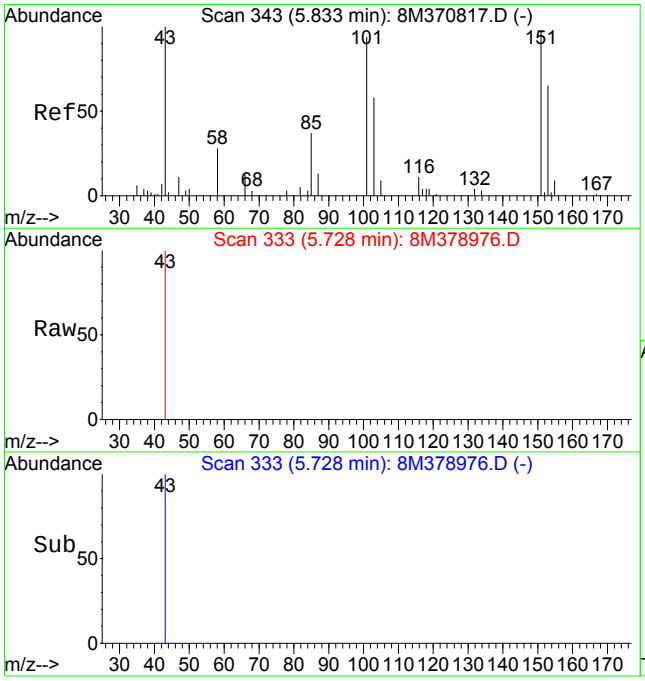
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.19	96	631956	25.00	ug/L	0.01
57) Chlorobenzene-d5	14.04	117	561374	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.05	152	316750	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.14	111	167888	25.6069	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 102.44%			
43) 1,2-Dichloroethane-d4	9.78	65	143528	28.4286	ug/L	0.01
Spiked Amount 25.000	Range 80 - 120		Recovery = 113.72%			
58) Toluene-d8	12.17	98	644710	24.8735	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 99.48%			
80) p-Bromofluorobenzene	15.54	95	247555	24.1597	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 96.64%			
Target Compounds						Qvalue
13) Acetone	5.73	43	395	0.4236	ug/L #	47
56) Dimethyl Disulfide	12.17	94	17616	1.7784	ug/L #	28

(#) = qualifier out of range (m) = manual integration
8M378976.D 8260WT.M Tue May 15 15:04:12 2012 Page 1

Data File : C:\MSDCHEM\1\DATA\051012\8M378976.D Vial: 15
Acq On : 11 May 2012 2:35 Operator: TMB
Sample : L12050153-03 A 826-SPE Inst : HPMS8
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 15:04 2012 Quant Results File: 8260WT.RES

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration

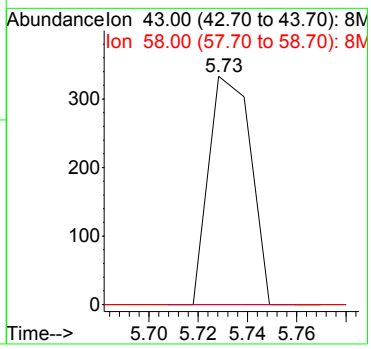


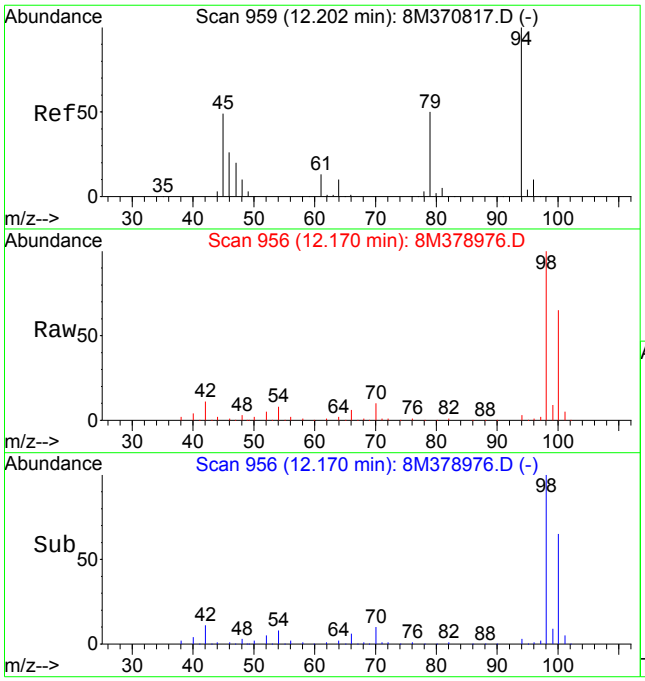


#13
Acetone
Concen: 0.42 ug/L
RT: 5.73 min Scan# 333
Delta R.T. 0.01 min
Lab File: 8M378976.D
Acq: 11 May 2012 2:35

Tgt Ion: 43 Resp: 395

Ion	Ratio	Lower	Upper
43	100		
58	0.0	16.9	39.3#

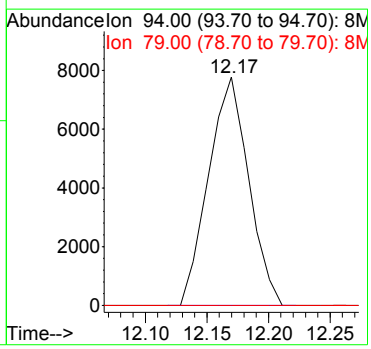




#56
Dimethyl Disulfide
Concen: 1.78 ug/L
RT: 12.17 min Scan# 956
Delta R.T. 0.08 min
Lab File: 8M378976.D
Acq: 11 May 2012 2:35

Tgt Ion: 94 Resp: 17616

Ion	Ratio	Lower	Upper
94	100		
79	0.0	29.2	68.0#



LSC Area Percent Report

Data File : K:\ORGANICS\VOLATILE\HPMS8\DATA\051012\8M378976.D Vial: 15
Acq On : 11 May 2012 2:35 Operator: TMB
Sample : L12050153-03 A 826-SPE Inst : HPMS8
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

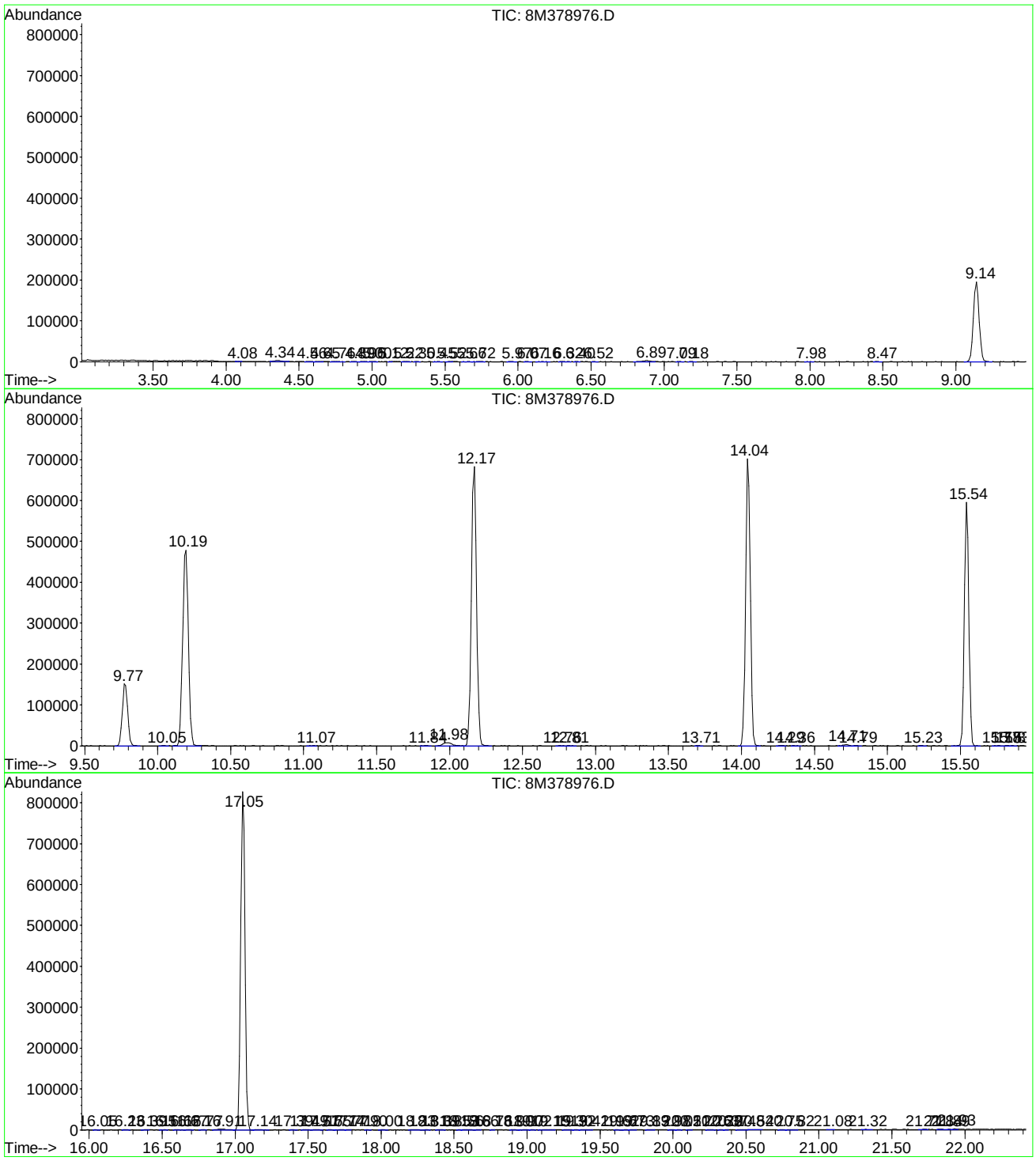
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.084	172	174	176	rVB	470	745	0.04%	0.009%
2	4.343	195	199	207	rVB4	2271	8762	0.51%	0.102%
3	4.560	218	220	224	rBB4	800	1642	0.10%	0.019%
4	4.653	224	229	230	rBV	759	1599	0.09%	0.019%
5	4.756	235	239	244	rBB	638	1773	0.10%	0.021%
6	4.891	248	252	254	rBB	673	1128	0.07%	0.013%
7	4.963	254	259	260	rBB	718	1523	0.09%	0.018%
8	5.005	261	263	266	rVB	373	838	0.05%	0.010%
9	5.118	273	274	276	rBV	377	665	0.04%	0.008%
10	5.222	282	284	288	rBB	391	1104	0.06%	0.013%
11	5.304	290	292	294	rBB	821	898	0.05%	0.010%
12	5.449	303	306	309	rBB	421	700	0.04%	0.008%
13	5.522	311	313	316	rBV	772	1367	0.08%	0.016%
14	5.656	322	326	329	rBB	725	1048	0.06%	0.012%
15	5.718	329	332	337	rBB	542	1471	0.09%	0.017%
16	5.966	352	356	358	rBB	621	1007	0.06%	0.012%
17	6.070	363	366	368	rBB	726	869	0.05%	0.010%
18	6.163	371	375	380	rBB	365	837	0.05%	0.010%
19	6.318	386	390	394	rBB	787	1602	0.09%	0.019%
20	6.400	396	398	400	rBB	328	586	0.03%	0.007%
21	6.524	408	410	412	rBB	701	672	0.04%	0.008%
22	6.886	436	445	450	rBV	2638	10254	0.60%	0.120%
23	7.093	464	465	469	rBB	408	685	0.04%	0.008%
24	7.176	472	473	477	rBB	328	583	0.03%	0.007%
25	7.982	549	551	555	rBB	732	651	0.04%	0.008%
26	8.468	595	598	600	rBB	410	649	0.04%	0.008%
27	9.140	655	663	673	rBB	195353	532751	31.15%	6.216%
28	9.771	718	724	734	rBB	151978	385520	22.54%	4.498%
29	10.050	747	751	753	rBB	444	738	0.04%	0.009%
30	10.195	756	765	775	rBV	478707	1295134	75.72%	15.111%
31	11.074	845	850	851	rBB	379	645	0.04%	0.008%
32	11.839	920	924	927	rBB	375	849	0.05%	0.010%
33	11.984	930	938	949	rBB3	7580	32379	1.89%	0.378%
34	12.170	949	956	967	rBB	682281	1660249	97.07%	19.371%
35	12.759	1010	1013	1016	rBB	408	674	0.04%	0.008%
36	12.811	1017	1018	1023	rBB	371	639	0.04%	0.007%
37	13.710	1102	1105	1107	rBB	354	620	0.04%	0.007%
38	14.041	1131	1137	1145	rBB	701312	1580857	92.43%	18.444%
39	14.289	1156	1161	1162	rBB	375	844	0.05%	0.010%
40	14.362	1166	1168	1172	rBB	394	623	0.04%	0.007%
41	14.713	1197	1202	1207	rBB3	2868	6872	0.40%	0.080%
42	14.786	1207	1209	1212	rBB	338	592	0.03%	0.007%

43	15.230	1250	1252	1255	rBB	396	648	0.04%	0.008%
44	15.540	1272	1282	1291	rBB	595598	1246632	72.89%	14.545%
45	15.768	1299	1304	1306	rBB	360	642	0.04%	0.007%
46	15.830	1307	1310	1311	rBB	367	643	0.04%	0.008%
47	15.861	1311	1313	1315	rBB	433	506	0.03%	0.006%
48	15.923	1315	1319	1322	rBB	356	856	0.05%	0.010%
49	16.047	1329	1331	1333	rBB	694	630	0.04%	0.007%
50	16.233	1348	1349	1353	rBB	417	871	0.05%	0.010%
51	16.388	1361	1364	1366	rBV	419	882	0.05%	0.010%
52	16.512	1373	1376	1378	rBB	356	608	0.04%	0.007%
53	16.616	1382	1386	1389	rBB	366	1048	0.06%	0.012%
54	16.667	1390	1391	1395	rBB	392	863	0.05%	0.010%
55	16.771	1399	1401	1404	rBB	420	670	0.04%	0.008%
56	16.905	1408	1414	1422	rBB	2143	7792	0.46%	0.091%
57	17.050	1422	1428	1435	rBB	827614	1710401	100.00%	19.956%
58	17.143	1435	1437	1445	rBB	535	1669	0.10%	0.019%
59	17.391	1459	1461	1464	rBB	745	890	0.05%	0.010%
60	17.495	1467	1471	1473	rBB	406	1102	0.06%	0.013%
61	17.567	1474	1478	1481	rBB	401	1148	0.07%	0.013%
62	17.650	1484	1486	1489	rBB	526	713	0.04%	0.008%
63	17.743	1489	1495	1496	rBB	472	1238	0.07%	0.014%
64	17.774	1496	1498	1500	rBV	385	853	0.05%	0.010%
65	17.898	1509	1510	1513	rBB	445	539	0.03%	0.006%
66	18.001	1518	1520	1524	rBB	406	682	0.04%	0.008%
67	18.229	1538	1542	1547	rBB	434	1587	0.09%	0.019%
68	18.311	1548	1550	1552	rBB	645	824	0.05%	0.010%
69	18.394	1556	1558	1562	rBB	377	1061	0.06%	0.012%
70	18.529	1570	1571	1573	rBB	511	524	0.03%	0.006%
71	18.560	1573	1574	1581	rBB	523	1795	0.10%	0.021%
72	18.663	1582	1584	1586	rBV	429	920	0.05%	0.011%
73	18.756	1592	1593	1595	rBV	471	723	0.04%	0.008%
74	18.901	1605	1607	1611	rBB	449	980	0.06%	0.011%
75	18.973	1611	1614	1618	rBB	517	1246	0.07%	0.015%
76	19.025	1618	1619	1622	rBB	373	619	0.04%	0.007%
77	19.149	1624	1631	1635	rBV2	1074	3787	0.22%	0.044%
78	19.304	1640	1646	1647	rBB2	349	1226	0.07%	0.014%
79	19.325	1647	1648	1651	rBB2	399	653	0.04%	0.008%
80	19.418	1651	1657	1660	rBV	485	1992	0.12%	0.023%
81	19.625	1674	1677	1679	rBB	402	713	0.04%	0.008%
82	19.666	1680	1681	1684	rBB	364	636	0.04%	0.007%
83	19.728	1684	1687	1689	rBV	411	1145	0.07%	0.013%
84	19.831	1695	1697	1701	rBV	394	1319	0.08%	0.015%
85	19.976	1710	1711	1715	rBB	491	988	0.06%	0.012%
86	20.048	1715	1718	1719	rBB	416	715	0.04%	0.008%
87	20.110	1722	1724	1726	rBV	405	930	0.05%	0.011%
88	20.255	1735	1738	1741	rBB	482	1263	0.07%	0.015%
89	20.328	1743	1745	1747	rBB	374	676	0.04%	0.008%
90	20.369	1747	1749	1750	rBV	438	694	0.04%	0.008%
91	20.483	1755	1760	1763	rBV	454	1904	0.11%	0.022%
92	20.545	1763	1766	1772	rVB2	468	1499	0.09%	0.017%
93	20.752	1783	1786	1788	rBB	742	1316	0.08%	0.015%
94	20.824	1788	1793	1796	rBV	820	2844	0.17%	0.033%
95	21.082	1815	1818	1820	rBV2	604	1096	0.06%	0.013%
96	21.320	1838	1841	1845	rBV2	855	1871	0.11%	0.022%
97	21.713	1876	1879	1882	rBV3	1294	2829	0.17%	0.033%
98	21.837	1888	1891	1895	rVB2	838	1608	0.09%	0.019%
99	21.889	1895	1896	1898	rBV	1001	1027	0.06%	0.012%
100	21.930	1898	1900	1902	rBV2	1402	1773	0.10%	0.021%

Sum of corrected areas: 8570953

File : K:\ORGANICS\VOLATILE\HPMS8\DATA\051012\8M378976.D
Operator : TMB
Acquired : 11 May 2012 2:35 using AcqMethod 8260WT
Instrument : HPMS8
Sample Name: L12050153-03 A 826-SPE
Misc Info : 1,1
Vial Number: 15
Quant File :8260WT.RES (RTE Integrator)



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\051012\8M378977.D Vial: 16
Acq On : 11 May 2012 3:07 Operator: TMB
Sample : L12050153-05 A 826-SPE Inst : HPMS8
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 15:04:13 2012 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration
DataAcq Meth : 8260WT

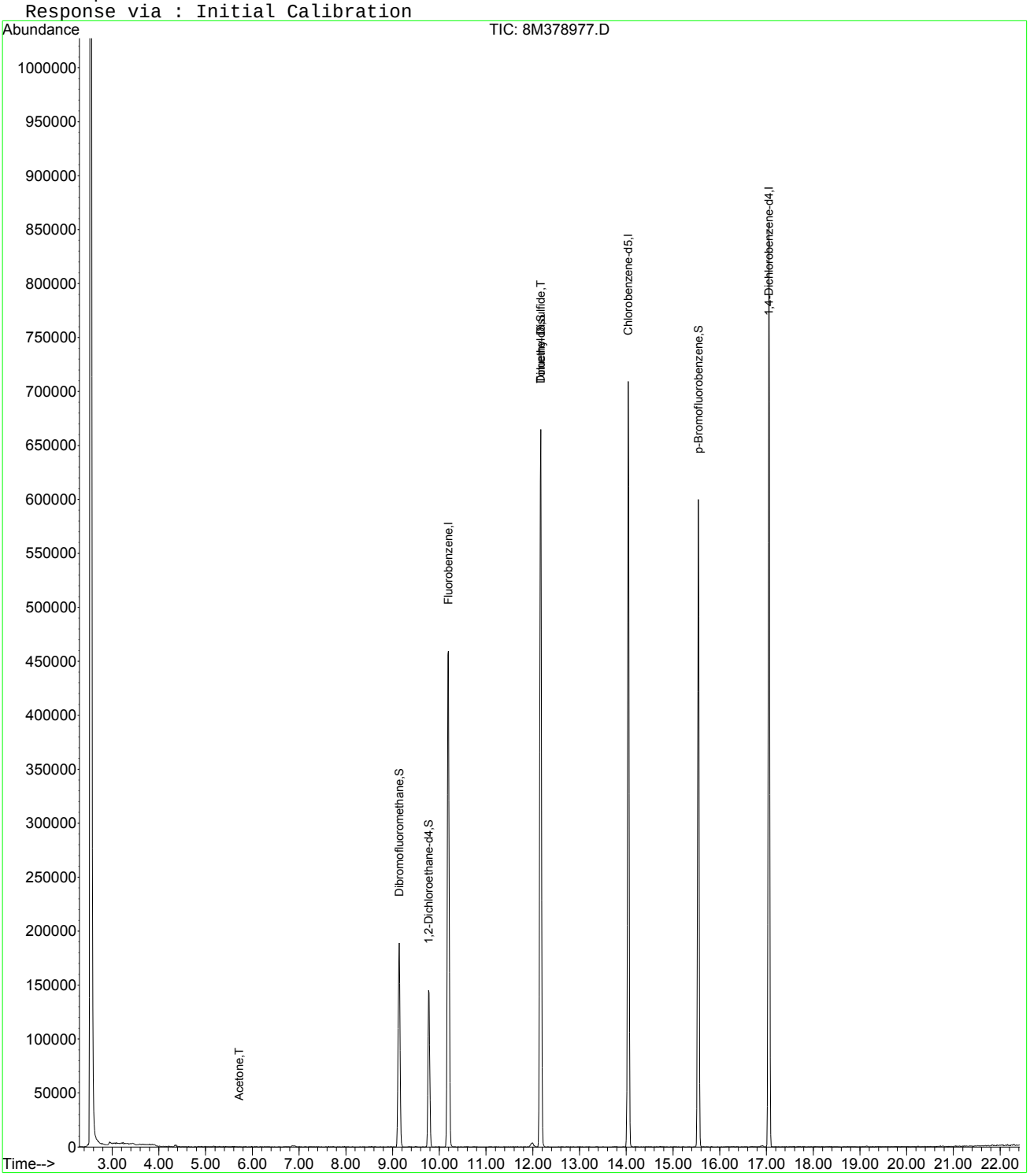
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.20	96	616388	25.00	ug/L	0.01
57) Chlorobenzene-d5	14.04	117	559449	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.05	152	318253	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.14	111	164596	25.7388	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 102.96%			
43) 1,2-Dichloroethane-d4	9.77	65	140595	28.5510	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 114.20%			
58) Toluene-d8	12.17	98	630369	24.4039	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 97.60%			
80) p-Bromofluorobenzene	15.54	95	248405	24.1282	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 96.52%			
Target Compounds						Qvalue
13) Acetone	5.72	43	382	0.4200	ug/L #	47
56) Dimethyl Disulfide	12.17	94	17316	1.7922	ug/L #	28

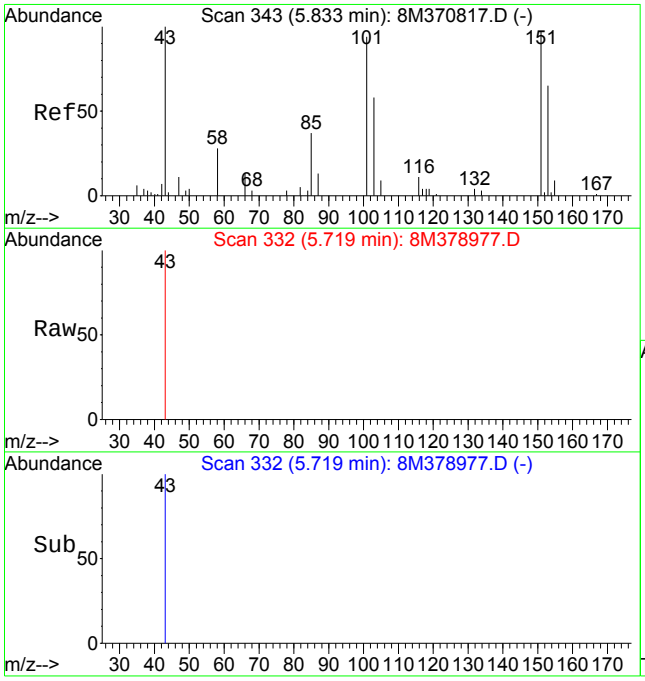
(#) = qualifier out of range (m) = manual integration
8M378977.D 8260WT.M Tue May 15 15:04:14 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\051012\8M378977.D Vial: 16
Acq On : 11 May 2012 3:07 Operator: TMB
Sample : L12050153-05 A 826-SPE Inst : HPMS8
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 15:04 2012 Quant Results File: 8260WT.RES

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration

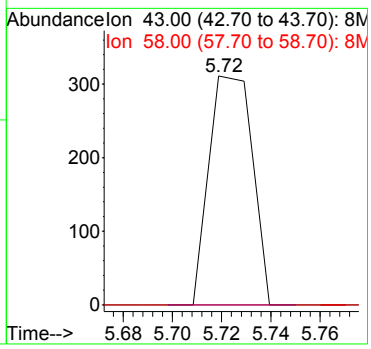


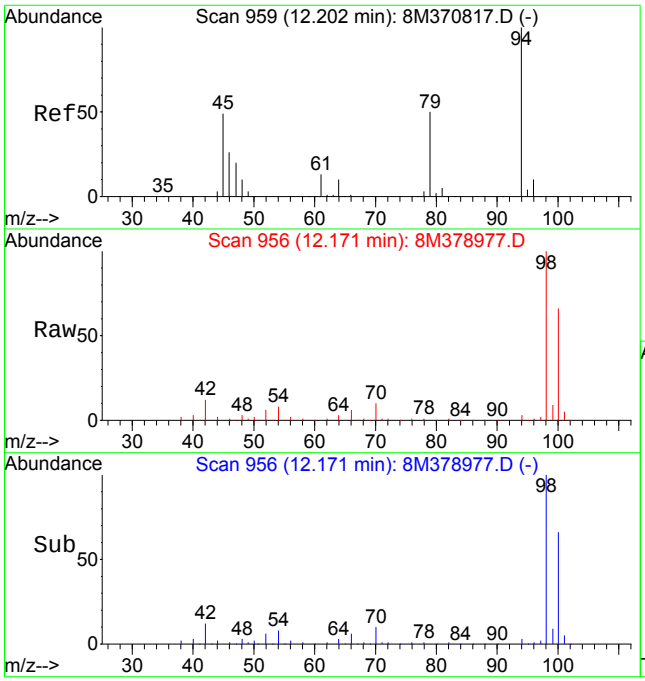


#13
Acetone
Concen: 0.42 ug/L
RT: 5.72 min Scan# 332
Delta R.T. 0.00 min
Lab File: 8M378977.D
Acq: 11 May 2012 3:07

Tgt Ion: 43 Resp: 382

Ion	Ratio	Lower	Upper
43	100		
58	0.0	16.9	39.3#

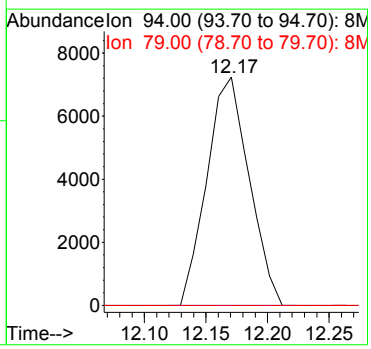




#56
Dimethyl Disulfide
Concen: 1.79 ug/L
RT: 12.17 min Scan# 956
Delta R.T. 0.09 min
Lab File: 8M378977.D
Acq: 11 May 2012 3:07

Tgt Ion: 94 Resp: 17316

Ion	Ratio	Lower	Upper
94	100		
79	0.0	29.2	68.0#



LSC Area Percent Report

Data File : K:\ORGANICS\VOLATILE\HPMS8\DATA\051012\8M378977.D Vial: 16
Acq On : 11 May 2012 3:07 Operator: TMB
Sample : L12050153-05 A 826-SPE Inst : HPMS8
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

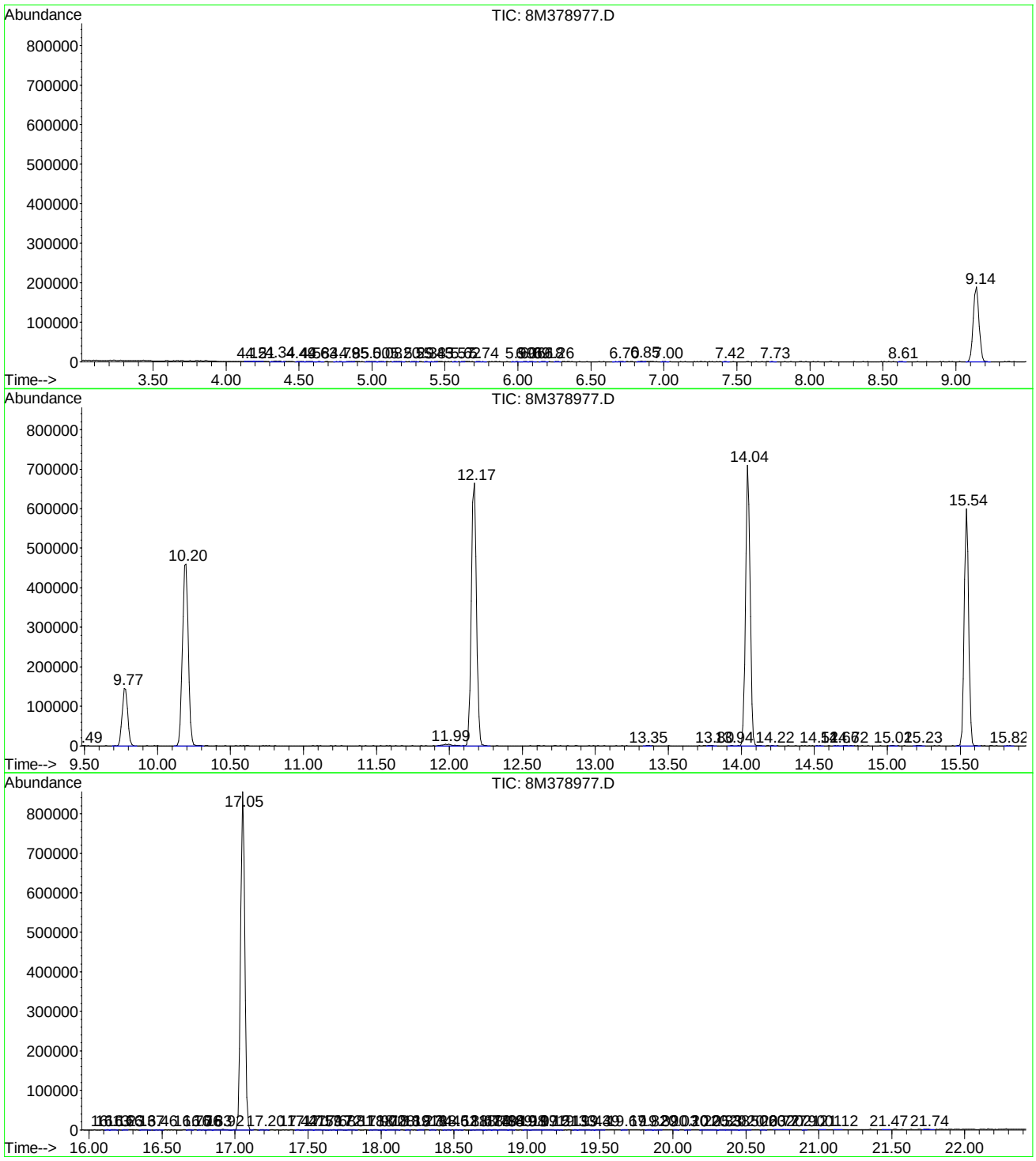
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.147	178	180	184	rVB	343	517	0.03%	0.006%
2	4.209	184	186	190	rBV	570	878	0.05%	0.010%
3	4.344	195	199	205	rBV	1861	6172	0.36%	0.073%
4	4.488	212	213	218	rBB	441	1242	0.07%	0.015%
5	4.581	218	222	224	rBB	445	1233	0.07%	0.015%
6	4.633	225	227	230	rBB	726	646	0.04%	0.008%
7	4.788	237	242	244	rBB	401	685	0.04%	0.008%
8	4.850	245	248	251	rBV	718	1568	0.09%	0.019%
9	4.995	258	262	266	rBB	806	1808	0.11%	0.021%
10	5.078	266	270	271	rBB	366	850	0.05%	0.010%
11	5.202	276	282	284	rBB	711	2093	0.12%	0.025%
12	5.295	288	291	293	rBB	677	1087	0.06%	0.013%
13	5.378	297	299	301	rBB	817	720	0.04%	0.009%
14	5.429	301	304	306	rBV	788	1160	0.07%	0.014%
15	5.574	316	318	319	rBB	649	597	0.03%	0.007%
16	5.615	321	322	324	rBV	680	862	0.05%	0.010%
17	5.739	331	334	338	rBB	318	766	0.04%	0.009%
18	5.988	355	358	361	rBB	668	855	0.05%	0.010%
19	6.060	362	365	366	rBB	389	648	0.04%	0.008%
20	6.091	366	368	371	rBB	421	682	0.04%	0.008%
21	6.184	373	377	379	rBB	343	596	0.03%	0.007%
22	6.256	383	384	387	rBB	374	640	0.04%	0.008%
23	6.701	422	427	430	rBB	425	1128	0.07%	0.013%
24	6.846	438	441	444	rBV	1267	3154	0.18%	0.037%
25	7.001	454	456	459	rBB	393	642	0.04%	0.008%
26	7.425	495	497	499	rBB	384	471	0.03%	0.006%
27	7.735	526	527	530	rBB	460	521	0.03%	0.006%
28	8.614	611	612	616	rBB	376	620	0.04%	0.007%
29	9.141	656	663	672	rBB	189132	520484	30.24%	6.156%
30	9.493	694	697	702	rBB	648	985	0.06%	0.012%
31	9.772	716	724	732	rBB	145131	377439	21.93%	4.464%
32	10.196	757	765	776	rBB	459491	1263009	73.37%	14.939%
33	11.995	931	939	948	rBB2	3825	16782	0.97%	0.198%
34	12.171	948	956	966	rBB	664946	1631454	94.78%	19.297%
35	13.349	1068	1070	1073	rBB	339	602	0.03%	0.007%
36	13.804	1110	1114	1116	rBB	326	780	0.05%	0.009%
37	13.939	1124	1127	1129	rBB	404	492	0.03%	0.006%
38	14.042	1130	1137	1148	rBB	709455	1570318	91.23%	18.574%
39	14.218	1152	1154	1156	rBB	437	488	0.03%	0.006%
40	14.518	1182	1183	1187	rBB	406	453	0.03%	0.005%
41	14.662	1194	1197	1199	rBB	411	489	0.03%	0.006%
42	14.724	1200	1203	1207	rBB	687	1286	0.07%	0.015%

43	15.024	1231	1232	1236	rBB	376	637	0.04%	0.008%
44	15.231	1247	1252	1254	rBB	390	861	0.05%	0.010%
45	15.541	1275	1282	1291	rBB	600020	1251638	72.71%	14.804%
46	15.820	1307	1309	1313	rBB	452	474	0.03%	0.006%
47	16.131	1337	1339	1340	rBB	407	461	0.03%	0.005%
48	16.162	1340	1342	1345	rBB	375	857	0.05%	0.010%
49	16.234	1348	1349	1352	rBV	382	850	0.05%	0.010%
50	16.368	1360	1362	1367	rBB	380	1060	0.06%	0.013%
51	16.462	1369	1371	1375	rBB	428	468	0.03%	0.006%
52	16.699	1391	1394	1395	rBB	451	692	0.04%	0.008%
53	16.761	1398	1400	1403	rBB	429	668	0.04%	0.008%
54	16.834	1404	1407	1408	rBB	353	614	0.04%	0.007%
55	16.916	1408	1415	1420	rBB2	1302	4618	0.27%	0.055%
56	17.051	1421	1428	1435	rBV	856176	1721339	100.00%	20.360%
57	17.196	1439	1442	1445	rBB	359	831	0.05%	0.010%
58	17.423	1463	1464	1467	rBB	466	487	0.03%	0.006%
59	17.475	1468	1469	1475	rBB	371	1096	0.06%	0.013%
60	17.589	1475	1480	1484	rBB	682	1479	0.09%	0.017%
61	17.682	1485	1489	1490	rBB	625	797	0.05%	0.009%
62	17.723	1490	1493	1496	rBB	556	1022	0.06%	0.012%
63	17.806	1497	1501	1504	rBB	501	1200	0.07%	0.014%
64	17.971	1512	1517	1519	rBB	417	862	0.05%	0.010%
65	18.023	1520	1522	1523	rBB	464	498	0.03%	0.006%
66	18.085	1523	1528	1532	rBB	414	1801	0.10%	0.021%
67	18.188	1536	1538	1539	rBB	451	488	0.03%	0.006%
68	18.271	1544	1546	1548	rBV	392	877	0.05%	0.010%
69	18.343	1552	1553	1556	rBB	622	783	0.05%	0.009%
70	18.457	1561	1564	1566	rBB	357	622	0.04%	0.007%
71	18.519	1568	1570	1574	rBB	436	738	0.04%	0.009%
72	18.674	1579	1585	1588	rBB	447	1212	0.07%	0.014%
73	18.736	1588	1591	1593	rBB	489	740	0.04%	0.009%
74	18.788	1593	1596	1597	rBB	420	715	0.04%	0.008%
75	18.840	1597	1601	1604	rBB	369	1293	0.08%	0.015%
76	18.891	1604	1606	1608	rBB	377	620	0.04%	0.007%
77	18.984	1614	1615	1618	rBB	395	709	0.04%	0.008%
78	19.067	1619	1623	1627	rBV	441	1828	0.11%	0.022%
79	19.150	1627	1631	1635	rVB	891	2544	0.15%	0.030%
80	19.212	1636	1637	1640	rBB	380	463	0.03%	0.005%
81	19.326	1647	1648	1650	rBB	540	617	0.04%	0.007%
82	19.429	1650	1658	1661	rBB	551	2428	0.14%	0.029%
83	19.491	1661	1664	1668	rBV	442	1631	0.09%	0.019%
84	19.667	1679	1681	1683	rBV	452	934	0.05%	0.011%
85	19.822	1695	1696	1700	rBB	499	978	0.06%	0.012%
86	19.894	1700	1703	1706	rBV	596	1254	0.07%	0.015%
87	20.029	1714	1716	1717	rVB	571	643	0.04%	0.008%
88	20.101	1721	1723	1725	rBV	435	942	0.05%	0.011%
89	20.246	1731	1737	1743	rBB	959	2863	0.17%	0.034%
90	20.328	1743	1745	1748	rBV	618	1323	0.08%	0.016%
91	20.380	1748	1750	1757	rVB	665	2177	0.13%	0.026%
92	20.504	1757	1762	1765	rBV	765	2374	0.14%	0.028%
93	20.628	1771	1774	1775	rBB	795	942	0.05%	0.011%
94	20.721	1780	1783	1786	rVV	947	1262	0.07%	0.015%
95	20.773	1786	1788	1791	rVB	698	1234	0.07%	0.015%
96	20.897	1799	1800	1802	rBV	845	1130	0.07%	0.013%
97	21.011	1810	1811	1814	rBV	334	586	0.03%	0.007%
98	21.125	1820	1822	1825	rBV2	673	1291	0.07%	0.015%
99	21.466	1852	1855	1857	rBV2	803	1839	0.11%	0.022%
100	21.745	1879	1882	1886	rBV	619	1316	0.08%	0.016%

Sum of corrected areas: 8454608

File : K:\ORGANICS\VOLATILE\HPMS8\DATA\051012\8M378977.D
Operator : TMB
Acquired : 11 May 2012 3:07 using AcqMethod 8260WT
Instrument : HPMS8
Sample Name: L12050153-05 A 826-SPE
Misc Info : 1,1
Vial Number: 16
Quant File :8260WT.RES (RTE Integrator)



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\051012\8M378978.D Vial: 17
Acq On : 11 May 2012 3:39 Operator: TMB
Sample : L12050153-07 A 826-SPE Inst : HPMS8
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 15:04:15 2012 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration
DataAcq Meth : 8260WT

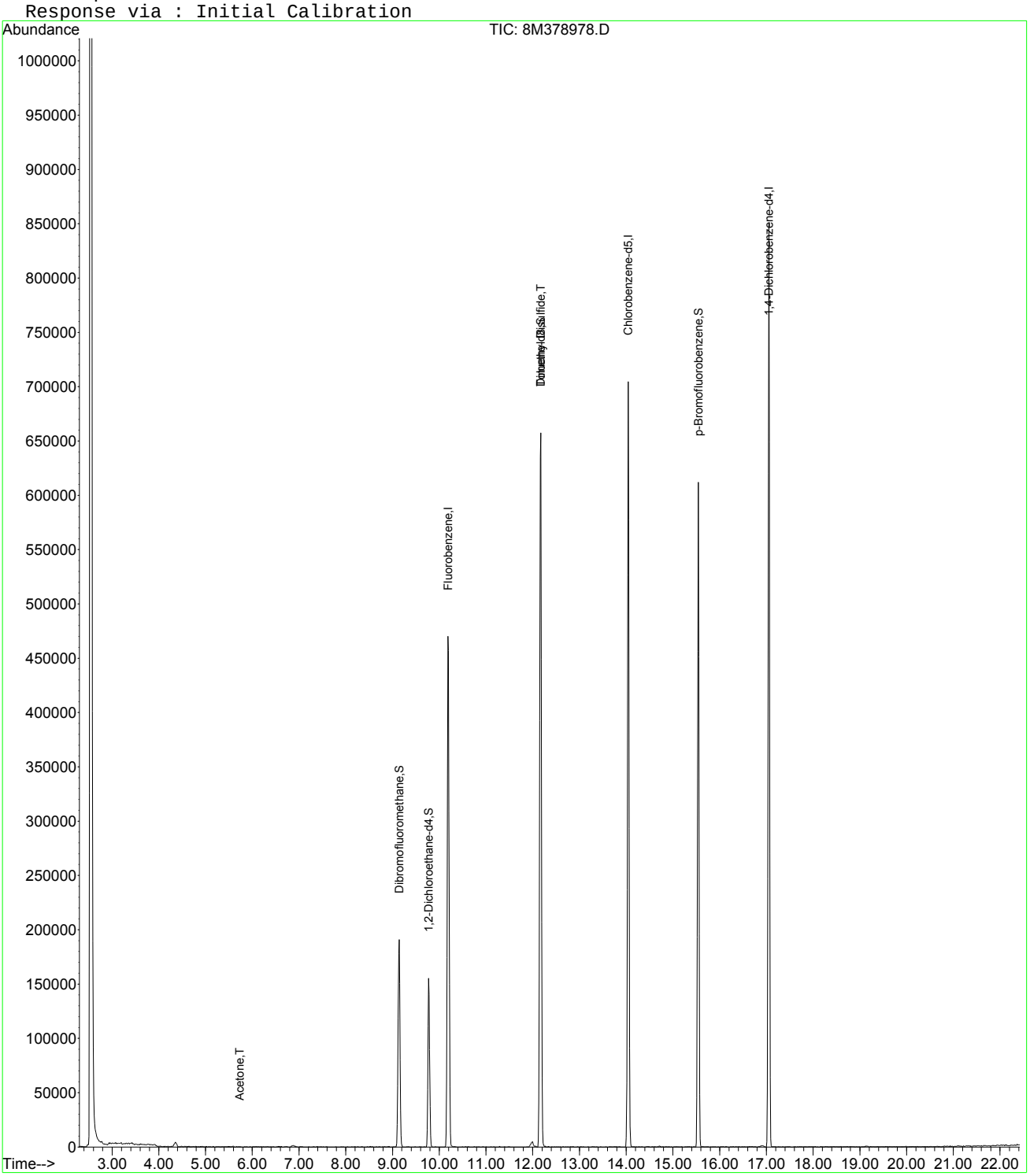
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.19	96	619122	25.00 ug/L	0.00
57) Chlorobenzene-d5	14.04	117	556363	25.00 ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.05	152	315730	25.00 ug/L	0.00
System Monitoring Compounds					
37) Dibromofluoromethane	9.14	111	165582	25.7787 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 103.12%		
43) 1,2-Dichloroethane-d4	9.77	65	143995	29.1123 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 116.44%		
58) Toluene-d8	12.17	98	633758	24.6712 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 98.68%		
80) p-Bromofluorobenzene	15.54	95	248579	24.3380 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 97.36%		
Target Compounds					Qvalue
13) Acetone	5.73	43	259	0.2835 ug/L #	47
56) Dimethyl Disulfide	12.17	94	18137	1.8689 ug/L #	28

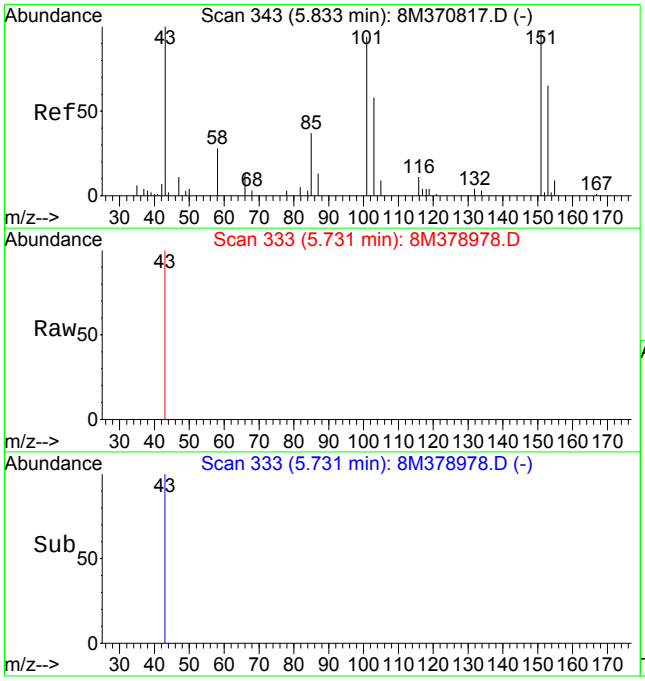
(#) = qualifier out of range (m) = manual integration
8M378978.D 8260WT.M Tue May 15 15:04:15 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\051012\8M378978.D Vial: 17
Acq On : 11 May 2012 3:39 Operator: TMB
Sample : L12050153-07 A 826-SPE Inst : HPMS8
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 15:04 2012 Quant Results File: 8260WT.RES

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration

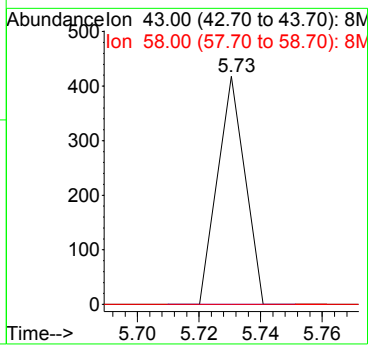


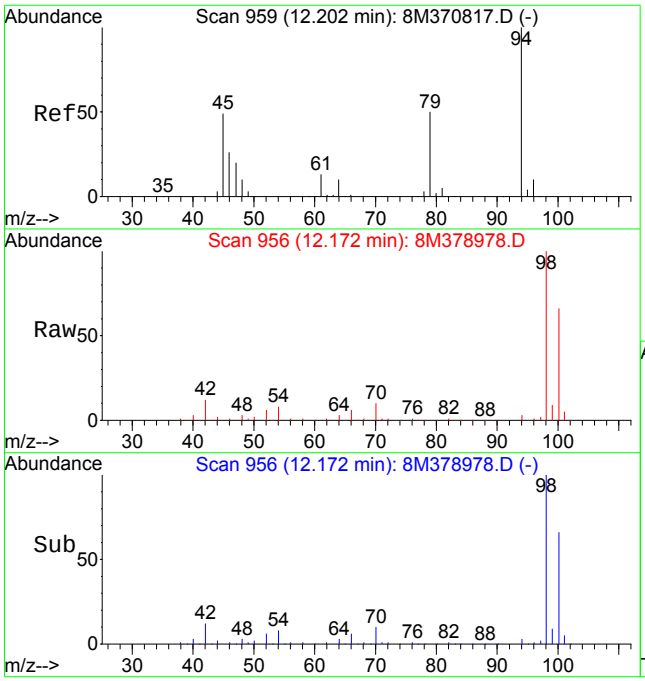


#13
Acetone
Concen: 0.28 ug/L
RT: 5.73 min Scan# 333
Delta R.T. 0.01 min
Lab File: 8M378978.D
Acq: 11 May 2012 3:39

Tgt Ion: 43 Resp: 259

Ion	Ratio	Lower	Upper
43	100		
58	0.0	16.9	39.3#

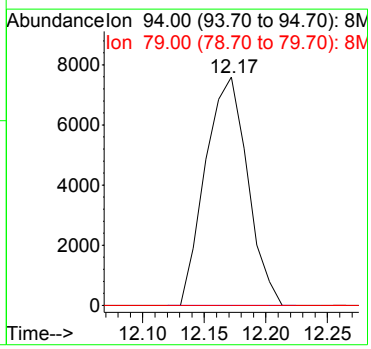




#56
Dimethyl Disulfide
Concen: 1.87 ug/L
RT: 12.17 min Scan# 956
Delta R.T. 0.09 min
Lab File: 8M378978.D
Acq: 11 May 2012 3:39

Tgt Ion: 94 Resp: 18137

Ion	Ratio	Lower	Upper
94	100		
79	0.0	29.2	68.0#



LSC Area Percent Report

Data File : K:\ORGANICS\VOLATILE\HPMS8\DATA\051012\8M378978.D Vial: 17
Acq On : 11 May 2012 3:39 Operator: TMB
Sample : L12050153-07 A 826-SPE Inst : HPMS8
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

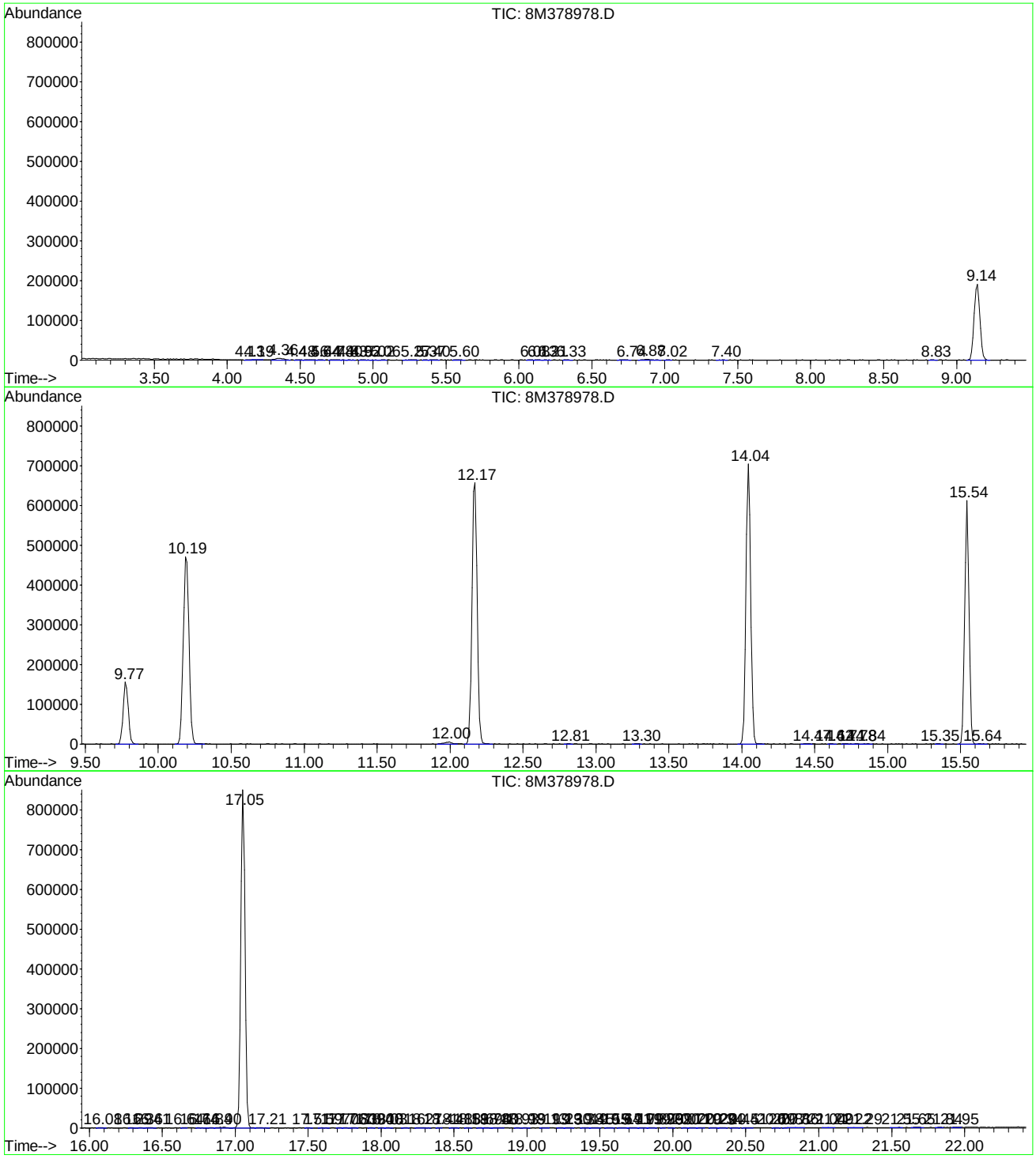
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.128	177	178	182	rBV	730	1594	0.09%	0.019%
2	4.190	182	184	189	rVB	414	921	0.05%	0.011%
3	4.355	195	200	207	rVB4	4505	16366	0.95%	0.193%
4	4.479	210	212	216	rBB	732	1596	0.09%	0.019%
5	4.562	216	220	225	rBB	721	2298	0.13%	0.027%
6	4.645	225	228	230	rBB	749	1394	0.08%	0.016%
7	4.738	233	237	241	rBB	492	1574	0.09%	0.019%
8	4.800	241	243	245	rBB	648	684	0.04%	0.008%
9	4.831	245	246	250	rBB	436	739	0.04%	0.009%
10	4.924	253	255	261	rBB	860	1362	0.08%	0.016%
11	5.017	261	264	266	rBB	718	645	0.04%	0.008%
12	5.058	267	268	271	rBB	379	645	0.04%	0.008%
13	5.265	282	288	292	rBB	413	1496	0.09%	0.018%
14	5.369	295	298	299	rBB	362	641	0.04%	0.008%
15	5.400	299	301	306	rBB	435	1336	0.08%	0.016%
16	5.596	315	320	323	rBB	719	1679	0.10%	0.020%
17	6.082	364	367	369	rBB	333	792	0.05%	0.009%
18	6.134	369	372	374	rBB	311	761	0.04%	0.009%
19	6.206	375	379	380	rBB	329	597	0.03%	0.007%
20	6.330	388	391	394	rBB	326	786	0.05%	0.009%
21	6.744	424	431	433	rBB	619	1394	0.08%	0.016%
22	6.878	438	444	453	rBB	1468	5997	0.35%	0.071%
23	7.023	455	458	460	rBB	340	603	0.04%	0.007%
24	7.395	490	494	497	rBB	610	805	0.05%	0.009%
25	8.832	631	633	636	rBB	416	718	0.04%	0.008%
26	9.143	656	663	671	rBB	190910	525583	30.62%	6.188%
27	9.773	718	724	732	rBB	155296	383703	22.35%	4.518%
28	10.187	757	764	776	rBB	470295	1273939	74.22%	14.999%
29	11.996	931	939	944	rBV	4923	17940	1.05%	0.211%
30	12.172	949	956	967	rBB	657528	1634385	95.21%	19.243%
31	12.813	1015	1018	1020	rBB	377	650	0.04%	0.008%
32	13.299	1060	1065	1066	rBB	316	765	0.04%	0.009%
33	14.043	1130	1137	1147	rBB	704707	1564455	91.14%	18.420%
34	14.467	1172	1178	1179	rBB	463	1102	0.06%	0.013%
35	14.622	1190	1193	1195	rBB	384	692	0.04%	0.008%
36	14.705	1199	1201	1206	rBB	1051	1960	0.11%	0.023%
37	14.778	1207	1208	1212	rBB	411	684	0.04%	0.008%
38	14.840	1213	1214	1219	rBB	338	605	0.04%	0.007%
39	15.346	1261	1263	1266	rBB	432	732	0.04%	0.009%
40	15.543	1276	1282	1289	rBB	612079	1249932	72.82%	14.717%
41	15.636	1289	1291	1295	rBB	609	842	0.05%	0.010%
42	16.080	1331	1334	1337	rBB	402	847	0.05%	0.010%

43	16.287	1352	1354	1357	rBB	452	759	0.04%	0.009%
44	16.359	1358	1361	1362	rBB	403	637	0.04%	0.008%
45	16.411	1363	1366	1370	rBB	414	1135	0.07%	0.013%
46	16.639	1387	1388	1391	rBV	536	997	0.06%	0.012%
47	16.742	1397	1398	1403	rBB	335	601	0.04%	0.007%
48	16.835	1404	1407	1409	rBB	377	652	0.04%	0.008%
49	16.897	1409	1413	1420	rBB2	1330	5327	0.31%	0.063%
50	17.052	1421	1428	1436	rBB	850769	1716543	100.00%	20.211%
51	17.207	1436	1443	1445	rBB	407	1310	0.08%	0.015%
52	17.507	1469	1472	1474	rBB	334	592	0.03%	0.007%
53	17.590	1478	1480	1485	rBB	411	631	0.04%	0.007%
54	17.704	1490	1491	1494	rBB	391	646	0.04%	0.008%
55	17.755	1494	1496	1498	rBB	382	640	0.04%	0.008%
56	17.828	1499	1503	1504	rBB	345	810	0.05%	0.010%
57	17.941	1511	1514	1515	rBB	403	676	0.04%	0.008%
58	18.003	1518	1520	1522	rBB	349	623	0.04%	0.007%
59	18.034	1522	1523	1527	rBB	429	728	0.04%	0.009%
60	18.159	1533	1535	1538	rBB	485	800	0.05%	0.009%
61	18.272	1542	1546	1552	rBB	502	1830	0.11%	0.022%
62	18.407	1556	1559	1560	rBV	375	827	0.05%	0.010%
63	18.479	1565	1566	1571	rBB	411	1113	0.06%	0.013%
64	18.593	1575	1577	1579	rBB	479	808	0.05%	0.010%
65	18.686	1583	1586	1587	rBB	395	665	0.04%	0.008%
66	18.738	1587	1591	1593	rBB	503	922	0.05%	0.011%
67	18.800	1593	1597	1601	rBV	466	1834	0.11%	0.022%
68	18.934	1608	1610	1612	rBB	383	646	0.04%	0.008%
69	18.975	1613	1614	1618	rBB	443	710	0.04%	0.008%
70	19.130	1625	1629	1631	rBV	924	2366	0.14%	0.028%
71	19.234	1636	1639	1641	rBB	501	1016	0.06%	0.012%
72	19.296	1641	1645	1647	rBB	396	1115	0.06%	0.013%
73	19.379	1652	1653	1658	rBB	490	1126	0.07%	0.013%
74	19.451	1658	1660	1665	rBB	384	1341	0.08%	0.016%
75	19.554	1668	1670	1674	rBB	522	1354	0.08%	0.016%
76	19.637	1676	1678	1683	rBB	531	1446	0.08%	0.017%
77	19.709	1683	1685	1690	rBB	411	1375	0.08%	0.016%
78	19.792	1690	1693	1696	rBB	472	1238	0.07%	0.015%
79	19.875	1696	1701	1702	rBB	439	1181	0.07%	0.014%
80	19.927	1705	1706	1708	rBV	412	678	0.04%	0.008%
81	19.989	1710	1712	1714	rVB	678	1021	0.06%	0.012%
82	20.071	1719	1720	1723	rBB	525	823	0.05%	0.010%
83	20.113	1723	1724	1729	rBB	476	1245	0.07%	0.015%
84	20.185	1729	1731	1734	rBV	451	1269	0.07%	0.015%
85	20.288	1737	1741	1743	rBB	419	1156	0.07%	0.014%
86	20.340	1743	1746	1749	rBB	505	1198	0.07%	0.014%
87	20.444	1751	1756	1757	rBB	467	1185	0.07%	0.014%
88	20.506	1759	1762	1766	rBV	543	1895	0.11%	0.022%
89	20.692	1779	1780	1784	rBB	682	1093	0.06%	0.013%
90	20.774	1786	1788	1789	rBV	795	934	0.05%	0.011%
91	20.805	1789	1791	1794	rVV	687	1139	0.07%	0.013%
92	20.857	1794	1796	1800	rVV2	548	1278	0.07%	0.015%
93	21.043	1812	1814	1816	rVB	482	572	0.03%	0.007%
94	21.095	1816	1819	1820	rBV	716	1289	0.08%	0.015%
95	21.219	1829	1831	1833	rBV	831	865	0.05%	0.010%
96	21.291	1833	1838	1839	rBV2	608	1561	0.09%	0.018%
97	21.550	1857	1863	1865	rBV	745	2983	0.17%	0.035%
98	21.653	1871	1873	1879	rBV3	836	2590	0.15%	0.030%
99	21.839	1887	1891	1892	rBV	1255	2717	0.16%	0.032%
100	21.953	1898	1902	1904	rBV3	918	2522	0.15%	0.030%

Sum of corrected areas: 8493272

File : K:\ORGANICS\VOLATILE\HPMS8\DATA\051012\8M378978.D
Operator : TMB
Acquired : 11 May 2012 3:39 using AcqMethod 8260WT
Instrument : HPMS8
Sample Name: L12050153-07 A 826-SPE
Misc Info : 1,1
Vial Number: 17
Quant File :8260WT.RES (RTE Integrator)



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\051012\8M378970.D Vial: 9
Acq On : 10 May 2012 23:22 Operator: TMB
Sample : L12050153-09 A 826-SPE Inst : HPMS8
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 15:03:58 2012 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration
DataAcq Meth : 8260WT

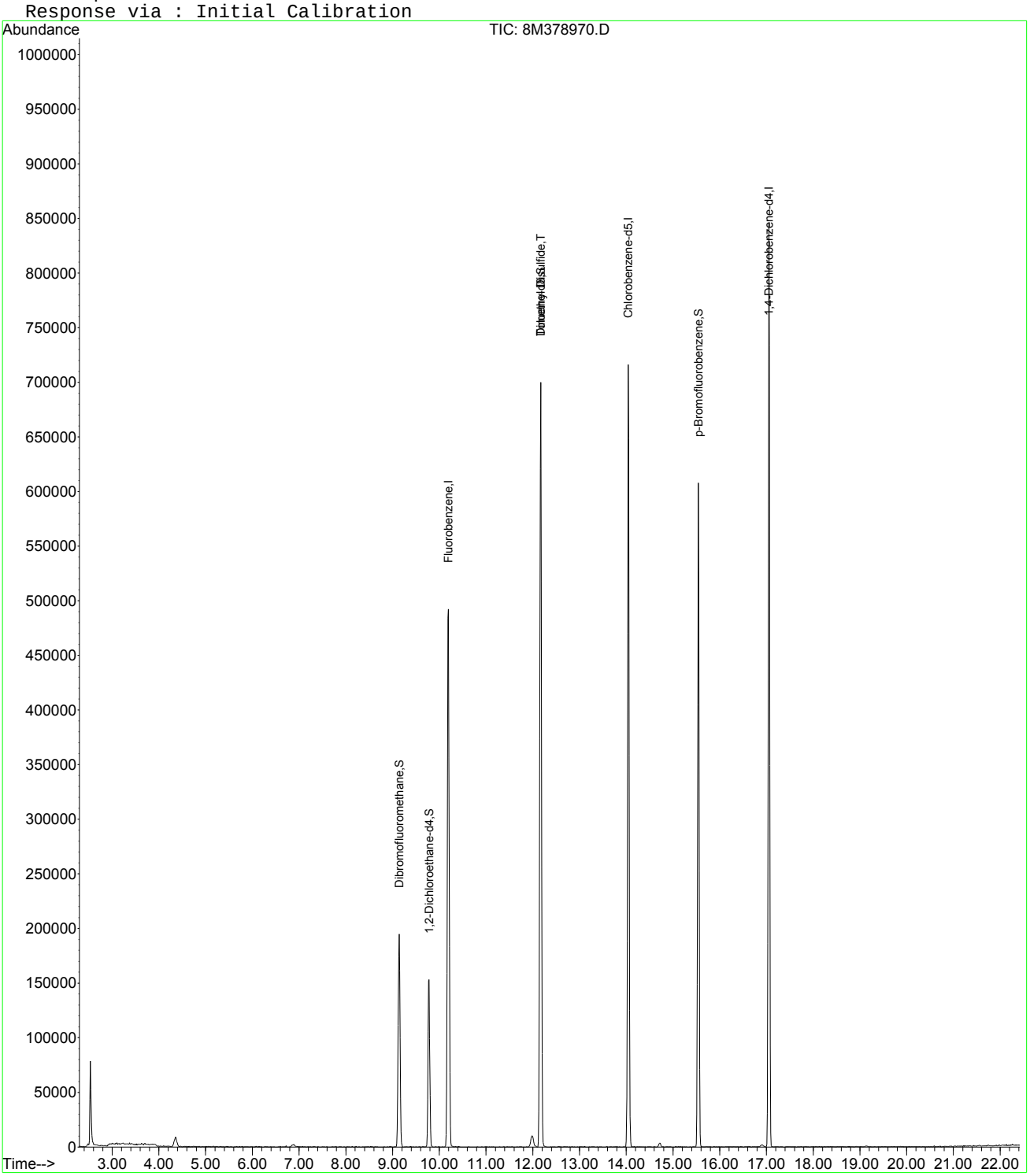
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.20	96	653181	25.00	ug/L	0.01
57) Chlorobenzene-d5	14.04	117	570271	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.05	152	316108	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.14	111	173518	25.6056	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 102.44%			
43) 1,2-Dichloroethane-d4	9.78	65	145156	27.8168	ug/L	0.01
Spiked Amount 25.000	Range 80 - 120		Recovery = 111.28%			
58) Toluene-d8	12.17	98	661060	25.1064	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 100.44%			
80) p-Bromofluorobenzene	15.54	95	252345	24.6772	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 98.72%			
Target Compounds						Qvalue
56) Dimethyl Disulfide	12.17	94	18163	1.7740	ug/L #	28

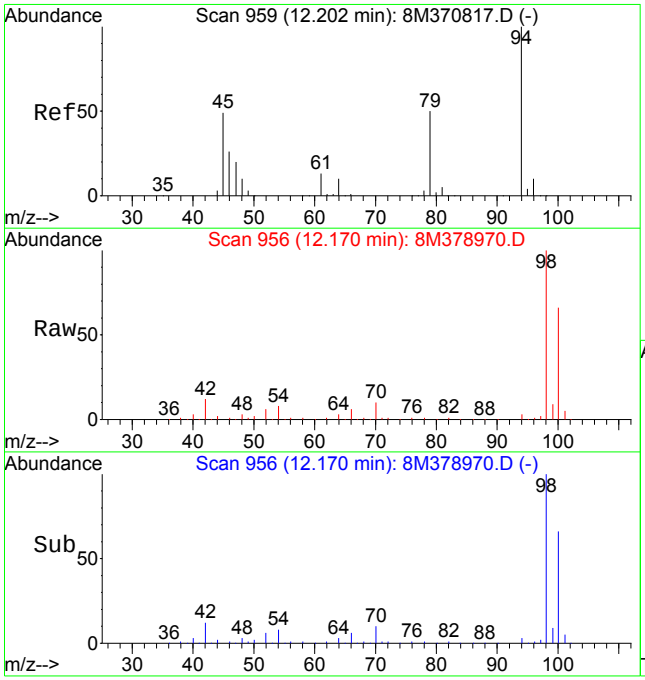
(#) = qualifier out of range (m) = manual integration
8M378970.D 8260WT.M Tue May 15 15:03:59 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\051012\8M378970.D Vial: 9
Acq On : 10 May 2012 23:22 Operator: TMB
Sample : L12050153-09 A 826-SPE Inst : HPMS8
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 15:03 2012 Quant Results File: 8260WT.RES

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration

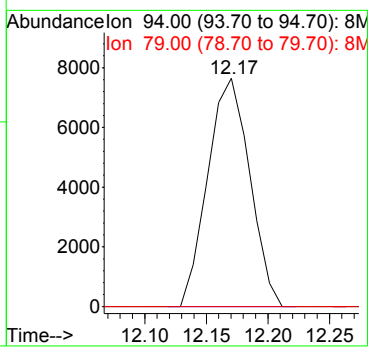




#56
Dimethyl Disulfide
Concen: 1.77 ug/L
RT: 12.17 min Scan# 956
Delta R.T. 0.08 min
Lab File: 8M378970.D
Acq: 10 May 2012 23:22

Tgt Ion: 94 Resp: 18163

Ion	Ratio	Lower	Upper
94	100		
79	0.0	29.2	68.0#



LSC Area Percent Report

Data File : K:\ORGANICS\VOLATILE\HPMS8\DATA\051012\8M378970.D Vial: 9
Acq On : 10 May 2012 23:22 Operator: TMB
Sample : L12050153-09 A 826-SPE Inst : HPMS8
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

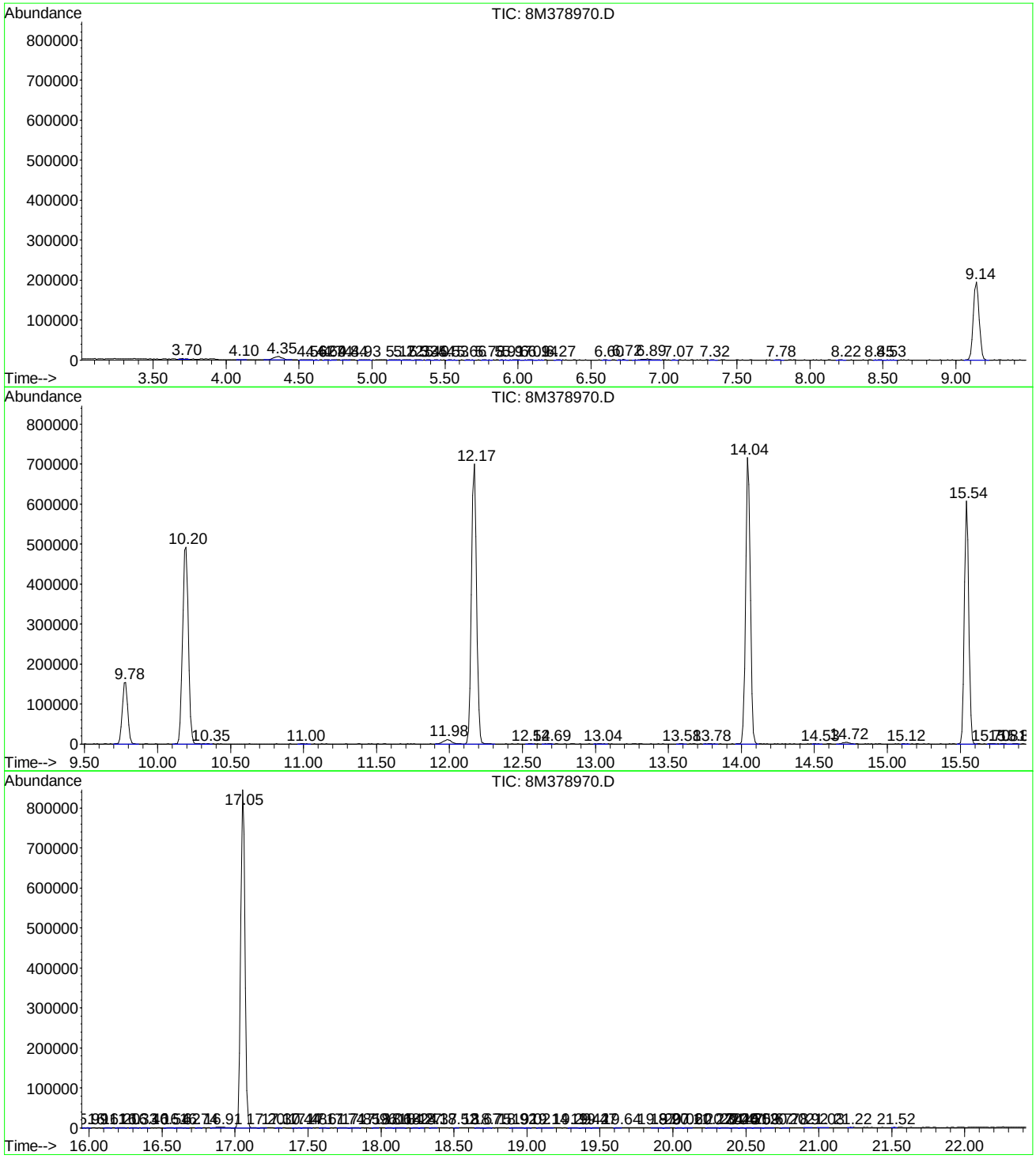
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.702	134	137	141	rBV2	1686	3882	0.22%	0.044%
2	4.095	173	175	179	rVB	706	937	0.05%	0.011%
3	4.354	191	200	209	rBV2	8645	34061	1.97%	0.386%
4	4.560	214	220	224	rBB	810	2874	0.17%	0.033%
5	4.622	224	226	227	rBB	737	726	0.04%	0.008%
6	4.695	230	233	235	rBB	495	964	0.06%	0.011%
7	4.736	235	237	239	rBV	764	1303	0.08%	0.015%
8	4.840	242	247	248	rBV	645	1661	0.10%	0.019%
9	4.933	253	256	262	rBB	627	1969	0.11%	0.022%
10	5.170	273	279	282	rBB	740	2234	0.13%	0.025%
11	5.222	282	284	289	rBB	764	1771	0.10%	0.020%
12	5.326	290	294	296	rBB	780	1368	0.08%	0.016%
13	5.398	298	301	302	rBB	410	690	0.04%	0.008%
14	5.439	303	305	307	rBB	716	917	0.05%	0.010%
15	5.532	312	314	319	rBB	393	857	0.05%	0.010%
16	5.656	324	326	330	rBB	624	1016	0.06%	0.012%
17	5.781	335	338	342	rBB	734	1100	0.06%	0.012%
18	5.915	347	351	353	rBB	394	708	0.04%	0.008%
19	5.967	353	356	362	rBB	327	1167	0.07%	0.013%
20	6.091	363	368	370	rBB	662	1353	0.08%	0.015%
21	6.142	371	373	376	rBB	729	680	0.04%	0.008%
22	6.266	383	385	388	rBB	476	723	0.04%	0.008%
23	6.597	415	417	420	rBB	661	857	0.05%	0.010%
24	6.721	425	429	432	rBB	1245	1367	0.08%	0.016%
25	6.887	435	445	454	rBB2	2507	11052	0.64%	0.125%
26	7.073	461	463	465	rBB2	855	720	0.04%	0.008%
27	7.321	486	487	491	rBB2	482	705	0.04%	0.008%
28	7.776	529	531	535	rBB2	368	842	0.05%	0.010%
29	8.221	570	574	576	rBB2	685	831	0.05%	0.009%
30	8.448	595	596	601	rBB	342	798	0.05%	0.009%
31	8.531	602	604	610	rBB	715	839	0.05%	0.010%
32	9.141	655	663	671	rBB	194972	543024	31.35%	6.158%
33	9.782	717	725	733	rBB	153220	394423	22.77%	4.473%
34	10.195	756	765	778	rBB	492264	1347474	77.80%	15.280%
35	10.351	778	780	782	rBB	787	676	0.04%	0.008%
36	11.002	839	843	847	rBB	351	824	0.05%	0.009%
37	11.984	930	938	948	rBB2	10376	42772	2.47%	0.485%
38	12.170	949	956	969	rBB	700049	1712444	98.87%	19.419%
39	12.543	990	992	995	rBB	624	896	0.05%	0.010%
40	12.687	1001	1006	1008	rBB	637	997	0.06%	0.011%
41	13.039	1035	1040	1044	rBB	345	1007	0.06%	0.011%
42	13.576	1090	1092	1096	rBB	424	692	0.04%	0.008%

43	13.783	1108	1112	1117	rBB	384	1055	0.06%	0.012%
44	14.042	1129	1137	1144	rBB	716346	1608389	92.86%	18.239%
45	14.528	1180	1184	1186	rBB	372	673	0.04%	0.008%
46	14.724	1196	1203	1208	rBB2	3722	11883	0.69%	0.135%
47	15.117	1239	1241	1244	rBB2	486	759	0.04%	0.009%
48	15.541	1276	1282	1289	rBV	608004	1267522	73.18%	14.374%
49	15.696	1296	1297	1302	rBB	426	1129	0.07%	0.013%
50	15.810	1304	1308	1310	rBB	436	959	0.06%	0.011%
51	15.882	1311	1315	1317	rBB	452	904	0.05%	0.010%
52	15.986	1322	1325	1327	rBB	436	726	0.04%	0.008%
53	16.110	1336	1337	1341	rBB	387	883	0.05%	0.010%
54	16.203	1344	1346	1351	rBB	437	1376	0.08%	0.016%
55	16.327	1353	1358	1359	rBB	439	1105	0.06%	0.013%
56	16.399	1361	1365	1366	rBB	362	834	0.05%	0.009%
57	16.544	1376	1379	1383	rBB	404	1127	0.07%	0.013%
58	16.616	1383	1386	1392	rBB	608	1617	0.09%	0.018%
59	16.740	1397	1398	1401	rBB	433	700	0.04%	0.008%
60	16.906	1407	1414	1421	rBB	2191	8597	0.50%	0.097%
61	17.051	1422	1428	1438	rBB	845931	1732018	100.00%	19.641%
62	17.195	1439	1442	1444	rBV	415	1134	0.07%	0.013%
63	17.299	1450	1452	1454	rBB	440	719	0.04%	0.008%
64	17.443	1461	1466	1467	rBB	472	698	0.04%	0.008%
65	17.485	1467	1470	1474	rBB	426	1324	0.08%	0.015%
66	17.609	1479	1482	1485	rBB	400	839	0.05%	0.010%
67	17.743	1491	1495	1498	rBB	453	1494	0.09%	0.017%
68	17.847	1499	1505	1506	rBB	470	1424	0.08%	0.016%
69	17.960	1514	1516	1518	rBV	417	944	0.05%	0.011%
70	18.064	1523	1526	1528	rBB	450	959	0.06%	0.011%
71	18.136	1528	1533	1536	rBB	453	1637	0.09%	0.019%
72	18.240	1540	1543	1545	rBB	592	999	0.06%	0.011%
73	18.271	1545	1546	1548	rBV	438	720	0.04%	0.008%
74	18.374	1552	1556	1557	rBV	461	1175	0.07%	0.013%
75	18.519	1568	1570	1571	rBV	459	708	0.04%	0.008%
76	18.674	1582	1585	1588	rBB	389	848	0.05%	0.010%
77	18.746	1589	1592	1593	rBB	469	731	0.04%	0.008%
78	18.922	1605	1609	1615	rBB	574	2275	0.13%	0.026%
79	19.015	1615	1618	1619	rBB	519	820	0.05%	0.009%
80	19.139	1623	1630	1634	rBV2	905	3914	0.23%	0.044%
81	19.294	1644	1645	1651	rBB	439	1418	0.08%	0.016%
82	19.418	1652	1657	1659	rBB	422	1347	0.08%	0.015%
83	19.470	1659	1662	1664	rBV	464	1245	0.07%	0.014%
84	19.635	1674	1678	1679	rBV	426	1161	0.07%	0.013%
85	19.873	1699	1701	1707	rVB	657	1898	0.11%	0.022%
86	19.966	1707	1710	1711	rBV	429	920	0.05%	0.010%
87	20.059	1715	1719	1720	rBB	541	1053	0.06%	0.012%
88	20.111	1720	1724	1726	rBV	465	1530	0.09%	0.017%
89	20.266	1735	1739	1744	rBB	536	1917	0.11%	0.022%
90	20.338	1744	1746	1751	rBB	542	1600	0.09%	0.018%
91	20.442	1752	1756	1757	rBB	427	956	0.06%	0.011%
92	20.473	1757	1759	1761	rBB	539	769	0.04%	0.009%
93	20.514	1761	1763	1766	rBB	507	1055	0.06%	0.012%
94	20.587	1766	1770	1773	rBB	1076	1867	0.11%	0.021%
95	20.669	1773	1778	1780	rBV	836	2110	0.12%	0.024%
96	20.783	1785	1789	1790	rBV	778	1466	0.08%	0.017%
97	20.917	1800	1802	1805	rBV	435	791	0.05%	0.009%
98	21.031	1809	1813	1816	rBV	596	1612	0.09%	0.018%
99	21.217	1829	1831	1832	rVB	1005	977	0.06%	0.011%
100	21.517	1858	1860	1861	rBV	616	906	0.05%	0.010%

Sum of corrected areas: 8818417

File : K:\ORGANICS\VOLATILE\HPMS8\DATA\051012\8M378970.D
Operator : TMB
Acquired : 10 May 2012 23:22 using AcqMethod 8260WT
Instrument : HPMS8
Sample Name: L12050153-09 A 826-SPE
Misc Info : 1,1
Vial Number: 9
Quant File :8260WT.RES (RTE Integrator)



2.1.1.4 Standards Data

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\012512\8M376558.D Vial: 5
Acq On : 25 Jan 2012 12:43 Operator: ADC
Sample : WG387881-01 5ug/L A9FOO STD Inst : HPMS8
Misc : 1,1 STD49721 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 01 15:38:13 2012 Quant Results File: A9FOOWT.RES

Quant Method : C:\MSDCHEM\1\METHODS\A9FOOWT.M (RTE Integrator)
Title : A9-FOO Water - IC: 01/25/12- HPMS8
Last Update : Wed Feb 01 15:35:09 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

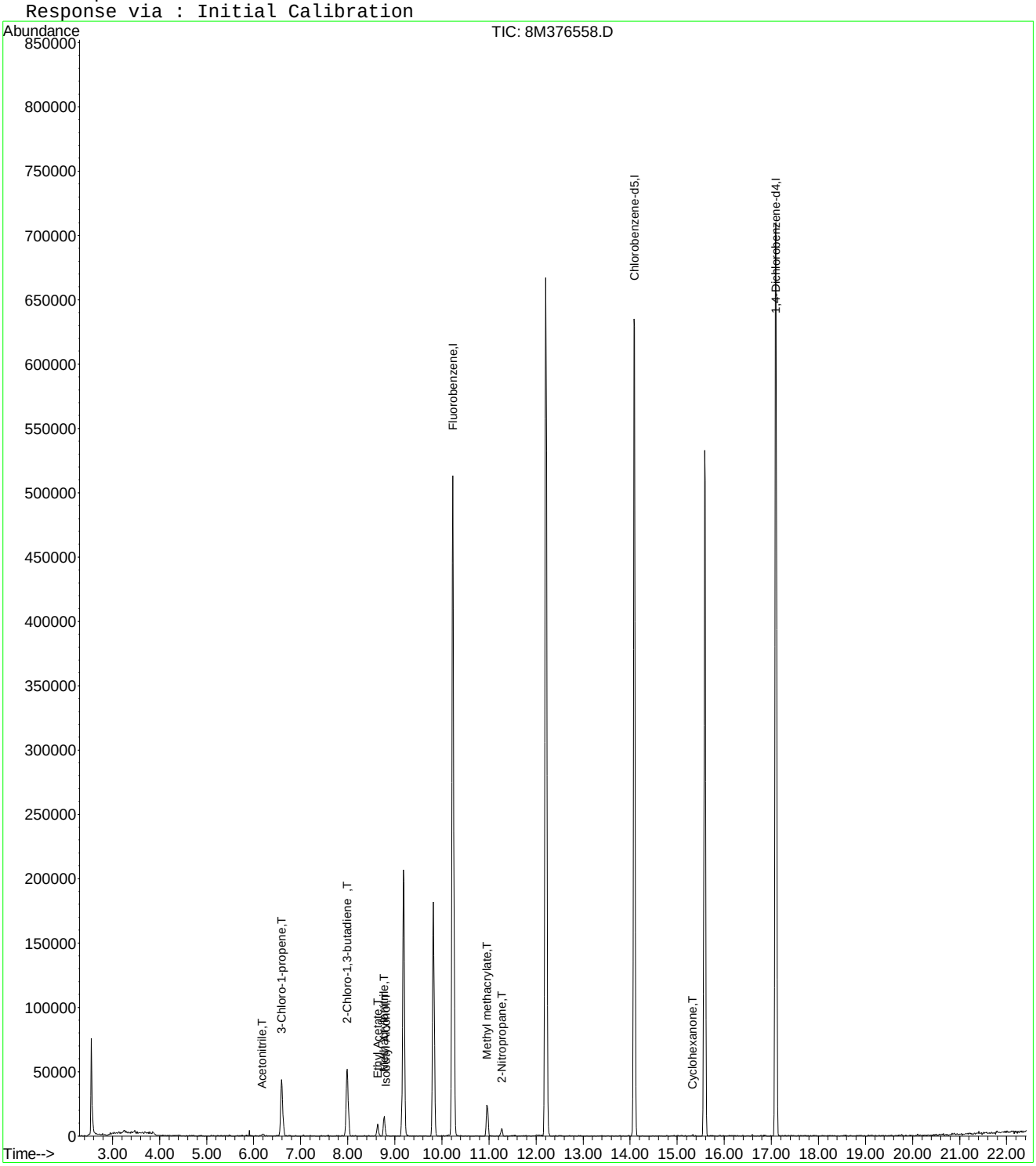
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	10.23	96	656295	25.00	ug/L		0.00
11) Chlorobenzene-d5	14.09	117	486754	25.00	ug/L		0.00
12) 1,4-Dichlorobenzene-d4	17.10	152	262855	25.00	ug/L		0.00
Target Compounds							Qvalue
2) Acetonitrile	6.18	41	2309	4.7425	ug/L		65
3) 3-Chloro-1-propene	6.59	41	49314	4.8141	ug/L		100
4) 2-Chloro-1,3-butadiene	7.99	53	61015	5.0296	ug/L		95
5) Ethyl Acetate	8.63	43	16418	4.7992	ug/L		95
6) Methacrylonitrile	8.77	67	6918	4.9194	ug/L		83
7) Isobutyl Alcohol	8.81	43	817	5.5399	ug/L	#	11
9) Methyl methacrylate	10.96	41	18510	4.4070	ug/L		97
10) 2-Nitropropane	11.27	43	5684	3.8971	ug/L		93
13) Cyclohexanone	15.32	55	508	1.9649	ug/L	#	31

(#) = qualifier out of range (m) = manual integration
8M376558.D A9FOOWT.M Wed Feb 01 15:38:15 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\012512\8M376558.D Vial: 5
Acq On : 25 Jan 2012 12:43 Operator: ADC
Sample : WG387881-01 5ug/L A9FOO STD Inst : HPMS8
Misc : 1,1 STD49721 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 1 15:38 2012 Quant Results File: A9FOOWT.RES

Method : C:\MSDCHEM\1\METHODS\A9FOOWT.M (RTE Integrator)
Title : A9-FOO Water - IC: 01/25/12- HPMS8
Last Update : Wed Feb 01 15:35:09 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\012512\8M376559.D Vial: 6
Acq On : 25 Jan 2012 13:28 Operator: ADC
Sample : WG387881-02 20ug/L A9FOO STD Inst : HPMS8
Misc : 1,1 STD49721 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 01 15:38:15 2012 Quant Results File: A9FOOWT.RES

Quant Method : C:\MSDCHEM\1\METHODS\A9FOOWT.M (RTE Integrator)
Title : A9-FOO Water - IC: 01/25/12- HPMS8
Last Update : Wed Feb 01 15:35:09 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

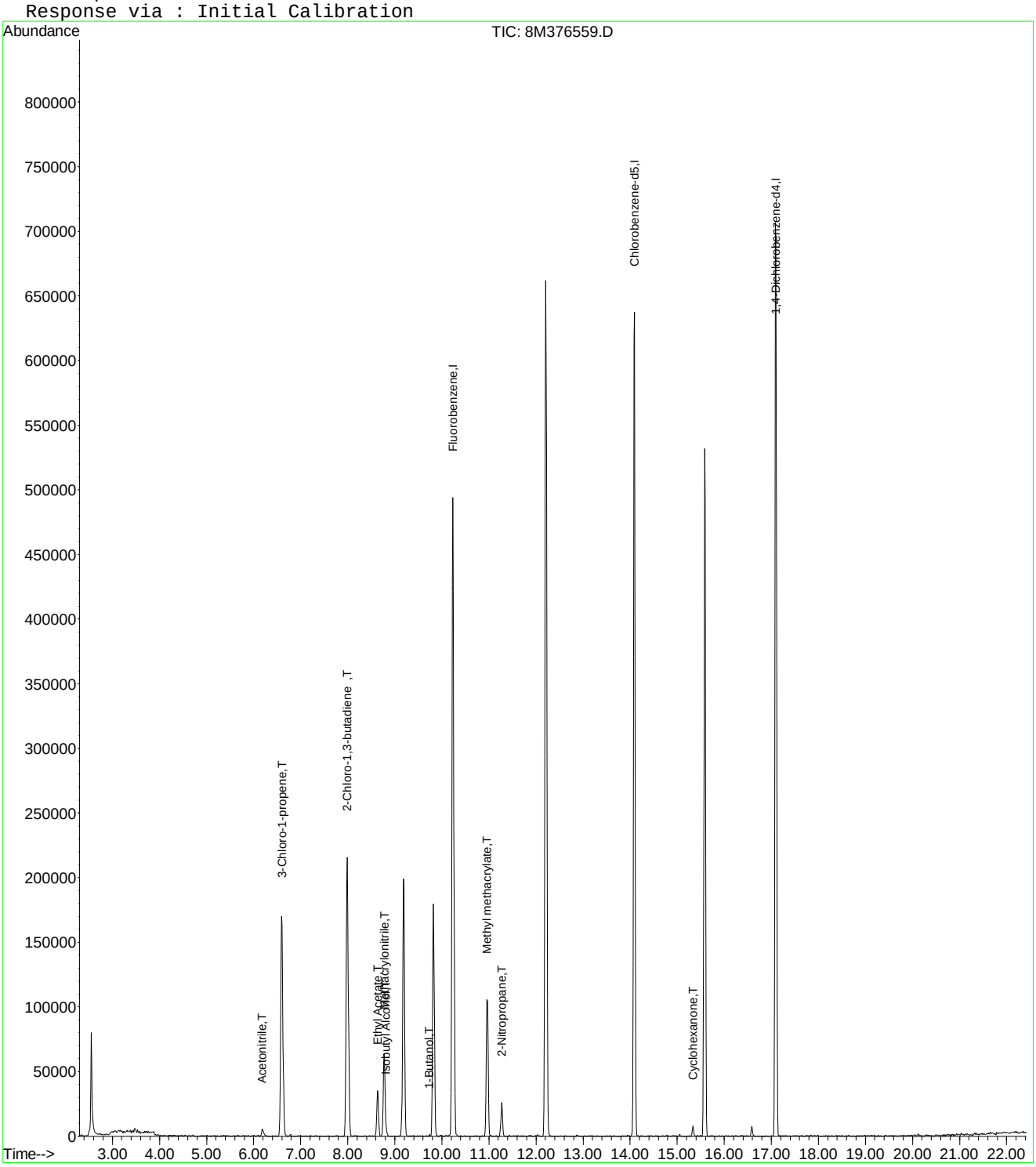
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	10.24	96	641906	25.00	ug/L		0.00
11) Chlorobenzene-d5	14.09	117	480006	25.00	ug/L		0.00
12) 1,4-Dichlorobenzene-d4	17.10	152	261314	25.00	ug/L		0.00
Target Compounds							Qvalue
2) Acetonitrile	6.18	41	8633	18.1289	ug/L		99
3) 3-Chloro-1-propene	6.61	41	200453	20.0070	ug/L		100
4) 2-Chloro-1,3-butadiene	7.99	53	238952	20.1388	ug/L		99
5) Ethyl Acetate	8.63	43	64409	19.2495	ug/L		98
6) Methacrylonitrile	8.78	67	25503	18.5419	ug/L		95
7) Isobutyl Alcohol	8.81	43	4920	34.1090	ug/L	#	53
8) 1-Butanol	9.73	56	710	18.9652	ug/L		99
9) Methyl methacrylate	10.96	41	79471	19.3450	ug/L		98
10) 2-Nitropropane	11.27	43	26253	18.4031	ug/L		99
13) Cyclohexanone	15.33	55	5242	20.3952	ug/L		88

(#) = qualifier out of range (m) = manual integration
8M376559.D A9FOOWT.M Wed Feb 01 15:38:16 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\012512\8M376559.D Vial: 6
Acq On : 25 Jan 2012 13:28 Operator: ADC
Sample : WG387881-02 20ug/L A9FOO STD Inst : HPMS8
Misc : 1,1 STD49721 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 1 15:38 2012 Quant Results File: A9FOOWT.RES

Method : C:\MSDCHEM\1\METHODS\A9FOOWT.M (RTE Integrator)
Title : A9-FOO Water - IC: 01/25/12- HPMS8
Last Update : Wed Feb 01 15:35:09 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\012512\8M376560.D Vial: 7
Acq On : 25 Jan 2012 13:58 Operator: ADC
Sample : WG387881-03 50ug/L A9FOO STD Inst : HPMS8
Misc : 1,1 STD49721 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 01 15:38:17 2012 Quant Results File: A9FOOWT.RES

Quant Method : C:\MSDCHEM\1\METHODS\A9FOOWT.M (RTE Integrator)
Title : A9-FOO Water - IC: 01/25/12- HPMS8
Last Update : Wed Feb 01 15:35:09 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

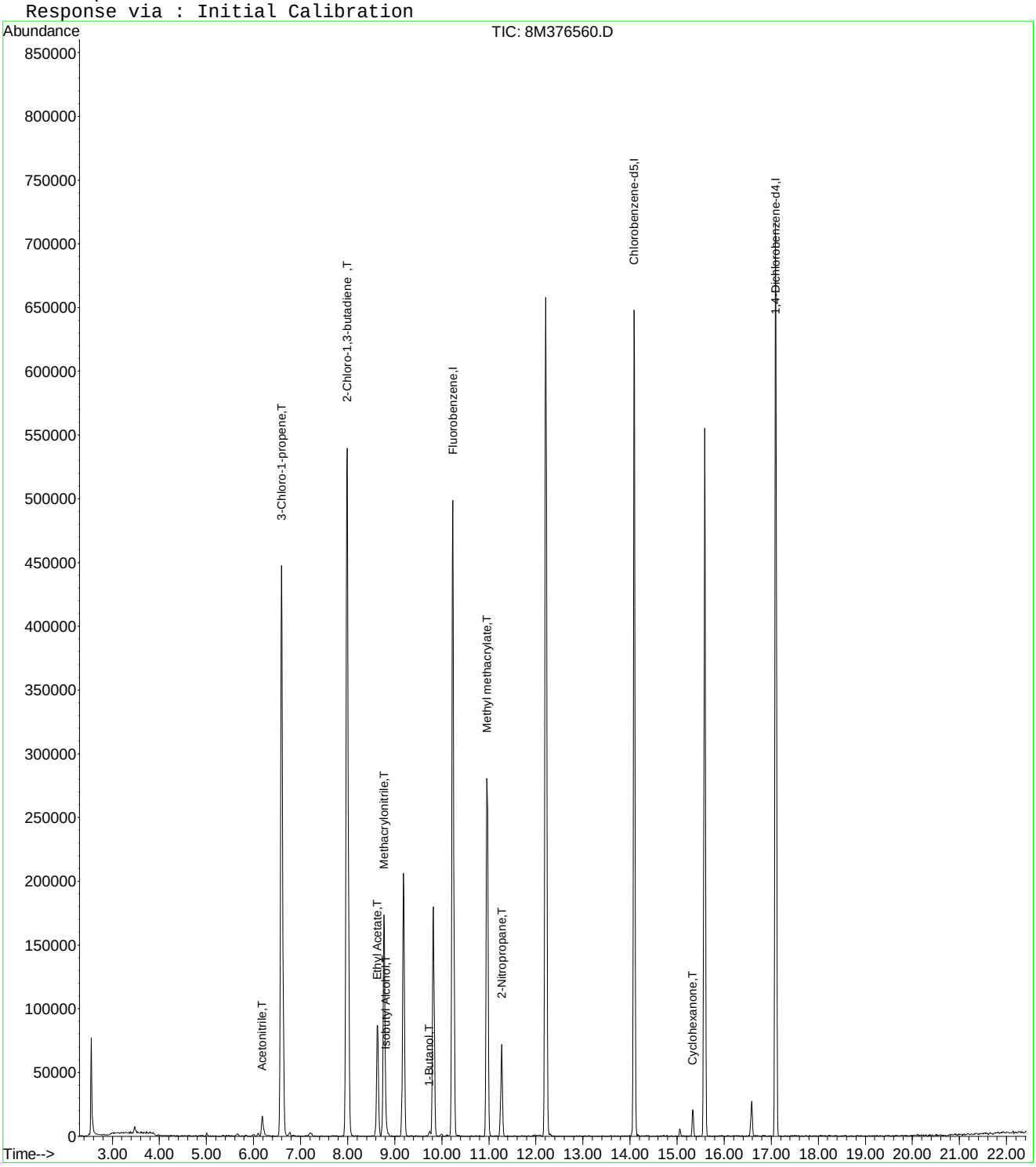
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.24	96	648527	25.00	ug/L	0.00
11) Chlorobenzene-d5	14.08	117	482506	25.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4	17.09	152	263746	25.00	ug/L	0.00
Target Compounds						Qvalue
2) Acetonitrile	6.18	41	23521	48.8886	ug/L	95
3) 3-Chloro-1-propene	6.60	41	508641	50.2487	ug/L	100
4) 2-Chloro-1,3-butadiene	7.99	53	607253	50.6565	ug/L	99
5) Ethyl Acetate	8.62	43	166201	49.1644	ug/L	100
6) Methacrylonitrile	8.77	67	70376	50.6442	ug/L	98
7) Isobutyl Alcohol	8.81	43	14323	98.2836	ug/L	96
8) 1-Butanol	9.73	56	3105	50.3795	ug/L	79
9) Methyl methacrylate	10.96	41	210106	50.6224	ug/L	99
10) 2-Nitropropane	11.27	43	71916	49.8977	ug/L	97
13) Cyclohexanone	15.32	55	12432	47.9236	ug/L	99

(#) = qualifier out of range (m) = manual integration
8M376560.D A9FOOWT.M Wed Feb 01 15:38:18 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\012512\8M376560.D Vial: 7
Acq On : 25 Jan 2012 13:58 Operator: ADC
Sample : WG387881-03 50ug/L A9FOO STD Inst : HPMS8
Misc : 1,1 STD49721 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 1 15:38 2012 Quant Results File: A9FOOWT.RES

Method : C:\MSDCHEM\1\METHODS\A9FOOWT.M (RTE Integrator)
Title : A9-FOO Water - IC: 01/25/12- HPMS8
Last Update : Wed Feb 01 15:35:09 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\012512\8M376561.D Vial: 8
Acq On : 25 Jan 2012 14:29 Operator: ADC
Sample : WG387881-04 100ug/L A9FOO STD Inst : HPMS8
Misc : 1,1 STD49721 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 01 15:38:19 2012 Quant Results File: A9FOOWT.RES

Quant Method : C:\MSDCHEM\1\METHODS\A9FOOWT.M (RTE Integrator)
Title : A9-FOO Water - IC: 01/25/12- HPMS8
Last Update : Wed Feb 01 15:35:09 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

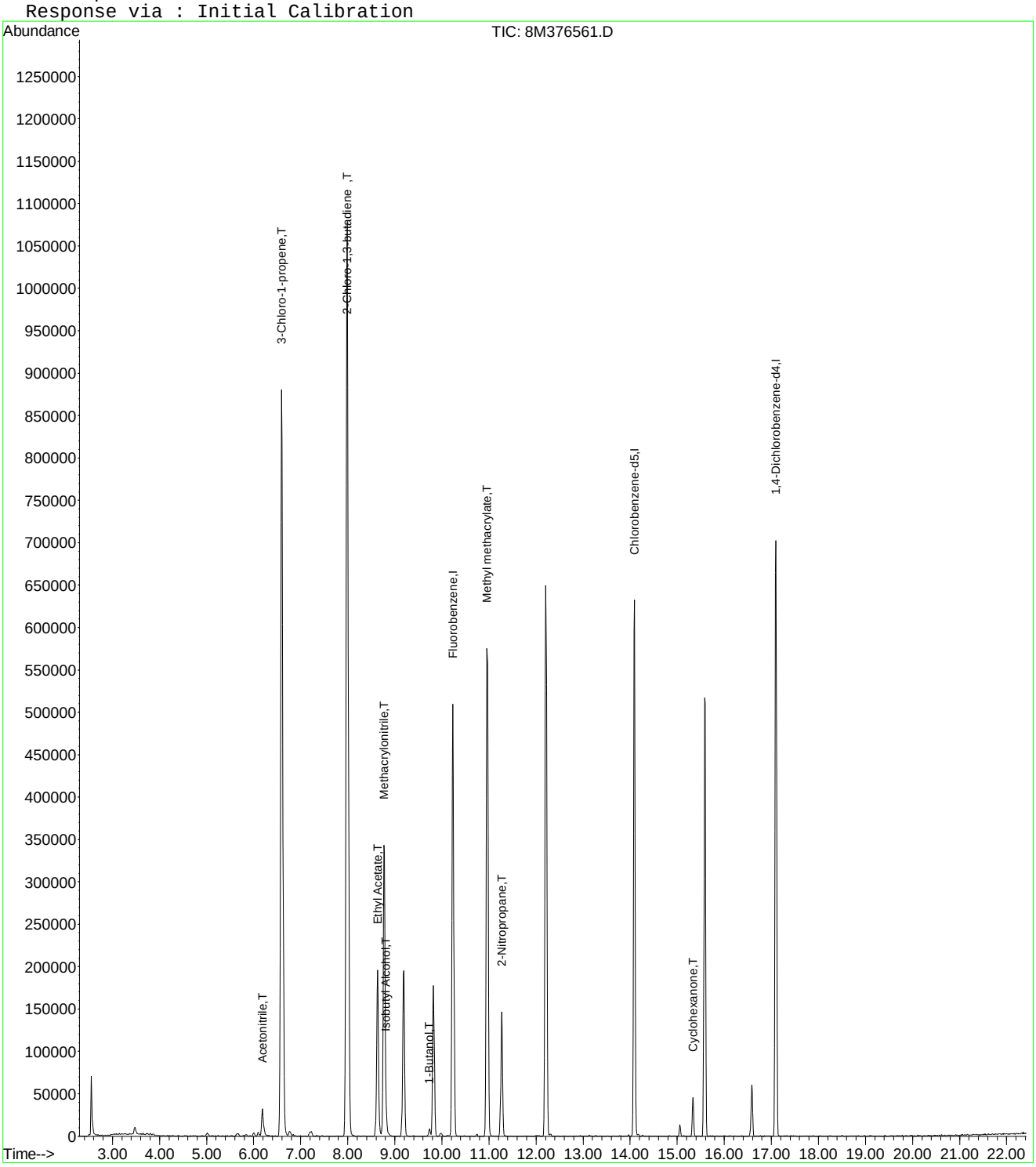
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.23	96	644867	25.00	ug/L	0.00
11) Chlorobenzene-d5	14.09	117	466673	25.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4	17.10	152	256948	25.00	ug/L	0.00
Target Compounds						Qvalue
2) Acetonitrile	6.19	41	49584	103.6457	ug/L	100
3) 3-Chloro-1-propene	6.60	41	1019216	101.2600	ug/L	100
4) 2-Chloro-1,3-butadiene	7.99	53	1196904	100.4113	ug/L	100
5) Ethyl Acetate	8.63	43	352520	104.8718	ug/L	100
6) Methacrylonitrile	8.77	67	141285	102.2491	ug/L	100
7) Isobutyl Alcohol	8.81	43	31160	215.0317	ug/L	100
8) 1-Butanol	9.73	56	7250	105.4560	ug/L	100
9) Methyl methacrylate	10.96	41	432008	104.6777	ug/L	100
10) 2-Nitropropane	11.27	43	151905	105.9950	ug/L	100
13) Cyclohexanone	15.33	55	24800	98.1298	ug/L	100

(#) = qualifier out of range (m) = manual integration
8M376561.D A9FOOWT.M Wed Feb 01 15:38:20 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\012512\8M376561.D Vial: 8
Acq On : 25 Jan 2012 14:29 Operator: ADC
Sample : WG387881-04 100ug/L A9FOO STD Inst : HPMS8
Misc : 1,1 STD49721 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 1 15:38 2012 Quant Results File: A9FOOWT.RES

Method : C:\MSDCHEM\1\METHODS\A9FOOWT.M (RTE Integrator)
Title : A9-FOO Water - IC: 01/25/12- HPMS8
Last Update : Wed Feb 01 15:35:09 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\012512\8M376562.D Vial: 9
Acq On : 25 Jan 2012 14:59 Operator: ADC
Sample : WG387881-05 200ug/L A9FOO STD Inst : HPMS8
Misc : 1,1 STD49721 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 01 15:38:21 2012 Quant Results File: A9FOOWT.RES

Quant Method : C:\MSDCHEM\1\METHODS\A9FOOWT.M (RTE Integrator)
Title : A9-FOO Water - IC: 01/25/12- HPMS8
Last Update : Wed Feb 01 15:35:09 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

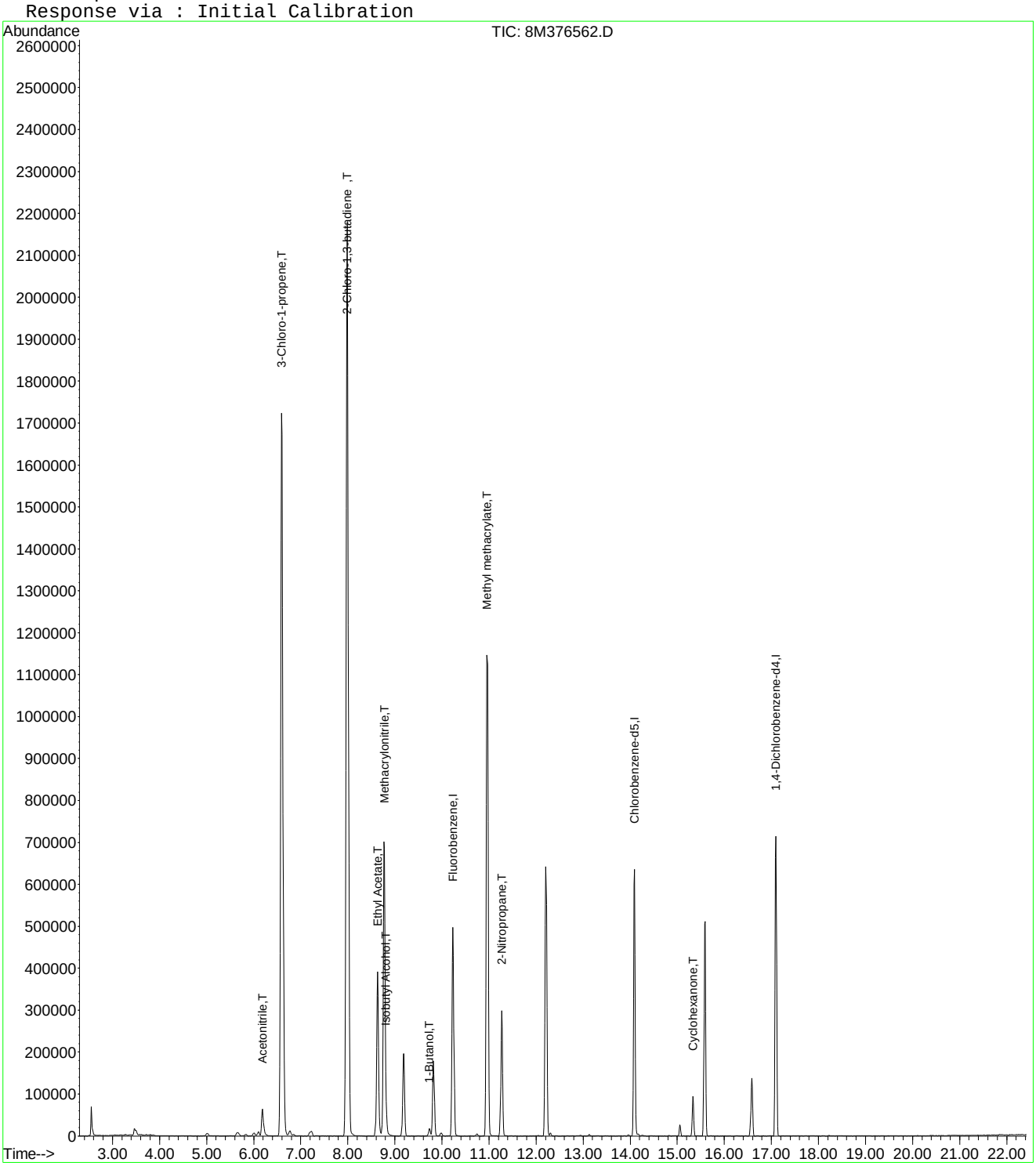
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.23	96	635990	25.00	ug/L	0.00
11) Chlorobenzene-d5	14.09	117	471643	25.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4	17.10	152	259529	25.00	ug/L	0.00
Target Compounds						Qvalue
2) Acetonitrile	6.19	41	102381	216.9947	ug/L	99
3) 3-Chloro-1-propene	6.59	41	2077765	209.3089	ug/L	100
4) 2-Chloro-1,3-butadiene	7.99	53	2418154	205.6965	ug/L	99
5) Ethyl Acetate	8.63	43	702184	211.8096	ug/L	99
6) Methacrylonitrile	8.78	67	287125	210.6949	ug/L	100
7) Isobutyl Alcohol	8.81	43	59100	413.5352	ug/L #	11
8) 1-Butanol	9.73	56	13732	193.7587	ug/L	75
9) Methyl methacrylate	10.96	41	874313	214.8073	ug/L	99
10) 2-Nitropropane	11.27	43	318671	225.4632	ug/L	93
13) Cyclohexanone	15.33	55	52772	206.7341	ug/L	98

(#) = qualifier out of range (m) = manual integration
8M376562.D A9FOOWT.M Wed Feb 01 15:38:22 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\012512\8M376562.D Vial: 9
Acq On : 25 Jan 2012 14:59 Operator: ADC
Sample : WG387881-05 200ug/L A9FOO STD Inst : HPMS8
Misc : 1,1 STD49721 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 1 15:38 2012 Quant Results File: A9FOOWT.RES

Method : C:\MSDCHEM\1\METHODS\A9FOOWT.M (RTE Integrator)
Title : A9-FOO Water - IC: 01/25/12- HPMS8
Last Update : Wed Feb 01 15:35:09 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\012512\8M376563.D Vial: 10
Acq On : 25 Jan 2012 15:29 Operator: ADC
Sample : WG387881-06 300ug/L A9FOO STD Inst : HPMS8
Misc : 1,1 STD49721 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 01 15:38:23 2012 Quant Results File: A9FOOWT.RES

Quant Method : C:\MSDCHEM\1\METHODS\A9FOOWT.M (RTE Integrator)
Title : A9-FOO Water - IC: 01/25/12- HPMS8
Last Update : Wed Feb 01 15:35:09 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

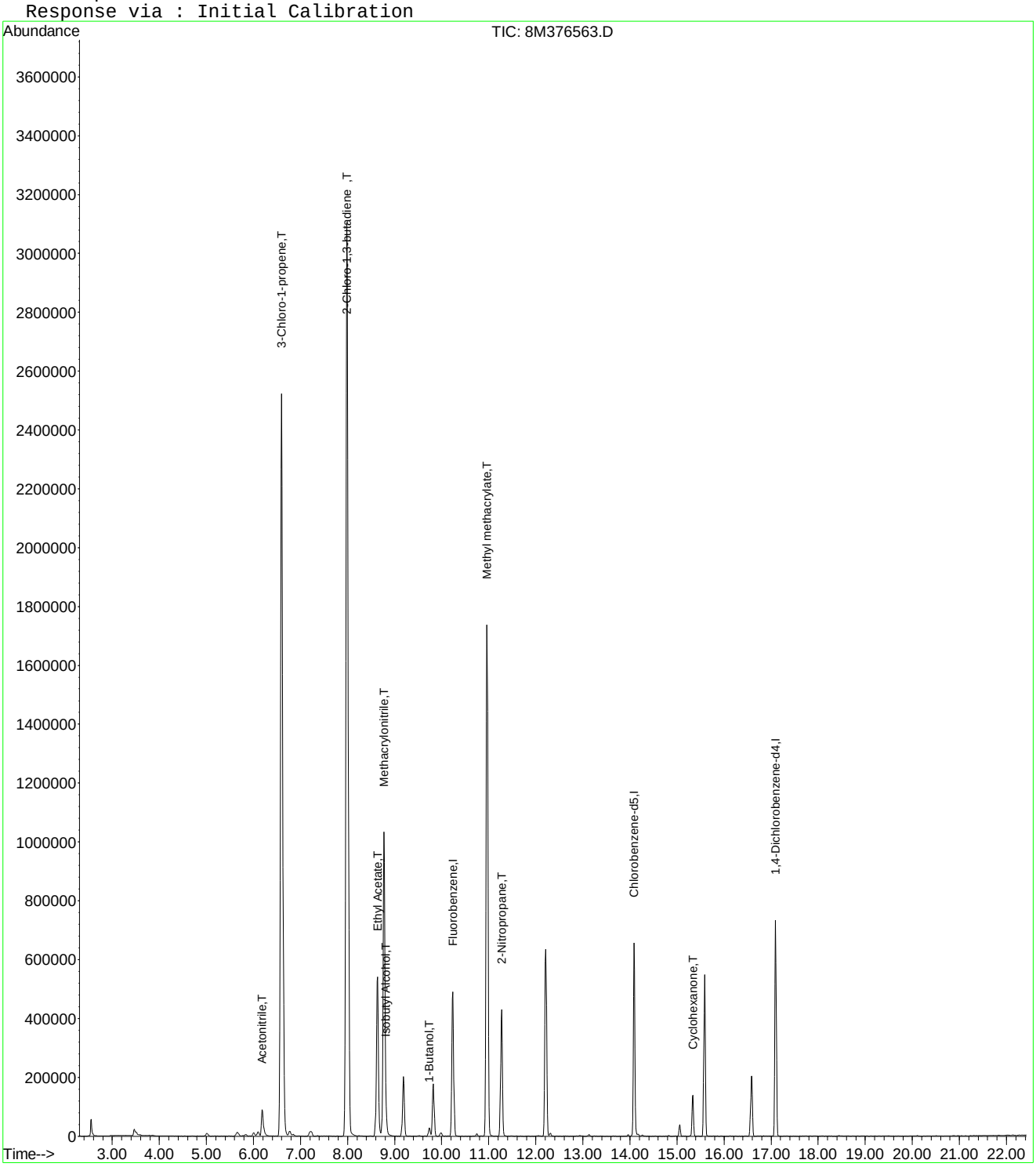
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	10.24	96	643596	25.00	ug/L		0.00
11) Chlorobenzene-d5	14.08	117	478604	25.00	ug/L		0.00
12) 1,4-Dichlorobenzene-d4	17.09	152	258958	25.00	ug/L		0.00
Target Compounds							Qvalue
2) Acetonitrile	6.19	41	145734	305.2302	ug/L		100
3) 3-Chloro-1-propene	6.60	41	2997257	298.3680	ug/L		100
4) 2-Chloro-1,3-butadiene	7.98	53	3489509	293.3218	ug/L		99
5) Ethyl Acetate	8.64	43	1024074	305.2552	ug/L		100
6) Methacrylonitrile	8.77	67	420542	304.9506	ug/L		100
7) Isobutyl Alcohol	8.81	43	90964	628.9722	ug/L	#	11
8) 1-Butanol	9.73	56	23466	320.6313	ug/L		90
9) Methyl methacrylate	10.96	41	1263842	306.8400	ug/L		100
10) 2-Nitropropane	11.27	43	460658	322.0689	ug/L		97
13) Cyclohexanone	15.34	55	79883	313.6314	ug/L		98

(#) = qualifier out of range (m) = manual integration
8M376563.D A9FOOWT.M Wed Feb 01 15:38:24 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\012512\8M376563.D Vial: 10
Acq On : 25 Jan 2012 15:29 Operator: ADC
Sample : WG387881-06 300ug/L A9FOO STD Inst : HPMS8
Misc : 1,1 STD49721 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 1 15:38 2012 Quant Results File: A9FOOWT.RES

Method : C:\MSDCHEM\1\METHODS\A9FOOWT.M (RTE Integrator)
Title : A9-FOO Water - IC: 01/25/12- HPMS8
Last Update : Wed Feb 01 15:35:09 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\012512\8M376564.D Vial: 11
Acq On : 25 Jan 2012 15:59 Operator: ADC
Sample : WG387881-07 400ug/L A9FOO STD Inst : HPMS8
Misc : 1,1 STD49721 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 01 15:38:25 2012 Quant Results File: A9FOOWT.RES

Quant Method : C:\MSDCHEM\1\METHODS\A9FOOWT.M (RTE Integrator)
Title : A9-FOO Water - IC: 01/25/12- HPMS8
Last Update : Wed Feb 01 15:35:09 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

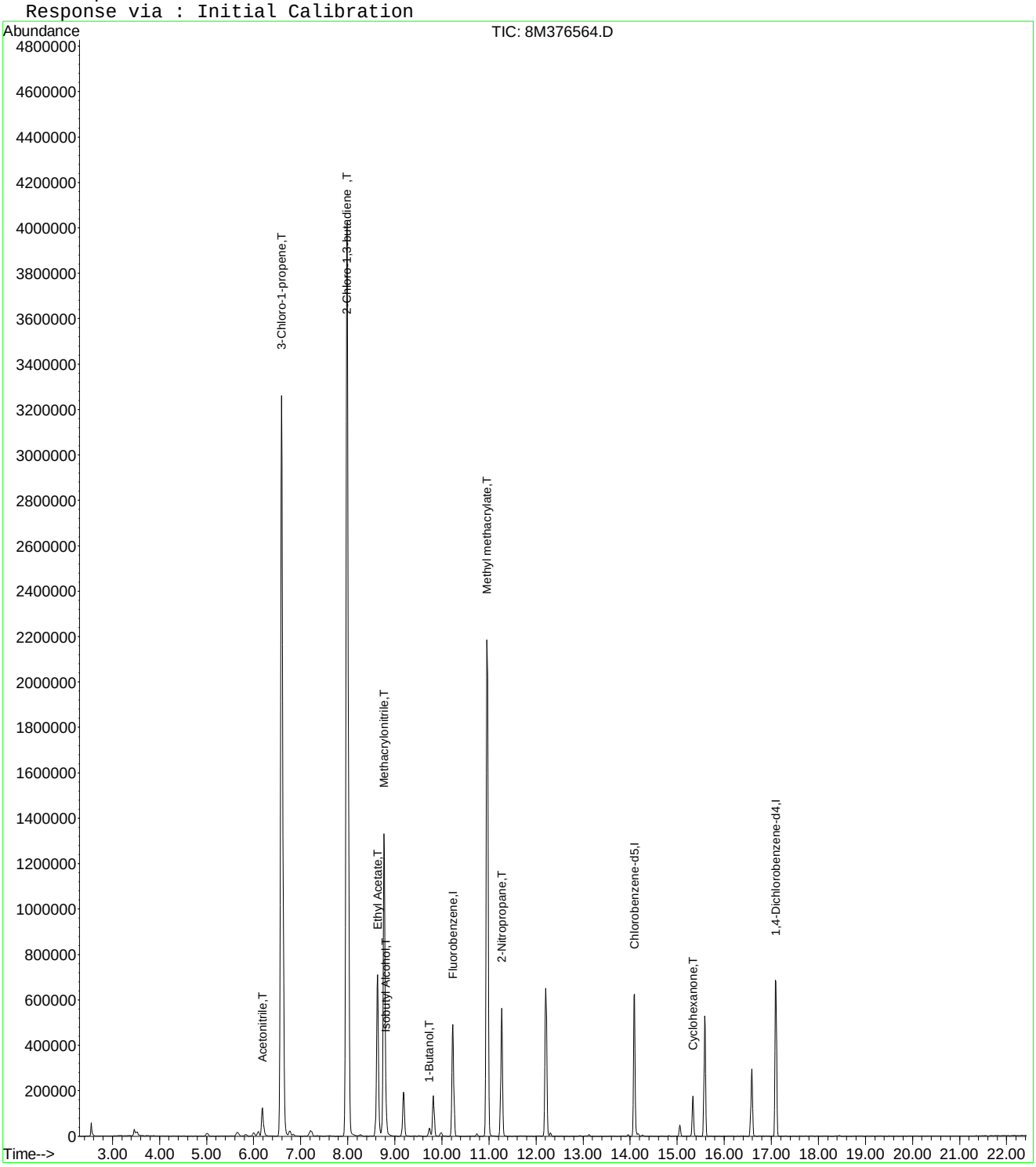
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.23	96	641318	25.00	ug/L	0.00
11) Chlorobenzene-d5	14.09	117	477949	25.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4	17.10	152	257944	25.00	ug/L	0.00
Target Compounds						Qvalue
2) Acetonitrile	6.19	41	195716	411.3703	ug/L	97
3) 3-Chloro-1-propene	6.60	41	3916511	391.2619	ug/L	100
4) 2-Chloro-1,3-butadiene	7.98	53	4569564	385.4736	ug/L	99
5) Ethyl Acetate	8.63	43	1295880	387.6470	ug/L	99
6) Methacrylonitrile	8.77	67	540691	393.4677	ug/L	98
7) Isobutyl Alcohol	8.81	43	116114	805.7242	ug/L	95
8) 1-Butanol	9.73	56	27906	380.8093	ug/L	86
9) Methyl methacrylate	10.96	41	1633999	398.1171	ug/L	100
10) 2-Nitropropane	11.27	43	593841	416.6585	ug/L	96
13) Cyclohexanone	15.33	55	97561	384.5434	ug/L	100

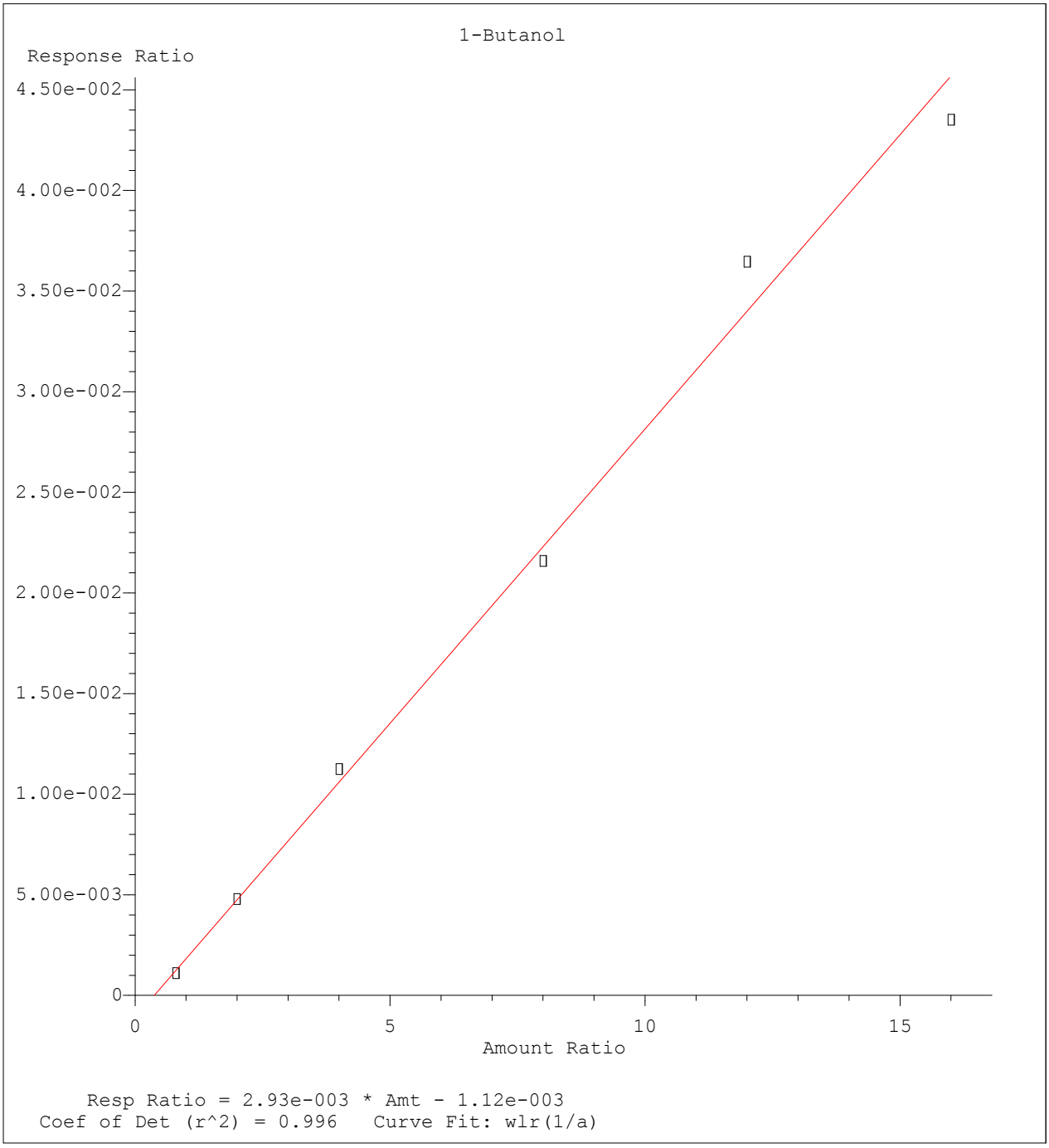
(#) = qualifier out of range (m) = manual integration
8M376564.D A9FOOWT.M Wed Feb 01 15:38:26 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\012512\8M376564.D Vial: 11
Acq On : 25 Jan 2012 15:59 Operator: ADC
Sample : WG387881-07 400ug/L A9FOO STD Inst : HPMS8
Misc : 1,1 STD49721 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 1 15:38 2012 Quant Results File: A9FOOWT.RES

Method : C:\MSDCHEM\1\METHODS\A9FOOWT.M (RTE Integrator)
Title : A9-FOO Water - IC: 01/25/12- HPMS8
Last Update : Wed Feb 01 15:35:09 2012
Response via : Initial Calibration





Method Name: C:\MSDCHEM\1\METHODS\A9FOOWT.M
Calibration Table Last Updated: Wed Feb 01 15:35:09 2012

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\012512\8M376565.D Vial: 12
Acq On : 25 Jan 2012 16:29 Operator: ADC
Sample : WG387881-08 100ug/L A9FOO ALT Inst : HPMS8
Misc : 1,1 STD49721 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 01 15:38:27 2012 Quant Results File: A9FOOWT.RES

Quant Method : C:\MSDCHEM\1\METHODS\A9FOOWT.M (RTE Integrator)
Title : A9-FOO Water - IC: 01/25/12- HPMS8
Last Update : Wed Feb 01 15:35:09 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

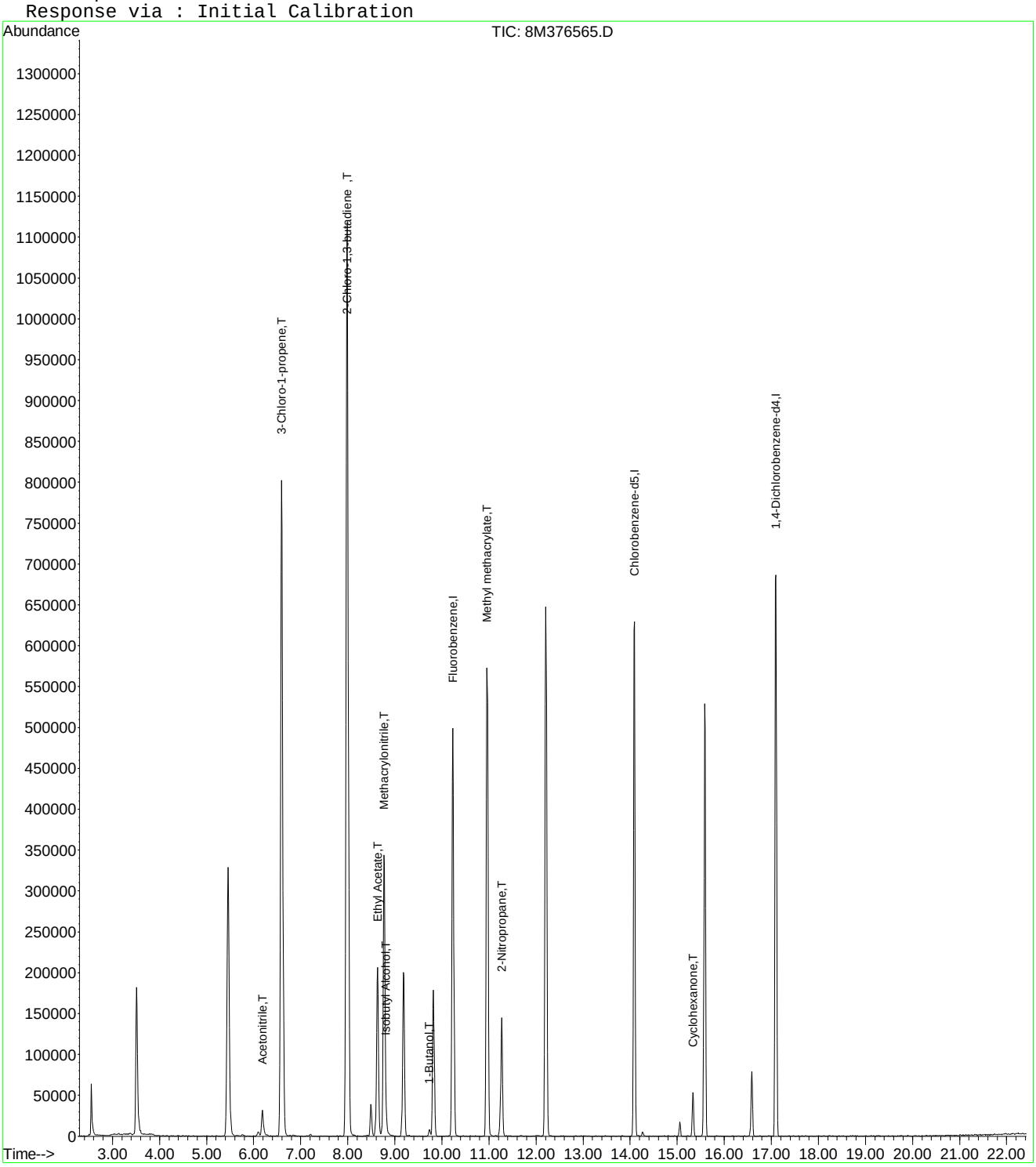
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.23	96	639588	25.00	ug/L	0.00
11) Chlorobenzene-d5	14.09	117	475173	25.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4	17.10	152	258713	25.00	ug/L	0.00
Target Compounds						Qvalue
2) Acetonitrile	6.19	41	44826	94.4734	ug/L	93
3) 3-Chloro-1-propene	6.59	41	937126	93.8727	ug/L	100
4) 2-Chloro-1,3-butadiene	7.99	53	1257481	106.3640	ug/L	99
5) Ethyl Acetate	8.63	43	386153	115.8255	ug/L	98
6) Methacrylonitrile	8.77	67	142494	103.9752	ug/L	99
7) Isobutyl Alcohol	8.81	43	32002	222.6651	ug/L	94
8) 1-Butanol	9.73	56	6562	97.0693	ug/L	93
9) Methyl methacrylate	10.96	41	422245	103.1565	ug/L	99
10) 2-Nitropropane	11.27	43	148207	104.2682	ug/L	96
13) Cyclohexanone	15.33	55	31305	123.0240	ug/L	97

(#) = qualifier out of range (m) = manual integration
8M376565.D A9FOOWT.M Wed Feb 01 15:38:28 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\012512\8M376565.D Vial: 12
Acq On : 25 Jan 2012 16:29 Operator: ADC
Sample : WG387881-08 100ug/L A9FOO ALT Inst : HPMS8
Misc : 1,1 STD49721 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 1 15:38 2012 Quant Results File: A9FOOWT.RES

Method : C:\MSDCHEM\1\METHODS\A9FOOWT.M (RTE Integrator)
Title : A9-FOO Water - IC: 01/25/12- HPMS8
Last Update : Wed Feb 01 15:35:09 2012
Response via : Initial Calibration



Data File : C:\MSDCHEM\1\DATA\012512\8M376565.D Vial: 12
Acq On : 25 Jan 2012 16:29 Operator: ADC
Sample : WG387881-08 100ug/L A9FOO ALT Inst : HPMS8
Misc : 1,1 STD49721 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\A9FOOWT.M (RTE Integrator)
Title : A9-FOO Water - IC: 01/25/12- HPMS8
Last Update : Wed Feb 01 15:35:09 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	99	0.00
2	T	Acetonitrile	100.000	94.473	5.5	90	0.00
3	T	3-Chloro-1-propene	100.000	93.873	6.1	92	0.00
4	T	2-Chloro-1,3-butadiene	100.000	106.364	-6.4	105	0.00
5	T	Ethyl Acetate	100.000	115.826	-15.8	110	0.00
6	T	Methacrylonitrile	100.000	103.975	-4.0	101	0.00
7	T	Isobutyl Alcohol	200.000	222.665	-11.3	103	0.00
8	T	1-Butanol	100.000	97.069	2.9	91	0.00
9	T	Methyl methacrylate	100.000	103.157	-3.2	98	0.00
10	T	2-Nitropropane	100.000	104.268	-4.3	98	0.00
11	I	Chlorobenzene-d5	25.000	25.000	0.0	102	0.00
12	I	1,4-Dichlorobenzene-d4	25.000	25.000	0.0	101	0.00
13	T	Cyclohexanone	100.000	123.024	-23.0	126	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
8M376565.D A9FOOWT.M Wed Feb 01 15:41:50 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\032712\8M377935.D Vial: 2
Acq On : 27 Mar 2012 11:14 Operator: adc
Sample : WG393321-02 0.3 ug/L STD 8260 Inst : HPMS8
Misc : 1,1 STD50782 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 28 08:21:06 2012 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\2\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	10.18	96	650257	25.00	ug/L		0.00
57) Chlorobenzene-d5	14.04	117	530488	25.00	ug/L		0.00
78) 1,4-Dichlorobenzene-d4	17.05	152	279514	25.00	ug/L		0.00
System Monitoring Compounds							
37) Dibromofluoromethane	9.13	111	1028	0.1524	ug/L		0.00
Spiked Amount 25.000	Range 86 - 118		Recovery =	0.60%#			
43) 1,2-Dichloroethane-d4	9.77	65	1284	0.2472	ug/L		0.00
Spiked Amount 25.000	Range 80 - 120		Recovery =	1.00%#			
58) Toluene-d8	12.17	98	3824	0.1561	ug/L		0.00
Spiked Amount 25.000	Range 88 - 110		Recovery =	0.64%#			
80) p-Bromofluorobenzene	15.54	95	1914	0.2117	ug/L		0.00
Spiked Amount 25.000	Range 86 - 115		Recovery =	0.84%#			
Target Compounds							Qvalue
13) Acetone	5.73	43	4434	4.6214	ug/L	#	1
14) 1,1-Dichloroethene	5.97	61	2586	0.2966	ug/L		86
19) Methylene Chloride	6.73	84	2421	0.3732	ug/L		96
23) trans-1,2-Dichloroethene	7.17	61	2463	0.2992	ug/L		95
27) 1,1-Dichloroethane	7.80	63	3301	0.3136	ug/L	#	68
29) 2-Butanone	8.36	43	1132	0.7929	ug/L	#	55
31) 2,2-Dichloropropane	8.58	77	2668	0.2946	ug/L	#	56
32) cis-1,2-Dichloroethene	8.63	96	2091	0.3068	ug/L		89
33) Chloroform	8.86	83	3634	0.3350	ug/L		83
35) Bromochloromethane	9.07	130	1113	0.2535	ug/L		75
36) Tetrahydrofuran	9.11	42	6593	6.8141	ug/L		98
38) 1,1,1-Trichloroethane	9.39	97	2844	0.2885	ug/L		94
40) 1,1-Dichloropropene	9.59	75	2834	0.3338	ug/L	#	69
42) Carbon Tetrachloride	9.73	117	2748	0.2980	ug/L	#	92
45) 1,2-Dichloroethane	9.89	62	1865	0.2794	ug/L	#	50
46) Benzene	9.94	78	9216	0.3699	ug/L		95
47) Trichloroethene	10.69	130	2406	0.2921	ug/L		80
49) 1,2-Dichloropropane	10.91	63	1509	0.2489	ug/L	#	60
50) Bromodichloromethane	11.20	83	2288	0.2926	ug/L	#	91
52) Dibromomethane	11.27	93	854	0.2721	ug/L		88
55) cis-1,3-Dichloropropene	11.84	75	2372	0.2577	ug/L	#	73
59) Toluene	12.26	91	10870	0.3715	ug/L		85
62) trans-1,3-Dichloropropene	12.44	75	2166	0.2668	ug/L		84
63) 1,1,2-Trichloroethane	12.64	97	1150	0.2543	ug/L		68
65) 1,3-Dichloropropane	12.95	76	2094	0.2828	ug/L		100
66) Tetrachloroethene	13.08	164	1675	0.2540	ug/L	#	77
67) Dibromochloromethane	13.33	129	1662	0.2500	ug/L		94
68) 1,2-Dibromoethane	13.58	107	1312	0.2693	ug/L		77
69) 1-Chlorohexane	13.74	91	1213	0.1241	ug/L	#	16
70) Chlorobenzene	14.09	112	6302	0.3083	ug/L		99
71) 1,1,1,2-Tetrachloroethane	14.12	131	2020	0.2715	ug/L		91
72) Ethylbenzene	14.13	106	3205	0.2952	ug/L		50
73) m-,p-Xylene	14.23	106	8762	0.6610	ug/L		80
74) o-Xylene	14.78	106	4178	0.3137	ug/L		81
75) Styrene	14.82	104	8895	0.3731	ug/L	#	36
76) Bromoform	15.28	173	596	0.1563	ug/L	#	27
77) Isopropylbenzene	15.21	105	10857	0.3244	ug/L		93
79) 1,1,2,2-Tetrachloroethane	15.41	83	987	0.2197	ug/L	#	79
83) n-Propylbenzene	15.72	91	13181	0.3641	ug/L		90
84) Bromobenzene	15.82	156	2674	0.2971	ug/L		91

(#) = qualifier out of range (m) = manual integration
8M377935.D 8260WT.M Wed Mar 28 08:22:04 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\032712\8M377935.D Vial: 2
Acq On : 27 Mar 2012 11:14 Operator: adc
Sample : WG393321-02 0.3 ug/L STD 8260 Inst : HPMS8
Misc : 1,1 STD50782 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 28 08:21:06 2012 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\2\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

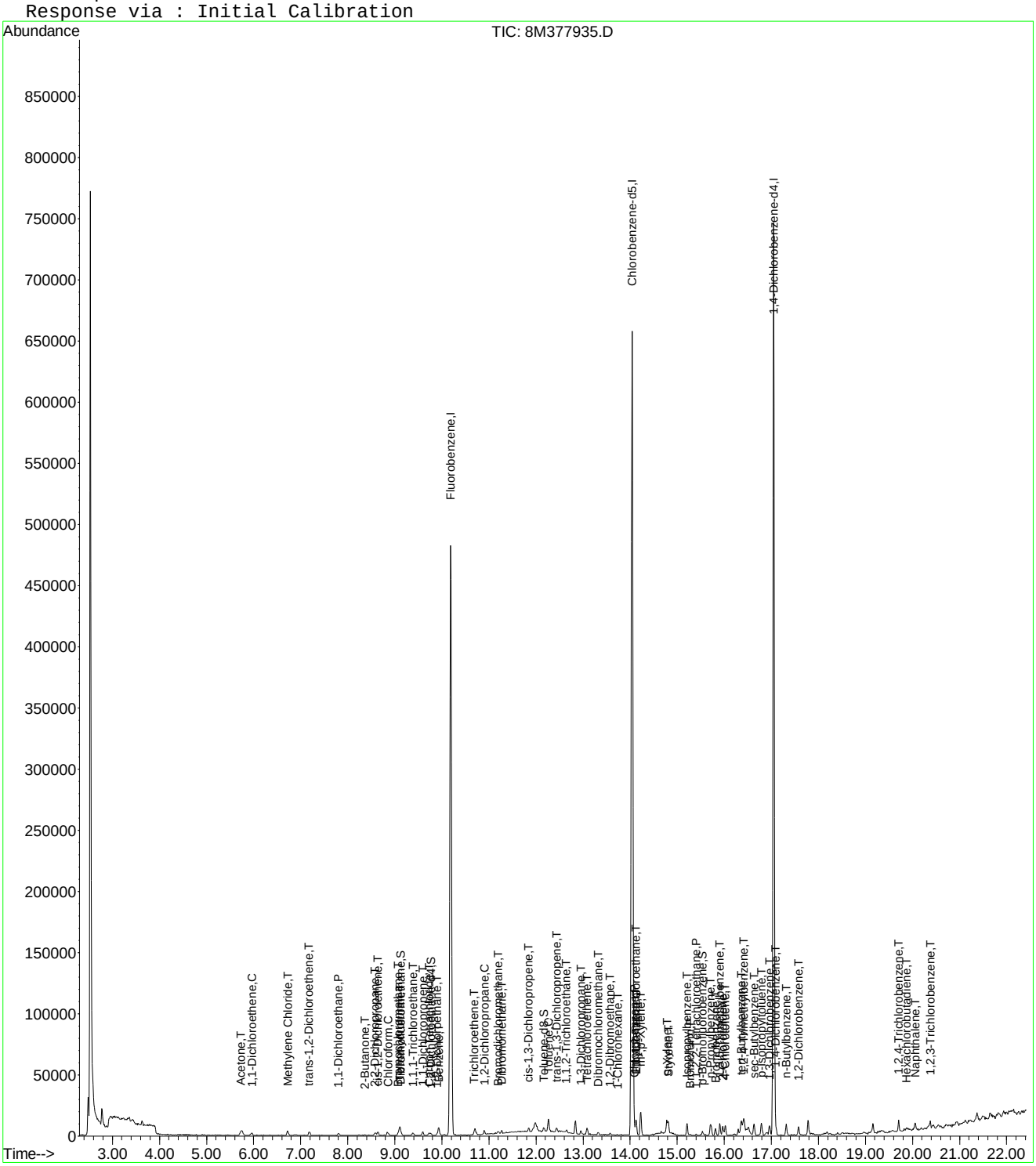
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
85)	1,3,5-Trimethylbenzene	15.90	105	8800	0.3260	ug/L		96
86)	2-Chlorotoluene	15.97	91	8121	0.3527	ug/L		92
87)	4-Chlorotoluene	16.02	91	7793	0.3580	ug/L		92
89)	tert-Butylbenzene	16.37	134	1962	0.3287	ug/L	#	73
90)	1,2,4-Trimethylbenzene	16.42	105	22731	0.4973	ug/L	#	51
91)	sec-Butylbenzene	16.64	105	11971	0.3626	ug/L		92
92)	p-Isopropyltoluene	16.79	119	8954	0.3005	ug/L		90
93)	1,3-Dichlorobenzene	16.97	146	5663	0.3189	ug/L		90
94)	1,4-Dichlorobenzene	17.09	146	5763	0.3233	ug/L	#	12
95)	n-Butylbenzene	17.32	91	9002	0.3865	ug/L	#	86
96)	1,2-Dichlorobenzene	17.58	146	5107	0.3226	ug/L		95
98)	1,2,4-Trichlorobenzene	19.71	182	3388	0.3178	ug/L		99
99)	Hexachlorobutadiene	19.87	225	1111	0.2933	ug/L	#	66
100)	Naphthalene	20.06	128	6947	0.3330	ug/L		92
101)	1,2,3-Trichlorobenzene	20.38	180	3053	0.3341	ug/L	#	85

(#) = qualifier out of range (m) = manual integration
8M377935.D 8260WT.M Wed Mar 28 08:22:04 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\032712\8M377935.D Vial: 2
Acq On : 27 Mar 2012 11:14 Operator: adc
Sample : WG393321-02 0.3 ug/L STD 8260 Inst : HPMS8
Misc : 1,1 STD50782 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 28 8:21 2012 Quant Results File: 8260WT.RES

Method : C:\MSDCHEM\2\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\032712\8M377936.D Vial: 3
Acq On : 27 Mar 2012 11:45 Operator: adc
Sample : WG393321-03 0.4 ug/L STD 8260 Inst : HPMS8
Misc : 1,1 STD50782 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 28 08:21:06 2012 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\2\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.18	96	626398	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.04	117	528645	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.05	152	285256	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.14	111	409	0.0629	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery =	0.24%#		
43) 1,2-Dichloroethane-d4	0.00	65	0	0.0000	ug/L	
Spiked Amount 25.000	Range 80 - 120		Recovery =	0.00%#		
58) Toluene-d8	12.16	98	3197	0.1310	ug/L	-0.01
Spiked Amount 25.000	Range 88 - 110		Recovery =	0.52%#		
80) p-Bromofluorobenzene	15.54	95	1073	0.1163	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery =	0.48%#		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.82	85	2656	0.3898	ug/L #	59
3) Chloromethane	3.21	50	4943	0.6295	ug/L	85
4) Vinyl Chloride	3.43	62	3029	0.4628	ug/L	83
6) Bromomethane	4.25	94	1852	0.3654	ug/L	91
7) Chloroethane	4.39	64	1462	0.3468	ug/L #	44
8) Trichlorofluoromethane	4.89	101	3936	0.4073	ug/L #	83
10) Isoprene	5.46	67	1981	0.2605	ug/L	99
12) 1,1,2-Trichloro-1,2,2-Trif	5.67	101	1975	0.3403	ug/L #	57
13) Acetone	5.73	43	200	0.2164	ug/L #	47
14) 1,1-Dichloroethene	5.95	61	3206	0.3817	ug/L	77
16) Dimethyl Sulfide	6.21	62	1832	0.3099	ug/L	100
17) Iodomethane	6.44	142	2536	0.2587	ug/L	92
18) Methyl acetate	6.49	43	594	0.2042	ug/L #	64
19) Methylene Chloride	6.72	84	2404	0.3847	ug/L	85
20) Carbon Disulfide	6.75	76	5299	0.3284	ug/L #	86
22) Methyl Tert Butyl Ether	6.96	73	3711	0.3470	ug/L #	52
23) trans-1,2-Dichloroethene	7.18	61	2911	0.3670	ug/L	93
24) n-Hexane	7.31	57	2374	0.3280	ug/L	86
27) 1,1-Dichloroethane	7.79	63	4239	0.4181	ug/L #	77
31) 2,2-Dichloropropane	8.59	77	3620	0.4150	ug/L #	55
32) cis-1,2-Dichloroethene	8.64	96	2400	0.3655	ug/L	94
33) Chloroform	8.86	83	4097	0.3921	ug/L	97
35) Bromochloromethane	9.07	130	1700	0.4020	ug/L	98
38) 1,1,1-Trichloroethane	9.39	97	3859	0.4064	ug/L	81
39) Cyclohexane	9.43	56	2868	0.3057	ug/L #	85
40) 1,1-Dichloropropene	9.59	75	3187	0.3897	ug/L	92
42) Carbon Tetrachloride	9.74	117	3410	0.3839	ug/L #	92
45) 1,2-Dichloroethane	9.89	62	2384	0.3708	ug/L #	80
46) Benzene	9.93	78	10624	0.4426	ug/L	93
47) Trichloroethene	10.71	130	2852	0.3594	ug/L	93
48) Methylcyclohexane	10.80	83	2669	0.2910	ug/L	96
49) 1,2-Dichloropropane	10.90	63	2206	0.3777	ug/L	77
50) Bromodichloromethane	11.20	83	2668	0.3541	ug/L #	86
52) Dibromomethane	11.26	93	875	0.2894	ug/L	81
55) cis-1,3-Dichloropropene	11.84	75	3410	0.3846	ug/L	93
56) Dimethyl Disulfide	12.09	94	3062	0.3119	ug/L	99
59) Toluene	12.26	91	15145	0.5195	ug/L	95
60) Ethyl Methacrylate	12.39	69	1821	0.3581	ug/L	96
62) trans-1,3-Dichloropropene	12.44	75	3234	0.3998	ug/L	85
63) 1,1,2-Trichloroethane	12.65	97	1558	0.3457	ug/L	94

(#) = qualifier out of range (m) = manual integration
8M377936.D 8260WT.M Wed Mar 28 08:22:28 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\032712\8M377936.D Vial: 3
Acq On : 27 Mar 2012 11:45 Operator: adc
Sample : WG393321-03 0.4 ug/L STD 8260 Inst : HPMS8
Misc : 1,1 STD50782 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 28 08:21:06 2012 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\2\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

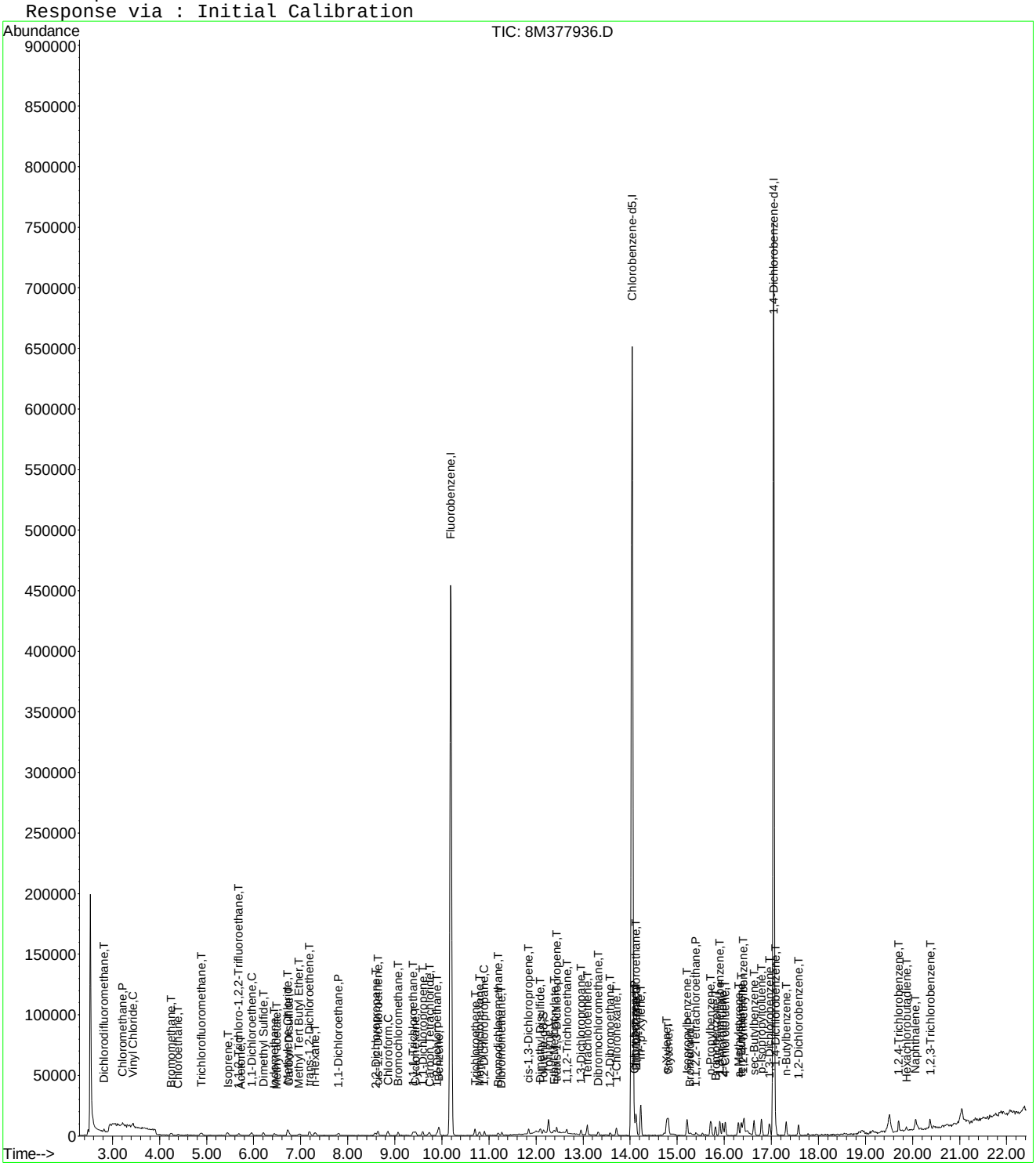
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
65)	1,3-Dichloropropane	12.95	76	3004	0.4071	ug/L		96
66)	Tetrachloroethene	13.09	164	2615	0.3980	ug/L		94
67)	Dibromochloromethane	13.33	129	2197	0.3317	ug/L		94
68)	1,2-Dibromoethane	13.57	107	1851	0.3812	ug/L		96
69)	1-Chlorohexane	13.71	91	4831	0.4961	ug/L	#	63
70)	Chlorobenzene	14.09	112	8818	0.4329	ug/L		90
71)	1,1,1,2-Tetrachloroethane	14.12	131	2966	0.4001	ug/L		99
72)	Ethylbenzene	14.13	106	4597	0.4248	ug/L		73
73)	m-,p-Xylene	14.23	106	11229	0.8500	ug/L		88
74)	o-Xylene	14.77	106	5672	0.4274	ug/L		89
75)	Styrene	14.81	104	11407	0.4802	ug/L		87
76)	Bromoform	15.27	173	1353	0.3560	ug/L	#	67
77)	Isopropylbenzene	15.21	105	14418	0.4322	ug/L		95
79)	1,1,2,2-Tetrachloroethane	15.39	83	1761	0.3841	ug/L	#	94
83)	n-Propylbenzene	15.71	91	16154	0.4373	ug/L		94
84)	Bromobenzene	15.82	156	3526	0.3839	ug/L		84
85)	1,3,5-Trimethylbenzene	15.90	105	11275	0.4092	ug/L		99
86)	2-Chlorotoluene	15.96	91	10091	0.4294	ug/L		94
87)	4-Chlorotoluene	16.01	91	10326	0.4648	ug/L		95
88)	a-Methylstyrene	16.30	118	5780	0.3528	ug/L		94
89)	tert-Butylbenzene	16.37	134	2393	0.3928	ug/L		82
90)	1,2,4-Trimethylbenzene	16.41	105	19671	0.3638	ug/L	#	66
91)	sec-Butylbenzene	16.63	105	15338	0.4553	ug/L		91
92)	p-Isopropyltoluene	16.79	119	12564	0.4132	ug/L		99
93)	1,3-Dichlorobenzene	16.97	146	7595	0.4190	ug/L		100
94)	1,4-Dichlorobenzene	17.09	146	7565	0.4159	ug/L		92
95)	n-Butylbenzene	17.32	91	10164	0.4276	ug/L		95
96)	1,2-Dichlorobenzene	17.58	146	6153	0.3808	ug/L		97
98)	1,2,4-Trichlorobenzene	19.71	182	4595	0.4223	ug/L		83
99)	Hexachlorobutadiene	19.88	225	1370	0.3544	ug/L		92
100)	Naphthalene	20.06	128	8827	0.4146	ug/L		98
101)	1,2,3-Trichlorobenzene	20.38	180	3541	0.3798	ug/L		94

(#) = qualifier out of range (m) = manual integration
8M377936.D 8260WT.M Wed Mar 28 08:22:28 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\032712\8M377936.D Vial: 3
Acq On : 27 Mar 2012 11:45 Operator: adc
Sample : WG393321-03 0.4 ug/L STD 8260 Inst : HPMS8
Misc : 1,1 STD50782 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 28 8:21 2012 Quant Results File: 8260WT.RES

Method : C:\MSDCHEM\2\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\032712\8M377937.D Vial: 4
Acq On : 27 Mar 2012 12:15 Operator: adc
Sample : WG393321-04 1.0 ug/L STD 8260 Inst : HPMS8
Misc : 1,1 STD50782 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 28 08:21:07 2012 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\2\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.18	96	638053	25.00 ug/L	0.00
57) Chlorobenzene-d5	14.04	117	545262	25.00 ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.05	152	296609	25.00 ug/L	0.00
System Monitoring Compounds					
37) Dibromofluoromethane	9.14	111	3914	0.5913 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery =	2.36%#	
43) 1,2-Dichloroethane-d4	9.77	65	3537	0.6939 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery =	2.76%#	
58) Toluene-d8	12.17	98	17497	0.6950 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery =	2.76%#	
80) p-Bromofluorobenzene	15.54	95	6710	0.6993 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery =	2.80%#	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	2.82	85	6858	0.9882 ug/L	99
3) Chloromethane	3.22	50	9685	1.2108 ug/L	94
4) Vinyl Chloride	3.43	62	7377	1.1066 ug/L	92
5) 1,3-Butadiene	3.48	54	6040	Below Cal #	73
6) Bromomethane	4.25	94	5317	1.0299 ug/L	99
7) Chloroethane	4.40	64	4301	1.0015 ug/L #	76
8) Trichlorofluoromethane	4.89	101	9874	1.0031 ug/L #	96
9) Diethyl ether	5.42	59	7838	2.1874 ug/L	92
10) Isoprene	5.46	67	8572	1.1066 ug/L	93
11) Acrolein	5.61	56	206	0.5090 ug/L #	10
12) 1,1,2-Trichloro-1,2,2-Trif	5.69	101	6598	1.1161 ug/L	88
13) Acetone	5.72	43	1528	1.6230 ug/L #	47
14) 1,1-Dichloroethene	5.95	61	8792	1.0277 ug/L	98
15) Tert-Butyl Alcohol	6.10	59	637	4.7585 ug/L #	57
16) Dimethyl Sulfide	6.21	62	6542	1.0863 ug/L	98
17) Iodomethane	6.44	142	8876	0.8888 ug/L	94
18) Methyl acetate	6.48	43	3340	1.1273 ug/L #	64
19) Methylene Chloride	6.72	84	7158	1.1244 ug/L	98
20) Carbon Disulfide	6.75	76	17504	1.0649 ug/L	99
21) Acrylonitrile	6.88	53	930	0.7297 ug/L #	47
22) Methyl Tert Butyl Ether	6.99	73	11971	1.0990 ug/L	92
23) trans-1,2-Dichloroethene	7.19	61	8040	0.9952 ug/L	97
24) n-Hexane	7.30	57	7951	1.0786 ug/L	95
25) Diisopropyl ether	7.65	45	42105	2.1606 ug/L	99
26) Vinyl Acetate	7.78	43	6720	1.0736 ug/L #	74
27) 1,1-Dichloroethane	7.79	63	10212	0.9888 ug/L #	94
28) Ethyl-Tert-Butyl ether	8.22	59	33168	2.0768 ug/L	99
29) 2-Butanone	8.36	43	1447	1.0329 ug/L #	55
31) 2,2-Dichloropropane	8.58	77	9352	1.0525 ug/L	89
32) cis-1,2-Dichloroethene	8.64	96	6790	1.0152 ug/L	98
33) Chloroform	8.85	83	10640	0.9996 ug/L	97
34) 1-Bromopropane	8.99	122	1077	0.7958 ug/L	97
35) Bromochloromethane	9.08	130	4105	0.9530 ug/L	98
36) Tetrahydrofuran	9.12	42	1960	2.0645 ug/L #	38
38) 1,1,1-Trichloroethane	9.40	97	9208	0.9521 ug/L	94
39) Cyclohexane	9.44	56	10119	1.0590 ug/L	97
40) 1,1-Dichloropropene	9.59	75	8775	1.0533 ug/L	91
41) Tert-Amyl-Methyl ether	9.72	73	27614	2.1129 ug/L #	99
42) Carbon Tetrachloride	9.73	117	9136	1.0097 ug/L	98
45) 1,2-Dichloroethane	9.89	62	6558	1.0013 ug/L	96

(#) = qualifier out of range (m) = manual integration
8M377937.D 8260WT.M Wed Mar 28 08:23:20 2012 Page 1

Data File : C:\MSDCHEM\2\DATA\032712\8M377937.D Vial: 4
Acq On : 27 Mar 2012 12:15 Operator: adc
Sample : WG393321-04 1.0 ug/L STD 8260 Inst : HPMS8
Misc : 1,1 STD50782 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 28 08:21:07 2012 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\2\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

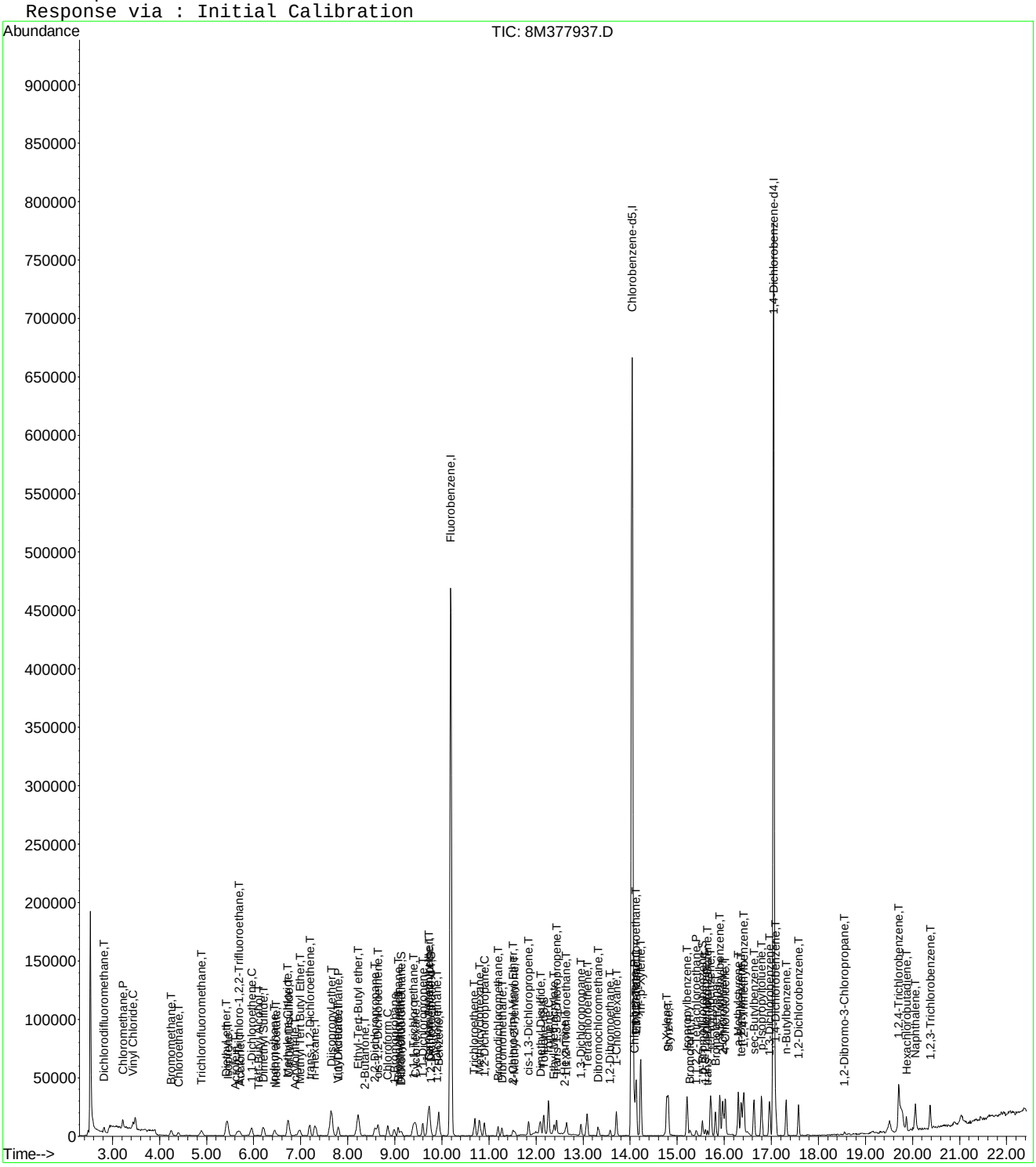
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	Benzene	9.93	78	26693	1.0917	ug/L		96
47)	Trichloroethene	10.69	130	8435	1.0436	ug/L		95
48)	Methylcyclohexane	10.80	83	10318	1.1045	ug/L		98
49)	1,2-Dichloropropane	10.91	63	6029	1.0135	ug/L		99
50)	Bromodichloromethane	11.20	83	8166	1.0642	ug/L	#	90
52)	Dibromomethane	11.28	93	3205	1.0407	ug/L		97
53)	2-Chloroethyl Vinyl Ether	11.52	63	2403	0.8803	ug/L		80
54)	4-Methyl-2-Pentanone	11.54	58	1124	0.9101	ug/L	#	47
55)	cis-1,3-Dichloropropene	11.84	75	9050	1.0020	ug/L		94
56)	Dimethyl Disulfide	12.10	94	8743	0.8742	ug/L		91
59)	Toluene	12.26	91	32585	1.0836	ug/L		99
60)	Ethyl Methacrylate	12.37	69	5265	1.0037	ug/L		91
62)	trans-1,3-Dichloropropene	12.44	75	8841	1.0597	ug/L		94
63)	1,1,2-Trichloroethane	12.64	97	4782	1.0287	ug/L		99
64)	2-Hexanone	12.61	58	841	0.7214	ug/L	#	32
65)	1,3-Dichloropropane	12.95	76	8216	1.0795	ug/L		99
66)	Tetrachloroethene	13.09	164	6778	1.0000	ug/L		97
67)	Dibromochloromethane	13.33	129	6866	1.0049	ug/L		100
68)	1,2-Dibromoethane	13.57	107	5329	1.0641	ug/L		92
69)	1-Chlorohexane	13.71	91	10795	1.0748	ug/L		94
70)	Chlorobenzene	14.09	112	21963	1.0453	ug/L		75
71)	1,1,1,2-Tetrachloroethane	14.12	131	7947	1.0393	ug/L		96
72)	Ethylbenzene	14.13	106	11229	1.0061	ug/L		84
73)	m-,p-Xylene	14.23	106	28587	2.0980	ug/L		92
74)	o-Xylene	14.77	106	13719	1.0023	ug/L		92
75)	Styrene	14.82	104	27739	1.1320	ug/L		98
76)	Bromoform	15.27	173	3729	0.9514	ug/L		90
77)	Isopropylbenzene	15.21	105	35401	1.0290	ug/L		97
79)	1,1,2,2-Tetrachloroethane	15.40	83	4656	0.9768	ug/L	#	92
81)	1,2,3-Trichloropropane	15.59	110	1428	0.9056	ug/L		70
82)	trans-1,4-Dichloro-2-Buten	15.64	53	1267	0.9182	ug/L		82
83)	n-Propylbenzene	15.71	91	39237	1.0214	ug/L		97
84)	Bromobenzene	15.82	156	9795	1.0257	ug/L		92
85)	1,3,5-Trimethylbenzene	15.90	105	29229	1.0203	ug/L		99
86)	2-Chlorotoluene	15.97	91	25764	1.0544	ug/L		96
87)	4-Chlorotoluene	16.01	91	24848	1.0757	ug/L		95
88)	a-Methylstyrene	16.29	118	17597	1.0330	ug/L		98
89)	tert-Butylbenzene	16.36	134	5969	0.9424	ug/L		74
90)	1,2,4-Trimethylbenzene	16.42	105	34667	0.8811	ug/L		87
91)	sec-Butylbenzene	16.63	105	35873	1.0241	ug/L		99
92)	p-Isopropyltoluene	16.79	119	32768	1.0364	ug/L		97
93)	1,3-Dichlorobenzene	16.97	146	19685	1.0445	ug/L		97
94)	1,4-Dichlorobenzene	17.09	146	19470	1.0294	ug/L		76
95)	n-Butylbenzene	17.32	91	25384	1.0271	ug/L		98
96)	1,2-Dichlorobenzene	17.58	146	17652	1.0507	ug/L		100
97)	1,2-Dibromo-3-Chloropropan	18.55	75	720	0.8775	ug/L		91
98)	1,2,4-Trichlorobenzene	19.71	182	11730	1.0368	ug/L		97
99)	Hexachlorobutadiene	19.88	225	3649	0.9078	ug/L		98
100)	Naphthalene	20.06	128	24384	1.1014	ug/L		99
101)	1,2,3-Trichlorobenzene	20.38	180	10004	1.0318	ug/L		98

(#) = qualifier out of range (m) = manual integration
8M377937.D 8260WT.M Wed Mar 28 08:23:20 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\032712\8M377937.D Vial: 4
Acq On : 27 Mar 2012 12:15 Operator: adc
Sample : WG393321-04 1.0 ug/L STD 8260 Inst : HPMS8
Misc : 1,1 STD50782 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 28 8:21 2012 Quant Results File: 8260WT.RES

Method : C:\MSDCHEM\2\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\032712\8M377938.D Vial: 5
Acq On : 27 Mar 2012 12:46 Operator: adc
Sample : WG393321-05 2.0 ug/L STD 8260 Inst : HPMS8
Misc : 1,1 STD50782 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 28 08:21:07 2012 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\2\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	10.19	96	631725	25.00	ug/L		0.00
57) Chlorobenzene-d5	14.04	117	529182	25.00	ug/L		0.00
78) 1,4-Dichlorobenzene-d4	17.05	152	285440	25.00	ug/L		0.00
System Monitoring Compounds							
37) Dibromofluoromethane	9.13	111	7080	1.0803	ug/L		0.00
Spiked Amount 25.000	Range 86 - 118		Recovery =	4.32%#			
43) 1,2-Dichloroethane-d4	9.77	65	5968	1.1825	ug/L		0.00
Spiked Amount 25.000	Range 80 - 120		Recovery =	4.72%#			
58) Toluene-d8	12.16	98	30704	1.2567	ug/L		0.00
Spiked Amount 25.000	Range 88 - 110		Recovery =	5.04%#			
80) p-Bromofluorobenzene	15.54	95	11544	1.2502	ug/L		0.00
Spiked Amount 25.000	Range 86 - 115		Recovery =	5.00%#			
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.82	85	14521	2.1133	ug/L		95
3) Chloromethane	3.22	50	17327	2.1879	ug/L		95
4) Vinyl Chloride	3.43	62	13917	2.1085	ug/L		99
5) 1,3-Butadiene	3.48	54	12744	1.4903	ug/L	#	68
6) Bromomethane	4.25	94	10952	2.1426	ug/L		96
7) Chloroethane	4.41	64	8927	2.0995	ug/L		98
8) Trichlorofluoromethane	4.88	101	20645	2.1183	ug/L		97
9) Diethyl ether	5.42	59	14498	4.0866	ug/L		96
10) Isoprene	5.44	67	15552	2.0278	ug/L		99
11) Acrolein	5.63	56	1174	2.9299	ug/L		70
12) 1,1,2-Trichloro-1,2,2-Trif	5.68	101	11993	2.0490	ug/L		100
13) Acetone	5.72	43	2022	2.1693	ug/L	#	67
14) 1,1-Dichloroethene	5.95	61	17461	2.0616	ug/L		97
15) Tert-Butyl Alcohol	6.07	59	1480	7.6882	ug/L	#	57
16) Dimethyl Sulfide	6.21	62	12352	2.0716	ug/L		93
17) Iodomethane	6.44	142	18697	1.8910	ug/L		99
18) Methyl acetate	6.47	43	5725	1.9517	ug/L	#	89
19) Methylene Chloride	6.72	84	13240	2.1007	ug/L		95
20) Carbon Disulfide	6.74	76	33631	2.0666	ug/L		99
21) Acrylonitrile	6.89	53	1796	1.4234	ug/L		95
22) Methyl Tert Butyl Ether	6.96	73	21385	1.9829	ug/L		99
23) trans-1,2-Dichloroethene	7.19	61	16469	2.0590	ug/L		99
24) n-Hexane	7.30	57	14579	1.9976	ug/L		99
25) Diisopropyl ether	7.64	45	81825	4.2409	ug/L		98
26) Vinyl Acetate	7.79	43	11958	1.9295	ug/L		93
27) 1,1-Dichloroethane	7.80	63	21508	2.1035	ug/L		96
28) Ethyl-Tert-Butyl ether	8.21	59	66322	4.1944	ug/L		98
29) 2-Butanone	8.36	43	2429	1.7512	ug/L	#	55
30) Propionitrile	8.45	54	1265	4.0164	ug/L	#	56
31) 2,2-Dichloropropane	8.58	77	17554	1.9953	ug/L		99
32) cis-1,2-Dichloroethene	8.64	96	13641	2.0600	ug/L		96
33) Chloroform	8.85	83	21669	2.0562	ug/L		97
34) 1-Bromopropane	9.00	122	2761	2.0605	ug/L		90
35) Bromochloromethane	9.07	130	8765	2.0552	ug/L		97
36) Tetrahydrofuran	9.11	42	3659	3.8926	ug/L		99
38) 1,1,1-Trichloroethane	9.38	97	19802	2.0680	ug/L		99
39) Cyclohexane	9.43	56	19478	2.0588	ug/L		99
40) 1,1-Dichloropropene	9.59	75	16358	1.9833	ug/L		98
41) Tert-Amyl-Methyl ether	9.72	73	53574	4.1403	ug/L	#	98
42) Carbon Tetrachloride	9.73	117	19232	2.1468	ug/L		95

(#) = qualifier out of range (m) = manual integration
8M377938.D 8260WT.M Wed Mar 28 08:23:53 2012 Page 1

Data File : C:\MSDCHEM\2\DATA\032712\8M377938.D Vial: 5
Acq On : 27 Mar 2012 12:46 Operator: adc
Sample : WG393321-05 2.0 ug/L STD 8260 Inst : HPMS8
Misc : 1,1 STD50782 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 28 08:21:07 2012 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\2\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

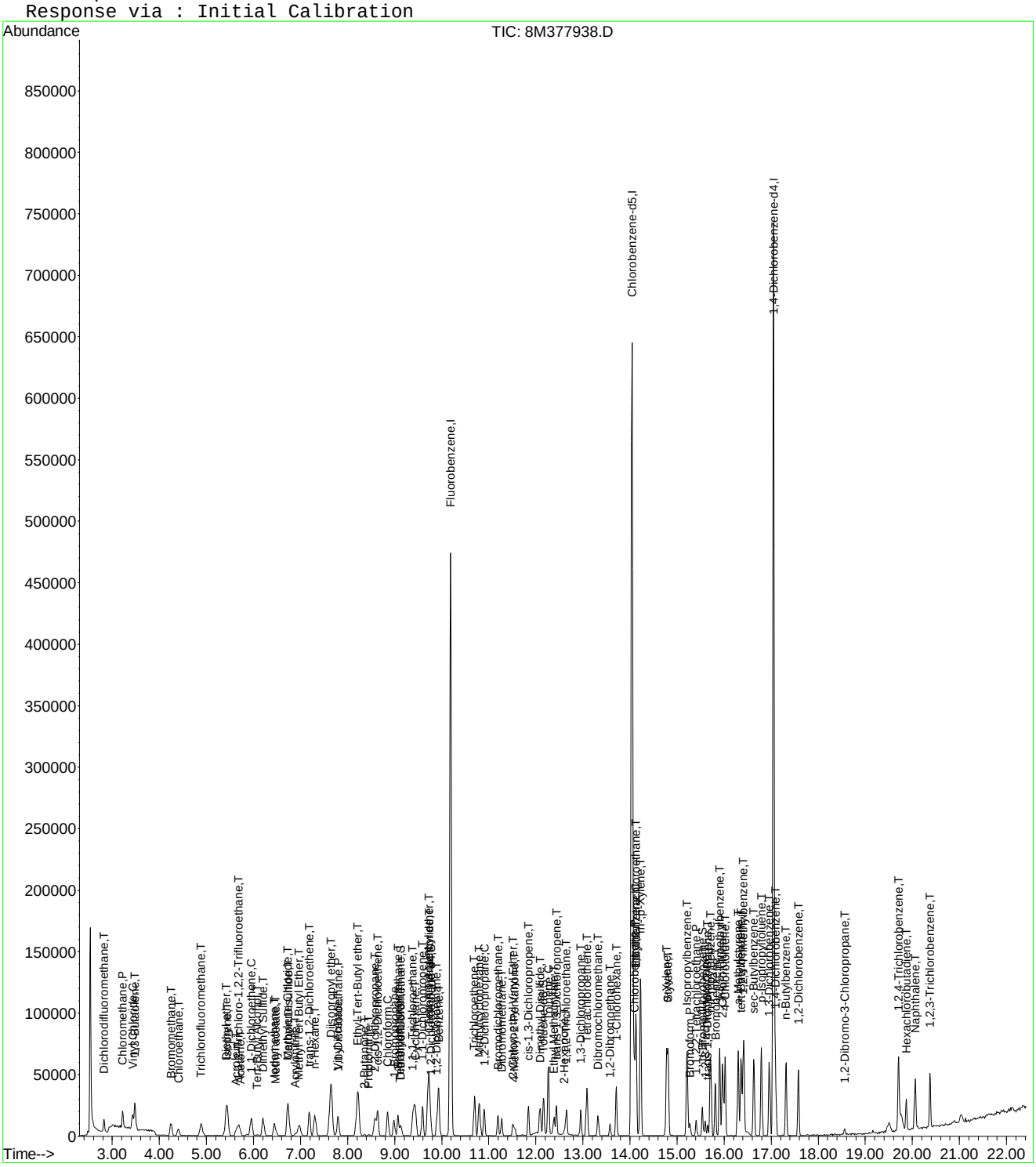
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
45)	1,2-Dichloroethane	9.89	62	14096	2.1739	ug/L	95
46)	Benzene	9.94	78	50618	2.0910	ug/L	98
47)	Trichloroethene	10.69	130	17092	2.1358	ug/L	98
48)	Methylcyclohexane	10.80	83	18455	1.9953	ug/L	97
49)	1,2-Dichloropropane	10.91	63	11976	2.0333	ug/L	97
50)	Bromodichloromethane	11.20	83	15626	2.0567	ug/L	98
52)	Dibromomethane	11.27	93	6227	2.0422	ug/L	95
53)	2-Chloroethyl Vinyl Ether	11.52	63	5092	1.8841	ug/L	100
54)	4-Methyl-2-Pentanone	11.54	58	1854	1.5162	ug/L	83
55)	cis-1,3-Dichloropropene	11.84	75	17506	1.9577	ug/L	100
56)	Dimethyl Disulfide	12.09	94	17327	1.7498	ug/L	98
59)	Toluene	12.26	91	60058	2.0579	ug/L	99
60)	Ethyl Methacrylate	12.38	69	10485	2.0596	ug/L	96
62)	trans-1,3-Dichloropropene	12.44	75	15700	1.9390	ug/L	98
63)	1,1,2-Trichloroethane	12.65	97	9513	2.1086	ug/L	97
64)	2-Hexanone	12.61	58	1809	1.5988	ug/L	75
65)	1,3-Dichloropropane	12.95	76	14861	2.0119	ug/L	97
66)	Tetrachloroethene	13.08	164	13788	2.0961	ug/L	98
67)	Dibromochloromethane	13.32	129	13567	2.0460	ug/L	99
68)	1,2-Dibromoethane	13.58	107	9859	2.0286	ug/L	96
69)	1-Chlorohexane	13.71	91	19613	2.0121	ug/L	99
70)	Chlorobenzene	14.09	112	43086	2.1130	ug/L	89
71)	1,1,1,2-Tetrachloroethane	14.13	131	15321	2.0645	ug/L	97
72)	Ethylbenzene	14.13	106	22945	2.1183	ug/L	93
73)	m-,p-Xylene	14.22	106	57004	4.3107	ug/L	97
74)	o-Xylene	14.78	106	27709	2.0859	ug/L	92
75)	Styrene	14.81	104	50591	2.1274	ug/L	97
76)	Bromoform	15.27	173	7402	1.9458	ug/L	90
77)	Isopropylbenzene	15.21	105	71591	2.1441	ug/L	99
79)	1,1,2,2-Tetrachloroethane	15.41	83	9564	2.0849	ug/L	98
81)	1,2,3-Trichloropropane	15.60	110	3232	2.1298	ug/L	96
82)	trans-1,4-Dichloro-2-Buten	15.65	53	2377	1.7900	ug/L	83
83)	n-Propylbenzene	15.72	91	78684	2.1285	ug/L	98
84)	Bromobenzene	15.82	156	19278	2.0977	ug/L	99
85)	1,3,5-Trimethylbenzene	15.90	105	58212	2.1115	ug/L	99
86)	2-Chlorotoluene	15.97	91	52579	2.2359	ug/L	95
87)	4-Chlorotoluene	16.02	91	45035	2.0259	ug/L	96
88)	a-Methylstyrene	16.30	118	33132	2.0211	ug/L	100
89)	tert-Butylbenzene	16.36	134	13188	2.1636	ug/L	97
90)	1,2,4-Trimethylbenzene	16.41	105	65222	2.0859	ug/L	92
91)	sec-Butylbenzene	16.63	105	70655	2.0959	ug/L	99
92)	p-Isopropyltoluene	16.79	119	63980	2.1028	ug/L	98
93)	1,3-Dichlorobenzene	16.96	146	38629	2.1298	ug/L	99
94)	1,4-Dichlorobenzene	17.09	146	38251	2.1015	ug/L	85
95)	n-Butylbenzene	17.31	91	49515	2.0818	ug/L	99
96)	1,2-Dichlorobenzene	17.58	146	33714	2.0853	ug/L	99
97)	1,2-Dibromo-3-Chloropropan	18.56	75	1372	1.7376	ug/L	82
98)	1,2,4-Trichlorobenzene	19.71	182	23008	2.1133	ug/L	96
99)	Hexachlorobutadiene	19.87	225	7896	2.0412	ug/L	95
100)	Naphthalene	20.06	128	45287	2.1256	ug/L	98
101)	1,2,3-Trichlorobenzene	20.37	180	19221	2.0600	ug/L	98

(#) = qualifier out of range (m) = manual integration
8M377938.D 8260WT.M Wed Mar 28 08:23:53 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\032712\8M377938.D Vial: 5
Acq On : 27 Mar 2012 12:46 Operator: adc
Sample : WG393321-05 2.0 ug/L STD 8260 Inst : HPMS8
Misc : 1,1 STD50782 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 28 8:21 2012 Quant Results File: 8260WT.RES

Method : C:\MSDCHEM\2\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\032712\8M377939.D Vial: 6
Acq On : 27 Mar 2012 13:17 Operator: adc
Sample : WG393321-06 5.0 ug/L STD 8260 Inst : HPMS8
Misc : 1,1 STD50782 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 28 08:21:07 2012 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\2\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.19	96	650112	25.00 ug/L	0.00
57) Chlorobenzene-d5	14.04	117	551628	25.00 ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.05	152	295177	25.00 ug/L	0.00
System Monitoring Compounds					
37) Dibromofluoromethane	9.13	111	17585	2.6072 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 10.44%#		
43) 1,2-Dichloroethane-d4	9.77	65	13459	2.5914 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 10.36%#		
58) Toluene-d8	12.16	98	66859	2.6251 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 10.52%#		
80) p-Bromofluorobenzene	15.53	95	24412	2.5566 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 10.24%#		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	2.82	85	35466	5.0156 ug/L	99
3) Chloromethane	3.22	50	39338	4.8269 ug/L	95
4) Vinyl Chloride	3.42	62	34837	5.1288 ug/L	95
5) 1,3-Butadiene	3.48	54	29443	5.7316 ug/L	94
6) Bromomethane	4.24	94	25307	4.8110 ug/L	99
7) Chloroethane	4.41	64	21608	4.9382 ug/L	96
8) Trichlorofluoromethane	4.88	101	50012	4.9865 ug/L	99
9) Diethyl ether	5.41	59	37257	10.2048 ug/L	98
10) Isoprene	5.45	67	39717	5.0321 ug/L	100
11) Acrolein	5.61	56	3748	9.0890 ug/L	86
12) 1,1,2-Trichloro-1,2,2-Trif	5.67	101	30227	5.0181 ug/L	100
13) Acetone	5.72	43	4398	4.5849 ug/L	98
14) 1,1-Dichloroethene	5.96	61	44722	5.1308 ug/L	100
15) Tert-Butyl Alcohol	6.08	59	4969	19.2389 ug/L #	68
16) Dimethyl Sulfide	6.21	62	30110	4.9070 ug/L	100
17) Iodomethane	6.44	142	49777	4.8921 ug/L	99
18) Methyl acetate	6.47	43	15069	4.9918 ug/L #	92
19) Methylene Chloride	6.72	84	32663	5.0358 ug/L	95
20) Carbon Disulfide	6.74	76	82612	4.9328 ug/L	100
21) Acrylonitrile	6.89	53	5536	4.2633 ug/L	97
22) Methyl Tert Butyl Ether	6.97	73	54611	4.9206 ug/L	99
23) trans-1,2-Dichloroethene	7.19	61	42586	5.1738 ug/L	99
24) n-Hexane	7.30	57	37012	4.9278 ug/L	96
25) Diisopropyl ether	7.64	45	199134	10.0291 ug/L	99
26) Vinyl Acetate	7.78	43	31434	4.9287 ug/L	97
27) 1,1-Dichloroethane	7.80	63	53810	5.1137 ug/L	99
28) Ethyl-Tert-Butyl ether	8.21	59	159937	9.8287 ug/L	100
29) 2-Butanone	8.36	43	6473	4.5349 ug/L	86
30) Propionitrile	8.45	54	4281	10.1224 ug/L #	80
31) 2,2-Dichloropropane	8.58	77	44582	4.9243 ug/L	99
32) cis-1,2-Dichloroethene	8.64	96	35194	5.1646 ug/L	99
33) Chloroform	8.85	83	54741	5.0476 ug/L	98
34) 1-Bromopropane	8.99	122	6709	4.8652 ug/L	91
35) Bromochloromethane	9.07	130	22255	5.0708 ug/L	95
36) Tetrahydrofuran	9.11	42	9220	9.5313 ug/L	97
38) 1,1,1-Trichloroethane	9.39	97	50301	5.1045 ug/L	99
39) Cyclohexane	9.43	56	48828	5.0152 ug/L	98
40) 1,1-Dichloropropene	9.60	75	42980	5.0636 ug/L	99
41) Tert-Amyl-Methyl ether	9.72	73	131791	9.8969 ug/L	100
42) Carbon Tetrachloride	9.73	117	46970	5.0947 ug/L	99

(#) = qualifier out of range (m) = manual integration
8M377939.D 8260WT.M Wed Mar 28 08:26:37 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\032712\8M377939.D Vial: 6
Acq On : 27 Mar 2012 13:17 Operator: adc
Sample : WG393321-06 5.0 ug/L STD 8260 Inst : HPMS8
Misc : 1,1 STD50782 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 28 08:21:07 2012 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\2\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

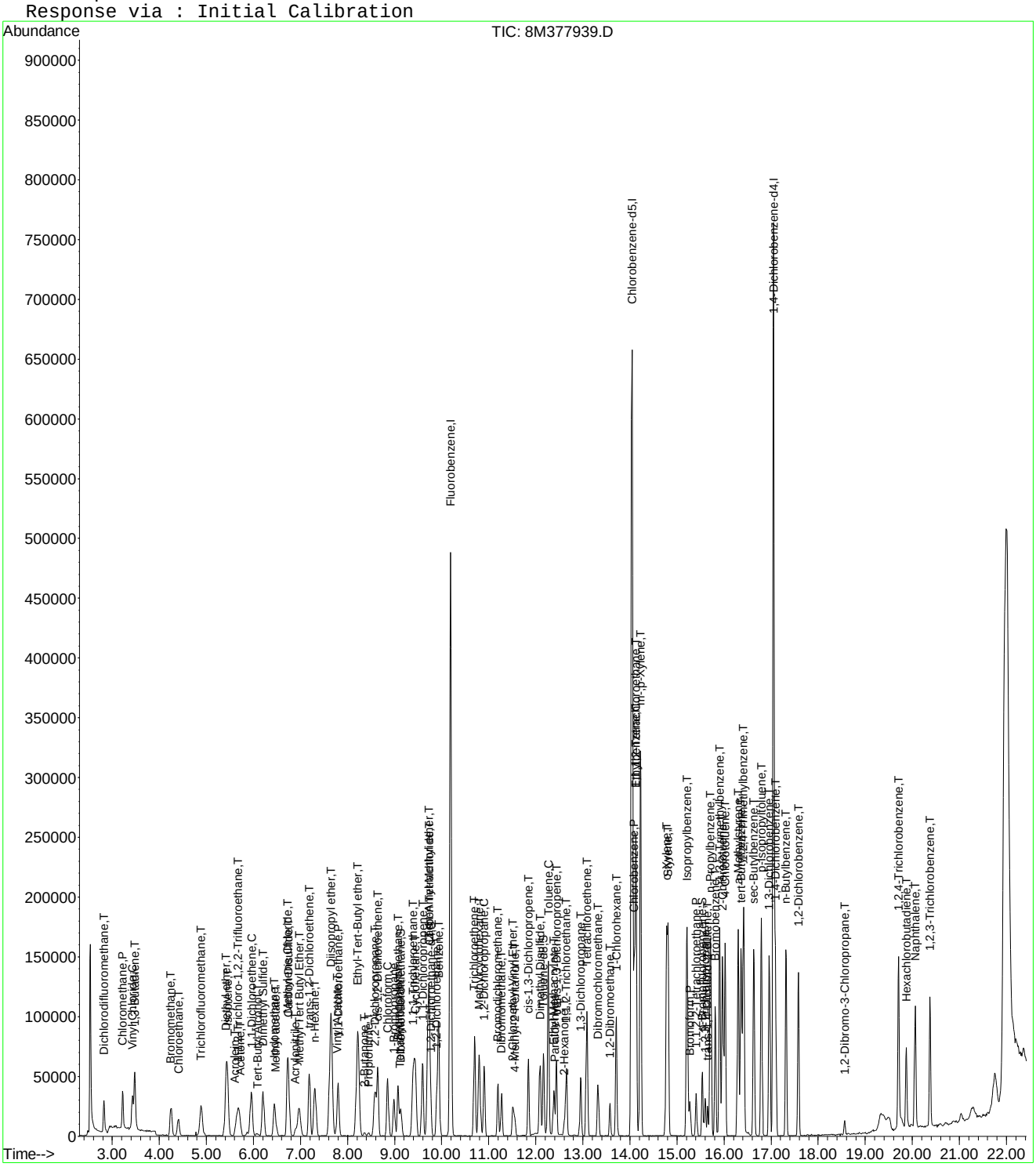
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
45)	1,2-Dichloroethane	9.89	62	33464	5.0148	ug/L	99
46)	Benzene	9.94	78	123801	4.9695	ug/L	98
47)	Trichloroethene	10.69	130	42032	5.1037	ug/L	99
48)	Methylcyclohexane	10.80	83	46930	4.9304	ug/L	97
49)	1,2-Dichloropropane	10.90	63	29883	4.9301	ug/L	97
50)	Bromodichloromethane	11.19	83	39670	5.0737	ug/L	94
52)	Dibromomethane	11.26	93	15972	5.0900	ug/L	97
53)	2-Chloroethyl Vinyl Ether	11.51	63	13491	4.8506	ug/L	97
54)	4-Methyl-2-Pentanone	11.55	58	5768	4.5836	ug/L	89
55)	cis-1,3-Dichloropropene	11.84	75	45505	4.9449	ug/L	98
56)	Dimethyl Disulfide	12.09	94	47417	4.6532	ug/L	99
59)	Toluene	12.26	91	148843	4.8926	ug/L	100
60)	Ethyl Methacrylate	12.38	69	25427	4.7914	ug/L	100
61)	Paraldehyde	12.40	89	396	9.3963	ug/L	90
62)	trans-1,3-Dichloropropene	12.44	75	41820	4.9548	ug/L	98
63)	1,1,2-Trichloroethane	12.65	97	24636	5.2385	ug/L	96
64)	2-Hexanone	12.61	58	5607	4.7538	ug/L	96
65)	1,3-Dichloropropane	12.95	76	37593	4.8822	ug/L	98
66)	Tetrachloroethene	13.08	164	35910	5.2371	ug/L	98
67)	Dibromochloromethane	13.32	129	35442	5.1275	ug/L	98
68)	1,2-Dibromoethane	13.58	107	25152	4.9646	ug/L	98
69)	1-Chlorohexane	13.71	91	47371	4.6620	ug/L	100
70)	Chlorobenzene	14.08	112	109407	5.1471	ug/L	98
71)	1,1,1,2-Tetrachloroethane	14.13	131	38713	5.0042	ug/L	97
72)	Ethylbenzene	14.13	106	58058	5.1420	ug/L	99
73)	m-,p-Xylene	14.22	106	141277	10.2488	ug/L	96
74)	o-Xylene	14.78	106	70707	5.1062	ug/L	96
75)	Styrene	14.81	104	122351	4.9355	ug/L	98
76)	Bromoform	15.27	173	19075	4.8104	ug/L	98
77)	Isopropylbenzene	15.21	105	181474	5.2138	ug/L	98
79)	1,1,2,2-Tetrachloroethane	15.41	83	24587	5.1831	ug/L	98
81)	1,2,3-Trichloropropane	15.59	110	8108	5.1668	ug/L	97
82)	trans-1,4-Dichloro-2-Buten	15.65	53	6467	4.7094	ug/L	87
83)	n-Propylbenzene	15.71	91	197025	5.1539	ug/L	98
84)	Bromobenzene	15.81	156	49811	5.2414	ug/L	99
85)	1,3,5-Trimethylbenzene	15.90	105	147633	5.1784	ug/L	99
86)	2-Chlorotoluene	15.97	91	129952	5.3440	ug/L	98
87)	4-Chlorotoluene	16.02	91	109974	4.7841	ug/L	99
88)	a-Methylstyrene	16.30	118	80756	4.7638	ug/L	98
89)	tert-Butylbenzene	16.36	134	33048	5.2429	ug/L	95
90)	1,2,4-Trimethylbenzene	16.41	105	156933	5.3583	ug/L	96
91)	sec-Butylbenzene	16.63	105	177308	5.0862	ug/L	98
92)	p-Isopropyltoluene	16.79	119	163824	5.2068	ug/L	98
93)	1,3-Dichlorobenzene	16.96	146	95745	5.1048	ug/L	99
94)	1,4-Dichlorobenzene	17.09	146	94525	5.0219	ug/L	94
95)	n-Butylbenzene	17.31	91	126150	5.1289	ug/L	100
96)	1,2-Dichlorobenzene	17.58	146	85471	5.1123	ug/L	100
97)	1,2-Dibromo-3-Chloropropan	18.56	75	4162	5.0972	ug/L	91
98)	1,2,4-Trichlorobenzene	19.71	182	56297	5.0004	ug/L	99
99)	Hexachlorobutadiene	19.87	225	20105	5.0259	ug/L	98
100)	Naphthalene	20.06	128	112483	5.1054	ug/L	99
101)	1,2,3-Trichlorobenzene	20.37	180	48723	5.0497	ug/L	99

(#) = qualifier out of range (m) = manual integration
8M377939.D 8260WT.M Wed Mar 28 08:26:37 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\032712\8M377939.D Vial: 6
Acq On : 27 Mar 2012 13:17 Operator: adc
Sample : WG393321-06 5.0 ug/L STD 8260 Inst : HPMS8
Misc : 1,1 STD50782 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 28 8:21 2012 Quant Results File: 8260WT.RES

Method : C:\MSDCHEM\2\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\032712\8M377940.D Vial: 7
Acq On : 27 Mar 2012 13:48 Operator: adc
Sample : WG393321-07 20.0 ug/L STD 8260 Inst : HPMS8
Misc : 1,1 STD50782 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 28 08:26:54 2012 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\2\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.18	96	658958	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.04	117	551915	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.05	152	291488	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.14	111	65071	9.5182	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 38.08%#			
43) 1,2-Dichloroethane-d4	9.77	65	51143	9.7148	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 38.84%#			
58) Toluene-d8	12.17	98	255470	10.0252	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 40.12%#			
80) p-Bromofluorobenzene	15.54	95	96219	10.2042	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 40.80%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.82	85	145852	20.3494	ug/L	100
3) Chloromethane	3.21	50	154167	18.6627	ug/L	99
4) Vinyl Chloride	3.42	62	132611	19.2614	ug/L	99
5) 1,3-Butadiene	3.46	54	92981	21.9114	ug/L	99
6) Bromomethane	4.25	94	105091	19.7100	ug/L	100
7) Chloroethane	4.40	64	89320	20.1386	ug/L	100
8) Trichlorofluoromethane	4.89	101	206471	20.3100	ug/L	99
9) Diethyl ether	5.42	59	299643	80.9711	ug/L	99
10) Isoprene	5.45	67	163145	20.3929	ug/L	100
11) Acrolein	5.61	56	15869	37.9662	ug/L	94
12) 1,1,2-Trichloro-1,2,2-Trif	5.68	101	122526	20.0680	ug/L	98
13) Acetone	5.72	43	19393	19.9456	ug/L	96
14) 1,1-Dichloroethene	5.95	61	178585	20.2136	ug/L	99
15) Tert-Butyl Alcohol	6.08	59	43153	145.2888	ug/L	94
16) Dimethyl Sulfide	6.20	62	122405	19.6806	ug/L	97
17) Iodomethane	6.44	142	222340	21.5584	ug/L	99
18) Methyl acetate	6.48	43	61739	20.1772	ug/L	97
19) Methylene Chloride	6.72	84	128209	19.5011	ug/L	99
20) Carbon Disulfide	6.75	76	351063	20.6806	ug/L	100
21) Acrylonitrile	6.90	53	26531	20.1573	ug/L	100
22) Methyl Tert Butyl Ether	6.97	73	227317	20.2070	ug/L	99
23) trans-1,2-Dichloroethene	7.18	61	168148	20.1540	ug/L	99
24) n-Hexane	7.31	57	160706	21.1093	ug/L	98
25) Diisopropyl ether	7.64	45	1632609	81.1201	ug/L	100
26) Vinyl Acetate	7.78	43	130351	20.1640	ug/L	100
27) 1,1-Dichloroethane	7.79	63	206258	19.3381	ug/L	100
28) Ethyl-Tert-Butyl ether	8.22	59	1340096	81.2484	ug/L	99
29) 2-Butanone	8.36	43	28040	19.3806	ug/L	97
30) Propionitrile	8.45	54	36997	76.1582	ug/L	97
31) 2,2-Dichloropropane	8.58	77	177674	19.3614	ug/L	100
32) cis-1,2-Dichloroethene	8.64	96	138125	19.9971	ug/L	98
33) Chloroform	8.85	83	207579	18.8838	ug/L	100
34) 1-Bromopropane	8.99	122	28757	20.5738	ug/L	98
35) Bromochloromethane	9.07	130	89176	20.0458	ug/L	98
36) Tetrahydrofuran	9.11	42	77081	78.6136	ug/L	98
38) 1,1,1-Trichloroethane	9.39	97	197584	19.7814	ug/L	100
39) Cyclohexane	9.44	56	198713	20.1361	ug/L	99
40) 1,1-Dichloropropene	9.59	75	171147	19.8926	ug/L	100
41) Tert-Amyl-Methyl ether	9.72	73	1080161	80.0265	ug/L	99
42) Carbon Tetrachloride	9.73	117	183251	19.6100	ug/L	99

(#) = qualifier out of range (m) = manual integration
8M377940.D 8260WT.M Wed Mar 28 08:26:55 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\032712\8M377940.D Vial: 7
Acq On : 27 Mar 2012 13:48 Operator: adc
Sample : WG393321-07 20.0 ug/L STD 8260 Inst : HPMS8
Misc : 1,1 STD50782 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 28 08:26:54 2012 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\2\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

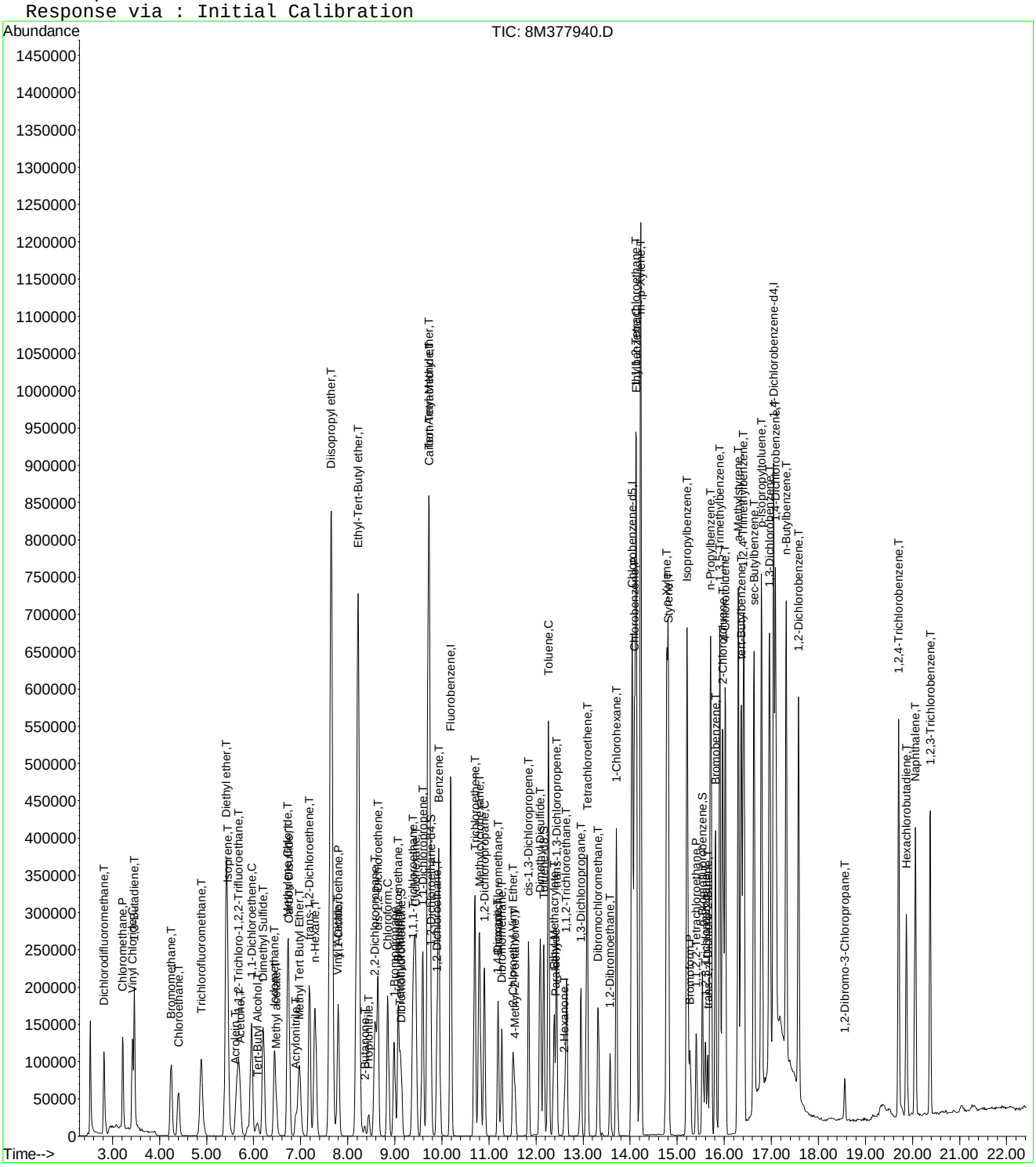
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
45)	1,2-Dichloroethane	9.89	62	131379	19.4236	ug/L	99
46)	Benzene	9.94	78	486251	19.2566	ug/L	99
47)	Trichloroethene	10.70	130	166438	19.9382	ug/L	99
48)	Methylcyclohexane	10.80	83	194100	20.1181	ug/L	99
49)	1,2-Dichloropropane	10.91	63	122795	19.9869	ug/L	100
50)	Bromodichloromethane	11.20	83	152088	19.1906	ug/L	100
51)	1,4-Dioxane	11.19	88	5332	151.3927	ug/L	90
52)	Dibromomethane	11.27	93	64680	20.3357	ug/L	99
53)	2-Chloroethyl Vinyl Ether	11.52	63	57551	20.4145	ug/L	98
54)	4-Methyl-2-Pentanone	11.55	58	25405	19.9171	ug/L	98
55)	cis-1,3-Dichloropropene	11.84	75	184708	19.8023	ug/L	100
56)	Dimethyl Disulfide	12.09	94	213257	20.6467	ug/L	99
59)	Toluene	12.26	91	563918	18.5269	ug/L	100
60)	Ethyl Methacrylate	12.39	69	107652	20.2750	ug/L	100
61)	Paraldehyde	12.42	89	7654	80.6298	ug/L	73
62)	trans-1,3-Dichloropropene	12.44	75	165517	19.5999	ug/L	99
63)	1,1,2-Trichloroethane	12.64	97	94503	20.0843	ug/L	98
64)	2-Hexanone	12.60	58	23616	20.0121	ug/L	100
65)	1,3-Dichloropropane	12.95	76	150848	19.5806	ug/L	99
66)	Tetrachloroethene	13.09	164	135857	19.8031	ug/L	99
67)	Dibromochloromethane	13.32	129	138740	20.0614	ug/L	99
68)	1,2-Dibromoethane	13.57	107	100227	19.7729	ug/L	99
69)	1-Chlorohexane	13.71	91	194400	19.1219	ug/L	99
70)	Chlorobenzene	14.09	112	412531	19.3977	ug/L	99
71)	1,1,1,2-Tetrachloroethane	14.12	131	152408	19.6908	ug/L	100
72)	Ethylbenzene	14.13	106	218738	19.3627	ug/L	97
73)	m-,p-Xylene	14.23	106	540568	39.1946	ug/L	99
74)	o-Xylene	14.77	106	271084	19.5664	ug/L	98
75)	Styrene	14.82	104	461535	18.6082	ug/L	99
76)	Bromoform	15.27	173	79255	19.9762	ug/L	97
77)	Isopropylbenzene	15.21	105	680772	19.5486	ug/L	100
79)	1,1,2,2-Tetrachloroethane	15.40	83	94344	20.1402	ug/L	99
81)	1,2,3-Trichloropropane	15.60	110	30839	19.9008	ug/L	89
82)	trans-1,4-Dichloro-2-Buten	15.65	53	28623	21.1077	ug/L	98
83)	n-Propylbenzene	15.71	91	752502	19.9334	ug/L	99
84)	Bromobenzene	15.82	156	188409	20.0763	ug/L	100
85)	1,3,5-Trimethylbenzene	15.90	105	564424	20.0484	ug/L	100
86)	2-Chlorotoluene	15.97	91	466198	19.4139	ug/L	99
87)	4-Chlorotoluene	16.01	91	443045	19.5172	ug/L	99
88)	a-Methylstyrene	16.29	118	349168	20.8583	ug/L	99
89)	tert-Butylbenzene	16.37	134	124075	19.9331	ug/L	98
90)	1,2,4-Trimethylbenzene	16.41	105	579739	21.0882	ug/L	99
91)	sec-Butylbenzene	16.64	105	673947	19.5772	ug/L	99
92)	p-Isopropyltoluene	16.79	119	613957	19.7604	ug/L	99
93)	1,3-Dichlorobenzene	16.97	146	359656	19.4185	ug/L	97
94)	1,4-Dichlorobenzene	17.09	146	361083	19.4261	ug/L	99
95)	n-Butylbenzene	17.32	91	473080	19.4774	ug/L	99
96)	1,2-Dichlorobenzene	17.58	146	323648	19.6033	ug/L	98
97)	1,2-Dibromo-3-Chloropropan	18.56	75	15918	19.7415	ug/L	91
98)	1,2,4-Trichlorobenzene	19.71	182	215694	19.4008	ug/L	99
99)	Hexachlorobutadiene	19.87	225	79006	20.0002	ug/L	99
100)	Naphthalene	20.06	128	422223	19.4064	ug/L	100
101)	1,2,3-Trichlorobenzene	20.38	180	186604	19.5844	ug/L	99

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

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\032712\8M377940.D Vial: 7
Acq On : 27 Mar 2012 13:48 Operator: adc
Sample : WG393321-07 20.0 ug/L STD 8260 Inst : HPMS8
Misc : 1,1 STD50782 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 28 8:26 2012 Quant Results File: 8260WT.RES

Method : C:\MSDCHEM\2\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\032712\8M377941.D Vial: 8
Acq On : 27 Mar 2012 14:18 Operator: adc
Sample : WG393321-08 50.0 ug/L STD 8260 Inst : HPMS8
Misc : 1,1 STD50782 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 28 08:26:56 2012 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\2\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.18	96	645452	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.04	117	545860	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.05	152	297011	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.14	111	165041	24.6463	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 98.60%			
43) 1,2-Dichloroethane-d4	9.77	65	129320	25.0788	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 100.32%			
58) Toluene-d8	12.17	98	645095	25.5957	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 102.40%			
80) p-Bromofluorobenzene	15.54	95	245500	25.5515	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 102.20%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.82	85	358360	51.0450	ug/L	100
3) Chloromethane	3.21	50	376343	46.5115	ug/L	100
4) Vinyl Chloride	3.42	62	309746	45.9311	ug/L	100
5) 1,3-Butadiene	3.46	54	209636	52.9301	ug/L	100
6) Bromomethane	4.24	94	259975	49.7791	ug/L	100
7) Chloroethane	4.39	64	218083	50.1992	ug/L	100
8) Trichlorofluoromethane	4.88	101	479111	48.1151	ug/L	100
9) Diethyl ether	5.42	59	359285	99.1195	ug/L	100
10) Isoprene	5.44	67	391000	49.8971	ug/L	100
11) Acrolein	5.61	56	41636	101.6976	ug/L	100
12) 1,1,2-Trichloro-1,2,2-Trif	5.66	101	285773	47.7850	ug/L	100
13) Acetone	5.72	43	51984	54.5841	ug/L	100
14) 1,1-Dichloroethene	5.94	61	425297	49.1455	ug/L	100
15) Tert-Butyl Alcohol	6.09	59	54997	188.2622	ug/L	100
16) Dimethyl Sulfide	6.20	62	308796	50.6879	ug/L	100
17) Iodomethane	6.44	142	556886	55.1263	ug/L	100
18) Methyl acetate	6.48	43	150526	50.2234	ug/L	100
19) Methylene Chloride	6.72	84	321299	49.8935	ug/L	100
20) Carbon Disulfide	6.75	76	897752	53.9918	ug/L	100
21) Acrylonitrile	6.90	53	69556	53.9520	ug/L	100
22) Methyl Tert Butyl Ether	6.97	73	550168	49.9296	ug/L	100
23) trans-1,2-Dichloroethene	7.18	61	415851	50.8863	ug/L	100
24) n-Hexane	7.30	57	378932	50.8155	ug/L	100
25) Diisopropyl ether	7.65	45	1971520	100.0095	ug/L	100
26) Vinyl Acetate	7.78	43	326467	51.5580	ug/L	100
27) 1,1-Dichloroethane	7.79	63	517336	49.5188	ug/L	100
28) Ethyl-Tert-Butyl ether	8.22	59	1649675	102.1107	ug/L	100
29) 2-Butanone	8.36	43	74286	52.4193	ug/L	100
30) Propionitrile	8.45	54	50353	105.2952	ug/L	100
31) 2,2-Dichloropropane	8.59	77	440655	49.0235	ug/L	100
32) cis-1,2-Dichloroethene	8.64	96	341607	50.4912	ug/L	100
33) Chloroform	8.85	83	525306	48.7878	ug/L	100
34) 1-Bromopropane	8.98	122	72454	52.9208	ug/L	100
35) Bromochloromethane	9.07	130	222661	51.0992	ug/L	100
36) Tetrahydrofuran	9.11	42	101409	105.5894	ug/L	100
38) 1,1,1-Trichloroethane	9.39	97	488432	49.9232	ug/L	100
39) Cyclohexane	9.43	56	483887	50.0595	ug/L	100
40) 1,1-Dichloropropene	9.59	75	425849	50.5327	ug/L	100
41) Tert-Amyl-Methyl ether	9.72	73	1342188	101.5202	ug/L	100
42) Carbon Tetrachloride	9.73	117	452904	49.4800	ug/L	100
45) 1,2-Dichloroethane	9.89	62	332637	50.2076	ug/L	100

(#) = qualifier out of range (m) = manual integration
8M377941.D 8260WT.M Tue May 15 08:50:31 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\032712\8M377941.D Vial: 8
Acq On : 27 Mar 2012 14:18 Operator: adc
Sample : WG393321-08 50.0 ug/L STD 8260 Inst : HPMS8
Misc : 1,1 STD50782 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 28 08:26:56 2012 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\2\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

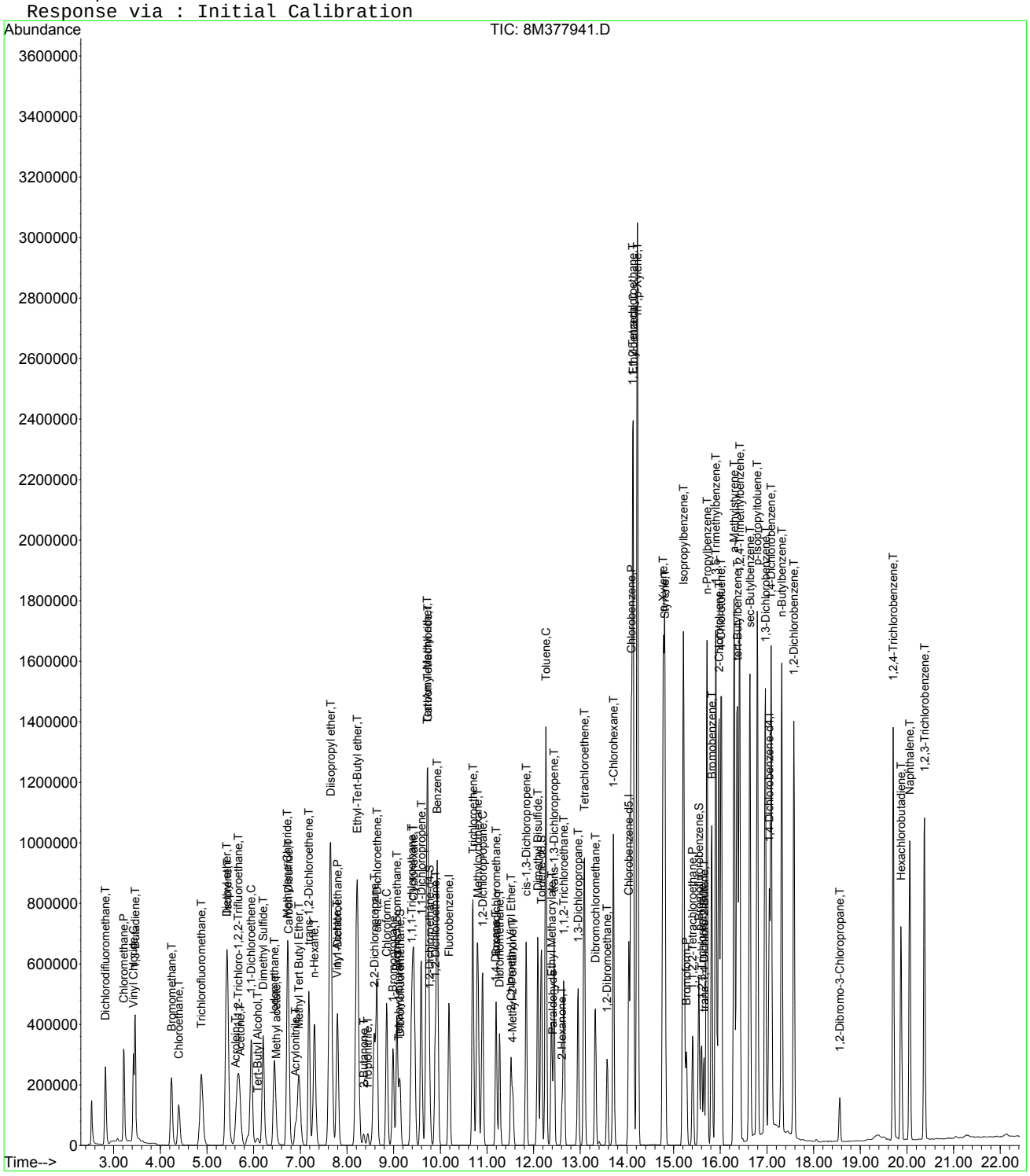
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
46)	Benzene	9.93	78	1197087	48.3993	ug/L	100
47)	Trichloroethene	10.70	130	413168	50.5304	ug/L	100
48)	Methylcyclohexane	10.80	83	470126	49.7472	ug/L	100
49)	1,2-Dichloropropane	10.91	63	309013	51.3495	ug/L	100
50)	Bromodichloromethane	11.20	83	393424	50.6813	ug/L	100
51)	1,4-Dioxane	11.19	88	6791	196.8531	ug/L	100
52)	Dibromomethane	11.27	93	168112	53.9611	ug/L	100
53)	2-Chloroethyl Vinyl Ether	11.52	63	149884	54.2793	ug/L	100
54)	4-Methyl-2-Pentanone	11.55	58	67629	54.1295	ug/L	100
55)	cis-1,3-Dichloropropene	11.84	75	478335	52.3547	ug/L	100
56)	Dimethyl Disulfide	12.09	94	561147	55.4648	ug/L	100
59)	Toluene	12.26	91	1409592	46.8244	ug/L	100
60)	Ethyl Methacrylate	12.39	69	274885	52.3457	ug/L	100
61)	Paraldehyde	12.41	89	10484	109.5470	ug/L	100
62)	trans-1,3-Dichloropropene	12.44	75	428724	51.3311	ug/L	100
63)	1,1,2-Trichloroethane	12.64	97	241421	51.8772	ug/L	100
64)	2-Hexanone	12.60	58	61486	52.6810	ug/L	100
65)	1,3-Dichloropropane	12.95	76	385826	50.6370	ug/L	100
66)	Tetrachloroethene	13.09	164	338467	49.8836	ug/L	100
67)	Dibromochloromethane	13.33	129	365911	53.4965	ug/L	100
68)	1,2-Dibromoethane	13.57	107	258444	51.5517	ug/L	100
69)	1-Chlorohexane	13.71	91	482005	47.9376	ug/L	100
70)	Chlorobenzene	14.09	112	1032836	49.1038	ug/L	100
71)	1,1,1,2-Tetrachloroethane	14.12	131	389414	50.8696	ug/L	100
72)	Ethylbenzene	14.13	106	555627	49.7296	ug/L	100
73)	m-,p-Xylene	14.23	106	1346622	98.7216	ug/L	100
74)	o-Xylene	14.77	106	690232	50.3724	ug/L	100
75)	Styrene	14.82	104	1157806	47.1983	ug/L	100
76)	Bromoform	15.27	173	209155	53.3024	ug/L	100
77)	Isopropylbenzene	15.21	105	1701146	49.3907	ug/L	100
79)	1,1,2,2-Tetrachloroethane	15.40	83	245951	51.5283	ug/L	100
81)	1,2,3-Trichloropropane	15.60	110	81185	51.4154	ug/L	100
82)	trans-1,4-Dichloro-2-Buten	15.65	53	75771	54.8373	ug/L	100
83)	n-Propylbenzene	15.71	91	1882433	48.9376	ug/L	100
84)	Bromobenzene	15.82	156	476522	49.8327	ug/L	100
85)	1,3,5-Trimethylbenzene	15.90	105	1418867	49.4611	ug/L	100
86)	2-Chlorotoluene	15.97	91	1164321	47.5842	ug/L	100
87)	4-Chlorotoluene	16.01	91	1127938	48.7645	ug/L	100
88)	a-Methylstyrene	16.29	118	868777	50.9331	ug/L	100
89)	tert-Butylbenzene	16.37	134	316128	49.8428	ug/L	100
90)	1,2,4-Trimethylbenzene	16.42	105	1455994	52.5348	ug/L	100
91)	sec-Butylbenzene	16.63	105	1692615	48.2538	ug/L	100
92)	p-Isopropyltoluene	16.79	119	1562677	49.3600	ug/L	100
93)	1,3-Dichlorobenzene	16.97	146	923760	48.9481	ug/L	100
94)	1,4-Dichlorobenzene	17.09	146	923928	48.7826	ug/L	100
95)	n-Butylbenzene	17.32	91	1204638	48.6745	ug/L	100
96)	1,2-Dichlorobenzene	17.58	146	835657	49.6743	ug/L	100
97)	1,2-Dibromo-3-Chloropropan	18.56	75	43784	53.2912	ug/L	100
98)	1,2,4-Trichlorobenzene	19.71	182	552746	48.7927	ug/L	100
99)	Hexachlorobutadiene	19.87	225	205121	50.9604	ug/L	100
100)	Naphthalene	20.06	128	1093329	49.3177	ug/L	100
101)	1,2,3-Trichlorobenzene	20.38	180	475318	48.9579	ug/L	100

(#) = qualifier out of range (m) = manual integration
8M377941.D 8260WT.M Tue May 15 08:50:31 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\032712\8M377941.D Vial: 8
Acq On : 27 Mar 2012 14:18 Operator: adc
Sample : WG393321-08 50.0 ug/L STD 8260 Inst : HPMS8
Misc : 1,1 STD50782 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 28 8:26 2012 Quant Results File: 8260WT.RES

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\032712\8M377942.D Vial: 9
Acq On : 27 Mar 2012 14:49 Operator: adc
Sample : WG393321-09 100.0 ug/L STD 8260 Inst : HPMS8
Misc : 1,1 STD50782 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 28 08:26:58 2012 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\2\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.18	96	634310	25.00 ug/L	0.00
57) Chlorobenzene-d5	14.04	117	532594	25.00 ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.05	152	288699	25.00 ug/L	0.00
System Monitoring Compounds					
37) Dibromofluoromethane	9.14	111	315635	47.9631 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 191.84%#		
43) 1,2-Dichloroethane-d4	9.77	65	248319	49.0020 ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 196.00%#		
58) Toluene-d8	12.17	98	1193976	48.5539 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 194.20%#		
80) p-Bromofluorobenzene	15.54	95	453918	48.6037 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 194.40%#		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	2.82	85	643914	93.3305 ug/L	98
3) Chloromethane	3.21	50	718868	90.4041 ug/L	99
4) Vinyl Chloride	3.42	62	583252	88.0076 ug/L	100
5) 1,3-Butadiene	3.45	54	366515	95.6583 ug/L	99
6) Bromomethane	4.23	94	501584	97.7286 ug/L	99
7) Chloroethane	4.39	64	413704	96.9007 ug/L	100
8) Trichlorofluoromethane	4.87	101	871606	89.0692 ug/L	99
9) Diethyl ether	5.42	59	668232	187.5900 ug/L	99
10) Isoprene	5.44	67	718510	93.3025 ug/L	99
11) Acrolein	5.61	56	79130	196.6733 ug/L	92
12) 1,1,2-Trichloro-1,2,2-Trif	5.66	101	535282	91.0785 ug/L	98
13) Acetone	5.73	43	94895	101.3917 ug/L	100
14) 1,1-Dichloroethene	5.94	61	780567	91.7834 ug/L	100
15) Tert-Butyl Alcohol	6.10	59	113388	392.1247 ug/L	93
16) Dimethyl Sulfide	6.20	62	577264	96.4206 ug/L	100
17) Iodomethane	6.44	142	1025366	103.2843 ug/L	100
18) Methyl acetate	6.48	43	289123	98.1611 ug/L	99
19) Methylene Chloride	6.72	84	595600	94.1135 ug/L	99
20) Carbon Disulfide	6.74	76	1667643	102.0556 ug/L	99
21) Acrylonitrile	6.90	53	130119	102.7013 ug/L	100
22) Methyl Tert Butyl Ether	6.97	73	1020779	94.2665 ug/L	100
23) trans-1,2-Dichloroethene	7.18	61	791835	98.5962 ug/L	99
24) n-Hexane	7.30	57	679485	92.7209 ug/L	99
25) Diisopropyl ether	7.64	45	3610618	186.3734 ug/L	100
26) Vinyl Acetate	7.78	43	592784	95.2612 ug/L	100
27) 1,1-Dichloroethane	7.79	63	978793	95.3347 ug/L	100
28) Ethyl-Tert-Butyl ether	8.22	59	3025459	190.5577 ug/L	100
29) 2-Butanone	8.36	43	141525	101.6201 ug/L	98
30) Propionitrile	8.45	54	93595	197.9564 ug/L	100
31) 2,2-Dichloropropane	8.58	77	834811	94.5053 ug/L	100
32) cis-1,2-Dichloroethene	8.64	96	654810	98.4842 ug/L	100
33) Chloroform	8.85	83	1013205	95.7543 ug/L	99
34) 1-Bromopropane	8.98	122	138790	103.1537 ug/L	99
35) Bromochloromethane	9.07	130	420976	98.3082 ug/L	100
36) Tetrahydrofuran	9.11	42	187968	199.1545 ug/L	98
38) 1,1,1-Trichloroethane	9.39	97	930211	96.7480 ug/L	100
39) Cyclohexane	9.43	56	896845	94.4110 ug/L	100
40) 1,1-Dichloropropene	9.59	75	798872	96.4620 ug/L	100
41) Tert-Amyl-Methyl ether	9.72	73	2479928	190.8712 ug/L	100
42) Carbon Tetrachloride	9.73	117	865909	96.2628 ug/L	99

(#) = qualifier out of range (m) = manual integration
8M377942.D 8260WT.M Wed Mar 28 08:26:58 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\032712\8M377942.D Vial: 9
Acq On : 27 Mar 2012 14:49 Operator: adc
Sample : WG393321-09 100.0 ug/L STD 8260 Inst : HPMS8
Misc : 1,1 STD50782 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 28 08:26:58 2012 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\2\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

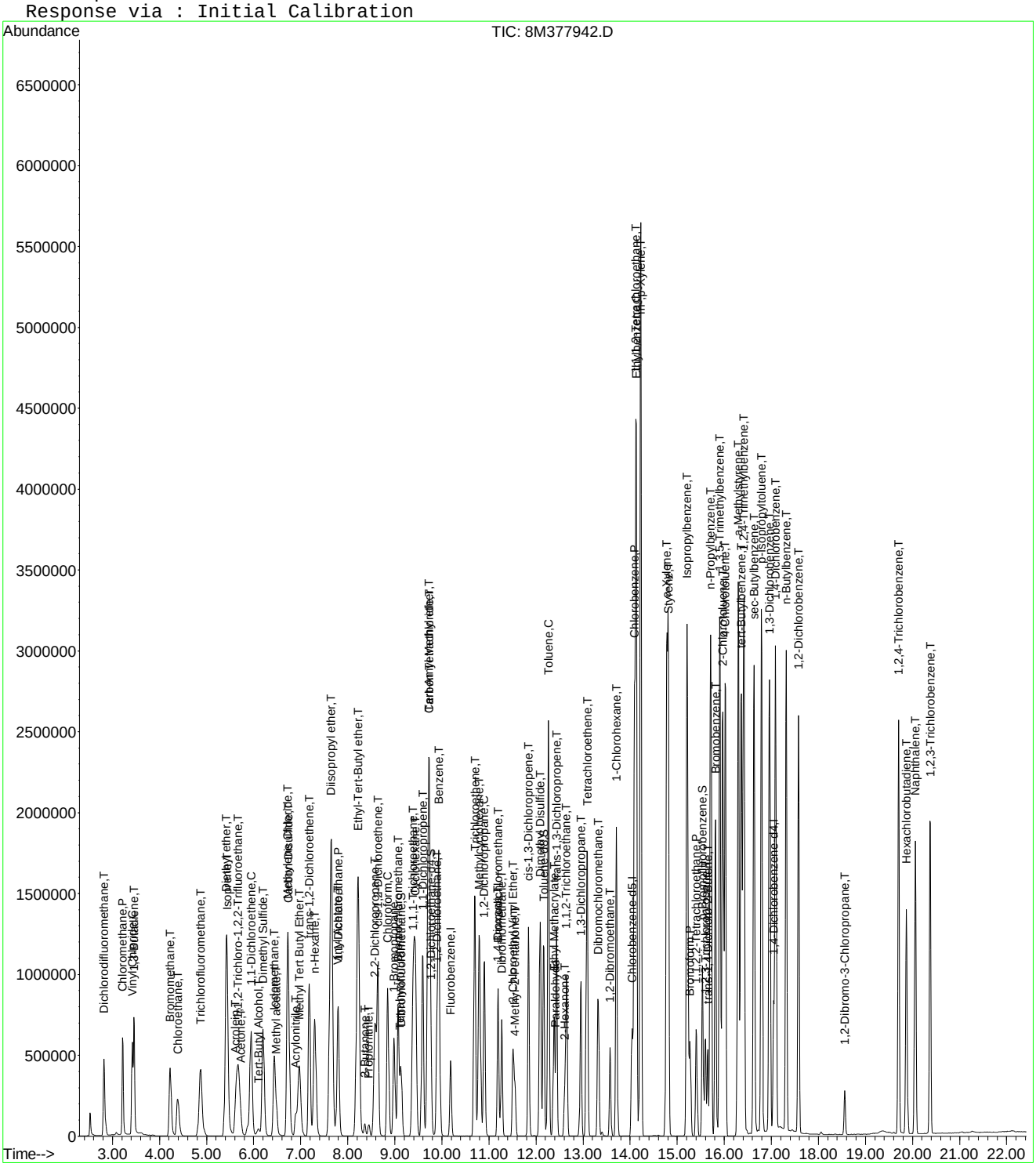
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
45)	1,2-Dichloroethane	9.89	62	638140	98.0115	ug/L	99
46)	Benzene	9.94	78	2241221	92.2063	ug/L	99
47)	Trichloroethene	10.70	130	784268	97.6008	ug/L	99
48)	Methylcyclohexane	10.79	83	878558	94.5992	ug/L	99
49)	1,2-Dichloropropane	10.90	63	589718	99.7163	ug/L	99
50)	Bromodichloromethane	11.20	83	766711	100.5034	ug/L	99
51)	1,4-Dioxane	11.19	88	13563	400.0615	ug/L	100
52)	Dibromomethane	11.27	93	314495	102.7208	ug/L	97
53)	2-Chloroethyl Vinyl Ether	11.52	63	280584	103.3962	ug/L	99
54)	4-Methyl-2-Pentanone	11.55	58	123808	100.8352	ug/L	99
55)	cis-1,3-Dichloropropene	11.84	75	905884	100.8924	ug/L	99
56)	Dimethyl Disulfide	12.09	94	1078902	108.5139	ug/L	100
59)	Toluene	12.26	91	2603197	88.6280	ug/L	99
60)	Ethyl Methacrylate	12.39	69	501933	97.9628	ug/L	100
61)	Paraldehyde	12.41	89	18470	193.3626	ug/L	96
62)	trans-1,3-Dichloropropene	12.44	75	803175	98.5594	ug/L	100
63)	1,1,2-Trichloroethane	12.64	97	447598	98.5768	ug/L	100
64)	2-Hexanone	12.61	58	113352	99.5388	ug/L	98
65)	1,3-Dichloropropane	12.95	76	721531	97.0546	ug/L	100
66)	Tetrachloroethene	13.09	164	632990	95.6144	ug/L	99
67)	Dibromochloromethane	13.33	129	686056	102.8003	ug/L	100
68)	1,2-Dibromoethane	13.57	107	479528	98.0338	ug/L	99
69)	1-Chlorohexane	13.71	91	897553	91.4892	ug/L	100
70)	Chlorobenzene	14.09	112	1923670	93.7345	ug/L	99
71)	1,1,1,2-Tetrachloroethane	14.12	131	734197	98.2979	ug/L	100
72)	Ethylbenzene	14.13	106	1039818	95.3837	ug/L	98
73)	m-,p-Xylene	14.23	106	2498146	187.7022	ug/L	97
74)	o-Xylene	14.77	106	1278214	95.6062	ug/L	100
75)	Styrene	14.82	104	2146484	89.6816	ug/L	99
76)	Bromoform	15.27	173	396095	103.4576	ug/L	98
77)	Isopropylbenzene	15.21	105	3129942	93.1376	ug/L	99
79)	1,1,2,2-Tetrachloroethane	15.40	83	451565	97.3296	ug/L	100
81)	1,2,3-Trichloropropane	15.60	110	151170	98.4941	ug/L	98
82)	trans-1,4-Dichloro-2-Buten	15.65	53	139478	103.8499	ug/L	86
83)	n-Propylbenzene	15.71	91	3480880	93.0977	ug/L	100
84)	Bromobenzene	15.82	156	902946	97.1449	ug/L	99
85)	1,3,5-Trimethylbenzene	15.90	105	2658545	95.3440	ug/L	99
86)	2-Chlorotoluene	15.97	91	2181549	91.7239	ug/L	99
87)	4-Chlorotoluene	16.01	91	2105711	93.6579	ug/L	99
88)	a-Methylstyrene	16.29	118	1643611	99.1331	ug/L	100
89)	tert-Butylbenzene	16.37	134	599025	97.1655	ug/L	99
90)	1,2,4-Trimethylbenzene	16.42	105	2734043	101.8439	ug/L	99
91)	sec-Butylbenzene	16.64	105	3166789	92.8794	ug/L	99
92)	p-Isopropyltoluene	16.79	119	2914703	94.7169	ug/L	99
93)	1,3-Dichlorobenzene	16.97	146	1740775	94.8956	ug/L	99
94)	1,4-Dichlorobenzene	17.09	146	1732433	94.1046	ug/L	100
95)	n-Butylbenzene	17.32	91	2284175	94.9515	ug/L	99
96)	1,2-Dichlorobenzene	17.58	146	1565626	95.7457	ug/L	99
97)	1,2-Dibromo-3-Chloropropan	18.56	75	80547	100.8595	ug/L	96
98)	1,2,4-Trichlorobenzene	19.71	182	1041709	94.6026	ug/L	99
99)	Hexachlorobutadiene	19.87	225	406092	103.7946	ug/L	99
100)	Naphthalene	20.06	128	1991719	92.4289	ug/L	100
101)	1,2,3-Trichlorobenzene	20.38	180	894723	94.8100	ug/L	99

(#) = qualifier out of range (m) = manual integration
8M377942.D 8260WT.M Wed Mar 28 08:26:59 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\032712\8M377942.D Vial: 9
Acq On : 27 Mar 2012 14:49 Operator: adc
Sample : WG393321-09 100.0 ug/L STD 8260 Inst : HPMS8
Misc : 1,1 STD50782 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 28 8:26 2012 Quant Results File: 8260WT.RES

Method : C:\MSDCHEM\2\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\032712\8M377943.D Vial: 10
Acq On : 27 Mar 2012 15:19 Operator: adc
Sample : WG393321-10 200.0 ug/L STD 8260 Inst : HPMS8
Misc : 1,1 STD50782 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 28 08:26:59 2012 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\2\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.18	96	629120	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.04	117	528582	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.05	152	280754	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.13	111	639588	97.9920	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 391.96%#			
43) 1,2-Dichloroethane-d4	9.77	65	507017	100.8776	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 403.52%#			
58) Toluene-d8	12.16	98	2324762	95.2556	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 381.04%#			
80) p-Bromofluorobenzene	15.54	95	874452	96.2824	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 385.12%#			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.82	85	1341694	196.0727	ug/L	98
3) Chloromethane	3.22	50	1518052	192.4837	ug/L	99
4) Vinyl Chloride	3.42	62	1175984	178.9094	ug/L	100
5) 1,3-Butadiene	3.45	54	752650	200.1092	ug/L	100
6) Bromomethane	4.21	94	995932	195.6482	ug/L	99
7) Chloroethane	4.37	64	830961	196.2392	ug/L	100
8) Trichlorofluoromethane	4.86	101	2045344	210.7375	ug/L	99
9) Diethyl ether	5.42	59	1330740	376.6549	ug/L	99
10) Isoprene	5.42	67	1409164	184.4974	ug/L	99
11) Acrolein	5.61	56	170650	427.6402	ug/L	93
12) 1,1,2-Trichloro-1,2,2-Trif	5.65	101	1149420	197.1877	ug/L	99
13) Acetone	5.74	43	186828	201.2653	ug/L	98
14) 1,1-Dichloroethene	5.94	61	1770522	209.9053	ug/L	100
15) Tert-Butyl Alcohol	6.14	59	260961	906.5042	ug/L #	81
16) Dimethyl Sulfide	6.19	62	1109799	186.8993	ug/L	99
17) Iodomethane	6.43	142	1917953	194.7876	ug/L	100
18) Methyl acetate	6.48	43	602298	206.1751	ug/L	99
19) Methylene Chloride	6.71	84	1182979	188.4700	ug/L	99
20) Carbon Disulfide	6.73	76	3111317	191.9756	ug/L	99
21) Acrylonitrile	6.90	53	262355	208.7818	ug/L	98
22) Methyl Tert Butyl Ether	6.97	73	2091725	194.7593	ug/L	99
23) trans-1,2-Dichloroethene	7.18	61	1611386	202.2986	ug/L	99
24) n-Hexane	7.29	57	1363634	187.6133	ug/L	100
25) Diisopropyl ether	7.65	45	6993004	363.9437	ug/L	99
26) Vinyl Acetate	7.79	43	1282119	207.7380	ug/L	100
27) 1,1-Dichloroethane	7.80	63	1997573	196.1692	ug/L	100
28) Ethyl-Tert-Butyl ether	8.22	59	5930339	376.6022	ug/L	99
29) 2-Butanone	8.36	43	286649	207.5223	ug/L	98
30) Propionitrile	8.46	54	186896	397.1858	ug/L	99
31) 2,2-Dichloropropane	8.58	77	1811725	206.7894	ug/L	99
32) cis-1,2-Dichloroethene	8.63	96	1336728	202.7040	ug/L	99
33) Chloroform	8.85	83	2074385	197.6599	ug/L	99
34) 1-Bromopropane	8.99	122	291415	218.3768	ug/L	99
35) Bromochloromethane	9.07	130	843378	198.5742	ug/L	100
36) Tetrahydrofuran	9.11	42	376377	402.0661	ug/L	97
38) 1,1,1-Trichloroethane	9.39	97	1949108	204.3923	ug/L	100
39) Cyclohexane	9.43	56	1802279	191.2913	ug/L	99
40) 1,1-Dichloropropene	9.58	75	1639803	199.6361	ug/L	99
41) Tert-Amyl-Methyl ether	9.72	73	4852855	376.5883	ug/L	99
42) Carbon Tetrachloride	9.73	117	1794265	201.1134	ug/L	100

(#) = qualifier out of range (m) = manual integration
8M377943.D 8260WT.M Wed Mar 28 08:27:00 2012 Page 1

Data File : C:\MSDCHEM\2\DATA\032712\8M377943.D Vial: 10
Acq On : 27 Mar 2012 15:19 Operator: adc
Sample : WG393321-10 200.0 ug/L STD 8260 Inst : HPMS8
Misc : 1,1 STD50782 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 28 08:26:59 2012 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\2\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

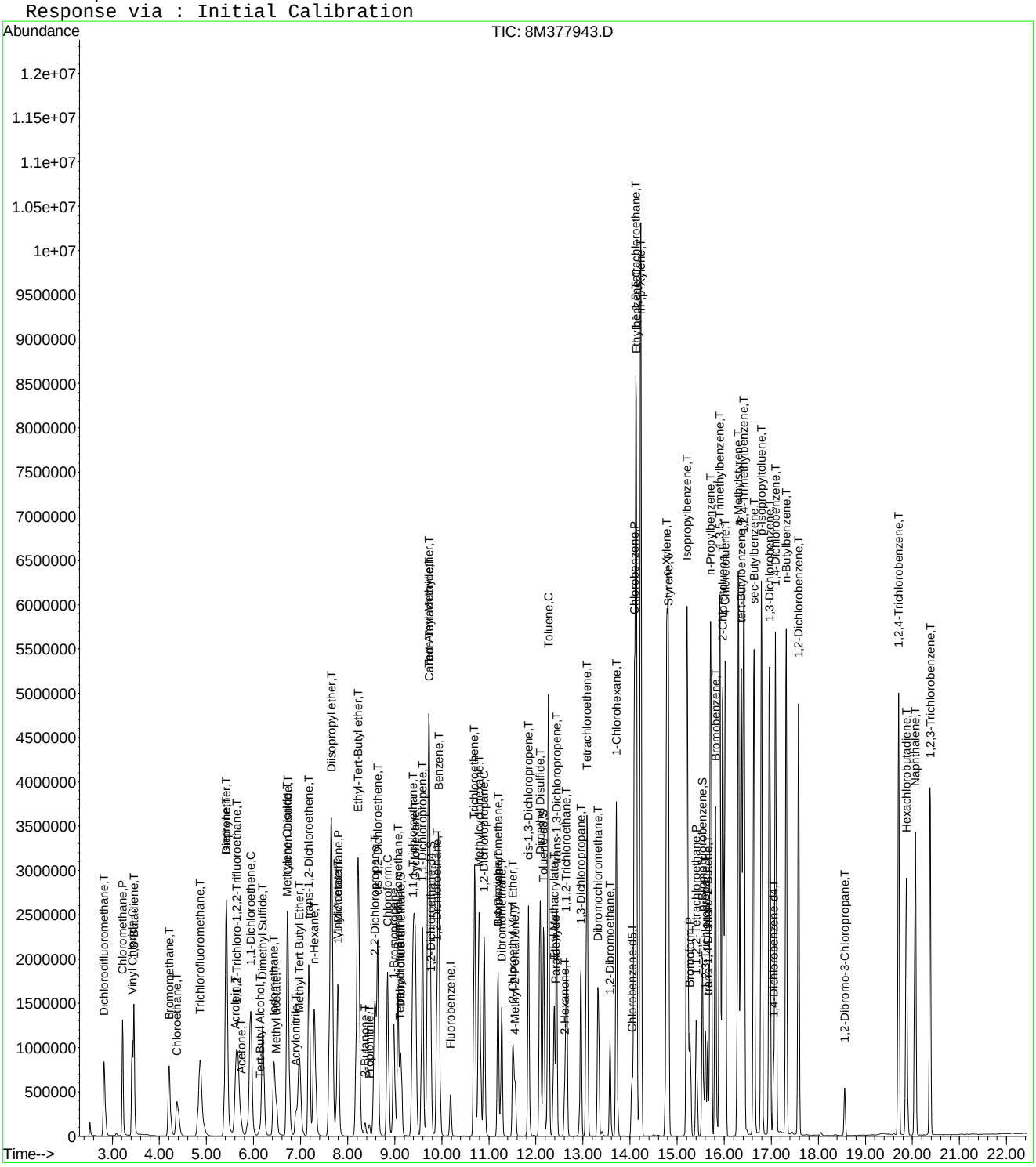
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
45)	1,2-Dichloroethane	9.90	62	1325593	205.2765	ug/L	99
46)	Benzene	9.94	78	4385066	181.8946	ug/L	98
47)	Trichloroethene	10.69	130	1571261	197.1538	ug/L	99
48)	Methylcyclohexane	10.79	83	1777684	192.9922	ug/L	99
49)	1,2-Dichloropropane	10.90	63	1191907	203.2039	ug/L	99
50)	Bromodichloromethane	11.20	83	1557448	205.8404	ug/L	100
51)	1,4-Dioxane	11.20	88	30711	913.3411	ug/L	95
52)	Dibromomethane	11.27	93	651959	214.7004	ug/L	99
53)	2-Chloroethyl Vinyl Ether	11.51	63	558009	207.3246	ug/L	100
54)	4-Methyl-2-Pentanone	11.55	58	241565	198.3652	ug/L	99
55)	cis-1,3-Dichloropropene	11.84	75	1821213	204.5100	ug/L	98
56)	Dimethyl Disulfide	12.09	94	2156585	218.6946	ug/L	99
59)	Toluene	12.26	91	5020418	172.2216	ug/L	98
60)	Ethyl Methacrylate	12.39	69	984425	193.5895	ug/L	100
61)	Paraldehyde	12.42	89	38366	398.6829	ug/L	96
62)	trans-1,3-Dichloropropene	12.44	75	1598301	197.6198	ug/L	100
63)	1,1,2-Trichloroethane	12.65	97	881044	195.5097	ug/L	100
64)	2-Hexanone	12.61	58	223334	197.6068	ug/L	97
65)	1,3-Dichloropropane	12.96	76	1413819	191.6192	ug/L	100
66)	Tetrachloroethene	13.08	164	1268896	193.1240	ug/L	99
67)	Dibromochloromethane	13.32	129	1346431	203.2839	ug/L	99
68)	1,2-Dibromoethane	13.58	107	947175	195.1084	ug/L	99
69)	1-Chlorohexane	13.71	91	1785215	183.3514	ug/L	99
70)	Chlorobenzene	14.09	112	3655014	179.4493	ug/L	96
71)	1,1,1,2-Tetrachloroethane	14.12	131	1397415	188.5129	ug/L	99
72)	Ethylbenzene	14.13	106	2007326	185.5319	ug/L	94
73)	m-,p-Xylene	14.23	106	4651220	352.1295	ug/L	93
74)	o-Xylene	14.78	106	2449837	184.6305	ug/L	97
75)	Styrene	14.82	104	4017393	169.1234	ug/L	96
76)	Bromoform	15.27	173	770750	202.8433	ug/L	100
77)	Isopropylbenzene	15.21	105	5863585	175.8069	ug/L	97
79)	1,1,2,2-Tetrachloroethane	15.41	83	877899	194.5758	ug/L	99
81)	1,2,3-Trichloropropane	15.60	110	294885	197.5681	ug/L	98
82)	trans-1,4-Dichloro-2-Buten	15.65	53	275400	210.8549	ug/L	87
83)	n-Propylbenzene	15.72	91	6428640	176.8025	ug/L	97
84)	Bromobenzene	15.82	156	1726344	190.9875	ug/L	100
85)	1,3,5-Trimethylbenzene	15.90	105	4989950	184.0199	ug/L	97
86)	2-Chlorotoluene	15.97	91	3912323	169.1499	ug/L	94
87)	4-Chlorotoluene	16.02	91	3956154	180.9415	ug/L	98
88)	a-Methylstyrene	16.30	118	3065761	190.1416	ug/L	98
89)	tert-Butylbenzene	16.37	134	1175024	195.9896	ug/L	97
90)	1,2,4-Trimethylbenzene	16.42	105	5062082	194.2441	ug/L	96
91)	sec-Butylbenzene	16.64	105	5967052	179.9614	ug/L	97
92)	p-Isopropyltoluene	16.79	119	5478541	183.0702	ug/L	97
93)	1,3-Dichlorobenzene	16.97	146	3293917	184.6442	ug/L	97
94)	1,4-Dichlorobenzene	17.09	146	3258373	182.0014	ug/L	98
95)	n-Butylbenzene	17.32	91	4399810	188.0728	ug/L	97
96)	1,2-Dichlorobenzene	17.58	146	2944153	185.1446	ug/L	97
97)	1,2-Dibromo-3-Chloropropan	18.56	75	163132	210.0516	ug/L	99
98)	1,2,4-Trichlorobenzene	19.71	182	2053145	191.7325	ug/L	98
99)	Hexachlorobutadiene	19.87	225	854767	224.6556	ug/L	100
100)	Naphthalene	20.06	128	3760751	179.4624	ug/L	99
101)	1,2,3-Trichlorobenzene	20.38	180	1759420	191.7142	ug/L	99

(#) = qualifier out of range (m) = manual integration
8M377943.D 8260WT.M Wed Mar 28 08:27:00 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\032712\8M377943.D Vial: 10
Acq On : 27 Mar 2012 15:19 Operator: adc
Sample : WG393321-10 200.0 ug/L STD 8260 Inst : HPMS8
Misc : 1,1 STD50782 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 28 8:26 2012 Quant Results File: 8260WT.RES

Method : C:\MSDCHEM\2\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\032712\8M377944.D Vial: 11
Acq On : 27 Mar 2012 15:49 Operator: adc
Sample : WG393321-11 300.0 ug/L STD 8260 Inst : HPMS8
Misc : 1,1 STD50782 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 28 08:27:01 2012 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\2\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.18	96	620267	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.04	117	523100	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.05	152	289880	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.13	111	207	0.0322	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery =	0.12%#		
43) 1,2-Dichloroethane-d4	9.72	65	4294	0.8665	ug/L	-0.05
Spiked Amount 25.000	Range 80 - 120		Recovery =	3.48%#		
58) Toluene-d8	12.16	98	3274	0.1356	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery =	0.56%#		
80) p-Bromofluorobenzene	15.54	95	3182	0.3393	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery =	1.36%#		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.82	85	1211	0.1795	ug/L	# 43
3) Chloromethane	3.21	50	9891	1.2720	ug/L	94
4) Vinyl Chloride	3.42	62	1011	0.1560	ug/L	# 43
5) 1,3-Butadiene	3.45	54	1105915	299.1691	ug/L	99
6) Bromomethane	4.21	94	39099	7.7905	ug/L	100
8) Trichlorofluoromethane	4.86	101	1213	0.1268	ug/L	# 66
9) Diethyl ether	5.42	59	964402	276.8620	ug/L	100
10) Isoprene	5.41	67	1225	0.1627	ug/L	97
11) Acrolein	5.61	56	253175	643.4991	ug/L	92
12) 1,1,2-Trichloro-1,2,2-Trif	5.67	101	1462	0.2544	ug/L	# 43
13) Acetone	5.74	43	267373	292.1456	ug/L	97
14) 1,1-Dichloroethene	5.94	61	1504	0.1809	ug/L	94
15) Tert-Butyl Alcohol	6.12	59	179906	634.6388	ug/L	93
17) Iodomethane	6.44	142	30415	3.1330	ug/L	95
18) Methyl acetate	6.48	43	230478	80.0219	ug/L	100
19) Methylene Chloride	6.71	84	4152	0.6709	ug/L	96
20) Carbon Disulfide	6.73	76	7207	0.4510	ug/L	# 83
21) Acrylonitrile	6.90	53	367778	296.8546	ug/L	93
22) Methyl Tert Butyl Ether	6.99	73	2860	0.2701	ug/L	# 52
23) trans-1,2-Dichloroethene	7.19	61	2649	0.3373	ug/L	99
24) n-Hexane	7.29	57	21013	2.9323	ug/L	97
25) Diisopropyl ether	7.65	45	5175040	273.1737	ug/L	99
26) Vinyl Acetate	7.78	43	1795541	295.0786	ug/L	100
27) 1,1-Dichloroethane	7.80	63	2650	0.2640	ug/L	# 50
28) Ethyl-Tert-Butyl ether	8.22	59	4381051	282.1867	ug/L	100
29) 2-Butanone	8.36	43	417461	306.5386	ug/L	98
30) Propionitrile	8.46	54	139247	300.4767	ug/L	99
31) 2,2-Dichloropropane	8.57	77	1988	0.2301	ug/L	# 41
32) cis-1,2-Dichloroethene	8.64	96	1881	0.2893	ug/L	# 1
33) Chloroform	8.85	83	2388	0.2308	ug/L	96
34) 1-Bromopropane	8.98	122	390930	297.1313	ug/L	99
35) Bromochloromethane	9.07	130	836	0.1996	ug/L	# 70
36) Tetrahydrofuran	9.11	42	278860	302.1450	ug/L	98
38) 1,1,1-Trichloroethane	9.39	97	2418	0.2572	ug/L	79
39) Cyclohexane	9.43	56	3362	0.3619	ug/L	# 65
40) 1,1-Dichloropropene	9.58	75	4252	0.5250	ug/L	# 66
41) Tert-Amyl-Methyl ether	9.72	73	3616771	284.6724	ug/L	100
42) Carbon Tetrachloride	9.73	117	2466	0.2804	ug/L	# 92
45) 1,2-Dichloroethane	9.88	62	1749	0.2747	ug/L	# 39
46) Benzene	9.93	78	9084	0.3822	ug/L	97

(#) = qualifier out of range (m) = manual integration
8M377944.D 8260WT.M Wed Mar 28 08:27:01 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\032712\8M377944.D Vial: 11
Acq On : 27 Mar 2012 15:49 Operator: adc
Sample : WG393321-11 300.0 ug/L STD 8260 Inst : HPMS8
Misc : 1,1 STD50782 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 28 08:27:01 2012 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\2\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

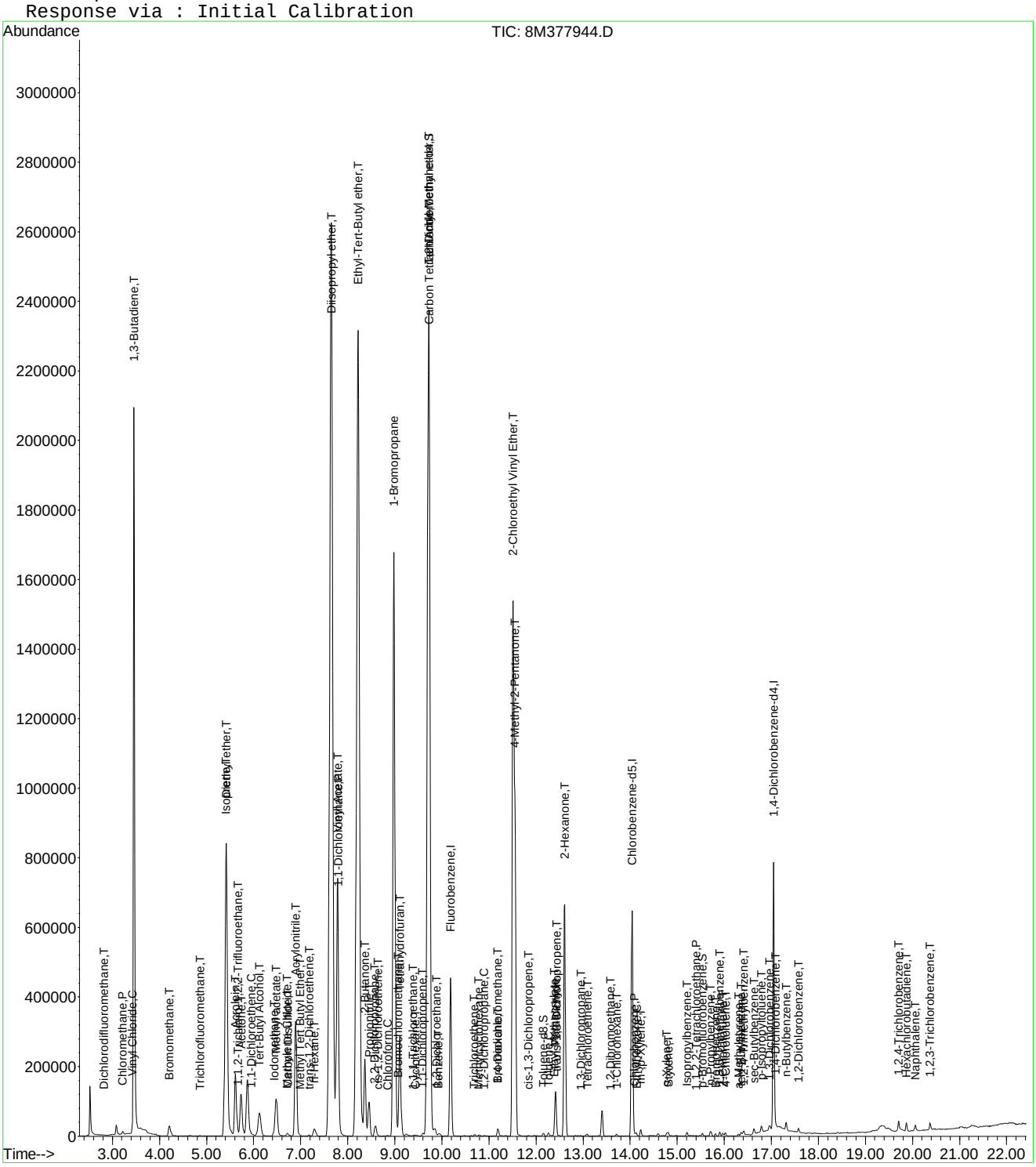
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
47)	Trichloroethene	10.69	130	2671	0.3399	ug/L		90
48)	Methylcyclohexane	10.78	83	3230	0.3557	ug/L		93
49)	1,2-Dichloropropane	10.90	63	1267	0.2191	ug/L	#	34
50)	Bromodichloromethane	11.19	83	1304	0.1748	ug/L	#	15
51)	1,4-Dioxane	11.19	88	21271	641.6257	ug/L		94
53)	2-Chloroethyl Vinyl Ether	11.52	63	820448	309.1829	ug/L		99
54)	4-Methyl-2-Pentanone	11.55	58	361873	301.3995	ug/L		99
55)	cis-1,3-Dichloropropene	11.84	75	2189	0.2493	ug/L	#	59
59)	Toluene	12.26	91	13100	0.4541	ug/L		96
60)	Ethyl Methacrylate	12.39	69	1060	0.2106	ug/L	#	1
61)	Paraldehyde	12.42	89	28155	297.0642	ug/L	#	42
62)	trans-1,3-Dichloropropene	12.44	75	1508	0.1884	ug/L	#	42
64)	2-Hexanone	12.61	58	339429	303.4755	ug/L	#	31
65)	1,3-Dichloropropane	12.95	76	1233	0.1689	ug/L		79
66)	Tetrachloroethene	13.09	164	2466	0.3793	ug/L		92
68)	1,2-Dibromoethane	13.59	107	849	0.1767	ug/L		97
69)	1-Chlorohexane	13.72	91	2997	0.3110	ug/L		98
70)	Chlorobenzene	14.09	112	8743	0.4338	ug/L		91
72)	Ethylbenzene	14.14	106	3203	0.2991	ug/L		59
73)	m-,p-Xylene	14.23	106	9069	0.6938	ug/L		91
74)	o-Xylene	14.77	106	4274	0.3255	ug/L		99
75)	Styrene	14.82	104	7723	0.3285	ug/L		97
77)	Isopropylbenzene	15.21	105	11668	0.3535	ug/L		99
79)	1,1,2,2-Tetrachloroethane	15.41	83	1217	0.2612	ug/L	#	83
83)	n-Propylbenzene	15.72	91	17845	0.4753	ug/L		95
84)	Bromobenzene	15.82	156	3386	0.3628	ug/L		93
85)	1,3,5-Trimethylbenzene	15.90	105	11115	0.3970	ug/L		98
86)	2-Chlorotoluene	15.97	91	9328	0.3906	ug/L		91
87)	4-Chlorotoluene	16.03	91	9569	0.4239	ug/L		92
88)	a-Methylstyrene	16.30	118	3291	0.1977	ug/L		91
89)	tert-Butylbenzene	16.36	134	2630	0.4249	ug/L		87
90)	1,2,4-Trimethylbenzene	16.42	105	18193	0.2969	ug/L		73
91)	sec-Butylbenzene	16.64	105	19694	0.5753	ug/L		95
92)	p-Isopropyltoluene	16.79	119	16678	0.5398	ug/L		96
93)	1,3-Dichlorobenzene	16.97	146	8673	0.4709	ug/L	#	73
94)	1,4-Dichlorobenzene	17.09	146	9232	0.4994	ug/L		89
95)	n-Butylbenzene	17.32	91	18972	0.7854	ug/L		95
96)	1,2-Dichlorobenzene	17.58	146	7643	0.4655	ug/L		88
98)	1,2,4-Trichlorobenzene	19.71	182	9972	0.9019	ug/L		93
99)	Hexachlorobutadiene	19.87	225	7548	1.9214	ug/L		99
100)	Naphthalene	20.06	128	18457	0.8530	ug/L		98
101)	1,2,3-Trichlorobenzene	20.37	180	9316	0.9832	ug/L		96

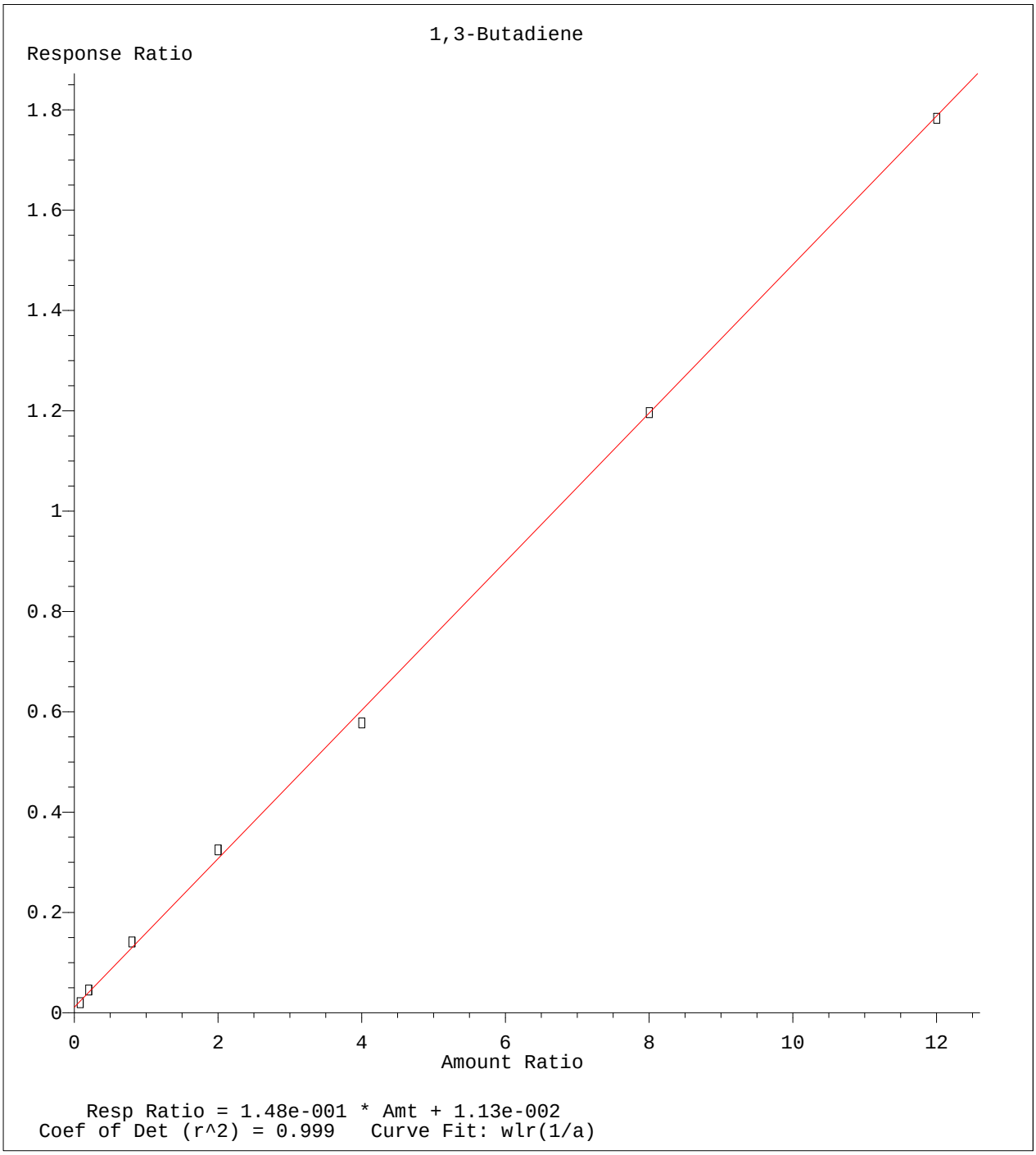
(#) = qualifier out of range (m) = manual integration
8M377944.D 8260WT.M Wed Mar 28 08:27:02 2012 Page 2

Quantitation Report (Not Reviewed)

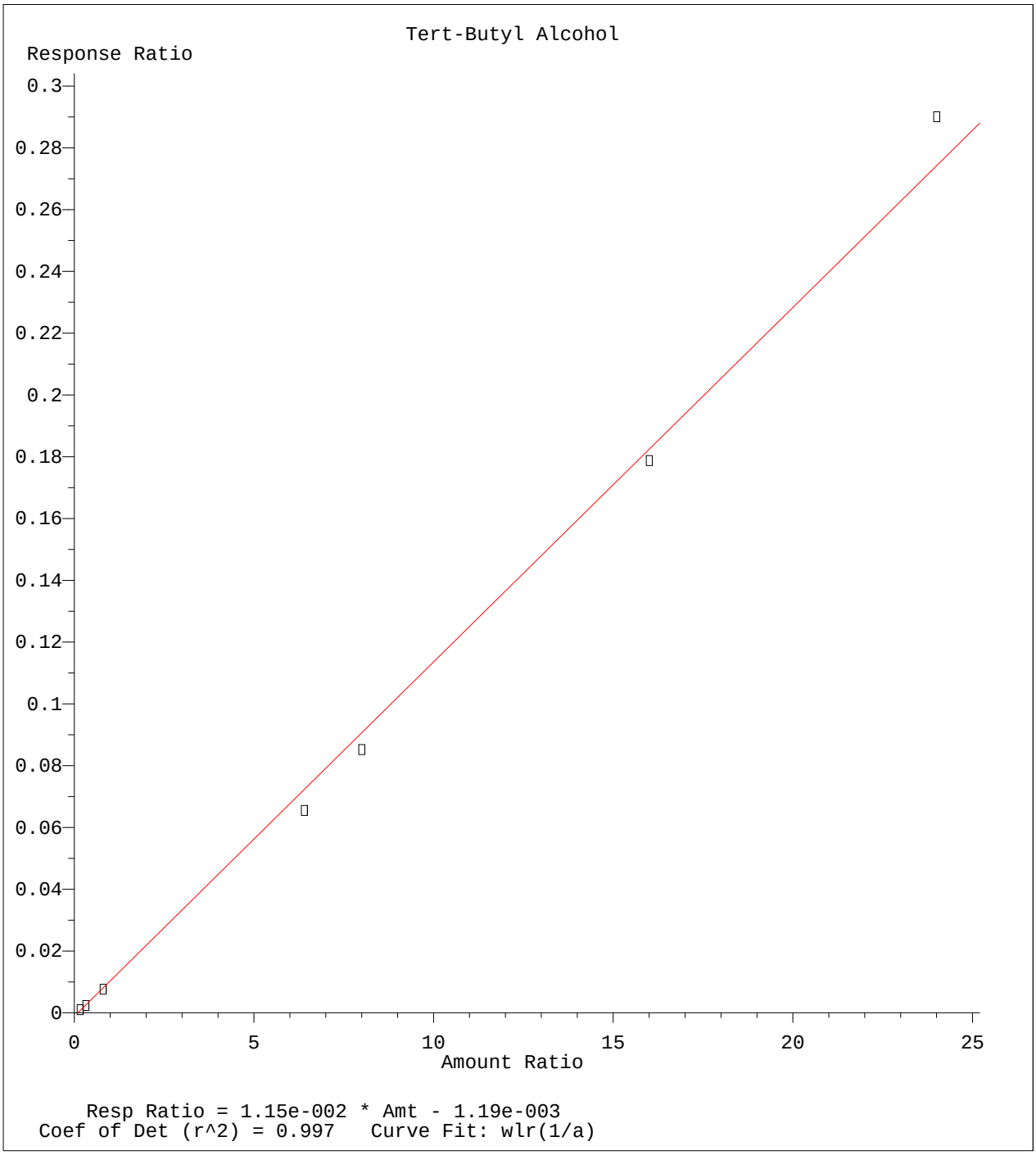
Data File : C:\MSDCHEM\2\DATA\032712\8M377944.D Vial: 11
Acq On : 27 Mar 2012 15:49 Operator: adc
Sample : WG393321-11 300.0 ug/L STD 8260 Inst : HPMS8
Misc : 1,1 STD50782 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 28 8:27 2012 Quant Results File: 8260WT.RES

Method : C:\MSDCHEM\2\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration

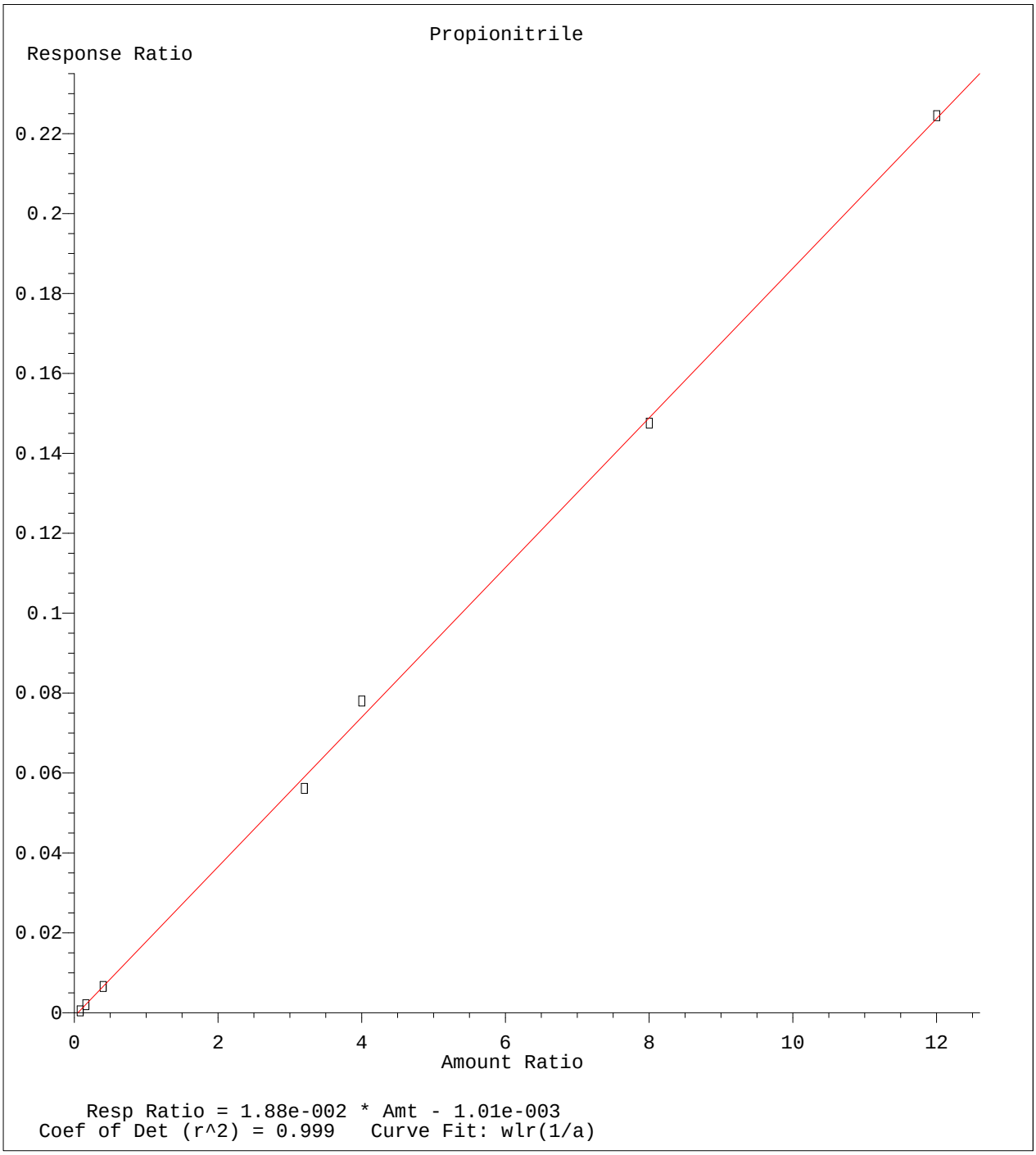




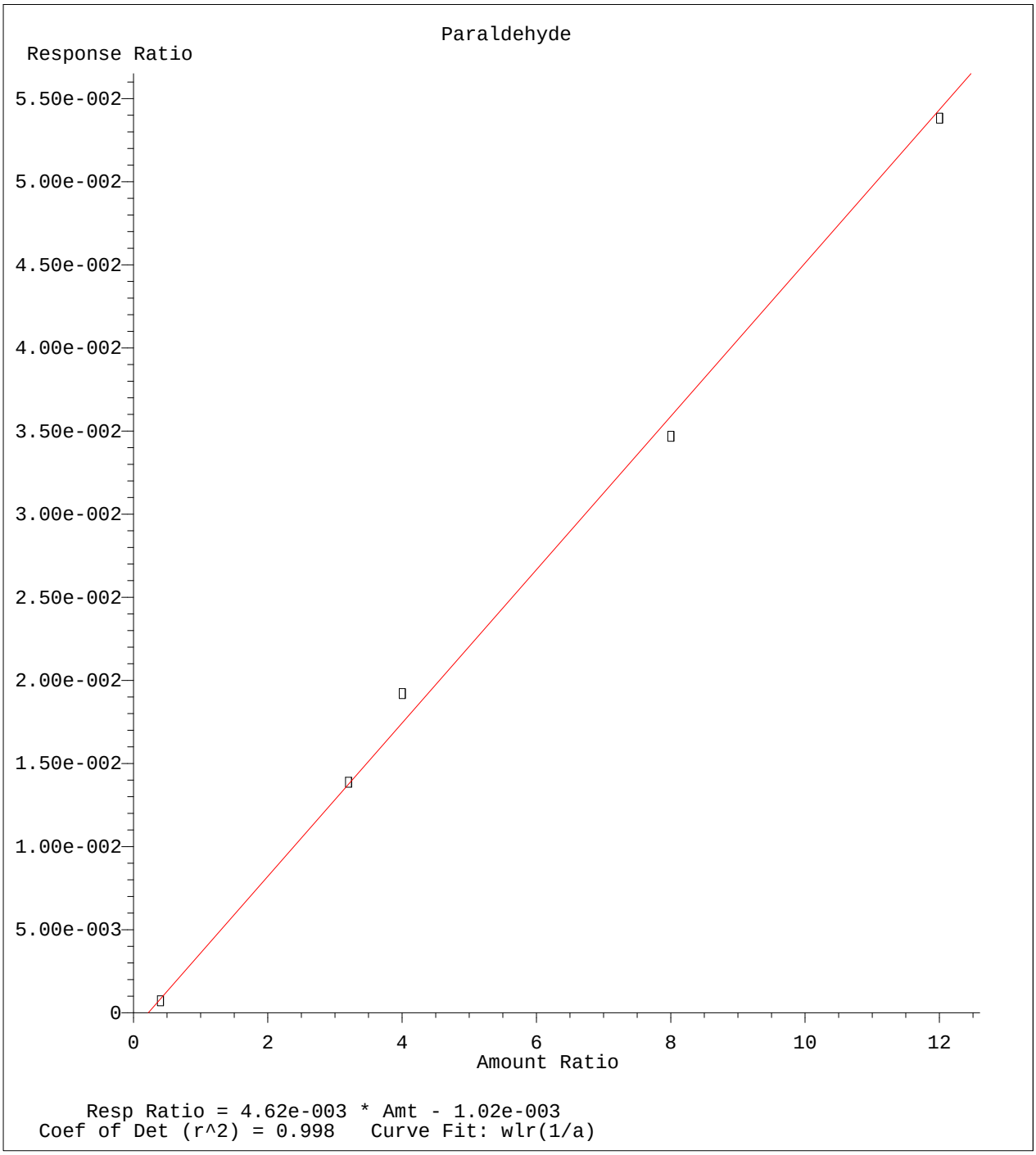
Method Name: C:\MSDCHEM\2\METHODS\8260WT.M
Calibration Table Last Updated: Wed Mar 28 08:18:24 2012



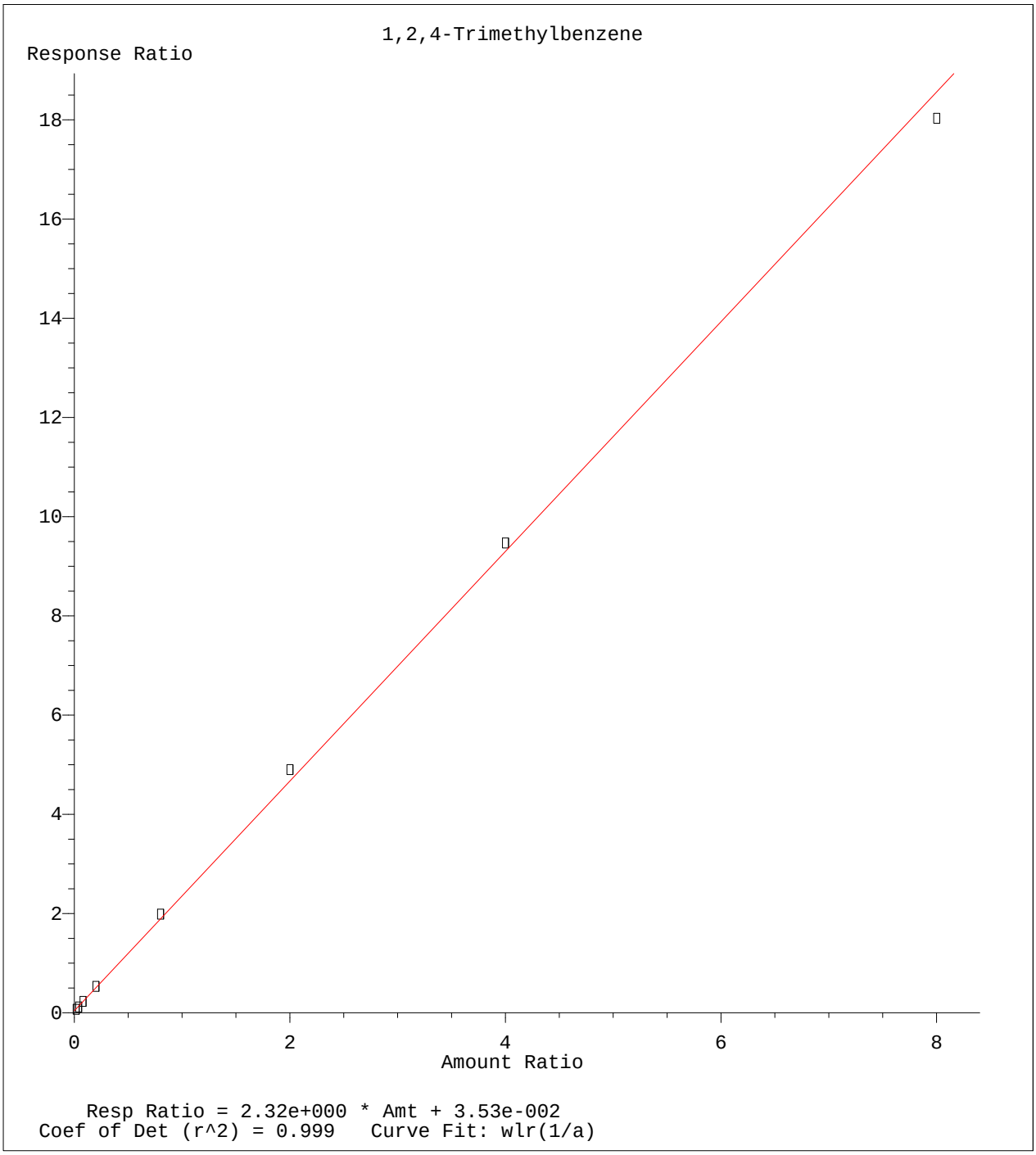
Method Name: C:\MSDCHEM\2\METHODS\8260WT.M
Calibration Table Last Updated: Wed Mar 28 08:18:24 2012



Method Name: C:\MSDCHEM\2\METHODS\8260WT.M
Calibration Table Last Updated: Wed Mar 28 08:18:24 2012



Method Name: C:\MSDCHEM\2\METHODS\8260WT.M
Calibration Table Last Updated: Wed Mar 28 08:18:24 2012



Method Name: C:\MSDCHEM\2\METHODS\8260WT.M
Calibration Table Last Updated: Wed Mar 28 08:18:24 2012

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\032712\8M377947.D Vial: 14
Acq On : 27 Mar 2012 17:20 Operator: adc
Sample : WG393321-12 50.0 ug/L ALT SRC 8260 Inst : HPMS8
Misc : 1,1 STD50783 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 28 08:27:02 2012 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\2\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.19	96	641347	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.04	117	533633	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.05	152	288543	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.13	111	160083	24.0589	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 96.24%			
43) 1,2-Dichloroethane-d4	9.77	65	126102	24.6113	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 98.44%			
58) Toluene-d8	12.16	98	625101	25.3707	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 101.48%			
80) p-Bromofluorobenzene	15.54	95	233558	25.0219	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 100.08%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.82	85	540229	77.4430	ug/L	98
3) Chloromethane	3.22	50	466508	58.0239	ug/L	99
4) Vinyl Chloride	3.42	62	362849	54.1500	ug/L	100
5) 1,3-Butadiene	3.46	54	116154	28.6672	ug/L	99
6) Bromomethane	4.23	94	284635	54.8498	ug/L	99
7) Chloroethane	4.40	64	241083	55.8486	ug/L	99
8) Trichlorofluoromethane	4.88	101	517814	52.3347	ug/L	99
9) Diethyl ether	5.41	59	323025	89.6865	ug/L	98
10) Isoprene	5.44	67	379566	48.7480	ug/L	100
11) Acrolein	5.62	56	54480	133.9213	ug/L	94
12) 1,1,2-Trichloro-1,2,2-Trif	5.68	101	306503	51.5794	ug/L	100
13) Acetone	5.72	43	50957	53.8482	ug/L	99
14) 1,1-Dichloroethene	5.95	61	419424	48.7771	ug/L	100
15) Tert-Butyl Alcohol	6.08	59	53032	182.7741	ug/L	98
16) Dimethyl Sulfide	6.21	62	296704	49.0148	ug/L	99
17) Iodomethane	6.44	142	318748	31.7549	ug/L	100
18) Methyl acetate	6.47	43	169282	56.8429	ug/L	98
19) Methylene Chloride	6.72	84	318173	49.7243	ug/L	99
20) Carbon Disulfide	6.74	76	844228	51.0978	ug/L	100
21) Acrylonitrile	6.89	53	69071	53.9187	ug/L	99
22) Methyl Tert Butyl Ether	6.97	73	585810	53.5046	ug/L	100
23) trans-1,2-Dichloroethene	7.19	61	420107	51.7361	ug/L	100
24) n-Hexane	7.30	57	381860	51.5360	ug/L	98
25) Diisopropyl ether	7.64	45	1934489	98.7591	ug/L	100
26) Vinyl Acetate	7.79	43	285604	45.3934	ug/L	100
27) 1,1-Dichloroethane	7.80	63	515550	49.6637	ug/L	100
28) Ethyl-Tert-Butyl ether	8.21	59	1553820	96.7931	ug/L	100
29) 2-Butanone	8.36	43	77234	54.8483	ug/L	100
30) Propionitrile	8.45	54	48457	102.0215	ug/L	99
31) 2,2-Dichloropropane	8.58	77	444280	49.7431	ug/L	99
32) cis-1,2-Dichloroethene	8.64	96	353213	52.5408	ug/L	99
33) Chloroform	8.85	83	516384	48.2661	ug/L	100
34) 1-Bromopropane	8.99	122	78530	57.7259	ug/L	99
35) Bromochloromethane	9.07	130	226534	52.3208	ug/L	99
36) Tetrahydrofuran	9.11	42	93062	97.5185	ug/L	96
38) 1,1,1-Trichloroethane	9.39	97	495477	50.9674	ug/L	100
39) Cyclohexane	9.43	56	494387	51.4731	ug/L	99
40) 1,1-Dichloropropene	9.59	75	433208	51.7350	ug/L	100
41) Tert-Amyl-Methyl ether	9.72	73	1327143	101.0247	ug/L	100
42) Carbon Tetrachloride	9.73	117	465732	51.2072	ug/L	99

(#) = qualifier out of range (m) = manual integration
8M377947.D 8260WT.M Wed Mar 28 08:27:03 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\032712\8M377947.D Vial: 14
Acq On : 27 Mar 2012 17:20 Operator: adc
Sample : WG393321-12 50.0 ug/L ALT SRC 8260 Inst : HPMS8
Misc : 1,1 STD50783 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 28 08:27:02 2012 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\2\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

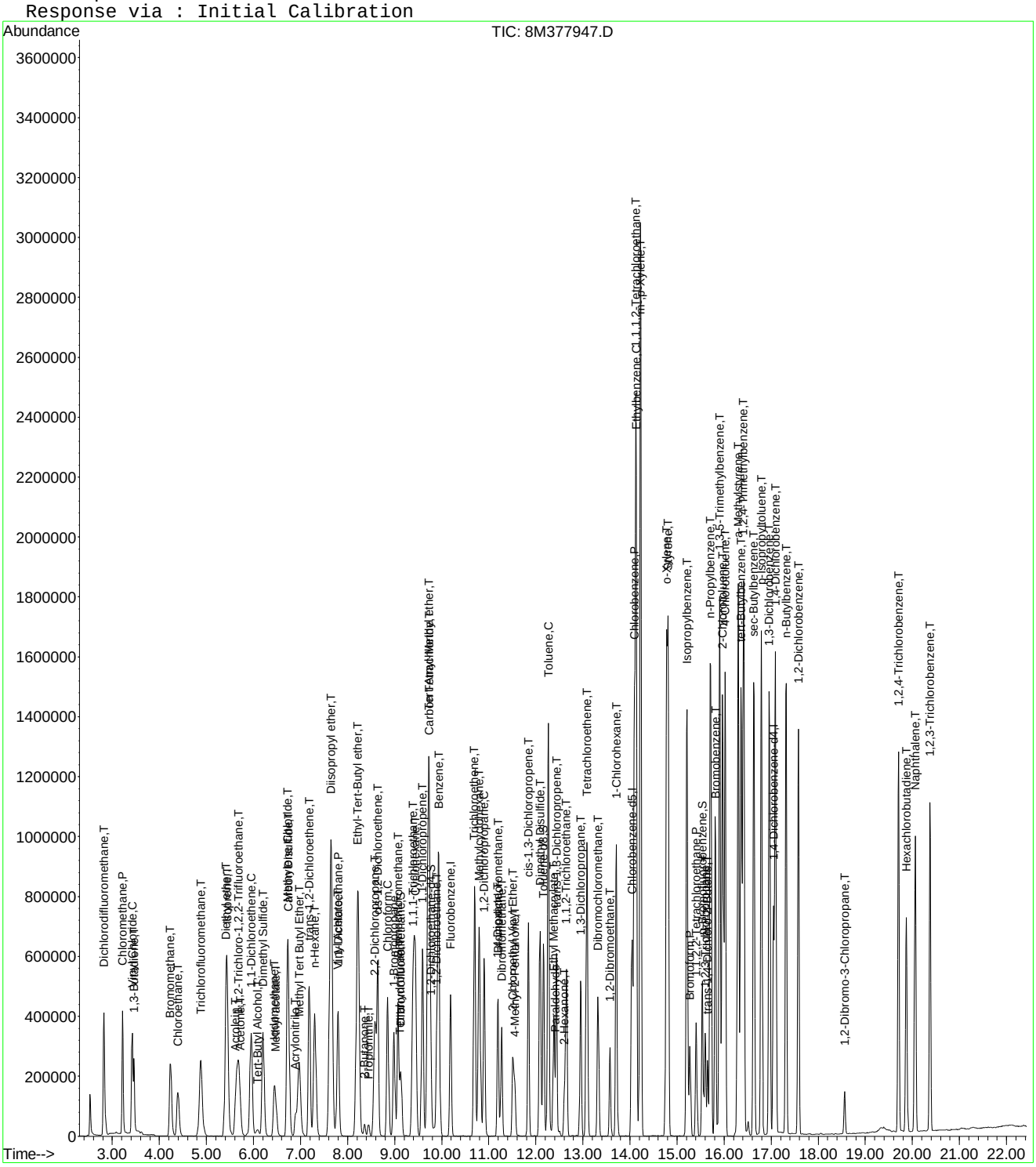
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
45)	1,2-Dichloroethane	9.89	62	336687	51.1441 ug/L	99
46)	Benzene	9.94	78	1223523	49.7848 ug/L	100
47)	Trichloroethene	10.69	130	424349	52.2301 ug/L	100
48)	Methylcyclohexane	10.80	83	486163	51.7735 ug/L	98
49)	1,2-Dichloropropane	10.90	63	314619	52.6157 ug/L	100
50)	Bromodichloromethane	11.20	83	402435	52.1739 ug/L	99
51)	1,4-Dioxane	11.19	88	6195	180.7261 ug/L	96
52)	Dibromomethane	11.27	93	164235	53.0541 ug/L	99
53)	2-Chloroethyl Vinyl Ether	11.51	63	139662	50.9012 ug/L	99
54)	4-Methyl-2-Pentanone	11.55	58	66620	53.6632 ug/L	98
55)	cis-1,3-Dichloropropene	11.84	75	506362	55.7770 ug/L	99
56)	Dimethyl Disulfide	12.09	94	562321	55.9366 ug/L	100
59)	Toluene	12.26	91	1422653	48.3411 ug/L	100
60)	Ethyl Methacrylate	12.38	69	279605	54.4645 ug/L	98
61)	Paraldehyde	12.41	89	7849	85.1829 ug/L	80
62)	trans-1,3-Dichloropropene	12.44	75	400529	49.0541 ug/L	99
63)	1,1,2-Trichloroethane	12.65	97	244198	53.6763 ug/L	100
64)	2-Hexanone	12.61	58	64083	56.1642 ug/L	97
65)	1,3-Dichloropropane	12.95	76	391868	52.6084 ug/L	99
66)	Tetrachloroethene	13.08	164	338912	51.0936 ug/L	99
67)	Dibromochloromethane	13.32	129	364714	54.5432 ug/L	100
68)	1,2-Dibromoethane	13.58	107	259604	52.9696 ug/L	99
69)	1-Chlorohexane	13.71	91	468914	47.7042 ug/L	100
70)	Chlorobenzene	14.09	112	1031073	50.1432 ug/L	99
71)	1,1,1,2-Tetrachloroethane	14.13	131	390031	52.1176 ug/L	99
72)	Ethylbenzene	14.14	106	558064	51.0922 ug/L	99
73)	m-,p-Xylene	14.22	106	1361797	102.1216 ug/L	100
74)	o-Xylene	14.78	106	685809	51.1964 ug/L	98
75)	Styrene	14.81	104	1154075	48.1242 ug/L	100
76)	Bromoform	15.27	173	202660	52.8305 ug/L	99
77)	Isopropylbenzene	15.21	105	1508341	44.7963 ug/L	100
79)	1,1,2,2-Tetrachloroethane	15.41	83	254177	54.8146 ug/L	99
81)	1,2,3-Trichloropropane	15.59	110	83040	54.1336 ug/L	99
82)	trans-1,4-Dichloro-2-Buten	15.65	53	63419	47.2449 ug/L	91
83)	n-Propylbenzene	15.71	91	1872385	50.1049 ug/L	99
84)	Bromobenzene	15.82	156	482499	51.9385 ug/L	100
85)	1,3,5-Trimethylbenzene	15.90	105	1473106	52.8589 ug/L	100
86)	2-Chlorotoluene	15.97	91	1254669	52.7815 ug/L	99
87)	4-Chlorotoluene	16.02	91	1064522	47.3735 ug/L	100
88)	a-Methylstyrene	16.30	118	868179	52.3918 ug/L	100
89)	tert-Butylbenzene	16.36	134	316761	51.4083 ug/L	98
90)	1,2,4-Trimethylbenzene	16.41	105	1480858	55.0179 ug/L	99
91)	sec-Butylbenzene	16.63	105	1716186	50.3616 ug/L	100
92)	p-Isopropyltoluene	16.79	119	1491694	48.5007 ug/L	99
93)	1,3-Dichlorobenzene	16.96	146	924519	50.4260 ug/L	99
94)	1,4-Dichlorobenzene	17.09	146	936244	50.8837 ug/L	99
95)	n-Butylbenzene	17.32	91	1219846	50.7356 ug/L	99
96)	1,2-Dichlorobenzene	17.58	146	836591	51.1893 ug/L	99
97)	1,2-Dibromo-3-Chloropropan	18.56	75	42816	53.6424 ug/L	95
98)	1,2,4-Trichlorobenzene	19.71	182	536783	48.7742 ug/L	100
99)	Hexachlorobutadiene	19.87	225	214743	54.9166 ug/L	98
100)	Naphthalene	20.06	128	1093034	50.7514 ug/L	99
101)	1,2,3-Trichlorobenzene	20.37	180	478516	50.7337 ug/L	99

(#) = qualifier out of range (m) = manual integration
8M377947.D 8260WT.M Wed Mar 28 08:27:03 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\2\DATA\032712\8M377947.D Vial: 14
Acq On : 27 Mar 2012 17:20 Operator: adc
Sample : WG393321-12 50.0 ug/L ALT SRC 8260 Inst : HPMS8
Misc : 1,1 STD50783 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 28 8:27 2012 Quant Results File: 8260WT.RES

Method : C:\MSDCHEM\2\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration



Data File : C:\MSDCHEM\2\DATA\032712\8M377947.D Vial: 14
Acq On : 27 Mar 2012 17:20 Operator: adc
Sample : WG393321-12 50.0 ug/L ALT SRC 8260 Inst : HPMS8
Misc : 1,1 STD50783 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\2\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	25.0000	25.0000	0.0	99	0.00
2	T	Dichlorodifluoromethane	50.0000	77.4430	-54.9#	151	0.00
3	P	Chloromethane	50.0000	58.0239	-16.0	124	0.00
4	C	Vinyl Chloride	50.0000	54.1500	-8.3	117	0.00
5	T	1,3-Butadiene	50.0000	28.6672	42.7#	55	0.00
6	T	Bromomethane	50.0000	54.8498	-9.7	109	0.00
7	T	Chloroethane	50.0000	55.8486	-11.7	111	0.00
8	T	Trichlorofluoromethane	50.0000	52.3347	-4.7	108	0.00
9	T	Diethyl ether	100.0000	89.6865	10.3	90	0.00
10	T	Isoprene	50.0000	48.7480	2.5	97	0.00
11	T	Acrolein	100.0000	133.9213	-33.9#	131	0.00
12	T	1,1,2-Trichloro-1,2,2-Trifl	50.0000	51.5794	-3.2	107	0.01
13	T	Acetone	50.0000	53.8482	-7.7	98	0.00
14	C	1,1-Dichloroethene	50.0000	48.7771	2.4	99	0.00
15	T	Tert-Butyl Alcohol	200.0000	182.7740	8.6	96	0.00
16	T	Dimethyl Sulfide	50.0000	49.0148	2.0	96	0.00
17	T	Iodomethane	50.0000	31.7549	36.5#	57	0.00
18	T	Methyl acetate	50.0000	56.8429	-13.7	112	0.00
19	T	Methylene Chloride	50.0000	49.7243	0.6	99	0.00
20	T	Carbon Disulfide	50.0000	51.0978	-2.2	94	0.00
21	T	Acrylonitrile	50.0000	53.9187	-7.8	99	0.00
22	T	Methyl Tert Butyl Ether	50.0000	53.5046	-7.0	106	0.00
23	T	trans-1,2-Dichloroethene	50.0000	51.7361	-3.5	101	0.00
24	T	n-Hexane	50.0000	51.5360	-3.1	101	0.00
25	T	Diisopropyl ether	100.0000	98.7591	1.2	98	0.00
26	T	Vinyl Acetate	50.0000	45.3933	9.2	87	0.00
27	P	1,1-Dichloroethane	50.0000	49.6637	0.7	100	0.00
28	T	Ethyl-Tert-Butyl ether	100.0000	96.7931	3.2	94	0.00
29	T	2-Butanone	50.0000	54.8483	-9.7	104	0.00
30	T	Propionitrile	100.0000	102.0215	-2.0	96	0.00
31	T	2,2-Dichloropropane	50.0000	49.7431	0.5	101	0.00
32	T	cis-1,2-Dichloroethene	50.0000	52.5408	-5.1	103	0.00
33	C	Chloroform	50.0000	48.2661	3.5	98	0.00
34		1-Bromopropane	50.0000	57.7259	-15.5	108	0.00
35	T	Bromochloromethane	50.0000	52.3208	-4.6	102	0.00
36	T	Tetrahydrofuran	100.0000	97.5185	2.5	92	0.00
37	S	Dibromofluoromethane	25.0000	24.0589	3.8	97	0.00
38	T	1,1,1-Trichloroethane	50.0000	50.9674	-1.9	101	0.00
39	T	Cyclohexane	50.0000	51.4731	-2.9	102	0.00
40	T	1,1-Dichloropropene	50.0000	51.7350	-3.5	102	0.00
41	T	Tert-Amyl-Methyl ether	100.0000	101.0247	-1.0	99	0.00
42	T	Carbon Tetrachloride	50.0000	51.2072	-2.4	103	0.00
43	S	1,2-Dichloroethane-d4	25.0000	24.6113	1.6	98	0.00
44		Heptane	50.0000	0.0000	100.0#	0	-2.46#
45	T	1,2-Dichloroethane	50.0000	51.1441	-2.3	101	0.00
46	T	Benzene	50.0000	49.7848	0.4	102	0.00
47	T	Trichloroethene	50.0000	52.2300	-4.5	103	0.00
48	T	Methylcyclohexane	50.0000	51.7735	-3.5	103	0.00
49	C	1,2-Dichloropropane	50.0000	52.6157	-5.2	102	0.00
50	T	Bromodichloromethane	50.0000	52.1739	-4.3	102	0.00
51	T	1,4-Dioxane	200.0000	180.7261	9.6	91	0.00
52	T	Dibromomethane	50.0000	53.0541	-6.1	98	0.00
53	T	2-Chloroethyl Vinyl Ether	50.0000	50.9012	-1.8	93	0.00
54	T	4-Methyl-2-Pentanone	50.0000	53.6632	-7.3	99	0.00

(#) = Out of Range
8M377947.D 8260WT.M Wed Mar 28 08:30:45 2012 Page 1

Data File : C:\MSDCHEM\2\DATA\032712\8M377947.D Vial: 14
Acq On : 27 Mar 2012 17:20 Operator: adc
Sample : WG393321-12 50.0 ug/L ALT SRC 8260 Inst : HPMS8
Misc : 1,1 STD50783 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\2\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
55	T	cis-1,3-Dichloropropene	50.0000	55.7770	-11.6	106	0.00
56	T	Dimethyl Disulfide	50.0000	55.9366	-11.9	100	0.00
57	I	Chlorobenzene-d5	25.0000	25.0000	0.0	98	0.00
58	S	Toluene-d8	25.0000	25.3707	-1.5	97	0.00
59	C	Toluene	50.0000	48.3411	3.3	101	0.00
60	T	Ethyl Methacrylate	50.0000	54.4645	-8.9	102	0.00
61		Paraldehyde	100.0000	85.1829	14.8	75	0.00
62	T	trans-1,3-Dichloropropene	50.0000	49.0541	1.9	93	0.00
63	T	1,1,2-Trichloroethane	50.0000	53.6763	-7.4	101	0.00
64	T	2-Hexanone	50.0000	56.1642	-12.3	104	0.00
65	T	1,3-Dichloropropane	50.0000	52.6084	-5.2	102	0.00
66	T	Tetrachloroethene	50.0000	51.0936	-2.2	100	0.00
67	T	Dibromochloromethane	50.0000	54.5433	-9.1	100	0.00
68	T	1,2-Dibromoethane	50.0000	52.9696	-5.9	100	0.00
69	T	1-Chlorohexane	50.0000	47.7042	4.6	97	0.00
70	P	Chlorobenzene	50.0000	50.1432	-0.3	100	0.00
71	T	1,1,1,2-Tetrachloroethane	50.0000	52.1176	-4.2	100	0.00
72	C	Ethylbenzene	50.0000	51.0922	-2.2	100	0.00
73	T	m-,p-Xylene	100.0000	102.1216	-2.1	101	0.00
74	T	o-Xylene	50.0000	51.1964	-2.4	99	0.00
75	T	Styrene	50.0000	48.1242	3.8	100	0.00
76	P	Bromoform	50.0000	52.8305	-5.7	97	0.00
77	T	Isopropylbenzene	50.0000	44.7963	10.4	89	0.00
78	I	1,4-Dichlorobenzene-d4	25.0000	25.0000	0.0	97	0.00
79	P	1,1,2,2-Tetrachloroethane	50.0000	54.8145	-9.6	103	0.00
80	S	p-Bromofluorobenzene	25.0000	25.0220	-0.1	95	0.00
81	T	1,2,3-Trichloropropane	50.0000	54.1336	-8.3	102	0.00
82	T	trans-1,4-Dichloro-2-Butene	50.0000	47.2449	5.5	84	0.00
83	T	n-Propylbenzene	50.0000	50.1049	-0.2	99	0.00
84	T	Bromobenzene	50.0000	51.9385	-3.9	101	0.00
85	T	1,3,5-Trimethylbenzene	50.0000	52.8589	-5.7	104	0.00
86	T	2-Chlorotoluene	50.0000	52.7815	-5.6	108	0.00
87	T	4-Chlorotoluene	50.0000	47.3735	5.3	94	0.00
88	T	a-Methylstyrene	50.0000	52.3918	-4.8	100	0.00
89	T	tert-Butylbenzene	50.0000	51.4083	-2.8	100	0.00
90	T	1,2,4-Trimethylbenzene	50.0000	55.0179	-10.0	102	0.00
91	T	sec-Butylbenzene	50.0000	50.3616	-0.7	101	0.00
92	T	p-Isopropyltoluene	50.0000	48.5007	3.0	95	0.00
93	T	1,3-Dichlorobenzene	50.0000	50.4260	-0.9	100	0.00
94	T	1,4-Dichlorobenzene	50.0000	50.8837	-1.8	101	0.00
95	T	n-Butylbenzene	50.0000	50.7356	-1.5	101	0.00
96	T	1,2-Dichlorobenzene	50.0000	51.1893	-2.4	100	0.00
97	T	1,2-Dibromo-3-Chloropropane	50.0000	53.6424	-7.3	98	0.00
98	T	1,2,4-Trichlorobenzene	50.0000	48.7742	2.5	97	0.00
99	T	Hexachlorobutadiene	50.0000	54.9166	-9.8	105	0.00
100	T	Naphthalene	50.0000	50.7514	-1.5	100	0.00
101	T	1,2,3-Trichlorobenzene	50.0000	50.7337	-1.5	101	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
8M377947.D 8260WT.M Wed Mar 28 08:30:45 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\051012\8M378940.D Vial: 3
Acq On : 10 May 2012 7:19 Operator: FJB
Sample : WG397XXX-01 100ug/L CCV A9 Inst : HPMS8
Misc : 1,1 STDXXXXX Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 10 07:41:52 2012 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration
DataAcq Meth : 8260WT

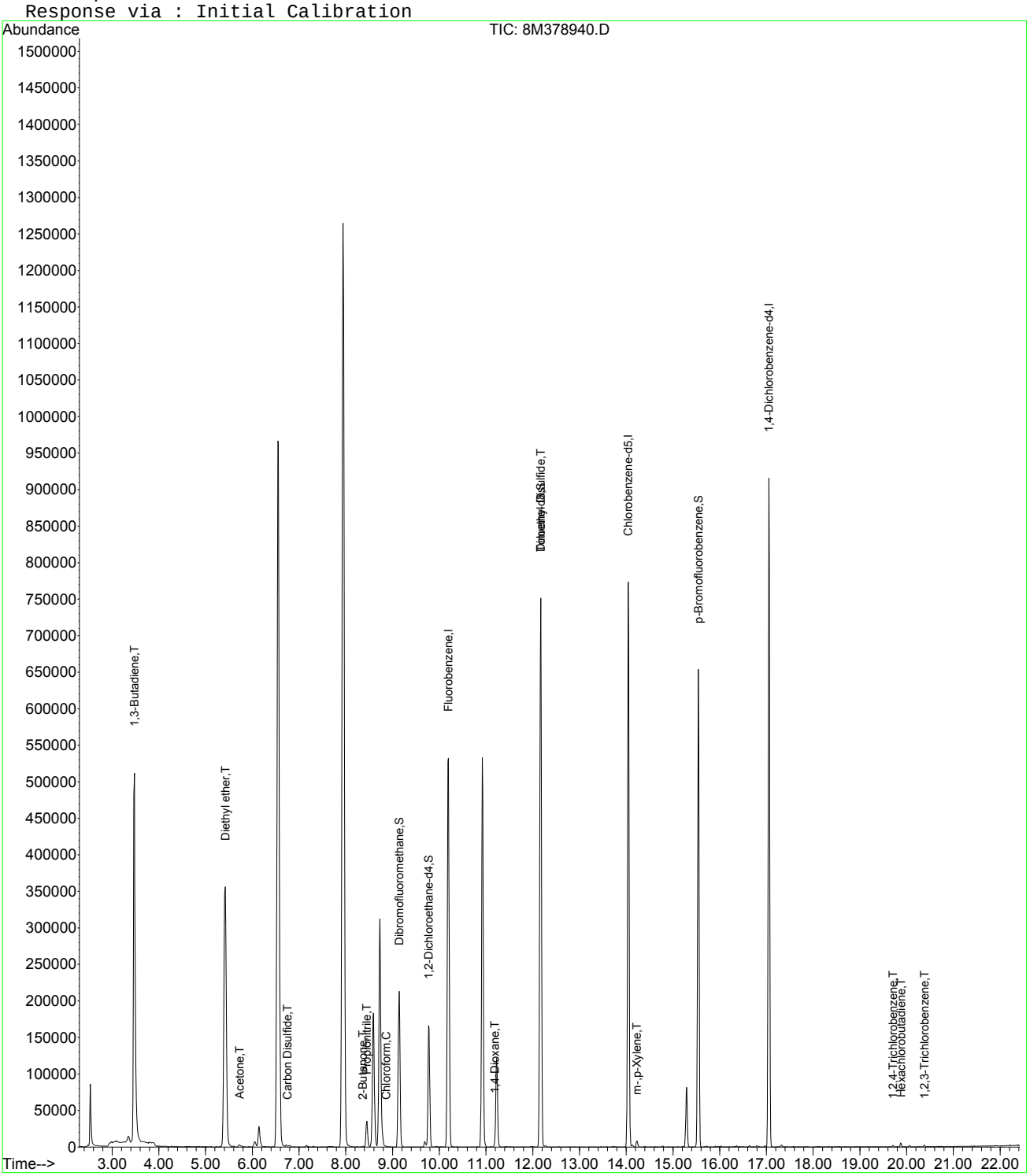
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.20	96	711474	25.00	ug/L	0.01
57) Chlorobenzene-d5	14.04	117	619124	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.05	152	346782	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.14	111	189105	25.6193	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 102.48%			
43) 1,2-Dichloroethane-d4	9.77	65	159746	28.1045	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 112.40%			
58) Toluene-d8	12.17	98	714268	24.9866	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 99.96%			
80) p-Bromofluorobenzene	15.54	95	280434	24.9983	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 100.00%			
Target Compounds						Qvalue
5) 1,3-Butadiene	3.48	54	321449	74.3793	ug/L	94
9) Diethyl ether	5.42	59	401585	100.5084	ug/L	99
13) Acetone	5.73	43	6208	5.9136	ug/L	79
20) Carbon Disulfide	6.75	76	2787	0.1521	ug/L #	75
29) 2-Butanone	8.37	43	2561	1.6395	ug/L #	55
30) Propionitrile	8.45	54	45153	85.9108	ug/L	96
33) Chloroform	8.86	83	1465	0.1234	ug/L	80
51) 1,4-Dioxane	11.19	88	4931	129.6727	ug/L	88
56) Dimethyl Disulfide	12.17	94	19384	1.7382	ug/L #	28
73) m-,p-Xylene	14.23	106	4777	0.3088	ug/L	97
90) 1,2,4-Trimethylbenzene	16.42	105	1306	Below Cal #		43
98) 1,2,4-Trichlorobenzene	19.71	182	1592	0.1204	ug/L #	41
99) Hexachlorobutadiene	19.88	225	2410	0.5128	ug/L	95
101) 1,2,3-Trichlorobenzene	20.38	180	1590	0.1403	ug/L #	80

(#) = qualifier out of range (m) = manual integration
8M378940.D 8260WT.M Thu May 10 07:41:53 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\051012\8M378940.D Vial: 3
Acq On : 10 May 2012 7:19 Operator: FJB
Sample : WG397XXX-01 100ug/L CCV A9 Inst : HPMS8
Misc : 1,1 STDXXXXX Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 10 7:41 2012 Quant Results File: 8260WT.RES

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\051012\8M378940.D Vial: 3
Acq On : 10 May 2012 7:19 Operator: FJB
Sample : WG397793-01 100ug/L CCV A9 Inst : HPMS8
Misc : 1,1 STD51412 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 11 14:12:25 2012 Quant Results File: A9FOOWT.RES

Quant Method : C:\MSDCHEM\1\METHODS\A9FOOWT.M (RTE Integrator)
Title : A9-FOO Water - IC: 01/25/12- HPMS8
Last Update : Fri Mar 09 15:12:10 2012
Response via : Initial Calibration
DataAcq Meth : 8260WT

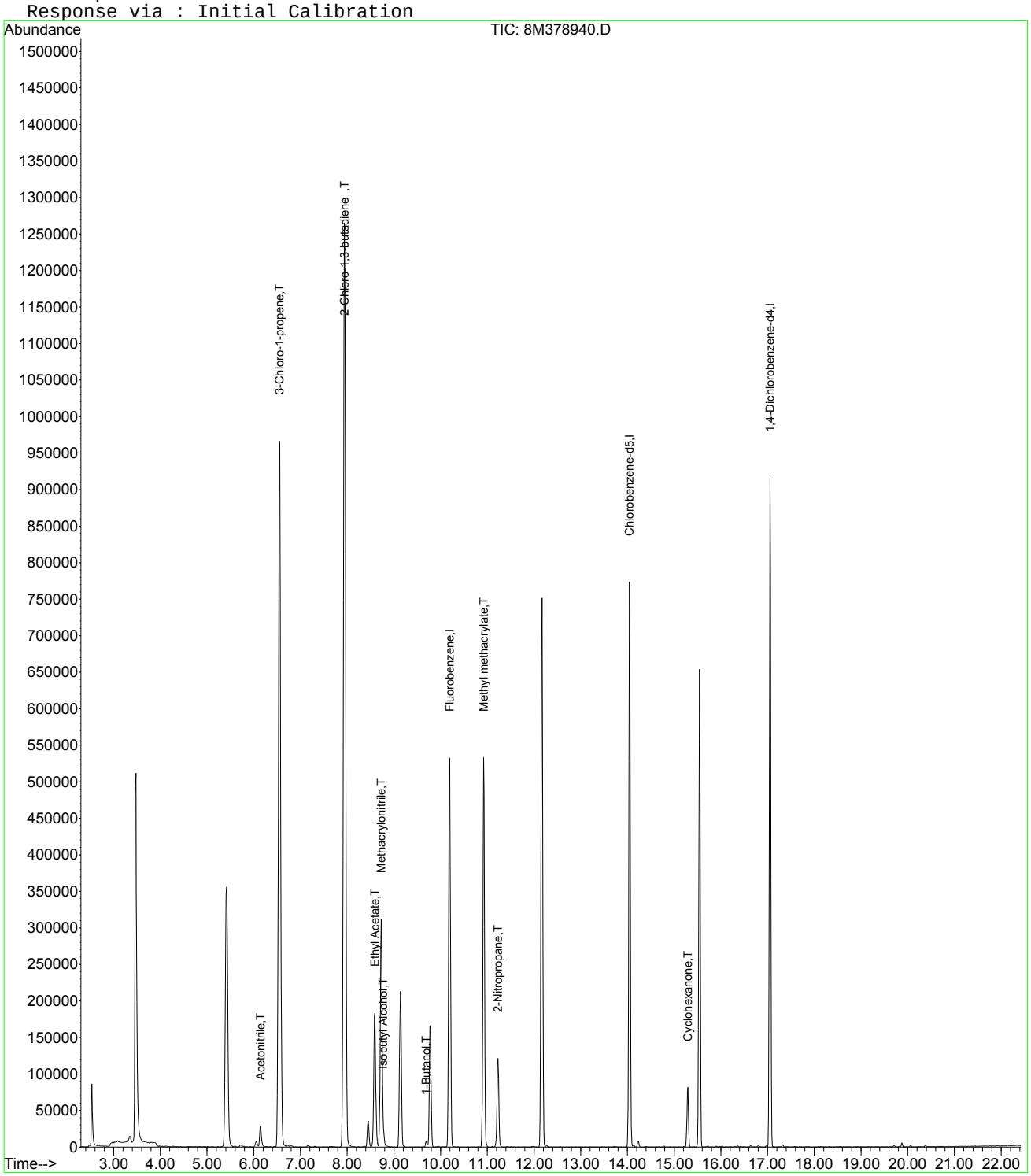
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	10.20	96	711474	25.00	ug/L		-0.04
11) Chlorobenzene-d5	14.04	117	619124	25.00	ug/L		-0.05
12) 1,4-Dichlorobenzene-d4	17.05	152	346782	25.00	ug/L		-0.05
Target Compounds							Qvalue
2) Acetonitrile	6.14	41	42043	79.6553	ug/L		97
3) 3-Chloro-1-propene	6.55	41	1101221	99.1647	ug/L		97
4) 2-Chloro-1,3-butadiene	7.94	53	1308935	99.5296	ug/L		88
5) Ethyl Acetate	8.59	43	332174	89.5678	ug/L		98
6) Methacrylonitrile	8.73	67	128835	84.5100	ug/L		90
7) Isobutyl Alcohol	8.77	43	23844	149.1404	ug/L	#	11
8) 1-Butanol	9.69	56	5013	69.6474	ug/L		80
9) Methyl methacrylate	10.92	41	376093	82.5978	ug/L		93
10) 2-Nitropropane	11.23	43	123237	77.9409	ug/L		99
13) Cyclohexanone	15.29	55	46317	135.7933	ug/L		92

(#) = qualifier out of range (m) = manual integration
8M378940.D A9FOOWT.M Fri May 11 14:12:25 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\051012\8M378940.D Vial: 3
Acq On : 10 May 2012 7:19 Operator: FJB
Sample : WG397793-01 100ug/L CCV A9 Inst : HPMS8
Misc : 1,1 STD51412 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 11 14:12 2012 Quant Results File: A9FOOWT.RES

Method : C:\MSDCHEM\1\METHODS\A9FOOWT.M (RTE Integrator)
Title : A9-FOO Water - IC: 01/25/12- HPMS8
Last Update : Fri Mar 09 15:12:10 2012
Response via : Initial Calibration



8M378940.D A9FOOWT.M Fri May 11 14:12:25 2012 Page 2

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\051012\8M378940.D Vial: 3
Acq On : 10 May 2012 7:19 Operator: FJB
Sample : WG397793-01 100ug/L CCV A9 Inst : HPMS8
Misc : 1,1 STD51412 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\A9FOOWT.M (RTE Integrator)
Title : A9-FOO Water - IC: 01/25/12- HPMS8
Last Update : Fri Mar 09 15:12:10 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	25.0000	25.0000	0.0	110	-0.04
2	T	Acetonitrile	100.0000	79.6553	20.3	85	-0.05
3	T	3-Chloro-1-propene	100.0000	99.1647	0.8	108	-0.05
4	T	2-Chloro-1,3-butadiene	100.0000	99.5296	0.5	109	-0.05
5	T	Ethyl Acetate	100.0000	89.5678	10.4	94	-0.04
6	T	Methacrylonitrile	100.0000	84.5100	15.5	91	-0.04
7	T	Isobutyl Alcohol	200.0000	149.1404	25.4	77	-0.04
8	T	1-Butanol	100.0000	69.6474	30.4	69	-0.04
9	T	Methyl methacrylate	100.0000	82.5978	17.4	87	-0.04
10	T	2-Nitropropane	100.0000	77.9409	22.1	81	-0.04
11	I	Chlorobenzene-d5	25.0000	25.0000	0.0	133	-0.05
12	I	1,4-Dichlorobenzene-d4	25.0000	25.0000	0.0	135	-0.05
13	T	Cyclohexanone	100.0000	135.7933	-35.8	187	-0.04

(#) = Out of Range SPCC's out = 0 CCC's out = 0
8M378940.D A9FOOWT.M Fri May 11 14:12:27 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\051012\8M378963.D Vial: 2
Acq On : 10 May 2012 19:35 Operator: TMB
Sample : WG397691-02 50ug/L CCV STD 8260 Inst : HPMS8
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 10 19:58:15 2012 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration
DataAcq Meth : 8260WT

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.19	96	689382	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.05	117	596078	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.06	152	334842	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.14	111	179037	25.0326	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 100.12%			
43) 1,2-Dichloroethane-d4	9.78	65	149062	27.0653	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 108.28%			
58) Toluene-d8	12.17	98	691630	25.1302	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 100.52%			
80) p-Bromofluorobenzene	15.54	95	266252	24.5805	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 98.32%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.83	85	380897	50.7978	ug/L	99
3) Chloromethane	3.22	50	401534	46.4626	ug/L	100
4) Vinyl Chloride	3.43	62	356415	49.4836	ug/L	99
5) 1,3-Butadiene	3.46	54	289299	68.9490	ug/L	96
6) Bromomethane	4.25	94	246867	44.2571	ug/L	99
7) Chloroethane	4.40	64	204653	44.1059	ug/L	97
8) Trichlorofluoromethane	4.89	101	612507	57.5917	ug/L	100
9) Diethyl ether	5.42	59	341901	88.3129	ug/L	99
10) Isoprene	5.45	67	406598	48.5811	ug/L	93
11) Acrolein	5.61	56	45716	104.5476	ug/L	94
12) 1,1,2-Trichloro-1,2,2-Trif	5.67	101	308752	48.3375	ug/L	98
13) Acetone	5.73	43	40629	39.9426	ug/L	94
14) 1,1-Dichloroethene	5.95	61	450694	48.7615	ug/L	95
15) Tert-Butyl Alcohol	6.08	59	27603	89.8368	ug/L	94
16) Dimethyl Sulfide	6.21	62	332337	51.0758	ug/L	93
17) Iodomethane	6.45	142	467742	43.3514	ug/L	94
18) Methyl acetate	6.48	43	119738	37.4051	ug/L	98
19) Methylene Chloride	6.73	84	300595	43.7039	ug/L	97
20) Carbon Disulfide	6.75	76	857217	48.2688	ug/L	100
21) Acrylonitrile	6.89	53	58925	42.7934	ug/L	100
22) Methyl Tert Butyl Ether	6.97	73	534164	45.3881	ug/L	98
23) trans-1,2-Dichloroethene	7.18	61	422291	48.3814	ug/L	98
24) n-Hexane	7.31	57	397209	49.8722	ug/L	97
25) Diisopropyl ether	7.65	45	1994183	94.7129	ug/L	98
26) Vinyl Acetate	7.78	43	322282	47.6538	ug/L	99
27) 1,1-Dichloroethane	7.80	63	500515	44.8558	ug/L	100
28) Ethyl-Tert-Butyl ether	8.22	59	1651958	95.7361	ug/L	99
29) 2-Butanone	8.36	43	59765	39.4852	ug/L	99
30) Propionitrile	8.45	54	39413	77.5263	ug/L	100
31) 2,2-Dichloropropane	8.59	77	491324	51.1773	ug/L	100
32) cis-1,2-Dichloroethene	8.64	96	336755	46.6022	ug/L	96
33) Chloroform	8.86	83	550478	47.8677	ug/L	100
34) 1-Bromopropane	8.99	122	76139	52.0685	ug/L	100
35) Bromochloromethane	9.08	130	226345	48.6346	ug/L	97
36) Tetrahydrofuran	9.11	42	80808	78.7775	ug/L	99
38) 1,1,1-Trichloroethane	9.40	97	565825	54.1482	ug/L	99
39) Cyclohexane	9.44	56	481849	46.6721	ug/L	99
40) 1,1-Dichloropropene	9.59	75	438077	48.6711	ug/L	99
41) Tert-Amyl-Methyl ether	9.73	73	1278322	90.5281	ug/L	96
42) Carbon Tetrachloride	9.74	117	545732	55.8223	ug/L	100
45) 1,2-Dichloroethane	9.89	62	370658	52.3813	ug/L	97

(#) = qualifier out of range (m) = manual integration
8M378963.D 8260WT.M Thu May 10 19:58:15 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\051012\8M378963.D Vial: 2
Acq On : 10 May 2012 19:35 Operator: TMB
Sample : WG397691-02 50ug/L CCV STD 8260 Inst : HPMS8
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 10 19:58:15 2012 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration
DataAcq Meth : 8260WT

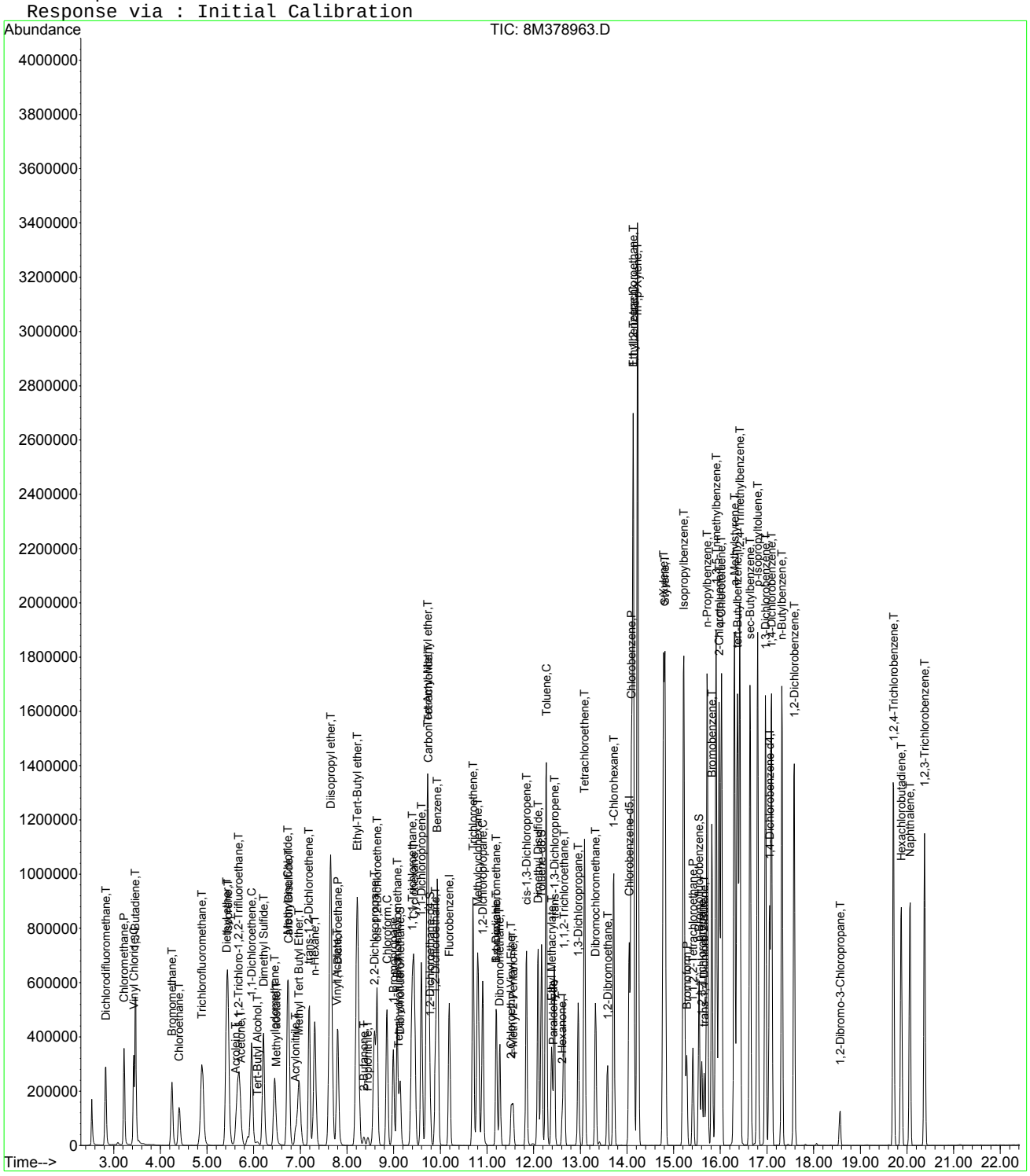
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
46)	Benzene	9.93	78	1189033	45.0102	ug/L	97
47)	Trichloroethene	10.70	130	442000	50.6119	ug/L	99
48)	Methylcyclohexane	10.80	83	457794	45.3554	ug/L	96
49)	1,2-Dichloropropane	10.91	63	289344	45.0171	ug/L	87
50)	Bromodichloromethane	11.20	83	428166	51.6420	ug/L	98
51)	1,4-Dioxane	11.20	88	2219	60.2240	ug/L	91
52)	Dibromomethane	11.27	93	161647	48.5796	ug/L	97
53)	2-Chloroethyl Vinyl Ether	11.52	63	68973	23.3863	ug/L	99
54)	4-Methyl-2-Pentanone	11.56	58	56519	42.3545	ug/L	98
55)	cis-1,3-Dichloropropene	11.85	75	488836	50.0946	ug/L	100
56)	Dimethyl Disulfide	12.10	94	558229	51.6604	ug/L	97
59)	Toluene	12.27	91	1438322	43.7535	ug/L	99
60)	Ethyl Methacrylate	12.38	69	230009	40.1101	ug/L	94
61)	Paraldehyde	12.42	89	6289	62.6595	ug/L	73
62)	trans-1,3-Dichloropropene	12.45	75	438133	48.0382	ug/L	100
63)	1,1,2-Trichloroethane	12.65	97	233384	45.9252	ug/L	98
64)	2-Hexanone	12.61	58	51429	40.3519	ug/L	86
65)	1,3-Dichloropropane	12.95	76	365260	43.8992	ug/L	94
66)	Tetrachloroethene	13.09	164	368772	49.7711	ug/L	98
67)	Dibromochloromethane	13.33	129	397262	53.1870	ug/L	100
68)	1,2-Dibromoethane	13.58	107	255312	46.6365	ug/L	100
69)	1-Chlorohexane	13.72	91	460646	41.9537	ug/L	94
70)	Chlorobenzene	14.09	112	1076435	46.8651	ug/L	99
71)	1,1,1,2-Tetrachloroethane	14.13	131	433249	51.8278	ug/L	100
72)	Ethylbenzene	14.13	106	583575	47.8307	ug/L	98
73)	m-,p-Xylene	14.23	106	1423897	95.5924	ug/L	98
74)	o-Xylene	14.78	106	710747	47.4997	ug/L	97
75)	Styrene	14.81	104	1175816	43.8943	ug/L	96
76)	Bromoform	15.28	173	225223	52.5617	ug/L	98
77)	Isopropylbenzene	15.22	105	1816343	48.2925	ug/L	100
79)	1,1,2,2-Tetrachloroethane	15.41	83	226591	42.1088	ug/L	99
81)	1,2,3-Trichloropropane	15.60	110	73738	41.4230	ug/L	94
82)	trans-1,4-Dichloro-2-Buten	15.65	53	69004	44.2976	ug/L	93
83)	n-Propylbenzene	15.71	91	1958615	45.1653	ug/L	100
84)	Bromobenzene	15.82	156	518253	48.0735	ug/L	95
85)	1,3,5-Trimethylbenzene	15.91	105	1529498	47.2937	ug/L	99
86)	2-Chlorotoluene	15.97	91	1368472	49.6088	ug/L	99
87)	4-Chlorotoluene	16.02	91	1126078	43.1837	ug/L	100
88)	a-Methylstyrene	16.30	118	885262	46.0359	ug/L	97
89)	tert-Butylbenzene	16.37	134	339931	47.5404	ug/L	90
90)	1,2,4-Trimethylbenzene	16.42	105	1561820	49.9678	ug/L	99
91)	sec-Butylbenzene	16.63	105	1806580	45.6839	ug/L	100
92)	p-Isopropyltoluene	16.80	119	1649322	46.2109	ug/L	100
93)	1,3-Dichlorobenzene	16.97	146	1000459	47.0228	ug/L	100
94)	1,4-Dichlorobenzene	17.10	146	1011182	47.3575	ug/L	98
95)	n-Butylbenzene	17.32	91	1300041	46.5945	ug/L	100
96)	1,2-Dichlorobenzene	17.59	146	886297	46.7322	ug/L	100
97)	1,2-Dibromo-3-Chloropropan	18.57	75	39951	43.1321	ug/L	96
98)	1,2,4-Trichlorobenzene	19.72	182	580008	45.4147	ug/L	99
99)	Hexachlorobutadiene	19.88	225	263498	58.0675	ug/L	99
100)	Naphthalene	20.07	128	1035048	41.4138	ug/L	100
101)	1,2,3-Trichlorobenzene	20.38	180	496096	45.3249	ug/L	99

(#) = qualifier out of range (m) = manual integration
8M378963.D 8260WT.M Thu May 10 19:58:16 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\051012\8M378963.D Vial: 2
Acq On : 10 May 2012 19:35 Operator: TMB
Sample : WG397691-02 50ug/L CCV STD 8260 Inst : HPMS8
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 10 19:58 2012 Quant Results File: 8260WT.RES

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\051012\8M378963.D Vial: 2
Acq On : 10 May 2012 19:35 Operator: TMB
Sample : WG397691-02 50ug/L CCV STD 8260 Inst : HPMS8
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	1.0000	1.0000	0.0	107	0.00
2	T	Dichlorodifluoromethane	0.2719	0.2763	-1.6	106	0.00
3	P	Chloromethane	0.3134	0.2912	7.1	107	0.00
4	C	Vinyl Chloride	0.2612	0.2585	1.0	115	0.00
5	T	1,3-Butadiene	0.1800	0.2098	-16.6	138	0.00
6	T	Bromomethane	0.2023	0.1790	11.5	95	0.00
7	T	Chloroethane	0.1683	0.1484	11.8	94	0.00
8	T	Trichlorofluoromethane	0.3857	0.4442	-15.2	128	0.00
9	T	Diethyl ether	0.1404	0.1240	11.7	95	0.00
10	T	Isoprene	0.3035	0.2949	2.8	104	0.00
11	T	Acrolein	0.0159	0.0166	-4.5	110	0.00
12	T	1,1,2-Trichloro-1,2,2-Trifl	0.2316	0.2239	3.3	108	0.00
13	T	Acetone	0.0369	0.0295	20.1	78	0.00
14	C	1,1-Dichloroethene	0.3352	0.3269	2.5	106	0.00
15	T	Tert-Butyl Alcohol	0.0096	0.0050	47.9#	50	-0.01
16	T	Dimethyl Sulfide	0.2360	0.2410	-2.2	108	0.00
17	T	Iodomethane	0.3913	0.3393	13.3	84	0.00
18	T	Methyl acetate	0.1161	0.0868	25.2#	80	0.00
19	T	Methylene Chloride	0.2494	0.2180	12.6	94	0.00
20	T	Carbon Disulfide	0.6440	0.6217	3.5	95	0.00
21	T	Acrylonitrile	0.0499	0.0427	14.4	85	0.00
22	T	Methyl Tert Butyl Ether	0.4268	0.3874	9.2	97	0.00
23	T	trans-1,2-Dichloroethene	0.3165	0.3063	3.2	102	0.00
24	T	n-Hexane	0.2888	0.2881	0.3	105	0.00
25	T	Diisopropyl ether	0.7635	0.7232	5.3	101	0.00
26	T	Vinyl Acetate	0.2453	0.2338	4.7	99	0.00
27	P	1,1-Dichloroethane	0.4047	0.3630	10.3	97	0.00
28	T	Ethyl-Tert-Butyl ether	0.6258	0.5991	4.3	100	0.00
29	T	2-Butanone	0.0549	0.0434	21.0	80	0.00
30	T	Propionitrile	0.0156	0.0143	8.3	78	0.00
31	T	2,2-Dichloropropane	0.3482	0.3564	-2.4	111	0.00
32	T	cis-1,2-Dichloroethene	0.2621	0.2442	6.8	99	0.00
33	C	Chloroform	0.4170	0.3992	4.3	105	0.00
34		1-Bromopropane	0.0530	0.0552	-4.1	105	0.01
35	T	Bromochloromethane	0.1688	0.1642	2.7	102	0.00
36	T	Tetrahydrofuran	0.0372	0.0293	21.2	80	0.00
37	S	Dibromofluoromethane	0.2594	0.2597	-0.1	108	0.00
38	T	1,1,1-Trichloroethane	0.3790	0.4104	-8.3	116	0.00
39	T	Cyclohexane	0.3744	0.3495	6.7	100	0.00
40	T	1,1-Dichloropropene	0.3264	0.3177	2.7	103	0.00
41	T	Tert-Amyl-Methyl ether	0.5121	0.4636	9.5	95	0.00
42	T	Carbon Tetrachloride	0.3545	0.3958	-11.6	120	0.00
43	S	1,2-Dichloroethane-d4	0.1997	0.2162	-8.3	115	0.00
44		Heptane	0.0000	0.0000	0.0	0#	-2.46#
45	T	1,2-Dichloroethane	0.2566	0.2688	-4.8	111	0.00
46	T	Benzene	0.9580	0.8624	10.0	99	0.00
47	T	Trichloroethene	0.3167	0.3206	-1.2	107	0.00
48	T	Methylcyclohexane	0.3660	0.3320	9.3	97	0.00
49	C	1,2-Dichloropropane	0.2331	0.2099	10.0	94	0.00
50	T	Bromodichloromethane	0.3007	0.3105	-3.3	109	0.00
51	T	1,4-Dioxane	0.0013	0.0004	70.1#	33#	0.00
52	T	Dibromomethane	0.1207	0.1172	2.8	96	0.00
53	T	2-Chloroethyl Vinyl Ether	0.1070	0.0500	53.2#	46#	0.00
54	T	4-Methyl-2-Pentanone	0.0484	0.0410	15.3	84	0.00
55	T	cis-1,3-Dichloropropene	0.3539	0.3545	-0.2	102	0.00

(#) = Out of Range
8M378963.D 8260WT.M Thu May 10 20:16:37 2012 Page 1

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\051012\8M378963.D Vial: 2
Acq On : 10 May 2012 19:35 Operator: TMB
Sample : WG397691-02 50ug/L CCV STD 8260 Inst : HPMS8
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
56	T	Dimethyl Disulfide	0.3919	0.4049	-3.3	99	0.00
57	I	Chlorobenzene-d5	1.0000	1.0000	0.0	109	0.00
58	S	Toluene-d8	1.1543	1.1603	-0.5	107	0.00
59	C	Toluene	1.3787	1.2065	12.5	102	0.00
60	T	Ethyl Methacrylate	0.2405	0.1929	19.8	84	0.00
61		Paraldehyde	0.0040	0.0026	33.2#	60	0.00
62	T	trans-1,3-Dichloropropene	0.3825	0.3675	3.9	102	0.00
63	T	1,1,2-Trichloroethane	0.2131	0.1958	8.1	97	0.00
64	T	2-Hexanone	0.0534	0.0431	19.3	84	0.00
65	T	1,3-Dichloropropane	0.3490	0.3064	12.2	95	0.00
66	T	Tetrachloroethene	0.3108	0.3093	0.5	109	0.00
67	T	Dibromochloromethane	0.3133	0.3332	-6.4	109	0.00
68	T	1,2-Dibromoethane	0.2296	0.2142	6.7	99	0.00
69	T	1-Chlorohexane	0.4605	0.3864	16.1	96	0.00
70	P	Chlorobenzene	0.9633	0.9029	6.3	104	0.00
71	T	1,1,1,2-Tetrachloroethane	0.3506	0.3634	-3.7	111	0.00
72	C	Ethylbenzene	0.5117	0.4895	4.3	105	0.00
73	T	m-,p-Xylene	0.6247	0.5972	4.4	106	0.00
74	T	o-Xylene	0.6276	0.5962	5.0	103	0.00
75	T	Styrene	1.1235	0.9863	12.2	102	0.00
76	P	Bromoform	0.1797	0.1889	-5.1	108	0.00
77	T	Isopropylbenzene	1.5775	1.5236	3.4	107	0.00
78	I	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	113	0.00
79	P	1,1,2,2-Tetrachloroethane	0.4018	0.3384	15.8	92	0.00
80	S	p-Bromofluorobenzene	0.8087	0.7952	1.7	108	0.00
81	T	1,2,3-Trichloropropane	0.1329	0.1101	17.2	91	0.00
82	T	trans-1,4-Dichloro-2-Butene	0.1163	0.1030	11.4	91	0.00
83	T	n-Propylbenzene	3.2378	2.9247	9.7	104	0.00
84	T	Bromobenzene	0.8049	0.7739	3.9	109	0.00
85	T	1,3,5-Trimethylbenzene	2.4146	2.2839	5.4	108	0.00
86	T	2-Chlorotoluene	2.0596	2.0435	0.8	118	0.00
87	T	4-Chlorotoluene	1.9469	1.6815	13.6	100	0.00
88	T	a-Methylstyrene	1.4357	1.3219	7.9	102	0.00
89	T	tert-Butylbenzene	0.5339	0.5076	4.9	108	0.00
90	T	1,2,4-Trimethylbenzene	2.7881	2.3322	16.4	107	0.00
91	T	sec-Butylbenzene	2.9525	2.6977	8.6	107	0.00
92	T	p-Isopropyltoluene	2.6648	2.4628	7.6	106	0.00
93	T	1,3-Dichlorobenzene	1.5885	1.4939	6.0	108	0.00
94	T	1,4-Dichlorobenzene	1.5942	1.5099	5.3	109	0.00
95	T	n-Butylbenzene	2.0832	1.9413	6.8	108	0.00
96	T	1,2-Dichlorobenzene	1.4160	1.3235	6.5	106	0.00
97	T	1,2-Dibromo-3-Chloropropane	0.0692	0.0597	13.7	91	0.00
98	T	1,2,4-Trichlorobenzene	0.9535	0.8661	9.2	105	0.01
99	T	Hexachlorobutadiene	0.3388	0.3935	-16.1	128	0.00
100	T	Naphthalene	1.8660	1.5456	17.2	95	0.00
101	T	1,2,3-Trichlorobenzene	0.8172	0.7408	9.4	104	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
8M378963.D 8260WT.M Thu May 10 20:16:37 2012 Page 2

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\051012\8M378963.D Vial: 2
Acq On : 10 May 2012 19:35 Operator: TMB
Sample : WG397691-02 50ug/L CCV STD 8260 Inst : HPMS8
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	25.0000	25.0000	0.0	107	0.00
2	T	Dichlorodifluoromethane	50.0000	50.7978	-1.6	106	0.00
3	P	Chloromethane	50.0000	46.4626	7.1	107	0.00
4	C	Vinyl Chloride	50.0000	49.4836	1.0	115	0.00
5	T	1,3-Butadiene	50.0000	68.9490	-37.9#	138	0.00
6	T	Bromomethane	50.0000	44.2571	11.5	95	0.00
7	T	Chloroethane	50.0000	44.1059	11.8	94	0.00
8	T	Trichlorofluoromethane	50.0000	57.5917	-15.2	128	0.00
9	T	Diethyl ether	100.0000	88.3129	11.7	95	0.00
10	T	Isoprene	50.0000	48.5811	2.8	104	0.00
11	T	Acrolein	100.0000	104.5476	-4.5	110	0.00
12	T	1,1,2-Trichloro-1,2,2-Trifl	50.0000	48.3375	3.3	108	0.00
13	T	Acetone	50.0000	39.9426	20.1	78	0.00
14	C	1,1-Dichloroethene	50.0000	48.7616	2.5	106	0.00
15	T	Tert-Butyl Alcohol	200.0000	89.8368	55.1#	50	-0.01
16	T	Dimethyl Sulfide	50.0000	51.0758	-2.2	108	0.00
17	T	Iodomethane	50.0000	43.3514	13.3	84	0.00
18	T	Methyl acetate	50.0000	37.4051	25.2#	80	0.00
19	T	Methylene Chloride	50.0000	43.7039	12.6	94	0.00
20	T	Carbon Disulfide	50.0000	48.2688	3.5	95	0.00
21	T	Acrylonitrile	50.0000	42.7934	14.4	85	0.00
22	T	Methyl Tert Butyl Ether	50.0000	45.3881	9.2	97	0.00
23	T	trans-1,2-Dichloroethene	50.0000	48.3814	3.2	102	0.00
24	T	n-Hexane	50.0000	49.8722	0.3	105	0.00
25	T	Diisopropyl ether	100.0000	94.7129	5.3	101	0.00
26	T	Vinyl Acetate	50.0000	47.6538	4.7	99	0.00
27	P	1,1-Dichloroethane	50.0000	44.8558	10.3	97	0.00
28	T	Ethyl-Tert-Butyl ether	100.0000	95.7361	4.3	100	0.00
29	T	2-Butanone	50.0000	39.4853	21.0	80	0.00
30	T	Propionitrile	100.0000	77.5263	22.5	78	0.00
31	T	2,2-Dichloropropane	50.0000	51.1773	-2.4	111	0.00
32	T	cis-1,2-Dichloroethene	50.0000	46.6022	6.8	99	0.00
33	C	Chloroform	50.0000	47.8677	4.3	105	0.00
34		1-Bromopropane	50.0000	52.0685	-4.1	105	0.01
35	T	Bromochloromethane	50.0000	48.6345	2.7	102	0.00
36	T	Tetrahydrofuran	100.0000	78.7775	21.2	80	0.00
37	S	Dibromofluoromethane	25.0000	25.0326	-0.1	108	0.00
38	T	1,1,1-Trichloroethane	50.0000	54.1482	-8.3	116	0.00
39	T	Cyclohexane	50.0000	46.6721	6.7	100	0.00
40	T	1,1-Dichloropropene	50.0000	48.6711	2.7	103	0.00
41	T	Tert-Amyl-Methyl ether	100.0000	90.5281	9.5	95	0.00
42	T	Carbon Tetrachloride	50.0000	55.8223	-11.6	120	0.00
43	S	1,2-Dichloroethane-d4	25.0000	27.0653	-8.3	115	0.00
44		Heptane	50.0000	0.0000	100.0#	0	-2.46#
45	T	1,2-Dichloroethane	50.0000	52.3813	-4.8	111	0.00
46	T	Benzene	50.0000	45.0102	10.0	99	0.00
47	T	Trichloroethene	50.0000	50.6119	-1.2	107	0.00
48	T	Methylcyclohexane	50.0000	45.3554	9.3	97	0.00
49	C	1,2-Dichloropropane	50.0000	45.0171	10.0	94	0.00
50	T	Bromodichloromethane	50.0000	51.6420	-3.3	109	0.00
51	T	1,4-Dioxane	200.0000	60.2240	69.9#	33	0.00
52	T	Dibromomethane	50.0000	48.5796	2.8	96	0.00
53	T	2-Chloroethyl Vinyl Ether	50.0000	23.3863	53.2#	46	0.00
54	T	4-Methyl-2-Pentanone	50.0000	42.3545	15.3	84	0.00
55	T	cis-1,3-Dichloropropene	50.0000	50.0946	-0.2	102	0.00

(#) = Out of Range
8M378963.D 8260WT.M Thu May 10 20:16:39 2012 Page 1

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\051012\8M378963.D Vial: 2
Acq On : 10 May 2012 19:35 Operator: TMB
Sample : WG397691-02 50ug/L CCV STD 8260 Inst : HPMS8
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
56	T	Dimethyl Disulfide	50.0000	51.6604	-3.3	99	0.00
57	I	Chlorobenzene-d5	25.0000	25.0000	0.0	109	0.00
58	S	Toluene-d8	25.0000	25.1302	-0.5	107	0.00
59	C	Toluene	50.0000	43.7535	12.5	102	0.00
60	T	Ethyl Methacrylate	50.0000	40.1101	19.8	84	0.00
61		Paraldehyde	100.0000	62.6595	37.3#	60	0.00
62	T	trans-1,3-Dichloropropene	50.0000	48.0382	3.9	102	0.00
63	T	1,1,2-Trichloroethane	50.0000	45.9252	8.1	97	0.00
64	T	2-Hexanone	50.0000	40.3519	19.3	84	0.00
65	T	1,3-Dichloropropane	50.0000	43.8992	12.2	95	0.00
66	T	Tetrachloroethene	50.0000	49.7711	0.5	109	0.00
67	T	Dibromochloromethane	50.0000	53.1870	-6.4	109	0.00
68	T	1,2-Dibromoethane	50.0000	46.6365	6.7	99	0.00
69	T	1-Chlorohexane	50.0000	41.9537	16.1	96	0.00
70	P	Chlorobenzene	50.0000	46.8651	6.3	104	0.00
71	T	1,1,1,2-Tetrachloroethane	50.0000	51.8278	-3.7	111	0.00
72	C	Ethylbenzene	50.0000	47.8307	4.3	105	0.00
73	T	m-,p-Xylene	100.0000	95.5924	4.4	106	0.00
74	T	o-Xylene	50.0000	47.4997	5.0	103	0.00
75	T	Styrene	50.0000	43.8943	12.2	102	0.00
76	P	Bromoform	50.0000	52.5617	-5.1	108	0.00
77	T	Isopropylbenzene	50.0000	48.2925	3.4	107	0.00
78	I	1,4-Dichlorobenzene-d4	25.0000	25.0000	0.0	113	0.00
79	P	1,1,2,2-Tetrachloroethane	50.0000	42.1088	15.8	92	0.00
80	S	p-Bromofluorobenzene	25.0000	24.5804	1.7	108	0.00
81	T	1,2,3-Trichloropropane	50.0000	41.4230	17.2	91	0.00
82	T	trans-1,4-Dichloro-2-Butene	50.0000	44.2976	11.4	91	0.00
83	T	n-Propylbenzene	50.0000	45.1653	9.7	104	0.00
84	T	Bromobenzene	50.0000	48.0735	3.9	109	0.00
85	T	1,3,5-Trimethylbenzene	50.0000	47.2937	5.4	108	0.00
86	T	2-Chlorotoluene	50.0000	49.6088	0.8	118	0.00
87	T	4-Chlorotoluene	50.0000	43.1837	13.6	100	0.00
88	T	a-Methylstyrene	50.0000	46.0359	7.9	102	0.00
89	T	tert-Butylbenzene	50.0000	47.5404	4.9	108	0.00
90	T	1,2,4-Trimethylbenzene	50.0000	49.9678	0.1	107	0.00
91	T	sec-Butylbenzene	50.0000	45.6839	8.6	107	0.00
92	T	p-Isopropyltoluene	50.0000	46.2109	7.6	106	0.00
93	T	1,3-Dichlorobenzene	50.0000	47.0228	6.0	108	0.00
94	T	1,4-Dichlorobenzene	50.0000	47.3576	5.3	109	0.00
95	T	n-Butylbenzene	50.0000	46.5945	6.8	108	0.00
96	T	1,2-Dichlorobenzene	50.0000	46.7322	6.5	106	0.00
97	T	1,2-Dibromo-3-Chloropropane	50.0000	43.1321	13.7	91	0.00
98	T	1,2,4-Trichlorobenzene	50.0000	45.4147	9.2	105	0.01
99	T	Hexachlorobutadiene	50.0000	58.0675	-16.1	128	0.00
100	T	Naphthalene	50.0000	41.4138	17.2	95	0.00
101	T	1,2,3-Trichlorobenzene	50.0000	45.3249	9.4	104	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\051012\8M378968.D Vial: 7
Acq On : 10 May 2012 22:18 Operator: TMB
Sample : WG397693-01 100ug/L A9/FOO CCV STD 8260 Inst : HPMS8
Misc : 1,1 STD51412 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 10 22:40:36 2012 Quant Results File: 8260WT.RES

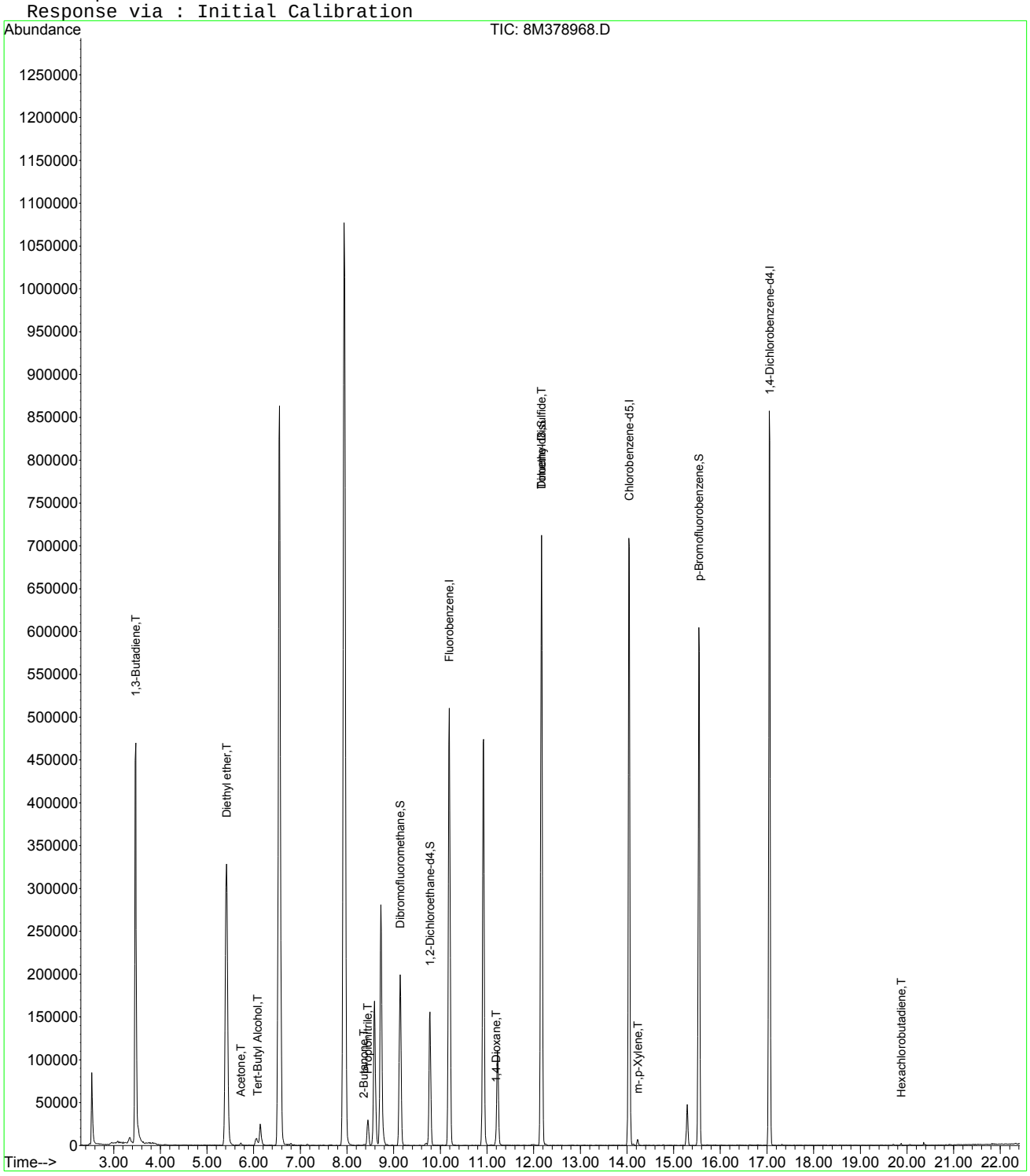
Quant Method : C:\MSDchem\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration
DataAcq Meth : 8260WT

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.19	96	663643	25.00 ug/L	0.01
57) Chlorobenzene-d5	14.05	117	588284	25.00 ug/L	0.01
78) 1,4-Dichlorobenzene-d4	17.06	152	328764	25.00 ug/L	0.01
System Monitoring Compounds					
37) Dibromofluoromethane	9.14	111	173971	25.2677 ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 101.08%		
43) 1,2-Dichloroethane-d4	9.78	65	146202	27.5756 ug/L	0.01
Spiked Amount 25.000	Range 80 - 120		Recovery = 110.32%		
58) Toluene-d8	12.17	98	670677	24.6917 ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 98.76%		
80) p-Bromofluorobenzene	15.54	95	265242	24.9399 ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 99.76%		
Target Compounds					Qvalue
5) 1,3-Butadiene	3.47	54	256830	63.4355 ug/L	97
9) Diethyl ether	5.42	59	364536	97.8115 ug/L	98
13) Acetone	5.73	43	5364	5.4779 ug/L #	66
15) Tert-Butyl Alcohol	6.09	59	5901	21.9596 ug/L #	1
29) 2-Butanone	8.36	43	2112	1.4495 ug/L #	55
30) Propionitrile	8.45	54	39223	80.0994 ug/L	99
51) 1,4-Dioxane	11.20	88	5142	144.9673 ug/L	96
56) Dimethyl Disulfide	12.17	94	19077	1.8339 ug/L #	28
73) m-,p-Xylene	14.24	106	3780	0.2571 ug/L	93
90) 1,2,4-Trimethylbenzene	16.43	105	712	Below Cal #	22
99) Hexachlorobutadiene	19.88	225	1274	0.2859 ug/L #	54

(#) = qualifier out of range (m) = manual integration
8M378968.D 8260WT.M Thu May 10 22:40:37 2012 Page 1

Data File : C:\MSDchem\1\data\051012\8M378968.D Vial: 7
Acq On : 10 May 2012 22:18 Operator: TMB
Sample : WG397693-01 100ug/L A9/FOO CCV STD 8260 Inst : HPMS8
Misc : 1,1 STD51412 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 10 22:40 2012 Quant Results File: 8260WT.RES

Method : C:\MSDchem\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\051012\8M378968.D Vial: 7
Acq On : 10 May 2012 22:18 Operator: TMB
Sample : WG397693-01 100ug/L A9/FOO CCV STD 8260 Inst : HPMS8
Misc : 1,1 STD51412 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 15 15:22:15 2012 Quant Results File: A9FOOWT.RES

Quant Method : C:\MSDCHEM\1\METHODS\A9FOOWT.M (RTE Integrator)
Title : A9-FOO Water - IC: 01/25/12- HPMS8
Last Update : Fri Mar 09 15:12:10 2012
Response via : Initial Calibration
DataAcq Meth : 8260WT

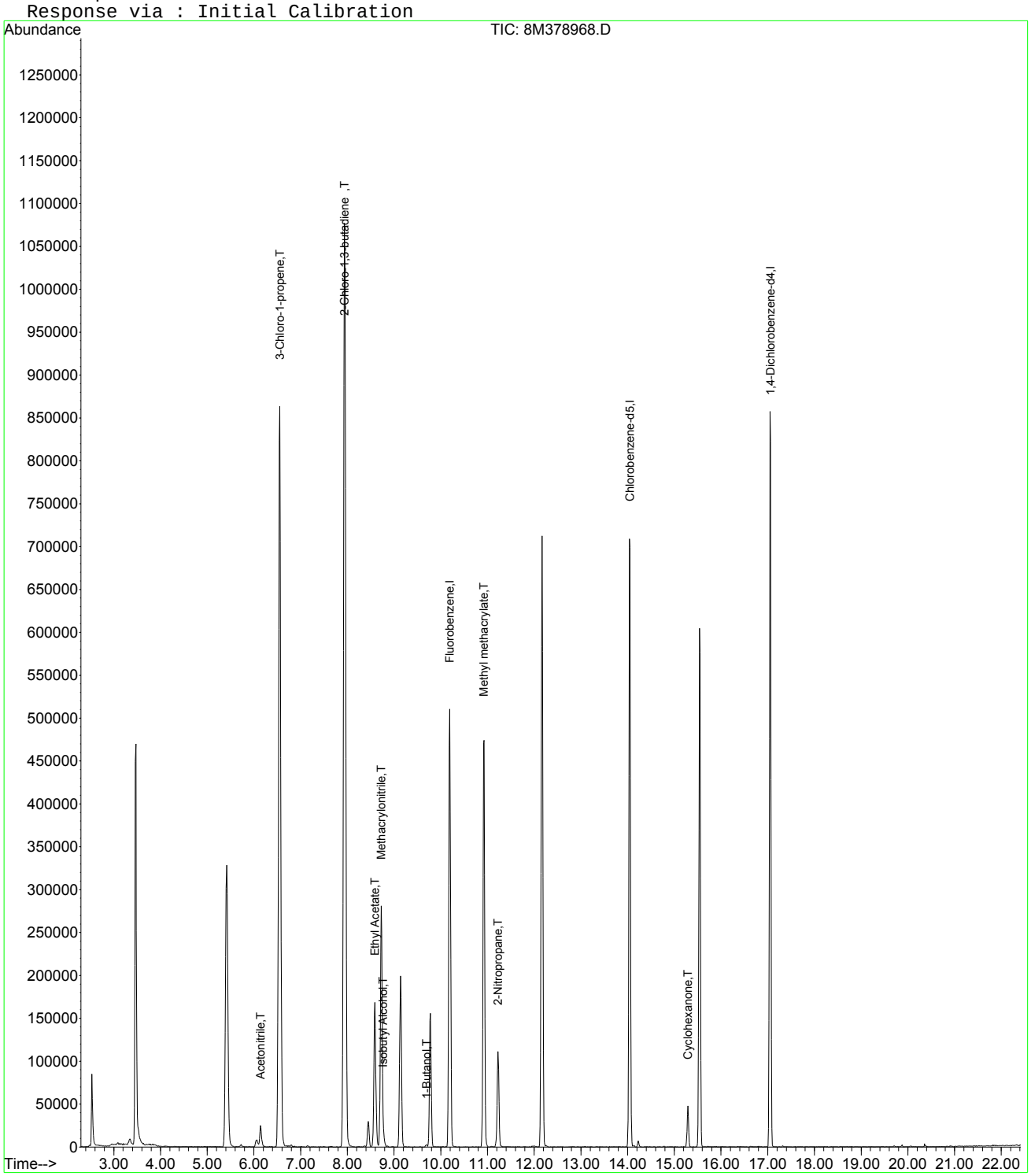
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.19	96	663643	25.00	ug/L	-0.04
11) Chlorobenzene-d5	14.05	117	588284	25.00	ug/L	-0.04
12) 1,4-Dichlorobenzene-d4	17.06	152	328764	25.00	ug/L	-0.04
Target Compounds						Qvalue
2) Acetonitrile	6.14	41	35008	71.1071	ug/L	95
3) 3-Chloro-1-propene	6.55	41	969611	93.6062	ug/L	97
4) 2-Chloro-1,3-butadiene	7.94	53	1123677	91.6010	ug/L	89
5) Ethyl Acetate	8.59	43	302616	87.4787	ug/L	99
6) Methacrylonitrile	8.72	67	115532	81.2458	ug/L	89
7) Isobutyl Alcohol	8.77	43	14796	99.2168	ug/L #	11
8) 1-Butanol	9.70	56	2306	39.1761	ug/L	93
9) Methyl methacrylate	10.92	41	350472	82.5185	ug/L	96
10) 2-Nitropropane	11.23	43	109647	74.3440	ug/L	99
13) Cyclohexanone	15.29	55	25880	80.0340	ug/L	97

(#) = qualifier out of range (m) = manual integration
8M378968.D A9FOOWT.M Tue May 15 15:22:16 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\051012\8M378968.D Vial: 7
Acq On : 10 May 2012 22:18 Operator: TMB
Sample : WG397693-01 100ug/L A9/FOO CCV STD 8260 Inst : HPMS8
Misc : 1,1 STD51412 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 15 15:22 2012 Quant Results File: A9FOOWT.RES

Method : C:\MSDCHEM\1\METHODS\A9FOOWT.M (RTE Integrator)
Title : A9-FOO Water - IC: 01/25/12- HPMS8
Last Update : Fri Mar 09 15:12:10 2012
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\051012\8M378968.D Vial: 7
Acq On : 10 May 2012 22:18 Operator: TMB
Sample : WG397693-01 100ug/L A9/FOO CCV STD 8260 Inst : HPMS8
Misc : 1,1 STD51412 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\A9FOOWT.M (RTE Integrator)
Title : A9-FOO Water - IC: 01/25/12- HPMS8
Last Update : Fri Mar 09 15:12:10 2012
Response via : Multiple Level Calibration

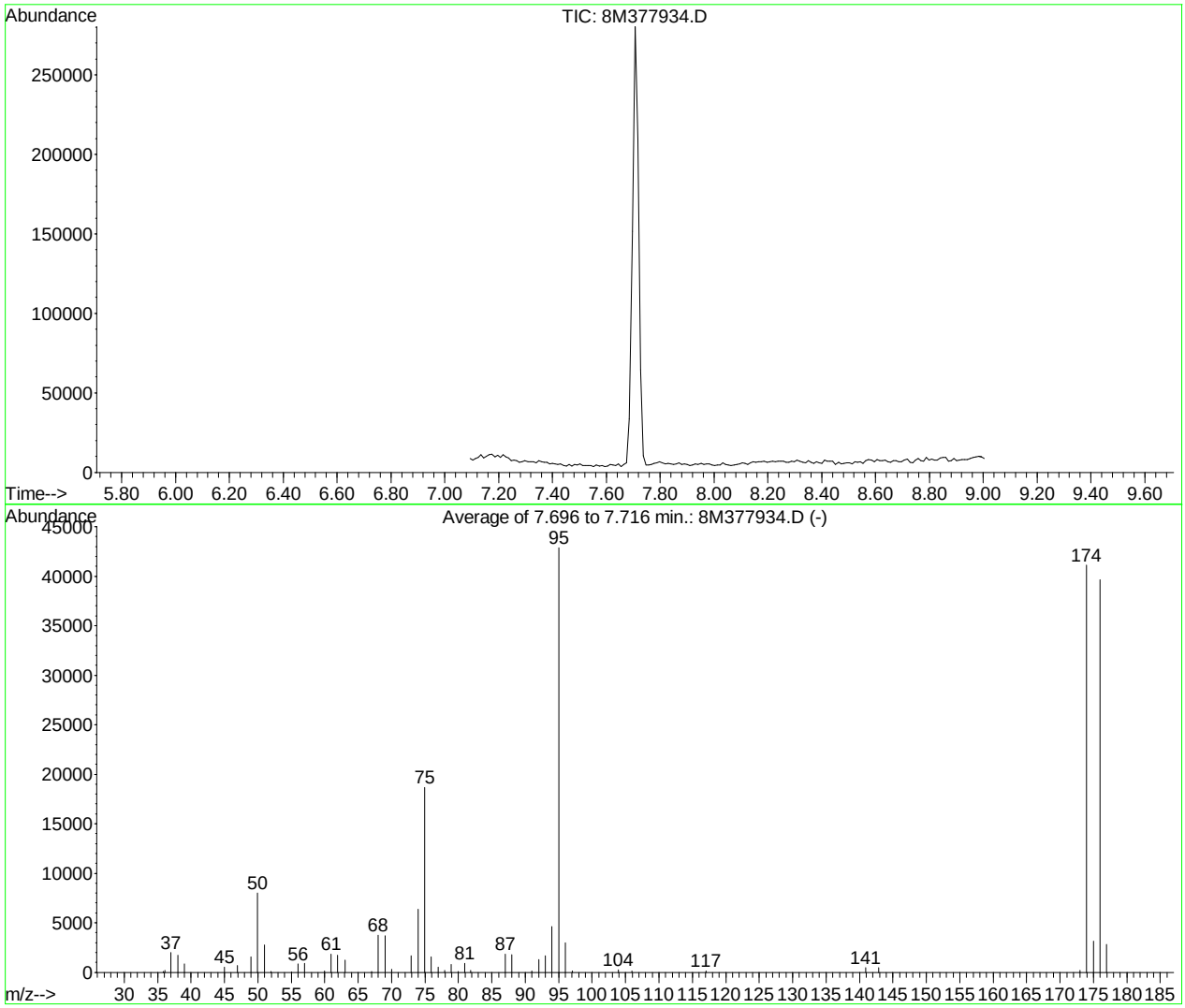
Min. RRF : 0.000 Min. Rel. Area : 1% Max. R.T. Dev 0.50min
Max. RRF Dev : 75% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	25.0000	25.0000	0.0	103	-0.04
2	T	Acetonitrile	100.0000	71.1071	28.9	71	-0.05
3	T	3-Chloro-1-propene	100.0000	93.6062	6.4	95	-0.04
4	T	2-Chloro-1,3-butadiene	100.0000	91.6010	8.4	94	-0.05
5	T	Ethyl Acetate	100.0000	87.4787	12.5	86	-0.04
6	T	Methacrylonitrile	100.0000	81.2459	18.8	82	-0.04
7	T	Isobutyl Alcohol	200.0000	99.2168	50.4	47	-0.04
8	T	1-Butanol	100.0000	39.1762	60.8	32	-0.03
9	T	Methyl methacrylate	100.0000	82.5185	17.5	81	-0.04
10	T	2-Nitropropane	100.0000	74.3440	25.7	72	-0.04
11	I	Chlorobenzene-d5	25.0000	25.0000	0.0	126	-0.04
12	I	1,4-Dichlorobenzene-d4	25.0000	25.0000	0.0	128	-0.04
13	T	Cyclohexanone	100.0000	80.0340	20.0	104	-0.04

(#) = Out of Range SPCC's out = 0 CCC's out = 0
8M378968.D A9FOOWT.M Tue May 15 15:22:18 2012 Page 1

2.1.1.5 Raw QC Data

Data File : C:\MSDCHEM\2\DATA\032712\8M377934.D Vial: 1
Acq On : 27 Mar 2012 10:51 Operator: adc
Sample : WG393321-01 BFB 50ng 8260 Inst : HPMS8
Misc : 1,1 STD50660 Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : C:\MSDCHEM\2\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8

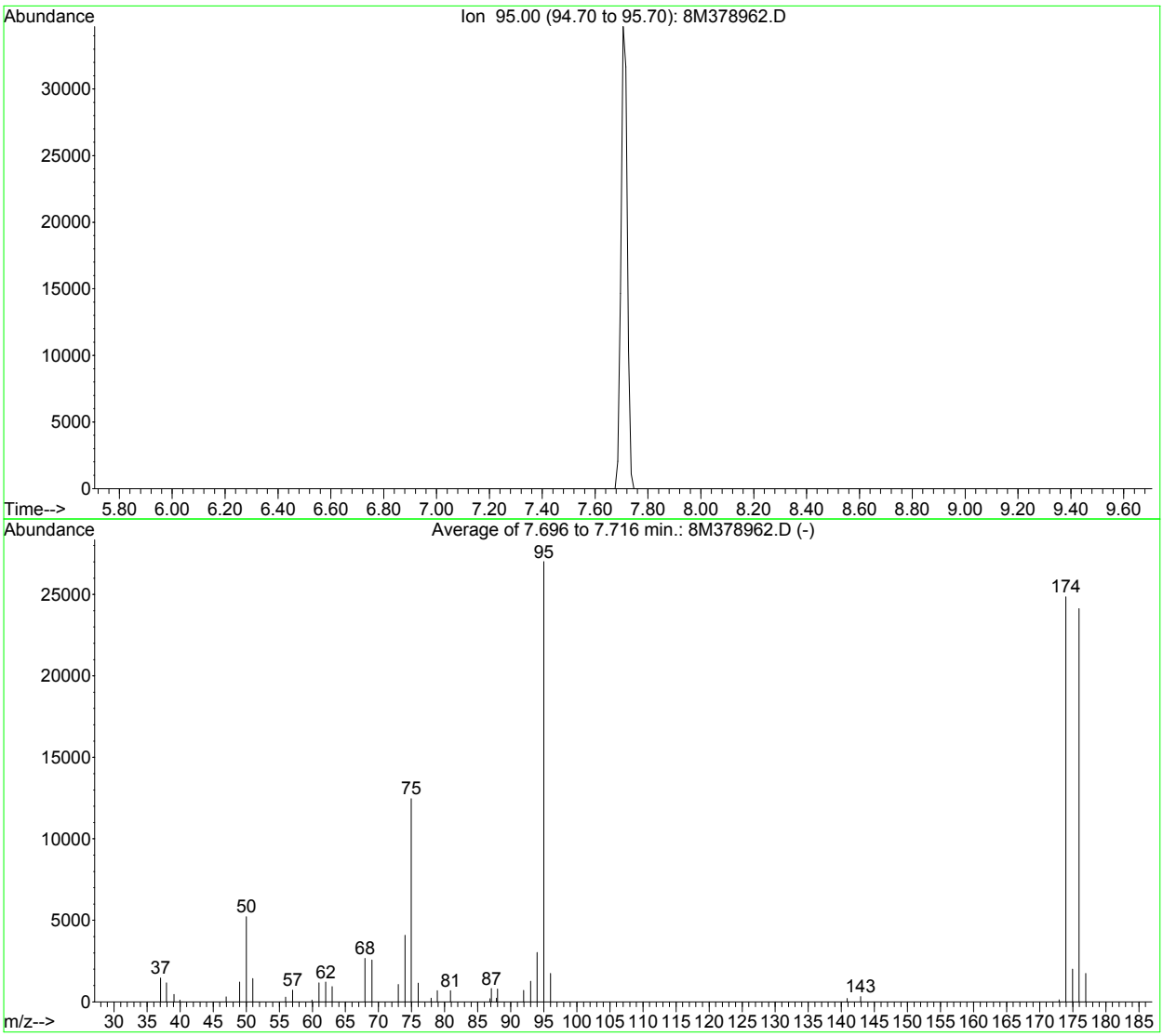


AutoFind: Scans 60, 61, 62; Background Corrected with Scan 55

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.7	7999	PASS
75	95	30	60	43.5	18673	PASS
95	95	100	100	100.0	42882	PASS
96	95	5	9	6.9	2967	PASS
173	174	0.00	2	0.4	181	PASS
174	95	50	100	95.9	41120	PASS
175	174	5	9	7.6	3128	PASS
176	174	95	101	96.4	39648	PASS
177	176	5	9	7.0	2790	PASS

8M377934.D 8260WT.M Wed Mar 28 08:34:44 2012

```
Data File : C:\MSDCHEM\1\DATA\051012\8M378962.D          Vial: 1
Acq On    : 10 May 2012  19:13                    Operator: TMB
Sample    : WG397691-01 50ng BFB STD 8260         Inst    : HPMS8
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 60, 61, 62; Background Corrected with Scan 56

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.3	5220	PASS
75	95	30	60	46.2	12471	PASS
95	95	100	100	100.0	27009	PASS
96	95	5	9	6.4	1741	PASS
173	174	0.00	2	0.5	116	PASS
174	95	50	100	92.0	24861	PASS
175	174	5	9	8.1	2005	PASS
176	174	95	101	97.1	24128	PASS
177	176	5	9	7.2	1740	PASS

8M378962.D BFB.M Thu May 10 19:45:29 2012

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\051012\8M378965.D Vial: 4
Acq On : 10 May 2012 20:40 Operator: TMB
Sample : WG397692-01 VBLK0510 BLANK STD 8260 Inst : HPMS8
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 15:03:54 2012 Quant Results File: 8260WT.RES

Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration
DataAcq Meth : 8260WT

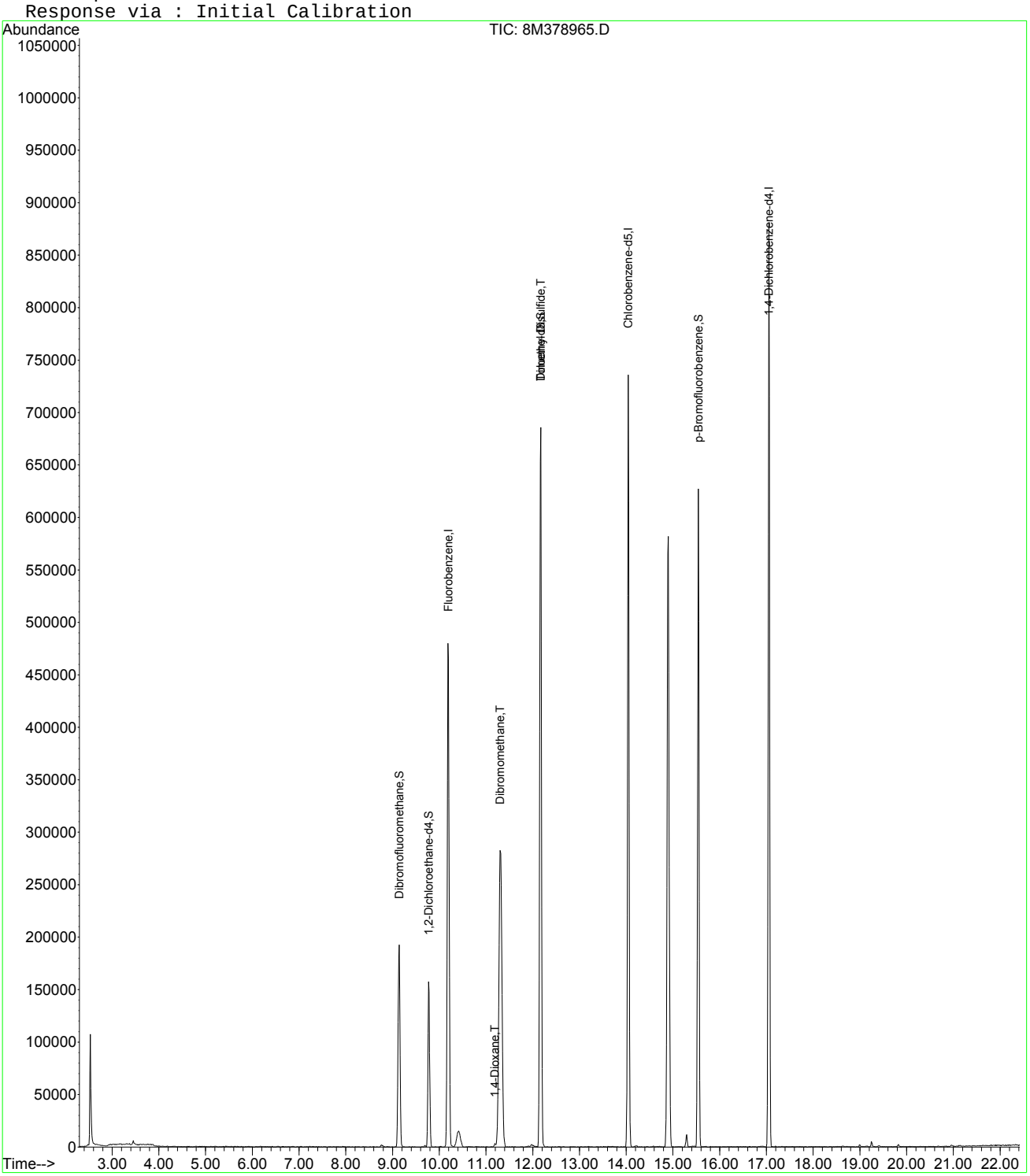
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.20	96	643325	25.00	ug/L	0.01
57) Chlorobenzene-d5	14.04	117	583069	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.05	152	324450	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.14	111	171176	25.6470	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 102.60%			
43) 1,2-Dichloroethane-d4	9.77	65	144794	28.1725	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 112.68%			
58) Toluene-d8	12.17	98	658059	24.4438	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 97.76%			
80) p-Bromofluorobenzene	15.54	95	256261	24.4158	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 97.68%			
Target Compounds						Qvalue
51) 1,4-Dioxane	11.19	88	3339	97.1088	ug/L	97
52) Dibromomethane	11.30	93	10950	3.5264	ug/L #	1
56) Dimethyl Disulfide	12.17	94	18957	1.8799	ug/L #	28

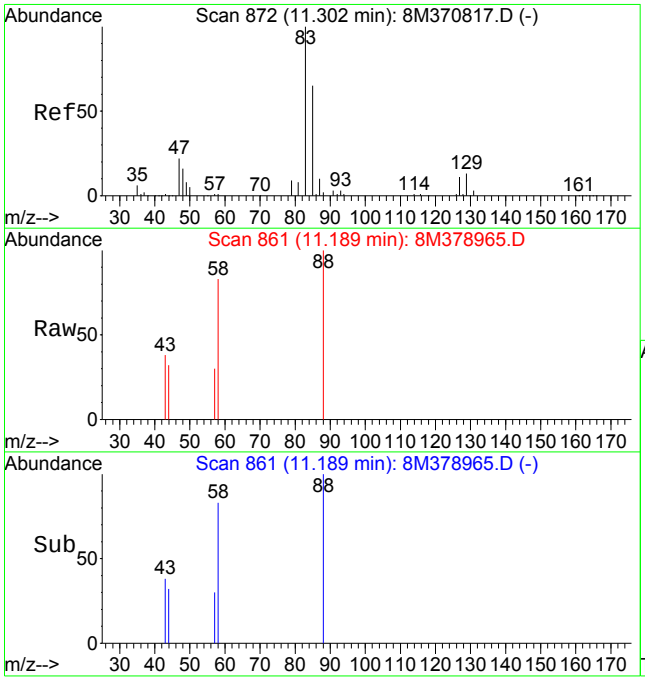
(#) = qualifier out of range (m) = manual integration
8M378965.D 8260WT.M Tue May 15 15:03:54 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\051012\8M378965.D Vial: 4
Acq On : 10 May 2012 20:40 Operator: TMB
Sample : WG397692-01 VBLK0510 BLANK STD 8260 Inst : HPMS8
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 15:03 2012 Quant Results File: 8260WT.RES

Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration

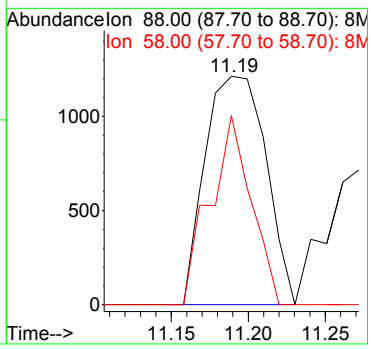


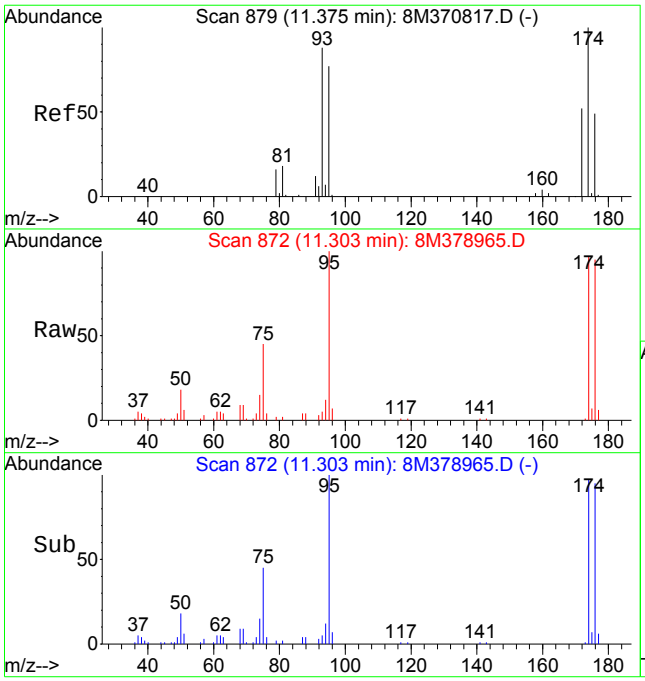


#51
1,4-Dioxane
Concen: 97.11 ug/L
RT: 11.19 min Scan# 861
Delta R.T. 0.00 min
Lab File: 8M378965.D
Acq: 10 May 2012 20:40

Tgt Ion: 88 Resp: 3339

Ion	Ratio	Lower	Upper
88	100		
58	56.1	35.0	81.6

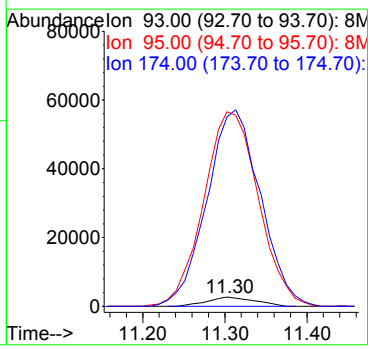


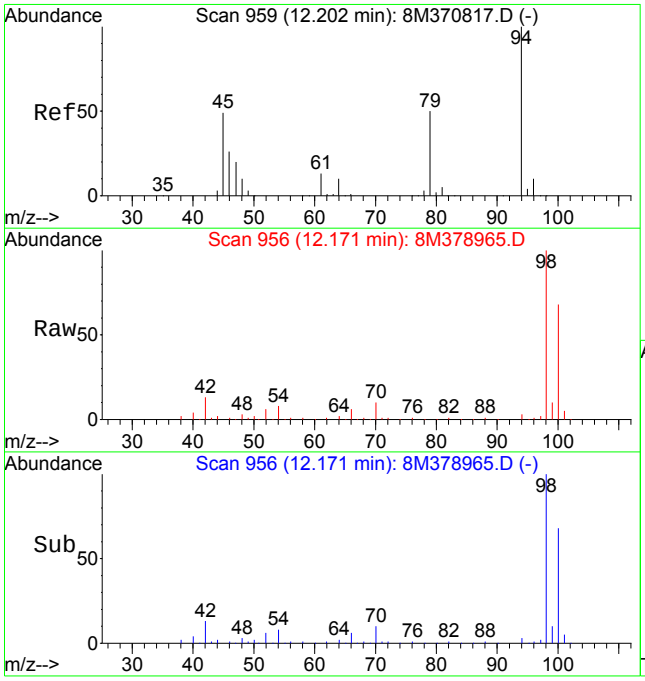


#52
Dibromomethane
Concen: 3.53 ug/L
RT: 11.30 min Scan# 872
Delta R.T. 0.03 min
Lab File: 8M378965.D
Acq: 10 May 2012 20:40

Tgt Ion: 93 Resp: 10950

Ion	Ratio	Lower	Upper
93	100		
95	2388.3	49.7	115.9#
174	2365.7	70.7	164.9#

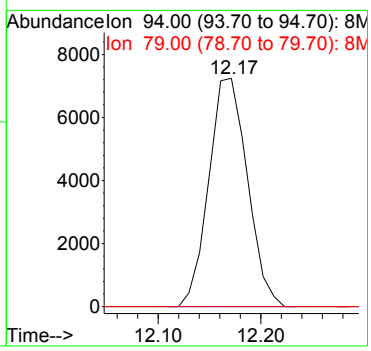




#56
Dimethyl Disulfide
Concen: 1.88 ug/L
RT: 12.17 min Scan# 956
Delta R.T. 0.09 min
Lab File: 8M378965.D
Acq: 10 May 2012 20:40

Tgt Ion: 94 Resp: 18957

Ion	Ratio	Lower	Upper
94	100		
79	0.0	29.2	68.0#



LSC Area Percent Report

Data File : K:\ORGANICS\VOLATILE\HPMS8\DATA\051012\8M378965.D Vial: 4
Acq On : 10 May 2012 20:40 Operator: TMB
Sample : WG397692-01 VBLK0510 BLANK STD 8260 Inst : HPMS8
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

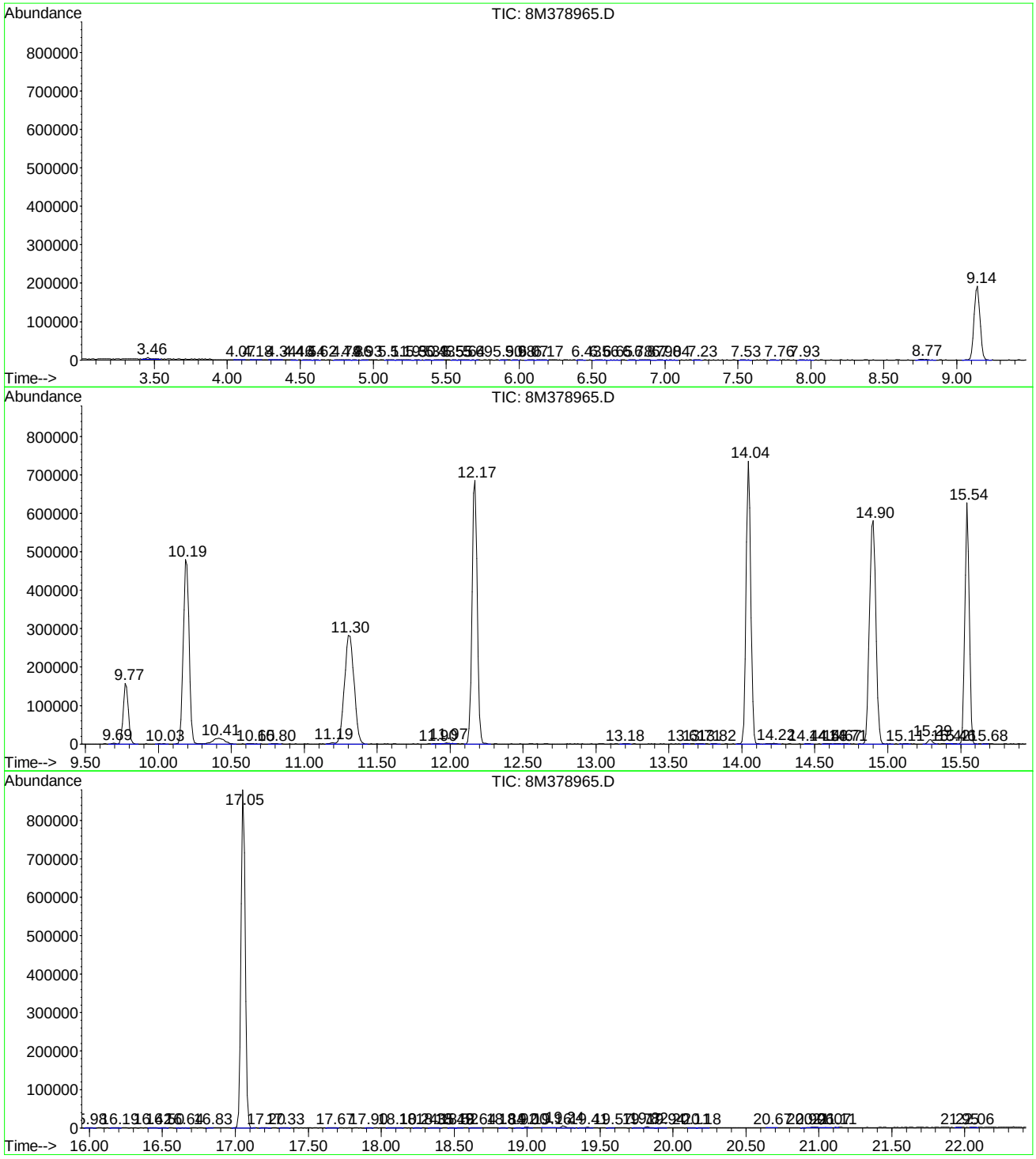
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.455	109	113	121	rVB3	4256	10017	0.56%	0.083%
2	4.065	170	172	177	rBV2	507	1604	0.09%	0.013%
3	4.179	181	183	188	rVB	704	949	0.05%	0.008%
4	4.344	193	199	202	rVV	552	1598	0.09%	0.013%
5	4.458	208	210	212	rVB	701	930	0.05%	0.008%
6	4.541	215	218	222	rBB	462	1484	0.08%	0.012%
7	4.623	222	226	227	rBB	712	1356	0.08%	0.011%
8	4.789	236	242	248	rBB	846	3354	0.19%	0.028%
9	4.861	248	249	252	rBB	779	1145	0.06%	0.010%
10	4.934	254	256	259	rBV	791	1647	0.09%	0.014%
11	5.109	270	273	277	rBB	755	1855	0.10%	0.015%
12	5.192	277	281	288	rBB	758	3259	0.18%	0.027%
13	5.296	289	291	294	rBB	404	931	0.05%	0.008%
14	5.389	296	300	301	rBB	783	1356	0.08%	0.011%
15	5.430	302	304	309	rBV	1012	2365	0.13%	0.020%
16	5.554	314	316	318	rBB	768	1082	0.06%	0.009%
17	5.637	318	324	327	rBB	882	2374	0.13%	0.020%
18	5.688	327	329	332	rBV	839	1363	0.08%	0.011%
19	5.895	346	349	351	rBV	679	1289	0.07%	0.011%
20	5.978	354	357	359	rBB	433	888	0.05%	0.007%
21	6.071	363	366	370	rBB	308	945	0.05%	0.008%
22	6.174	370	376	378	rBB	727	2131	0.12%	0.018%
23	6.433	397	401	403	rBB	707	1053	0.06%	0.009%
24	6.557	408	413	418	rBB	797	2094	0.12%	0.017%
25	6.650	419	422	426	rBB	714	1132	0.06%	0.009%
26	6.784	431	435	437	rBB	399	1091	0.06%	0.009%
27	6.867	438	443	448	rBB	781	2098	0.12%	0.017%
28	6.981	449	454	456	rBB	411	923	0.05%	0.008%
29	7.043	456	460	464	rBB	724	1349	0.08%	0.011%
30	7.229	474	478	480	rBB	735	1460	0.08%	0.012%
31	7.529	505	507	513	rBB	354	1016	0.06%	0.008%
32	7.756	525	529	531	rBB	409	909	0.05%	0.008%
33	7.932	544	546	554	rBB	719	1644	0.09%	0.014%
34	8.770	622	627	635	rBB2	2118	6221	0.35%	0.052%
35	9.142	653	663	672	rBB	192717	537604	30.27%	4.478%
36	9.690	713	716	719	rBB	1684	2702	0.15%	0.023%
37	9.773	719	724	732	rBB	157611	388426	21.87%	3.235%
38	10.031	744	749	752	rBB	715	1218	0.07%	0.010%
39	10.186	756	764	776	rBV	480095	1320625	74.35%	11.000%
40	10.414	777	786	797	rVB3	15383	85245	4.80%	0.710%
41	10.651	804	809	813	rBB3	345	1199	0.07%	0.010%
42	10.796	819	823	827	rBB	633	1195	0.07%	0.010%

43	11.189	857	861	863	rBV	3440	7108	0.40%	0.059%
44	11.303	863	872	884	rVB	282781	1288394	72.53%	10.731%
45	11.902	927	930	933	rBV	923	2314	0.13%	0.019%
46	11.975	933	937	943	rVV2	2122	6519	0.37%	0.054%
47	12.171	949	956	966	rBB	686014	1706675	96.08%	14.215%
48	13.185	1052	1054	1059	rBB	783	1366	0.08%	0.011%
49	13.608	1093	1095	1098	rBB	731	1263	0.07%	0.011%
50	13.712	1102	1105	1108	rBB	718	1383	0.08%	0.012%
51	13.815	1112	1115	1118	rBB	438	919	0.05%	0.008%
52	14.043	1129	1137	1146	rBB	736110	1627689	91.64%	13.558%
53	14.218	1147	1154	1158	rBB	1309	4019	0.23%	0.033%
54	14.436	1174	1175	1180	rBB	614	1074	0.06%	0.009%
55	14.580	1186	1189	1193	rBB	1050	2065	0.12%	0.017%
56	14.673	1193	1198	1199	rBB	686	1301	0.07%	0.011%
57	14.715	1199	1202	1204	rBB	830	1252	0.07%	0.010%
58	14.901	1210	1220	1233	rBB	581891	1767935	99.53%	14.726%
59	15.108	1237	1240	1244	rBB	356	1036	0.06%	0.009%
60	15.294	1253	1258	1262	rBB2	11900	24463	1.38%	0.204%
61	15.418	1268	1270	1272	rVV	903	1354	0.08%	0.011%
62	15.459	1272	1274	1276	rVB	961	1526	0.09%	0.013%
63	15.542	1276	1282	1289	rBB	627402	1303409	73.38%	10.857%
64	15.676	1292	1295	1296	rBV	464	922	0.05%	0.008%
65	15.976	1323	1324	1330	rBB	342	1012	0.06%	0.008%
66	16.193	1340	1345	1347	rBB	357	1291	0.07%	0.011%
67	16.421	1365	1367	1372	rBB	404	1372	0.08%	0.011%
68	16.504	1373	1375	1378	rBB	514	1019	0.06%	0.008%
69	16.638	1384	1388	1392	rBB	771	898	0.05%	0.007%
70	16.834	1404	1407	1408	rBV	459	891	0.05%	0.007%
71	17.052	1421	1428	1436	rBV	880715	1776249	100.00%	14.795%
72	17.196	1439	1442	1446	rBB	1045	1529	0.09%	0.013%
73	17.331	1452	1455	1459	rBB	779	1575	0.09%	0.013%
74	17.672	1483	1488	1491	rBB	398	1596	0.09%	0.013%
75	17.899	1509	1510	1514	rBB	422	910	0.05%	0.008%
76	18.096	1523	1529	1534	rBB	444	2313	0.13%	0.019%
77	18.241	1541	1543	1546	rBB	619	1114	0.06%	0.009%
78	18.354	1551	1554	1559	rBB	468	1581	0.09%	0.013%
79	18.489	1564	1567	1569	rBB	651	1094	0.06%	0.009%
80	18.520	1569	1570	1574	rBV	458	1261	0.07%	0.011%
81	18.644	1578	1582	1586	rBV2	851	3248	0.18%	0.027%
82	18.840	1598	1601	1603	rBB	427	923	0.05%	0.008%
83	18.923	1608	1609	1613	rBB	405	902	0.05%	0.008%
84	18.995	1613	1616	1620	rBV	2179	4473	0.25%	0.037%
85	19.161	1626	1632	1635	rVB2	734	1725	0.10%	0.014%
86	19.243	1636	1640	1648	rVB3	5356	10913	0.61%	0.091%
87	19.409	1650	1656	1660	rBV2	1327	4495	0.25%	0.037%
88	19.574	1669	1672	1674	rBV	441	1139	0.06%	0.009%
89	19.771	1686	1691	1692	rBV	450	1432	0.08%	0.012%
90	19.822	1693	1696	1702	rBB2	2452	5219	0.29%	0.043%
91	19.936	1702	1707	1709	rBV	549	1914	0.11%	0.016%
92	20.112	1723	1724	1729	rVB	580	1402	0.08%	0.012%
93	20.184	1729	1731	1737	rBV	470	2012	0.11%	0.017%
94	20.670	1775	1778	1782	rBV	714	1415	0.08%	0.012%
95	20.898	1798	1800	1801	rBV	711	989	0.06%	0.008%
96	20.960	1802	1806	1814	rVB2	1575	5309	0.30%	0.044%
97	21.074	1814	1817	1818	rBV	553	1211	0.07%	0.010%
98	21.115	1820	1821	1823	rBV2	1034	1334	0.08%	0.011%
99	21.952	1900	1902	1904	rBV2	965	1358	0.08%	0.011%
100	22.056	1910	1912	1915	rVB2	839	1535	0.09%	0.013%

Sum of corrected areas: 12005765

File : K:\ORGANICS\VOLATILE\HPMS8\DATA\051012\8M378965.D
Operator : TMB
Acquired : 10 May 2012 20:40 using AcqMethod 8260WT
Instrument : HPMS8
Sample Name: WG397692-01 VBLK0510 BLANK STD 8260
Misc Info : 1,1
Vial Number: 4
Quant File :8260WT.RES (RTE Integrator)



Data File : K:\ORGANICS\VOLATILE\HPMS8\DATA\051012\8M378965.D Vial: 4
Acq On : 10 May 2012 20:40 Operator: TMB
Sample : WG397692-01 VBLK0510 BLANK STD 8260 Inst : HPMS8
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

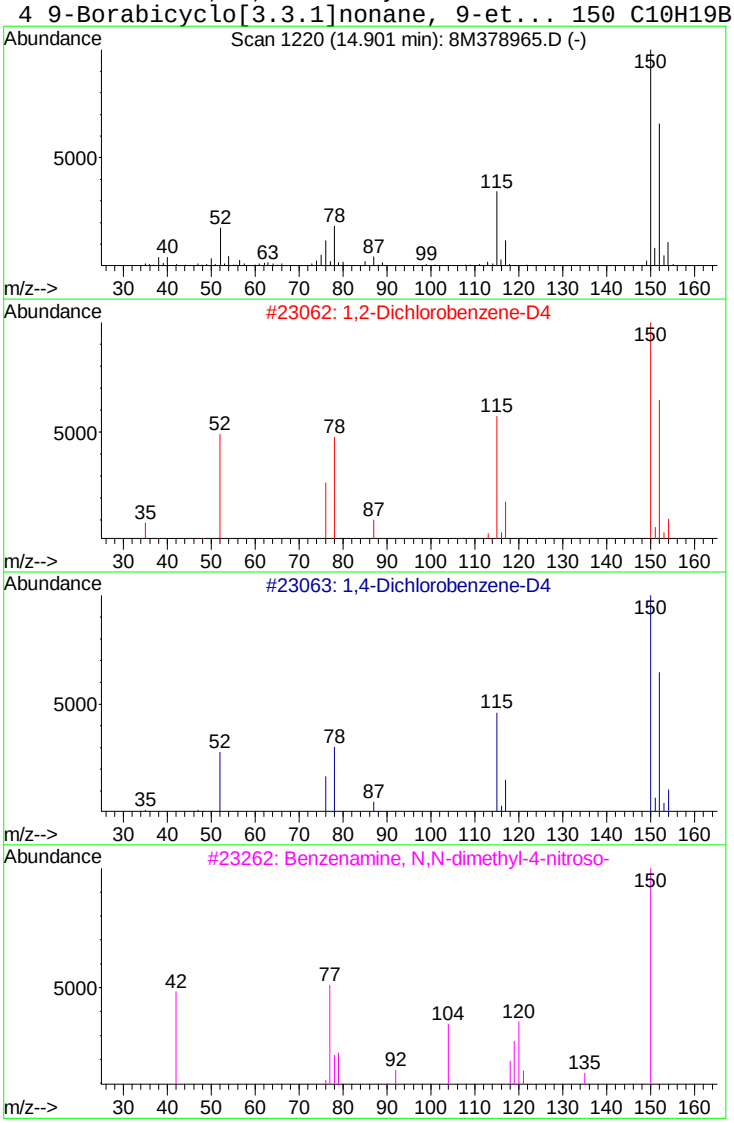
Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Library : C:\DATABASE\NIST02.L

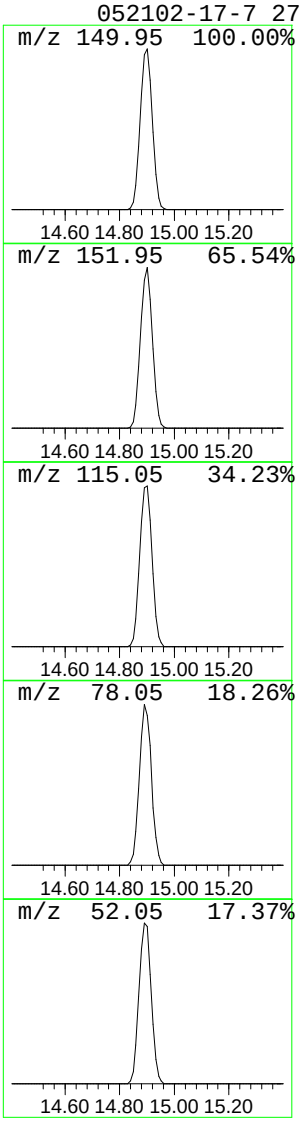
****

Peak Number 1 1,2-Dichlorobenzene-D4 Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.90	27.15 ug/L	1767940	Chlorobenzene-d5	14.04

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,2-Dichlorobenzene-D4	150	C6D4Cl2	002199-69-1	94
2	1,4-Dichlorobenzene-D4	150	C6D4Cl2	003855-82-1	94
3	Benzenamine, N,N-dimethyl-4-nitr...	150	C8H10N2O	000138-89-6	32
4	9-Borabicyclo[3.3.1]nonane, 9-et...	150	C10H19B	052102-17-7	27





Tentatively Identified Compound (LSC) summary

Operator ID: TMB Date Acquired: 10 May 2012 20:40
Data File: K:\ORGANICS\VOLATILE\HPMS8\DATA\051012\8M378965.D
Name: WG397692-01 VBLK0510 BLANK STD 8260
Misc: 1,1
Method: C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title: 8260B/624_WATER SOP:OVLMSV01 04/25/12 - HPMS6
Library Searched: C:\DATABASE\NIST02.L

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
1,2-Dichlorobenze...	14.90	27.2	ug/L	1767940	2	14.04	1627690	25.0

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\051012\8M378966.D Vial: 5
Acq On : 10 May 2012 21:13 Operator: TMB
Sample : WG397692-02 20ug/L LCS STD 8260 Inst : HPMS8
Misc : 1,1 STD51427 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 10 21:35:47 2012 Quant Results File: 8260WT.RES

Quant Method : C:\MSDchem\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration
DataAcq Meth : 8260WT

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.19	96	682617	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.05	117	585399	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.06	152	330307	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.14	111	183372	25.8928	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 103.56%			
43) 1,2-Dichloroethane-d4	9.78	65	152276	27.9229	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 111.68%			
58) Toluene-d8	12.17	98	684399	25.3211	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 101.28%			
80) p-Bromofluorobenzene	15.54	95	263845	24.6927	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 98.76%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.83	85	212286	28.5918	ug/L	100
3) Chloromethane	3.22	50	192140	22.4534	ug/L	99
4) Vinyl Chloride	3.43	62	161886	22.6985	ug/L	98
5) 1,3-Butadiene	3.47	54	117168	27.0690	ug/L	88
6) Bromomethane	4.25	94	105074	19.0238	ug/L	100
7) Chloroethane	4.40	64	85238	18.5522	ug/L	97
8) Trichlorofluoromethane	4.90	101	248552	23.6020	ug/L	100
9) Diethyl ether	5.42	59	330381	86.1831	ug/L	99
10) Isoprene	5.45	67	144214	17.4017	ug/L	94
11) Acrolein	5.61	56	35418	81.7999	ug/L	97
12) 1,1,2-Trichloro-1,2,2-Trif	5.68	101	124811	19.7338	ug/L	98
13) Acetone	5.73	43	17583	17.4573	ug/L	93
14) 1,1-Dichloroethene	5.95	61	188870	20.6368	ug/L	95
15) Tert-Butyl Alcohol	6.08	59	24749	81.5905	ug/L	96
16) Dimethyl Sulfide	6.21	62	136288	21.1533	ug/L	95
17) Iodomethane	6.45	142	193389	18.1014	ug/L	94
18) Methyl acetate	6.48	43	53150	16.7681	ug/L	98
19) Methylene Chloride	6.72	84	130578	19.1731	ug/L	95
20) Carbon Disulfide	6.75	76	345952	19.6732	ug/L	99
21) Acrylonitrile	6.89	53	21913	16.0717	ug/L	98
22) Methyl Tert Butyl Ether	6.98	73	233336	20.0231	ug/L	98
23) trans-1,2-Dichloroethene	7.19	61	174410	20.1800	ug/L	98
24) n-Hexane	7.31	57	141072	17.8881	ug/L	97
25) Diisopropyl ether	7.65	45	2029671	97.3537	ug/L	98
26) Vinyl Acetate	7.78	43	140303	20.9513	ug/L	97
27) 1,1-Dichloroethane	7.80	63	213750	19.3460	ug/L	100
28) Ethyl-Tert-Butyl ether	8.22	59	1634589	95.6684	ug/L	99
29) 2-Butanone	8.36	43	25134	16.7700	ug/L	97
30) Propionitrile	8.45	54	37400	74.3520	ug/L	99
31) 2,2-Dichloropropane	8.59	77	194173	20.4259	ug/L	100
32) cis-1,2-Dichloroethene	8.64	96	141650	19.7967	ug/L	96
33) Chloroform	8.86	83	234972	20.6349	ug/L	100
34) 1-Bromopropane	8.99	122	32299	22.3069	ug/L	99
35) Bromochloromethane	9.08	130	98990	21.4807	ug/L	96
36) Tetrahydrofuran	9.11	42	78630	77.4139	ug/L	99
38) 1,1,1-Trichloroethane	9.40	97	230676	22.2940	ug/L	98
39) Cyclohexane	9.44	56	184796	18.0768	ug/L	99
40) 1,1-Dichloropropene	9.59	75	173238	19.4378	ug/L	99
41) Tert-Amyl-Methyl ether	9.72	73	1335342	95.5033	ug/L	95
42) Carbon Tetrachloride	9.74	117	218852	22.6080	ug/L	99
45) 1,2-Dichloroethane	9.89	62	155907	22.2511	ug/L	97

(#) = qualifier out of range (m) = manual integration
8M378966.D 8260WT.M Thu May 10 21:35:48 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\051012\8M378966.D Vial: 5
Acq On : 10 May 2012 21:13 Operator: TMB
Sample : WG397692-02 20ug/L LCS STD 8260 Inst : HPMS8
Misc : 1,1 STD51427 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 10 21:35:47 2012 Quant Results File: 8260WT.RES

Quant Method : C:\MSDchem\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration
DataAcq Meth : 8260WT

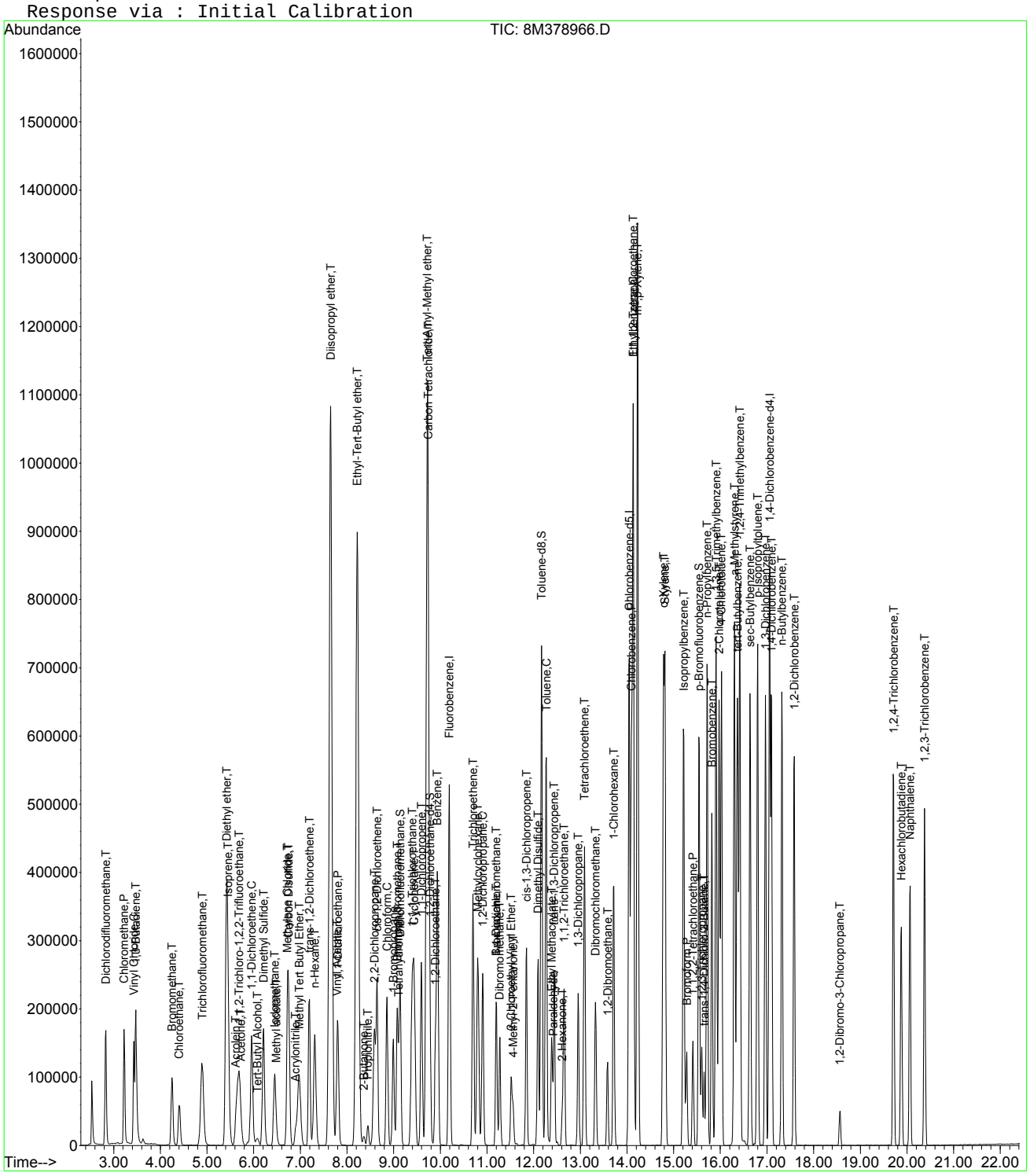
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
46)	Benzene	9.93	78	497477	19.0184	ug/L	98
47)	Trichloroethene	10.70	130	178043	20.5891	ug/L	100
48)	Methylcyclohexane	10.80	83	176252	17.6350	ug/L	97
49)	1,2-Dichloropropane	10.91	63	121166	19.0382	ug/L	86
50)	Bromodichloromethane	11.20	83	179050	21.8096	ug/L	99
51)	1,4-Dioxane	11.20	88	1630	44.6769	ug/L	77
52)	Dibromomethane	11.27	93	67339	20.4379	ug/L	95
53)	2-Chloroethyl Vinyl Ether	11.52	63	50668	17.3500	ug/L	97
54)	4-Methyl-2-Pentanone	11.56	58	22422	16.9692	ug/L	94
55)	cis-1,3-Dichloropropene	11.85	75	196912	20.3790	ug/L	100
56)	Dimethyl Disulfide	12.10	94	210708	19.6929	ug/L	97
59)	Toluene	12.27	91	585996	18.1511	ug/L	99
60)	Ethyl Methacrylate	12.38	69	101072	17.9469	ug/L	95
61)	Paraldehyde	12.42	89	4776	49.7017	ug/L	87
62)	trans-1,3-Dichloropropene	12.44	75	162854	18.1815	ug/L	99
63)	1,1,2-Trichloroethane	12.65	97	99002	19.8370	ug/L	100
64)	2-Hexanone	12.61	58	19237	15.3690	ug/L	72
65)	1,3-Dichloropropane	12.95	76	155824	19.0695	ug/L	94
66)	Tetrachloroethene	13.09	164	143360	19.7015	ug/L	97
67)	Dibromochloromethane	13.33	129	160667	21.9031	ug/L	99
68)	1,2-Dibromoethane	13.58	107	106030	19.7213	ug/L	99
69)	1-Chlorohexane	13.72	91	176833	16.3990	ug/L	93
70)	Chlorobenzene	14.09	112	429529	19.0417	ug/L	98
71)	1,1,1,2-Tetrachloroethane	14.13	131	172908	21.0616	ug/L	98
72)	Ethylbenzene	14.13	106	233062	19.4506	ug/L	97
73)	m-,p-Xylene	14.23	106	561562	38.3878	ug/L	96
74)	o-Xylene	14.78	106	278739	18.9681	ug/L	95
75)	Styrene	14.81	104	470475	17.8837	ug/L	97
76)	Bromoform	15.28	173	91384	21.7159	ug/L	99
77)	Isopropylbenzene	15.22	105	633835	17.1597	ug/L	99
79)	1,1,2,2-Tetrachloroethane	15.41	83	94070	17.7216	ug/L	99
81)	1,2,3-Trichloropropane	15.60	110	34527	19.6622	ug/L	94
82)	trans-1,4-Dichloro-2-Buten	15.65	53	29597	19.2609	ug/L	85
83)	n-Propylbenzene	15.71	91	771818	18.0423	ug/L	99
84)	Bromobenzene	15.82	156	212472	19.9796	ug/L	94
85)	1,3,5-Trimethylbenzene	15.91	105	611018	19.1527	ug/L	97
86)	2-Chlorotoluene	15.97	91	547097	20.1053	ug/L	99
87)	4-Chlorotoluene	16.02	91	436587	16.9724	ug/L	99
88)	a-Methylstyrene	16.30	118	354182	18.6713	ug/L	97
89)	tert-Butylbenzene	16.37	134	132089	18.7267	ug/L	87
90)	1,2,4-Trimethylbenzene	16.42	105	649581	20.8475	ug/L	98
91)	sec-Butylbenzene	16.63	105	701848	17.9916	ug/L	100
92)	p-Isopropyltoluene	16.80	119	650760	18.4834	ug/L	99
93)	1,3-Dichlorobenzene	16.97	146	398125	18.9693	ug/L	99
94)	1,4-Dichlorobenzene	17.10	146	401377	19.0561	ug/L	99
95)	n-Butylbenzene	17.32	91	508608	18.4792	ug/L	99
96)	1,2-Dichlorobenzene	17.59	146	357783	19.1240	ug/L	100
97)	1,2-Dibromo-3-Chloropropan	18.56	75	16114	17.6359	ug/L	94
98)	1,2,4-Trichlorobenzene	19.72	182	234644	18.6249	ug/L	100
99)	Hexachlorobutadiene	19.88	225	95957	21.4365	ug/L	98
100)	Naphthalene	20.07	128	438977	17.8053	ug/L	100
101)	1,2,3-Trichlorobenzene	20.38	180	208738	19.3328	ug/L	99

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

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\051012\8M378966.D Vial: 5
Acq On : 10 May 2012 21:13 Operator: TMB
Sample : WG397692-02 20ug/L LCS STD 8260 Inst : HPMS8
Misc : 1,1 STD51427 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 10 21:35 2012 Quant Results File: 8260WT.RES

Method : C:\MSDchem\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\051012\8M378967.D Vial: 6
Acq On : 10 May 2012 21:45 Operator: TMB
Sample : WG397692-03 20ug/L LCSDUP STD 8260 Inst : HPMS8
Misc : 1,1 STD51427 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 10 22:08:18 2012 Quant Results File: 8260WT.RES

Quant Method : C:\MSDchem\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration
DataAcq Meth : 8260WT

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.19	96	675202	25.00	ug/L	0.01
57) Chlorobenzene-d5	14.04	117	593528	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.05	152	336616	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.14	111	175792	25.0951	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 100.40%			
43) 1,2-Dichloroethane-d4	9.78	65	146634	27.1836	ug/L	0.01
Spiked Amount 25.000	Range 80 - 120		Recovery = 108.72%			
58) Toluene-d8	12.17	98	686079	25.0356	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 100.16%			
80) p-Bromofluorobenzene	15.54	95	264518	24.2917	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 97.16%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.82	85	231018	31.4564	ug/L	100
3) Chloromethane	3.22	50	201753	23.8356	ug/L	98
4) Vinyl Chloride	3.43	62	171759	24.3473	ug/L	98
5) 1,3-Butadiene	3.46	54	112174	26.1384	ug/L	92
6) Bromomethane	4.25	94	105610	19.3308	ug/L	100
7) Chloroethane	4.40	64	90118	19.8297	ug/L	97
8) Trichlorofluoromethane	4.89	101	259002	24.8644	ug/L	99
9) Diethyl ether	5.42	59	310059	81.7701	ug/L	99
10) Isoprene	5.45	67	131795	16.0778	ug/L	94
11) Acrolein	5.61	56	37065	86.5438	ug/L	91
12) 1,1,2-Trichloro-1,2,2-Trif	5.68	101	123344	19.7160	ug/L	97
13) Acetone	5.73	43	17595	17.6610	ug/L	90
14) 1,1-Dichloroethene	5.95	61	191533	21.1576	ug/L	93
15) Tert-Butyl Alcohol	6.09	59	37863	124.7825	ug/L	98
16) Dimethyl Sulfide	6.21	62	129421	20.3080	ug/L	94
17) Iodomethane	6.45	142	184889	17.4958	ug/L	94
18) Methyl acetate	6.48	43	53049	16.9201	ug/L	98
19) Methylene Chloride	6.72	84	130869	19.4268	ug/L	96
20) Carbon Disulfide	6.75	76	326019	18.7432	ug/L	100
21) Acrylonitrile	6.90	53	23692	17.5673	ug/L	100
22) Methyl Tert Butyl Ether	6.97	73	226388	19.6402	ug/L	99
23) trans-1,2-Dichloroethene	7.18	61	170499	19.9441	ug/L	100
24) n-Hexane	7.31	57	144660	18.5445	ug/L	96
25) Diisopropyl ether	7.65	45	1993601	96.6737	ug/L	98
26) Vinyl Acetate	7.78	43	138009	20.8351	ug/L	97
27) 1,1-Dichloroethane	7.81	63	209047	19.1281	ug/L	100
28) Ethyl-Tert-Butyl ether	8.22	59	1606932	95.0825	ug/L	99
29) 2-Butanone	8.36	43	26125	17.6226	ug/L	96
30) Propionitrile	8.45	54	40403	81.0798	ug/L	98
31) 2,2-Dichloropropane	8.59	77	196409	20.8880	ug/L	99
32) cis-1,2-Dichloroethene	8.64	96	140029	19.7850	ug/L	96
33) Chloroform	8.86	83	231950	20.5932	ug/L	99
34) 1-Bromopropane	8.98	122	32678	22.8165	ug/L	99
35) Bromochloromethane	9.08	130	97746	21.4437	ug/L	97
36) Tetrahydrofuran	9.11	42	80754	80.3782	ug/L	99
38) 1,1,1-Trichloroethane	9.40	97	228768	22.3524	ug/L	99
39) Cyclohexane	9.44	56	185947	18.3892	ug/L	99
40) 1,1-Dichloropropene	9.59	75	176270	19.9952	ug/L	99
41) Tert-Amyl-Methyl ether	9.72	73	1327275	95.9688	ug/L	96
42) Carbon Tetrachloride	9.74	117	221206	23.1021	ug/L	98
45) 1,2-Dichloroethane	9.89	62	153598	22.1623	ug/L	98

(#) = qualifier out of range (m) = manual integration
8M378967.D 8260WT.M Thu May 10 22:08:19 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\051012\8M378967.D Vial: 6
Acq On : 10 May 2012 21:45 Operator: TMB
Sample : WG397692-03 20ug/L LCSDUP STD 8260 Inst : HPMS8
Misc : 1,1 STD51427 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 10 22:08:18 2012 Quant Results File: 8260WT.RES

Quant Method : C:\MSDchem\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration
DataAcq Meth : 8260WT

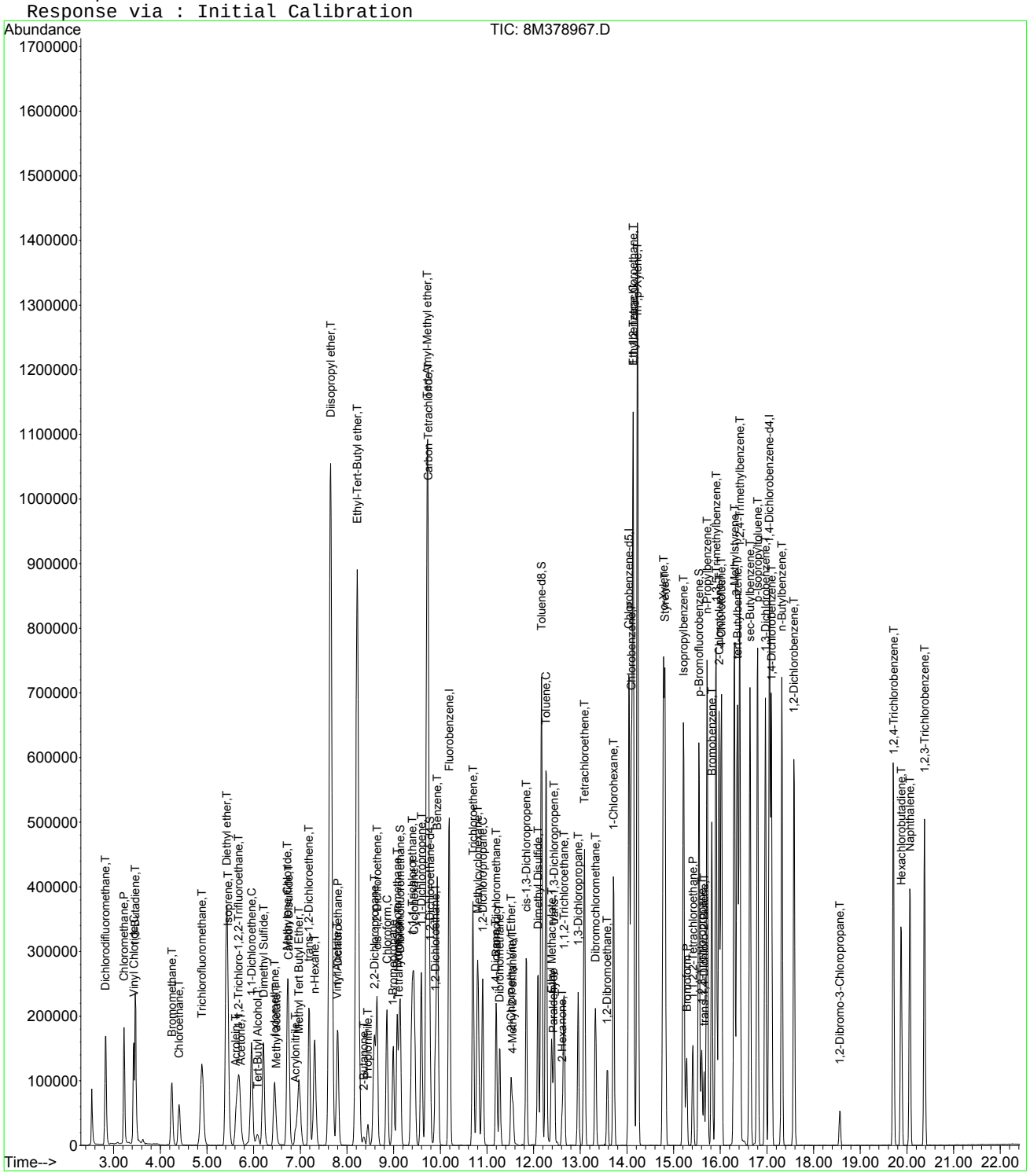
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
46)	Benzene	9.94	78	506488	19.5755	ug/L	98
47)	Trichloroethene	10.70	130	183218	21.4203	ug/L	99
48)	Methylcyclohexane	10.80	83	188395	19.0570	ug/L	98
49)	1,2-Dichloropropane	10.91	63	120686	19.1711	ug/L	89
50)	Bromodichloromethane	11.20	83	179769	22.1377	ug/L	99
51)	1,4-Dioxane	11.19	88	5251	145.5060	ug/L	99
52)	Dibromomethane	11.27	93	67896	20.8332	ug/L	98
53)	2-Chloroethyl Vinyl Ether	11.52	63	50363	17.4350	ug/L	96
54)	4-Methyl-2-Pentanone	11.55	58	23853	18.2505	ug/L	98
55)	cis-1,3-Dichloropropene	11.84	75	200112	20.9376	ug/L	100
56)	Dimethyl Disulfide	12.10	94	208945	19.7425	ug/L	96
59)	Toluene	12.26	91	603714	18.4438	ug/L	100
60)	Ethyl Methacrylate	12.39	69	104353	18.2758	ug/L	93
61)	Paraldehyde	12.42	89	6070	60.9063	ug/L	68
62)	trans-1,3-Dichloropropene	12.44	75	168876	18.5956	ug/L	97
63)	1,1,2-Trichloroethane	12.65	97	101332	20.0257	ug/L	97
64)	2-Hexanone	12.61	58	21917	17.2703	ug/L	87
65)	1,3-Dichloropropane	12.95	76	162183	19.5759	ug/L	96
66)	Tetrachloroethene	13.09	164	151561	20.5432	ug/L	97
67)	Dibromochloromethane	13.33	129	163898	22.0376	ug/L	99
68)	1,2-Dibromoethane	13.57	107	105510	19.3558	ug/L	98
69)	1-Chlorohexane	13.71	91	190452	17.4201	ug/L	95
70)	Chlorobenzene	14.09	112	446665	19.5302	ug/L	99
71)	1,1,1,2-Tetrachloroethane	14.13	131	181105	21.7579	ug/L	100
72)	Ethylbenzene	14.13	106	241960	19.9166	ug/L	96
73)	m-,p-Xylene	14.23	106	590327	39.8015	ug/L	95
74)	o-Xylene	14.78	106	289596	19.4370	ug/L	96
75)	Styrene	14.82	104	489879	18.3662	ug/L	97
76)	Bromoform	15.28	173	94337	22.1106	ug/L	98
77)	Isopropylbenzene	15.21	105	664585	17.7458	ug/L	99
79)	1,1,2,2-Tetrachloroethane	15.42	83	97738	18.0675	ug/L	99
81)	1,2,3-Trichloropropane	15.60	110	37072	20.7158	ug/L	87
82)	trans-1,4-Dichloro-2-Buten	15.65	53	29471	18.8194	ug/L	91
83)	n-Propylbenzene	15.71	91	819291	18.7931	ug/L	99
84)	Bromobenzene	15.82	156	217862	20.1025	ug/L	96
85)	1,3,5-Trimethylbenzene	15.91	105	637798	19.6175	ug/L	98
86)	2-Chlorotoluene	15.97	91	506651	18.2699	ug/L	99
87)	4-Chlorotoluene	16.03	91	514296	19.6187	ug/L	100
88)	a-Methylstyrene	16.30	118	367356	19.0028	ug/L	98
89)	tert-Butylbenzene	16.37	134	138487	19.2658	ug/L	87
90)	1,2,4-Trimethylbenzene	16.42	105	672424	21.1821	ug/L	98
91)	sec-Butylbenzene	16.64	105	739412	18.5993	ug/L	100
92)	p-Isopropyltoluene	16.80	119	690944	19.2569	ug/L	98
93)	1,3-Dichlorobenzene	16.97	146	415685	19.4347	ug/L	99
94)	1,4-Dichlorobenzene	17.10	146	411828	19.1858	ug/L	99
95)	n-Butylbenzene	17.32	91	542580	19.3440	ug/L	100
96)	1,2-Dichlorobenzene	17.58	146	368472	19.3262	ug/L	100
97)	1,2-Dibromo-3-Chloropropan	18.56	75	17523	18.8186	ug/L	93
98)	1,2,4-Trichlorobenzene	19.72	182	243184	18.9410	ug/L	99
99)	Hexachlorobutadiene	19.88	225	103934	22.7834	ug/L	98
100)	Naphthalene	20.07	128	456254	18.1592	ug/L	100
101)	1,2,3-Trichlorobenzene	20.38	180	215996	19.6301	ug/L	99

(#) = qualifier out of range (m) = manual integration
8M378967.D 8260WT.M Thu May 10 22:08:19 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\051012\8M378967.D Vial: 6
Acq On : 10 May 2012 21:45 Operator: TMB
Sample : WG397692-03 20ug/L LCSDUP STD 8260 Inst : HPMS8
Misc : 1,1 STD51427 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 10 22:08 2012 Quant Results File: 8260WT.RES

Method : C:\MSDchem\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration



2.1.2 RSK 175

2.1.2.1 Summary Data

Login Number: L12050153
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: The MS/MSD results were not associated with this sample delivery group (SDG), due to insufficient volume of sample. 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: 46093
Approved By: Michael Albertson

Certificate of Analysis

Sample #: L12050153-01 **PrePrep Method:** N/A **Instrument:** HP16
Client ID: MW-15-050312 **Prep Method:** 5021 **Prep Date:** N/A
Matrix: Water **Analytical Method:** RSK175 **Cal Date:** 04/30/2012 15:04
Workgroup #: WG397238 **Analyst:** FJB **Run Date:** 05/07/2012 18:24
Collect Date: 05/03/2012 10:45 **Dilution:** 1 **File ID:** 16G32267
Sample Tag: 01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	4.23		5.00	1.00
Carbon Dioxide	124-38-9	38700		10000	2500

Sample #: L12050153-03 **PrePrep Method:** N/A **Instrument:** HP16
Client ID: MW-17-050312 **Prep Method:** 5021 **Prep Date:** N/A
Matrix: Water **Analytical Method:** RSK175 **Cal Date:** 04/30/2012 15:04
Workgroup #: WG397238 **Analyst:** FJB **Run Date:** 05/07/2012 18:33
Collect Date: 05/03/2012 11:30 **Dilution:** 1 **File ID:** 16G32268
Sample Tag: 01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	8.65		5.00	1.00
Carbon Dioxide	124-38-9	150000		10000	2500

Sample #: L12050153-05 **PrePrep Method:** N/A **Instrument:** HP16
Client ID: MW-28050312 **Prep Method:** 5021 **Prep Date:** N/A
Matrix: Water **Analytical Method:** RSK175 **Cal Date:** 04/30/2012 15:04
Workgroup #: WG397238 **Analyst:** FJB **Run Date:** 05/07/2012 18:51
Collect Date: 05/03/2012 15:00 **Dilution:** 1 **File ID:** 16G32270
Sample Tag: 01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	152		5.00	1.00
Carbon Dioxide	124-38-9	158000		10000	2500

Sample #: L12050153-07 **PrePrep Method:** N/A **Instrument:** HP16
Client ID: TW-02-050312 **Prep Method:** 5021 **Prep Date:** N/A
Matrix: Water **Analytical Method:** RSK175 **Cal Date:** 04/30/2012 15:04
Workgroup #: WG397238 **Analyst:** FJB **Run Date:** 05/07/2012 19:01
Collect Date: 05/03/2012 13:30 **Dilution:** 1 **File ID:** 16G32271
Sample Tag: 01 **Units:** ug/L

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	133		5.00	1.00
Carbon Dioxide	124-38-9	139000		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

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

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HP16 Dataset: 050712
Analyst1: FJB Analyst2: NA
Method: RSK175 SOP: RSK01 Rev: 16
Method: 5021 SOP: RSK01 Rev: 16

Maintenance Log ID: 41637

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

Column 1 ID: RTQBOND Column 2 ID: RTQBOND
Workgroups: WG397238, WG397239

Comments: samples with file IDs 16G32277 to 16G32298 need dilutions

File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
16G32245	WG397237-01 133umol/mol CCV RSK175	NA	1	1	STD38726	05/07/12 14:45
16G32246	WG397237-01 133umol/mol CCV RSK175	NA	1	1	STD38726	05/07/12 15:11
16G32247	WG397238-01 BLANK RSK175	NA	1	1		05/07/12 15:23
16G32248	WG397238-02 67umol/mol LCS RSK175	NA	1	1	STD45308	05/07/12 15:32
16G32249	WG397238-03 67umol/mol LCSD RSK175	NA	1	1	STD45308	05/07/12 15:41
16G32250	L12050064-01 C RSK175	<2	1	1		05/07/12 15:50
16G32251	L12050052-02 B RSK175	<2	1	1		05/07/12 15:58
16G32252	L12050052-04 B RSK175	<2	1	1		05/07/12 16:08
16G32253	L12050052-07 B RSK175	<2	1	1		05/07/12 16:17
16G32254	L12050052-11 B RSK175	<2	1	1		05/07/12 16:26
16G32255	L12050099-01 5X B RSK175	7	1	5		05/07/12 16:35
16G32256	L12050052-01 50X B RSK175 D1	<2	1	50		05/07/12 16:44
16G32257	WG397237-02 133umol/mol CCV RSK175	NA	1	1	STD38726	05/07/12 16:53
16G32258	L12050052-03 50X B RSK175 D1	<2	1	50		05/07/12 17:02
16G32259	L12050052-06 20X B RSK175 D1	<2	1	20		05/07/12 17:11
16G32260	WG397237-02 133umol/mol CCV RSK175	<2	1	1		05/07/12 17:20
16G32261	L12050052-09 50X B RSK175 D1	<2	1	50		05/07/12 17:30
16G32262	L12050052-10 20X B RSK175 D1	<2	1	20		05/07/12 17:39
16G32263	L12050052-12 50X B RSK175 D1	<2	1	50		05/07/12 17:48
16G32264	L12050052-13 25X B RSK175 D1	<2	1	25		05/07/12 17:57
16G32265	L12050052-14 25X B RSK175 D1	4	1	25		05/07/12 18:06
16G32266	L12050122-01 A RSK175	<2	1	1		05/07/12 18:15
16G32267	L12050153-01 A RSK175	7	1	1		05/07/12 18:24
16G32268	L12050153-03 A RSK175	7	1	1		05/07/12 18:33
16G32269	WG397237-03 133umol/mol CCV RSK175	NA	1	1	STD38726	05/07/12 18:42
16G32270	L12050153-05 A RSK175	7	1	1		05/07/12 18:51
16G32271	L12050153-07 A RSK175	7	1	1		05/07/12 19:01
16G32272	L12050052-16 A RSK175	<2	1	1		05/07/12 19:10
16G32273	WG397237-04 133umol/mol CCV RSK175	NA	1	1	STD38726	05/07/12 19:19
16G32274	WG397239-01 BLANK RSK175	NA	1	1		05/07/12 19:28
16G32275	WG397239-02 67umol/mol LCS RSK175	NA	1	1	STD45308	05/07/12 19:37
16G32276	WG397239-03 67umol/mol LCS DUP RSK1	NA	1	1	STD45308	05/07/12 19:46
16G32277	L12050052-17 A RSK175	<2	1	1		05/07/12 19:55
16G32278	L12050089-01 A RSK175	5	1	1		05/07/12 20:05

Approved: May 09, 2012

Page: 1

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HP16 Dataset: 050712
Analyst1: FJB Analyst2: NA
Method: RSK175 SOP: RSK01 Rev: 16
Method: 5021 SOP: RSK01 Rev: 16

Maintenance Log ID: 41637

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

Column 1 ID: RTQBOND Column 2 ID: RTQBOND
Workgroups: WG397238, WG397239

Comments: samples with file IDs 16G32277 to 16G32298 need dilutions

File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
16G32279	L12050089-02 A RSK175	<2	1	1		05/07/12 20:14
16G32280	L12050089-03 A RSK175	<2	1	1		05/07/12 20:23
16G32281	L12050089-04 A RSK175	<2	1	1		05/07/12 20:33
16G32282	L12050089-05 A RSK175	<2	1	1		05/07/12 20:42
16G32283	L12050089-06 A RSK175	<2	1	1		05/07/12 20:51
16G32284	WG397237-05 133umol/mol CCV RSK175	NA	1	1	STD38726	05/07/12 21:00
16G32285	L12050089-07 A RSK175	<2	1	1		05/07/12 21:09
16G32286	L12050089-08 A RSK175	<2	1	1		05/07/12 21:18
16G32287	L12050089-09 A RSK175	5	1	1		05/07/12 21:28
16G32288	L12050089-10 A RSK175	<2	1	1		05/07/12 21:37
16G32289	L12050089-11 A RSK175	<2	1	1		05/07/12 21:46
16G32290	L12050089-12 A RSK175	<2	1	1		05/07/12 21:55
16G32291	L12050089-13 A RSK175	<2	1	1		05/07/12 22:05
16G32292	L12050089-14 A RSK175	<2	1	1		05/07/12 22:14
16G32293	L12050151-01 A RSK175	<2	1	1		05/07/12 22:23
16G32294	L12050151-02 A RSK175	<2	1	1		05/07/12 22:33
16G32295	WG397237-06 133umol/mol CCV RSK175	NA	1	1	STD38726	05/07/12 22:42
16G32296	L12050151-03 A RSK175	<2	1	1		05/07/12 22:52
16G32297	L12050151-04 A RSK175	<2	1	1		05/07/12 23:01
16G32298	L12050151-05 A RSK175	<2	1	1		05/07/12 23:11
16G32299	WG397237-07 133umol/mol CCV RSK175	NA	1	1	STD38726	05/07/12 23:20

Comments

Seq.	Rerun	Dil.	Reason	Analytes
1				
File ID: 16G32245				
			dnr rr propane low	
13				
File ID: 16G32257				
			dnr not analyzed - operator error	
30				
File ID: 16G32274				
			methane detected above RL; subsequent samples needed dilutions	

Approved: May 09, 2012

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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 #: B154405

	Initial Amount		Nominal Amount		Spike Amount		Surrogate Spike Amount		Final Amount		Final Nominal Amount		Temp (C)
WG397237-01	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397237-02	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397237-03	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397237-04	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397237-05	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397237-06	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397237-07	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050089-12	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050151-02	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050151-03	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397238-02	15	mL	15	mL	.1	mL			5.47	mL	5.47	mL	40
L12050052-06	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050089-07	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050151-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050052-04	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397239-02	15	mL	15	mL	.1	mL			5.47	mL	5.47	mL	40
L12050089-04	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050089-09	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397238-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050052-07	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050089-03	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050151-04	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050151-05	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050099-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050052-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050052-09	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050153-03	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397238-03	15	mL	15	mL	.1	mL			5.47	mL	5.47	mL	40
L12050052-10	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050052-12	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050052-14	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050052-16	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050089-14	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050052-11	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050153-05	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397239-03	15	mL	15	mL	.1	mL			5.47	mL	5.47	mL	40
L12050089-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050089-08	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050089-10	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050064-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050052-03	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050122-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050052-17	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050089-02	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050089-11	15	mL	15	mL					5.47	mL	5.47	mL	40

Batch #: B154405

L12050089-06	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050089-05	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397239-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050153-07	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050153-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050089-13	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050052-02	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050052-13	15	mL	15	mL					5.47	mL	5.47	mL	40

Microbac Laboratories Inc.
UPLOAD BATCH EXTRACTION INFORMATION

Batch #: B154408

	Initial Amount		Nominal Amount		Spike Amount		Surrogate Spike Amount		Final Amount		Final Nominal Amount		Temp (C)
WG397237-02	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: 07-MAY-2012
Analyst: FJB
Analyst: NA
Method: RSK175
Instrument: HP16
Curve Workgroup: NA
Runlog ID: 46625
Analytical Workgroups: WG397238, WG397239

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	NA
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:
08-MAY-2012

Secondary Reviewer:
09-MAY-2012

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-09-2012 08:16:50

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: RSK175 **AAB#:** WG397238

Login Number: L12050153

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-15-050312	01	05/03/12							7		05/07/12	4.3	7	
MW-17-050312	03	05/03/12							7		05/07/12	4.3	7	
MW-28050312	05	05/03/12							7		05/07/12	4.2	7	
TW-02-050312	07	05/03/12							7		05/07/12	4.2	7	

*** = SEE PROJECT QAPP REQUIREMENTS**

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2408072
Report generated 05/09/2012 14:50

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12050153
Work Group: WG397238
Blank File ID: 16G32247
Blank Sample ID: WG397238-01
Prep Date: 05/07/12 15:23
Instrument ID: HP16
Analyzed Date: 05/07/12 15:23
Method: RSK175
Analyst: FJB

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG397238-02	16G32248	05/07/12 15:32	01
LCS2	WG397238-03	16G32249	05/07/12 15:41	01
MW-15-050312	L12050153-01	16G32267	05/07/12 18:24	01
MW-17-050312	L12050153-03	16G32268	05/07/12 18:33	01
MW-28050312	L12050153-05	16G32270	05/07/12 18:51	01
TW-02-050312	L12050153-07	16G32271	05/07/12 19:01	01

Report Name: BLANK_SUMMARY
PDF File ID: 2408073
Report generated 05/09/2012 14:50

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050153 Prep Date: 05/07/12 15:23 Sample ID: WG397238-01
Instrument ID: HP16 Run Date: 05/07/12 15:23 Prep Method: 5021
File ID: 16G32247 Analyst: FJB Method: RSK175
Workgroup (AAB#): WG397238 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: 2406633
09-MAY-2012 14:50

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050153 Analyst: FJB Prep Method: 5021
Instrument ID: HP16 Matrix: Water Method: RSK175
Workgroup (AAB#): WG397238 Units: ug/L
QC Key: WATERLOO Lot #: STD45308

Sample ID: WG397238-02 LCS File ID: 16G32248 Run Date: 05/07/2012 15:32
Sample ID: WG397238-03 LCS2 File ID: 16G32249 Run Date: 05/07/2012 15:41

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Methane	116	106	90.7	116	109	93.3	2.86	56 - 140	40	
Carbon Dioxide	31300	24300	77.4	31300	29000	92.4	17.7	10 - 200	40	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 2406634
Report generated: 05/09/2012 14:50

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: L12050153 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: 2408074
Report generated 05/09/2012 14:50

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050153 Run Date: 05/07/2012 Sample ID: WG397237-01

Instrument ID: HP16 Run Time: 15:11 Method: RSK175

File ID: 16G32246 Analyst: FJB QC Key: WATERLOO

Workgroup (AAB#): WG397238 Cal ID: HP16 - 30-APR-12

Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
methane		228	216	ug/L	172000	5.34	20	
carbon dioxide		62700	68200	ug/L	6210	8.81	30	

* Exceeds %D Criteria

CCV - Modified 03/05/2008

PDF File ID: 2406635

Report generated 05/09/2012 14:50

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050153 Run Date: 05/07/2012 Sample ID: WG397237-02

Instrument ID: HP16 Run Time: 17:20 Method: RSK175

File ID: 16G32260 Analyst: FJB QC Key: WATERLOO

Workgroup (AAB#): WG397238 Cal ID: HP16 - 30-APR-12

Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
methane		228	208	ug/L	165000	8.85	20	
carbon dioxide		62700	62000	ug/L	5650	1.07	30	

* Exceeds %D Criteria

CCV - Modified 03/05/2008

PDF File ID: 2406635

Report generated 05/09/2012 14:50

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050153 Run Date: 05/07/2012 Sample ID: WG397237-03

Instrument ID: HP16 Run Time: 18:42 Method: RSK175

File ID: 16G32269 Analyst: FJB QC Key: WATERLOO

Workgroup (AAB#): WG397238 Cal ID: HP16 - 30-APR-12

Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
methane		228	211	ug/L	168000	7.59	20	
carbon dioxide		62700	58400	ug/L	5320	6.86	30	

* Exceeds %D Criteria

CCV - Modified 03/05/2008

PDF File ID: 2406635

Report generated 05/09/2012 14:50

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050153 Run Date: 05/07/2012 Sample ID: WG397237-04

Instrument ID: HP16 Run Time: 19:19 Method: RSK175

File ID: 16G32273 Analyst: FJB QC Key: WATERLOO

Workgroup (AAB#): WG397238 Cal ID: HP16 - 30-APR-12

Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
methane		228	208	ug/L	166000	8.63	20	
carbon dioxide		62700	54100	ug/L	4930	13.7	30	

* Exceeds %D Criteria

CCV - Modified 03/05/2008

PDF File ID: 2406635

Report generated 05/09/2012 14:50

2.1.2.3 Sample Data

Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\050712\16G32267.D\FID1A.CH Vial: 22
Signal #2 : C:\MSDchem\1\DATA\050712\16G32267.D\TCD2B.CH
Acq On : 07 May 2012 18:24 Operator: FJB
Sample : L12050153-01 A RSK175 Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 07 18:29:49 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 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 :

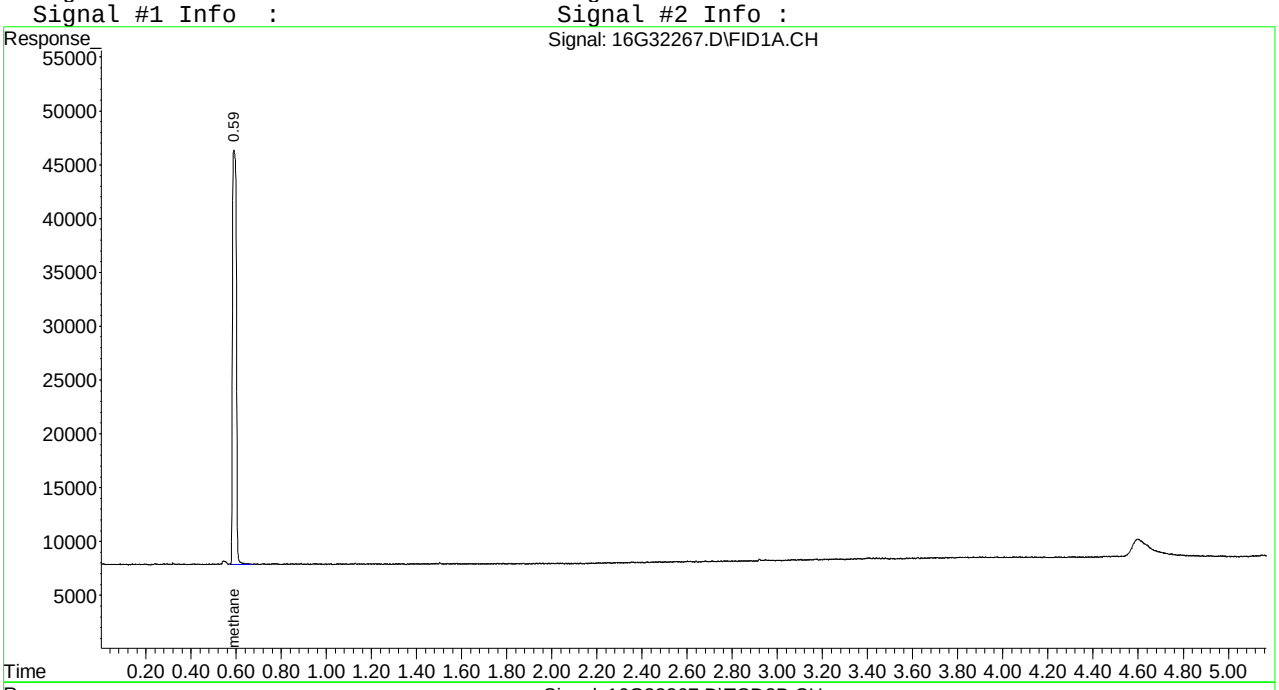
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.59	447686	2.469	umol/
2) T	ethene	0.00	0	N.D.	umol/
3) T	acetylene	0.00	0	N.D.	umol/
4) T	ethane	0.00	0	N.D.	umol/
5) T	propane	0.00	0	N.D.	umol/
7) T	carbon dioxide	0.20	46996133	8232.882	umol/

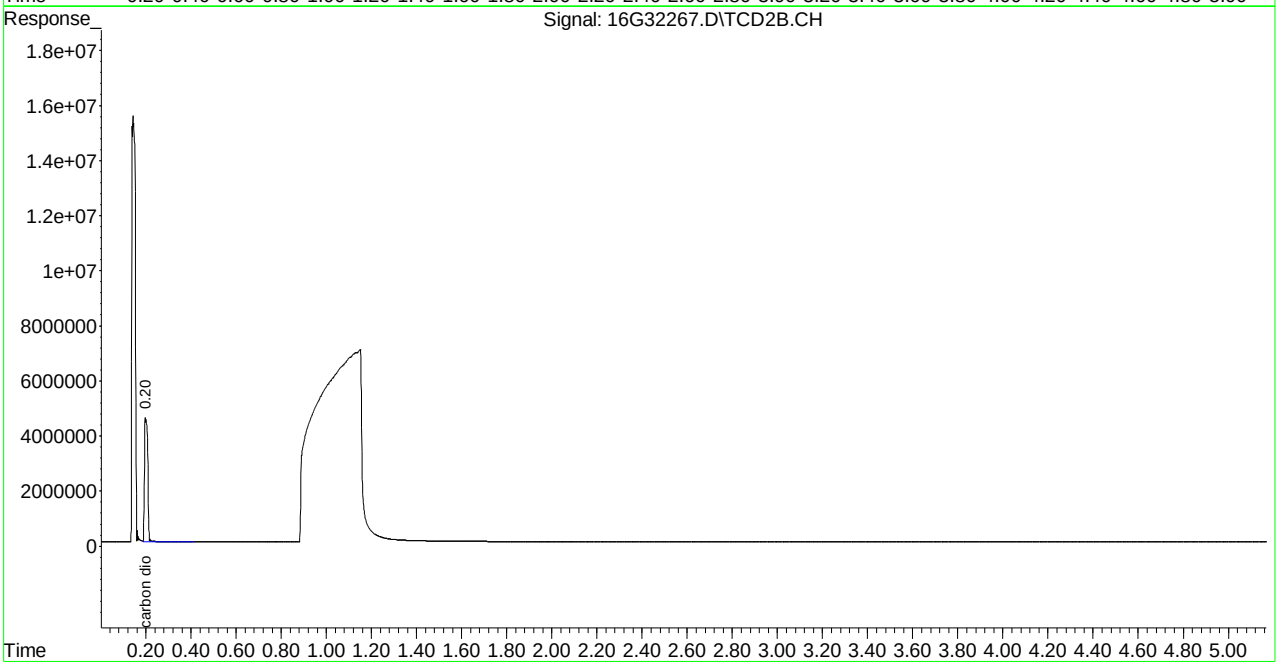
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32267.D RSK2EXT.M Mon May 07 18:29:49 2012 Page 1

Signal #1 : C:\MSDchem\1\DATA\050712\16G32267.D\FID1A.CH Vial: 22
Signal #2 : C:\MSDchem\1\DATA\050712\16G32267.D\TCD2B.CH
Acq On : 07 May 2012 18:24 Operator: FJB
Sample : L12050153-01 A RSK175 Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 7 18:29 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 :





Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\050712\16G32268.D\FID1A.CH Vial: 23
Signal #2 : C:\MSDchem\1\DATA\050712\16G32268.D\TCD2B.CH
Acq On : 07 May 2012 18:33 Operator: FJB
Sample : L12050153-03 A RSK175 Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 07 18:38:49 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 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 :

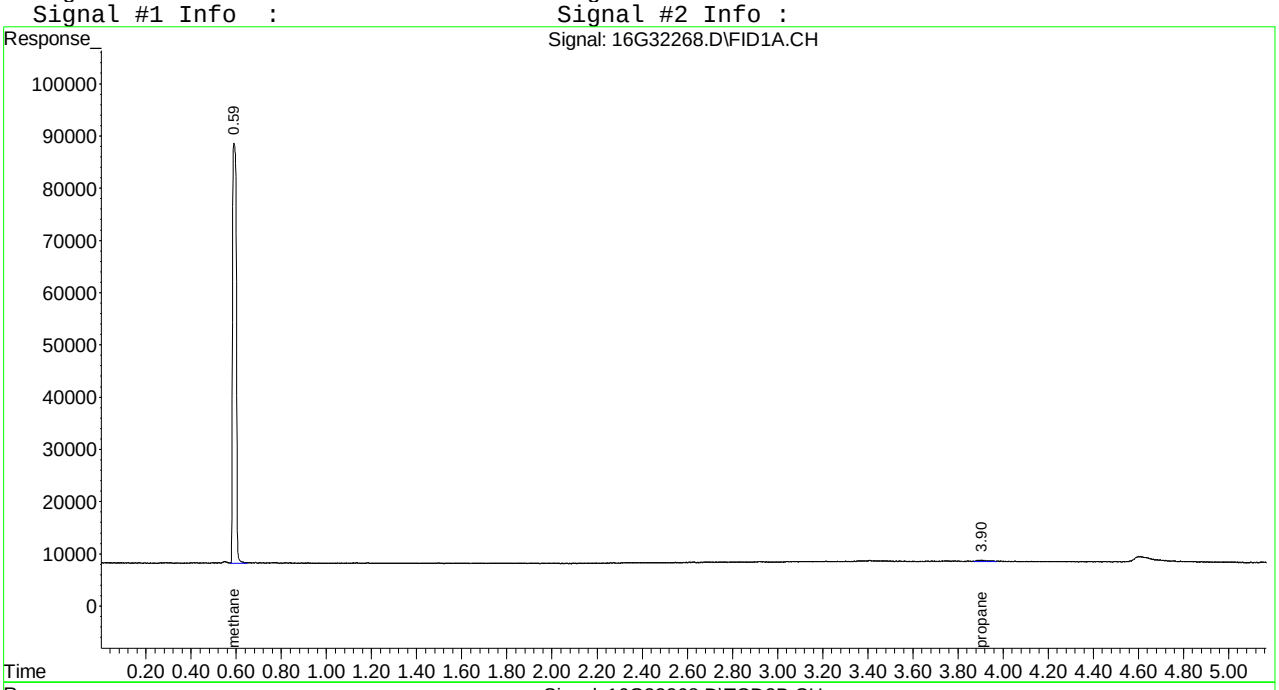
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.59	915553	5.049	umol/
2) T	ethene	0.00	0	N.D.	umol/
3) T	acetylene	0.00	0	N.D.	umol/
4) T	ethane	0.00	0	N.D.	umol/
5) T	propane	3.90	7143	0.016	umol/
7) T	carbon dioxide	0.20	182102776	31901.150	umol/

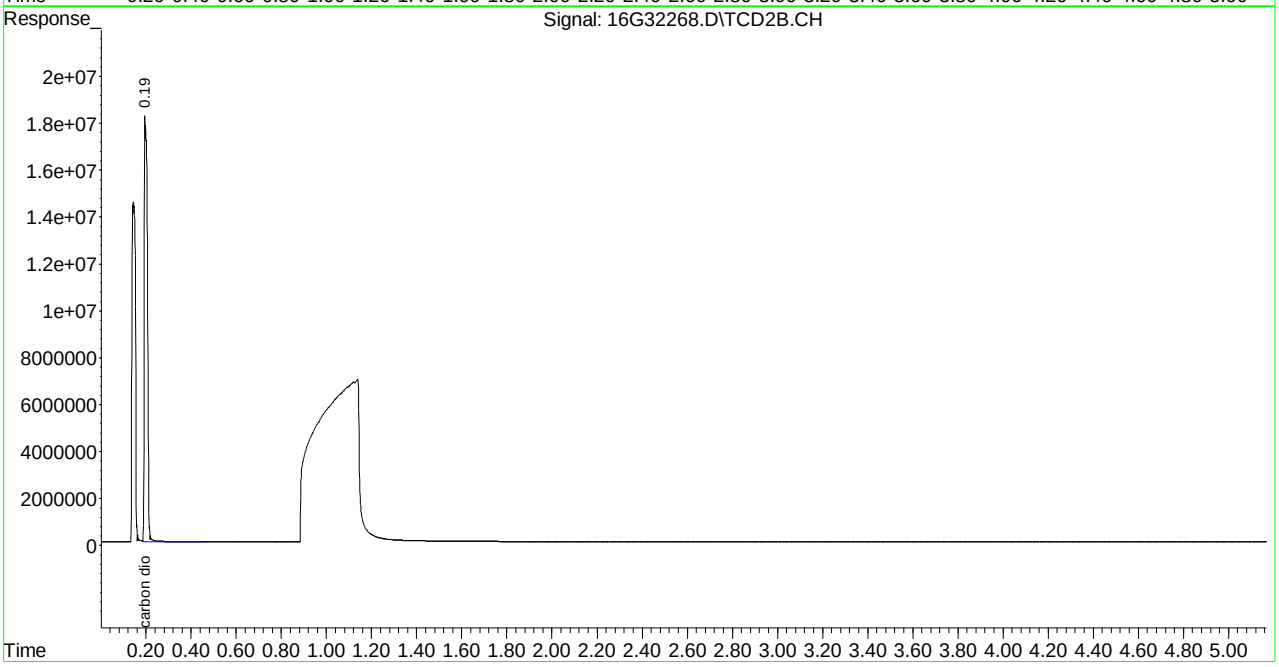
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32268.D RSK2EXT.M Mon May 07 18:38:49 2012 Page 1

Signal #1 : C:\MSDchem\1\DATA\050712\16G32268.D\FID1A.CH Vial: 23
Signal #2 : C:\MSDchem\1\DATA\050712\16G32268.D\TCD2B.CH
Acq On : 07 May 2012 18:33 Operator: FJB
Sample : L12050153-03 A RSK175 Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 7 18:38 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\050712\16G32270.D\FID1A.CH Vial: 25
Signal #2 : C:\MSDchem\1\DATA\050712\16G32270.D\TCD2B.CH
Acq On : 07 May 2012 18:51 Operator: FJB
Sample : L12050153-05 A RSK175 Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 07 18:57:05 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 :

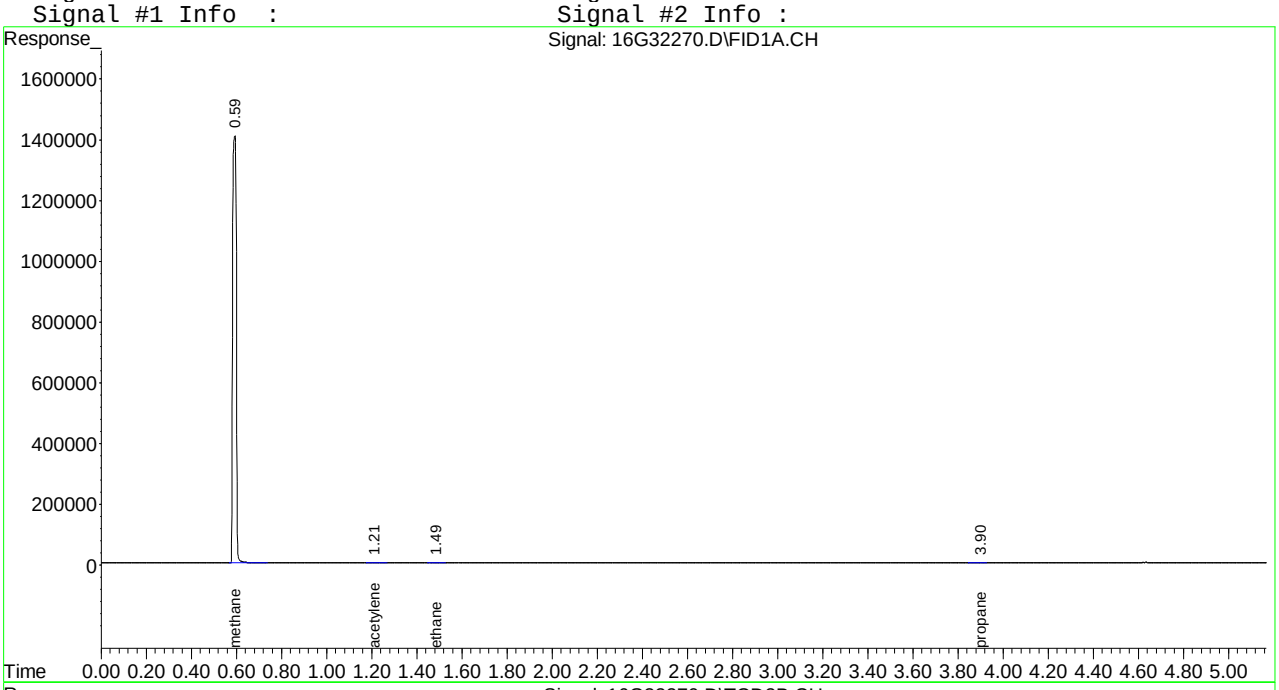
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.59	16043225	88.475	umol/
2) T	ethene	0.00	0	N.D.	umol/
3) T	acetylene	1.21	4762	0.016	umol/
4) T	ethane	1.49	6931	0.023	umol/
5) T	propane	3.90	4166	0.009	umol/
7) T	carbon dioxide	0.20	191523253	33551.449	umol/

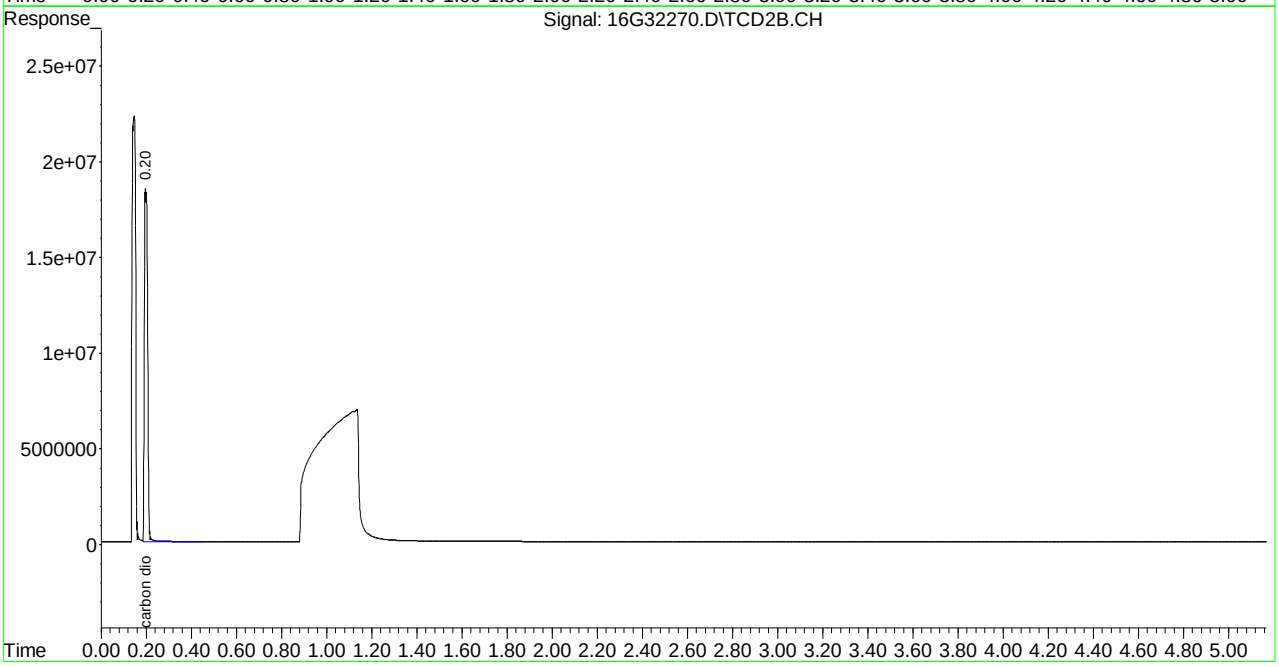
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32270.D RSK2EXT.M Mon May 07 18:57:05 2012 Page 1

Signal #1 : C:\MSDchem\1\DATA\050712\16G32270.D\FID1A.CH Vial: 25
Signal #2 : C:\MSDchem\1\DATA\050712\16G32270.D\TCD2B.CH
Acq On : 07 May 2012 18:51 Operator: FJB
Sample : L12050153-05 A RSK175 Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 7 18:57 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\050712\16G32271.D\FID1A.CH Vial: 26
Signal #2 : C:\MSDchem\1\DATA\050712\16G32271.D\TCD2B.CH
Acq On : 07 May 2012 19:01 Operator: FJB
Sample : L12050153-07 A RSK175 Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 07 19:06:16 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	14096673	77.740	umol/
2) T	ethene	0.00	0	N.D.	umol/
3) T	acetylene	0.00	0	N.D.	umol/
4) T	ethane	1.49	9969	0.033	umol/
5) T	propane	3.90	11517	0.026	umol/
7) T	carbon dioxide	0.20	168579999	29532.201	umol/

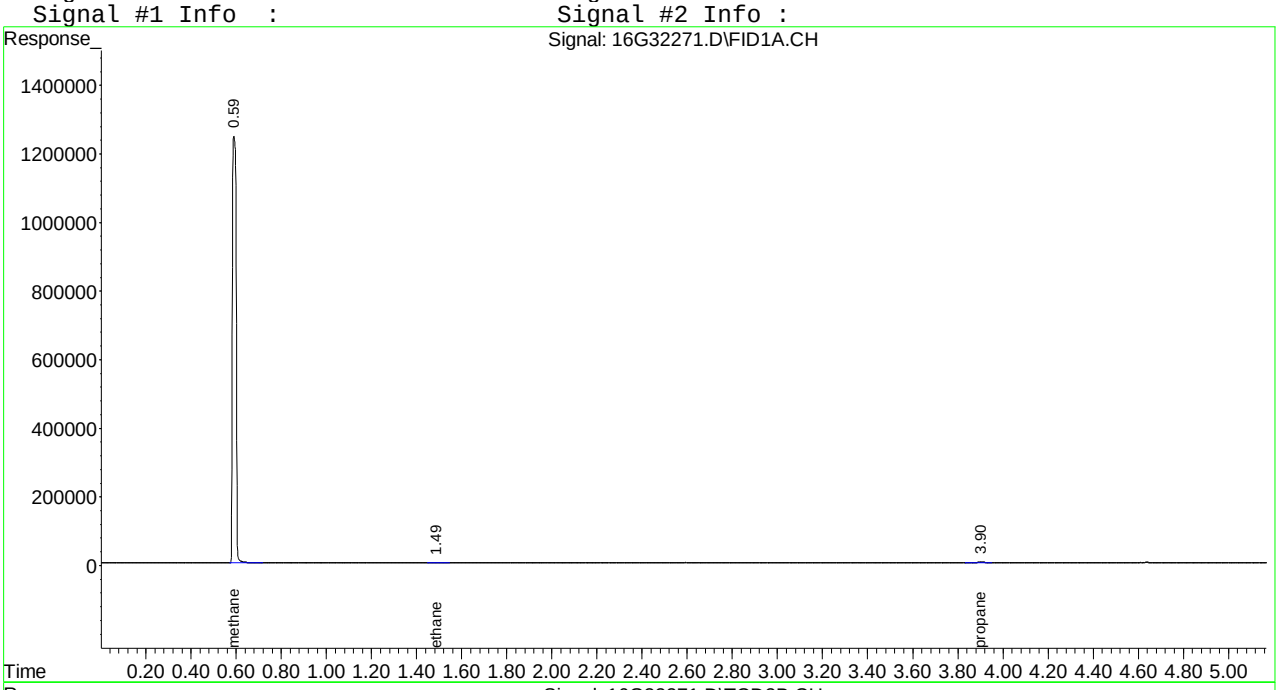
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32271.D RSK2EXT.M Mon May 07 19:06:16 2012 Page 1

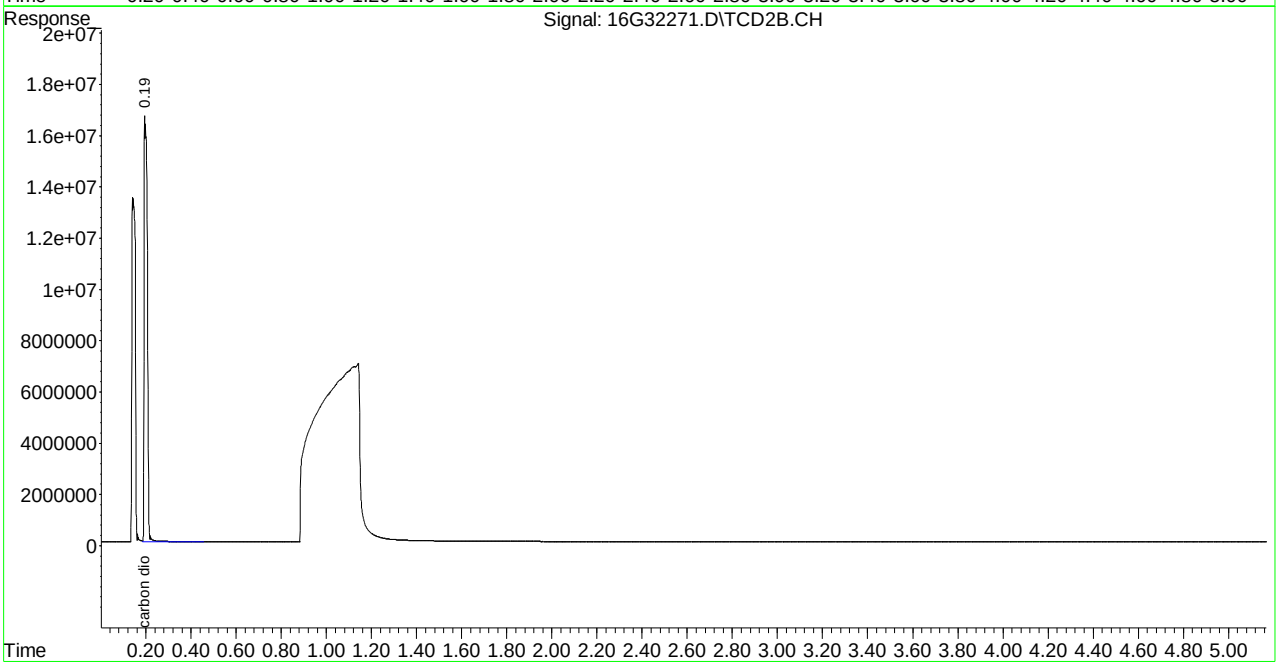
Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\050712\16G32271.D\FID1A.CH Vial: 26
Signal #2 : C:\MSDchem\1\DATA\050712\16G32271.D\TCD2B.CH
Acq On : 07 May 2012 19:01 Operator: FJB
Sample : L12050153-07 A RSK175 Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 7 19:06 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 :

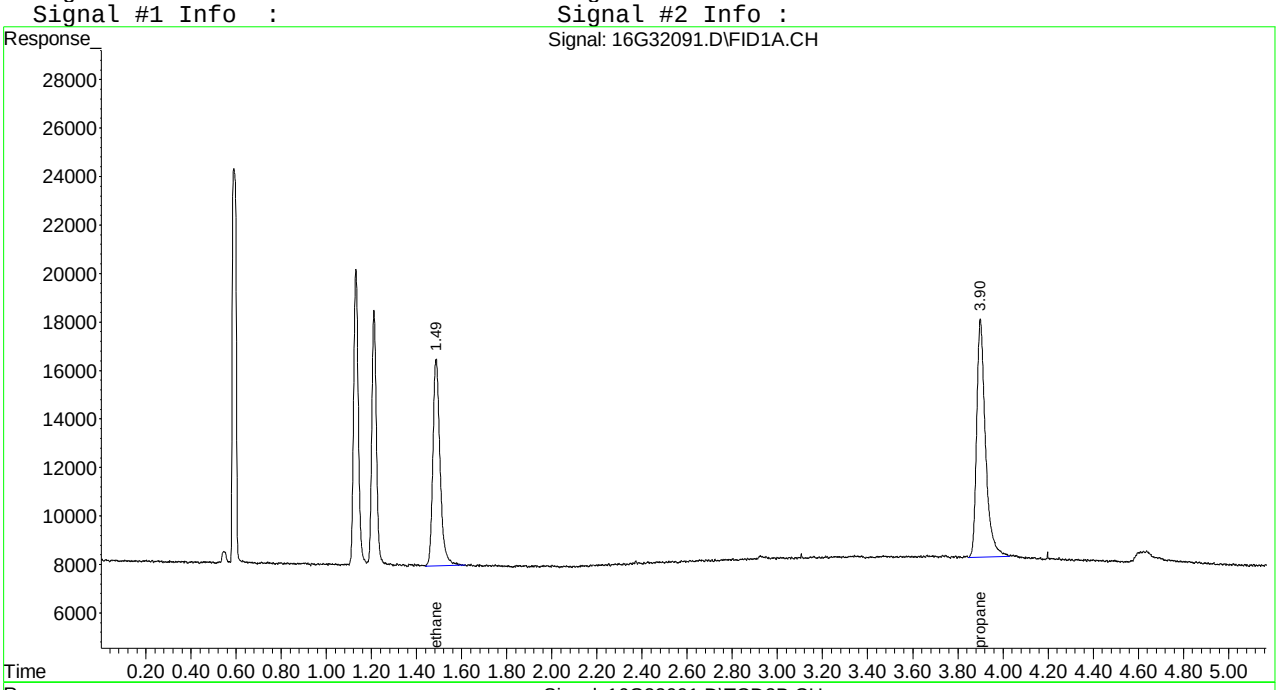
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.00	0	N.D.	umol/d
2) T	ethene	0.00	0	N.D.	umol/d
3) T	acetylene	0.00	0	N.D.	umol/d
4) T	ethane	1.49	188654	0.648	umol/
5) T	propane	3.90	265941	0.638	umol/
7) T	carbon dioxide	0.00	0	N.D.	umol/d

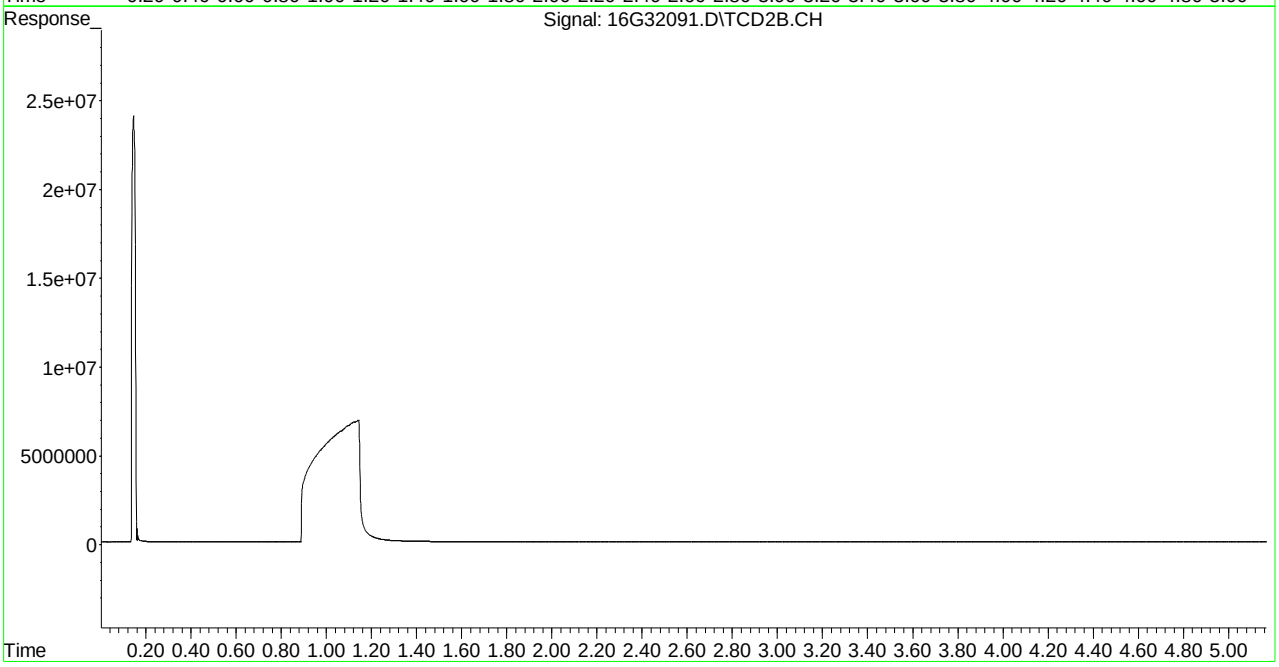
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32091.D RSK2EXT.M Mon Apr 30 14:45:33 2012 Page 1

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/

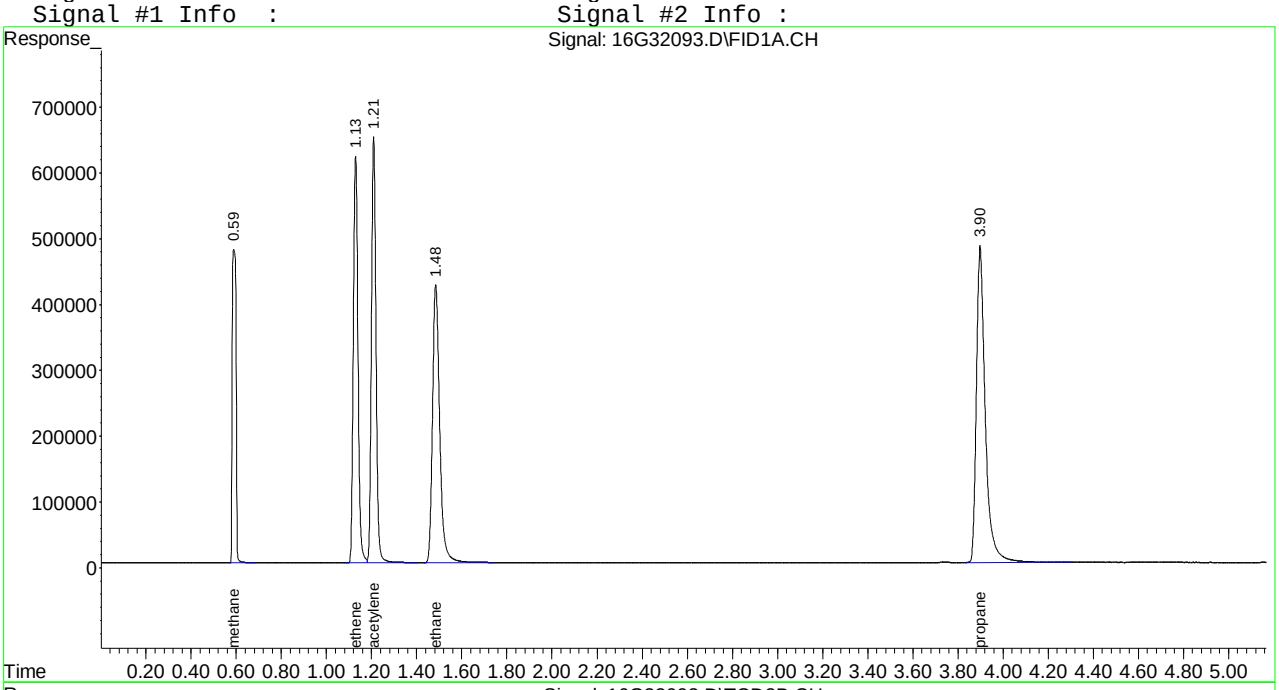
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32093.D RSK2EXT.M Mon Apr 30 14:04:00 2012 Page 1

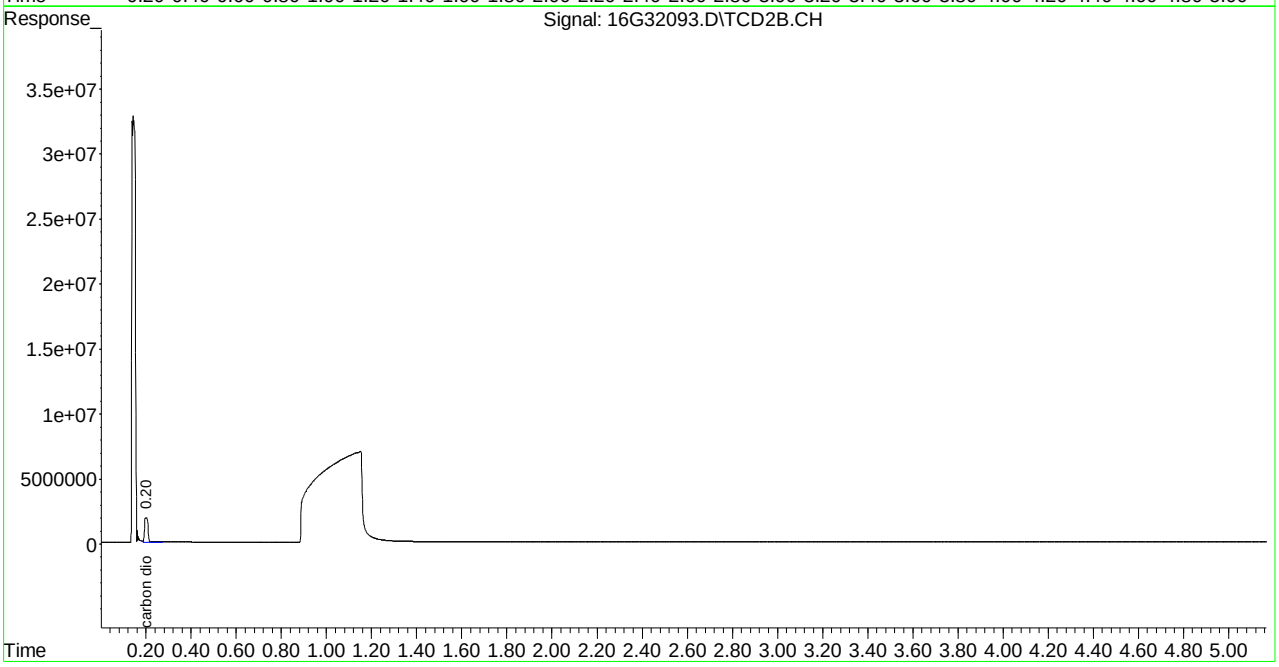
Quantitation Report (Not Reviewed)

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 :

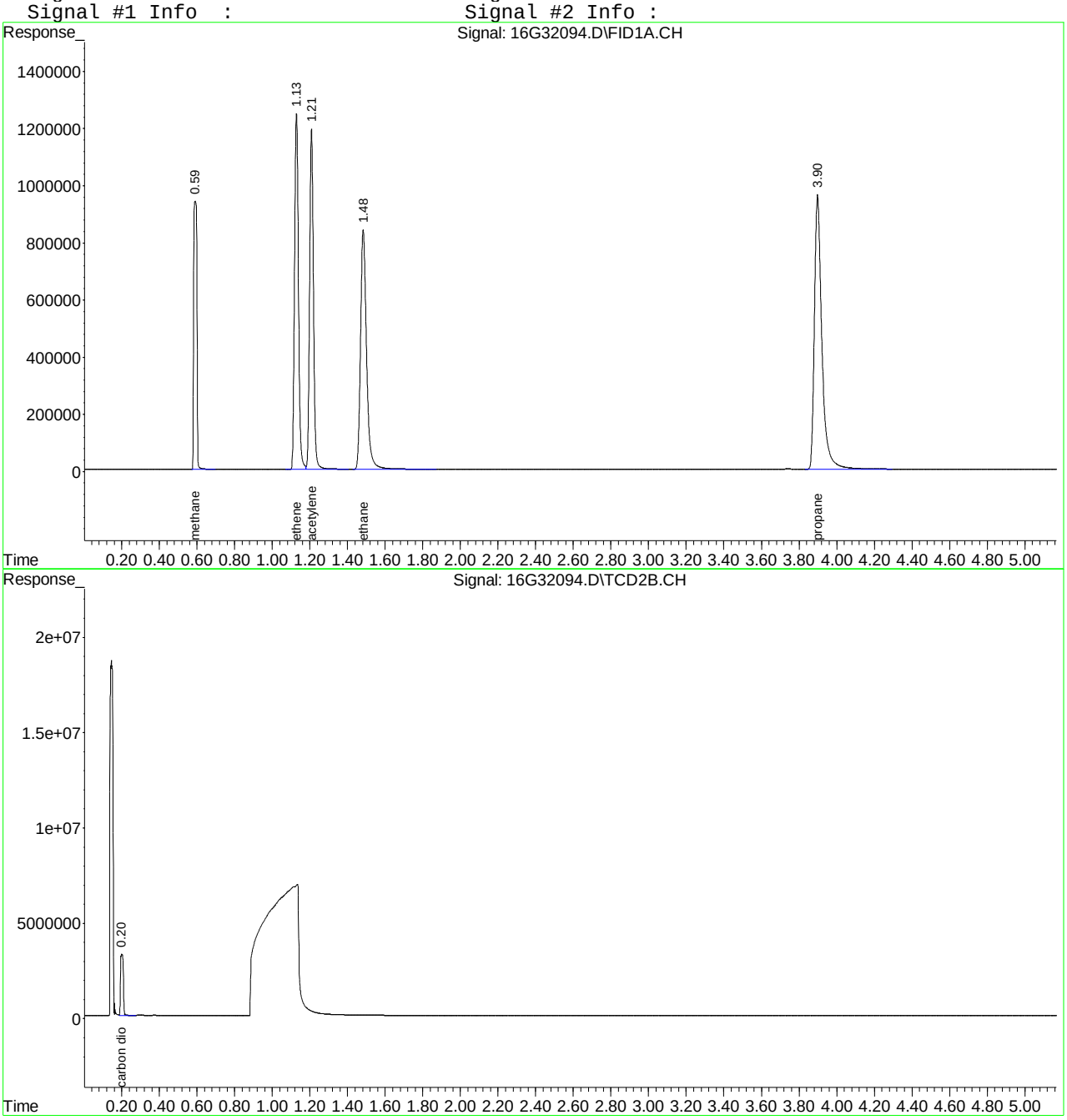
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.59	10967402	56.675	umol/
2) T	ethene	1.13	17874985	57.501	umol/
3) T	acetylene	1.21	17012722	54.845	umol/
4) T	ethane	1.48	18525237	58.085	umol/
5) T	propane	3.90	26527253	57.489	umol/
7) T	carbon dioxide	0.20	34639522	5802.700	umol/

(f)=RT Delta > 1/2 Window (m)=manual int.
16G32094.D RSK2EXT.M Mon Apr 30 14:13:09 2012 Page 1

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 :

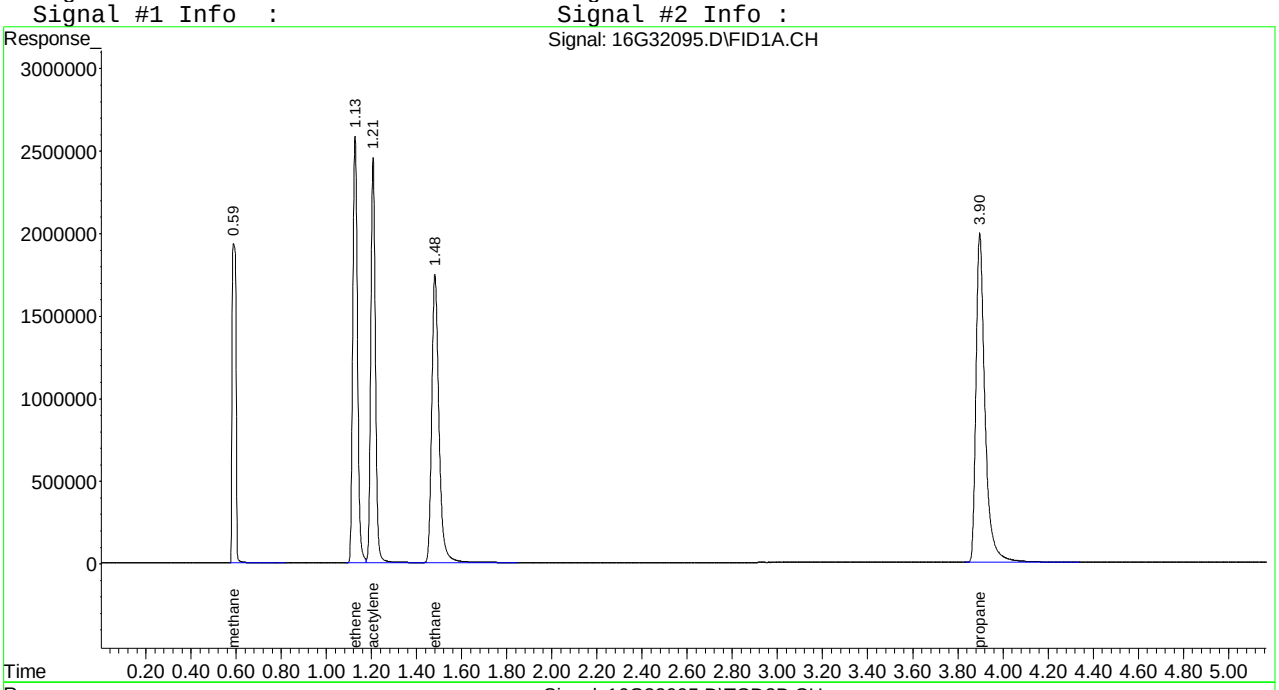
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1) T	methane	0.59	22928576	118.486 umol/
2) T	ethene	1.13	37444591	120.453 umol/
3) T	acetylene	1.21	35336293	113.917 umol/
4) T	ethane	1.48	38718775	121.400 umol/
5) T	propane	3.90	55608118	120.511 umol/
7) T	carbon dioxide	0.20	73011522	12230.652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

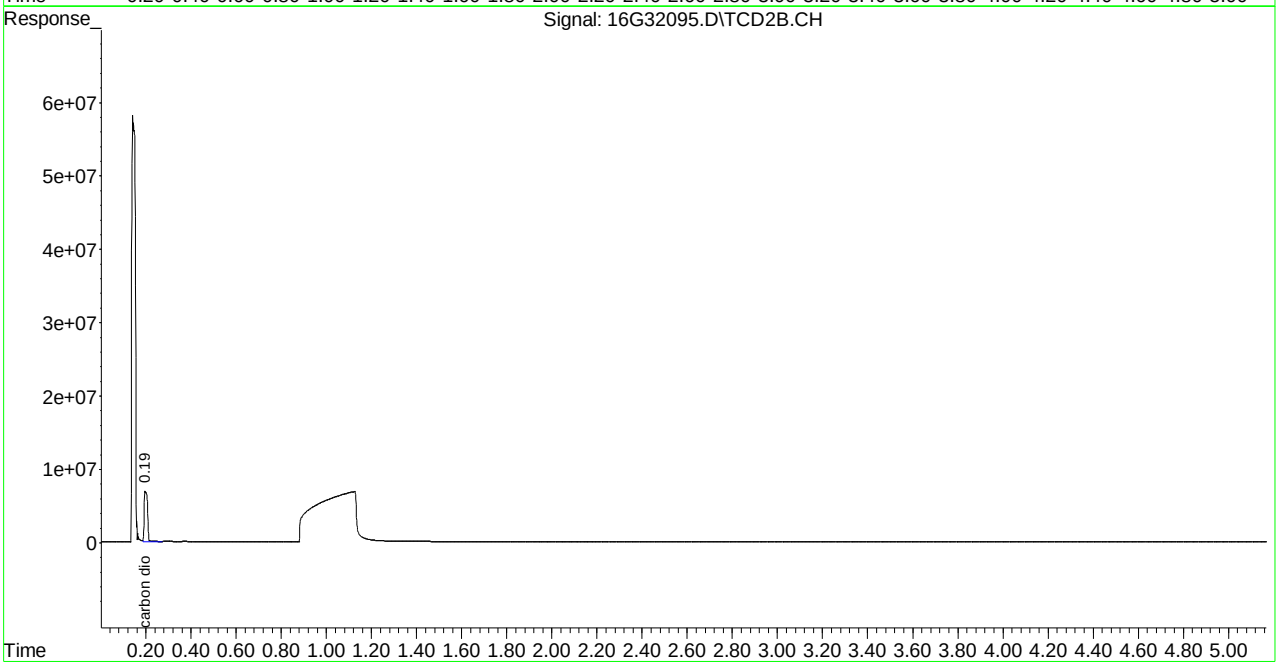
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32095.D RSK2EXT.M Mon Apr 30 14:22:09 2012 Page 1

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 :

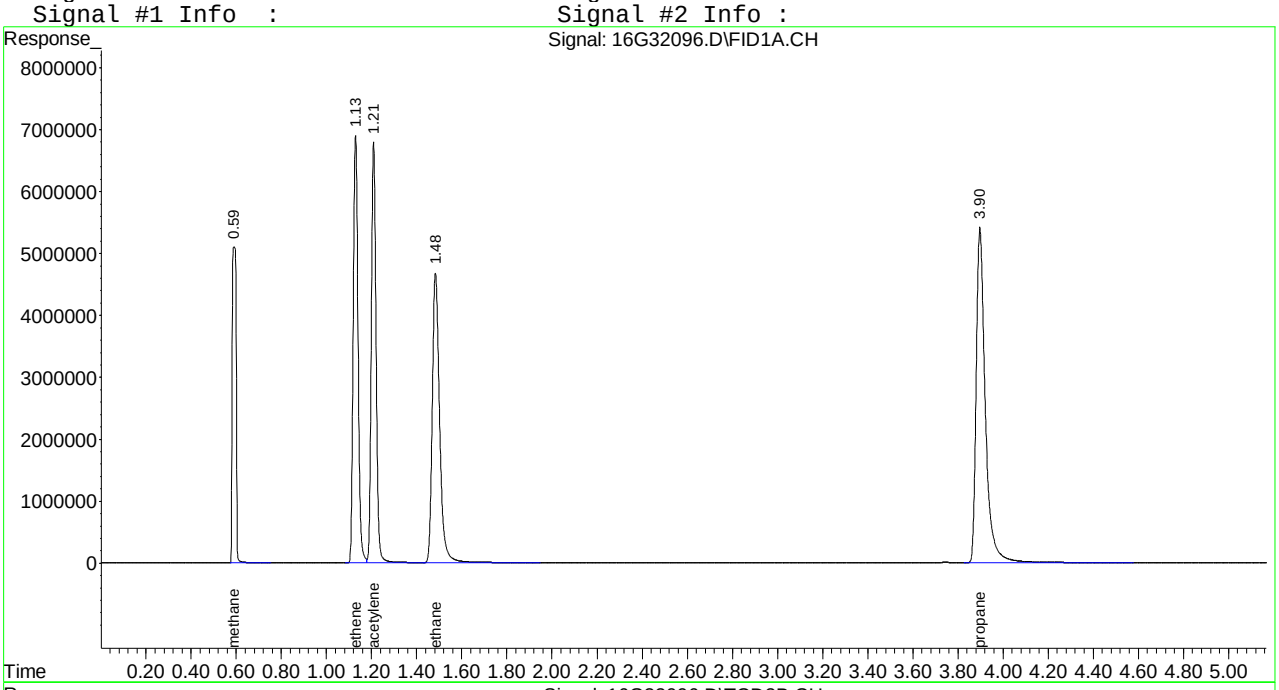
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1) T	methane	0.59	61151880	316.010 umol/
2) T	ethene	1.13	102124387	328.518 umol/
3) T	acetylene	1.21	100384614	323.619 umol/
4) T	ethane	1.48	105345556	330.304 umol/
5) T	propane	3.90	152068426	329.556 umol/
7) T	carbon dioxide	0.20	190381445	31892.078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

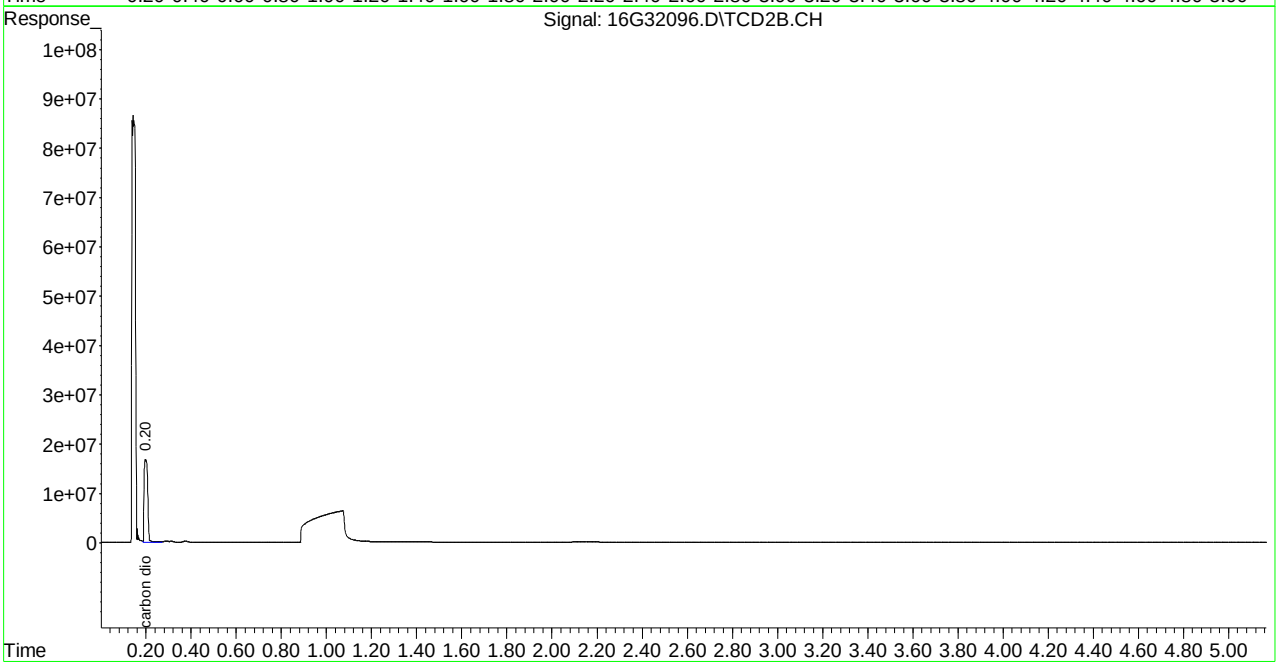
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32096.D RSK2EXT.M Mon Apr 30 14:31:51 2012 Page 1

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)

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 :

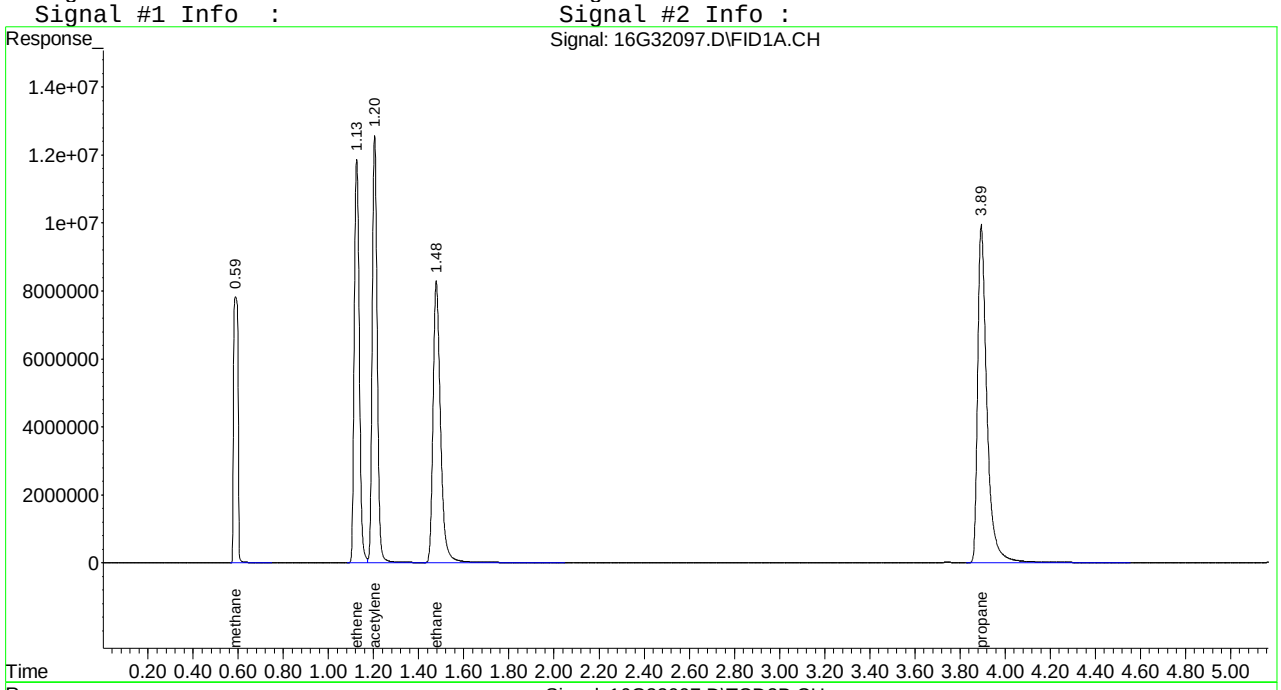
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1) T	methane	0.59	105407837	544.709 umol/
2) T	ethene	1.13	184568763	593.729 umol/
3) T	acetylene	1.20	194109593	625.769 umol/
4) T	ethane	1.48	190467929	597.199 umol/
5) T	propane	3.89	283665394	614.747 umol/
7) T	carbon dioxide	0.19	351812796	58934.531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

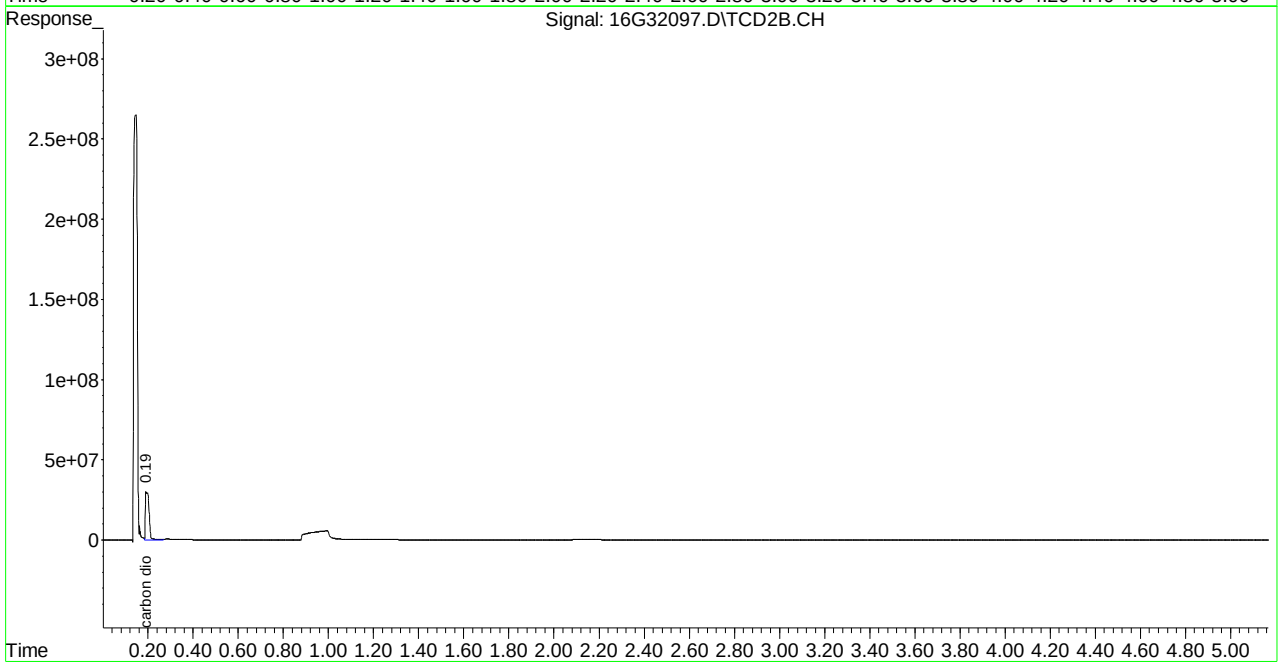
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32097.D RSK2EXT.M Mon Apr 30 14:40:49 2012 Page 1

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 :

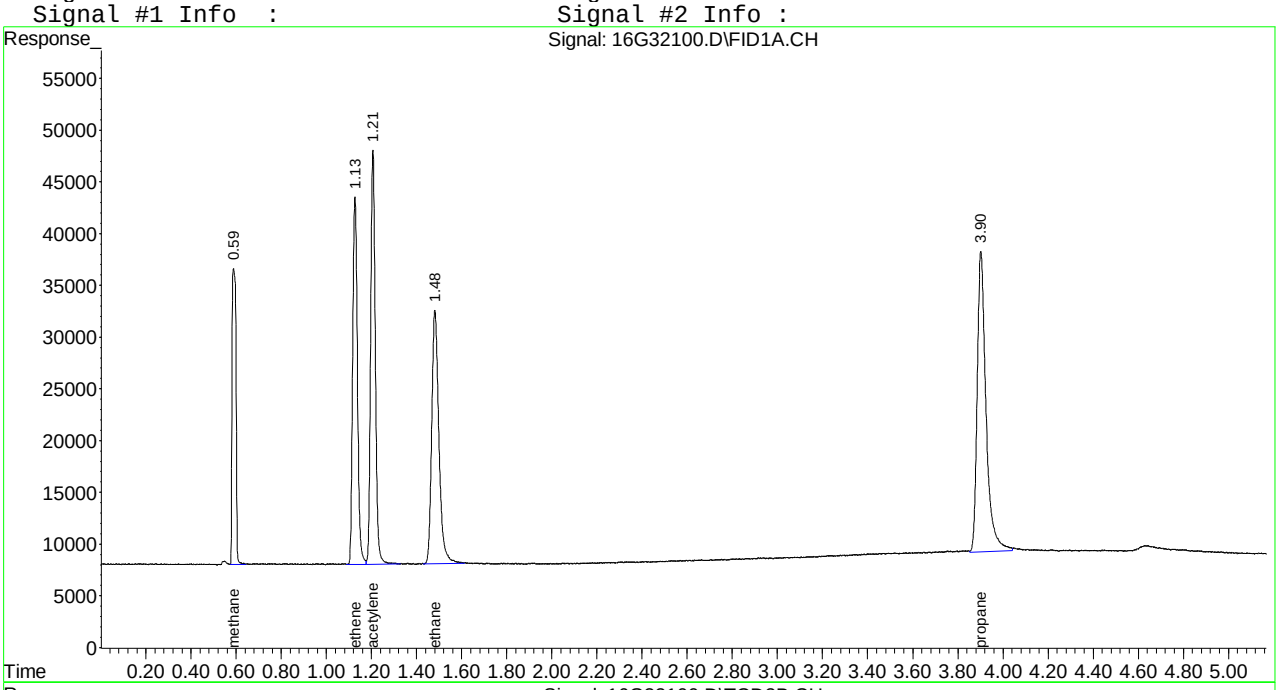
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1) T	methane	0.59	339694	1.927 umol/
2) T	ethene	1.13	518903	1.845 umol/
3) T	acetylene	1.21	583229	2.112 umol/
4) T	ethane	1.48	539701	1.855 umol/
5) T	propane	3.90	789587	1.895 umol/
7) T	carbon dioxide	0.20	13063496	2368.342 umol/

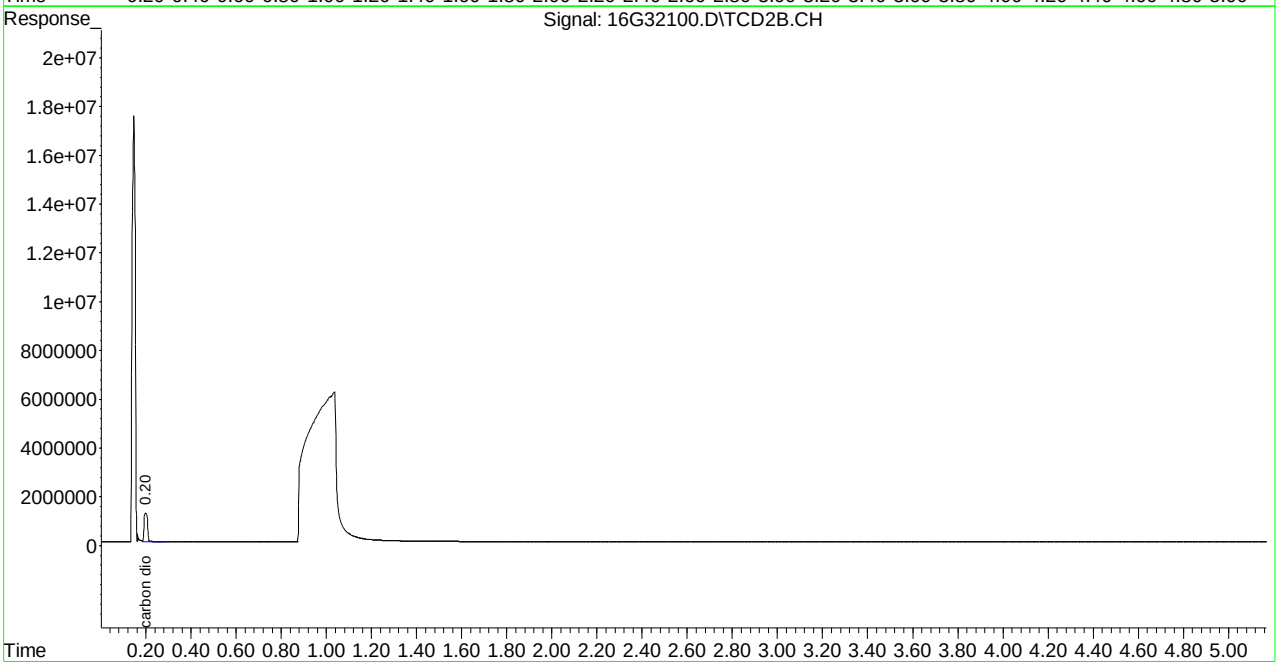
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32100.D RSK2EXT.M Mon Apr 30 15:09:45 2012 Page 1

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 :

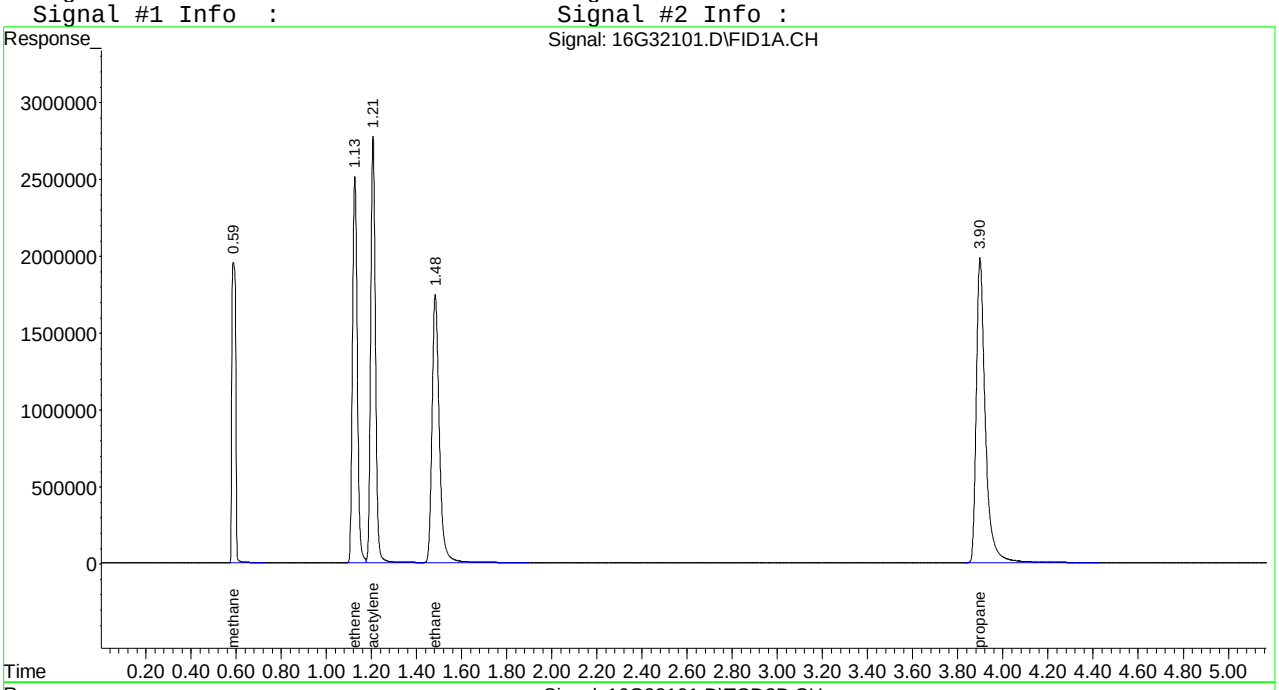
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1) T	methane	0.59	22836049	125.936 umol/
2) T	ethene	1.13	37088559	125.126 umol/
3) T	acetylene	1.21	41185177	142.223 umol/
4) T	ethane	1.48	38937915	128.104 umol/
5) T	propane	3.90	55298984	126.002 umol/
7) T	carbon dioxide	0.20	70387680	12330.663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

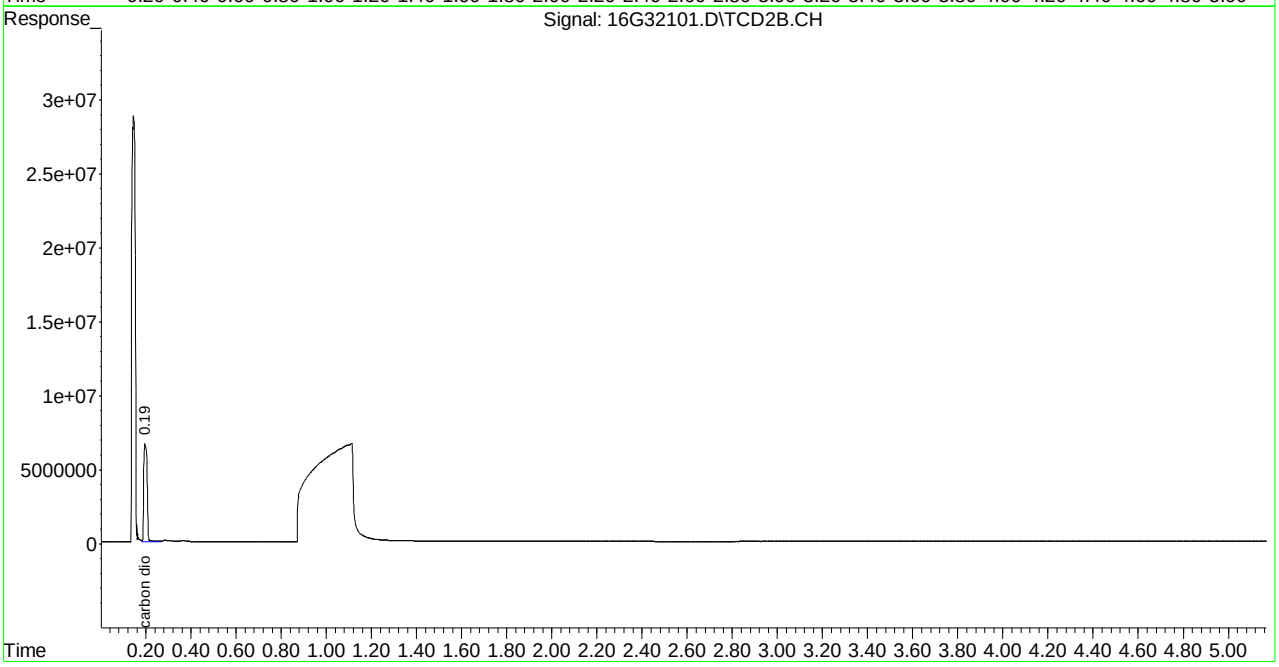
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32101.D RSK2EXT.M Mon Apr 30 15:29:41 2012 Page 1

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 :





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

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\050712\16G32246.D\FID1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\050712\16G32246.D\TCD2B.CH
Acq On : 07 May 2012 15:11 Operator: FJB
Sample : WG397237-01 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 07 15:17:40 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 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 :

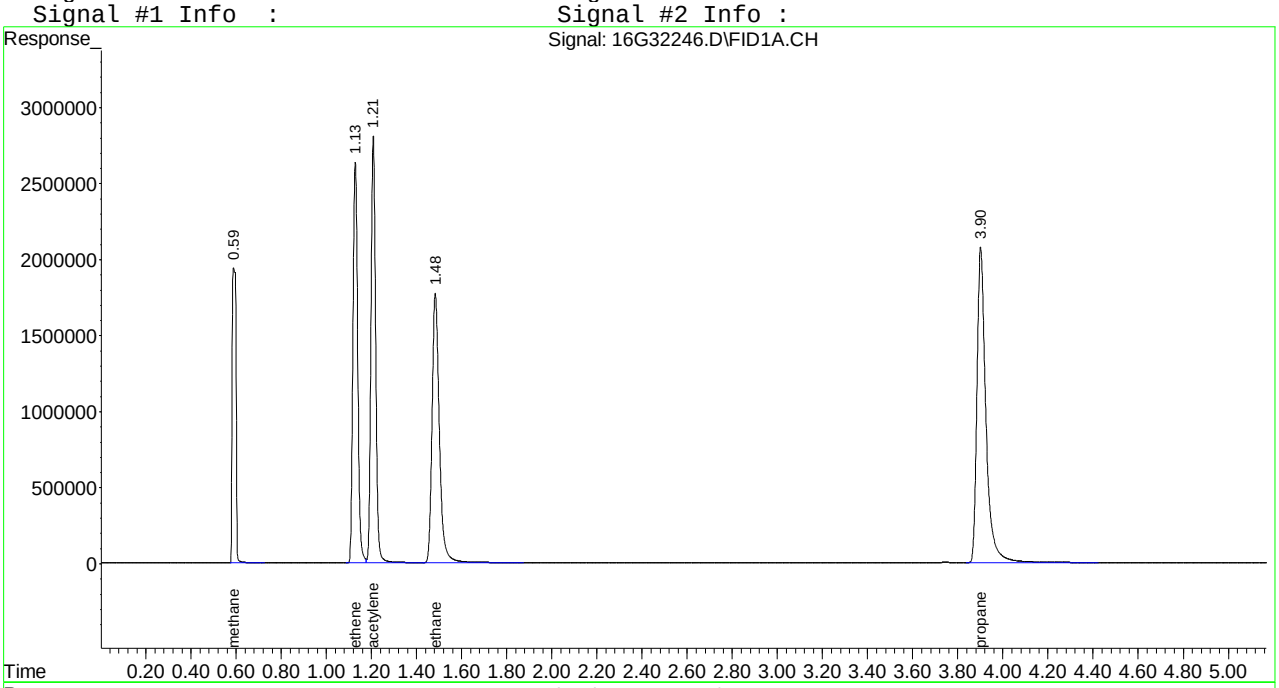
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1) T	methane	0.59	22829748	125.901 umol/
2) T	ethene	1.13	38590572	130.193 umol/
3) T	acetylene	1.21	41020344	141.654 umol/
4) T	ethane	1.48	39580451	130.218 umol/
5) T	propane	3.90	57410903	130.814 umol/
7) T	carbon dioxide	0.20	82814213	14507.569 umol/

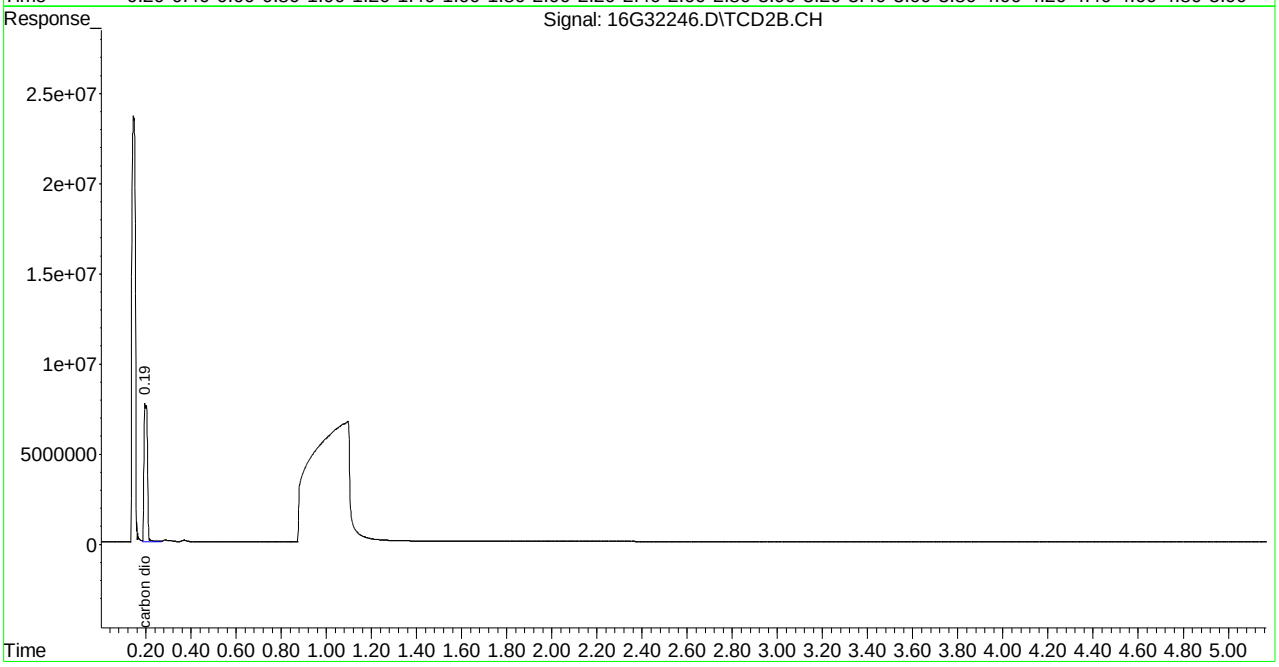
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32246.D RSK2EXT.M Mon May 07 15:17:40 2012 Page 1

Signal #1 : C:\MSDCHEM\1\DATA\050712\16G32246.D\FID1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\050712\16G32246.D\TCD2B.CH
Acq On : 07 May 2012 15:11 Operator: FJB
Sample : WG397237-01 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 7 15:17 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 :





Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\050712\16G32246.D\FID1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\050712\16G32246.D\TCD2B.CH
Acq On : 07 May 2012 15:11 Operator: FJB
Sample : WG397237-01 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	125.901	5.3	100	0.00
2	T	ethene	133.000	130.193	2.1	103	0.00
3	T	acetylene	133.000	141.654	-6.5	116	0.00
4	T	ethane	133.000	130.218	2.1	102	0.00
5	T	propane	133.000	130.814	1.6	103	0.00
		Signal #2					
7	T	carbon dioxide	13333.000	14507.569	-8.8	113	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
16G32246.D RSK2EXT.M Tue May 08 08:20:56 2012 Page 1

Signal #1 : C:\MSDCHEM\1\DATA\050712\16G32246.D\FID1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\050712\16G32246.D\TCD2B.CH
Acq On : 07 May 2012 15:11 Operator: FJB
Sample : WG397237-01 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

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\050712\16G32260.D\FID1A.CH Vial: 15
Signal #2 : C:\MSDCHEM\1\DATA\050712\16G32260.D\TCD2B.CH
Acq On : 07 May 2012 17:20 Operator: FJB
Sample : WG397237-02 133umol/mol CCV RSK175 Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 07 17:26:08 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 : 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	21983832	121.236 umol/
2) T	ethene	1.13	36106378	121.812 umol/
3) T	acetylene	1.21	34793650	120.152 umol/
4) T	ethane	1.48	37254657	122.566 umol/
5) T	propane	3.90	53368086	121.602 umol/
7) T	carbon dioxide	0.20	75293129	13190.010 umol/

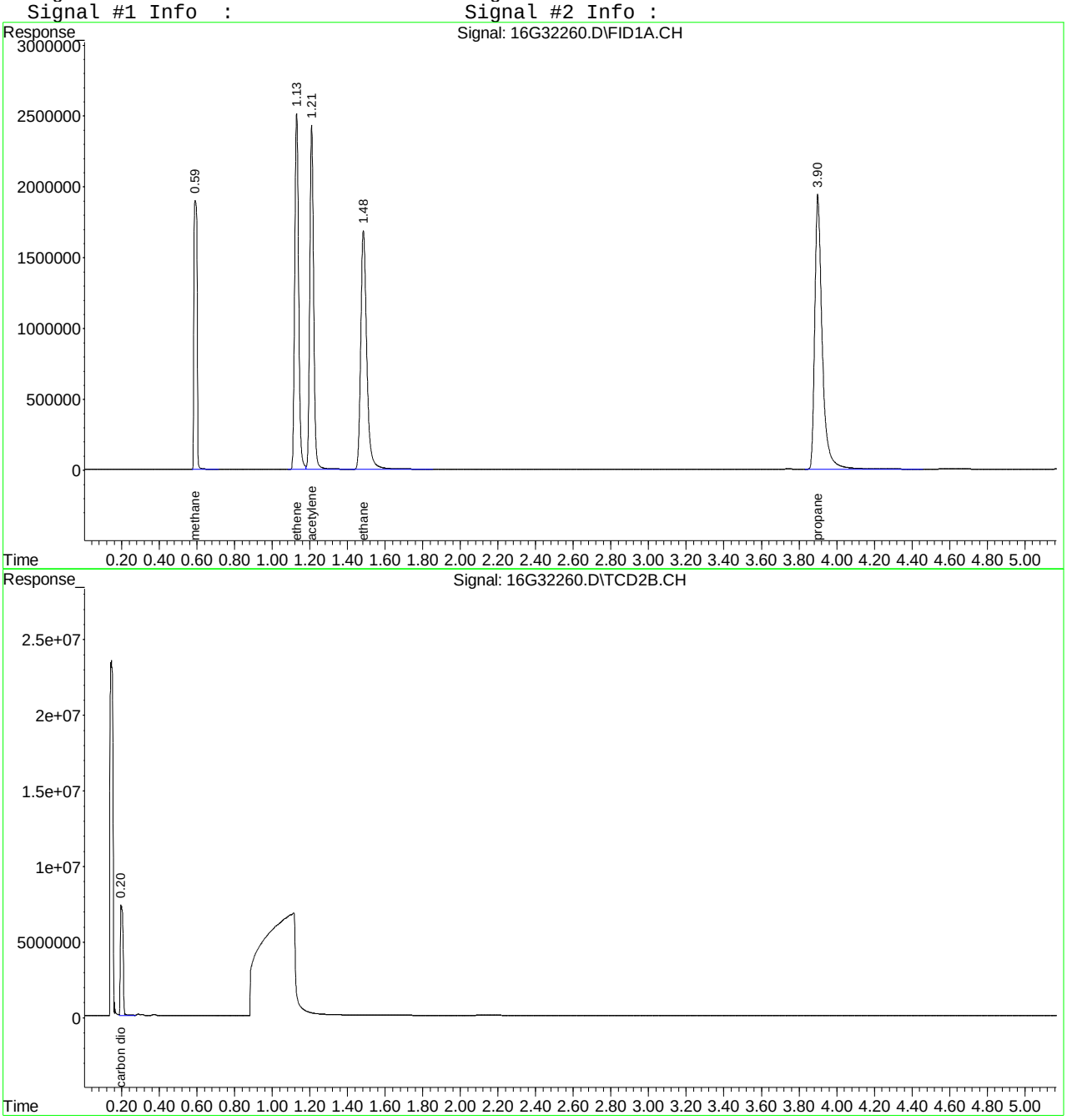
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32260.D RSK2EXT.M Wed May 09 08:31:42 2012 Page 1

Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\050712\16G32260.D\FID1A.CH Vial: 15
Signal #2 : C:\MSDCHEM\1\DATA\050712\16G32260.D\TCD2B.CH
Acq On : 07 May 2012 17:20 Operator: FJB
Sample : WG397237-02 133umol/mol CCV RSK175 Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 7 17:26 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\050712\16G32260.D\FID1A.CH Vial: 15
Signal #2 : C:\MSDCHEM\1\DATA\050712\16G32260.D\TCD2B.CH
Acq On : 07 May 2012 17:20 Operator: FJB
Sample : WG397237-02 133umol/mol CCV RSK175 Inst : HP16
Misc : 1,1 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	121.236	8.8	96	0.00
2	T	ethene	133.000	121.812	8.4	96	0.00
3	T	acetylene	133.000	120.152	9.7	98	0.00
4	T	ethane	133.000	122.566	7.8	96	0.00
5	T	propane	133.000	121.602	8.6	96	0.00
		Signal #2					
7	T	carbon dioxide	13333.000	13190.010	1.1	103	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
16G32260.D RSK2EXT.M Wed May 09 08:31:46 2012 Page 1

Signal #1 : C:\MSDCHEM\1\DATA\050712\16G32260.D\FID1A.CH Vial: 15
Signal #2 : C:\MSDCHEM\1\DATA\050712\16G32260.D\TCD2B.CH
Acq On : 07 May 2012 17:20 Operator: FJB
Sample : WG397237-02 133umol/mol CCV RSK175 Inst : HP16
Misc : 1,1 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\050712\16G32269.D\FID1A.CH Vial: 24
Signal #2 : C:\MSDchem\1\DATA\050712\16G32269.D\TCD2B.CH
Acq On : 07 May 2012 18:42 Operator: FJB
Sample : WG397237-03 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 07 18:47:51 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 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 :

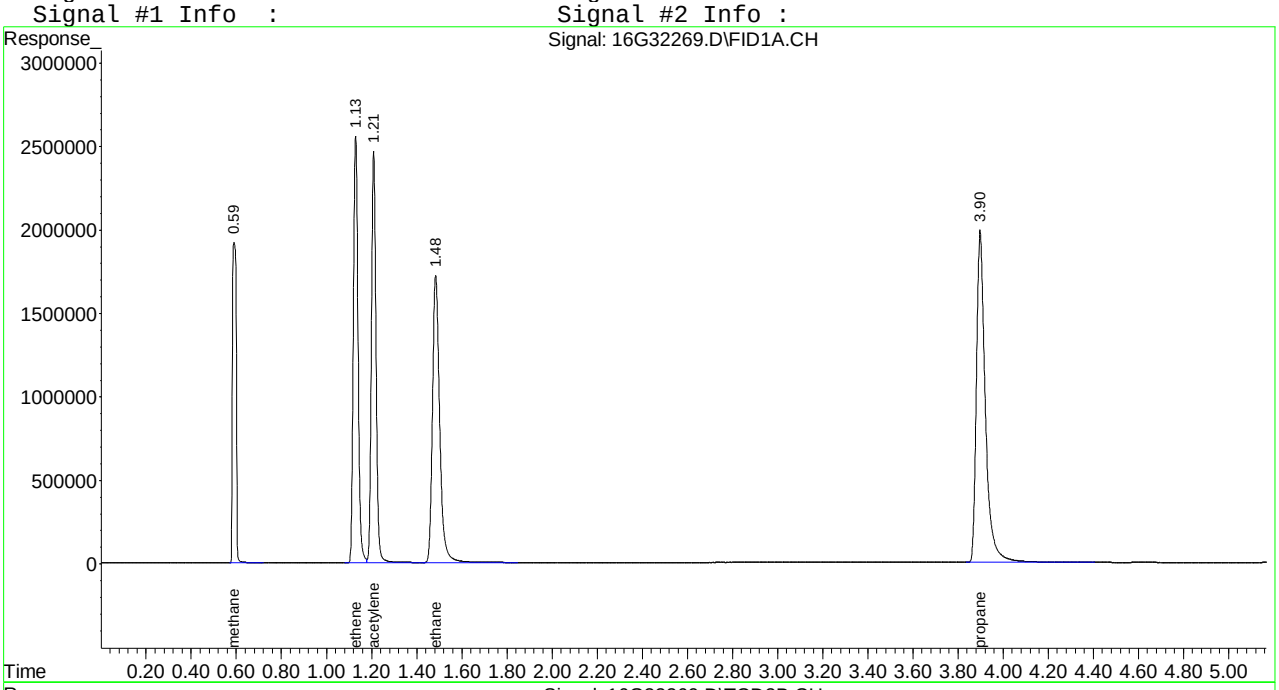
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1) T	methane	0.59	22287012	122.908 umol/
2) T	ethene	1.13	36853768	124.334 umol/
3) T	acetylene	1.21	35334868	122.020 umol/
4) T	ethane	1.48	38111642	125.385 umol/
5) T	propane	3.90	55038373	125.408 umol/
7) T	carbon dioxide	0.20	70888417	12418.383 umol/

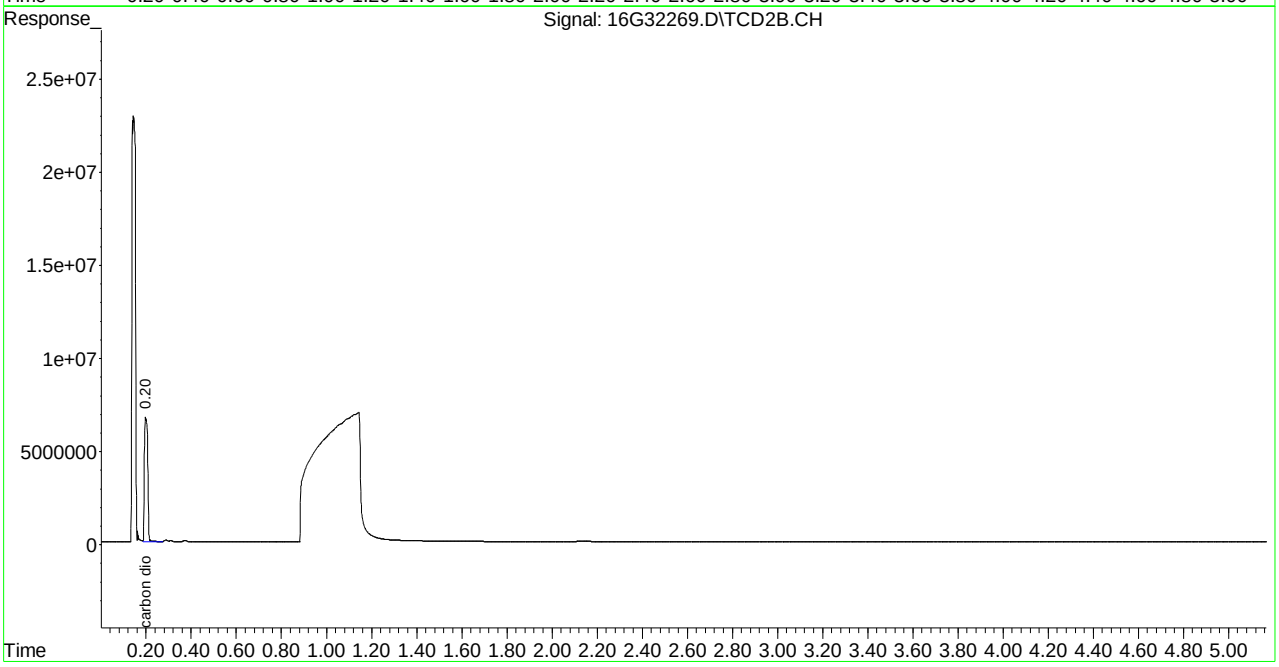
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32269.D RSK2EXT.M Mon May 07 18:47:51 2012 Page 1

Signal #1 : C:\MSDchem\1\DATA\050712\16G32269.D\FID1A.CH Vial: 24
Signal #2 : C:\MSDchem\1\DATA\050712\16G32269.D\TCD2B.CH
Acq On : 07 May 2012 18:42 Operator: FJB
Sample : WG397237-03 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 7 18:47 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\050712\16G32269.D\FID1A.CH Vial: 24
Signal #2 : C:\MSDCHEM\1\DATA\050712\16G32269.D\TCD2B.CH
Acq On : 07 May 2012 18:42 Operator: FJB
Sample : WG397237-03 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	122.908	7.6	97	0.00
2	T	ethene	133.000	124.334	6.5	98	0.00
3	T	acetylene	133.000	122.020	8.3	100	0.00
4	T	ethane	133.000	125.385	5.7	98	0.00
5	T	propane	133.000	125.408	5.7	99	0.00
		Signal #2					
7	T	carbon dioxide	13333.000	12418.383	6.9	97	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
16G32269.D RSK2EXT.M Tue May 08 08:21:10 2012 Page 1

Signal #1 : C:\MSDCHEM\1\DATA\050712\16G32269.D\FID1A.CH Vial: 24
Signal #2 : C:\MSDCHEM\1\DATA\050712\16G32269.D\TCD2B.CH
Acq On : 07 May 2012 18:42 Operator: FJB
Sample : WG397237-03 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\050712\16G32273.D\FID1A.CH Vial: 28
Signal #2 : C:\MSDchem\1\DATA\050712\16G32273.D\TCD2B.CH
Acq On : 07 May 2012 19:19 Operator: FJB
Sample : WG397237-04 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 07 19:24:24 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 :

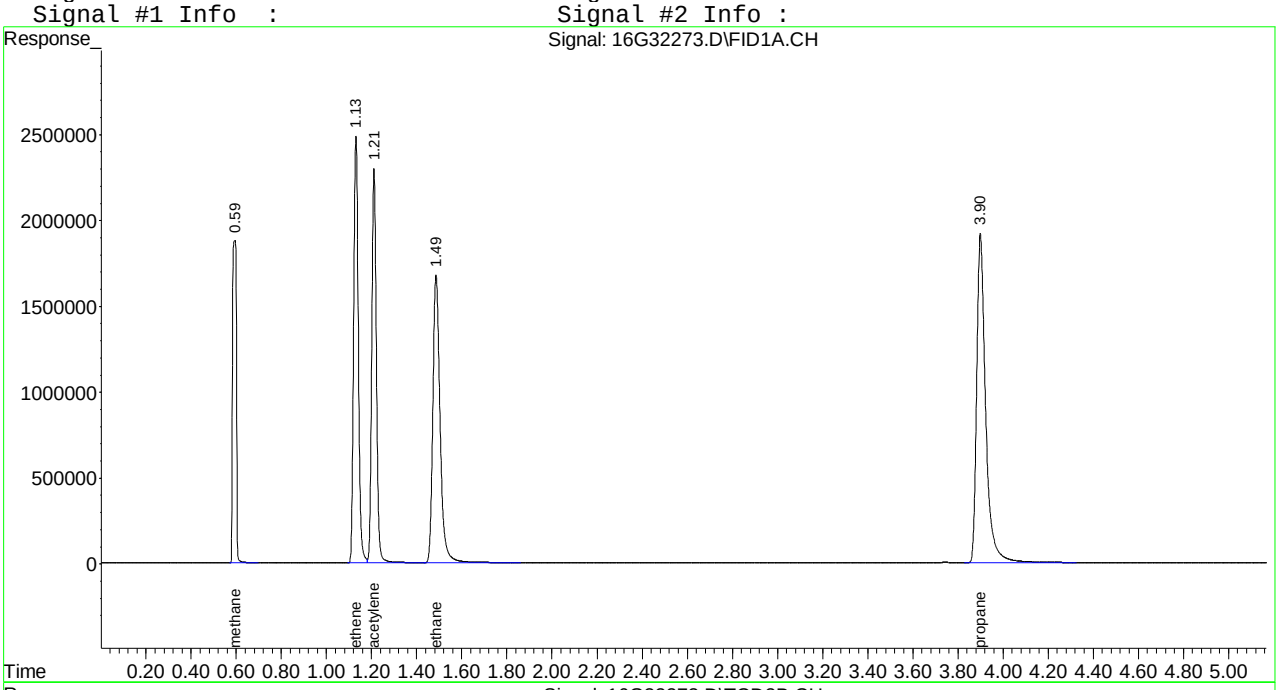
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1) T	methane	0.59	22036849	121.528 umol/
2) T	ethene	1.13	35900424	121.118 umol/
3) T	acetylene	1.21	33067484	114.191 umol/
4) T	ethane	1.49	37174767	122.303 umol/
5) T	propane	3.90	53024822	120.820 umol/
7) T	carbon dioxide	0.20	65676274	11505.309 umol/

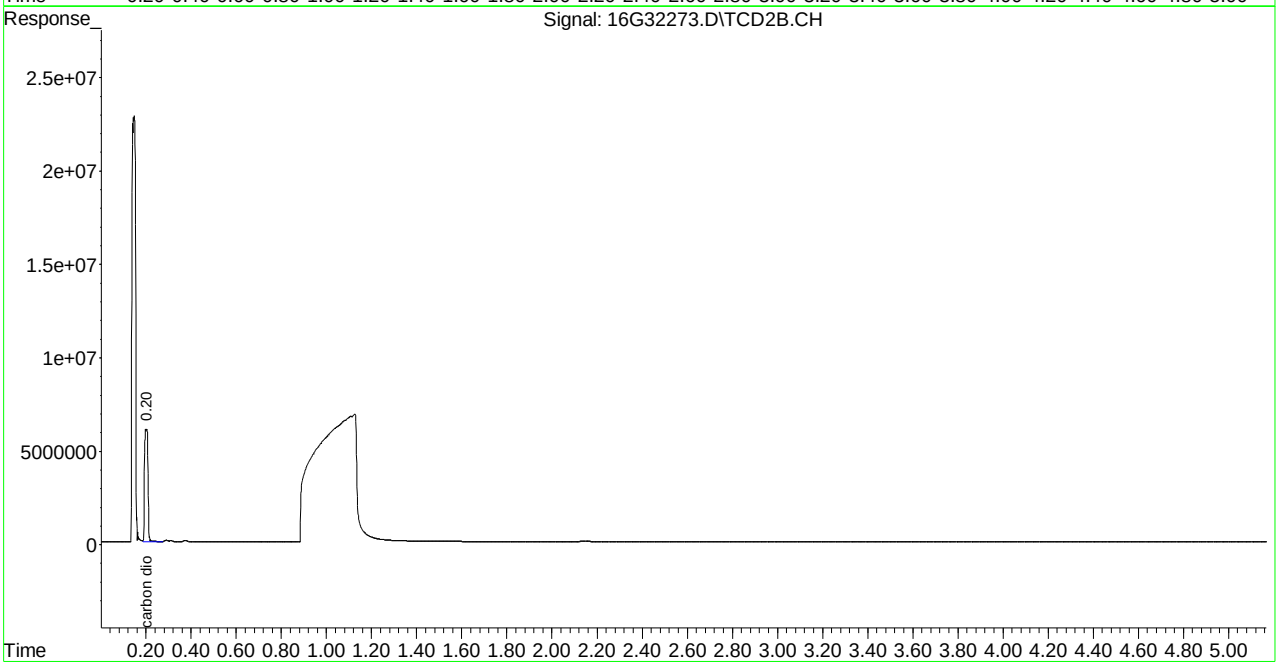
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32273.D RSK2EXT.M Mon May 07 19:24:24 2012 Page 1

Signal #1 : C:\MSDchem\1\DATA\050712\16G32273.D\FID1A.CH Vial: 28
Signal #2 : C:\MSDchem\1\DATA\050712\16G32273.D\TCD2B.CH
Acq On : 07 May 2012 19:19 Operator: FJB
Sample : WG397237-04 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 7 19:24 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\050712\16G32273.D\FID1A.CH Vial: 28
Signal #2 : C:\MSDCHEM\1\DATA\050712\16G32273.D\TCD2B.CH
Acq On : 07 May 2012 19:19 Operator: FJB
Sample : WG397237-04 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	121.528	8.6	96	0.00
2	T	ethene	133.000	121.118	8.9	96	0.00
3	T	acetylene	133.000	114.191	14.1	94	0.00
4	T	ethane	133.000	122.303	8.0	96	0.00
5	T	propane	133.000	120.820	9.2	95	0.00
		Signal #2					
7	T	carbon dioxide	13333.000	11505.309	13.7	90	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
16G32273.D RSK2EXT.M Tue May 08 08:21:19 2012 Page 1

Signal #1 : C:\MSDCHEM\1\DATA\050712\16G32273.D\FID1A.CH Vial: 28
Signal #2 : C:\MSDCHEM\1\DATA\050712\16G32273.D\TCD2B.CH
Acq On : 07 May 2012 19:19 Operator: FJB
Sample : WG397237-04 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

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Microbac Laboratories Inc.
Daily Retention Time Window Determination

Login #: L12050153 **Run Date:** 05/07/2012 **Sample ID:** WG397237-01
Instrument: HP16 **Run Time:** 15:11 **Method:** RSK175
Workgroup (AAB#): WG397238 **File ID:** 16G32246

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: 2406636
Report generated 05/09/2012 14:50

2.1.2.5 Raw QC Data

Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\050712\16G32247.D\FID1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\050712\16G32247.D\TCD2B.CH
Acq On : 07 May 2012 15:23 Operator: FJB
Sample : WG397238-01 BLANK RSK175 Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 07 15:28:20 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 :

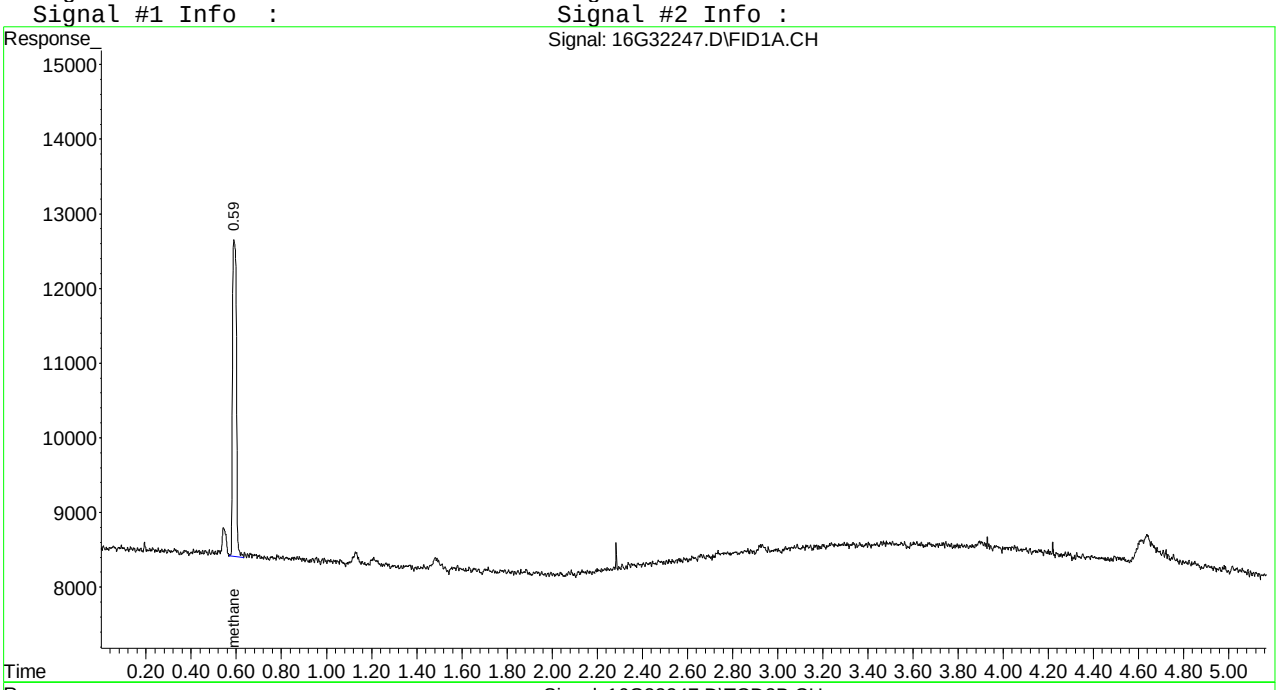
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.59	50029	0.276	umol/
2) T	ethene	0.00	0	N.D.	umol/
3) T	acetylene	0.00	0	N.D.	umol/
4) T	ethane	0.00	0	N.D.	umol/
5) T	propane	0.00	0	N.D.	umol/
7) T	carbon dioxide	0.00	0	N.D.	umol/

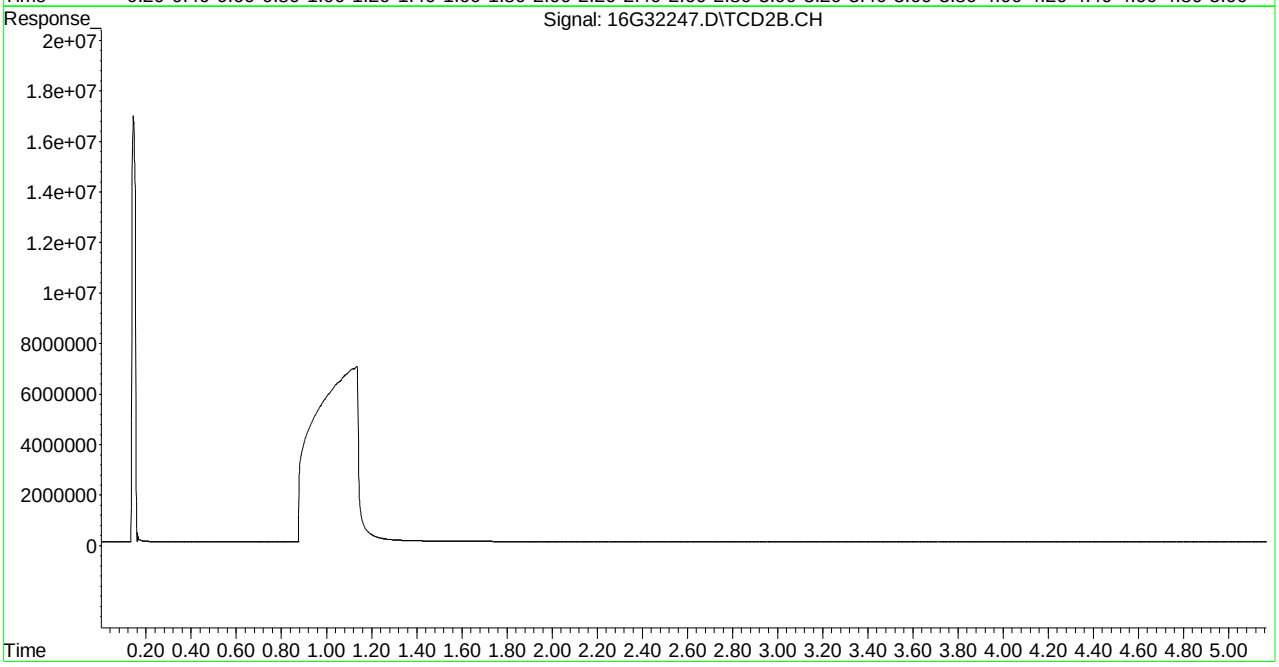
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32247.D RSK2EXT.M Tue May 08 08:25:09 2012 Page 1

Signal #1 : C:\MSDCHEM\1\DATA\050712\16G32247.D\FID1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\050712\16G32247.D\TCD2B.CH
Acq On : 07 May 2012 15:23 Operator: FJB
Sample : WG397238-01 BLANK RSK175 Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 7 15:28 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\050712\16G32248.D\FID1A.CH Vial: 3
Signal #2 : C:\MSDchem\1\DATA\050712\16G32248.D\TCD2B.CH
Acq On : 07 May 2012 15:32 Operator: FJB
Sample : WG397238-02 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 07 15:37:13 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 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 :

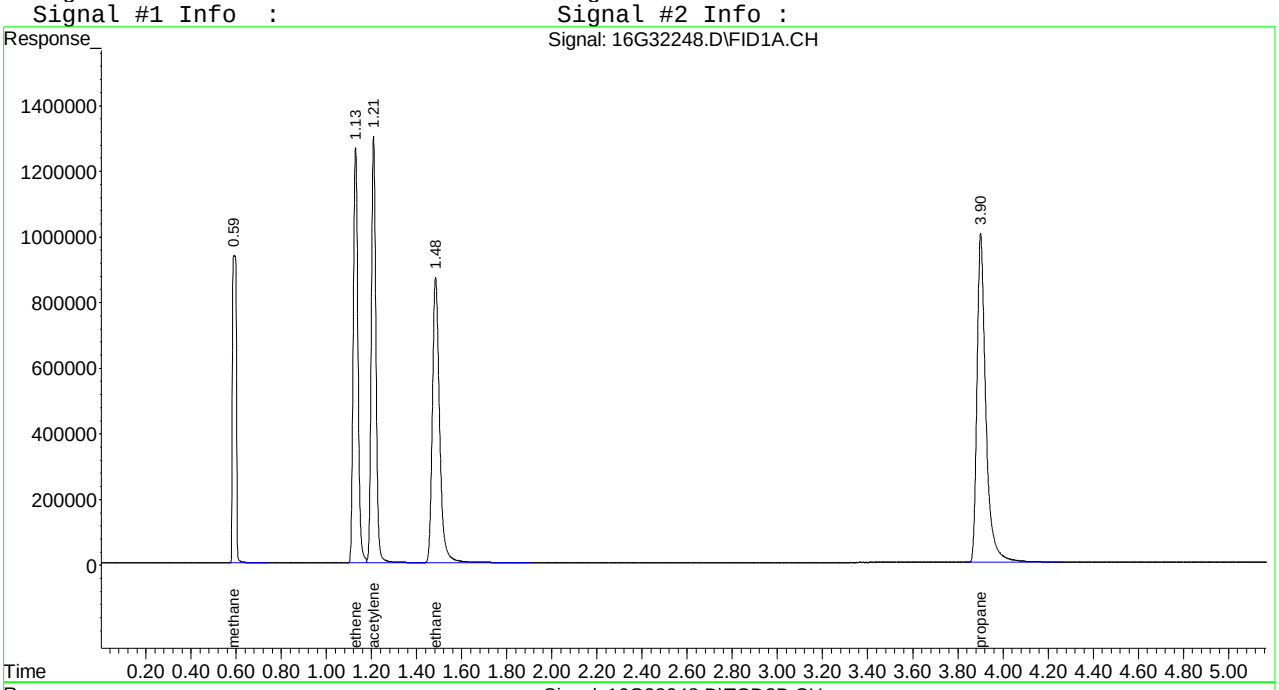
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1) T	methane	0.59	11179097	61.650 umol/
2) T	ethene	1.13	18245071	61.554 umol/
3) T	acetylene	1.21	18684734	64.523 umol/
4) T	ethane	1.48	19283816	63.443 umol/
5) T	propane	3.90	27429863	62.501 umol/
7) T	carbon dioxide	0.20	29465005	5161.742 umol/

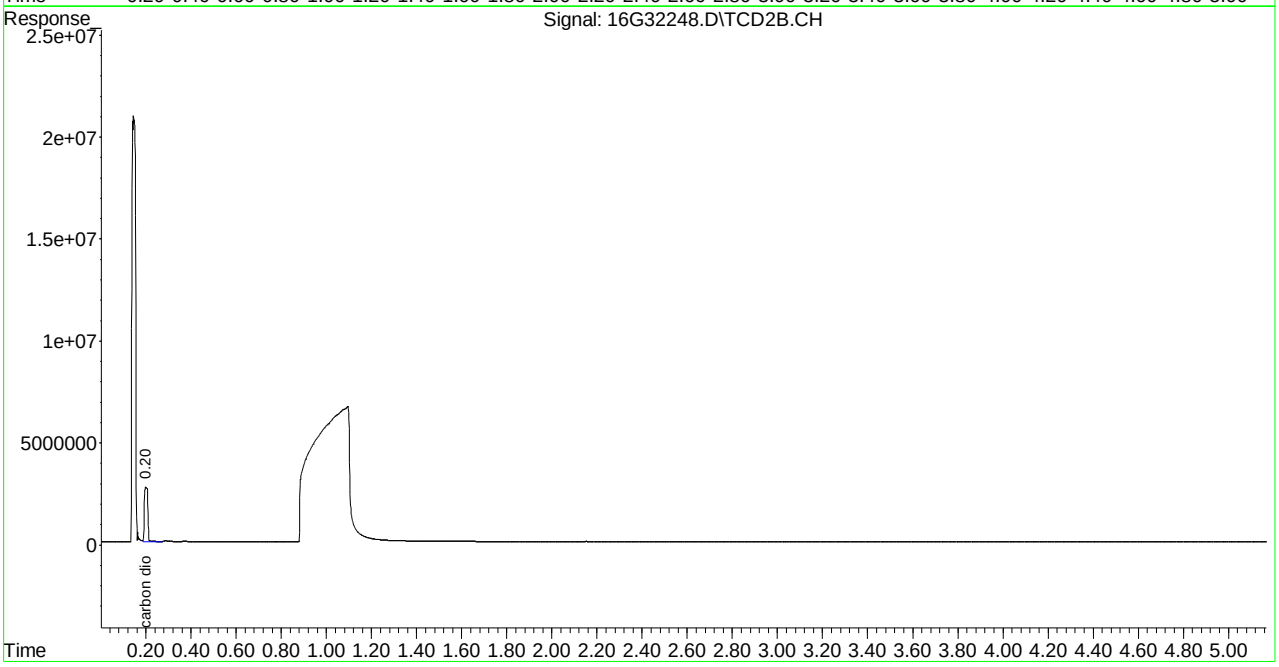
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32248.D RSK2EXT.M Mon May 07 15:37:13 2012 Page 1

Signal #1 : C:\MSDchem\1\DATA\050712\16G32248.D\FID1A.CH Vial: 3
Signal #2 : C:\MSDchem\1\DATA\050712\16G32248.D\TCD2B.CH
Acq On : 07 May 2012 15:32 Operator: FJB
Sample : WG397238-02 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 7 15:37 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 : 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\050712\16G32249.D\FID1A.CH Vial: 4
Signal #2 : C:\MSDchem\1\DATA\050712\16G32249.D\TCD2B.CH
Acq On : 07 May 2012 15:41 Operator: FJB
Sample : WG397238-03 67umol/mol LCSD RSK175 Inst : HP16
Misc : 1,1 STD45308 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 07 15:46:13 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 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 :

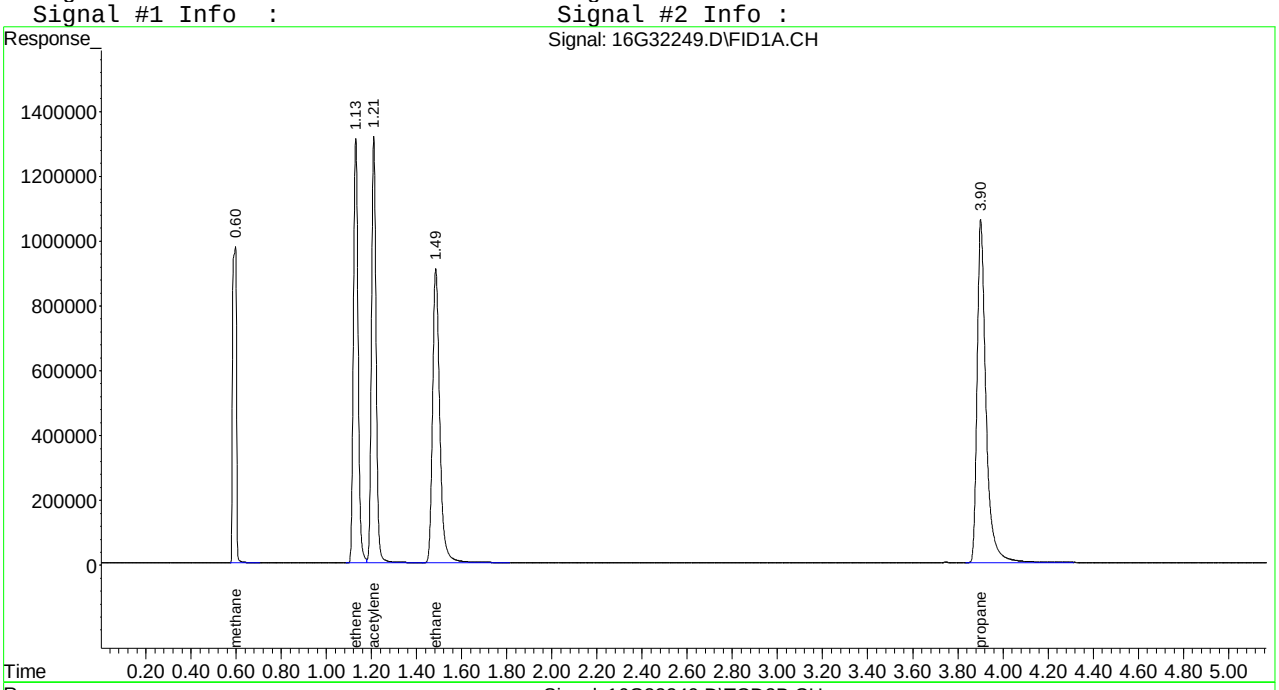
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1) T	methane	0.60	11504204	63.443 umol/
2) T	ethene	1.13	18913969	63.810 umol/
3) T	acetylene	1.21	18906389	65.289 umol/
4) T	ethane	1.49	20065088	66.013 umol/
5) T	propane	3.90	28969367	66.008 umol/
7) T	carbon dioxide	0.20	35170160	6161.183 umol/

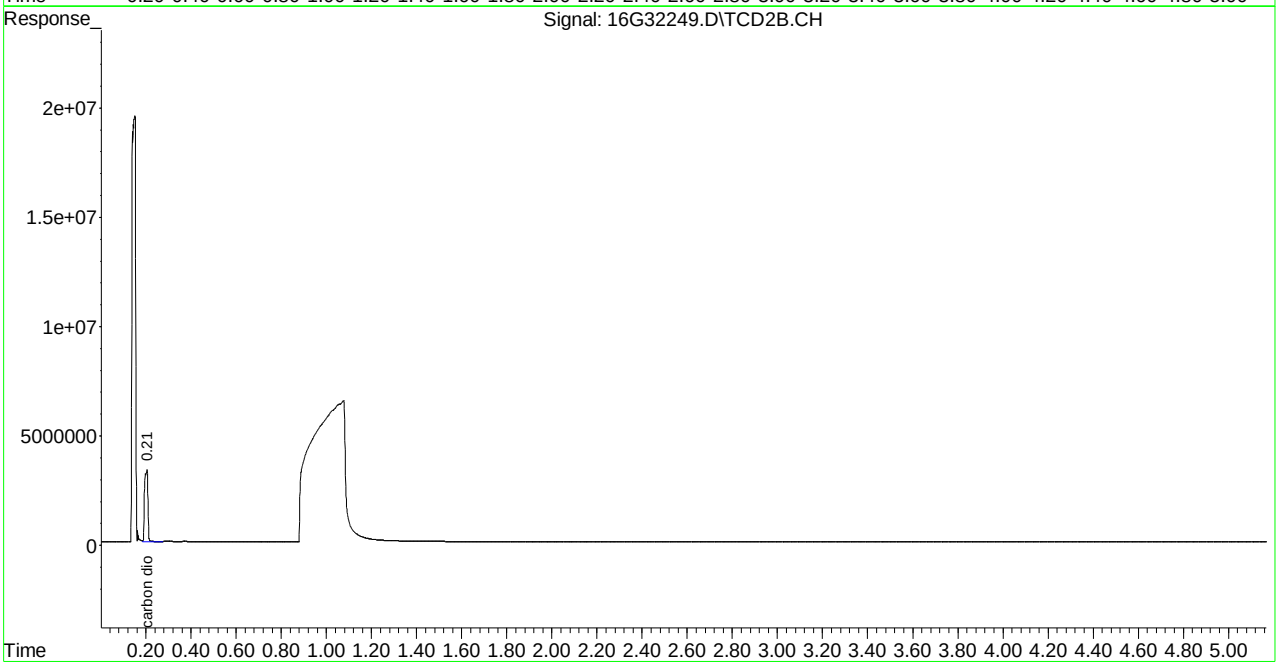
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32249.D RSK2EXT.M Mon May 07 15:46:14 2012 Page 1

Signal #1 : C:\MSDchem\1\DATA\050712\16G32249.D\FID1A.CH Vial: 4
Signal #2 : C:\MSDchem\1\DATA\050712\16G32249.D\TCD2B.CH
Acq On : 07 May 2012 15:41 Operator: FJB
Sample : WG397238-03 67umol/mol LCSD RSK175 Inst : HP16
Misc : 1,1 STD45308 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 7 15:46 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: L12050153
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 surrogate: Phenol-d5. 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: 46537
Approved By: Mike Cochran

Certificate of Analysis

Sample #:	L12050153-01	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-15-050312	**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 22:24
Collect Date:	05/03/2012 10:45	**Dilution:**	1	**File ID:**	4M60836
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
1,1'-Biphenyl	92-52-4		U	22.2	2.78
1,3,5-Trinitrobenzene	99-35-4		U	5.56	2.78
1,3-Dinitrobenzene	99-65-0		U	5.56	2.78
1,4-Dioxane	123-91-1		U	11.1	5.56
2,4,5-Trichlorophenol	95-95-4		U	5.56	2.78
2,4,6-Trichlorophenol	88-06-2		U	5.56	2.78
2,4-Dichlorophenol	120-83-2		U	5.56	2.78
2,4-Dimethylphenol	105-67-9		U	5.56	2.78
2,4-Dinitrophenol	51-28-5		U	27.8	13.9
2,4-Dinitrotoluene	121-14-2		U	5.56	2.78
2,6-Dinitrotoluene	606-20-2		U	5.56	2.78
2-Chloronaphthalene	91-58-7		U	5.56	2.78
2-Chlorophenol	95-57-8		U	5.56	2.78
2-Methylnaphthalene	91-57-6		U	5.56	2.78
2-Methylphenol	95-48-7		U	5.56	2.78
2-Nitroaniline	88-74-4		U	27.8	13.9
2-Nitrophenol	88-75-5		U	5.56	2.78
3-Nitroaniline	99-09-2		U	27.8	13.9
3,3'-Dichlorobenzidine	91-94-1		U	5.56	2.78
3-,4-Methylphenol	106-44-5		U	5.56	2.78
4-Bromophenyl-phenylether	101-55-3		U	5.56	2.78
4-Chloroaniline	106-47-8		U	5.56	2.78
4-Nitrophenol	100-02-7		U	27.8	13.9
Acenaphthene	83-32-9		U	5.56	2.78
Acenaphthylene	208-96-8		U	5.56	2.78
Anthracene	120-12-7		U	5.56	2.78
Benzo(a)anthracene	56-55-3		U	5.56	2.78
Benzo(a)pyrene	50-32-8		U	5.56	2.78
Benzo(b)fluoranthene	205-99-2		U	5.56	2.78
Benzo(g,h,i)Perylene	191-24-2		U	5.56	2.78
Benzo(k)fluoranthene	207-08-9		U	5.56	2.78
Benzoic acid	65-85-0		U	22.2	11.1
Benzyl alcohol	100-51-6		U	5.56	2.78

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Bis(2-Chloroethyl)ether	111-44-4		U	5.56	2.78
Bis(2-Chloroethoxy)Methane	111-91-1		U	5.56	2.78
bis(2-Ethylhexyl)phthalate	117-81-7		U	5.56	2.78
Butylbenzylphthalate	85-68-7		U	5.56	2.78
Carbazole	86-74-8		U	22.2	2.78
Chrysene	218-01-9		U	5.56	2.78
Di-N-Butylphthalate	84-74-2		U	5.56	2.78
Di-n-octylphthalate	117-84-0		U	5.56	2.78
Dibenzo(a,h)Anthracene	53-70-3		U	5.56	2.78
Dibenzofuran	132-64-9		U	5.56	2.78
Diethylphthalate	84-66-2		U	5.56	2.78
Dimethylphthalate	131-11-3		U	5.56	2.78
Fluoranthene	206-44-0		U	5.56	2.78
Fluorene	86-73-7		U	5.56	2.78
Hexachlorobenzene	118-74-1		U	5.56	2.78
Hexachlorobutadiene	87-68-3		U	5.56	2.78
Hexachlorocyclopentadiene	77-47-4		U	5.56	2.78
Hexachloroethane	67-72-1		U	5.56	2.78
Indeno(1,2,3-cd)pyrene	193-39-5		U	5.56	2.78
Isophorone	78-59-1		U	5.56	2.78
N-Nitrosodiphenylamine	86-30-6		U	5.56	2.78
Naphthalene	91-20-3		U	5.56	2.78
Nitrobenzene	98-95-3		U	5.56	2.78
Pentachlorophenol	87-86-5		U	27.8	13.9
Phenanthrene	85-01-8		U	5.56	2.78
Phenol	108-95-2		U	5.56	2.78
Pyrene	129-00-0		U	5.56	2.78

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2,4,6-Tribromophenol	77.9	10	123	
2-Fluorobiphenyl	77.6	43	116	
2-Fluorophenol	69.2	21	100	
Nitrobenzene-d5	77.2	35	114	
p-Terphenyl-d14	80.5	33	141	
Phenol-d5	74.0	10	94	

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #: L12050153-01 **PrePrep Method:** N/A **Instrument:** HPMS4
Client ID: MW-15-050312 **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 22:24
Collect Date: 05/03/2012 10:45 **Dilution:** 1 **File ID:** 4M60836
Sample Tag: 01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
unknown		7.37		0.000	0.000
unknown		4.68		0.000	0.000
unknown		12.7		0.000	0.000
unknown		4.92		0.000	0.000
unknown		8.76		0.000	0.000
unknown		10.9		0.000	0.000
unknown		6.54		0.000	0.000
unknown		9.18		0.000	0.000
unknown		9.03		0.000	0.000
unknown		5.40		0.000	0.000

Sample #: L12050153-03 **PrePrep Method:** N/A **Instrument:** HPMS4
Client ID: MW-17-050312 **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 22:58
Collect Date: 05/03/2012 11:30 **Dilution:** 1 **File ID:** 4M60837
Sample Tag: 01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
unknown		4.36		0.000	0.000
unknown		9.13		0.000	0.000
unknown		4.74		0.000	0.000
unknown		14.9		0.000	0.000
unknown		5.75		0.000	0.000
unknown		8.99		0.000	0.000
unknown		13.3		0.000	0.000
unknown		7.57		0.000	0.000
unknown		9.00		0.000	0.000
unknown		10.3		0.000	0.000
unknown		6.25		0.000	0.000

Certificate of Analysis

Sample #:	L12050153-03	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-17-050312	**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 22:58
Collect Date:	05/03/2012 11:30	**Dilution:**	1	**File ID:**	4M60837
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

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	120	10	123	
2-Fluorobiphenyl	107	43	116	
2-Fluorophenol	87.0	21	100	
Nitrobenzene-d5	106	35	114	
p-Terphenyl-d14	131	33	141	
Phenol-d5	98.2	10	94	*

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12050153-05	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-28050312	**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:**	MDC	**Run Date:**	05/13/2012 16:45
Collect Date:	05/03/2012 15:00	**Dilution:**	1	**File ID:**	4M60847
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
1,1'-Biphenyl	92-52-4		U	22.2	2.78
1,3,5-Trinitrobenzene	99-35-4		U	5.56	2.78
1,3-Dinitrobenzene	99-65-0		U	5.56	2.78
1,4-Dioxane	123-91-1		U	11.1	5.56
2,4,5-Trichlorophenol	95-95-4		U	5.56	2.78
2,4,6-Trichlorophenol	88-06-2		U	5.56	2.78
2,4-Dichlorophenol	120-83-2		U	5.56	2.78
2,4-Dimethylphenol	105-67-9		U	5.56	2.78
2,4-Dinitrophenol	51-28-5		U	27.8	13.9
2,4-Dinitrotoluene	121-14-2		U	5.56	2.78
2,6-Dinitrotoluene	606-20-2		U	5.56	2.78
2-Chloronaphthalene	91-58-7		U	5.56	2.78
2-Chlorophenol	95-57-8		U	5.56	2.78
2-Methylnaphthalene	91-57-6		U	5.56	2.78
2-Methylphenol	95-48-7		U	5.56	2.78
2-Nitroaniline	88-74-4		U	27.8	13.9
2-Nitrophenol	88-75-5		U	5.56	2.78
3-Nitroaniline	99-09-2		U	27.8	13.9
3,3'-Dichlorobenzidine	91-94-1		U	5.56	2.78
3-,4-Methylphenol	106-44-5		U	5.56	2.78
4-Bromophenyl-phenylether	101-55-3		U	5.56	2.78
4-Chloroaniline	106-47-8		U	5.56	2.78
4-Nitrophenol	100-02-7		U	27.8	13.9
Acenaphthene	83-32-9		U	5.56	2.78
Acenaphthylene	208-96-8		U	5.56	2.78
Anthracene	120-12-7		U	5.56	2.78
Benzo(a)anthracene	56-55-3		U	5.56	2.78
Benzo(a)pyrene	50-32-8		U	5.56	2.78
Benzo(b)fluoranthene	205-99-2		U	5.56	2.78
Benzo(g,h,i)Perylene	191-24-2		U	5.56	2.78
Benzo(k)fluoranthene	207-08-9		U	5.56	2.78
Benzoic acid	65-85-0		U	22.2	11.1
Benzyl alcohol	100-51-6		U	5.56	2.78

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Bis(2-Chloroethyl)ether	111-44-4		U	5.56	2.78
Bis(2-Chloroethoxy)Methane	111-91-1		U	5.56	2.78
bis(2-Ethylhexyl)phthalate	117-81-7		U	5.56	2.78
Butylbenzylphthalate	85-68-7		U	5.56	2.78
Carbazole	86-74-8		U	22.2	2.78
Chrysene	218-01-9		U	5.56	2.78
Di-N-Butylphthalate	84-74-2		U	5.56	2.78
Di-n-octylphthalate	117-84-0		U	5.56	2.78
Dibenzo(a,h)Anthracene	53-70-3		U	5.56	2.78
Dibenzofuran	132-64-9		U	5.56	2.78
Diethylphthalate	84-66-2		U	5.56	2.78
Dimethylphthalate	131-11-3		U	5.56	2.78
Fluoranthene	206-44-0		U	5.56	2.78
Fluorene	86-73-7		U	5.56	2.78
Hexachlorobenzene	118-74-1		U	5.56	2.78
Hexachlorobutadiene	87-68-3		U	5.56	2.78
Hexachlorocyclopentadiene	77-47-4		U	5.56	2.78
Hexachloroethane	67-72-1		U	5.56	2.78
Indeno(1,2,3-cd)pyrene	193-39-5		U	5.56	2.78
Isophorone	78-59-1		U	5.56	2.78
N-Nitrosodiphenylamine	86-30-6		U	5.56	2.78
Naphthalene	91-20-3		U	5.56	2.78
Nitrobenzene	98-95-3		U	5.56	2.78
Pentachlorophenol	87-86-5		U	27.8	13.9
Phenanthrene	85-01-8		U	5.56	2.78
Phenol	108-95-2		U	5.56	2.78
Pyrene	129-00-0		U	5.56	2.78

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2,4,6-Tribromophenol	98.0	10	123	
2-Fluorobiphenyl	86.9	43	116	
2-Fluorophenol	80.4	21	100	
Nitrobenzene-d5	90.0	35	114	
p-Terphenyl-d14	120	33	141	
Phenol-d5	87.4	10	94	

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12050153-05	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-28050312	**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:**	MDC	**Run Date:**	05/13/2012 16:45
Collect Date:	05/03/2012 15:00	**Dilution:**	1	**File ID:**	4M60847
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
unknown		5.10		0.000	0.000
unknown		9.16		0.000	0.000
unknown		8.13		0.000	0.000
unknown		12.6		0.000	0.000
unknown		5.37		0.000	0.000

Sample #:	L12050153-07	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	TW-02-050312	**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:**	MDC	**Run Date:**	05/13/2012 17:19
Collect Date:	05/03/2012 13:30	**Dilution:**	1	**File ID:**	4M60848
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
unknown		5.03		0.000	0.000
unknown		8.98		0.000	0.000
unknown		4.07		0.000	0.000
unknown		11.1		0.000	0.000
unknown		4.76		0.000	0.000
unknown		17.6		0.000	0.000
unknown		5.63		0.000	0.000
unknown		11.8		0.000	0.000
unknown		7.15		0.000	0.000
unknown		4.39		0.000	0.000

Sample #:	L12050153-07	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	TW-02-050312	**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:**	MDC	**Run Date:**	05/13/2012 17:19
Collect Date:	05/03/2012 13:30	**Dilution:**	1	**File ID:**	4M60848
Sample Tag:	01	**Units:**	ug/L		

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
1,1'-Biphenyl	92-52-4		U	20.0	2.50

Certificate of Analysis

Certificate of Analysis

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Analyte	CAS #	Result	Qual	RL	MDL
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
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

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
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	107	10	123	
2-Fluorobiphenyl	103	43	116	
2-Fluorophenol	77.5	21	100	
Nitrobenzene-d5	102	35	114	
p-Terphenyl-d14	124	33	141	
Phenol-d5	82.9	10	94	

U	Not detected at or above adjusted sample detection limit.

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	1 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: 2408523
Report generated: 05/17/2012 09:31

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.

Instrument Run Log

Instrument: HPMS4 Dataset: 051312
Analyst1: MDC Analyst2: CAA
Method: 8270C SOP: MSS01 Rev: 19

Maintenance Log ID: 41737 Syringe Filter Lot#:

Column 1 ID: RXI-5MS Column 2 ID: NA
Workgroups: WG397826, WG397828, WG397604
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	4M60838	WG397839-01 50PPM DFTPP STD	1	1	STD50659	05/13/12 11:52
2	4M60839	WG397839-02 50PPM Megamix STD	1	1	STD50886	05/13/12 12:11
3	4M60840	WG397840-01 50PPM TCL STD	1	1	STD51428	05/13/12 12:45
4	4M60841	WG397611-01 BLK 5/10 3546	7	1	SOIL	05/13/12 13:19
5	4M60842	WG397611-02 LCS 5/10 3546	7	1	SOIL	05/13/12 13:54
6	4M60843	WG397611-03 LCSD 5/10 3546	7	1	SOIL	05/13/12 14:28
7	4M60844	L12050232-01	1	1		05/13/12 15:03
8	4M60845	L12050232-02 MS	1	1		05/13/12 15:37
9	4M60846	L12050232-03 MSD	1	1		05/13/12 16:11
10	4M60847	L12050153-05	1	1		05/13/12 16:45
11	4M60848	L12050153-07	1	1		05/13/12 17:19
12	4M60849	L12050256-31	7	1	SOIL	05/13/12 17:54
13	4M60850	L12050256-33	7	1	SOIL	05/13/12 18:28
14	4M60851	L12050256-34	7	1	SOIL	05/13/12 19:02
15	4M60852	L12050256-35	7	1	SOIL	05/13/12 19:36
16	4M60853	L12050256-37	7	1	SOIL	05/13/12 20:10
17	4M60854	L12050256-38	7	1	SOIL	05/13/12 20:44
18	4M60855	L12050256-39	7	1	SOIL	05/13/12 21:18
19	4M60856	L12050256-40	7	1	SOIL	05/13/12 21:52
20	4M60857	L12050256-41	7	1	SOIL	05/13/12 22:26
21	4M60858	L12050256-42	7	1	SOIL	05/13/12 23:00
22	4M60859	L12050256-43	7	1	SOIL	05/13/12 23:34

Comments

Seq.	Rerun	Dil.	Reason	Analytes
5				
	WG397611-02 LCS 5/10 3546 - 9 analytes high.			
6				
	WG397611-03 LCSD 5/10 3546 - 9 analytes high.			
14				
	L12050256-34 - SS NBZ high.			
19				
	L12050256-40 - SS NBZ high.			

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Hema Vilasagar

Microbac

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS4 Dataset: 051312

Analyst1: MDC Analyst2: CAA

Method: 8270C SOP: MSS01 Rev: 19

Maintenance Log ID: 41737 Syringe Filter Lot#:

Column 1 ID: RXI-5MS Column 2 ID: NA

Workgroups: WG397826, WG397828, WG397604

Internal STD: COA16051 Surrogate STD: NA

CCV STD: LCS STD:

Comments

Seq.	Rerun	Dil.	Reason	Analytes
21				
	L12050256-42 - SS NBZ high.			

Approved: 17-MAY-12

Hema Vilasagar

Microbac

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.

Data Checklist

Date: 13-MAY-2012
Analyst: MDC
Analyst: CAA
Method: 8270
Instrument: HPMS4
Curve Workgroup: NA
Runlog ID: 46791
Analytical Workgroups: L12050232, L12050153, L12050256

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	X
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)	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	HAV

Primary Reviewer:
17-MAY-2012

Secondary Reviewer:
17-MAY-2012

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-17-2012 11:52:22

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 8270C **AAB#:** WG397604

Login Number: L12050153

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-15-050312	01	05/03/12					05/07/12	4	7		05/12/12	5.5	40	
MW-17-050312	03	05/03/12					05/07/12	4	7		05/12/12	5.5	40	
MW-28050312	05	05/03/12					05/07/12	3.8	7		05/13/12	6.2	40	
TW-02-050312	07	05/03/12					05/07/12	3.9	7		05/13/12	6.3	40	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2418166
Report generated 05/17/2012 14:07

Microbac Laboratories Inc.
SURROGATE STANDARDS

Login Number: L12050153
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
L12050153-01	1.00	01	77.9	77.6	69.2	77.2	80.5	74.0
L12050153-03	1.00	01	120	107	87.0	106	131	98.2
L12050153-05	1.00	01	98.0	86.9	80.4	90.0	120	87.4
L12050153-07	1.00	01	107	103	77.5	102	124	82.9
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: 2413190
Report generated: 05/17/2012 14:08

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12050153
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-15-050312	L12050153-01	4M60836	05/12/12 22:24	01
MW-17-050312	L12050153-03	4M60837	05/12/12 22:58	01
MW-28050312	L12050153-05	4M60847	05/13/12 16:45	01
TW-02-050312	L12050153-07	4M60848	05/13/12 17:19	01

Report Name: BLANK_SUMMARY
PDF File ID: 2418167
Report generated 05/17/2012 14:07

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number:L12050153 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: 2418168
17-MAY-2012 14:07

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050153 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
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Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number:L12050153 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
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Login Number: L12050153 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
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Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

DFTPP

Login Number: L12050153
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: 2418179
Report generated 05/17/2012 14:08

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

DFTPP

Login Number: L12050153
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
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Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

DFTPP

Login Number: L12050153
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	
L12050153-01	MW-15-050312	01	05/12/2012 22:24	
L12050153-03	MW-17-050312	01	05/12/2012 22:58	

* Sample past 12 hour tune limit

TUNE - Modified 03/06/2008
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Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

DFTPP

Login Number: L12050153
Instrument: HPMS4
Analyst: MDC
Workgroup: WG397839

Tune ID: WG397839-01
Run Date: 05/13/2012
Run Time: 11:52
File ID: 4M60838
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	35.8	89941	PASS
68.0	69.0	0	2.00	0	0	PASS
69.0	198	0	100	38.9	97834	PASS
70.0	69.0	0	2.00	0.243	238	PASS
127	198	40.0	60.0	49.9	125634	PASS
197	198	0	1.00	0	0	PASS
198	198	100	100	100	251520	PASS
199	198	5.00	9.00	6.92	17407	PASS
275	198	10.0	30.0	24.7	62050	PASS
365	198	1.00	100	2.91	7319	PASS
441	443	0.0100	100	79.8	39232	PASS
442	198	40.0	100	99.3	249685	PASS
443	442	17.0	23.0	19.7	49146	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG397839-02	CCV	01	05/13/2012 12:11	
WG397840-01	CCV	01	05/13/2012 12:45	
L12050153-05	MW-28050312	01	05/13/2012 16:45	
L12050153-07	TW-02-050312	01	05/13/2012 17:19	

* Sample past 12 hour tune limit

TUNE - Modified 03/06/2008
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Microbac Laboratories Inc.
INITIAL CALIBRATION SUMMARY

Login Number: L12050153
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
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Microbac Laboratories Inc.
INITIAL CALIBRATION SUMMARY

Login Number: L12050153 **Instrument ID:** HPMS4
Analytical Method: 8270C **Initial Calibration Date:** 19-APR-12 13:23
ICAL Workgroup: WG395394 **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.

INT_CAL - Modified 03/06/2008
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Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L12050153
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.

INT_CAL - Modified 03/06/2008
PDF File ID: 2418170
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INITIAL CALIBRATION DATA

Login Number: L12050153
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: L12050153
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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INITIAL CALIBRATION DATA

Login Number: L12050153 **Instrument ID:** HPMS4

Analytical Method: 8270C **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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Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L12050153
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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Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L12050153 **Instrument ID:** HPMS4

Analytical Method: 8270C **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

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Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L12050153 **Instrument ID:** HPMS4

Analytical Method: 8270C **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

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Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L12050153
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

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Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L12050153
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
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Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number:L12050153 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	

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Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12050153 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

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Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12050153 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

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Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12050153 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

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Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050153 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	

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Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050153 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

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Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050153 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: 2418180
Report generated 05/17/2012 14:08

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050153 Run Date: 05/13/2012 Sample ID: WG397839-02

Instrument ID: HPMS4 Run Time: 12:11 Method: 8270C

File ID: 4M60839 Analyst: MDC 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	50700	ug/L	0.373	1.48	20	
2,4-Dichlorophenol	CCC	50000	51300	ug/L	0.293	2.55	20	
2-Nitrophenol	CCC	50000	51400	ug/L	0.204	2.84	20	
Acenaphthene	CCC	50000	48900	ug/L	1.15	2.29	20	
Benzo[a]pyrene	CCC	50000	51600	ug/L	1.09	3.24	20	
Di-n-Octyl Phthalate	CCC	50000	53000	ug/L	1.37	6.08	20	
Fluoranthene	CCC	50000	49700	ug/L	1.10	0.667	20	
Hexachlorobutadiene	CCC	50000	52900	ug/L	0.176	5.75	20	
n-Nitrosodiphenylamine	CCC	50000	49700	ug/L	0.644	0.527	20	
Pentachlorophenol	CCC	50000	45100	ug/L	0.126	9.83	20	
Phenol	CCC	50000	48500	ug/L	1.47	3.10	20	
1,4-Dichlorobenzene	CCC	50000	49000	ug/L	1.51	2.01	20	
4-Chloro-3-Methylphenol	CCC	50000	50300	ug/L	0.292	0.608	20	
2,4-Dinitrophenol	SPCC	50000	45800	ug/L	0.143	8.38	20	
4-Nitrophenol	SPCC	50000	45300	ug/L	0.211	9.43	20	
Hexachlorocyclopentadiene	SPCC	50000	50400	ug/L	0.273	0.807	20	
n-Nitrosodipropylamine	SPCC	50000	49300	ug/L	0.843	1.30	20	
Sym-Trinitrobenzene		50000	57200	ug/L	0.181	14.4	20	
1,3-Dinitrobenzene		50000	52600	ug/L	0.255	5.23	20	
1,4-Dioxane		50000	45500	ug/L	0.453	9.09	20	
2,4,5-Trichlorophenol		50000	51000	ug/L	0.386	1.95	20	
2,4-Dimethylphenol		50000	46600	ug/L	0.318	6.74	20	
2,4-Dinitrotoluene		50000	52600	ug/L	0.423	5.18	20	
2,6-Dinitrotoluene		50000	51700	ug/L	0.327	3.33	20	
2-Chloronaphthalene		50000	51700	ug/L	1.17	3.30	20	
2-Chlorophenol		50000	48500	ug/L	1.32	3.06	20	
2-Methylnaphthalene		50000	49500	ug/L	0.682	0.935	20	
2-Methylphenol		50000	47600	ug/L	0.994	4.85	20	
2-Nitroaniline		50000	51100	ug/L	0.331	2.23	20	
3-Nitroaniline		50000	49800	ug/L	0.232	0.385	20	
3,3'-Dichlorobenzidine		50000	58000	ug/L	0.257	15.9	20	
3-,4-Methylphenol		50000	47700	ug/L	1.29	4.68	20	
4-Bromophenyl Phenyl Ether		50000	51400	ug/L	0.208	2.72	20	
4-Chloroaniline		50000	55400	ug/L	0.432	10.8	20	
Acenaphthylene		50000	49000	ug/L	1.78	2.05	20	
Anthracene		50000	48900	ug/L	1.06	2.29	20	
Benzo[a]anthracene		50000	49700	ug/L	1.05	0.604	20	
Benzo[b]fluoranthene		50000	51900	ug/L	1.20	3.71	20	
Benzo[ghi]perylene		50000	52600	ug/L	1.02	5.12	20	
Benzo[k]fluoranthene		50000	52200	ug/L	1.12	4.46	20	
Benzoic Acid		50000	11500	ug/L	0.0542	77.0	20	*
Benzyl Alcohol		50000	48300	ug/L	0.848	3.46	20	

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Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050153 Run Date: 05/13/2012 Sample ID: WG397839-02
Instrument ID: HPMS4 Run Time: 12:11 Method: 8270C
File ID: 4M60839 Analyst: MDC 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	46600	ug/L	0.885	6.76	20	
bis(2-Chloroethoxy)methane		50000	51100	ug/L	0.478	2.11	20	
bis(2-Ethylhexyl)phthalate		50000	51000	ug/L	0.757	1.94	20	
Butyl Benzyl Phthalate		50000	51000	ug/L	0.555	1.97	20	
Carbazole		50000	50300	ug/L	0.959	0.699	20	
Chrysene		50000	49100	ug/L	0.979	1.74	20	
Di-n-Butyl Phthalate		50000	50500	ug/L	1.19	0.958	20	
Dibenz[ah]anthracene		50000	54600	ug/L	1.07	9.18	20	
Dibenzofuran		50000	49900	ug/L	1.58	0.125	20	
Diethylphthalate		50000	51000	ug/L	1.29	2.01	20	
Dimethylphthalate		50000	50200	ug/L	1.27	0.369	20	
Fluorene		50000	49400	ug/L	1.33	1.17	20	
Hexachlorobenzene		50000	52200	ug/L	0.231	4.49	20	
Hexachloroethane		50000	49800	ug/L	0.568	0.437	20	
Indeno[1,2,3-cd]pyrene		50000	53600	ug/L	1.26	7.26	20	
Isophorone		50000	49800	ug/L	0.613	0.402	20	
Naphthalene		50000	48800	ug/L	1.03	2.33	20	
Nitrobenzene		50000	51400	ug/L	0.347	2.89	20	
Phenanthrene		50000	48500	ug/L	1.03	3.00	20	
Pyrene		50000	49600	ug/L	1.19	0.791	20	

* Exceeds %D Criteria

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

CCV - Modified 03/05/2008
PDF File ID: 2418180
Report generated 05/17/2012 14:08

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050153 Run Date: 05/13/2012 Sample ID: WG397840-01
Instrument ID: HPMS4 Run Time: 12:45 Method: 8270C
File ID: 4M60840 Analyst: MDC 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	49600	ug/L	1.63	0.741	20	

* Exceeds %D Criteria

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

CCV - Modified 03/05/2008
PDF File ID: 2418180
Report generated 05/17/2012 14:08

Microbac Laboratories Inc.

INTERNAL STANDARD AREA SUMMARY
(COMPARED TO CCV)

Login Number: L12050153 CCV Number: WG397824-02

Instrument ID: HPMS4 CAL ID: HPMS4-19-APR-12

Workgroup (AAB#): WG397604 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
L12050153-01	1.00	01	240142	508771	873842	899821	849701	916024
L12050153-03	1.00	01	238015	492962	834834	882195	820062	882195
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: 2418181
Report generated 05/17/2012 14:08

Microbac Laboratories Inc.

INTERNAL STANDARD AREA SUMMARY
(COMPARED TO CCV)

Login Number: L12050153
Instrument ID: HPMS4
Workgroup (AAB#): WG397604

CCV Number: WG397839-02
CAL ID: HPMS4-19-APR-12
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3	IS-4	IS-5	IS-6
WG397839-02	NA	NA	388767	821112	1391093	1450026	1315519	1477190
Upper Limit	NA	NA	777534	1642224	2782186	2900052	2631038	2954380
Lower Limit	NA	NA	194384	410556	695547	725013	657760	738595
L12050153-05	1.00	01	248028	518204	875598	928889	835575	930259
L12050153-07	1.00	01	246253	507190	859897	916595	834766	912693

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: 2418181
Report generated 05/17/2012 14:08

Microbac Laboratories Inc.

INTERNAL STANDARD RETENTION TIME SUMMARY
(COMPARED TO CCV)

Login Number:L12050153 CCV Number:WG397824-02
Instrument ID:HPMS4 CAL ID: HPMS4-19-APR-12
Workgroup (AAB#):WG397604 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
L12050153-01	1.00	01	7.23	10.32	15.6	8.51	18.32	11.91
L12050153-03	1.00	01	7.23	10.32	15.6	8.51	18.33	11.91
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: 2418183
Report generated 05/17/2012 14:08

Microbac Laboratories Inc.

INTERNAL STANDARD RETENTION TIME SUMMARY
(COMPARED TO CCV)

Login Number: L12050153 CCV Number: WG397839-02

Instrument ID: HPMS4 CAL ID: HPMS4-19-APR-12

Workgroup (AAB#): WG397604 Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3	IS-4	IS-5	IS-6
WG397839-02	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
L12050153-05	1.00	01	7.23	10.32	15.6	8.51	18.32	11.92
L12050153-07	1.00	01	7.23	10.32	15.6	8.51	18.32	11.91

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: 2418183
Report generated 05/17/2012 14:08

2.2.1.3 Sample Data

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051212\4M60836.D Vial: 21
Acq On : 12 May 2012 22:24 Operator: CAA
Sample : L12050153-01 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 14 11:40:53 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	240142	40.00	ug/ml	0.00
30) Naphthalene-d8	8.51	136	899821	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.32	164	508771	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.91	188	916024	40.00	ug/ml	-0.01
113) Chrysene-d12	15.60	240	873842	40.00	ug/ml	-0.01
128) Perylene-d12	18.32	264	849701	40.00	ug/ml	-0.02
System Monitoring Compounds						
8) 2-Fluorophenol	6.00	112	503697	69.1799	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 69.18%			
12) Phenol-d5	6.83	99	630195	73.9545	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 73.95%			
31) Nitrobenzene-d5	7.79	82	293924	38.6206	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 77.24%			
59) 2-Fluorobiphenyl	9.58	172	659523	38.8205	ug/ml	-0.01
Spiked Amount 50.000	Range 43 - 116		Recovery = 77.64%			
86) 2,4,6-Tribromophenol	11.14	330	176819	77.9353	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 77.94%			
117) p-Terphenyl-d14	13.95	244	647899	40.2274	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 80.46%			

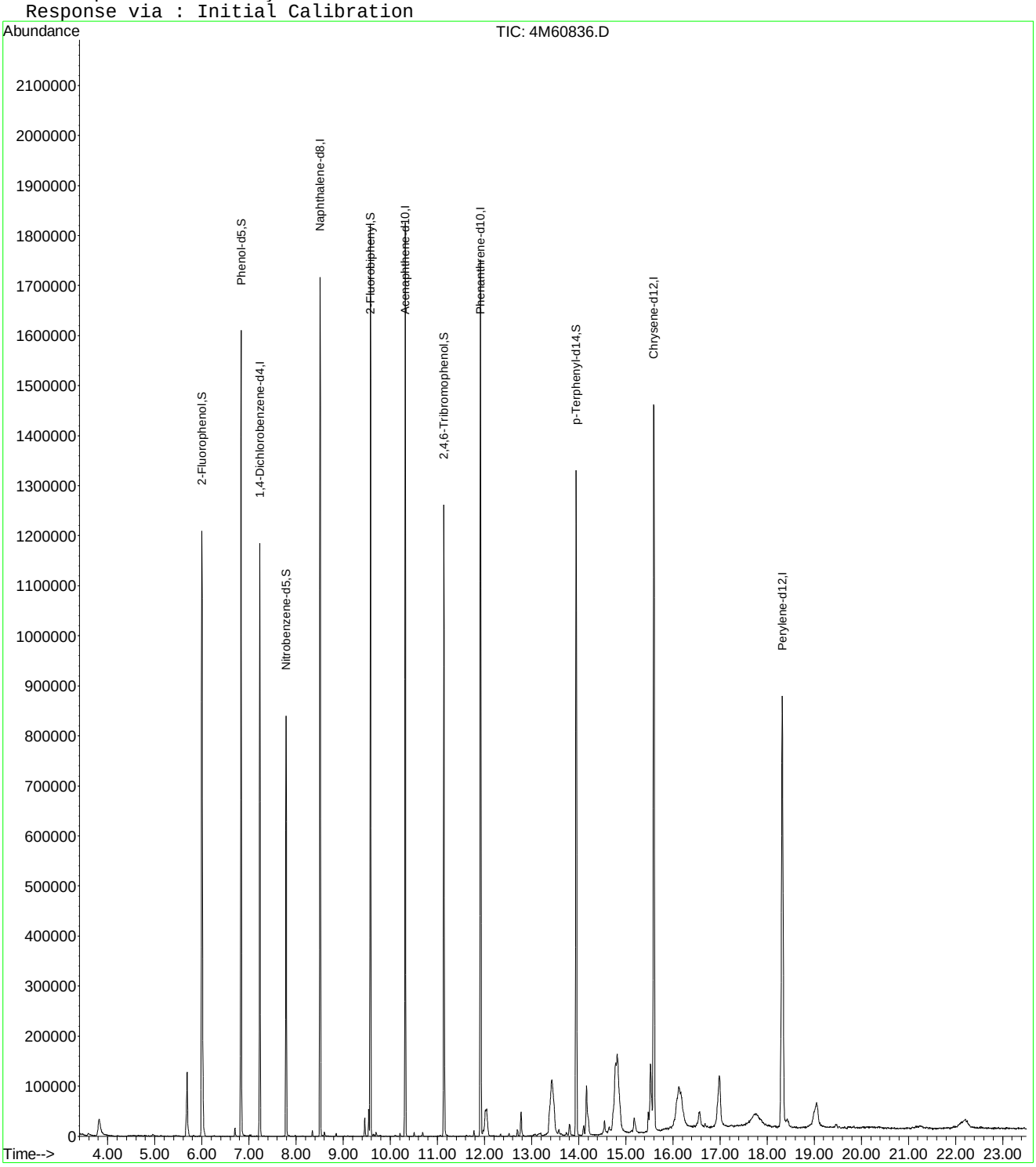
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
4M60836.D MEGAMIX.M Mon May 14 11:46:36 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051212\4M60836.D Vial: 21
Acq On : 12 May 2012 22:24 Operator: CAA
Sample : L12050153-01 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



Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\051212\4M60836.D Vial: 21
Acq On : 12 May 2012 22:24 Operator: CAA
Sample : L12050153-01 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 14 11:54:31 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 : 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	240142	40.00	ug/mL	0.00
3) Naphthalene-d8	8.51	136	899821	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.32	164	508771	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.91	188	916024	40.00	ug/mL	0.00

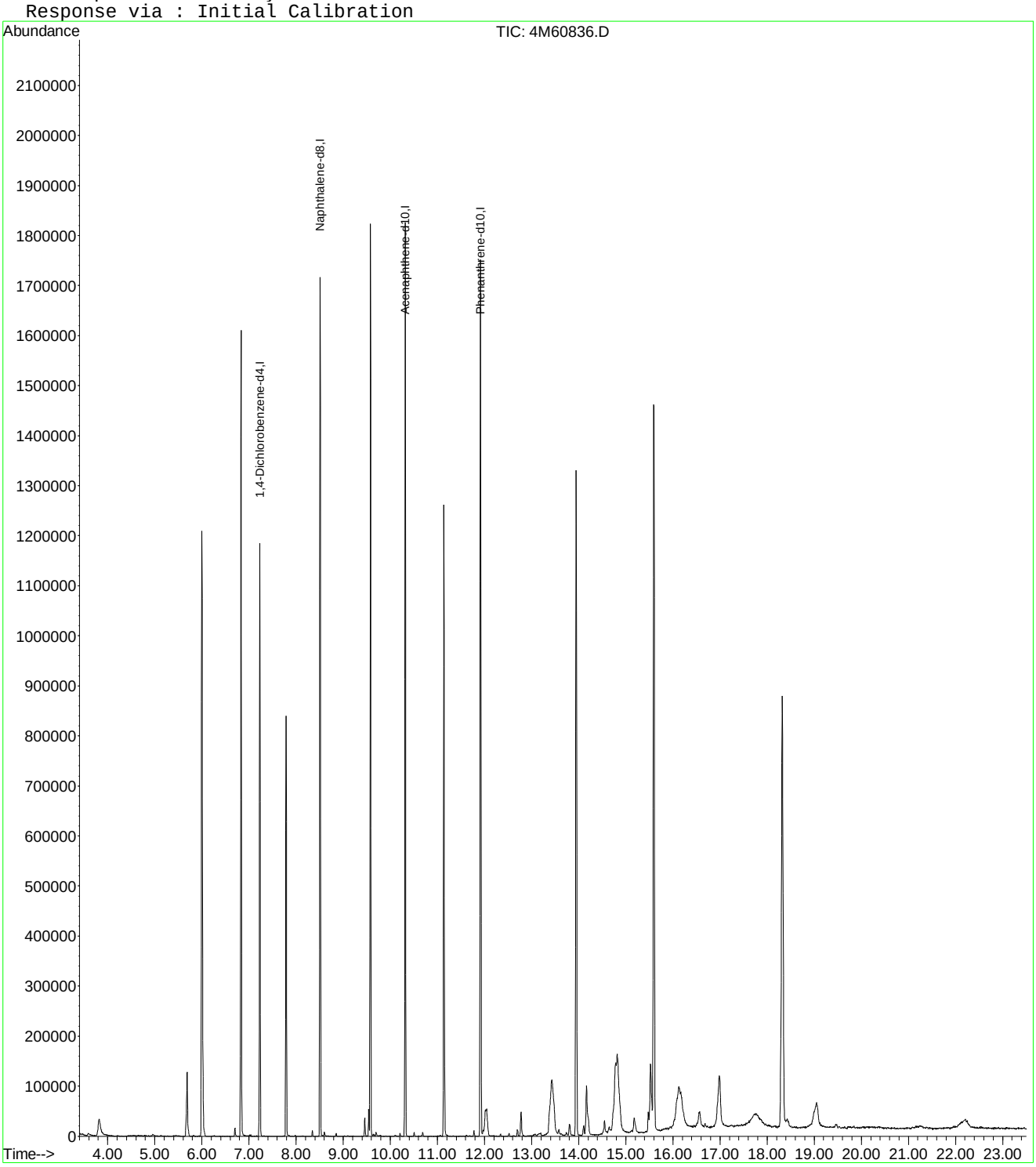
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
4M60836.D TCL.M Mon May 14 11:54:32 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\051212\4M60836.D Vial: 21
Acq On : 12 May 2012 22:24 Operator: CAA
Sample : L12050153-01 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



LSC Area Percent Report

Data File : I:\MSDCHEM\1\DATA\051212\4M60836.D Vial: 21
Acq On : 12 May 2012 22:24 Operator: CAA
Sample : L12050153-01 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	3.824	66	81	99	rBV2	33671	134133	5.93%	0.521%
2	5.689	421	430	443	rBB2	127927	225374	9.97%	0.875%
3	5.998	482	488	505	rBB	1209494	1645561	72.80%	6.387%
4	6.832	637	644	657	rBV	1610429	1725941	76.35%	6.699%
5	7.227	712	718	730	rBB	1185194	1360311	60.18%	5.280%
6	7.788	816	823	841	rBB	840034	866280	38.32%	3.363%
7	8.509	952	958	969	rBV	1717047	1770654	78.33%	6.873%
8	9.460	1130	1136	1141	rBB	36450	38655	1.71%	0.150%
9	9.540	1147	1151	1154	rBV	54172	56572	2.50%	0.220%
10	9.578	1154	1158	1166	rVB	1822877	1832667	81.08%	7.114%
11	10.320	1290	1297	1305	rBB	1826358	1979399	87.57%	7.683%
12	11.137	1444	1450	1470	rBB	1261637	1408876	62.33%	5.469%
13	11.912	1588	1595	1603	rBV	1751723	2183575	96.60%	8.476%
14	12.046	1603	1620	1644	rVB5	54357	229993	10.17%	0.893%
15	12.778	1750	1757	1765	rBV	48317	86408	3.82%	0.335%
16	13.429	1854	1879	1900	rBV2	110384	623465	27.58%	2.420%
17	13.803	1943	1949	1964	rVB2	23139	44830	1.98%	0.174%
18	13.947	1967	1976	1986	rBV	1329583	1850160	81.85%	7.182%
19	14.102	1994	2005	2010	rBV4	19986	32196	1.42%	0.125%
20	14.166	2010	2017	2033	rVB2	97918	250504	11.08%	0.972%
21	14.546	2077	2088	2095	rBV3	28303	60497	2.68%	0.235%
22	14.653	2100	2108	2111	rVV7	12846	27917	1.24%	0.108%
23	14.791	2115	2134	2135	rVV3	139106	445181	19.69%	1.728%
24	14.818	2136	2139	2163	rVB	153990	553768	24.50%	2.150%
25	15.176	2200	2206	2224	rVB4	30339	87980	3.89%	0.342%
26	15.475	2257	2262	2266	rBV3	40003	67841	3.00%	0.263%
27	15.523	2266	2271	2278	rVV2	134912	333055	14.73%	1.293%
28	15.593	2278	2284	2297	rVB	1450597	2260440	100.00%	8.774%
29	16.127	2353	2384	2390	rBV2	83118	466705	20.65%	1.812%
30	16.565	2457	2466	2480	rVB6	30156	96585	4.27%	0.375%
31	16.987	2525	2545	2570	rBV5	101835	439567	19.45%	1.706%
32	17.724	2665	2683	2686	rBV8	17175	70703	3.13%	0.274%
33	18.323	2781	2795	2808	rBV	862723	2161471	95.62%	8.390%
34	18.429	2809	2815	2828	rVB9	16533	52828	2.34%	0.205%
35	19.049	2904	2931	2947	rVB8	46407	262364	11.61%	1.018%
36	22.116	3489	3505	3506	rBV8	10247	29822	1.32%	0.116%

Sum of corrected areas: 25762278

```
File       : I:\MSDCHEM\1\DATA\051212\4M60836.D
Operator   : CAA
Acquired   : 12 May 2012  22:24     using AcqMethod BNATEST
Instrument :   HPMS4
Sample Name: L12050153-01
Misc Info  : 1,1
Vial Number: 21
Quant File :MEGAMIX.RES (RTE Integrator)
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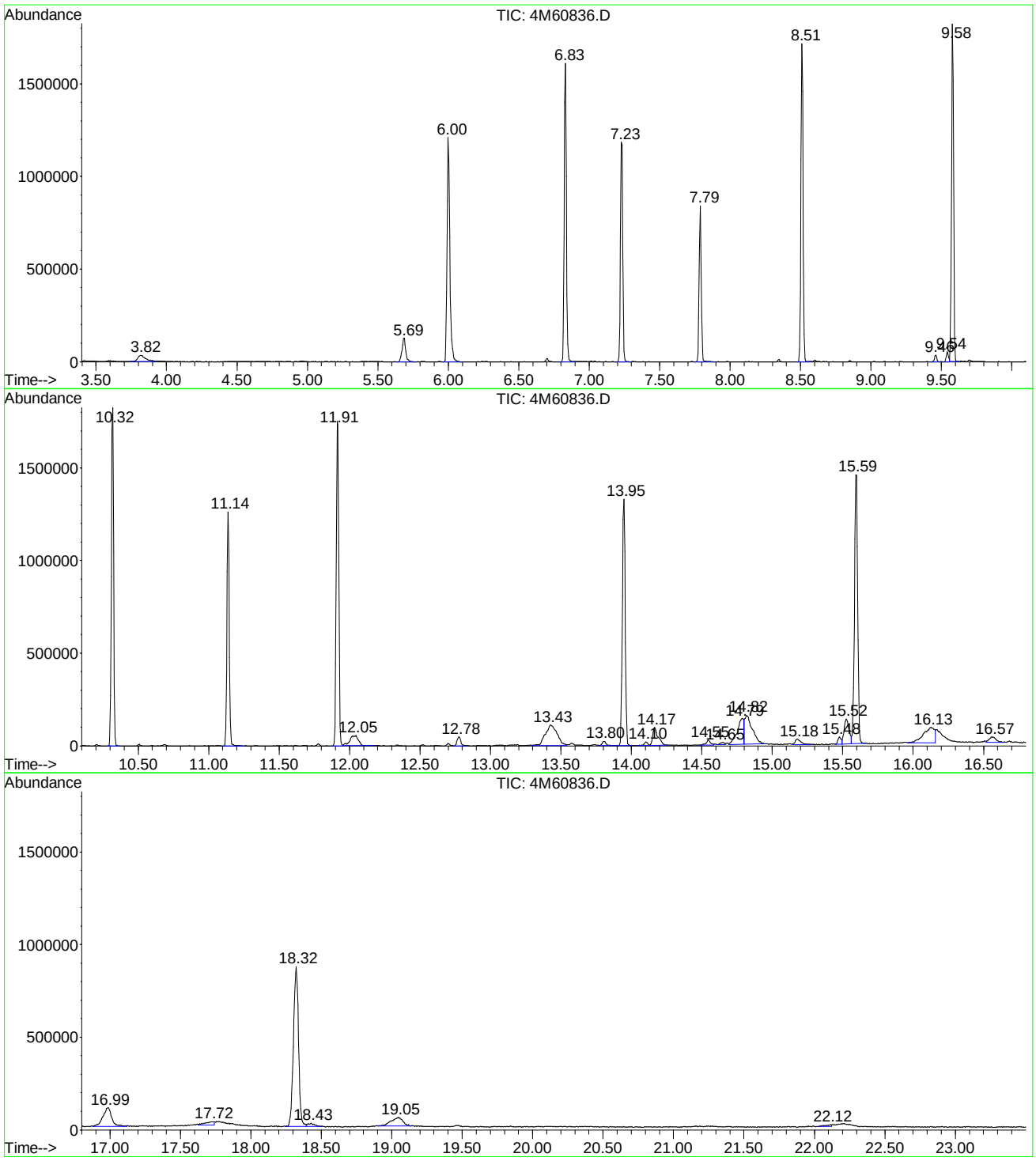


Data File : I:\MSDCHEM\1\DATA\051212\4M60836.D Vial: 21
Acq On : 12 May 2012 22:24 Operator: CAA
Sample : L12050153-01 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

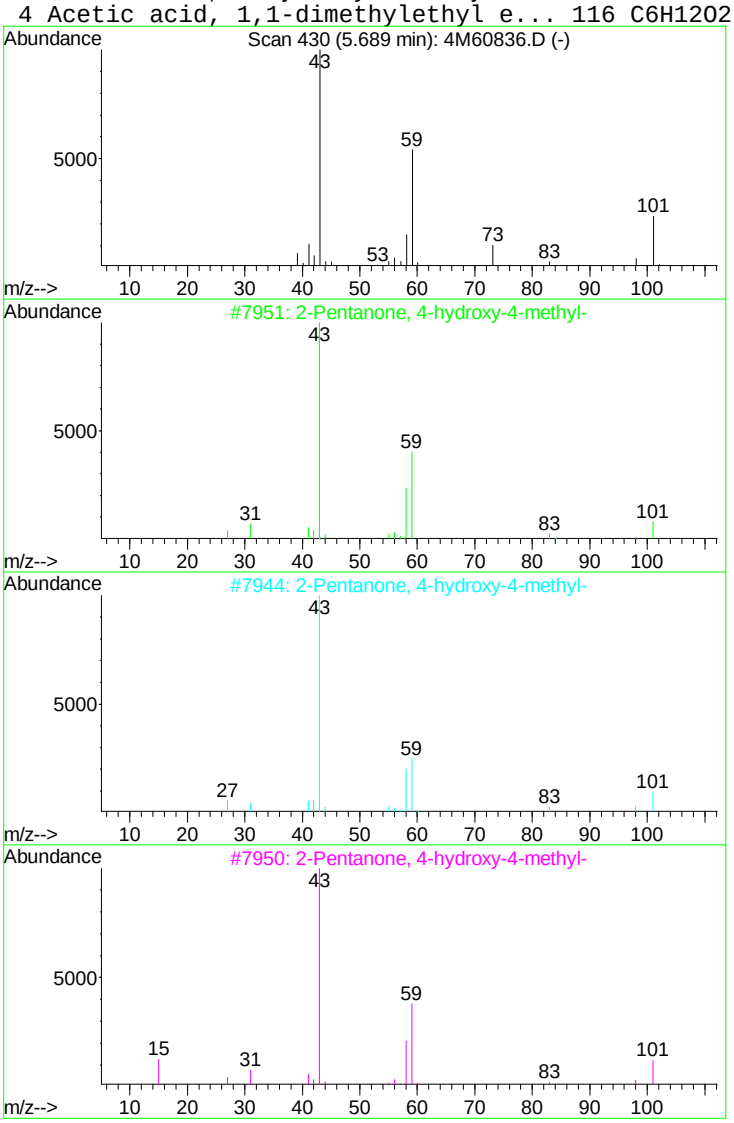
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

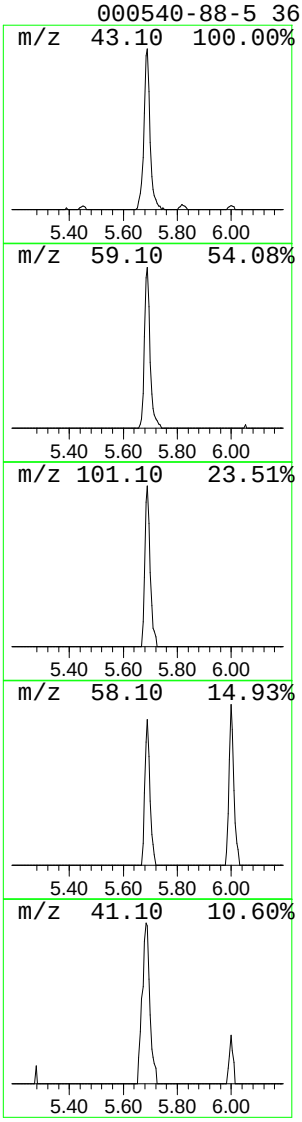
****

Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.69	6.63 ug/ml	225374	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	45
2	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	45
3	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	42
4	Acetic acid, 1,1-dimethylethyl e...	116	C6H12O2	000540-88-5	36





Data File : I:\MSDCHEM\1\DATA\051212\4M60836.D Vial: 21
Acq On : 12 May 2012 22:24 Operator: CAA
Sample : L12050153-01 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

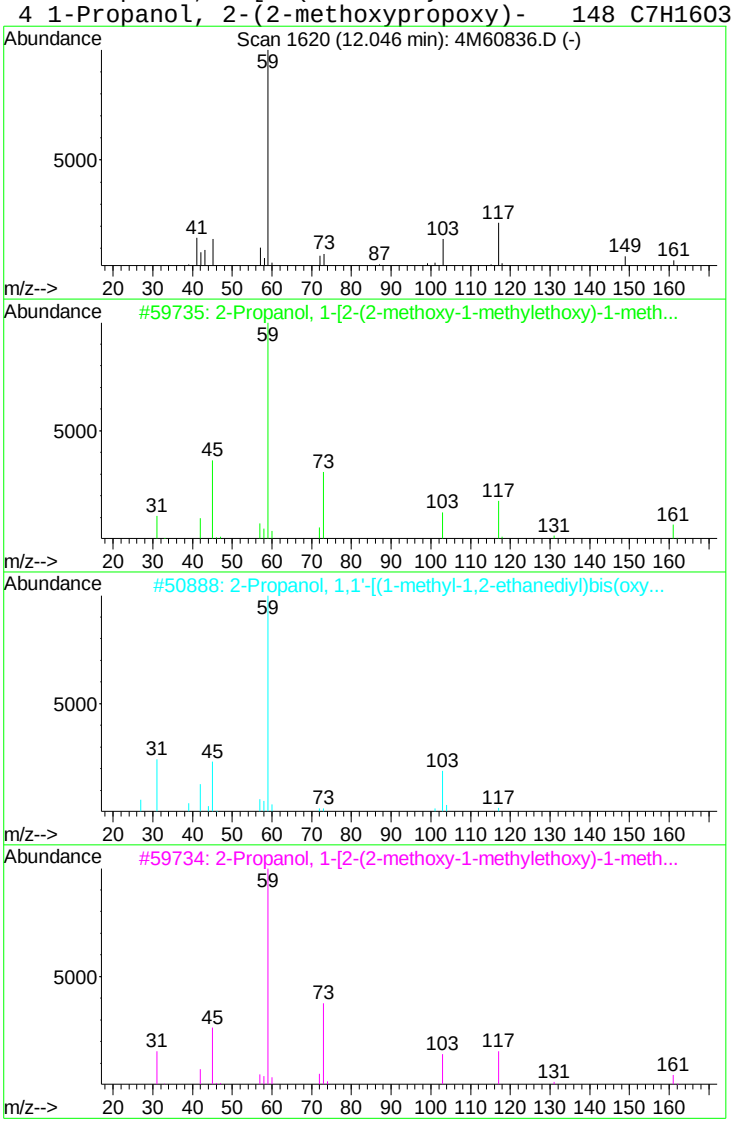
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

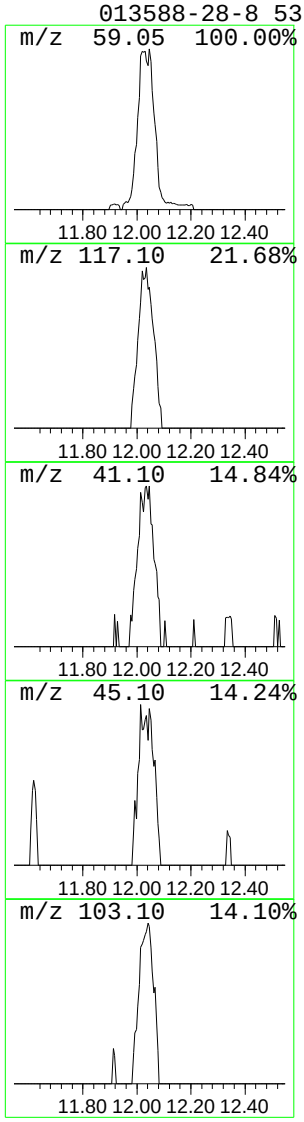
****

Peak Number 2 2-Propanol, 1-[2-(2-methoxy... Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.05	4.21 ug/ml	229993	Phenanthrene-d10	11.91

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	64
2	2-Propanol, 1,1'-[(1-methyl-1,2-...	192	C9H20O4	001638-16-0	59
3	2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	56
4	1-Propanol, 2-(2-methoxypropoxy)-	148	C7H16O3	013588-28-8	53





Data File : I:\MSDCHEM\1\DATA\051212\4M60836.D Vial: 21
Acq On : 12 May 2012 22:24 Operator: CAA
Sample : L12050153-01 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

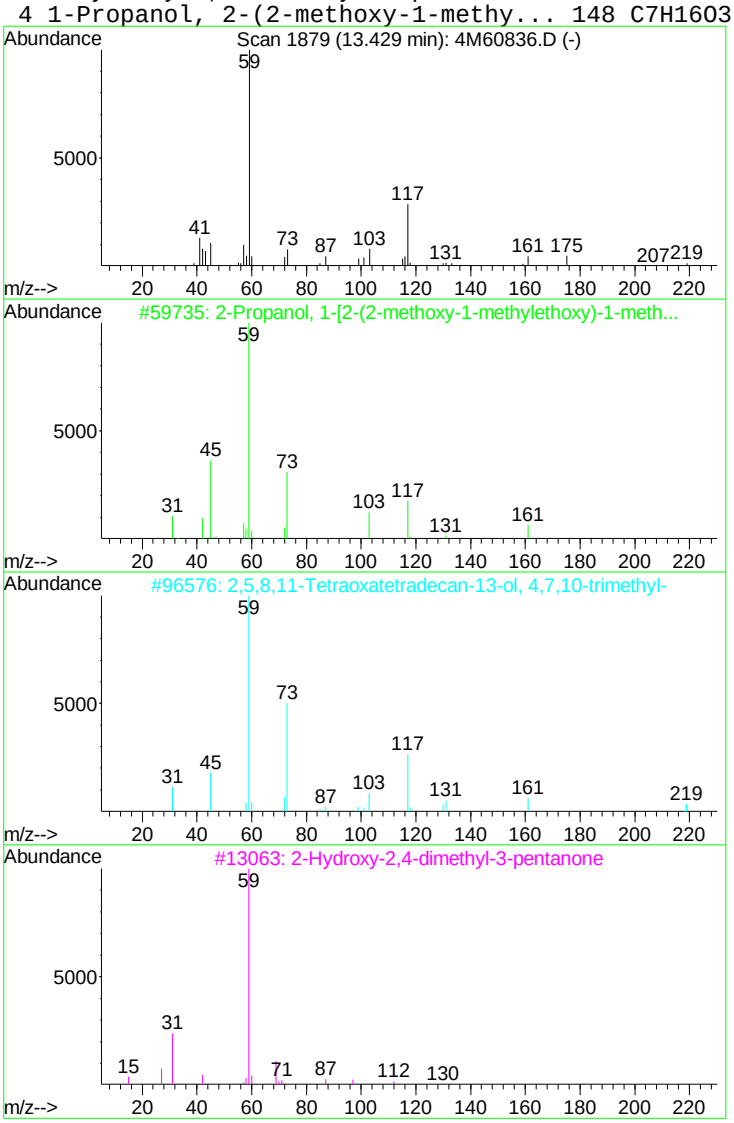
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

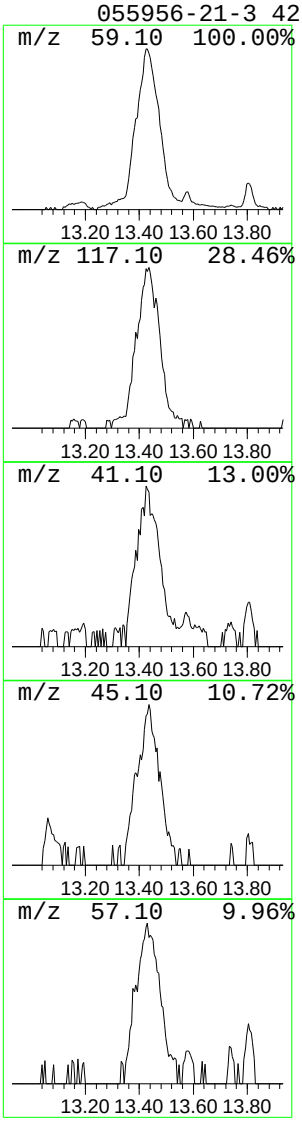
****

Peak Number 3 2-Propanol, 1-[2-(2-methoxy... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.43	11.42 ug/ml	623465	Phenanthrene-d10	11.91

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	59
2	2,5,8,11-Tetraoxatetradecan-13-o...	264	C13H28O5	020324-34-9	50
3	2-Hydroxy-2,4-dimethyl-3-pentanone	130	C7H14O2	003212-67-7	47
4	1-Propanol, 2-(2-methoxy-1-methy...	148	C7H16O3	055956-21-3	42





Data File : I:\MSDCHEM\1\DATA\051212\4M60836.D Vial: 21
Acq On : 12 May 2012 22:24 Operator: CAA
Sample : L12050153-01 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

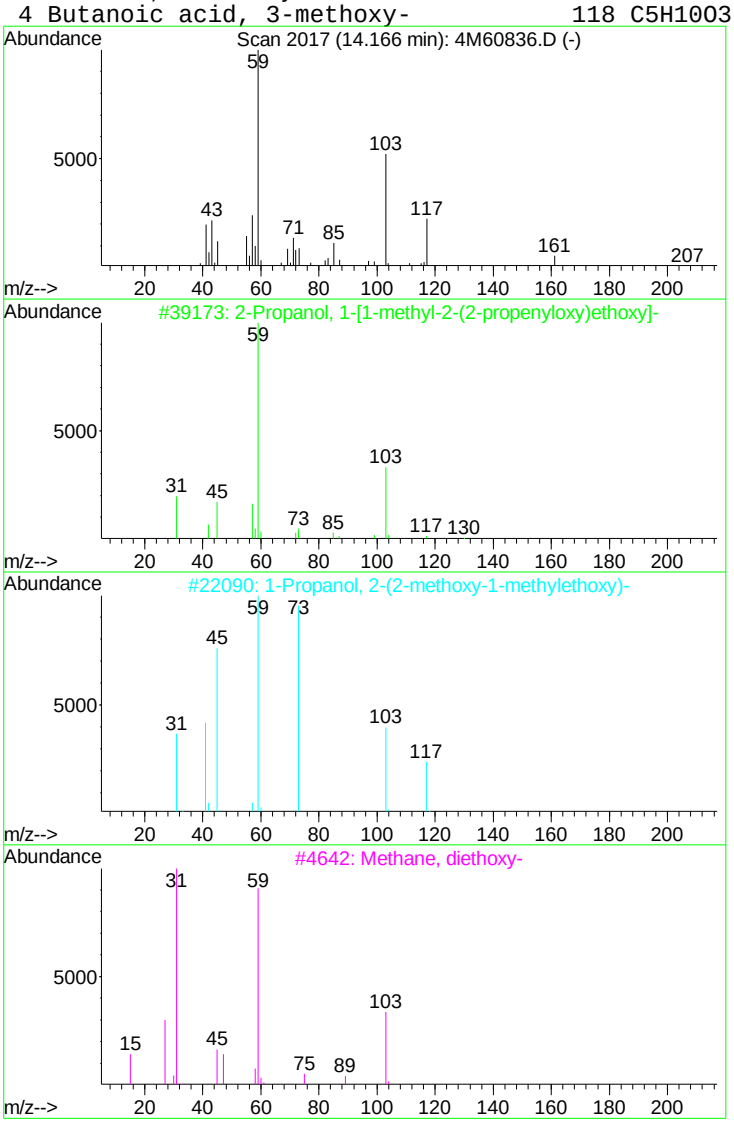
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

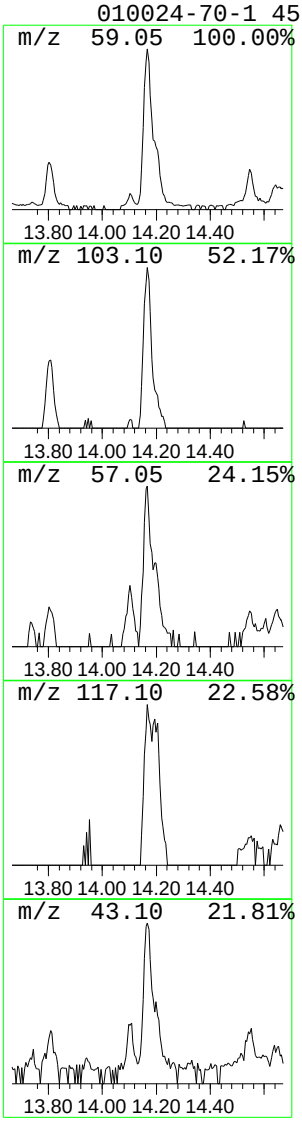
****

Peak Number 4 2-Propanol, 1-[1-methyl-2-(... Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.17	4.43 ug/ml	250504	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	59
2	1-Propanol, 2-(2-methoxy-1-methy...	148	C7H16O3	055956-21-3	53
3	Methane, diethoxy-	104	C5H12O2	000462-95-3	50
4	Butanoic acid, 3-methoxy-	118	C5H10O3	010024-70-1	45





Data File : I:\MSDCHEM\1\DATA\051212\4M60836.D Vial: 21
Acq On : 12 May 2012 22:24 Operator: CAA
Sample : L12050153-01 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

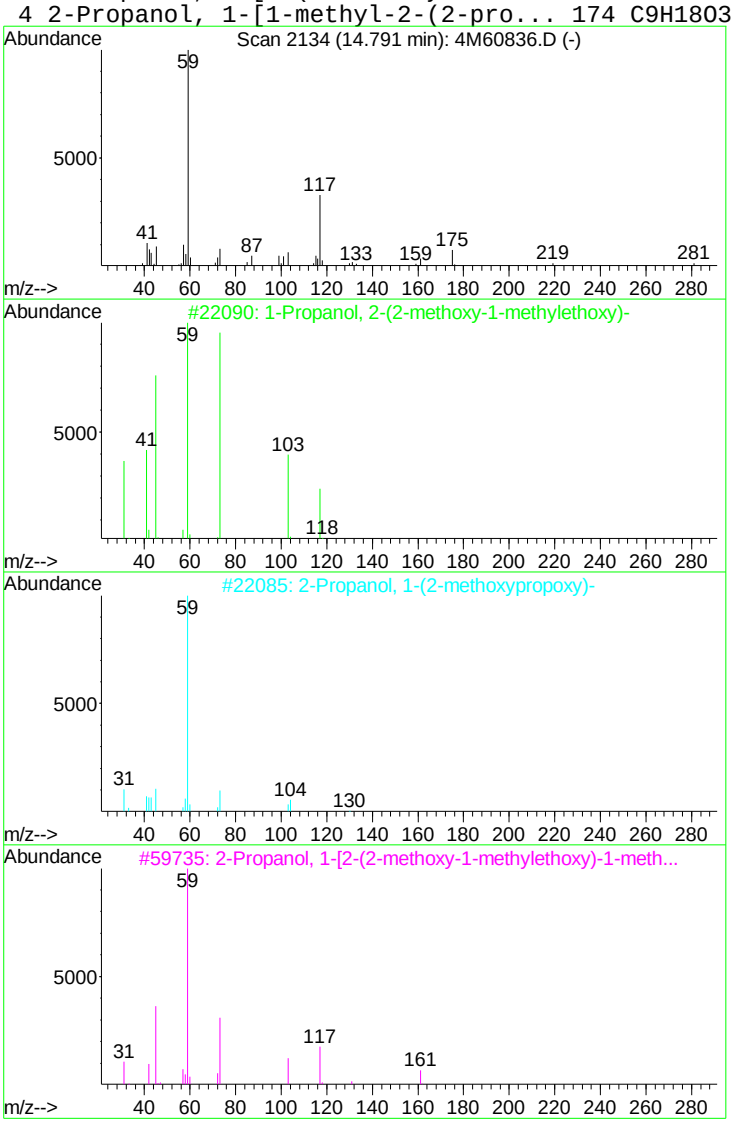
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

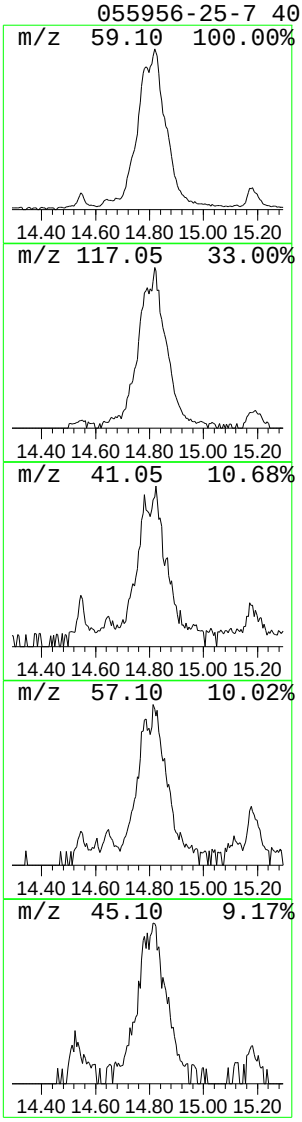
****

Peak Number 5 1-Propanol, 2-(2-methoxy-1-... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.79	7.88 ug/ml	445181	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	47
3	2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	45
4	2-Propanol, 1-[1-methyl-2-(2-pro...	174	C9H18O3	055956-25-7	40





Data File : I:\MSDCHEM\1\DATA\051212\4M60836.D Vial: 21
Acq On : 12 May 2012 22:24 Operator: CAA
Sample : L12050153-01 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

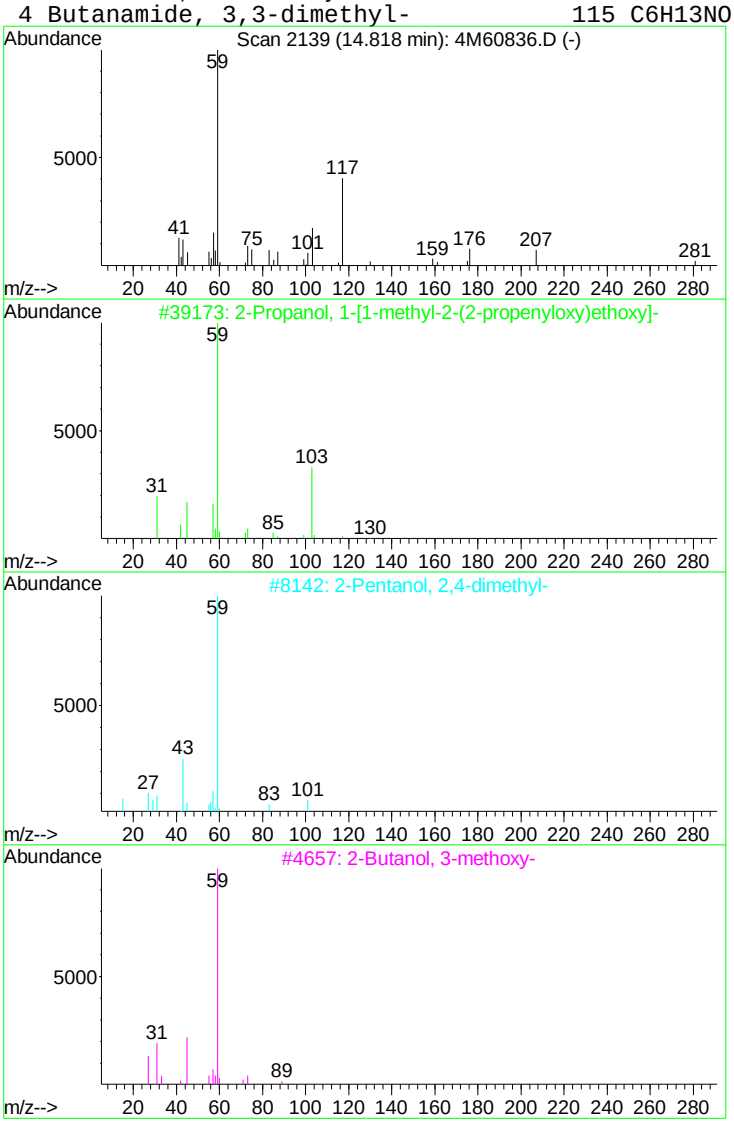
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

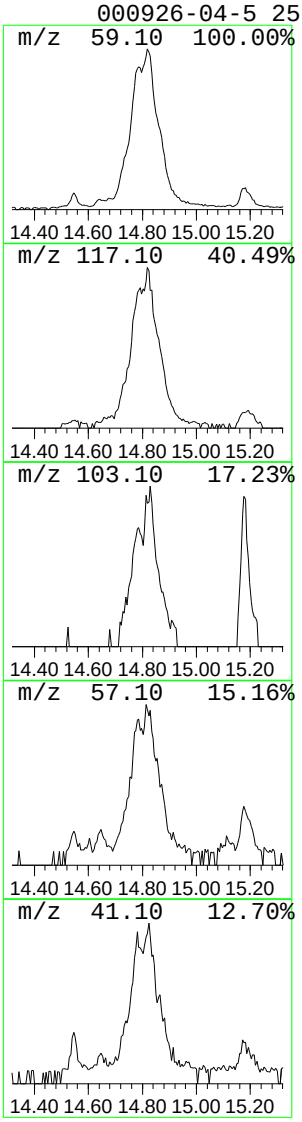
****

Peak Number 6 2-Propanol, 1-[1-methyl-2-(... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.82	9.80 ug/ml	553768	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	40
2	2-Pentanol, 2,4-dimethyl-	116	C7H16O	000625-06-9	37
3	2-Butanol, 3-methoxy-	104	C5H12O2	053778-72-6	25
4	Butanamide, 3,3-dimethyl-	115	C6H13NO	000926-04-5	25





Data File : I:\MSDCHEM\1\DATA\051212\4M60836.D Vial: 21
Acq On : 12 May 2012 22:24 Operator: CAA
Sample : L12050153-01 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

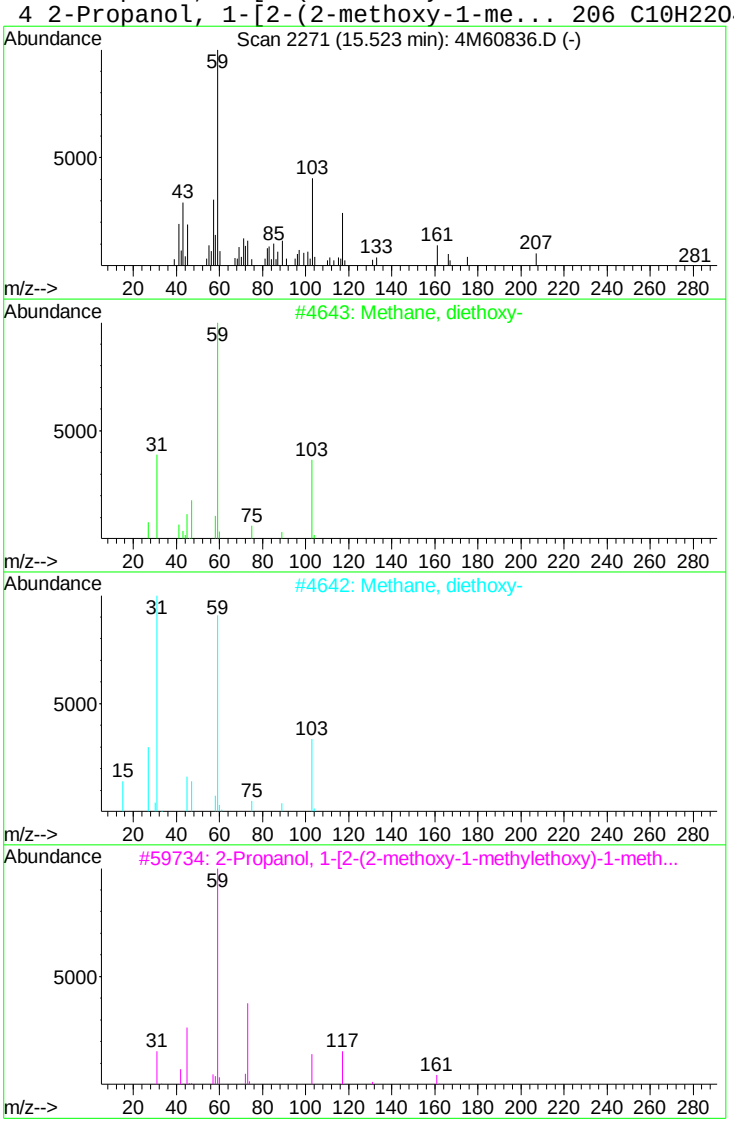
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

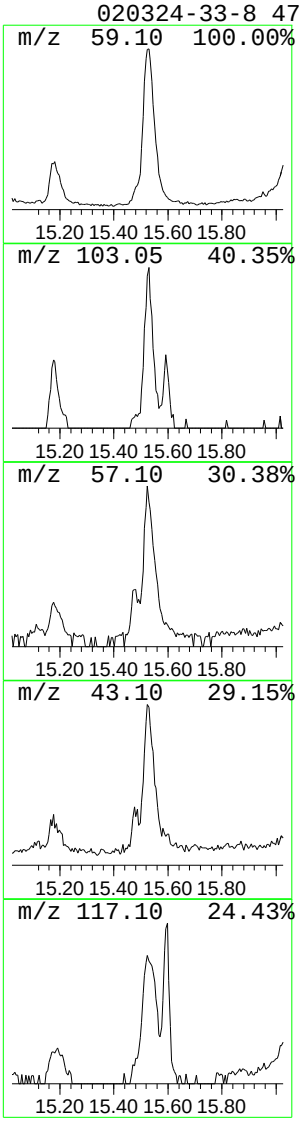
****

Peak Number 7 Methane, diethoxy- Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.52	5.89 ug/ml	333055	Chrysene-d12	15.60

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Methane, diethoxy-	104	C5H12O2	000462-95-3	52
2	Methane, diethoxy-	104	C5H12O2	000462-95-3	50
3	2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	47
4	2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	47





Data File : I:\MSDCHEM\1\DATA\051212\4M60836.D Vial: 21
Acq On : 12 May 2012 22:24 Operator: CAA
Sample : L12050153-01 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

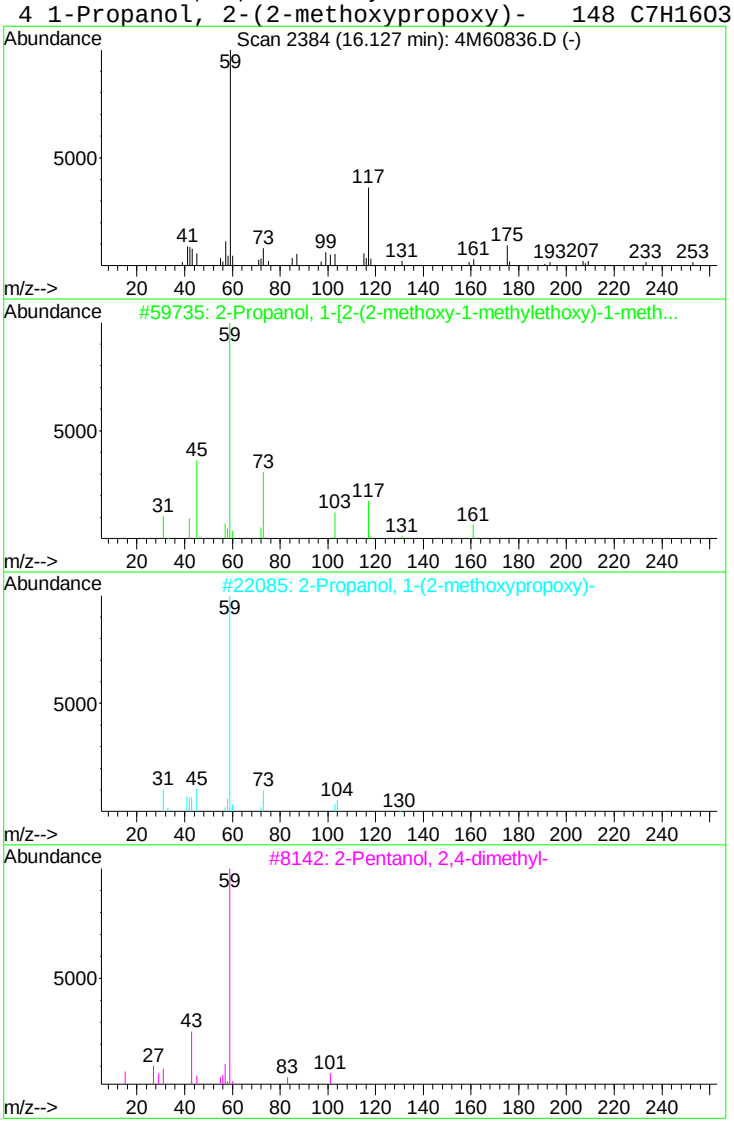
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

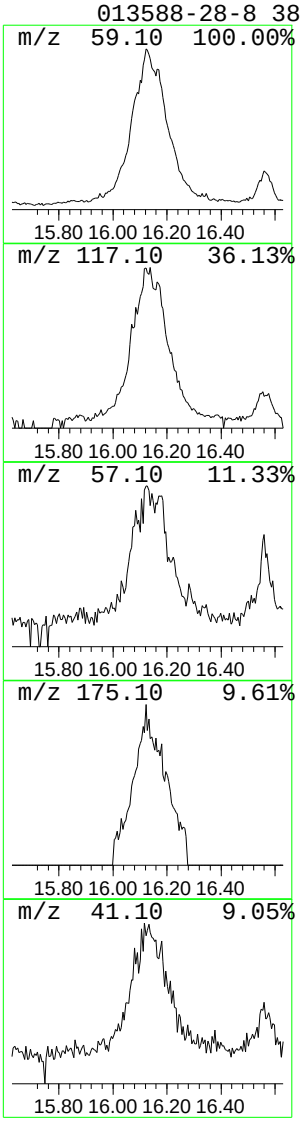
****

Peak Number 8 2-Propanol, 1-[2-(2-methoxy... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.13	8.26 ug/ml	466705	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	45
2	2-Propanol, 1-(2-methoxypropoxy)-	148	C7H16O3	013429-07-7	38
3	2-Pentanol, 2,4-dimethyl-	116	C7H16O	000625-06-9	38
4	1-Propanol, 2-(2-methoxypropoxy)-	148	C7H16O3	013588-28-8	38





Data File : I:\MSDCHEM\1\DATA\051212\4M60836.D Vial: 21
Acq On : 12 May 2012 22:24 Operator: CAA
Sample : L12050153-01 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

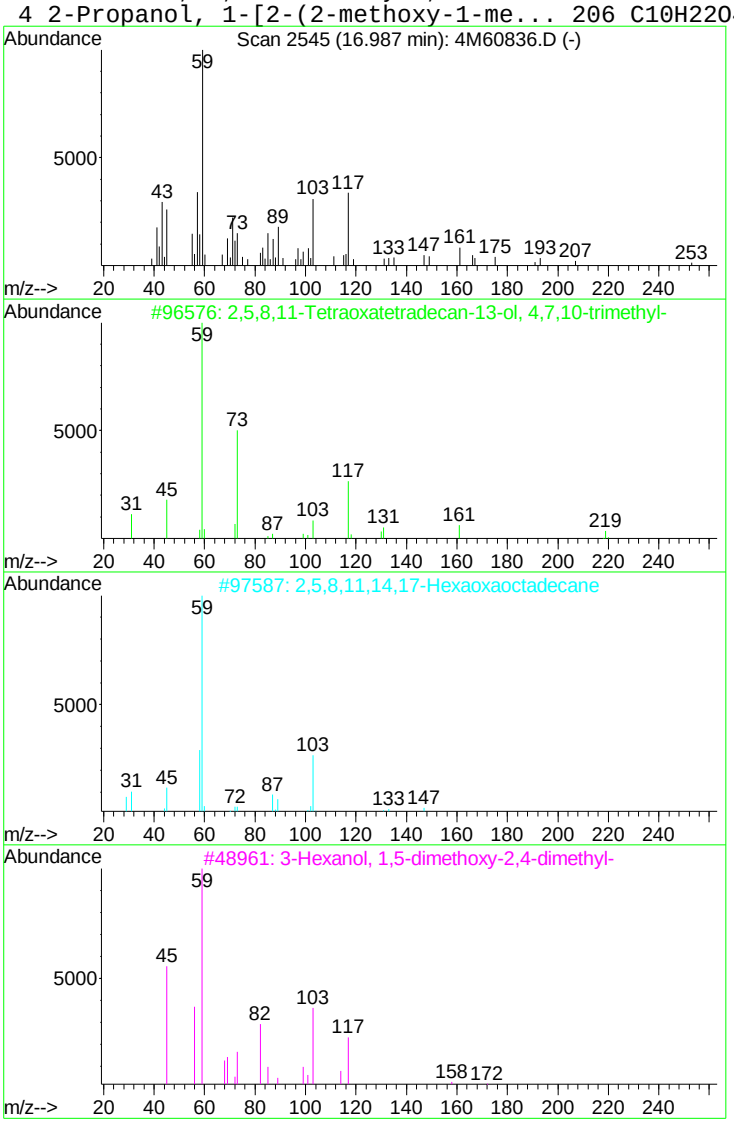
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

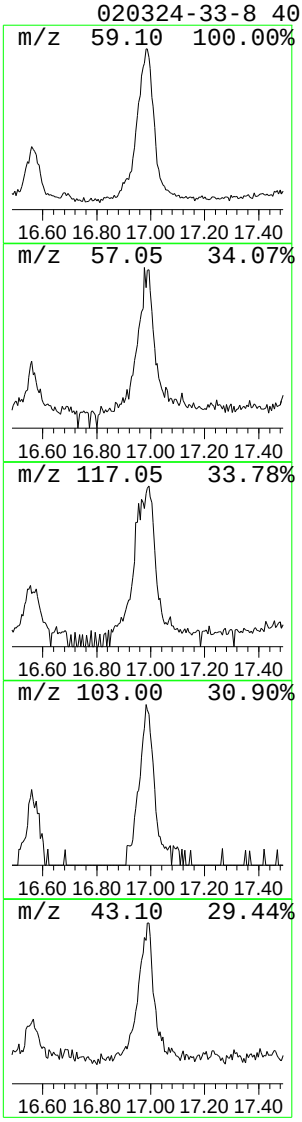
****

Peak Number 9 2,5,8,11-Tetraoxatetradecan... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.99	8.13 ug/ml	439567	Perylene-d12	18.32

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,5,8,11-Tetraoxatetradecan-13-o...	264	C13H28O5	020324-34-9	50
2	2,5,8,11,14,17-Hexaoxaoctadecane	266	C12H26O6	001191-87-3	47
3	3-Hexanol, 1,5-dimethoxy-2,4-dim...	190	C10H22O3	013897-22-8	42
4	2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	40





Data File : I:\MSDCHEM\1\DATA\051212\4M60836.D Vial: 21
Acq On : 12 May 2012 22:24 Operator: CAA
Sample : L12050153-01 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

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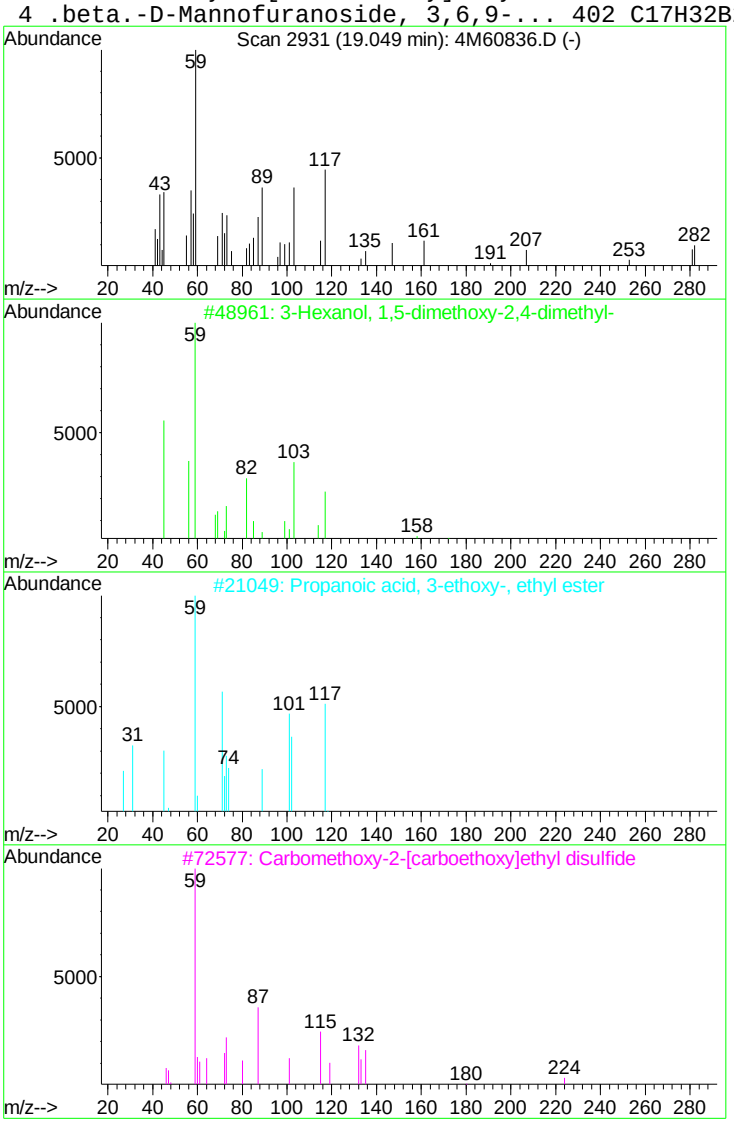
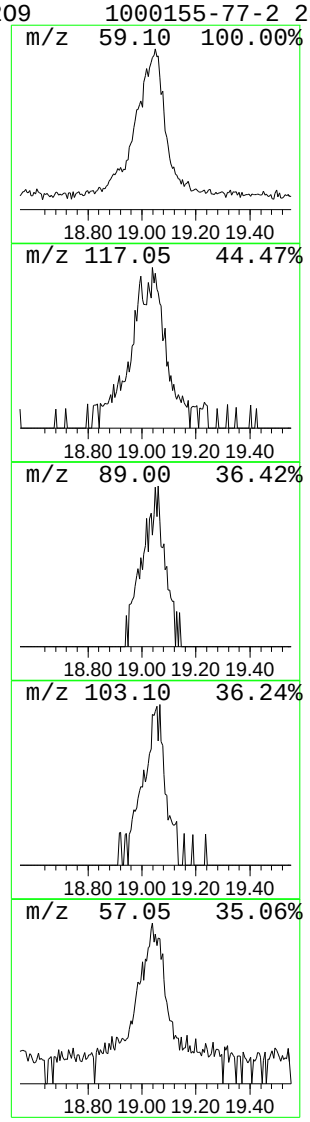
Peak Number 10 3-Hexanol, 1,5-dimethoxy-2,... Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.05	4.86 ug/ml	262364	Perylene-d12	18.32

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Hexanol, 1,5-dimethoxy-2,4-dim...	190	C10H22O3	013897-22-8	43
2	Propanoic acid, 3-ethoxy-, ethyl...	146	C7H14O3	000763-69-9	38
3	Carbomethoxy-2-[carboethoxy]ethy...	224	C7H12O4S2	1000251-20-1	38
4	.beta.-D-Mannofuranoside, 3,6,9-...	402	C17H32B2O9	1000155-77-2	28





Tentatively Identified Compound (LSC) summary

Operator ID: CAA Date Acquired: 12 May 2012 22:24
Data File: I:\MSDCHEM\1\DATA\051212\4M60836.D
Name: L12050153-01
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

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
2-Pentanone, 4-hy...	5.69	6.6	ug/ml	225374	1	7.23	1360310	40.0
2-Propanol, 1-[2-...	12.05	4.2	ug/ml	229993	4	11.91	2183580	40.0
2-Propanol, 1-[2-...	13.43	11.4	ug/ml	623465	4	11.91	2183580	40.0
2-Propanol, 1-[1-...	14.17	4.4	ug/ml	250504	5	15.60	2260440	40.0
1-Propanol, 2-(2-...	14.79	7.9	ug/ml	445181	5	15.60	2260440	40.0
2-Propanol, 1-[1-...	14.82	9.8	ug/ml	553768	5	15.60	2260440	40.0
Methane, diethoxy-	15.52	5.9	ug/ml	333055	5	15.60	2260440	40.0
2-Propanol, 1-[2-...	16.13	8.3	ug/ml	466705	5	15.60	2260440	40.0
2,5,8,11-Tetraoxa...	16.99	8.1	ug/ml	439567	6	18.32	2161470	40.0
3-Hexanol, 1,5-di...	19.05	4.9	ug/ml	262364	6	18.32	2161470	40.0

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051212\4M60837.D Vial: 22
Acq On : 12 May 2012 22:58 Operator: CAA
Sample : L12050153-03 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 14 11:40:53 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	238015	40.00	ug/ml	0.00
30) Naphthalene-d8	8.51	136	882195	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.32	164	492962	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.91	188	882195	40.00	ug/ml	0.00
113) Chrysene-d12	15.60	240	834834	40.00	ug/ml	-0.01
128) Perylene-d12	18.33	264	820062	40.00	ug/ml	-0.01
System Monitoring Compounds						
8) 2-Fluorophenol	6.00	112	627862	87.0038	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 87.00%			
12) Phenol-d5	6.83	99	829052	98.1602	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 98.16%#			
31) Nitrobenzene-d5	7.79	82	394068	52.8137	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 105.62%			
59) 2-Fluorobiphenyl	9.58	172	882079	53.5856	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 107.18%			
86) 2,4,6-Tribromophenol	11.14	330	263360	119.8020	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 119.80%			
117) p-Terphenyl-d14	13.95	244	1007596	65.4838	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 130.96%			

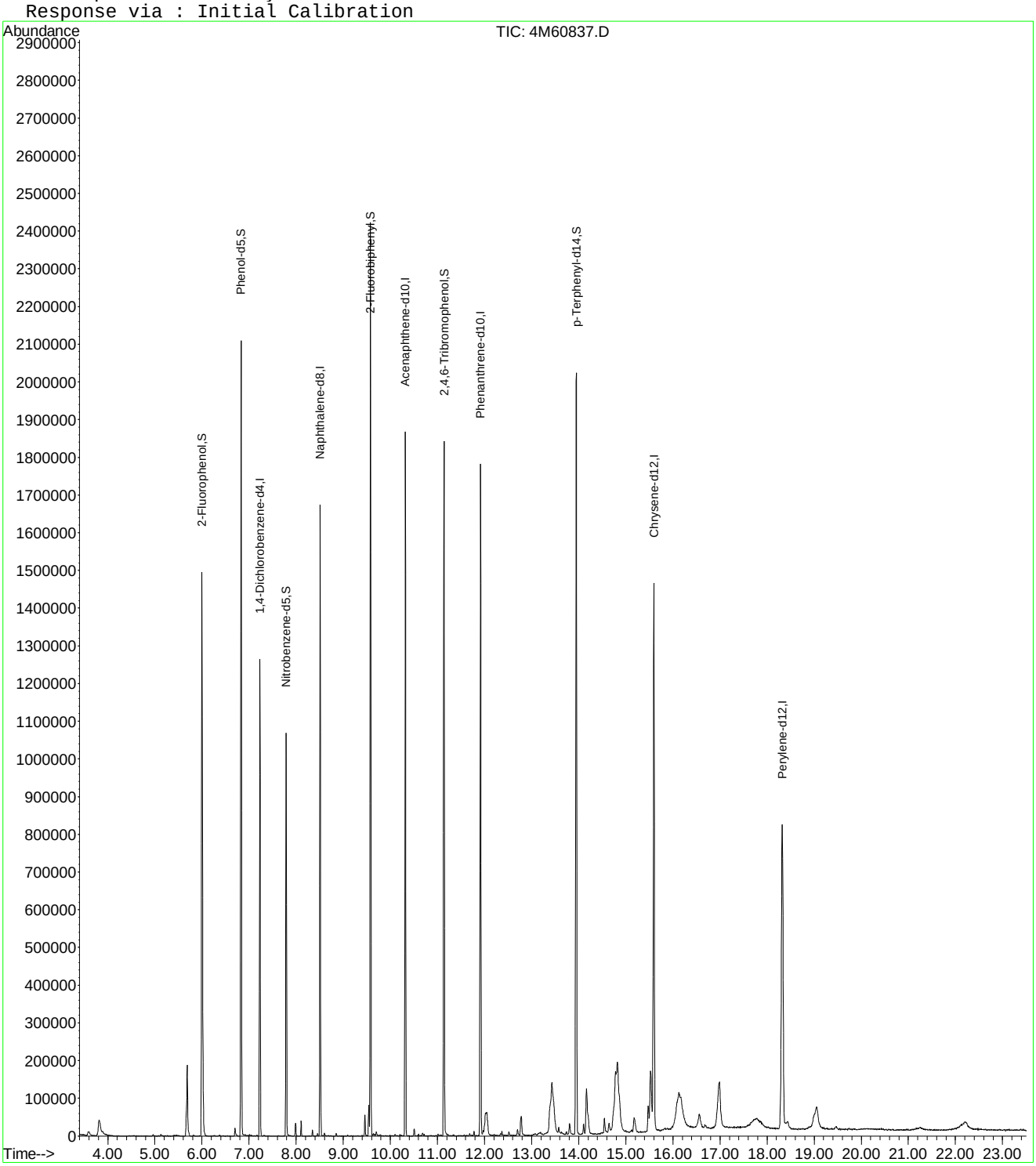
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
4M60837.D MEGAMIX.M Mon May 14 11:46:37 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051212\4M60837.D Vial: 22
Acq On : 12 May 2012 22:58 Operator: CAA
Sample : L12050153-03 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



Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\051212\4M60837.D Vial: 22
Acq On : 12 May 2012 22:58 Operator: CAA
Sample : L12050153-03 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 14 11:54:32 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	238015	40.00	ug/mL	0.00
3) Naphthalene-d8	8.51	136	882195	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.32	164	492962	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.91	188	882195	40.00	ug/mL	0.00

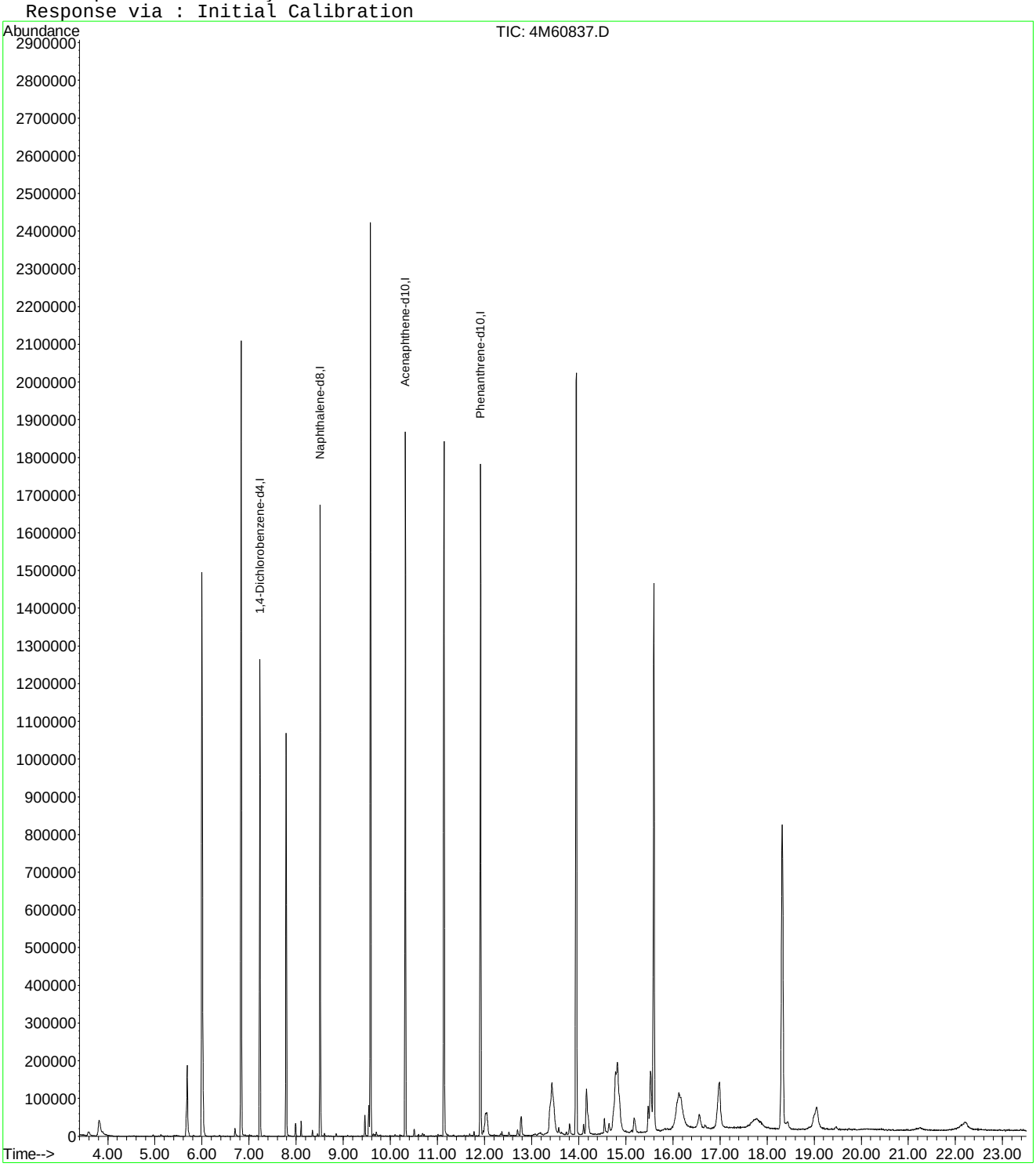
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
4M60837.D TCL.M Mon May 14 11:54:32 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\051212\4M60837.D Vial: 22
Acq On : 12 May 2012 22:58 Operator: CAA
Sample : L12050153-03 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



4M60837.D TCL.M Mon May 14 11:54:32 2012 Page 2

LSC Area Percent Report

Data File : I:\MSDCHEM\1\DATA\051212\4M60837.D Vial: 22
Acq On : 12 May 2012 22:58 Operator: CAA
Sample : L12050153-03 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	3.586	28	37	52	rBV2	10908	36159	1.24%	0.119%
2	3.816	64	80	91	rBV2	41883	146974	5.05%	0.484%
3	5.686	421	430	443	rBB2	187563	307439	10.56%	1.013%
4	6.001	482	489	507	rBB	1495956	2084099	71.59%	6.865%
5	6.829	638	644	657	rBV	2109830	2272939	78.08%	7.487%
6	7.230	713	719	728	rBB	1264189	1347394	46.28%	4.438%
7	7.791	816	824	842	rBB	1068796	1158993	39.81%	3.818%
8	7.988	855	861	867	rBB2	34650	34141	1.17%	0.112%
9	8.106	878	883	888	rBB	40801	35580	1.22%	0.117%
10	8.512	953	959	972	rBB	1674816	1749436	60.09%	5.763%
11	9.457	1130	1136	1146	rBB	55609	64872	2.23%	0.214%
12	9.543	1146	1152	1154	rBV	82541	82498	2.83%	0.272%
13	9.580	1154	1159	1167	rVB	2421796	2453821	84.29%	8.083%
14	10.317	1291	1297	1306	rBB	1868272	1928955	66.26%	6.354%
15	11.140	1445	1451	1465	rBV	1843023	2113491	72.60%	6.962%
16	11.915	1590	1596	1603	rBV	1782120	2125194	73.00%	7.001%
17	12.048	1609	1621	1636	rVB4	61358	251829	8.65%	0.830%
18	12.780	1751	1758	1774	rVB2	51478	105528	3.62%	0.348%
19	13.432	1845	1880	1903	rBV	139017	791603	27.19%	2.608%
20	13.806	1942	1950	1962	rVB2	28986	54262	1.86%	0.179%
21	13.950	1967	1977	1992	rVB	2020229	2911189	100.00%	9.590%
22	14.105	2000	2006	2011	rBV4	27524	41119	1.41%	0.135%
23	14.169	2011	2018	2035	rVV2	119906	315598	10.84%	1.040%
24	14.548	2081	2089	2101	rBV2	39533	68452	2.35%	0.225%
25	14.645	2101	2107	2114	rVV8	25397	49936	1.72%	0.164%
26	14.783	2114	2133	2135	rVV	162348	493699	16.96%	1.626%
27	14.821	2136	2140	2171	rVB2	186076	732069	25.15%	2.411%
28	15.179	2201	2207	2224	rVB4	40025	112361	3.86%	0.370%
29	15.478	2250	2263	2266	rBV	70790	127234	4.37%	0.419%
30	15.526	2266	2272	2279	rVV2	161208	415712	14.28%	1.369%
31	15.595	2279	2285	2297	rVB	1451730	2195723	75.42%	7.233%
32	16.124	2360	2384	2390	rBV2	93180	494030	16.97%	1.627%
33	16.557	2453	2465	2483	rVB6	35469	130725	4.49%	0.431%
34	16.990	2524	2546	2567	rBV4	122081	541881	18.61%	1.785%
35	18.320	2782	2795	2809	rBV	807968	2101095	72.17%	6.921%
36	18.437	2810	2817	2825	rVB	16085	49016	1.68%	0.161%
37	19.052	2911	2932	2953	rVB5	56099	328285	11.28%	1.081%
38	19.458	2999	3008	3020	rVB5	8938	29577	1.02%	0.097%
39	22.188	3517	3519	3542	rVB5	16108	74686	2.57%	0.246%

Sum of corrected areas: 30357594

```
File       : I:\MSDCHEM\1\DATA\051212\4M60837.D
Operator   : CAA
Acquired   : 12 May 2012  22:58     using AcqMethod BNATEST
Instrument :   HPMS4
Sample Name: L12050153-03
Misc Info  : 1,1
Vial Number: 22
Quant File :MEGAMIX.RES (RTE Integrator)
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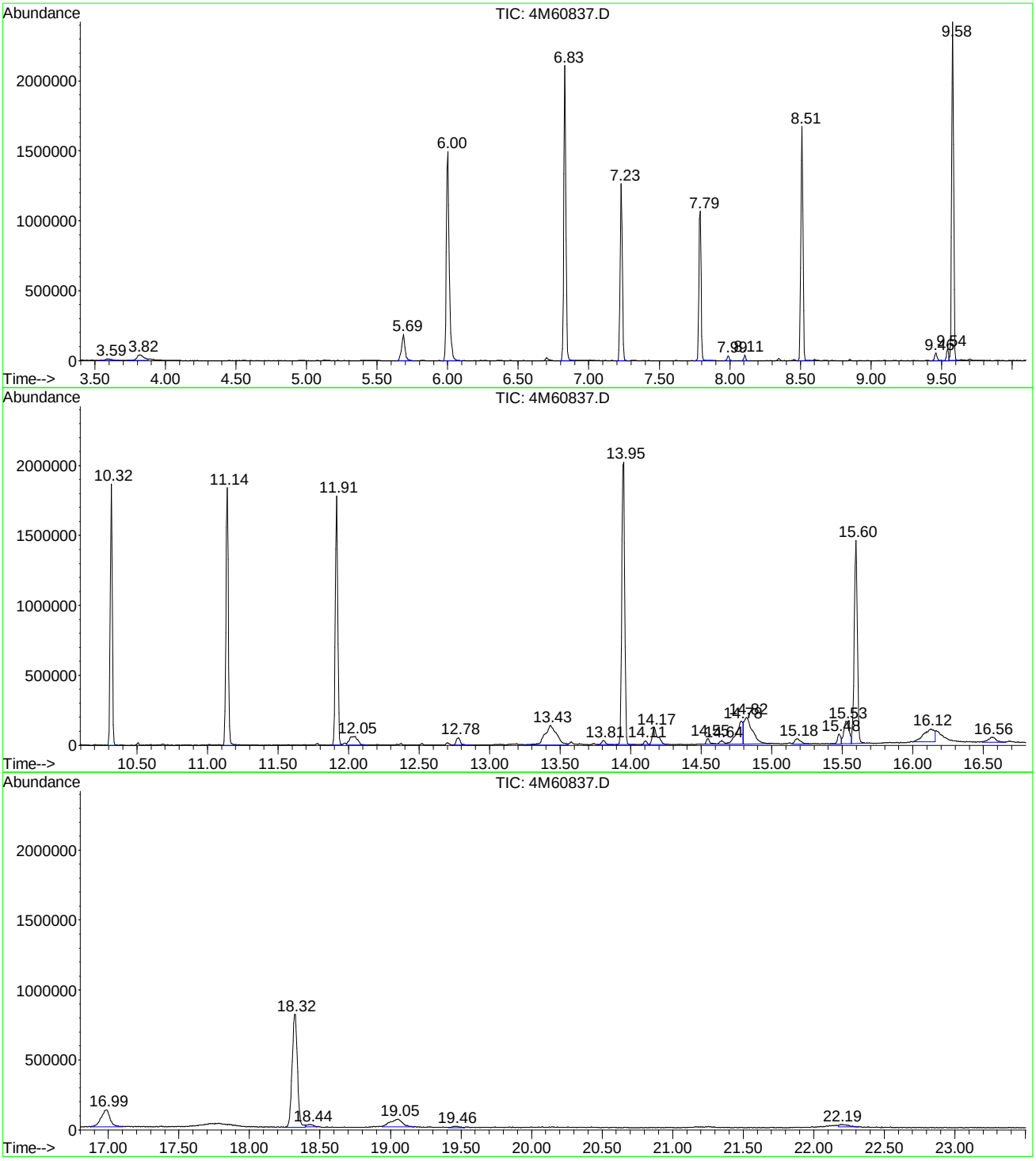


Data File : I:\MSDCHEM\1\DATA\051212\4M60837.D Vial: 22
Acq On : 12 May 2012 22:58 Operator: CAA
Sample : L12050153-03 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

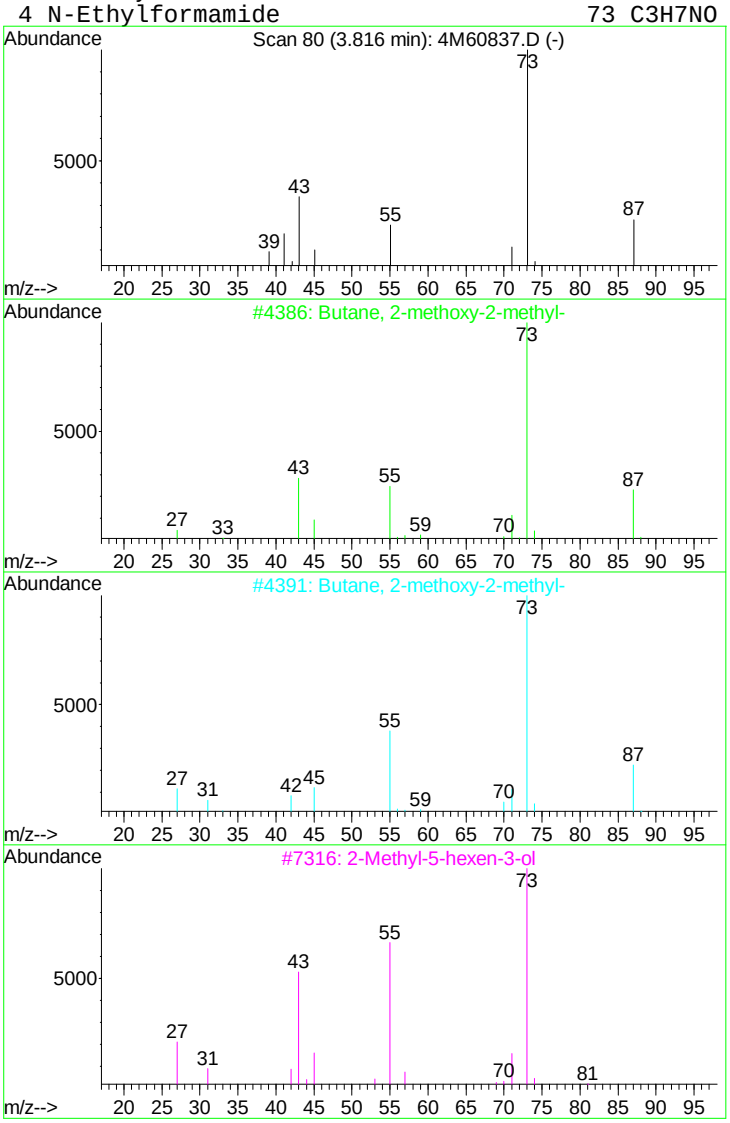
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

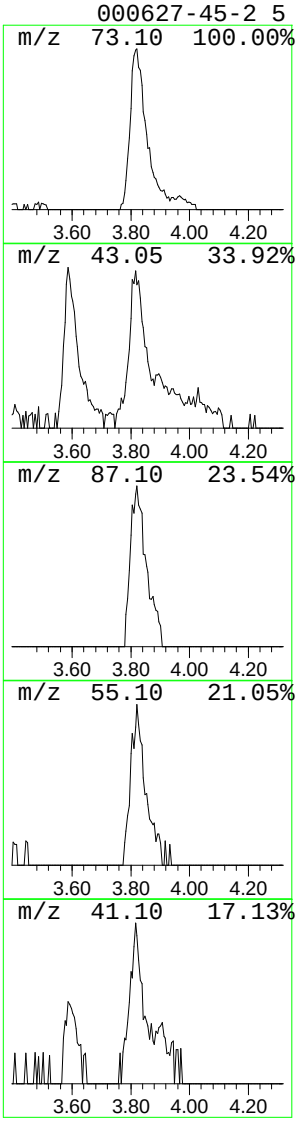
****

Peak Number 1 Butane, 2-methoxy-2-methyl- Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.82	4.36 ug/ml	146974	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	40
3	2-Methyl-5-hexen-3-ol	114	C7H14O	032815-70-6	9
4	N-Ethylformamide	73	C3H7NO	000627-45-2	5





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Sample : L12050153-03 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

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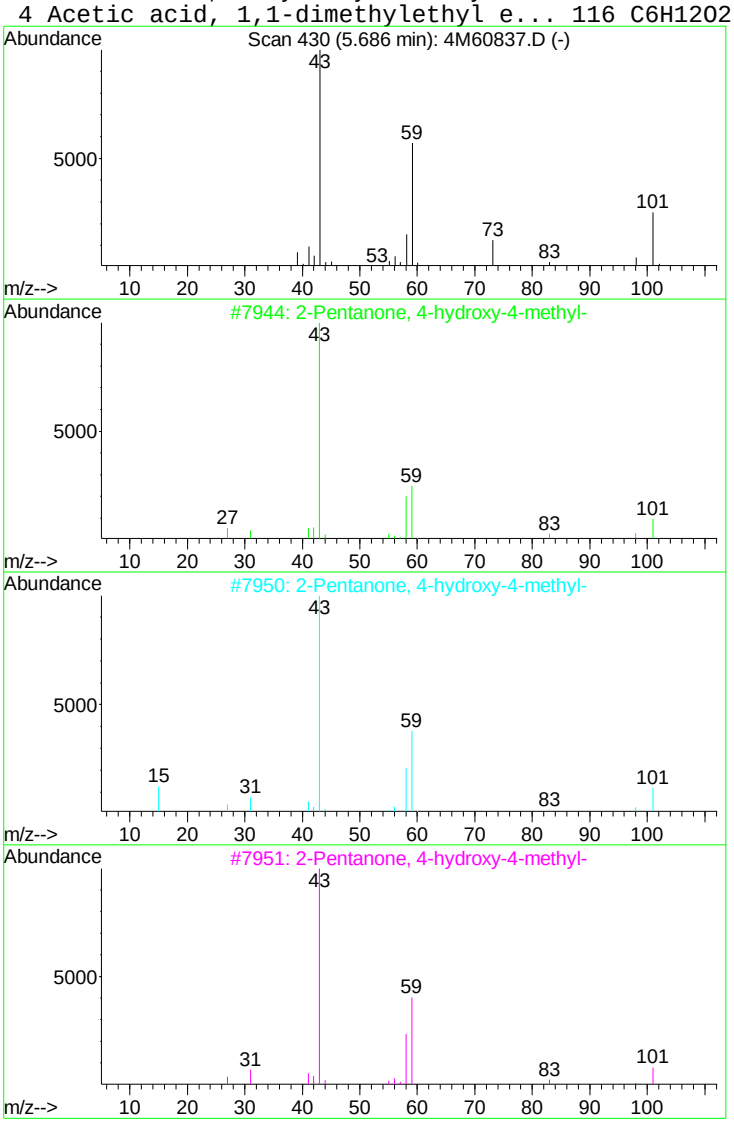
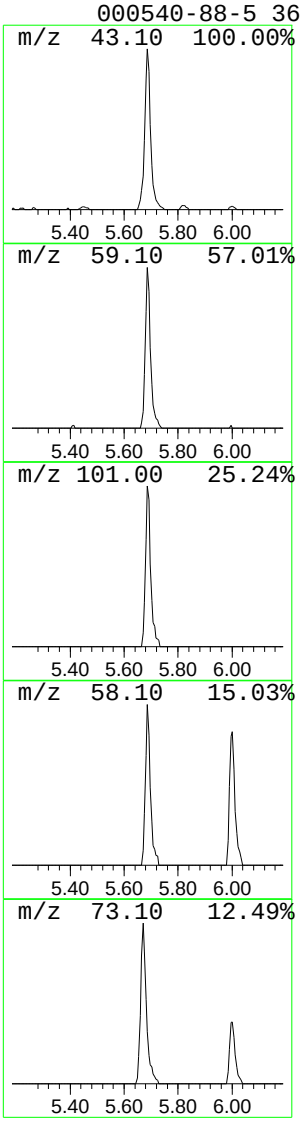
Peak Number 2 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.69	9.13 ug/ml	307439	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	45
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	38
4	Acetic acid, 1,1-dimethylethyl e...	116	C6H12O2	000540-88-5	36





Data File : I:\MSDCHEM\1\DATA\051212\4M60837.D Vial: 22
Acq On : 12 May 2012 22:58 Operator: CAA
Sample : L12050153-03 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

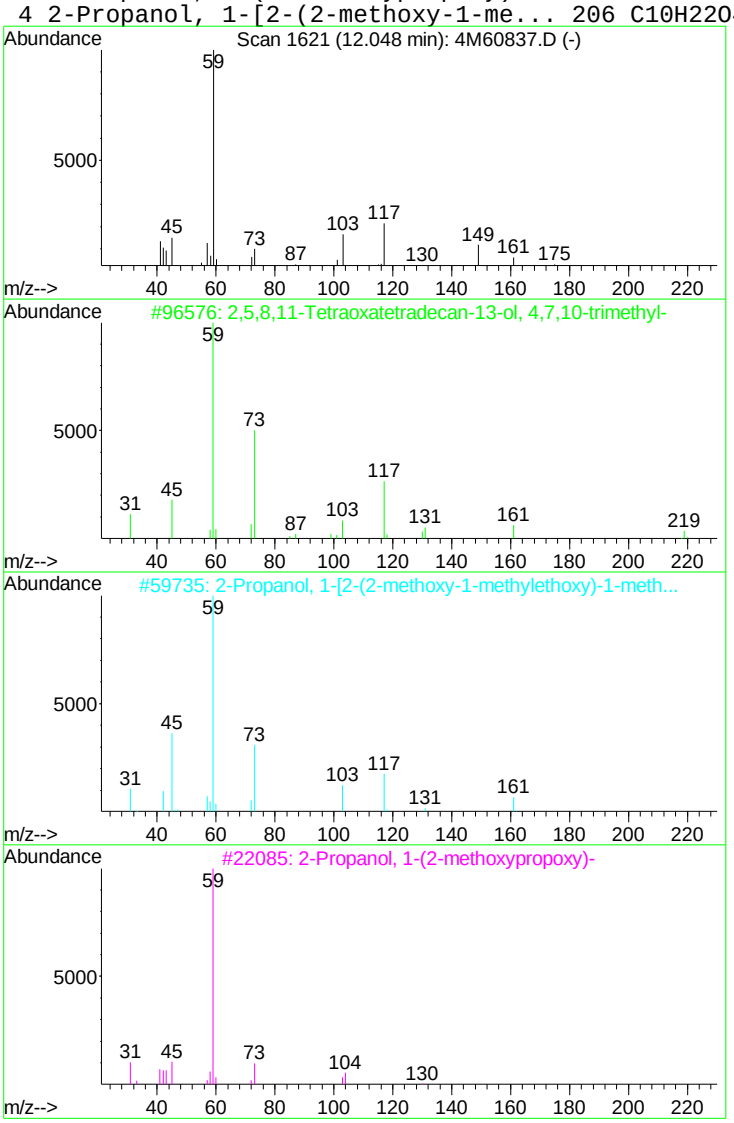
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

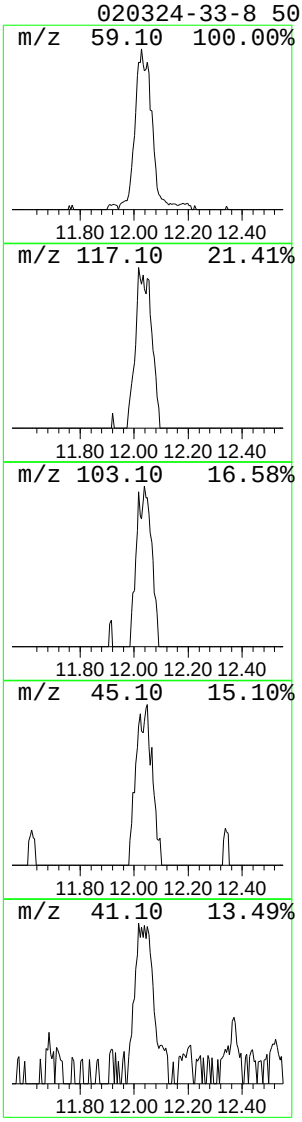
****

Peak Number 3 2,5,8,11-Tetraoxatetradecan... Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.05	4.74 ug/ml	251829	Phenanthrene-d10	11.91

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,5,8,11-Tetraoxatetradecan-13-o...	264	C13H28O5	020324-34-9	59
2	2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	56
3	2-Propanol, 1-(2-methoxypropoxy)-	148	C7H16O3	013429-07-7	50
4	2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	50





Data File : I:\MSDCHEM\1\DATA\051212\4M60837.D Vial: 22
Acq On : 12 May 2012 22:58 Operator: CAA
Sample : L12050153-03 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

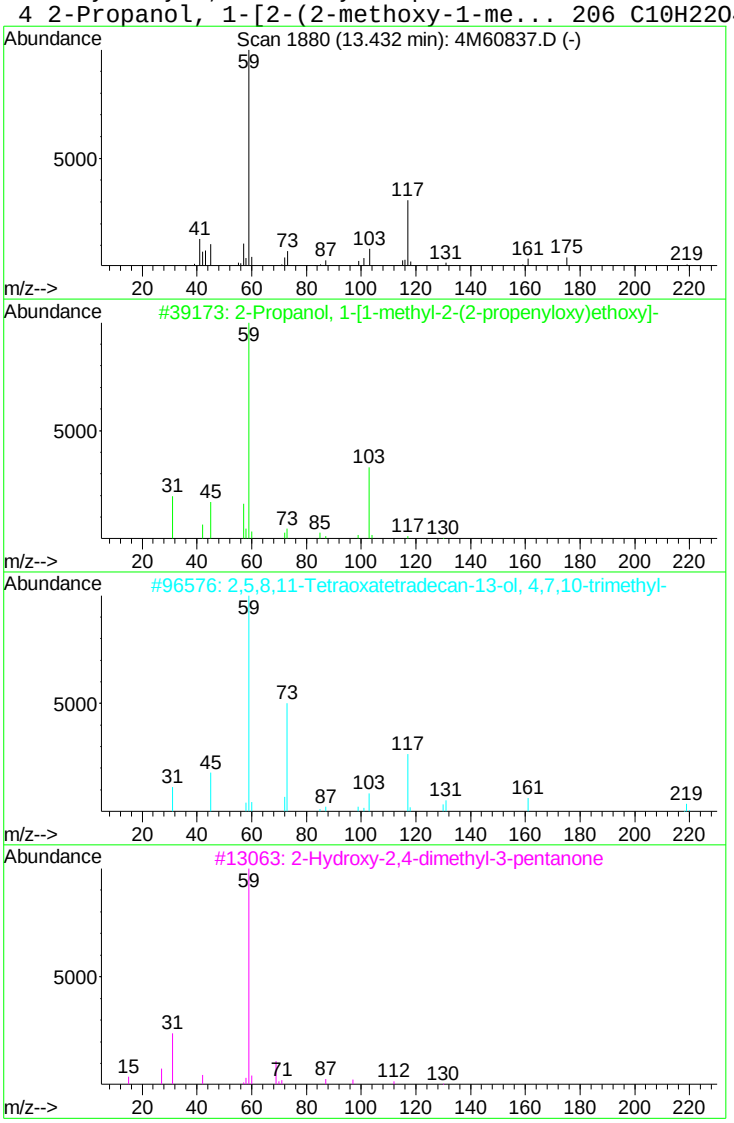
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

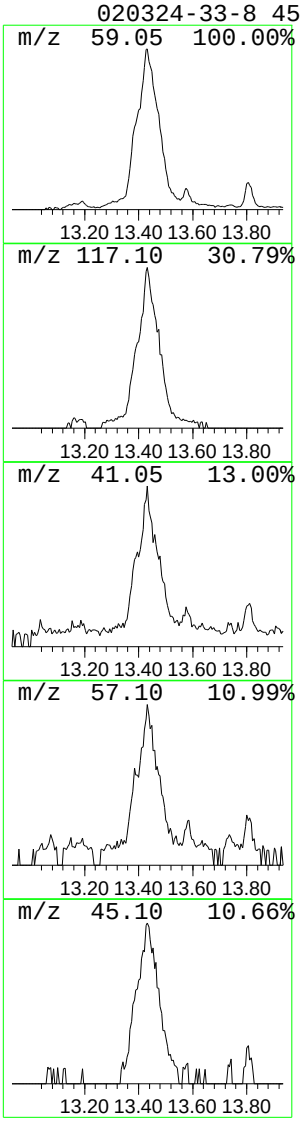
****

Peak Number 4 2-Propanol, 1-[1-methyl-2-(... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.43	14.90 ug/ml	791603	Phenanthrene-d10	11.91

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	2,5,8,11-Tetraoxatetradecan-13-o...	264	C13H28O5	020324-34-9	50
3	2-Hydroxy-2,4-dimethyl-3-pentanone	130	C7H14O2	003212-67-7	47
4	2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	45





Data File : I:\MSDCHEM\1\DATA\051212\4M60837.D Vial: 22
Acq On : 12 May 2012 22:58 Operator: CAA
Sample : L12050153-03 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

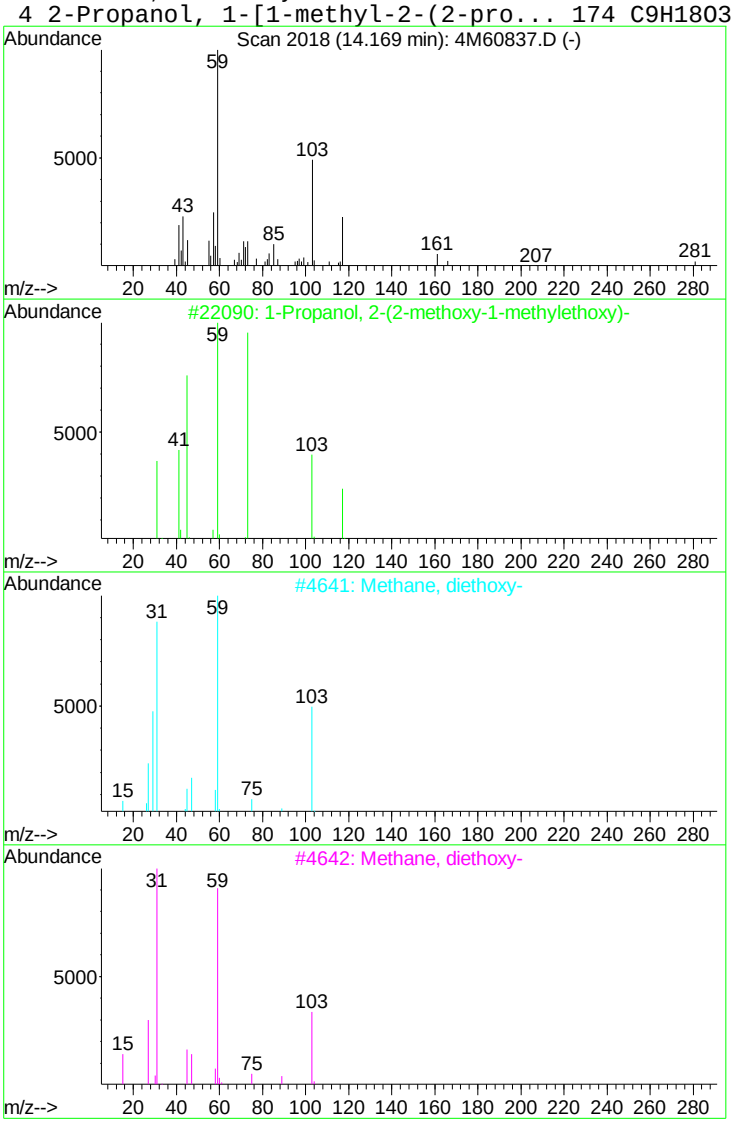
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

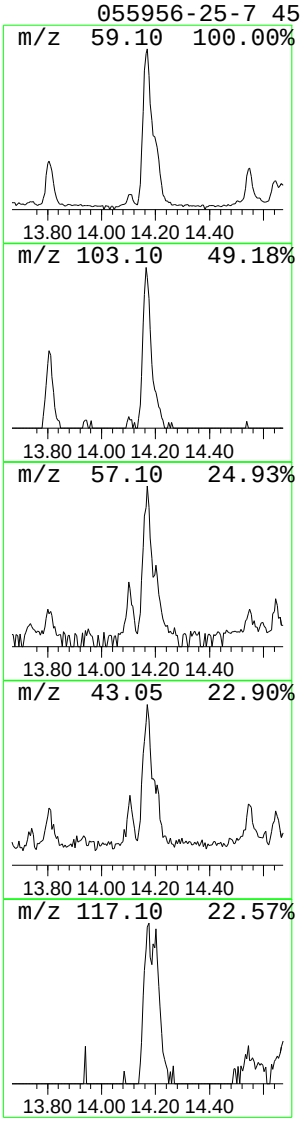
****

Peak Number 5 1-Propanol, 2-(2-methoxy-1-... Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.17	5.75 ug/ml	315598	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	Methane, diethoxy-	104	C5H12O2	000462-95-3	47
3	Methane, diethoxy-	104	C5H12O2	000462-95-3	47
4	2-Propanol, 1-[1-methyl-2-(2-pro...	174	C9H18O3	055956-25-7	45





Data File : I:\MSDCHEM\1\DATA\051212\4M60837.D Vial: 22
Acq On : 12 May 2012 22:58 Operator: CAA
Sample : L12050153-03 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

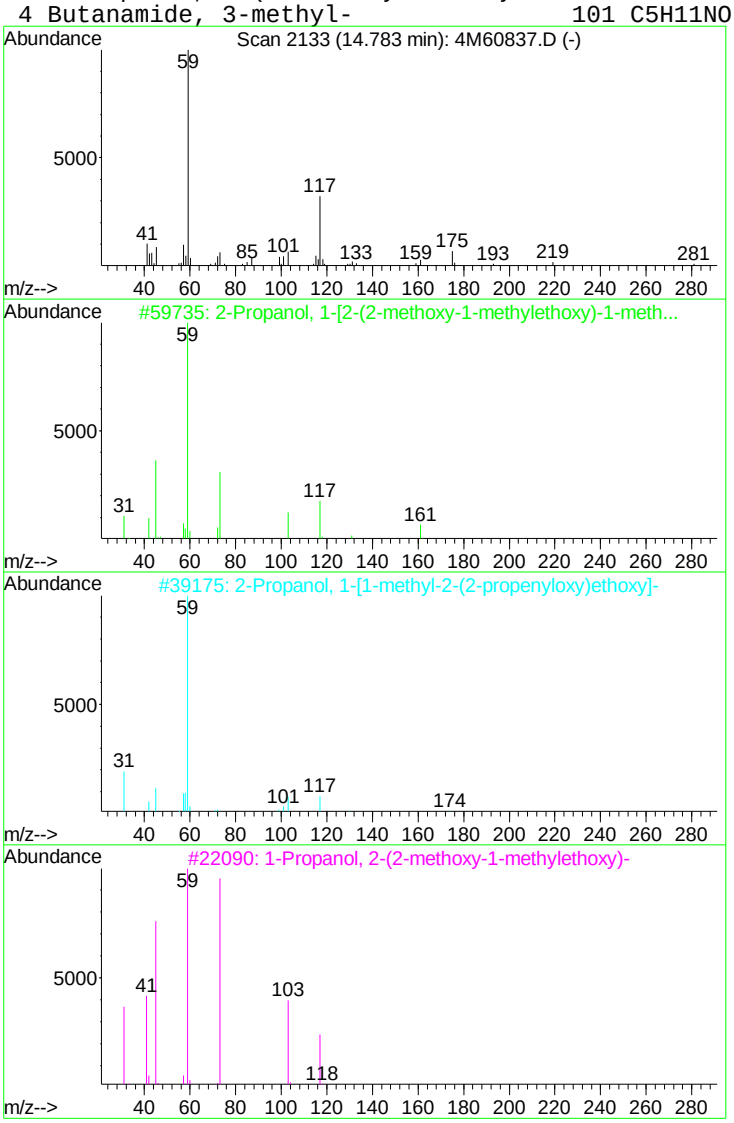
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

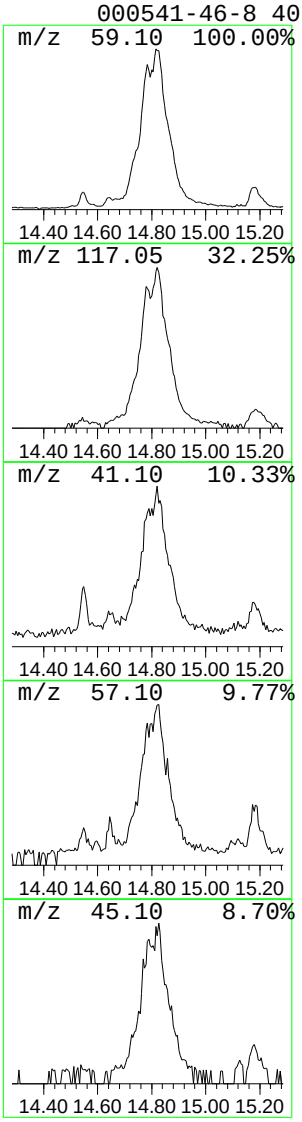
****

Peak Number 6 2-Propanol, 1-[2-(2-methoxy... Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.78	8.99 ug/ml	493699	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	45
2	2-Propanol, 1-[1-methyl-2-(2-pro...	174	C9H18O3	055956-25-7	45
3	1-Propanol, 2-(2-methoxy-1-methy...	148	C7H16O3	055956-21-3	45
4	Butanamide, 3-methyl-	101	C5H11NO	000541-46-8	40





Data File : I:\MSDCHEM\1\DATA\051212\4M60837.D Vial: 22
Acq On : 12 May 2012 22:58 Operator: CAA
Sample : L12050153-03 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

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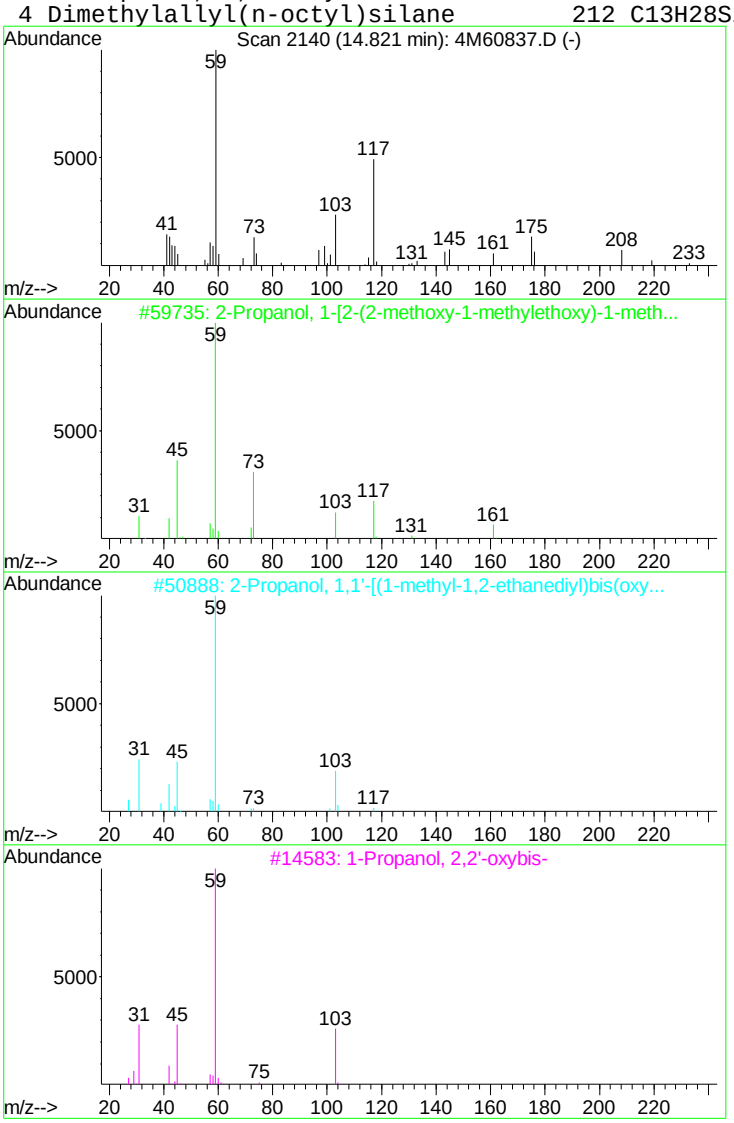
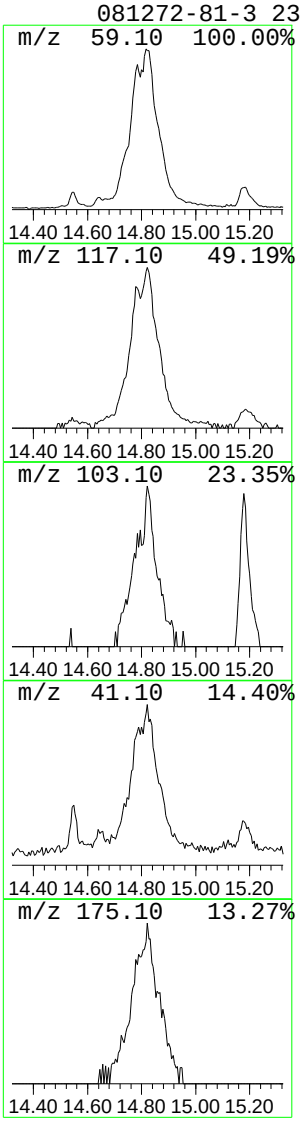
Peak Number 7 2-Propanol, 1-[2-(2-methoxy... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.82	13.34 ug/ml	732069	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-Propanol, 1,1'-[(1-methyl-1,2-...	192	C9H20O4	001638-16-0	25
3	1-Propanol, 2,2'-oxybis-	134	C6H14O3	000108-61-2	23
4	Dimethylallyl(n-octyl)silane	212	C13H28Si	081272-81-3	23





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Acq On : 12 May 2012 22:58 Operator: CAA
Sample : L12050153-03 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

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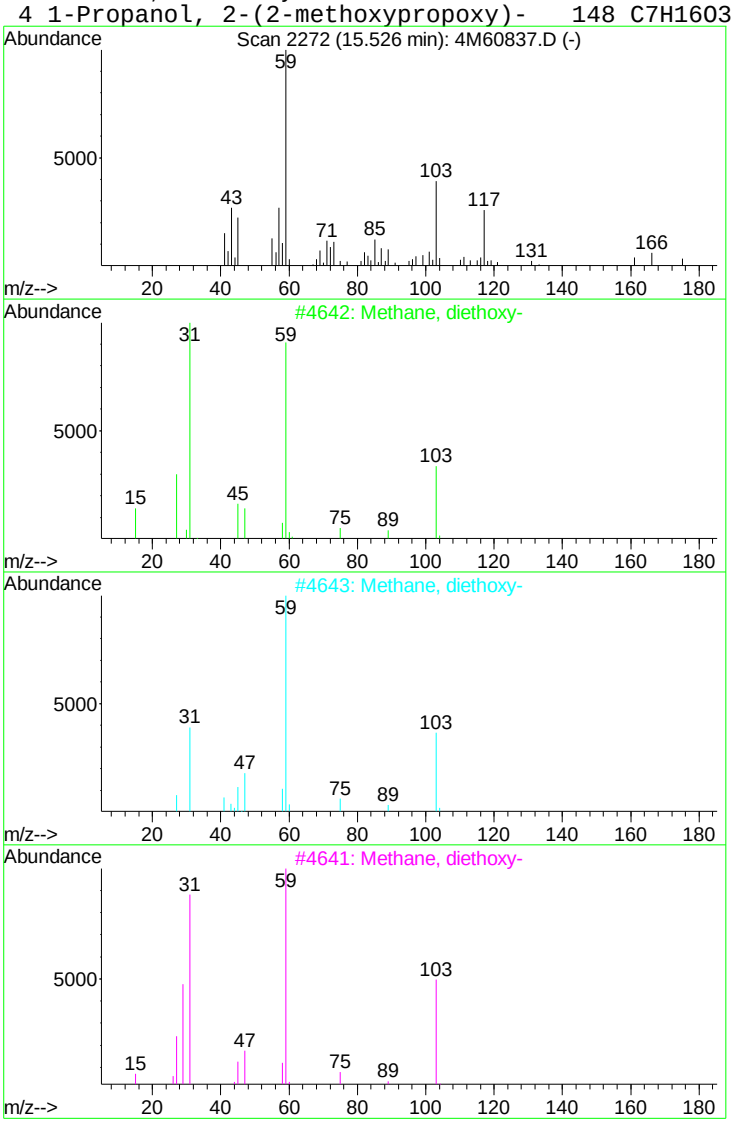
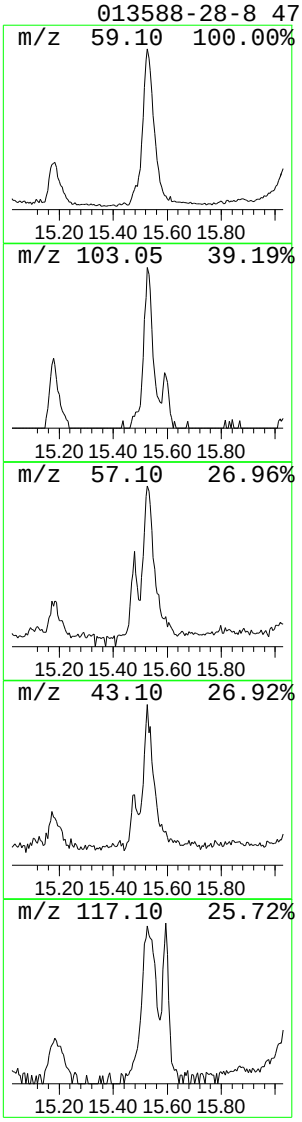
Peak Number 8 Methane, diethoxy- Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.53	7.57 ug/ml	415712	Chrysene-d12	15.60

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Methane, diethoxy-	104	C5H12O2	000462-95-3	50
2	Methane, diethoxy-	104	C5H12O2	000462-95-3	49
3	Methane, diethoxy-	104	C5H12O2	000462-95-3	47
4	1-Propanol, 2-(2-methoxypropoxy)-	148	C7H16O3	013588-28-8	47





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Acq On : 12 May 2012 22:58 Operator: CAA
Sample : L12050153-03 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

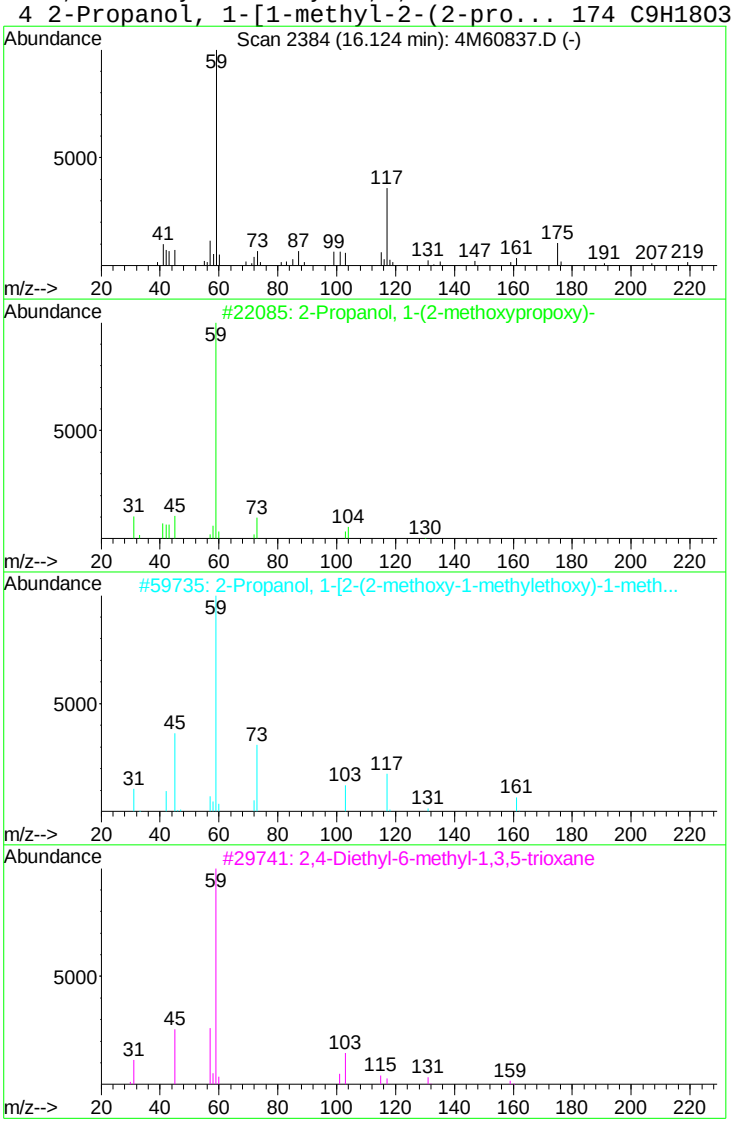
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

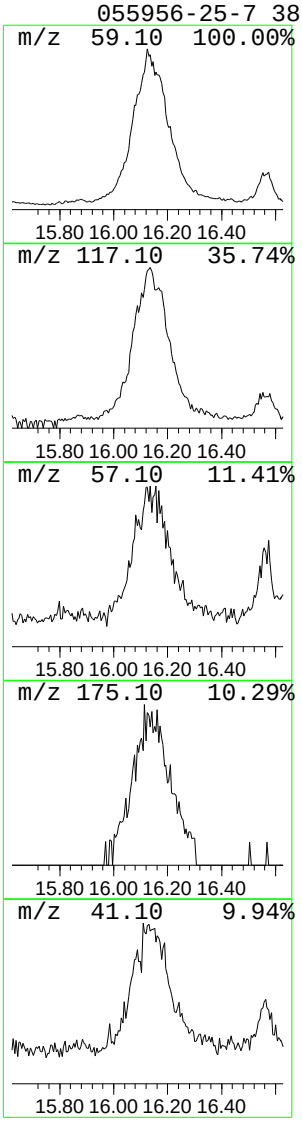
****

Peak Number 9 2-Propanol, 1-(2-methoxypro... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.12	9.00 ug/ml	494030	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-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	40
3	2,4-Diethyl-6-methyl-1,3,5-trioxane	160	C8H16O3	117888-04-7	38
4	2-Propanol, 1-[1-methyl-2-(2-pro...	174	C9H18O3	055956-25-7	38





Data File : I:\MSDCHEM\1\DATA\051212\4M60837.D Vial: 22
Acq On : 12 May 2012 22:58 Operator: CAA
Sample : L12050153-03 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

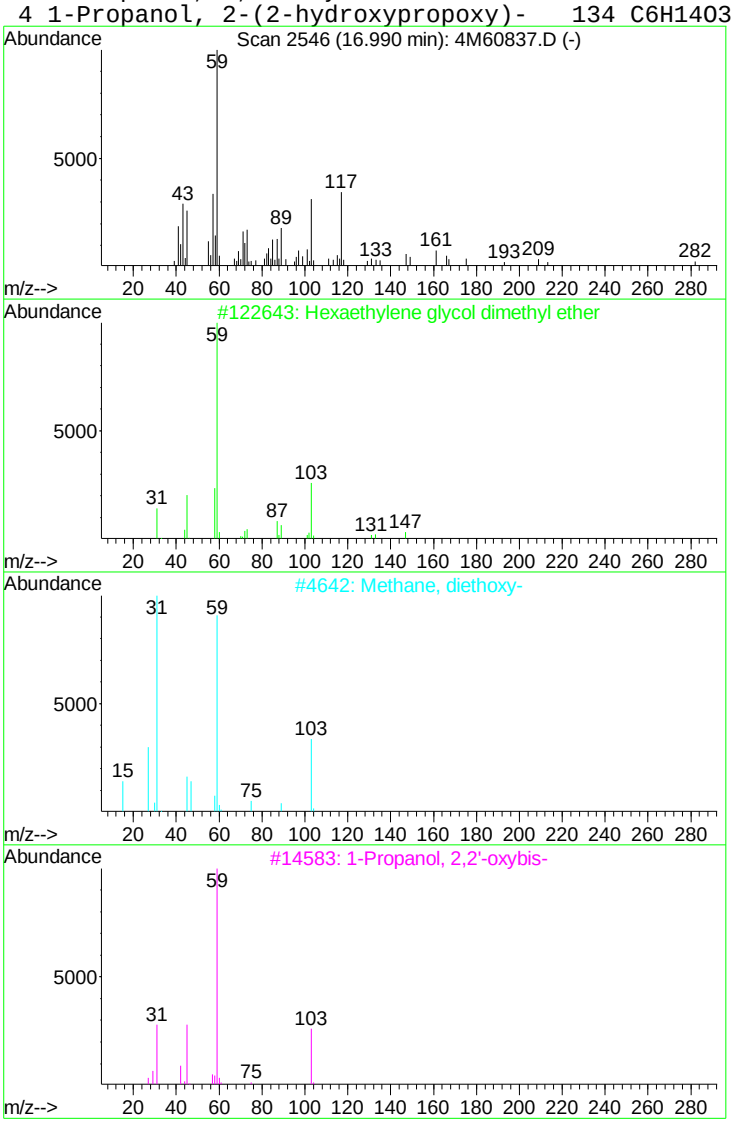
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

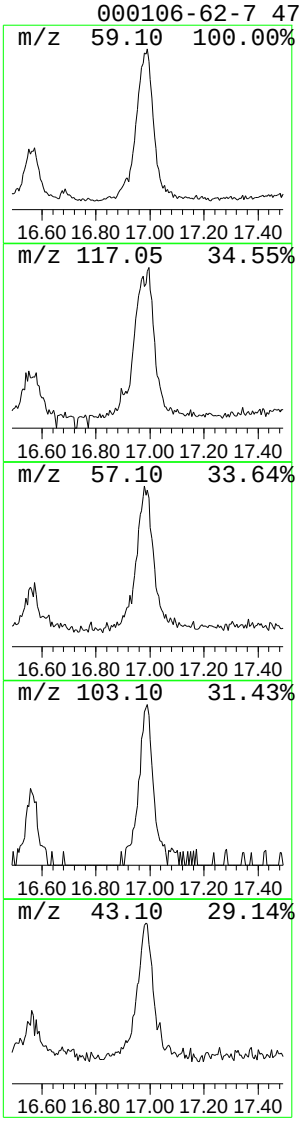
****

Peak Number 10 Hexaethylene glycol dimethy... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.99	10.32 ug/ml	541881	Perylene-d12	18.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexaethylene glycol dimethyl ether	310	C14H30O7	001072-40-8	59
2	Methane, diethoxy-	104	C5H12O2	000462-95-3	49
3	1-Propanol, 2,2'-oxybis-	134	C6H14O3	000108-61-2	47
4	1-Propanol, 2-(2-hydroxypropoxy)-	134	C6H14O3	000106-62-7	47





Data File : I:\MSDCHEM\1\DATA\051212\4M60837.D Vial: 22
Acq On : 12 May 2012 22:58 Operator: CAA
Sample : L12050153-03 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

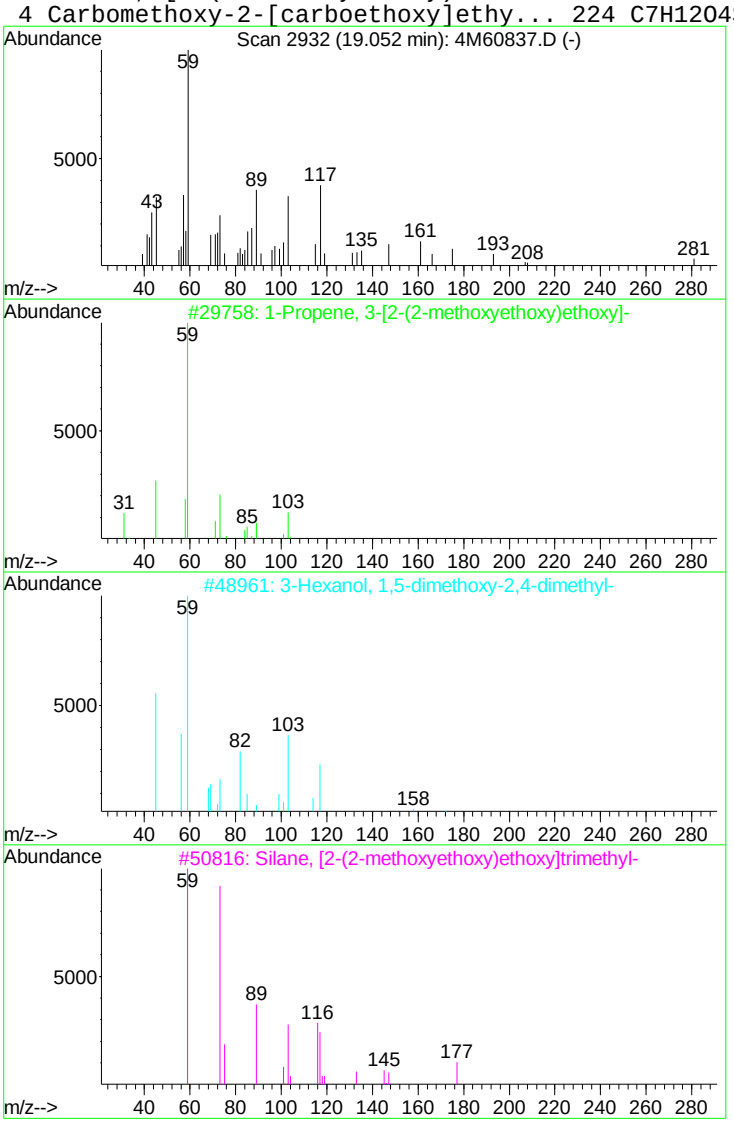
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

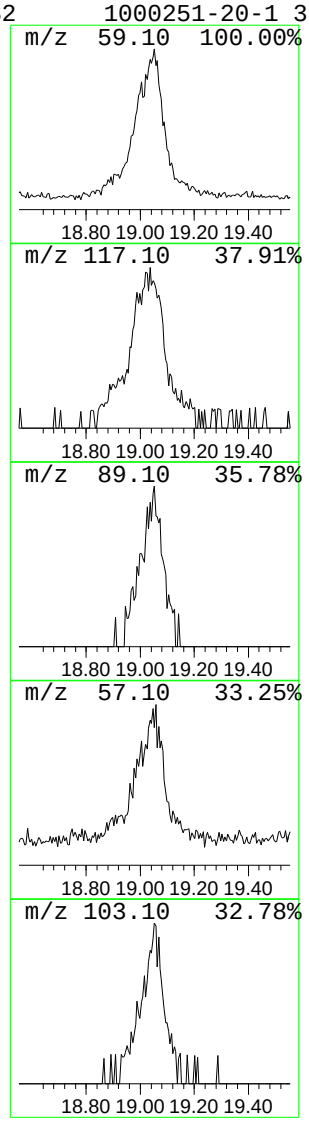
****

Peak Number 11 1-Propene, 3-[2-(2-methoxye... Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.05	6.25 ug/ml	328285	Perylene-d12	18.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Propene, 3-[2-(2-methoxyethoxy...	160	C8H16O3	013752-97-1	43
2	3-Hexanol, 1,5-dimethoxy-2,4-dim...	190	C10H22O3	013897-22-8	42
3	Silane, [2-(2-methoxyethoxy)etho...	192	C8H20O3Si	062199-57-9	38
4	Carbomethoxy-2-[carboethoxy]ethy...	224	C7H12O4S2	1000251-20-1	38





Tentatively Identified Compound (LSC) summary

Operator ID: CAA Date Acquired: 12 May 2012 22:58
Data File: I:\MSDCHEM\1\DATA\051212\4M60837.D
Name: L12050153-03
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

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Butane, 2-methoxy...	3.82	4.4	ug/ml	146974	1	7.23	1347390	40.0
2-Pentanone, 4-hy...	5.69	9.1	ug/ml	307439	1	7.23	1347390	40.0
2,5,8,11-Tetraoxa...	12.05	4.7	ug/ml	251829	4	11.91	2125190	40.0
2-Propanol, 1-[1-...	13.43	14.9	ug/ml	791603	4	11.91	2125190	40.0
1-Propanol, 2-(2-...	14.17	5.7	ug/ml	315598	5	15.60	2195720	40.0
2-Propanol, 1-[2-...	14.78	9.0	ug/ml	493699	5	15.60	2195720	40.0
2-Propanol, 1-[2-...	14.82	13.3	ug/ml	732069	5	15.60	2195720	40.0
Methane, diethoxy-	15.53	7.6	ug/ml	415712	5	15.60	2195720	40.0
2-Propanol, 1-(2-...	16.12	9.0	ug/ml	494030	5	15.60	2195720	40.0
Hexaethylene glyc...	16.99	10.3	ug/ml	541881	6	18.33	2101100	40.0
1-Propene, 3-[2-(...	19.05	6.2	ug/ml	328285	6	18.33	2101100	40.0

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051312\4M60847.D Vial: 10
Acq On : 13 May 2012 16:45 Operator: MDC
Sample : L12050153-05 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 13:49:29 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 : Tue May 15 13:49:15 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

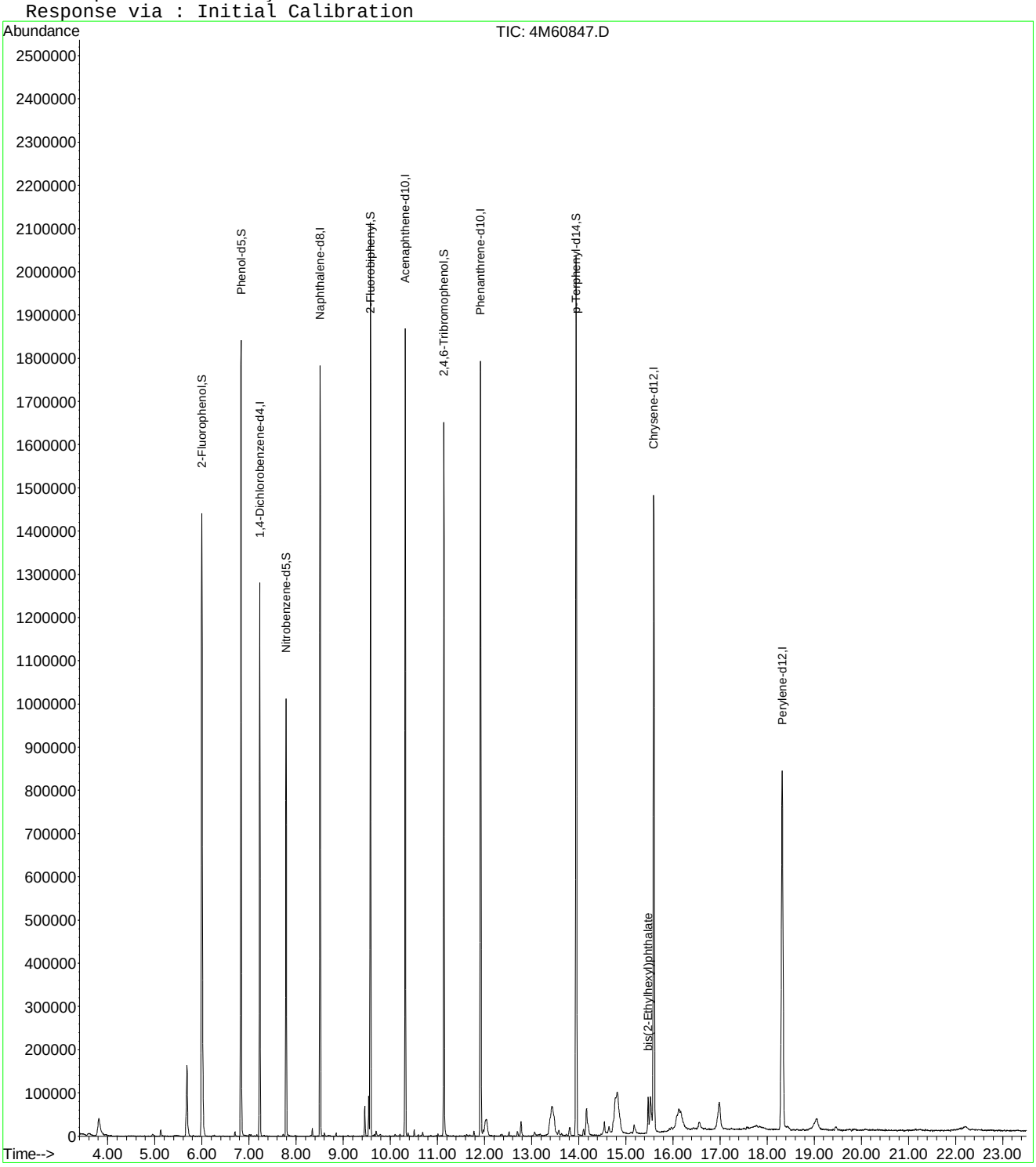
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.23	152	248028	40.00	ug/ml	0.00
30) Naphthalene-d8	8.51	136	928889	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.32	164	518204	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.92	188	930259	40.00	ug/ml	0.00
113) Chrysene-d12	15.60	240	875598	40.00	ug/ml	-0.01
128) Perylene-d12	18.32	264	835575	40.00	ug/ml	-0.02
System Monitoring Compounds						
8) 2-Fluorophenol	6.00	112	604259	80.3528	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 80.35%			
12) Phenol-d5	6.83	99	769467	87.4273	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 87.43%			
31) Nitrobenzene-d5	7.79	82	353384	44.9804	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 89.96%			
59) 2-Fluorobiphenyl	9.58	172	751454	43.4266	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 86.86%			
86) 2,4,6-Tribromophenol	11.14	330	226380	97.9637	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 97.96%			
117) p-Terphenyl-d14	13.95	244	966640	59.8974	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 119.80%			
Target Compounds						Qvalue
124) bis(2-Ethylhexyl)phthalate	15.48	149	34219	2.1051	ug/ml#	98

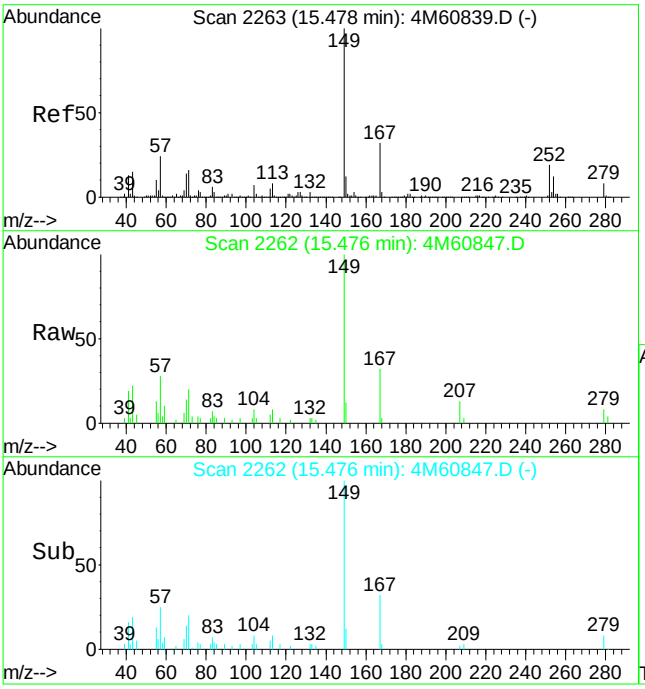
(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051312\4M60847.D Vial: 10
Acq On : 13 May 2012 16:45 Operator: MDC
Sample : L12050153-05 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 13:49 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 : Tue May 15 13:49:15 2012
Response via : Initial Calibration

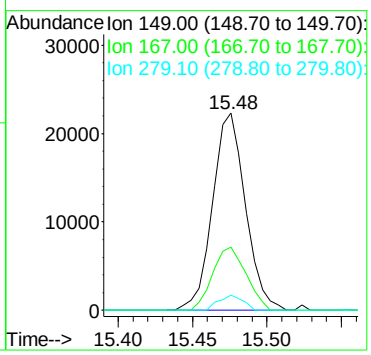




#124
bis(2-Ethylhexyl)phthalate
Concen: 2.11 ug/ml
RT: 15.48 min Scan# 2262
Delta R.T. -0.01 min
Lab File: 4M60847.D
Acq: 13 May 2012 16:45

Tgt Ion:149 Resp: 34219

Ion	Ratio	Lower	Upper
149	100		
167	32.6	25.4	38.0
279	5.6	6.2	9.2#



Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\051312\4M60847.D Vial: 10
Acq On : 13 May 2012 16:45 Operator: MDC
Sample : L12050153-05 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 17 09:25:26 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 : Thu May 17 09:23:10 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	248028	40.00	ug/mL	0.00
3) Naphthalene-d8	8.51	136	928889	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.32	164	518204	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.92	188	930259	40.00	ug/mL	0.00

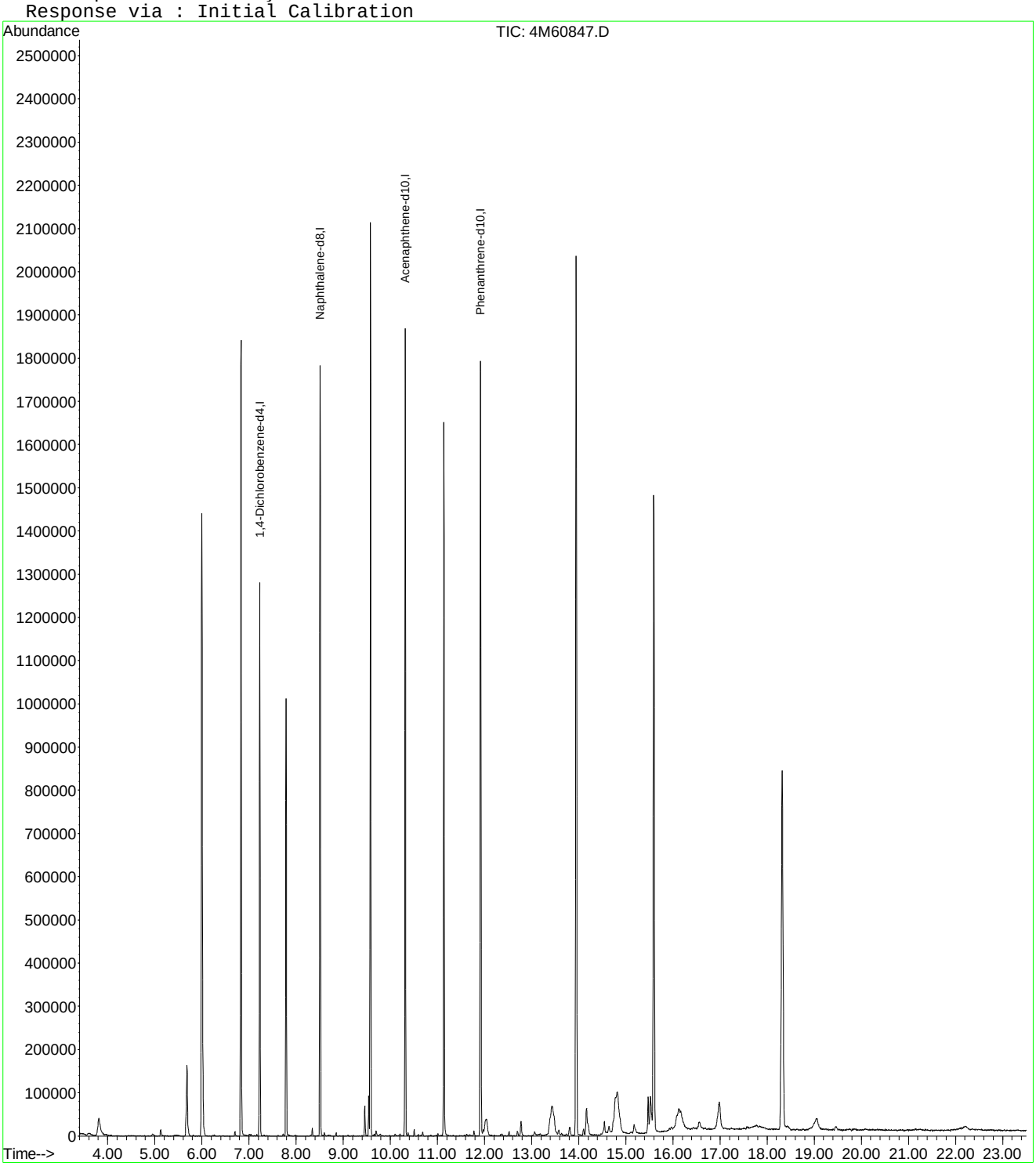
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
4M60847.D TCL.M Thu May 17 09:25:26 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\051312\4M60847.D Vial: 10
Acq On : 13 May 2012 16:45 Operator: MDC
Sample : L12050153-05 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 17 9:25 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 : Thu May 17 09:23:10 2012
Response via : Initial Calibration



LSC Area Percent Report

Data File : I:\MSDCHEM\1\DATA\051312\4M60847.D Vial: 10
Acq On : 13 May 2012 16:45 Operator: MDC
Sample : L12050153-05 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

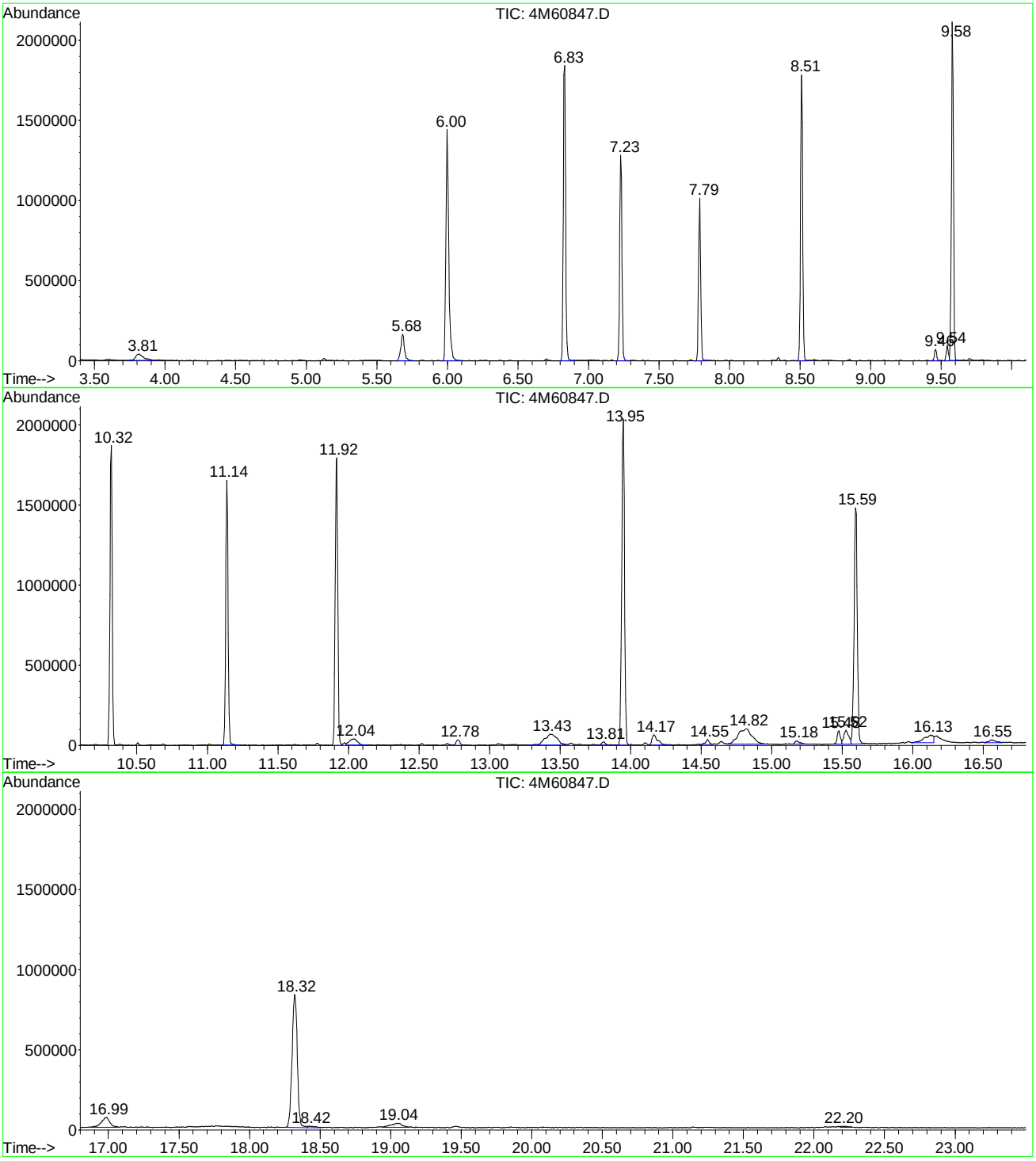
If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.814	66	79	100	rBV2	40580	163127	5.86%	0.600%
2	5.683	420	429	443	rBB2	164111	292904	10.52%	1.078%
3	5.999	481	488	506	rBB	1441010	1994467	71.65%	7.341%
4	6.832	637	644	657	rBV	1841213	2096320	75.31%	7.716%
5	7.227	712	718	728	rBB	1280345	1421148	51.05%	5.231%
6	7.788	817	823	834	rBV	1012438	1046710	37.60%	3.853%
7	8.509	950	958	967	rBV	1783016	1849245	66.43%	6.806%
8	9.460	1129	1136	1141	rBB	69517	74116	2.66%	0.273%
9	9.540	1147	1151	1154	rBV	93283	98054	3.52%	0.361%
10	9.578	1154	1158	1166	rVB	2113706	2109261	75.77%	7.763%
11	10.320	1291	1297	1305	rBV	1869258	2035024	73.11%	7.490%
12	11.138	1443	1450	1464	rBV	1651082	1875668	67.38%	6.904%
13	11.918	1587	1596	1603	rBV	1793904	2234716	80.28%	8.225%
14	12.035	1608	1618	1636	rVB4	38711	158651	5.70%	0.584%
15	12.778	1749	1757	1771	rBB3	34134	64326	2.31%	0.237%
16	13.430	1853	1879	1901	rBV4	67701	409110	14.70%	1.506%
17	13.809	1943	1950	1957	rBV3	19591	35770	1.29%	0.132%
18	13.948	1966	1976	1984	rBV	2035996	2783621	100.00%	10.246%
19	14.167	2011	2017	2036	rVB2	61566	167501	6.02%	0.617%
20	14.546	2077	2088	2094	rBV3	31250	60397	2.17%	0.222%
21	14.824	2114	2140	2165	rVB	95048	644886	23.17%	2.374%
22	15.176	2200	2206	2221	rBV4	20712	53695	1.93%	0.198%
23	15.476	2255	2262	2266	rBV	84003	131070	4.71%	0.482%
24	15.524	2266	2271	2278	rVV4	83762	206612	7.42%	0.760%
25	15.593	2278	2284	2296	rVB	1473643	2282264	81.99%	8.400%
26	16.127	2359	2384	2388	rBV3	48375	225562	8.10%	0.830%
27	16.549	2455	2463	2478	rBV7	17044	64415	2.31%	0.237%
28	16.987	2523	2545	2561	rBV5	63696	257217	9.24%	0.947%
29	18.318	2782	2794	2811	rBV	831337	2130718	76.54%	7.842%
30	18.424	2811	2814	2828	rVB	10358	34992	1.26%	0.129%
31	19.044	2910	2930	2946	rVB10	24484	136333	4.90%	0.502%
32	22.196	3518	3520	3540	rVB10	8457	31302	1.12%	0.115%

Sum of corrected areas: 27169202

File : I:\MSDCHEM\1\DATA\051312\4M60847.D
Operator : MDC
Acquired : 13 May 2012 16:45 using AcqMethod BNATEST
Instrument : HPMS4
Sample Name: L12050153-05
Misc Info : 1,1
Vial Number: 10
Quant File :MEGAMIX.RES (RTE Integrator)



Data File : I:\MSDCHEM\1\DATA\051312\4M60847.D Vial: 10
Acq On : 13 May 2012 16:45 Operator: MDC
Sample : L12050153-05 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

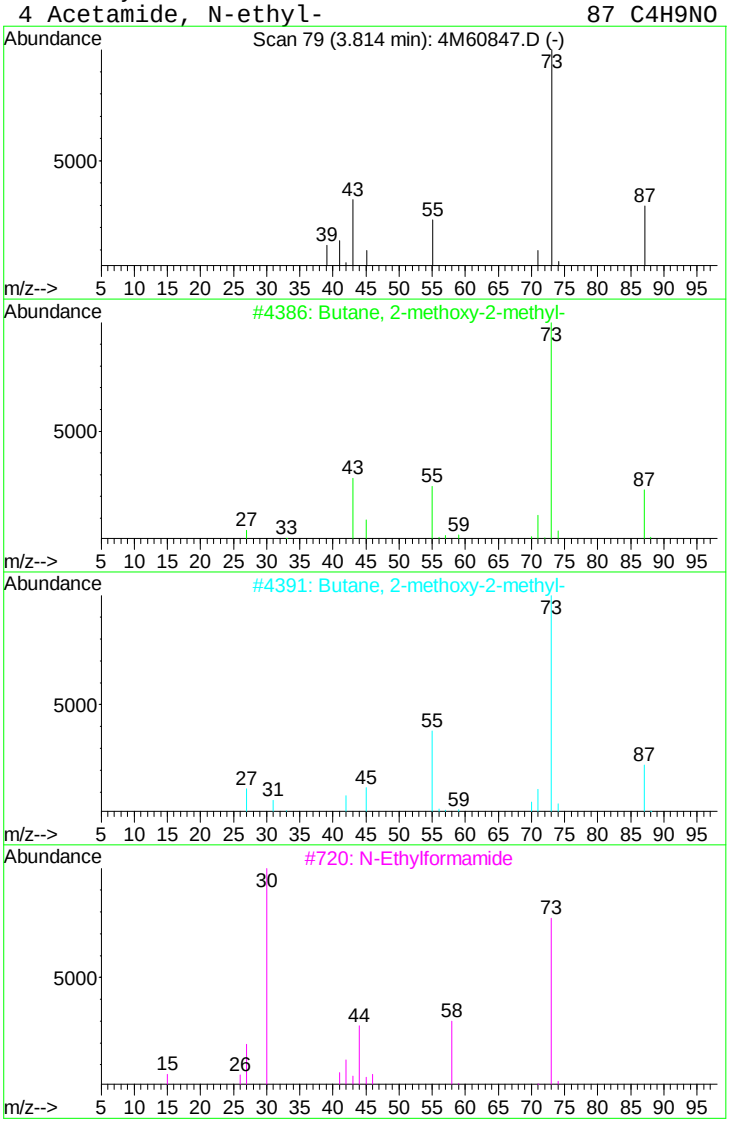
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

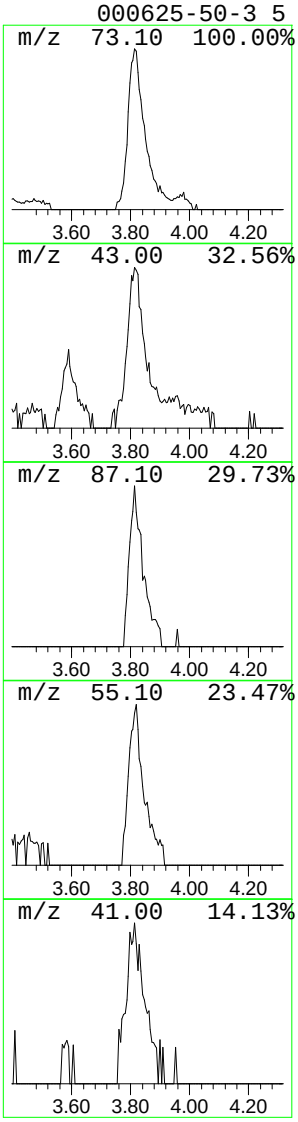
****

Peak Number 1 Butane, 2-methoxy-2-methyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.81	4.59 ug/ml	163127	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	N-Ethylformamide	73	C3H7NO	000627-45-2	5
4	Acetamide, N-ethyl-	87	C4H9NO	000625-50-3	5





Data File : I:\MSDCHEM\1\DATA\051312\4M60847.D Vial: 10
Acq On : 13 May 2012 16:45 Operator: MDC
Sample : L12050153-05 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

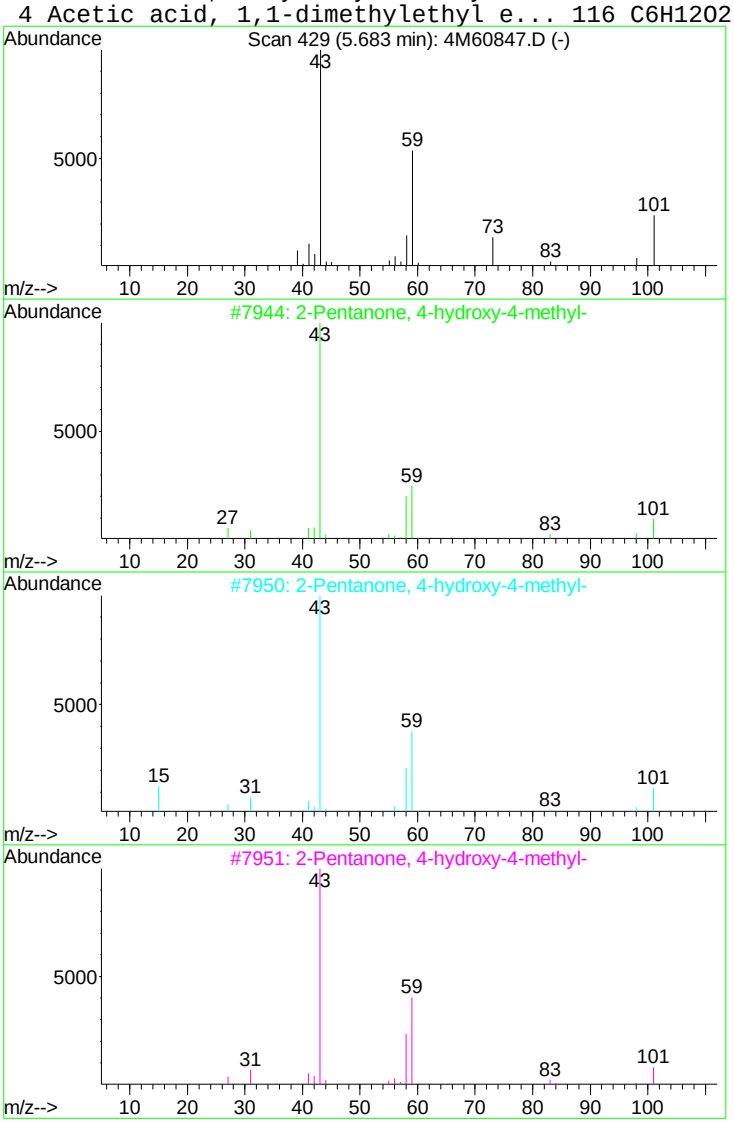
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

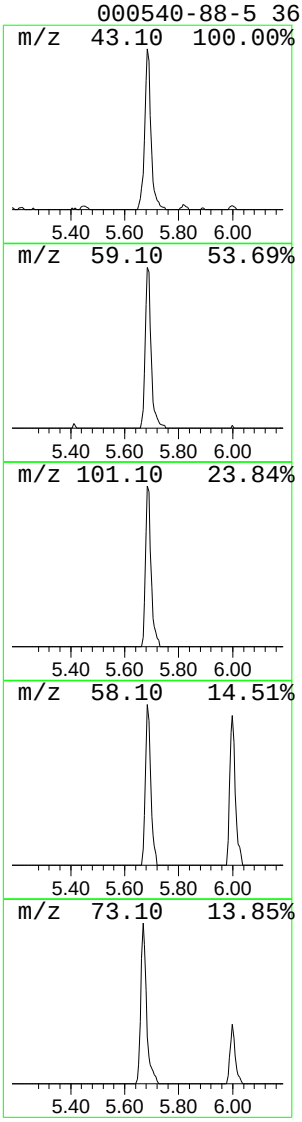
****

Peak Number 2 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.68	8.24 ug/ml	292904	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	59
2	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
3	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	38
4	Acetic acid, 1,1-dimethylethyl e...	116	C6H12O2	000540-88-5	36





Data File : I:\MSDCHEM\1\DATA\051312\4M60847.D Vial: 10
Acq On : 13 May 2012 16:45 Operator: MDC
Sample : L12050153-05 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

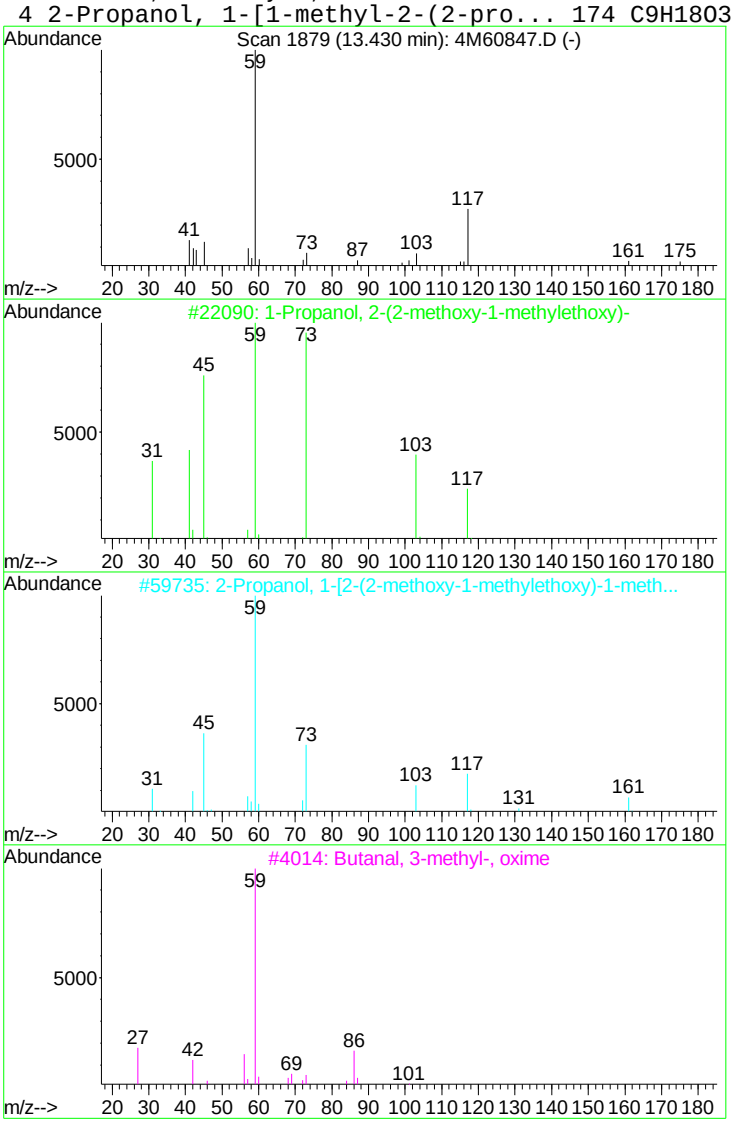
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

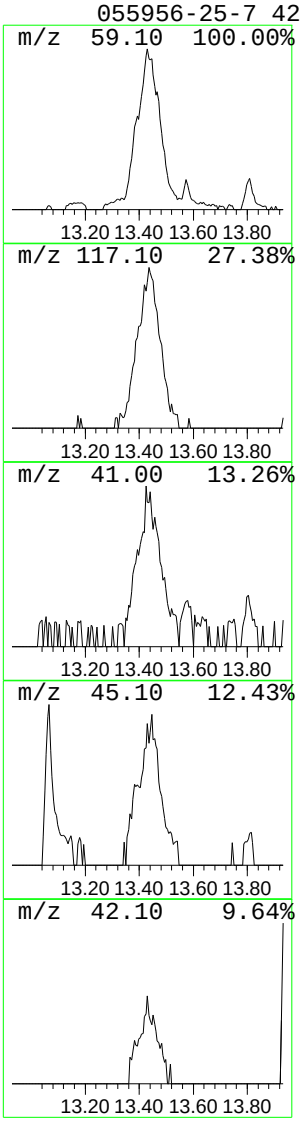
****

Peak Number 3 1-Propanol, 2-(2-methoxy-1-... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.43	7.32 ug/ml	409110	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-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	45
3	Butanal, 3-methyl-, oxime	101	C5H11NO	000626-90-4	42
4	2-Propanol, 1-[1-methyl-2-(2-pro...	174	C9H18O3	055956-25-7	42





Data File : I:\MSDCHEM\1\DATA\051312\4M60847.D Vial: 10
Acq On : 13 May 2012 16:45 Operator: MDC
Sample : L12050153-05 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

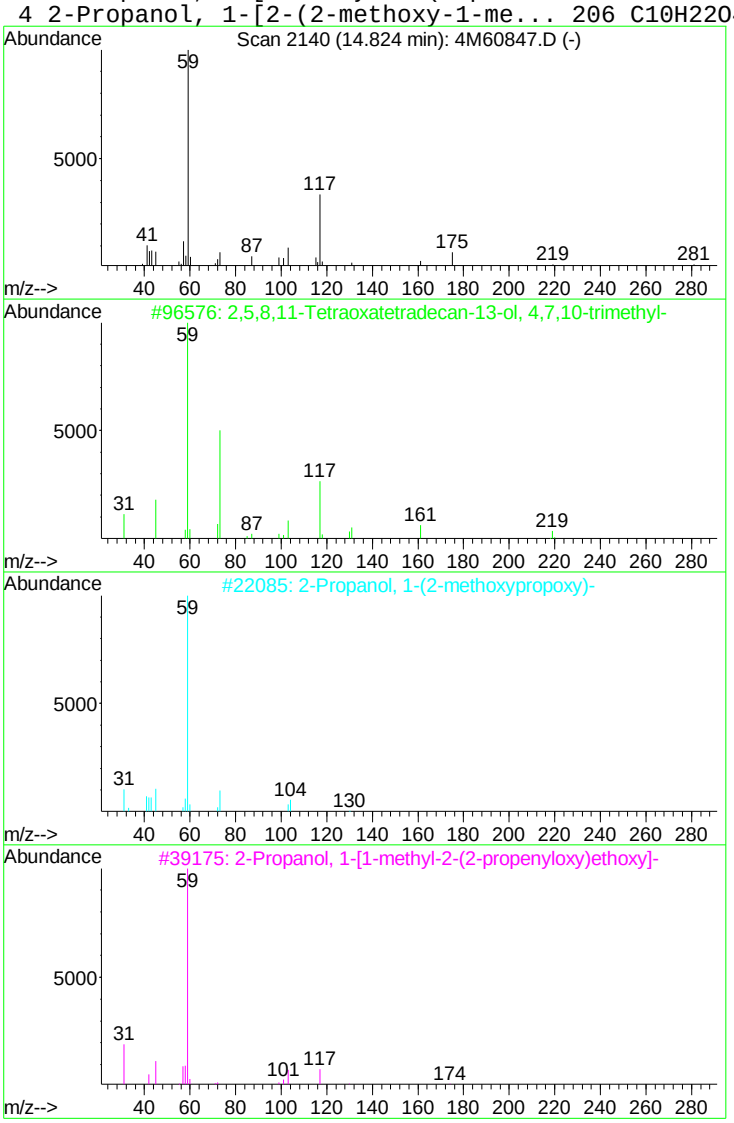
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

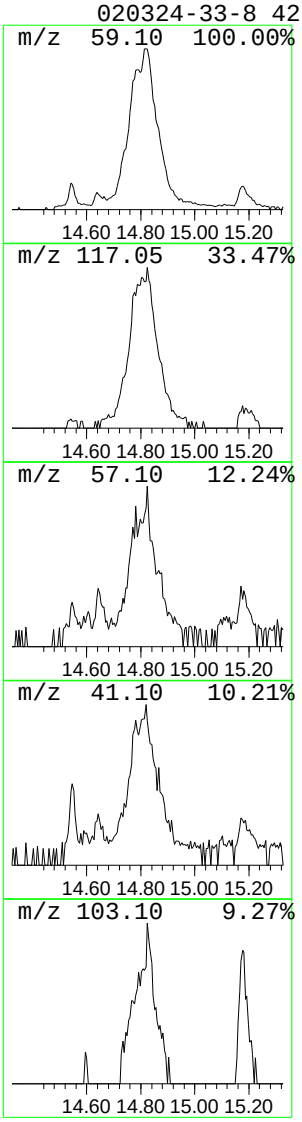
****

Peak Number 4 2,5,8,11-Tetraoxatetradecan... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.82	11.30 ug/ml	644886	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	2-Propanol, 1-(2-methoxypropoxy)-	148	C7H16O3	013429-07-7	47
3	2-Propanol, 1-[1-methyl-2-(2-pro...	174	C9H18O3	055956-25-7	45
4	2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	42





Data File : I:\MSDCHEM\1\DATA\051312\4M60847.D Vial: 10
Acq On : 13 May 2012 16:45 Operator: MDC
Sample : L12050153-05 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

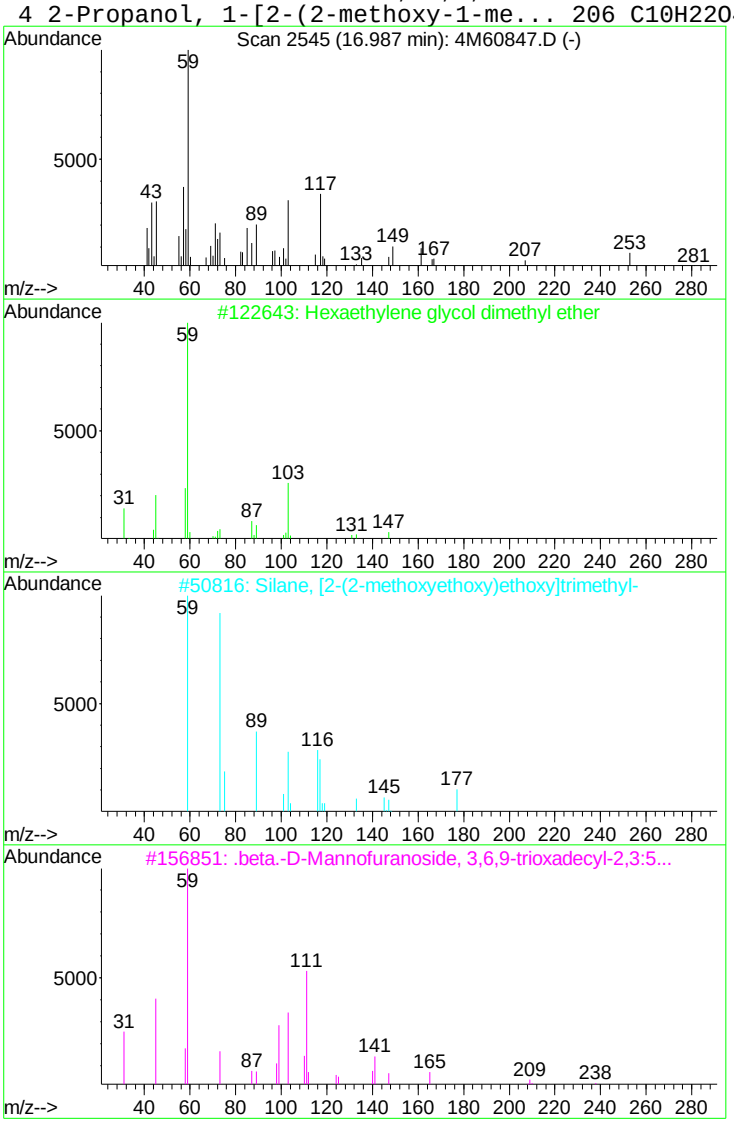
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

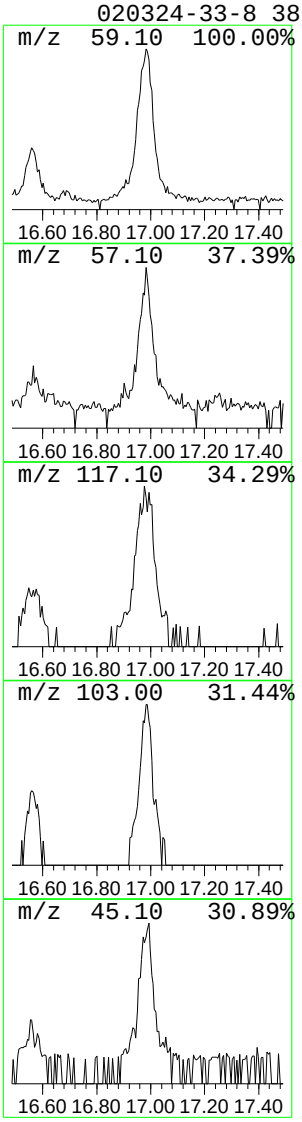
****

Peak Number 5 Hexaethylene glycol dimethy... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.99	4.83 ug/ml	257217	Perylene-d12	18.32

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexaethylene glycol dimethyl ether	310	C14H30O7	001072-40-8	47
2	Silane, [2-(2-methoxyethoxy)etho...	192	C8H20O3Si	062199-57-9	40
3	.beta.-D-Mannofuranoside, 3,6,9-...	402	C17H32B2O9	1000155-77-2	38
4	2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	38





Tentatively Identified Compound (LSC) summary

Operator ID: MDC Date Acquired: 13 May 2012 16:45
Data File: I:\MSDCHEM\1\DATA\051312\4M60847.D
Name: L12050153-05
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

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Butane, 2-methoxy...	3.81	4.6	ug/ml	163127	1	7.23	1421150	40.0
2-Pentanone, 4-hy...	5.68	8.2	ug/ml	292904	1	7.23	1421150	40.0
1-Propanol, 2-(2-...	13.43	7.3	ug/ml	409110	4	11.92	2234720	40.0
2,5,8,11-Tetraoxa...	14.82	11.3	ug/ml	644886	5	15.60	2282260	40.0
Hexaethylene glyc...	16.99	4.8	ug/ml	257217	6	18.32	2130720	40.0

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051312\4M60848.D Vial: 11
Acq On : 13 May 2012 17:19 Operator: MDC
Sample : L12050153-07 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 13:49:29 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 : Tue May 15 13:49:15 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

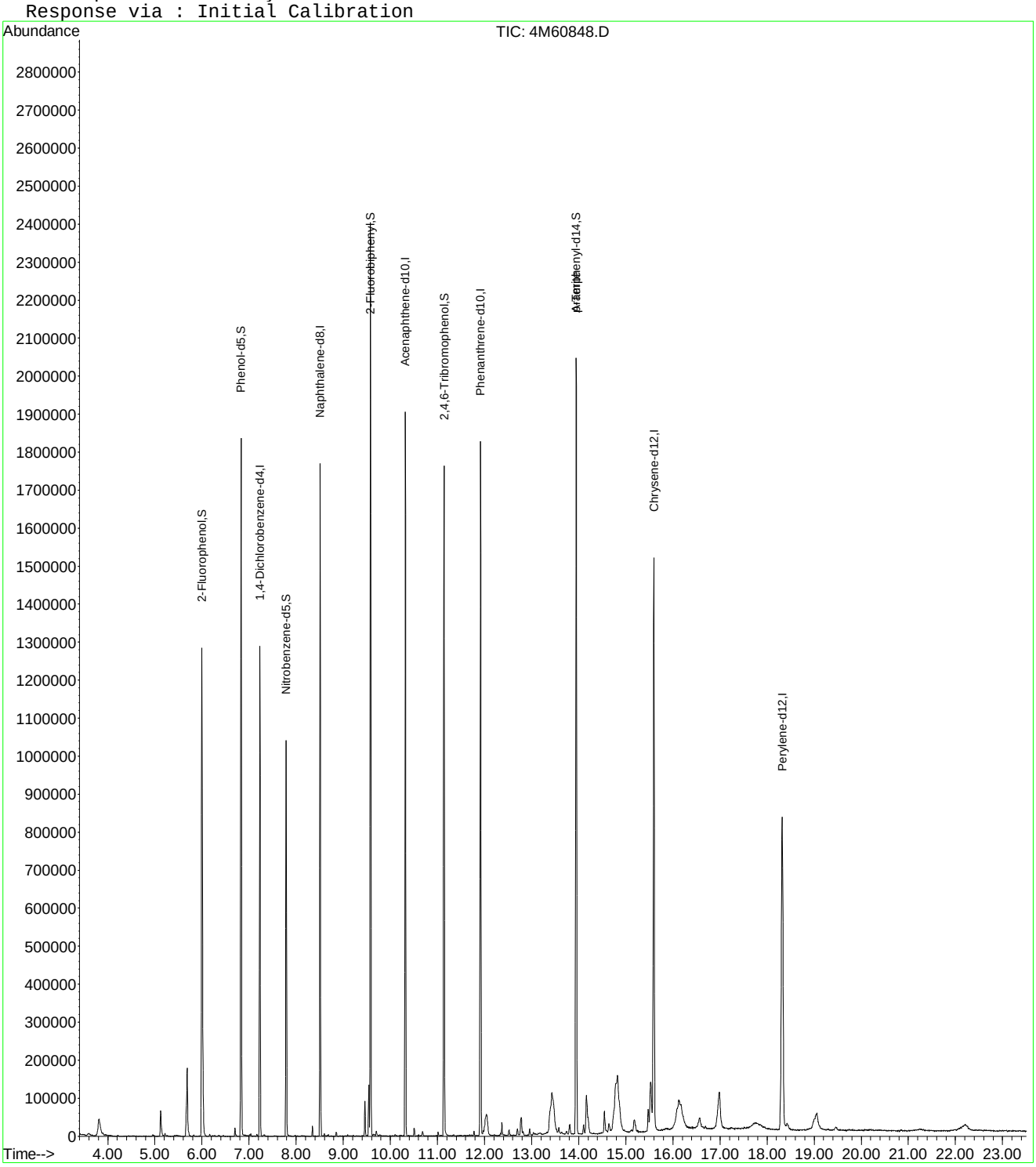
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.23	152	246253	40.00	ug/ml	0.00
30) Naphthalene-d8	8.51	136	916595	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.32	164	507190	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.91	188	912693	40.00	ug/ml	0.00
113) Chrysene-d12	15.60	240	859897	40.00	ug/ml	-0.01
128) Perylene-d12	18.32	264	834766	40.00	ug/ml	-0.02
System Monitoring Compounds						
8) 2-Fluorophenol	6.00	112	578900	77.5355	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 77.54%			
12) Phenol-d5	6.83	99	724801	82.9459	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 82.95%			
31) Nitrobenzene-d5	7.79	82	394916	50.9410	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 101.88%			
59) 2-Fluorobiphenyl	9.58	172	868952	51.3073	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 102.62%			
86) 2,4,6-Tribromophenol	11.14	330	241895	106.9508	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 106.95%			
117) p-Terphenyl-d14	13.94	244	981231	61.9117	ug/ml	-0.01
Spiked Amount 50.000	Range 33 - 141		Recovery = 123.82%			
Target Compounds						Qvalue
116) Aramite	13.95	185	2767	1.8999	ug/ml#	31

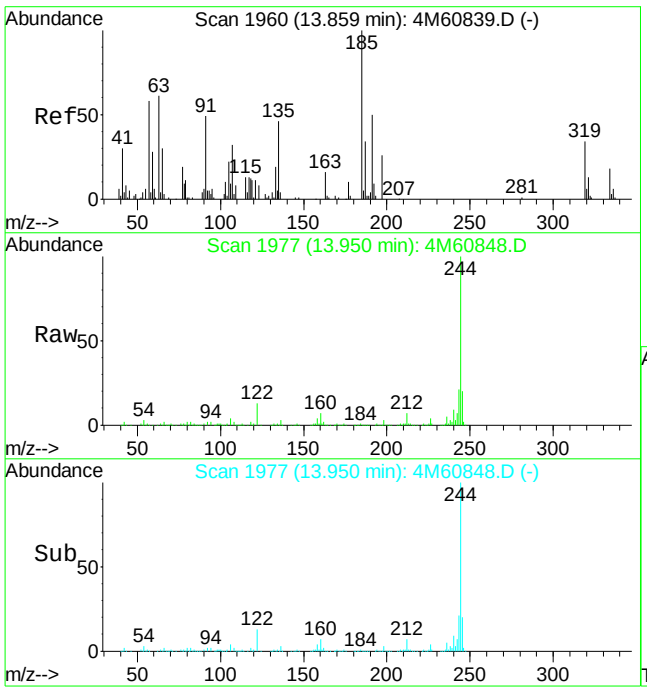
(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051312\4M60848.D Vial: 11
Acq On : 13 May 2012 17:19 Operator: MDC
Sample : L12050153-07 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 13:49 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 : Tue May 15 13:49:15 2012
Response via : Initial Calibration

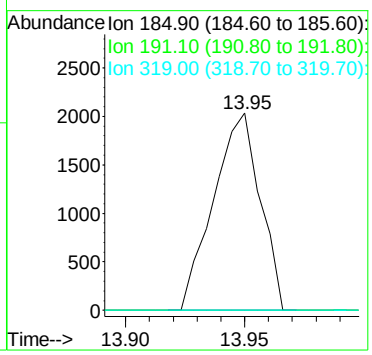




#116
Aramite
Concen: 1.90 ug/ml
RT: 13.95 min Scan# 1977
Delta R.T. 0.08 min
Lab File: 4M60848.D
Acq: 13 May 2012 17:19

Tgt Ion:185 Resp: 2767

Ion	Ratio	Lower	Upper
185	100		
191	0.0	42.0	63.0#
319	0.0	28.8	43.2#



Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\051312\4M60848.D Vial: 11
Acq On : 13 May 2012 17:19 Operator: MDC
Sample : L12050153-07 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 17 09:25:27 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 : Thu May 17 09:23:10 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	246253	40.00	ug/mL	0.00
3) Naphthalene-d8	8.51	136	916595	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.32	164	507190	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.91	188	912693	40.00	ug/mL	0.00

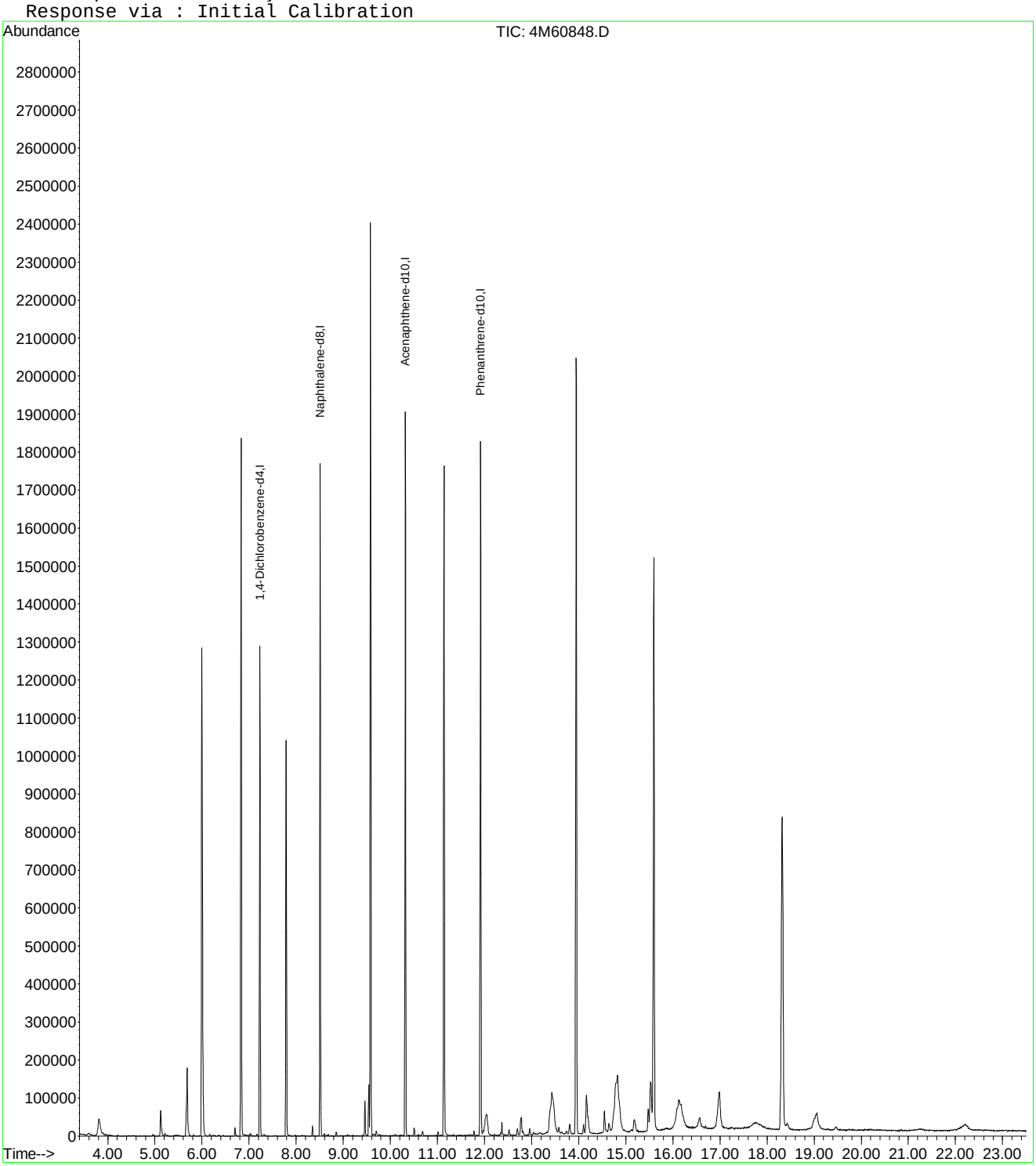
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
4M60848.D TCL.M Thu May 17 09:25:27 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\051312\4M60848.D Vial: 11
Acq On : 13 May 2012 17:19 Operator: MDC
Sample : L12050153-07 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 17 9:25 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 : Thu May 17 09:23:10 2012
Response via : Initial Calibration



LSC Area Percent Report

Data File : I:\MSDCHEM\1\DATA\051312\4M60848.D Vial: 11
Acq On : 13 May 2012 17:19 Operator: MDC
Sample : L12050153-07 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	3.811	64	79	102	rBV3	43565	174640	6.10%	0.592%
2	5.125	319	325	338	rBV	67712	109379	3.82%	0.371%
3	5.686	422	430	444	rBB2	179128	311858	10.90%	1.056%
4	5.995	482	488	508	rBB	1284861	1907990	66.68%	6.463%
5	6.829	637	644	658	rBV	1837186	1992256	69.62%	6.749%
6	7.229	711	719	729	rBB	1289713	1389683	48.56%	4.707%
7	7.790	817	824	837	rBV	1041283	1165164	40.72%	3.947%
8	8.512	950	959	969	rBV	1770282	1837045	64.20%	6.223%
9	9.462	1129	1137	1142	rBV	91405	106272	3.71%	0.360%
10	9.543	1147	1152	1155	rBV	134045	138164	4.83%	0.468%
11	9.580	1155	1159	1166	rVB	2402919	2435531	85.11%	8.250%
12	10.317	1288	1297	1305	rVB	1905656	1995592	69.74%	6.760%
13	11.140	1444	1451	1464	rBV	1763471	2004856	70.06%	6.791%
14	11.915	1589	1596	1604	rBV	1828294	2193509	76.65%	7.430%
15	12.043	1609	1620	1635	rVB3	55960	223277	7.80%	0.756%
16	12.369	1678	1681	1687	rVB2	33254	32807	1.15%	0.111%
17	12.700	1735	1743	1750	rBV3	18447	31773	1.11%	0.108%
18	12.780	1750	1758	1763	rBV2	46989	90765	3.17%	0.307%
19	13.432	1861	1880	1903	rBV	106863	607734	21.24%	2.059%
20	13.806	1944	1950	1957	rBV5	25424	48688	1.70%	0.165%
21	13.945	1965	1976	1985	rVB	2042144	2861587	100.00%	9.693%
22	14.105	1999	2006	2011	rBV3	24828	39113	1.37%	0.132%
23	14.164	2011	2017	2035	rVB2	101222	270897	9.47%	0.918%
24	14.548	2080	2089	2101	rBV3	57795	106392	3.72%	0.360%
25	14.644	2101	2107	2113	rVV7	23250	47264	1.65%	0.160%
26	14.821	2116	2140	2165	rVB2	147812	1000448	34.96%	3.389%
27	15.179	2200	2207	2218	rVB4	31057	83767	2.93%	0.284%
28	15.478	2254	2263	2266	rBV	58562	90392	3.16%	0.306%
29	15.531	2266	2273	2278	rVV3	128428	320770	11.21%	1.087%
30	15.595	2278	2285	2302	rVB	1507029	2277159	79.58%	7.714%
31	16.124	2355	2384	2417	rBV2	76945	668833	23.37%	2.266%
32	16.562	2457	2466	2478	rBV5	24835	70795	2.47%	0.240%
33	16.984	2526	2545	2559	rBV4	95302	383167	13.39%	1.298%
34	17.721	2667	2683	2684	rBV8	10886	32221	1.13%	0.109%
35	18.320	2783	2795	2812	rBV	823430	2142265	74.86%	7.257%
36	18.421	2812	2814	2824	rVB5	15256	31934	1.12%	0.108%
37	19.057	2909	2933	2949	rBV5	42223	235310	8.22%	0.797%
38	19.458	3000	3008	3019	rVB5	9469	28928	1.01%	0.098%
39	22.203	3521	3522	3536	rVB10	12840	33059	1.16%	0.112%

Sum of corrected areas: 29521284

```
File       : I:\MSDCHEM\1\DATA\051312\4M60848.D
Operator   : MDC
Acquired   : 13 May 2012  17:19     using AcqMethod BNATEST
Instrument :   HPMS4
Sample Name: L12050153-07
Misc Info  : 1,1
Vial Number: 11
Quant File :MEGAMIX.RES (RTE Integrator)
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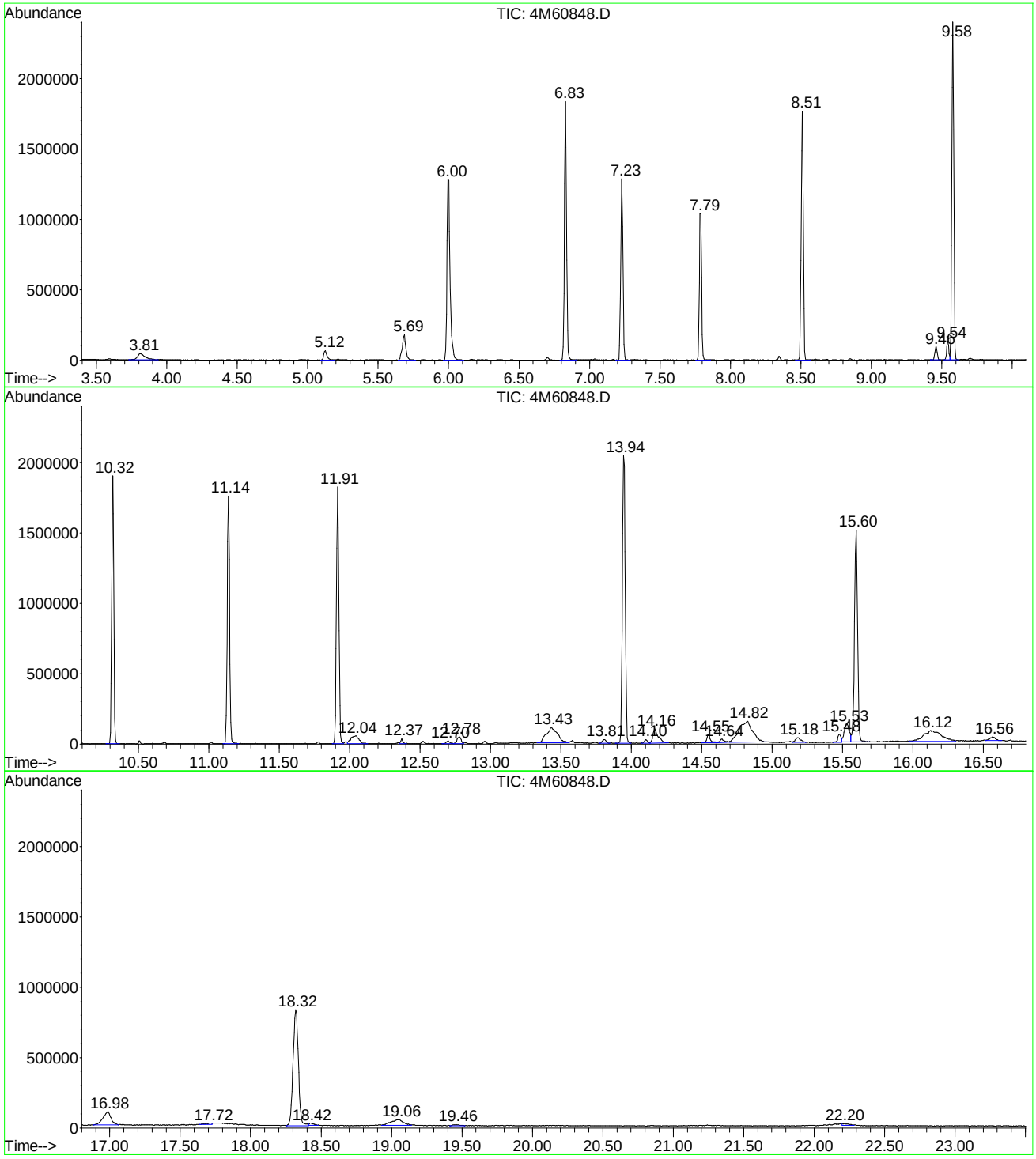


Data File : I:\MSDCHEM\1\DATA\051312\4M60848.D Vial: 11
Acq On : 13 May 2012 17:19 Operator: MDC
Sample : L12050153-07 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

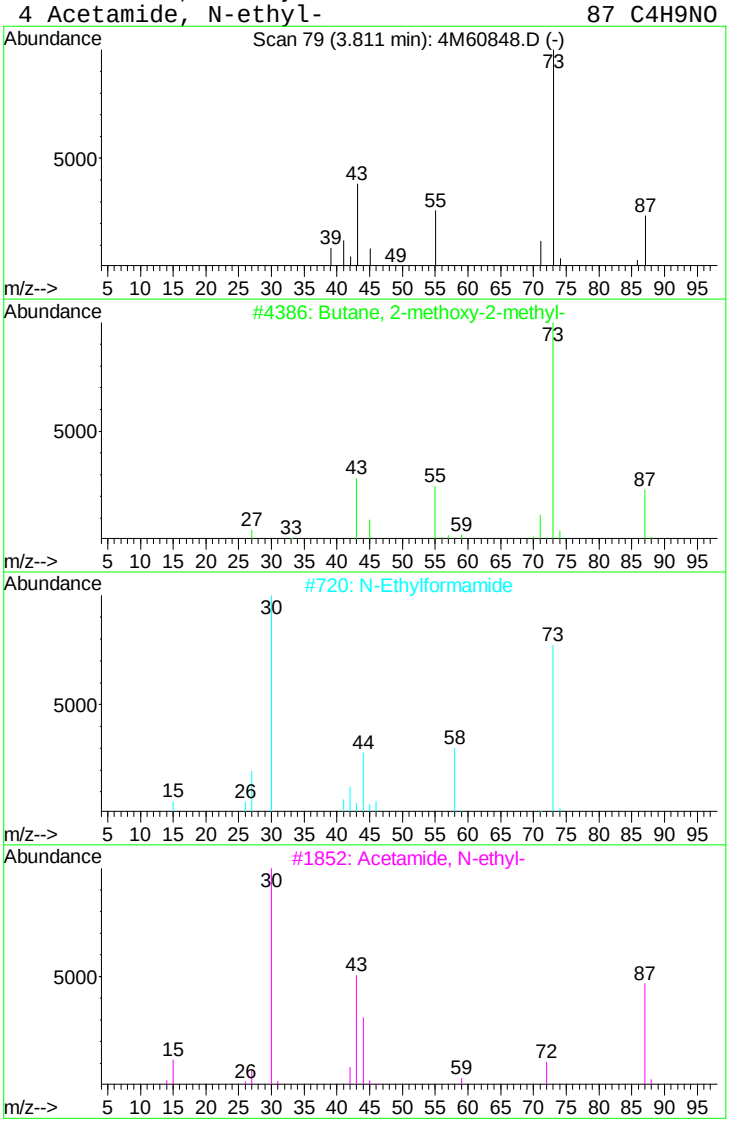
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

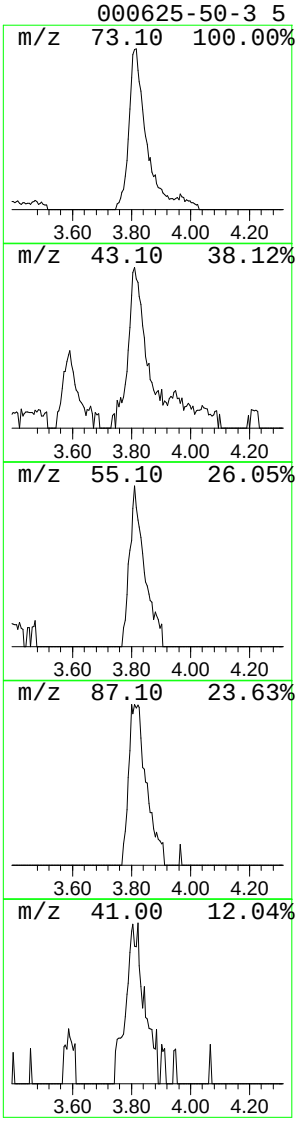
****

Peak Number 1 Butane, 2-methoxy-2-methyl- Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.81	5.03 ug/ml	174640	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	N-Ethylformamide	73	C3H7NO	000627-45-2	5
3	Acetamide, N-ethyl-	87	C4H9NO	000625-50-3	5
4	Acetamide, N-ethyl-	87	C4H9NO	000625-50-3	5





Data File : I:\MSDCHEM\1\DATA\051312\4M60848.D Vial: 11
Acq On : 13 May 2012 17:19 Operator: MDC
Sample : L12050153-07 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

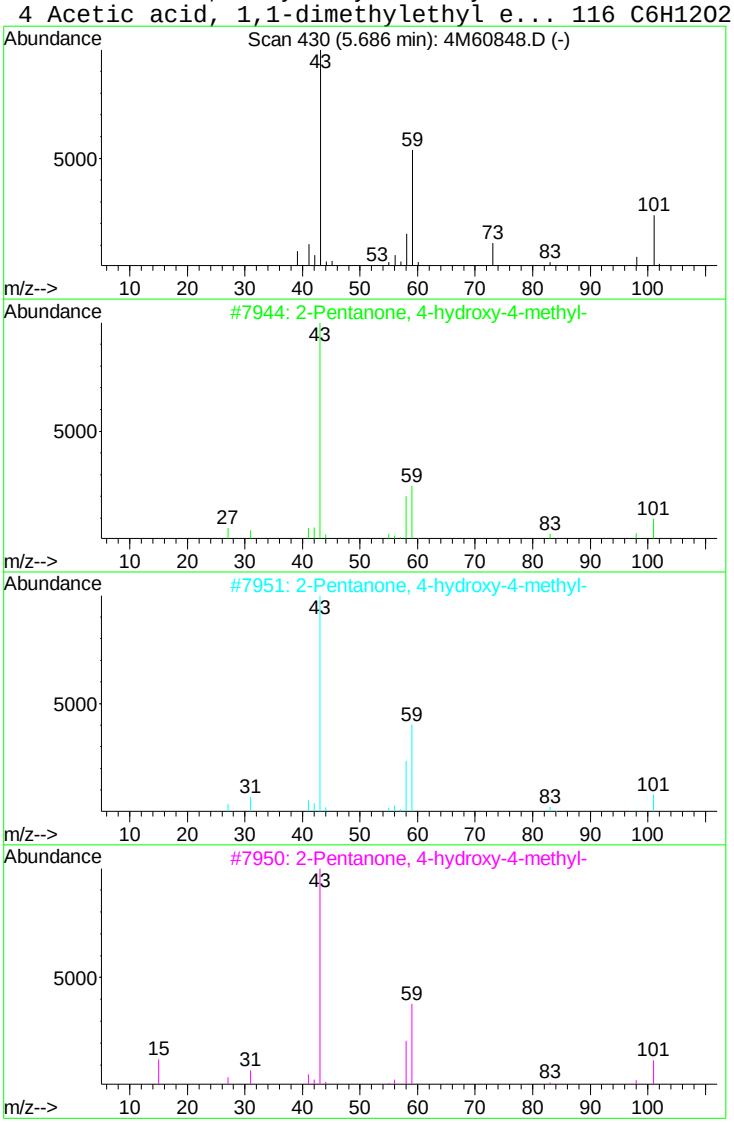
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

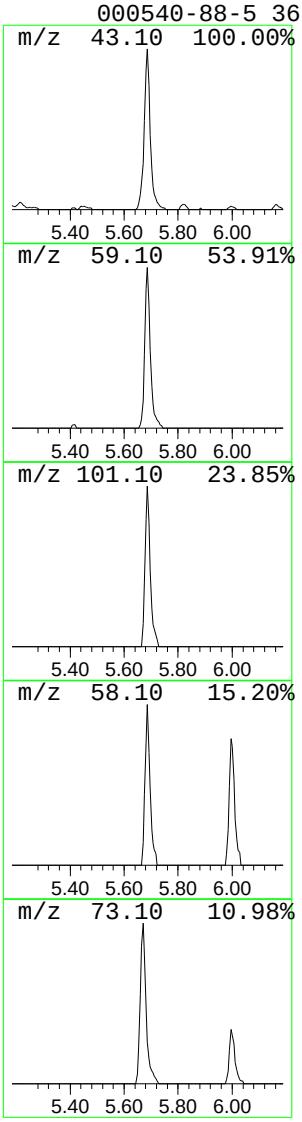
****

Peak Number 2 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.69	8.98 ug/ml	311858	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	59
2	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
3	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	42
4	Acetic acid, 1,1-dimethylethyl e...	116	C6H12O2	000540-88-5	36





Data File : I:\MSDCHEM\1\DATA\051312\4M60848.D Vial: 11
Acq On : 13 May 2012 17:19 Operator: MDC
Sample : L12050153-07 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

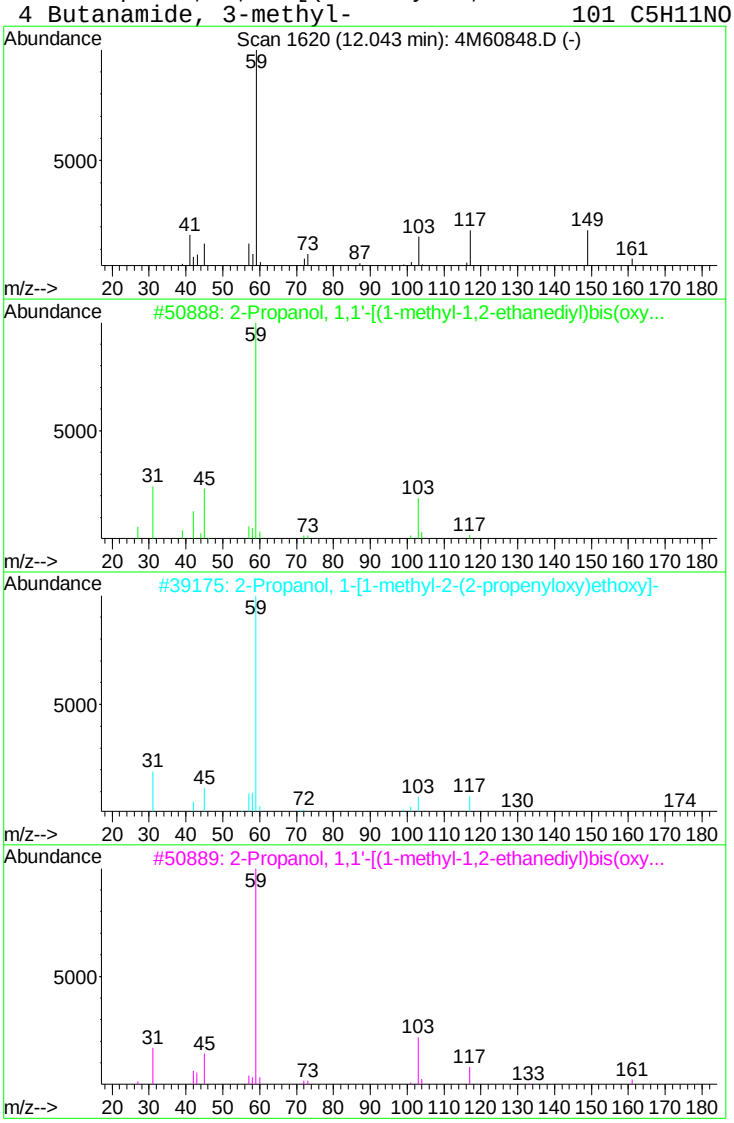
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

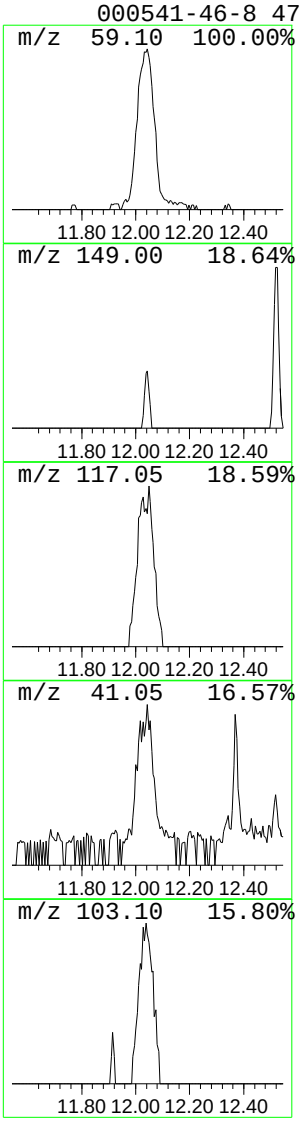
****

Peak Number 3 2-Propanol, 1,1'-[(1-methyl... Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.04	4.07 ug/ml	223277	Phenanthrene-d10	11.91

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Propanol, 1,1'-[(1-methyl-1,2-...	192	C9H20O4	001638-16-0	53
2	2-Propanol, 1-[1-methyl-2-(2-pro...	174	C9H18O3	055956-25-7	53
3	2-Propanol, 1,1'-[(1-methyl-1,2-...	192	C9H20O4	001638-16-0	53
4	Butanamide, 3-methyl-	101	C5H11NO	000541-46-8	47





Data File : I:\MSDCHEM\1\DATA\051312\4M60848.D Vial: 11
Acq On : 13 May 2012 17:19 Operator: MDC
Sample : L12050153-07 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

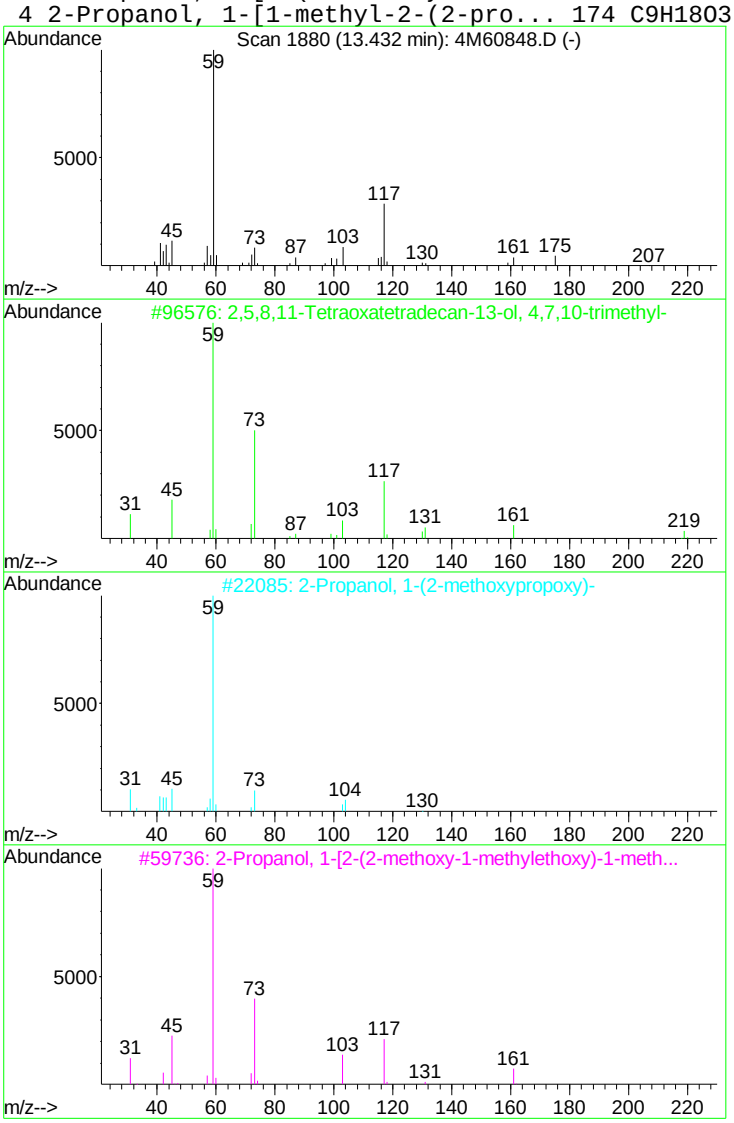
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

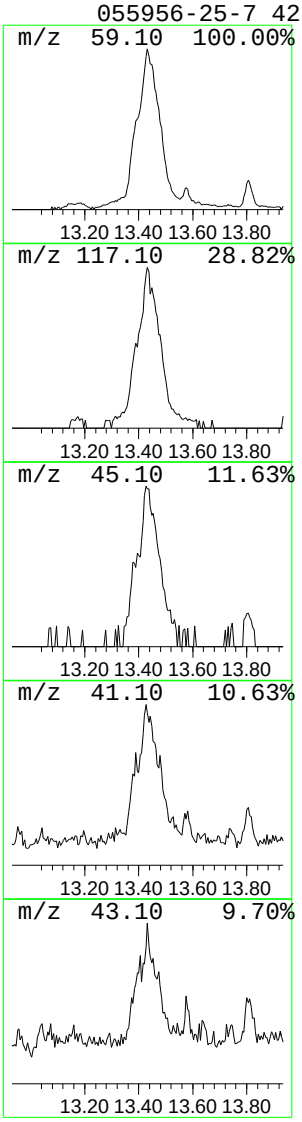
****

Peak Number 4 2,5,8,11-Tetraoxatetradecan... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.43	11.08 ug/ml	607734	Phenanthrene-d10	11.91

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,5,8,11-Tetraoxatetradecan-13-o...	264	C13H28O5	020324-34-9	50
2	2-Propanol, 1-(2-methoxypropoxy)-	148	C7H16O3	013429-07-7	47
3	2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	42
4	2-Propanol, 1-[1-methyl-2-(2-pro...	174	C9H18O3	055956-25-7	42





Data File : I:\MSDCHEM\1\DATA\051312\4M60848.D Vial: 11
Acq On : 13 May 2012 17:19 Operator: MDC
Sample : L12050153-07 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

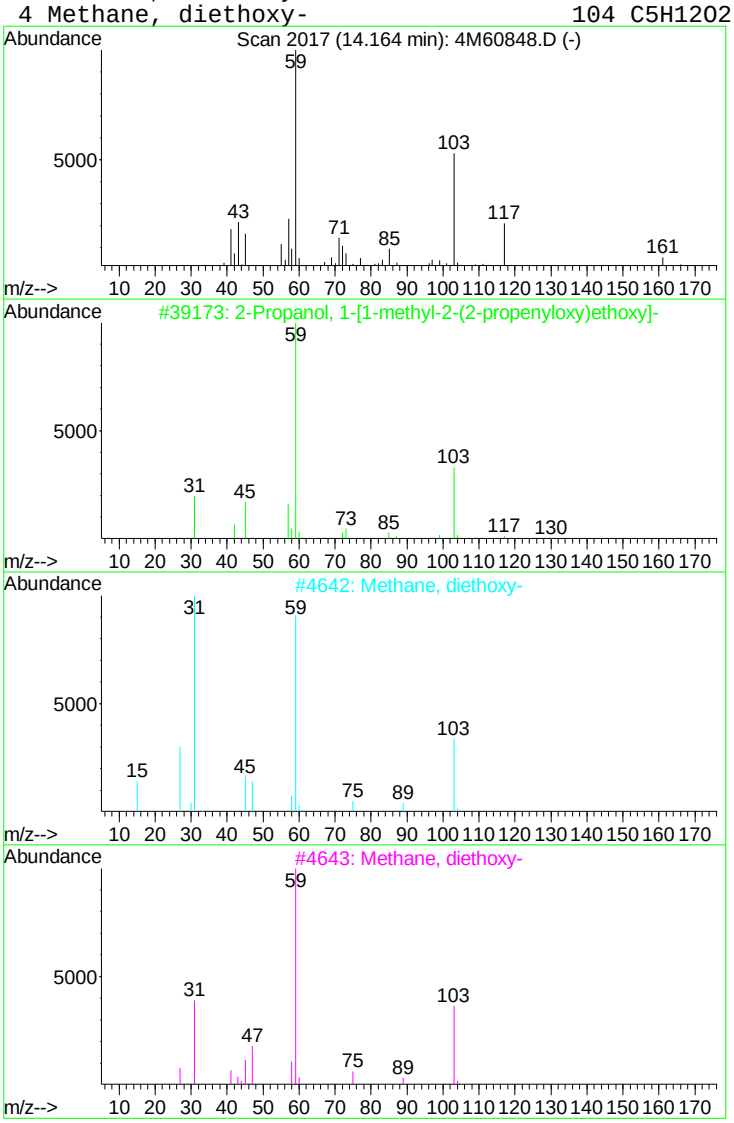
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

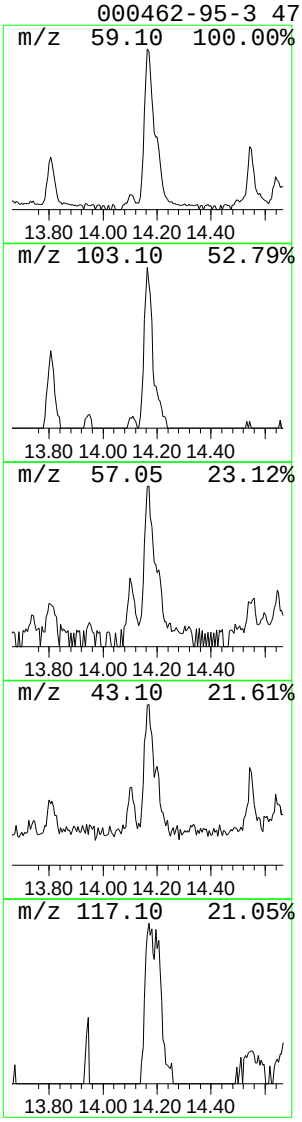
****

Peak Number 5 2-Propanol, 1-[1-methyl-2-(... Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.16	4.76 ug/ml	270897	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	59
2	Methane, diethoxy-	104	C5H12O2	000462-95-3	49
3	Methane, diethoxy-	104	C5H12O2	000462-95-3	49
4	Methane, diethoxy-	104	C5H12O2	000462-95-3	47





Data File : I:\MSDCHEM\1\DATA\051312\4M60848.D Vial: 11
Acq On : 13 May 2012 17:19 Operator: MDC
Sample : L12050153-07 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

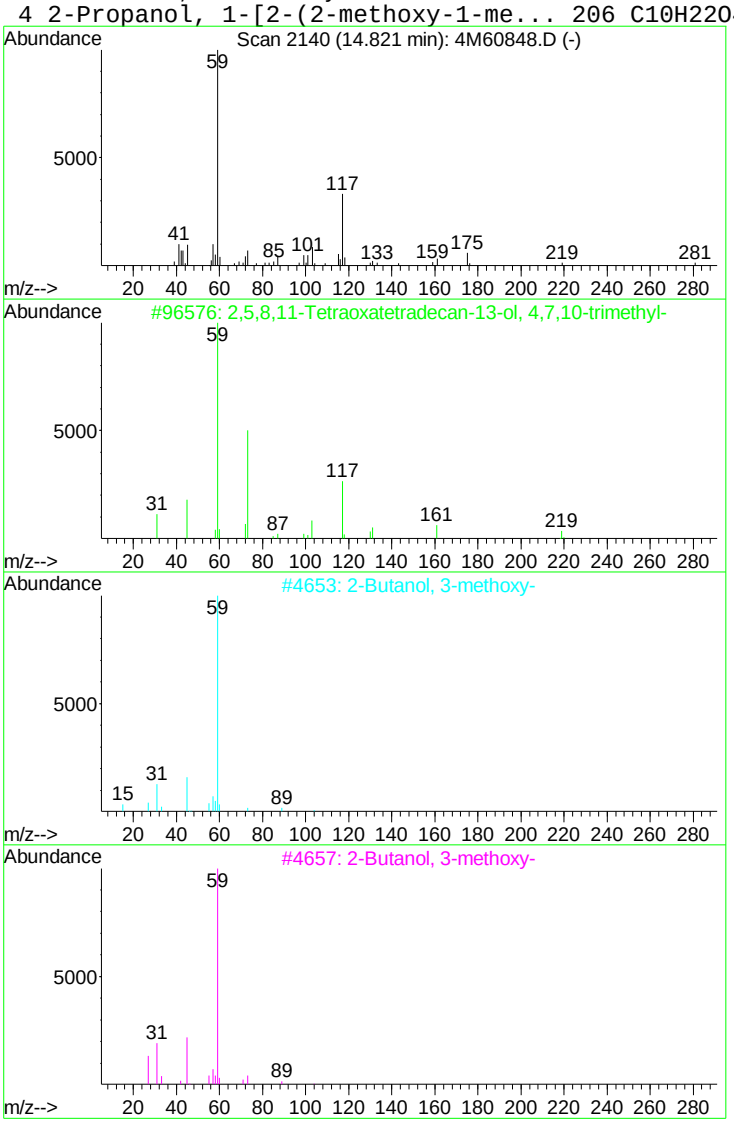
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

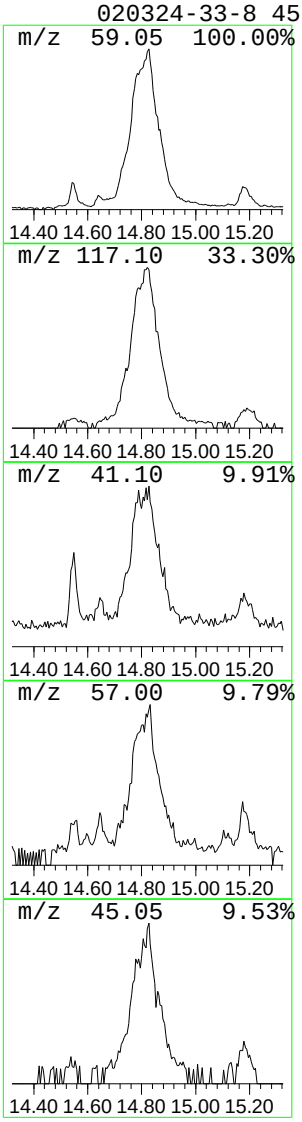
****

Peak Number 6 2,5,8,11-Tetraoxatetradecan... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.82	17.57 ug/ml	1000450	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	56
2	2-Butanol, 3-methoxy-	104	C5H12O2	053778-72-6	49
3	2-Butanol, 3-methoxy-	104	C5H12O2	053778-72-6	47
4	2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	45





Data File : I:\MSDCHEM\1\DATA\051312\4M60848.D Vial: 11
Acq On : 13 May 2012 17:19 Operator: MDC
Sample : L12050153-07 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

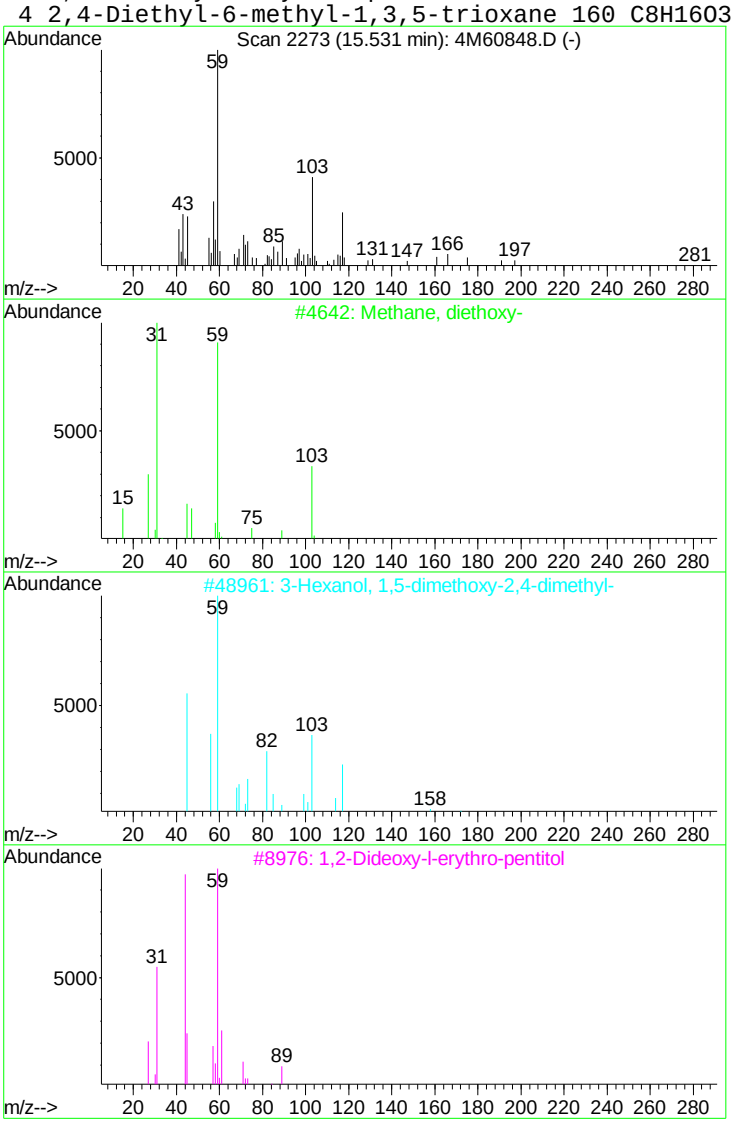
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

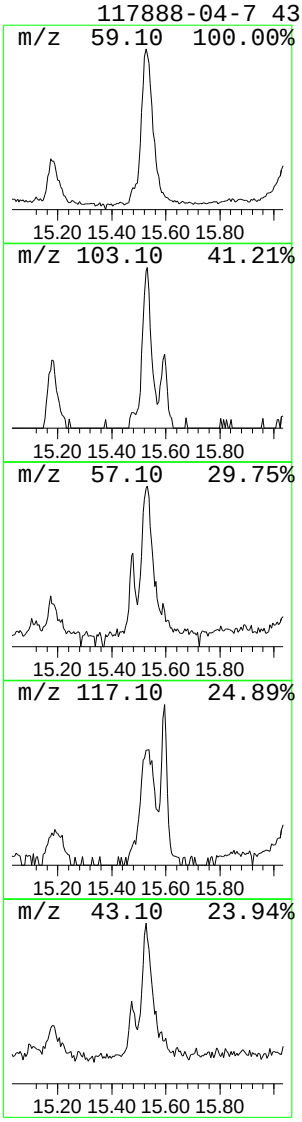
****

Peak Number 7 Methane, diethoxy- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.53	5.63 ug/ml	320770	Chrysene-d12	15.60

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Methane, diethoxy-	104	C5H12O2	000462-95-3	50
2	3-Hexanol, 1,5-dimethoxy-2,4-dim...	190	C10H22O3	013897-22-8	45
3	1,2-Dideoxy-l-erythro-pentitol	120	C5H12O3	1000112-47-4	43
4	2,4-Diethyl-6-methyl-1,3,5-trioxane	160	C8H16O3	117888-04-7	43





Data File : I:\MSDCHEM\1\DATA\051312\4M60848.D Vial: 11
Acq On : 13 May 2012 17:19 Operator: MDC
Sample : L12050153-07 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

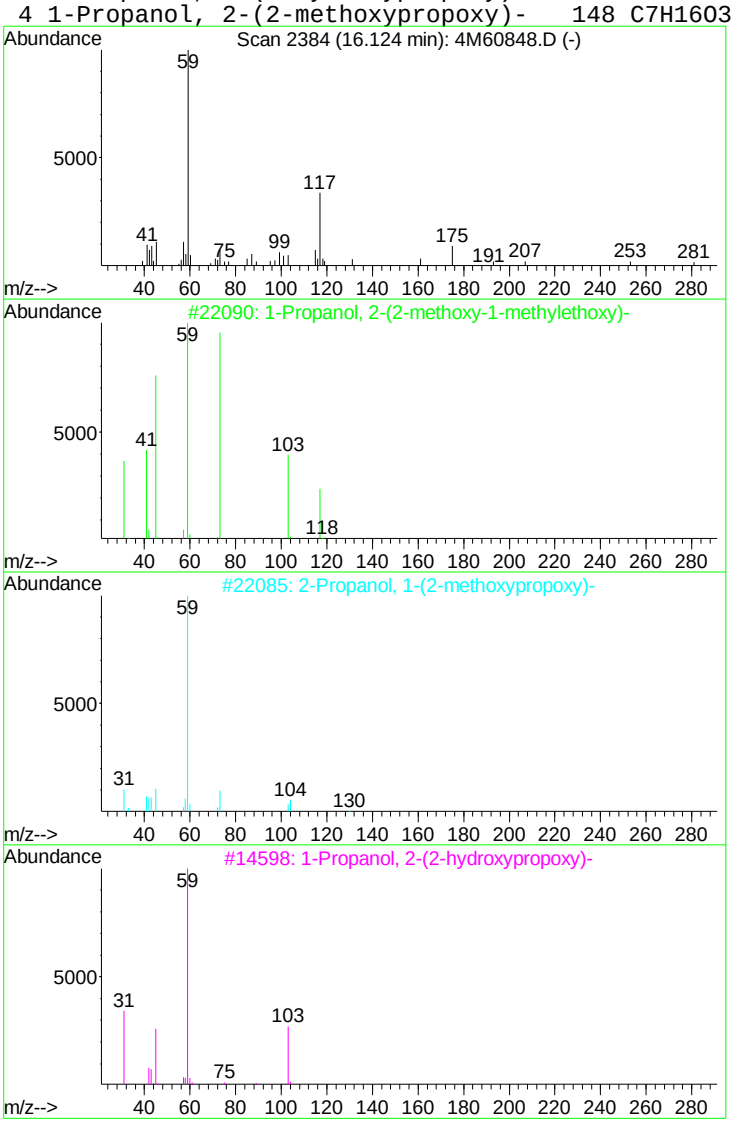
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

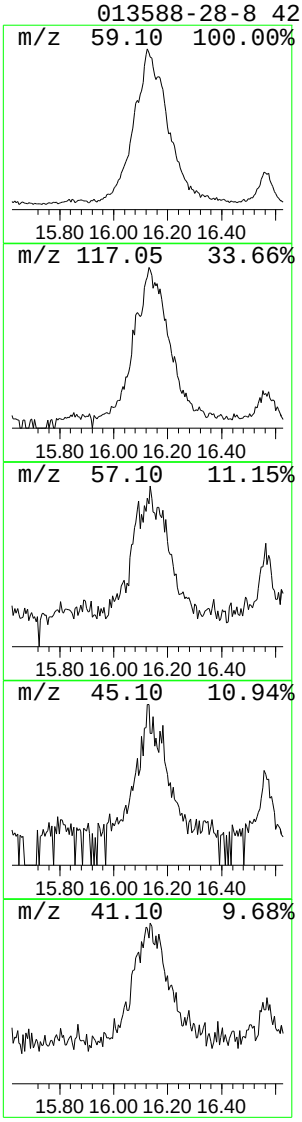
****

Peak Number 8 1-Propanol, 2-(2-methoxy-1-... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.12	11.75 ug/ml	668833	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-methoxypropoxy)-	148	C7H16O3	013429-07-7	50
3	1-Propanol, 2-(2-hydroxypropoxy)-	134	C6H14O3	000106-62-7	47
4	1-Propanol, 2-(2-methoxypropoxy)-	148	C7H16O3	013588-28-8	42





Data File : I:\MSDCHEM\1\DATA\051312\4M60848.D Vial: 11
Acq On : 13 May 2012 17:19 Operator: MDC
Sample : L12050153-07 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

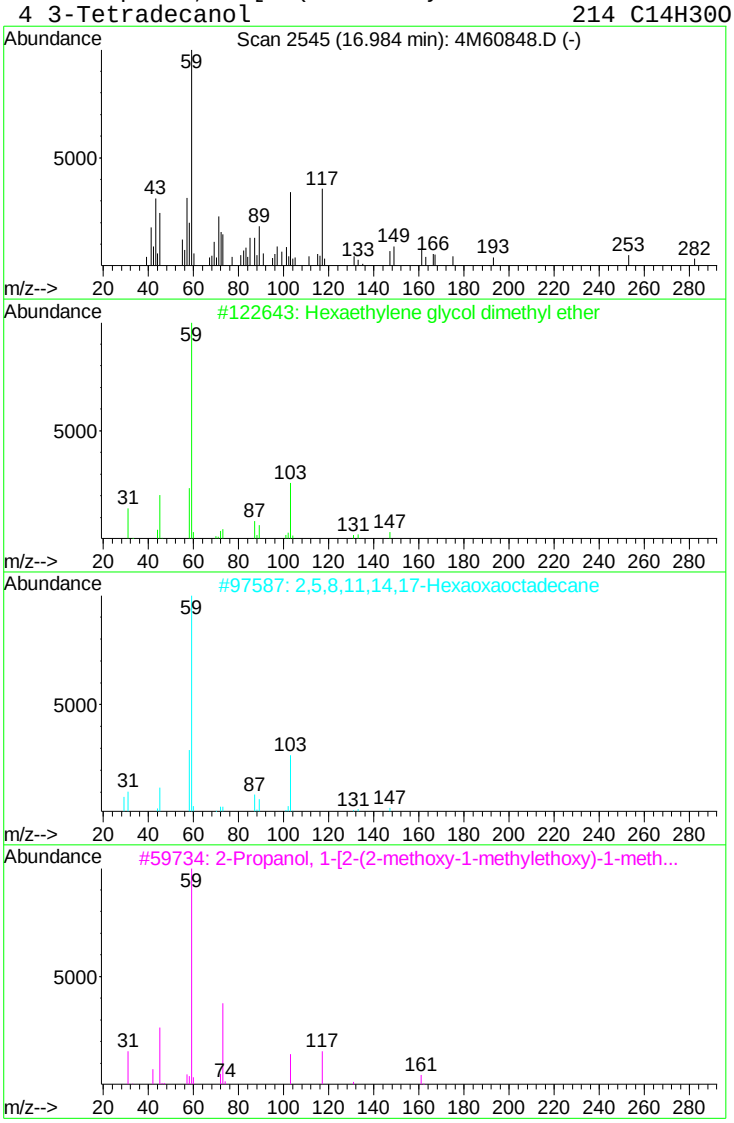
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

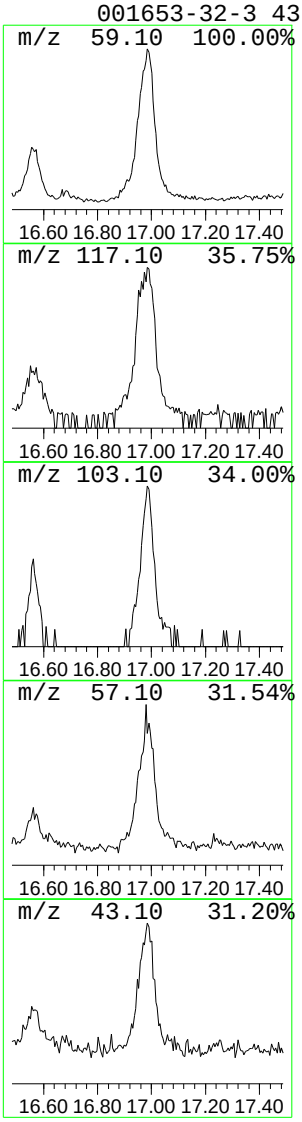
****

Peak Number 9 Hexaethylene glycol dimethy... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.98	7.15 ug/ml	383167	Perylene-d12	18.32

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexaethylene glycol dimethyl ether	310	C14H30O7	001072-40-8	47
2	2,5,8,11,14,17-Hexaoxaoctadecane	266	C12H26O6	001191-87-3	47
3	2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	47
4	3-Tetradecanol	214	C14H30O	001653-32-3	43





Data File : I:\MSDCHEM\1\DATA\051312\4M60848.D Vial: 11
Acq On : 13 May 2012 17:19 Operator: MDC
Sample : L12050153-07 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

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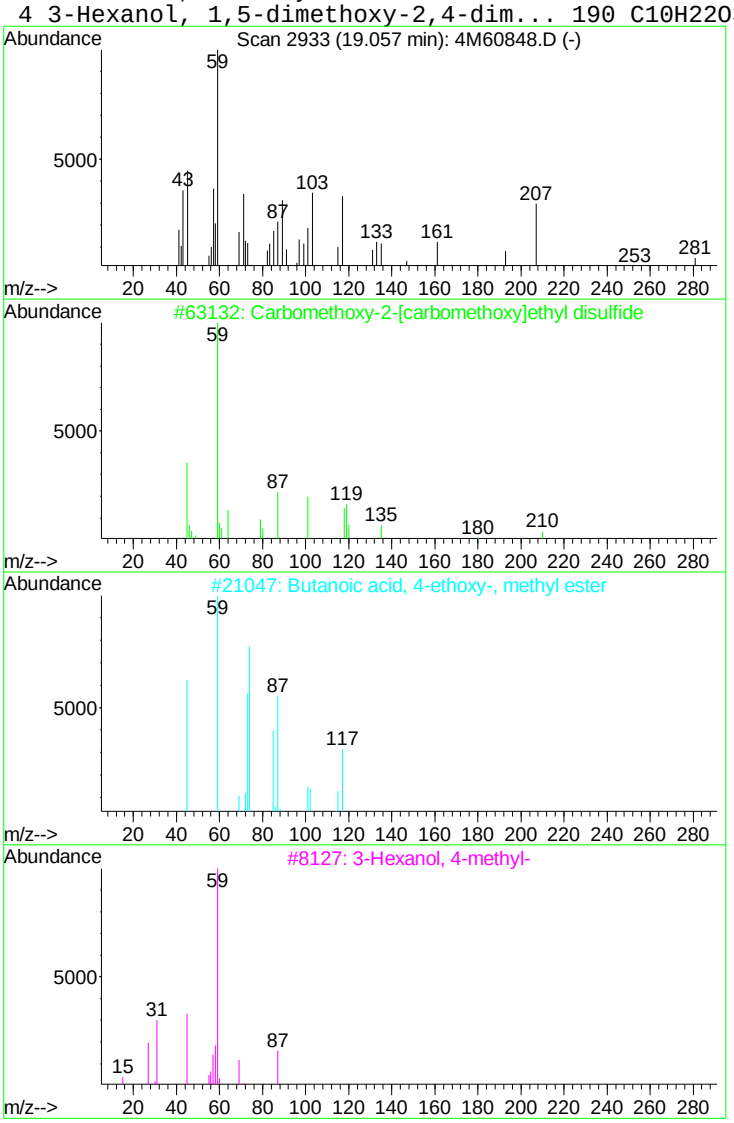
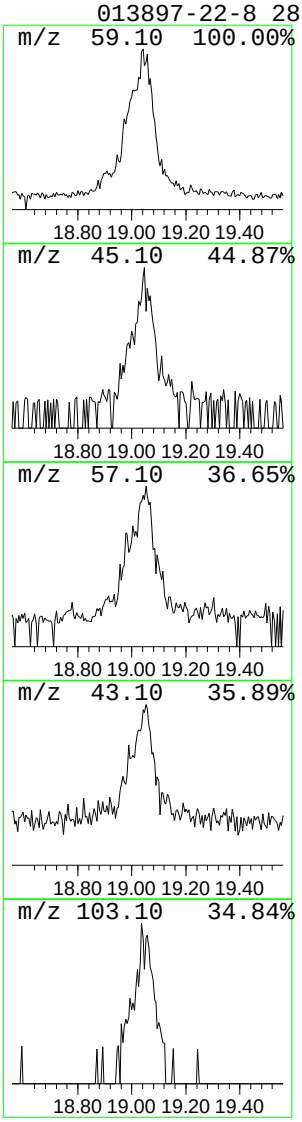
Peak Number 10 Carbomethoxy-2-[carbomethox... Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.06	4.39 ug/ml	235310	Perylene-d12	18.32

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Carbomethoxy-2-[carbomethoxy]eth...	210	C6H10O4S2	1000251-38-2	38
2	Butanoic acid, 4-ethoxy-, methyl...	146	C7H14O3	029006-04-0	37
3	3-Hexanol, 4-methyl-	116	C7H16O	000615-29-2	37
4	3-Hexanol, 1,5-dimethoxy-2,4-dim...	190	C10H22O3	013897-22-8	28





Tentatively Identified Compound (LSC) summary

Operator ID: MDC Date Acquired: 13 May 2012 17:19
Data File: I:\MSDCHEM\1\DATA\051312\4M60848.D
Name: L12050153-07
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

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Butane, 2-methoxy...	3.81	5.0	ug/ml	174640	1	7.23	1389680	40.0
2-Pentanone, 4-hy...	5.69	9.0	ug/ml	311858	1	7.23	1389680	40.0
2-Propanol, 1,1'-...	12.04	4.1	ug/ml	223277	4	11.91	2193510	40.0
2,5,8,11-Tetraoxa...	13.43	11.1	ug/ml	607734	4	11.91	2193510	40.0
2-Propanol, 1-[1-...	14.16	4.8	ug/ml	270897	5	15.60	2277160	40.0
2,5,8,11-Tetraoxa...	14.82	17.6	ug/ml	1000450	5	15.60	2277160	40.0
Methane, diethoxy-	15.53	5.6	ug/ml	320770	5	15.60	2277160	40.0
1-Propanol, 2-(2-...	16.12	11.7	ug/ml	668833	5	15.60	2277160	40.0
Hexaethylene glyc...	16.98	7.2	ug/ml	383167	6	18.32	2142270	40.0
Carbomethoxy-2-[c...	19.06	4.4	ug/ml	235310	6	18.32	2142270	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
4M60439.D MEGAMIX.M Fri Apr 20 08:18:56 2012 Page 2

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

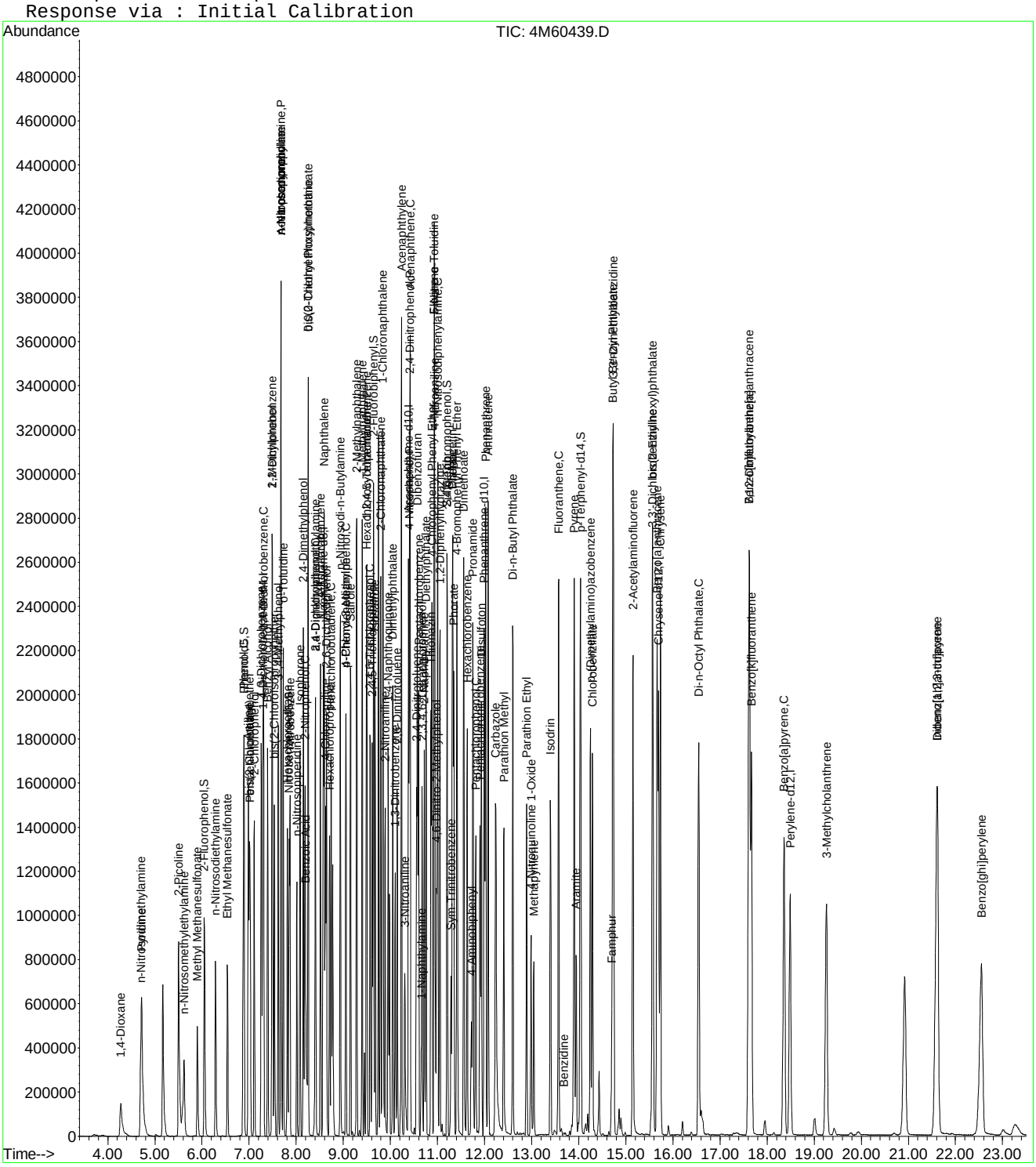
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.56	87	339058	61.7901	ug/ml	100
98)	4-Aminobiphenyl	11.72	169	362625	53.7158	ug/ml	100
99)	Pentachlorophenol	11.81	266	206843	60.4342	ug/ml	98
100)	Pronamide	11.75	173	474797	52.5004	ug/ml	99
101)	Pentachloronitrobenzene	11.90	237	112466	52.7533	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

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

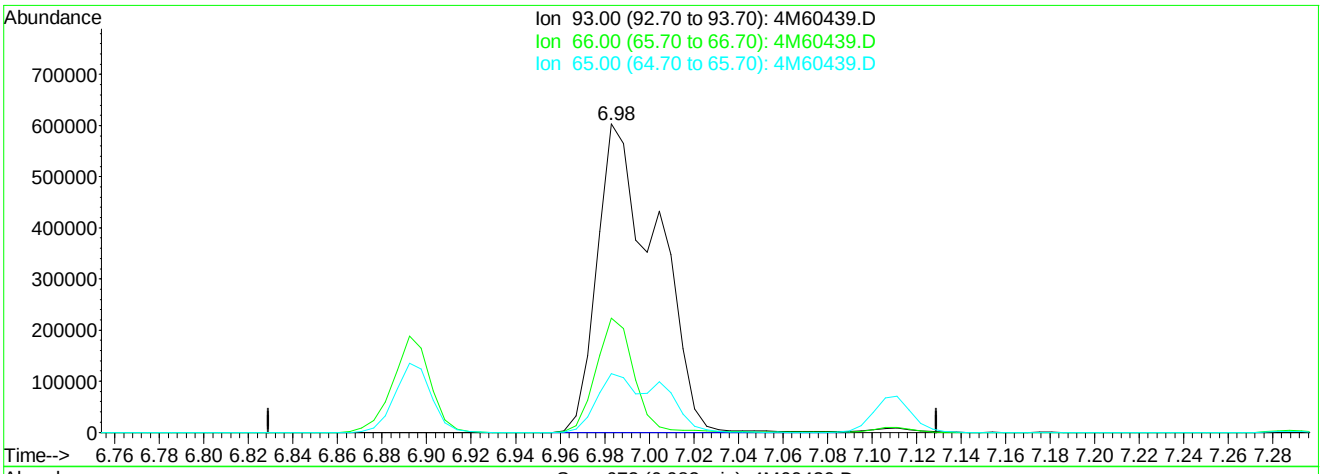
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration

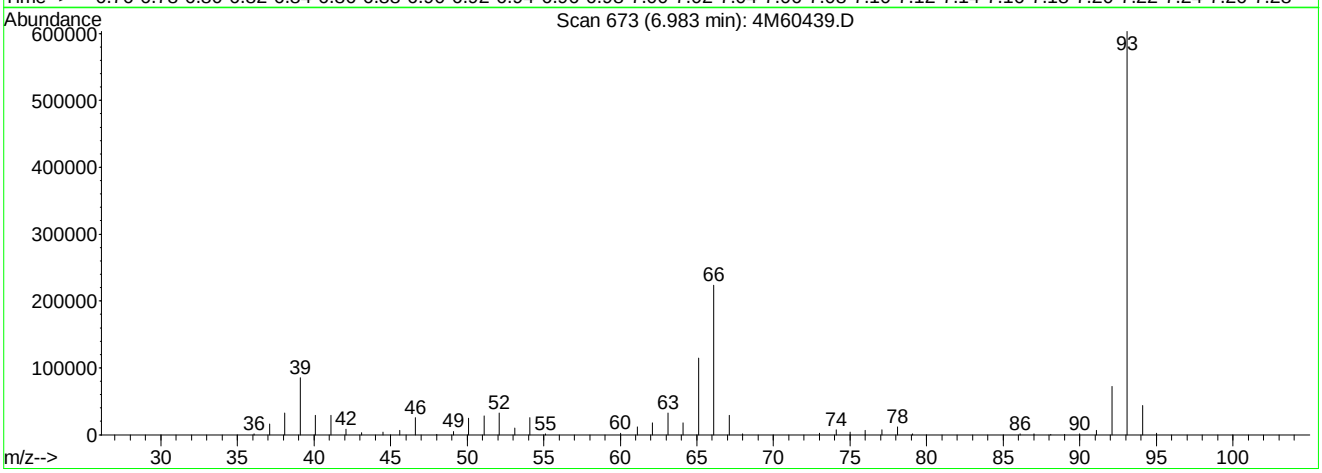


Quantitation Report (Qedit)

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

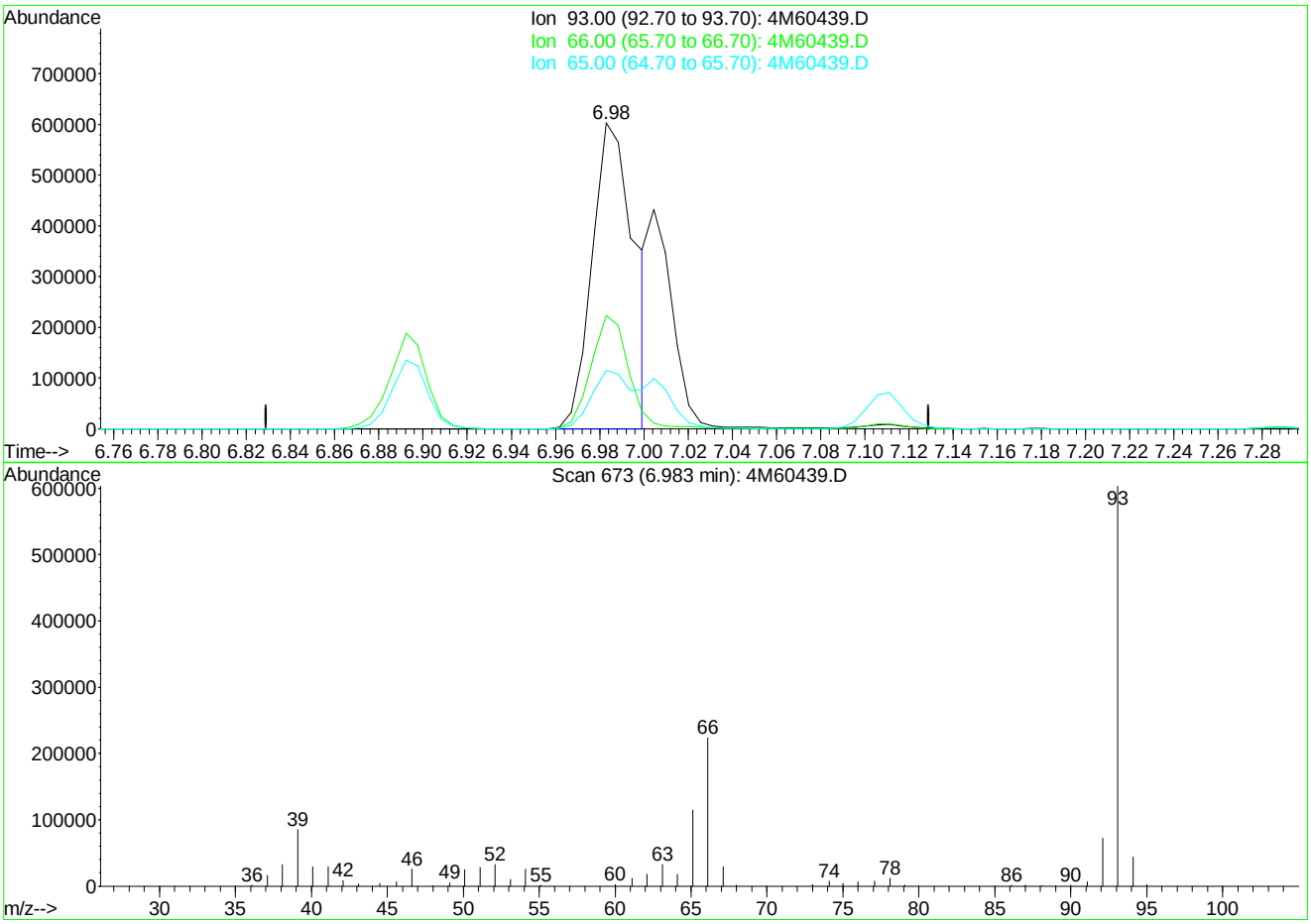
Ion	Exp%	Act%
93.00	100	100
66.00	42.70	23.58#
65.00	19.20	20.60
0.00	0.00	0.00

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 ; 2012

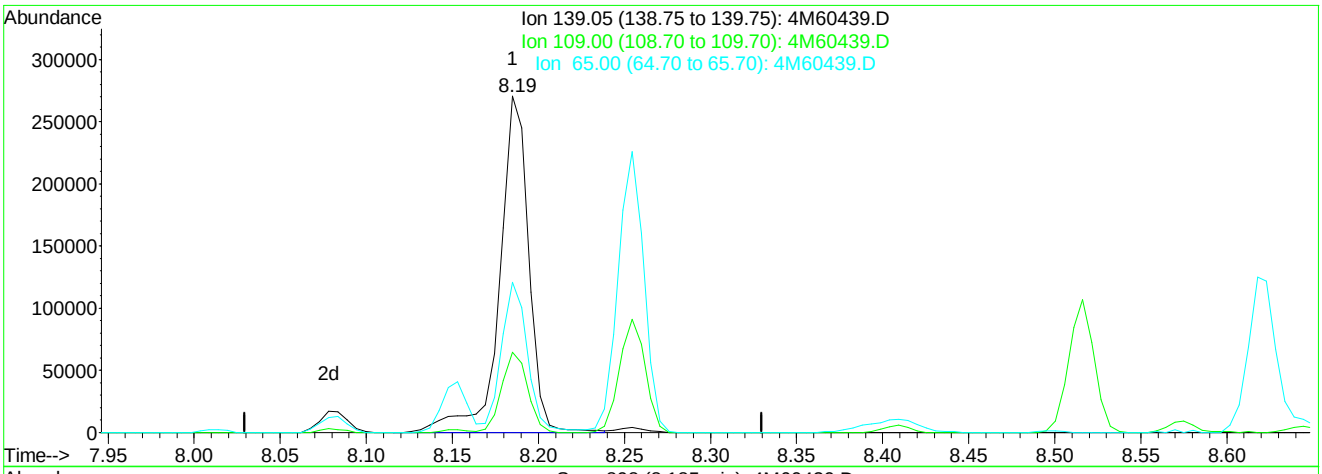
Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41

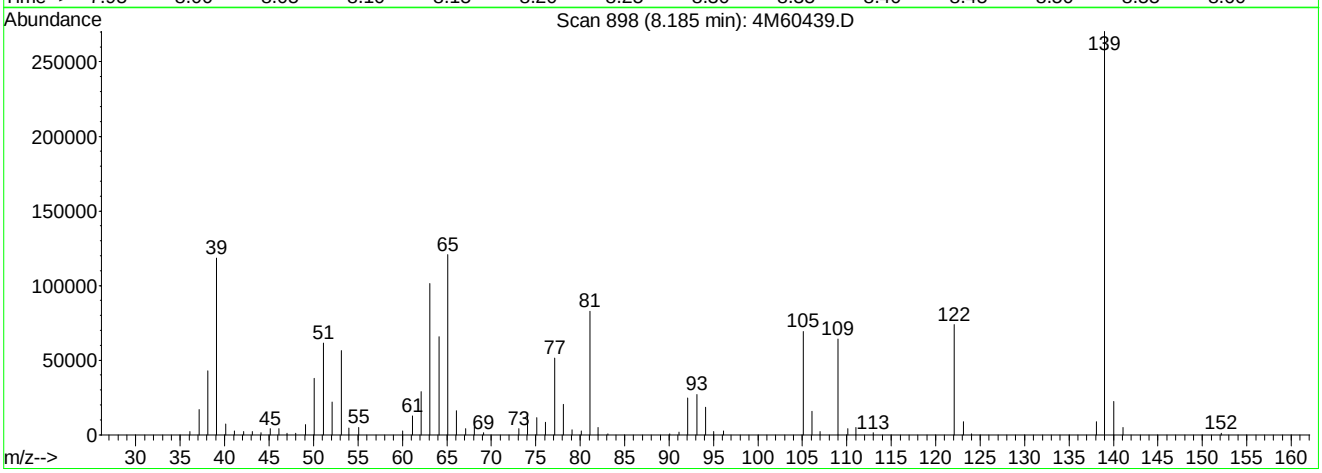
#3 - Improperly integrated isomers and/or coeluting compounds

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

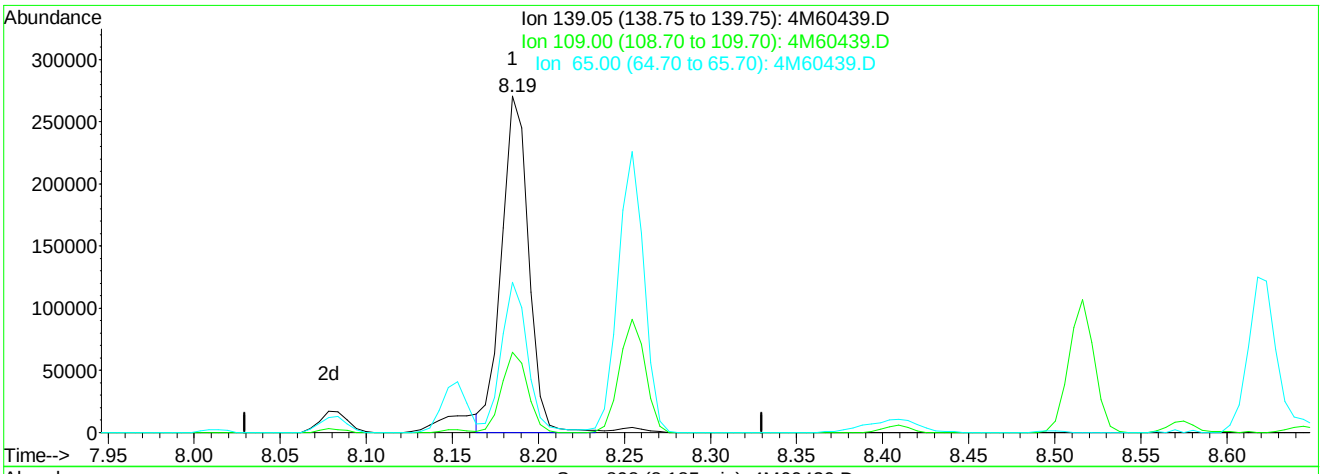
Ion	Exp%	Act%
139.05	100	100
109.00	16.10	21.09
65.00	37.90	40.29
0.00	0.00	0.00

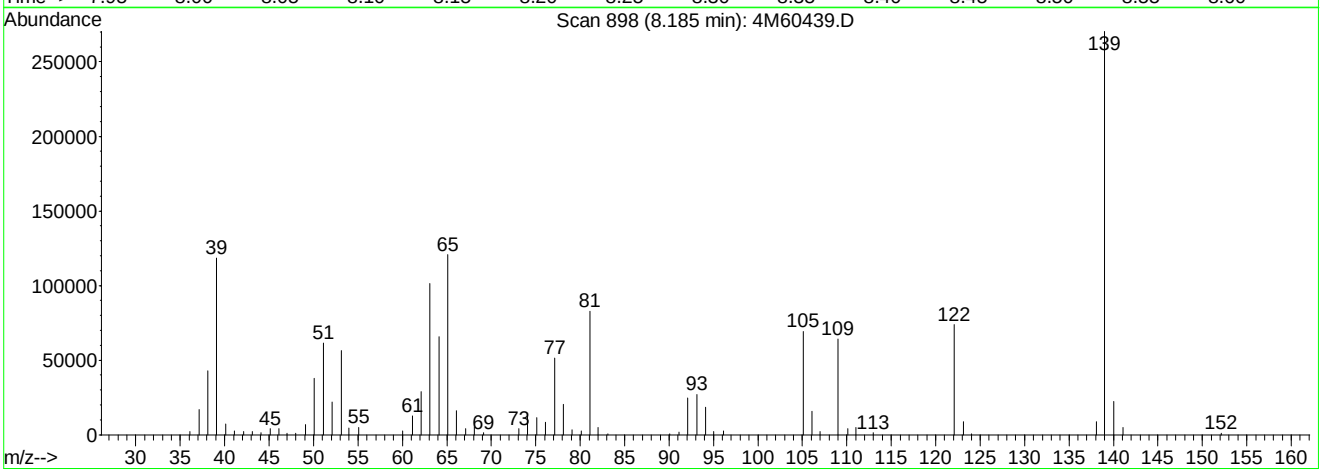
4M60439.D MEGAMIX.M Thu Apr 19 14:20:01 2012

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 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\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

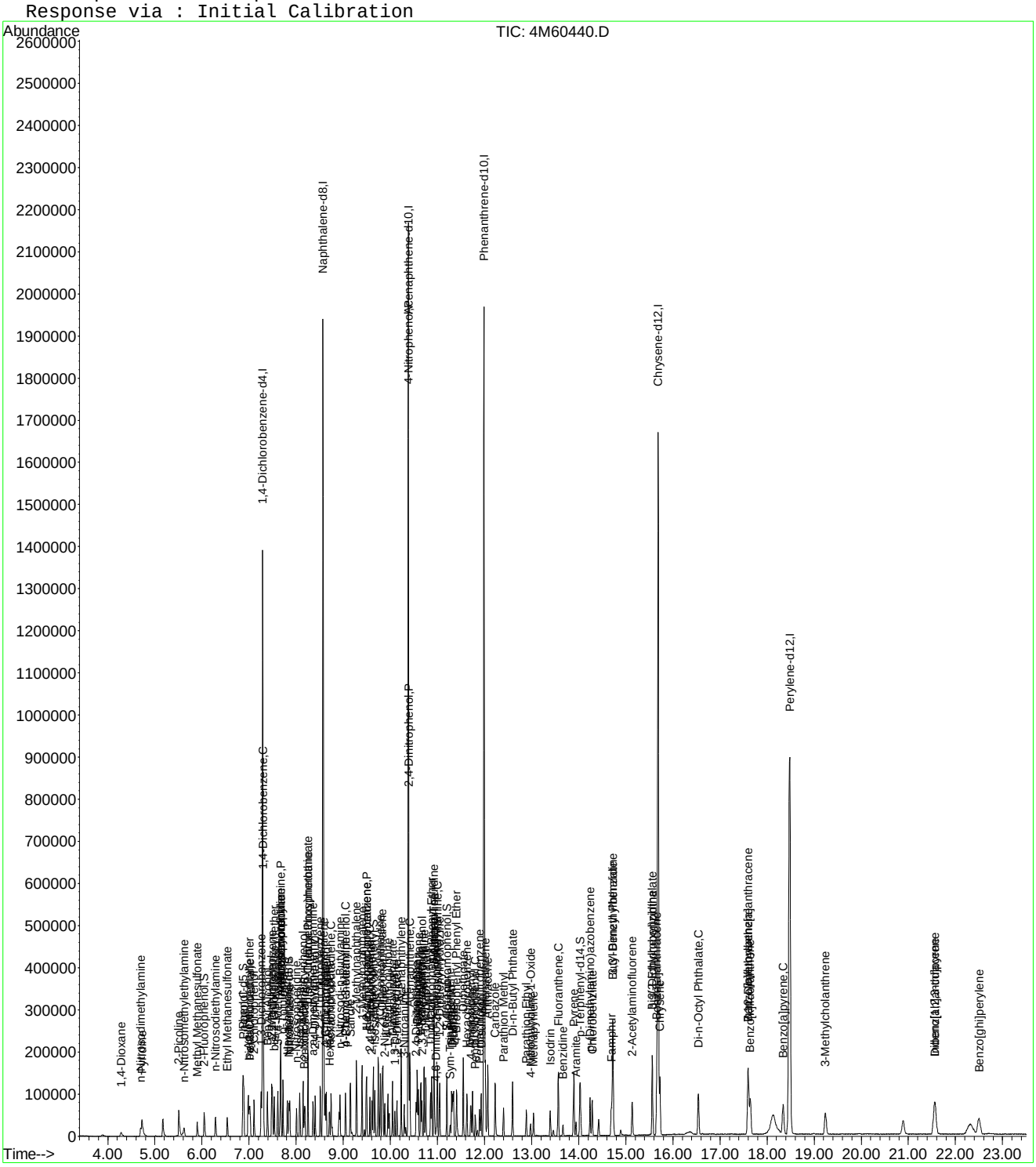
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.55	87	21420	4.5998	ug/ml	98
98)	4-Aminobiphenyl	11.71	169	41614	7.2373	ug/ml	97
99)	Pentachlorophenol	11.80	266	8880	3.0117	ug/ml	98
100)	Pronamide	11.74	173	25508	3.3192	ug/ml	97
101)	Pentachloronitrobenzene	11.90	237	5928	3.2762	ug/ml	97
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
4M60440.D MEGAMIX.M Fri Apr 20 08:18:57 2012 Page 3

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

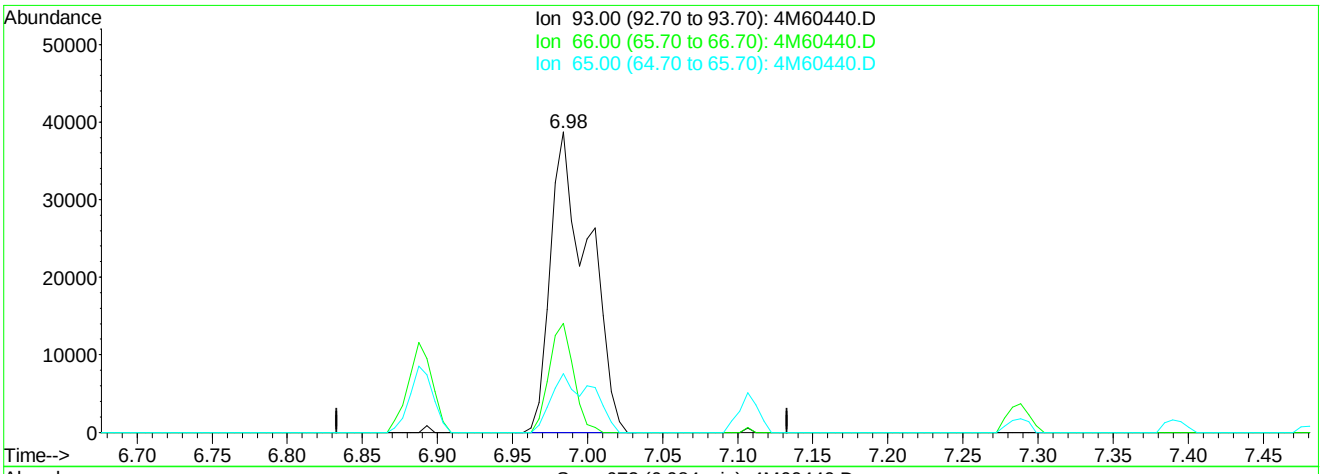
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration

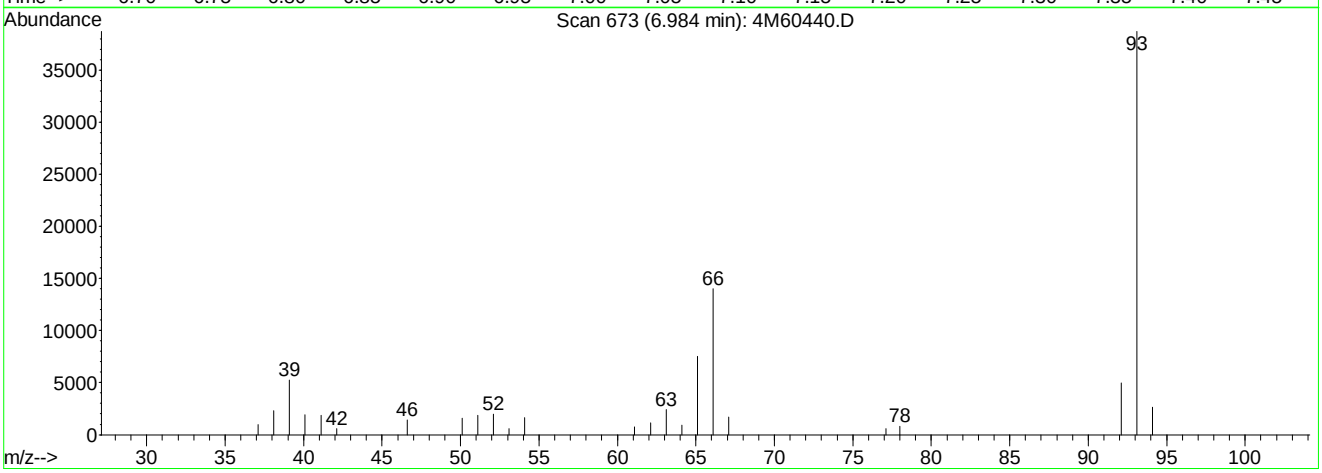


Quantitation Report (Qedit)

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

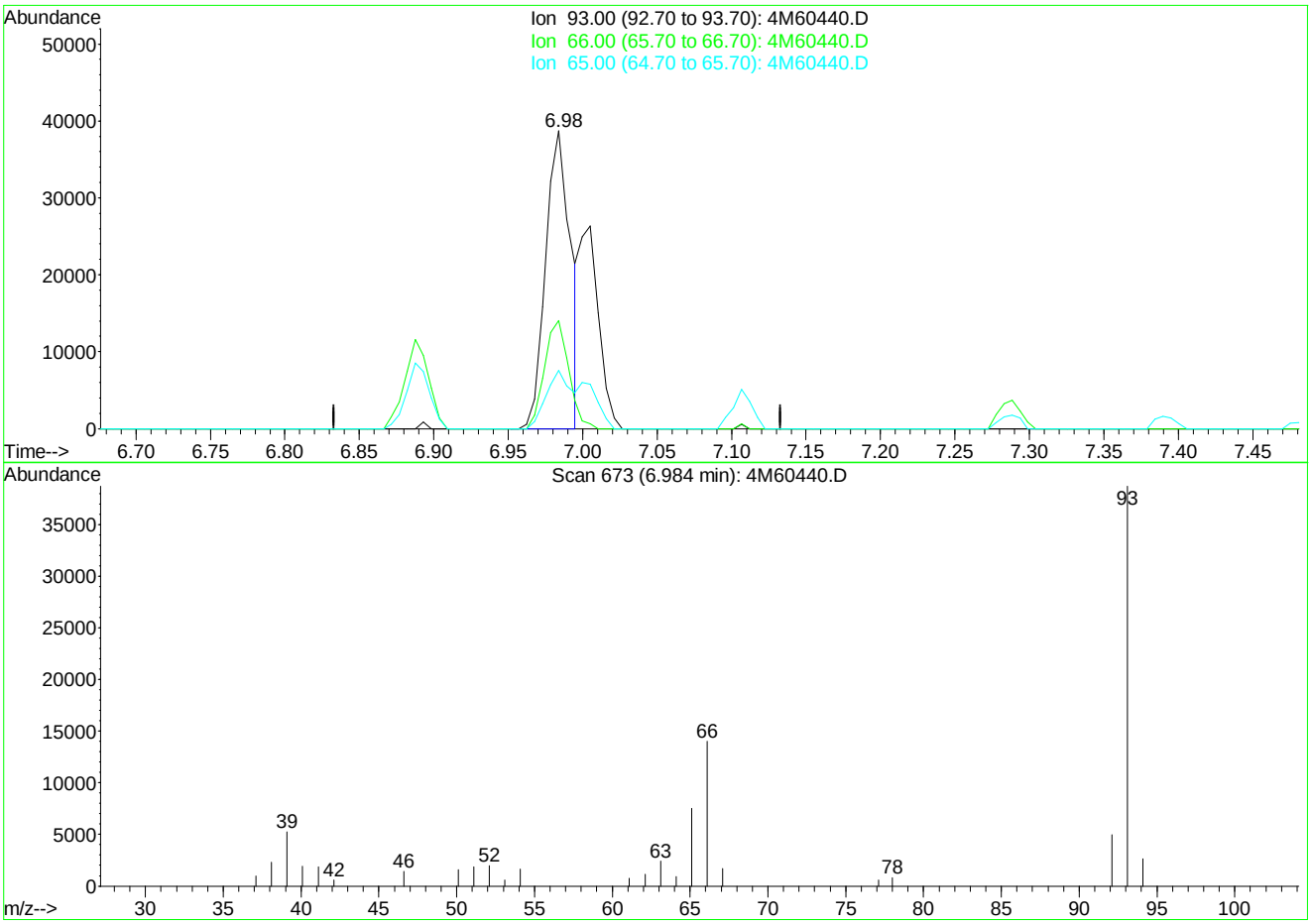
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.15
65.00	29.20	12.96#
0.00	0.00	0.00

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

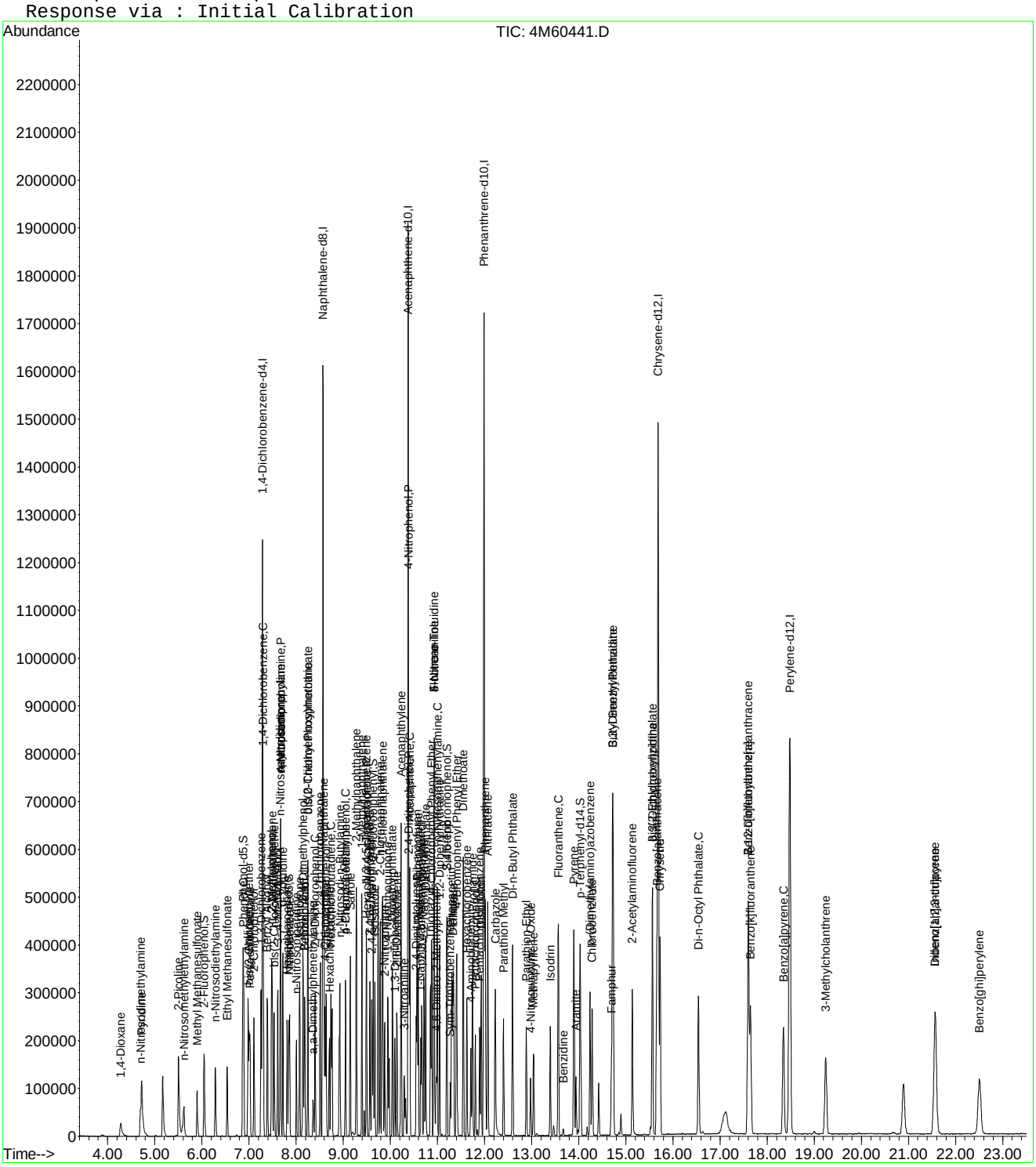
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.55	87	62939	14.8427	ug/ml	98
98)	4-Aminobiphenyl	11.71	169	98626	18.8359	ug/ml	97
99)	Pentachlorophenol	11.81	266	31968	11.9067	ug/ml	98
100)	Pronamide	11.75	173	78302	11.1894	ug/ml	99
101)	Pentachloronitrobenzene	11.90	237	18446	11.1953	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
4M60441.D MEGAMIX.M Fri Apr 20 08:18:58 2012 Page 3

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

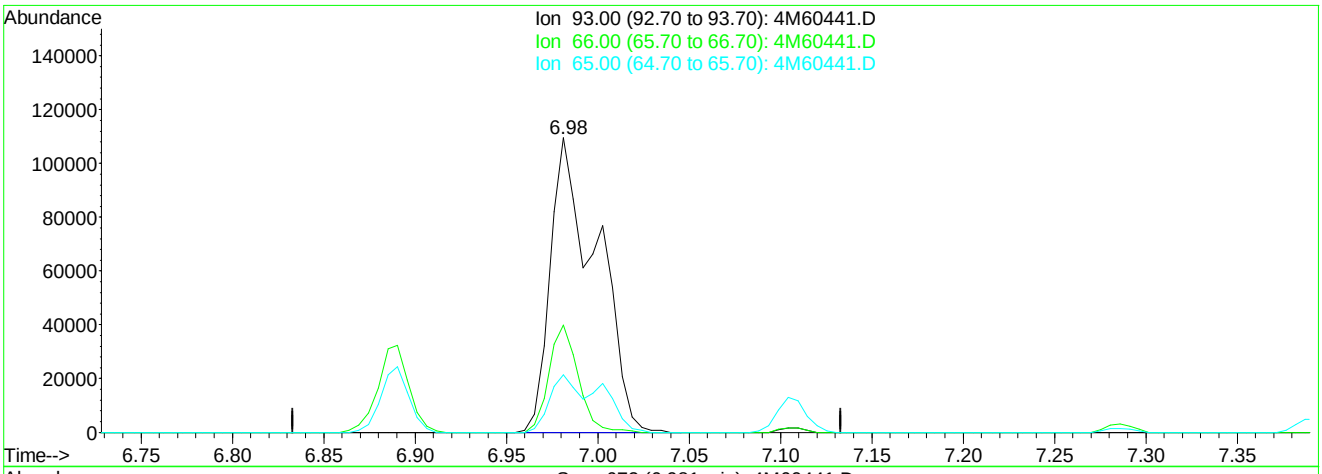
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration



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

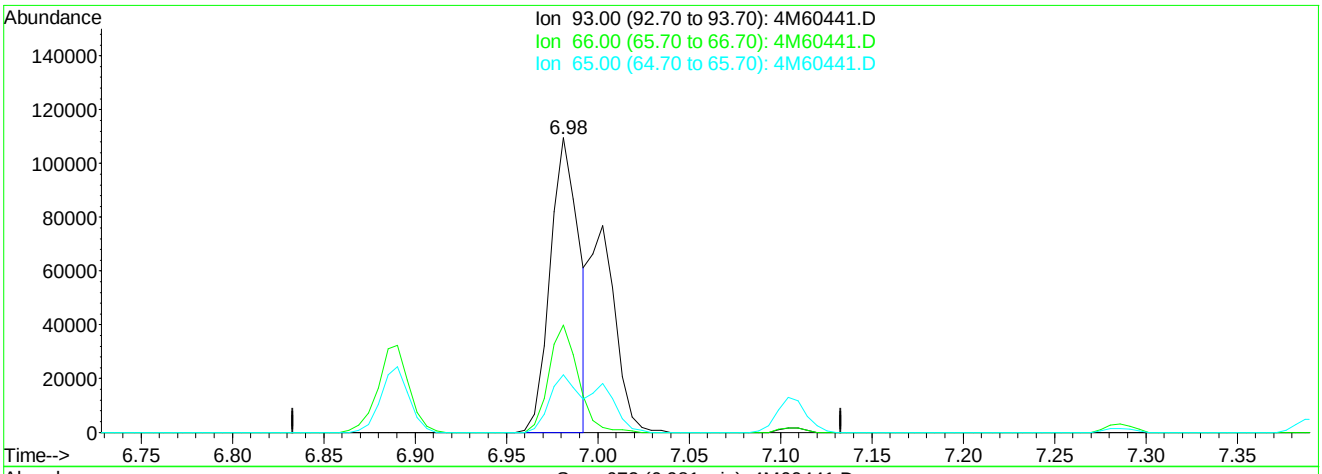
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.04
65.00	29.20	12.50#
0.00	0.00	0.00

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

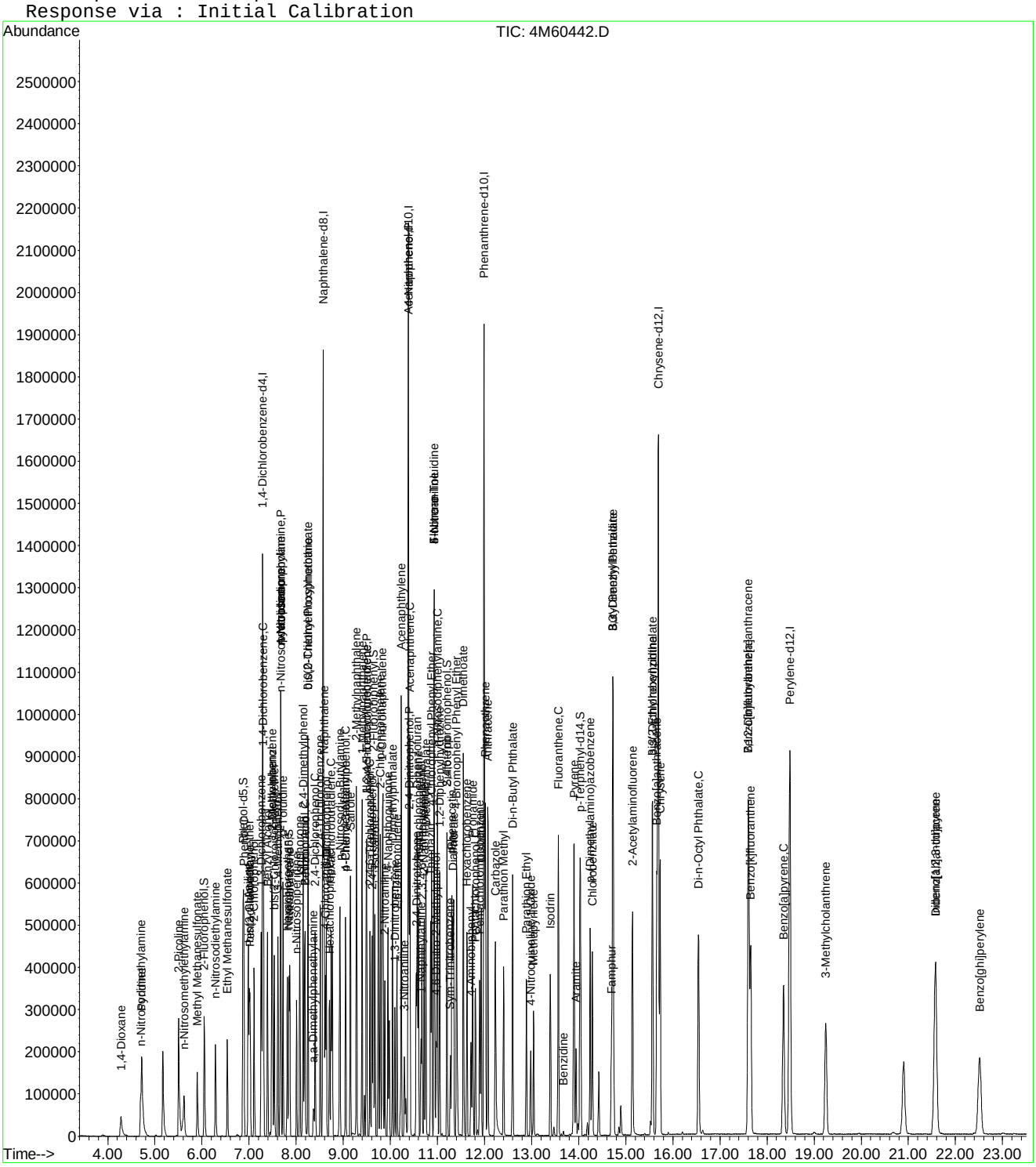
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.55	87	100546	21.7536	ug/ml	99
98)	4-Aminobiphenyl	11.71	169	125719	22.0160	ug/ml	99
99)	Pentachlorophenol	11.81	266	53277	18.1856	ug/ml	99
100)	Pronamide	11.75	173	123932	16.2463	ug/ml	99
101)	Pentachloronitrobenzene	11.90	237	29537	16.4436	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
4M60442.D MEGAMIX.M Fri Apr 20 08:18:58 2012 Page 3

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

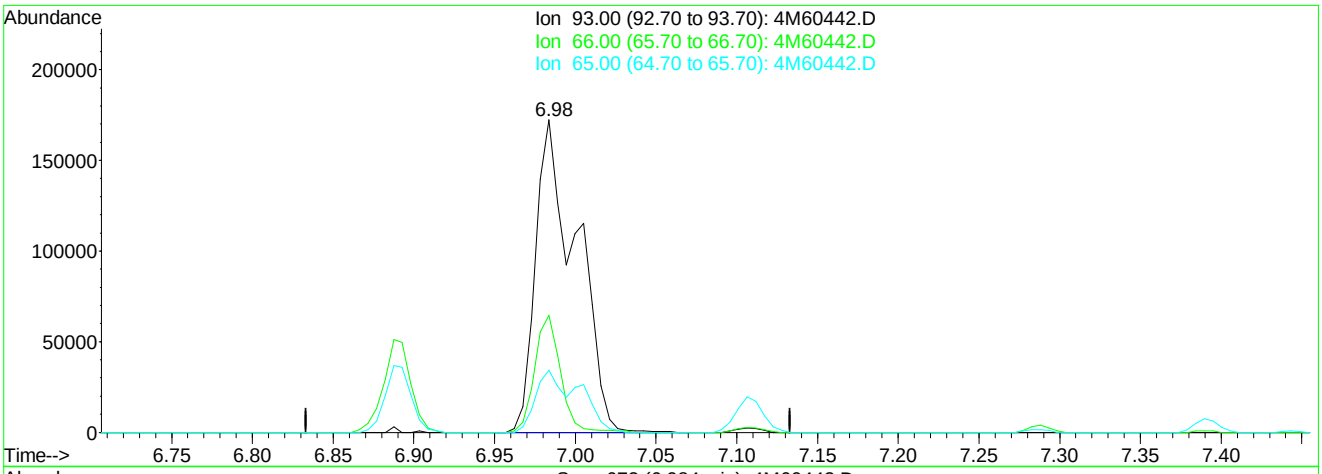
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration


Abundance
TIC: 4M60442.D
Time-->
1,4-Dioxane
n-Nitrosodimethylamine
Pyridine
2-Picoline
n-Nitrosomethylethylamine
Methyl Methanesulfonate
2-Fluorophenol,S
n-Nitrosodiethylamine
Ethyl Methanesulfonate
Phenol-d5,S
Phenol
Aniline
bis(2-Chloroethyl) Ether
1,3-Dichlorobenzene
1,4-Dichlorobenzene-d4,I
1,4-Dichlorobenzene,C
Benzyl Alcohol
1,2-Dichlorobenzene
2-Methylphenol
n-Nitrosodi-n-propylamine,P
Hexachloroethane
n-Nitrosopyrrolidine
Acetophenone
3-Methylphenol/4-Methylphenol
n-Nitrosodi-n-propylamine
Isophorone
2-Nitrophenol
2,4-Dimethylphenol
Bis(2-Chloroethoxy)methane
Naphthalene-d8,I
2,4-Dichlorophenol
1,2,4-Trichlorobenzene
Naphthalene
Benzoic Acid
Hexachlorobutadiene,C
4-Chloroaniline
2-Methylnaphthalene-d10,I
2-Methylnaphthalene
Hexachlorocyclopentadiene
2,4,6-Trichlorophenol,P
2,4,5-Trichlorophenol,S
2-Fluorobiphenyl,I
2-Chloronaphthalene
2-Nitroaniline
Dimethyl Phthalate
2,6-Dinitrotoluene
3-Nitroaniline
Acenaphthylene
2,4-Dinitrophenol,P
Acenaphthene,C
Acenaphthene-d10,I
4-Nitrophenol
Dibenzofuran
2,4-Dinitrotoluene
2,3,4,6-Tetrachlorophenol
Diethyl Phthalate
4-Chlorophenyl Phenyl Ether
Fluorene
4-Nitroaniline
4,6-Dinitro-2-methylphenol
n-Nitrosodiphenylamine,P
Azobenzene
Sym-Trinitrobenzene
4-Bromophenyl Phenyl Ether
Hexachlorobenzene
Atrazine
Pentachlorophenol,S
Phenanthrene-d10,I
Phenanthrene
Anthracene
Carbazole
Di-n-Butyl Phthalate
Fluoranthene,C
Pyrene
p-Terphenyl-d14,S
Butyl Benzyl Phthalate
3,3'-Dichlorobenzidine
Benzo[a]anthracene
Chrysene-d12,I
Chrysene
bis(2-Ethylhexyl) Phthalate
Di-n-Octyl Phthalate
Benzo[b]fluoranthene
Benzo[k]fluoranthene
Benzo[a]pyrene
Perylene-d12,I
Indeno[1,2,3-cd]pyrene
Dibenz[a,h]anthracene
Benzo[ghi]perylene
Parathion Methyl
Parathion Ethyl
Isodrin
Benzidine
Aramite
Famphur
2-Acetylaminofluorene
4-Nitroquinoline-1-oxide
4-Aminobiphenyl
Chlordane
3-Methylcholanthrene
7,12-Dimethylbenz(a)anthracene
Pentachlorobenzene,C
Pentachloronitrobenzene
Pentachloroaniline
Pentachlorophenol
Pronamide
Hexachlorophene
Diallate
Hexachloropropene
Safrole
Phorate
Sulfotepp
Dimethoate
Thionazin
Sym-Trinitrobenzene
Ethyl Parathion
Methyl Parathion
Famphur
Isodrin
Benzidine
Aramite
Chlordane
Toxaphene
Aroclor-1016
Aroclor-1221
Aroclor-1232
Aroclor-1242
Aroclor-1248
Aroclor-1254
Aroclor-1260
Aroclor-1260,S
Aroclor-1260,I
Aroclor-1268
Aroclor-1268,S
Aroclor-1268,I
Aroclor-1268,C
Aroclor-1268,P

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

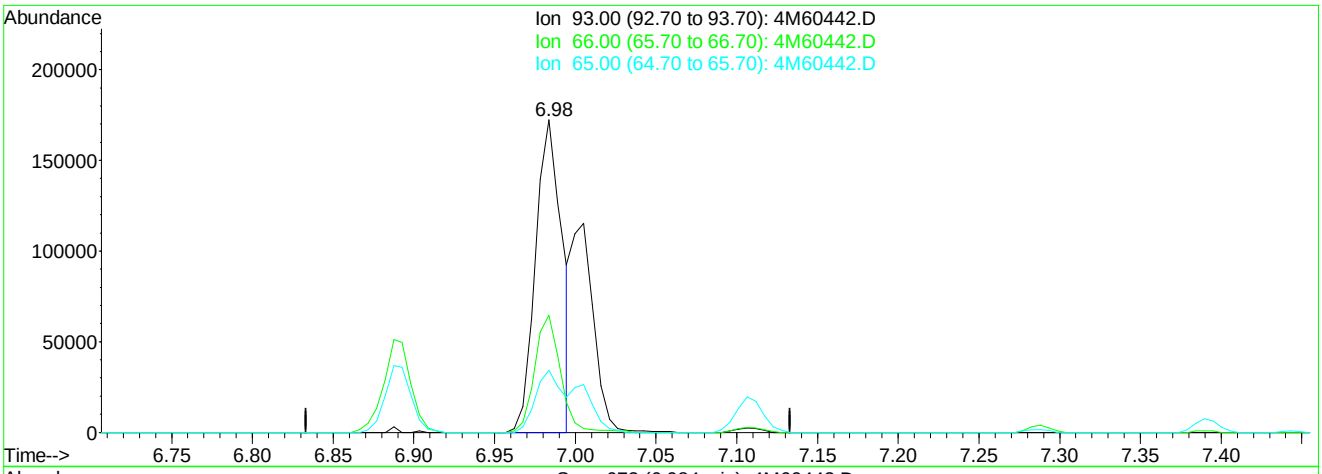
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.55
65.00	29.20	12.97#
0.00	0.00	0.00

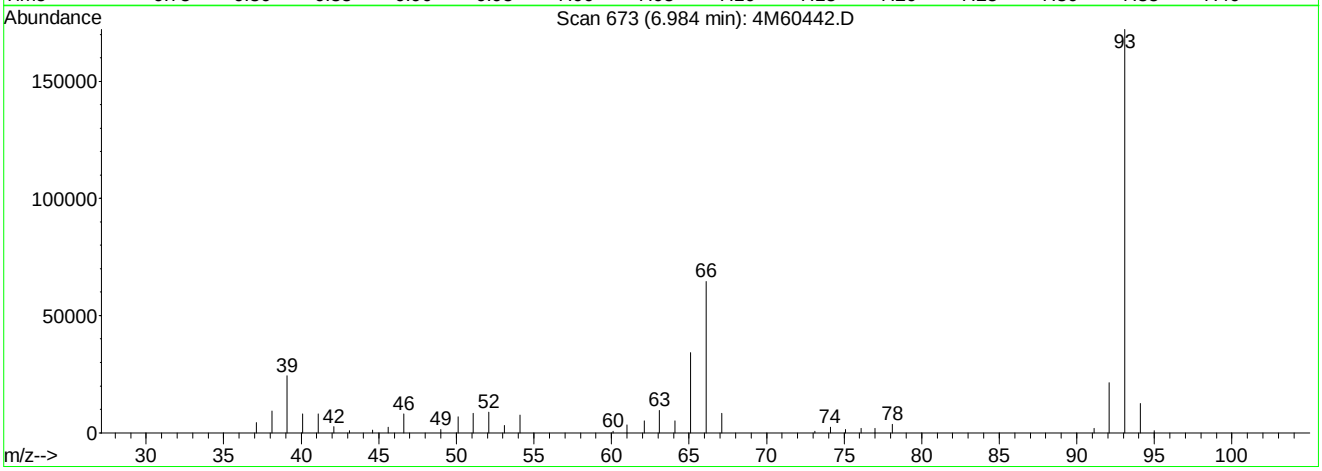
4M60442.D MEGAMIX.M Thu Apr 19 14:22:04 2012

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
4M60443.D MEGAMIX.M Fri Apr 20 08:18:59 2012 Page 2

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

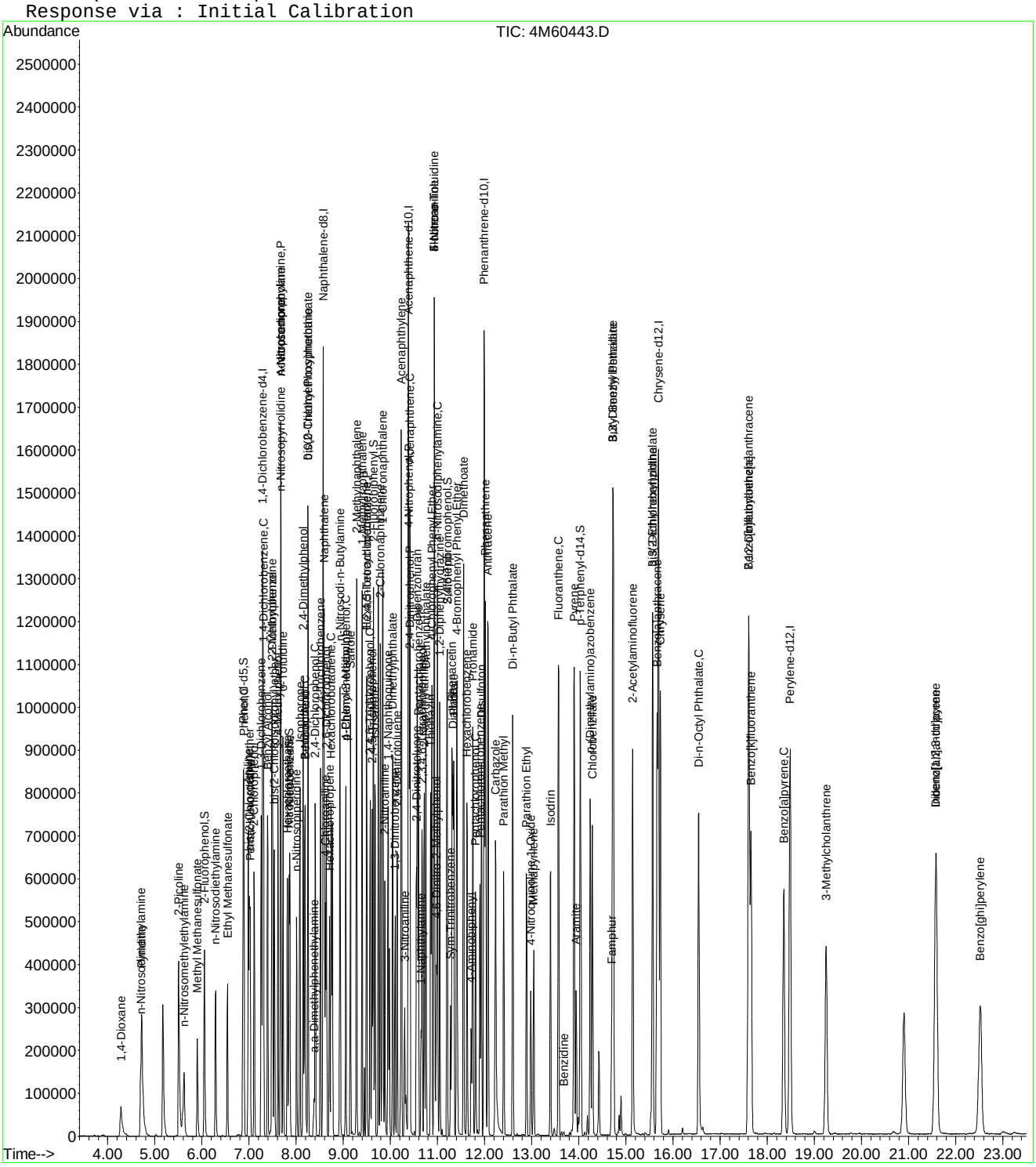
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.55	87	154209	33.4716	ug/ml	99
98)	4-Aminobiphenyl	11.71	169	167715	29.4842	ug/ml	99
99)	Pentachlorophenol	11.81	266	85623	29.2700	ug/ml	99
100)	Pronamide	11.75	173	198719	26.1362	ug/ml	99
101)	Pentachloronitrobenzene	11.90	237	47519	26.5373	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

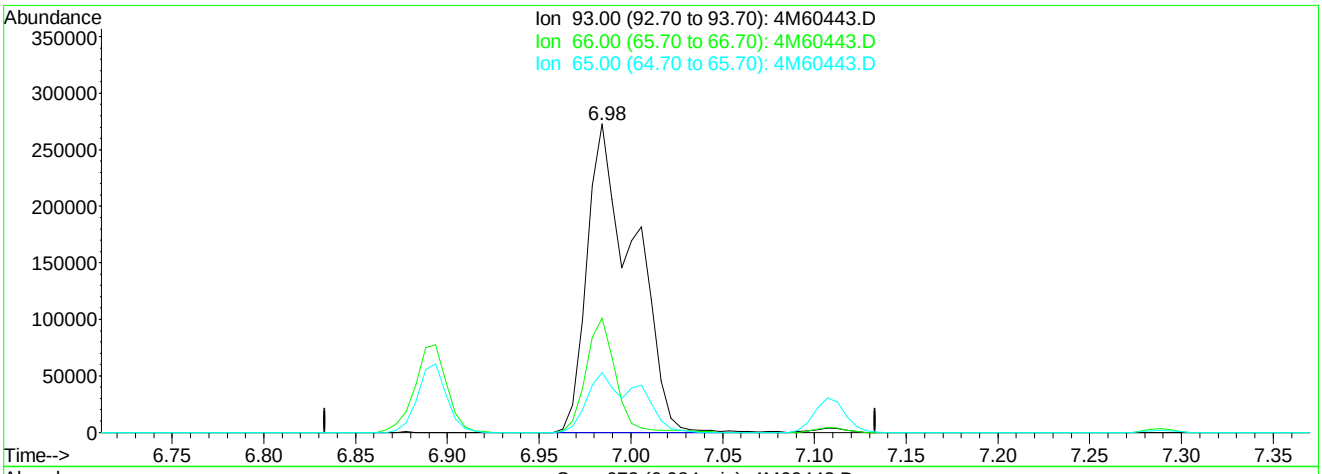
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration



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

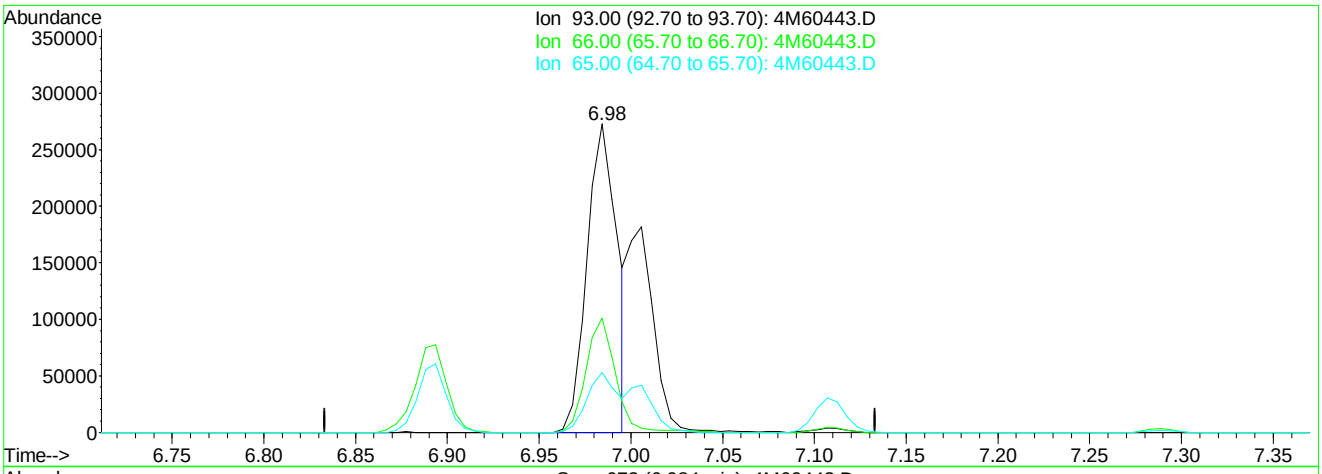
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.25
65.00	29.20	12.52#
0.00	0.00	0.00

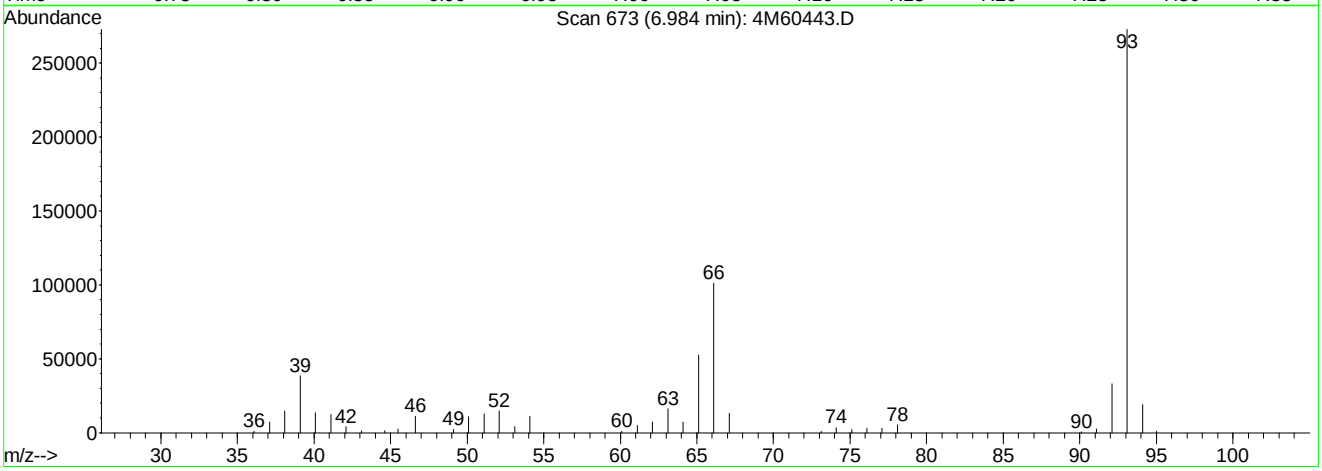
4M60443.D MEGAMIX.M Thu Apr 19 14:22:42 2012

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 ; 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

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

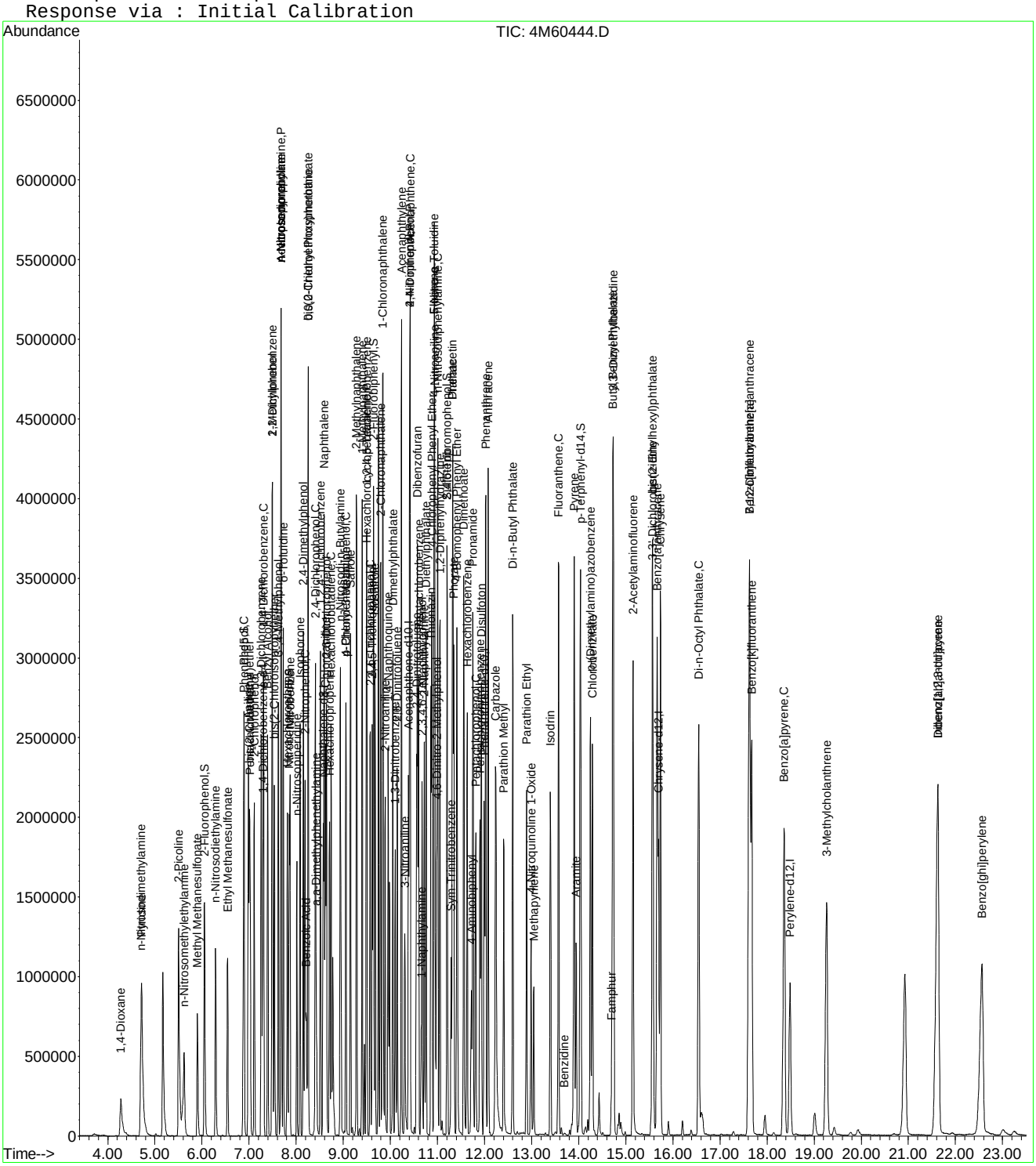
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.56	87	438351	87.6686	ug/ml	99
98)	4-Aminobiphenyl	11.72	169	583198	94.6458	ug/ml	100
99)	Pentachlorophenol	11.81	266	297153	93.2093	ug/ml	100
100)	Pronamide	11.75	173	682115	82.6482	ug/ml	99
101)	Pentachloronitrobenzene	11.90	237	162254	83.4353	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

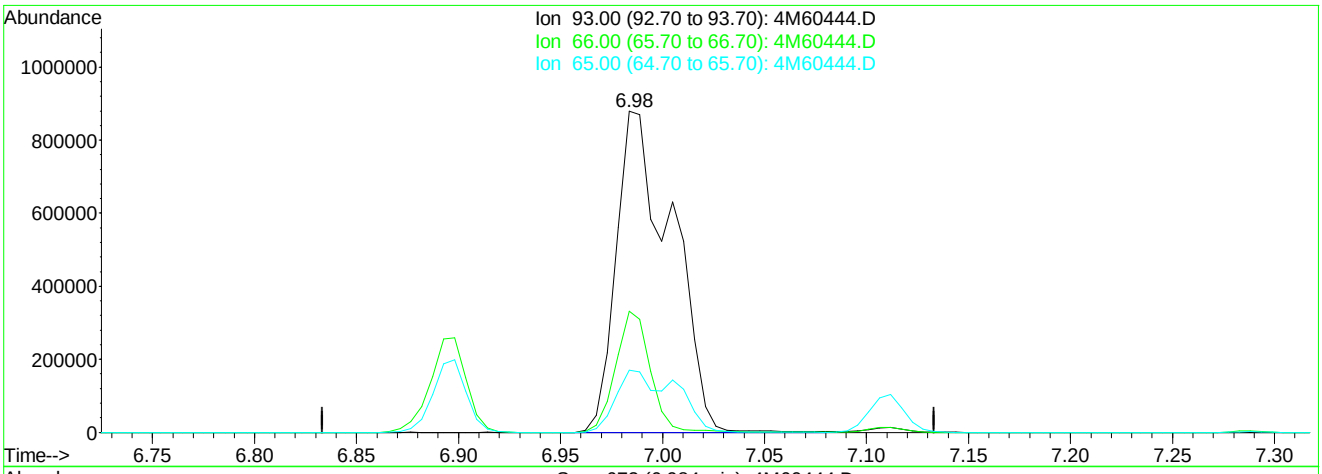
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration

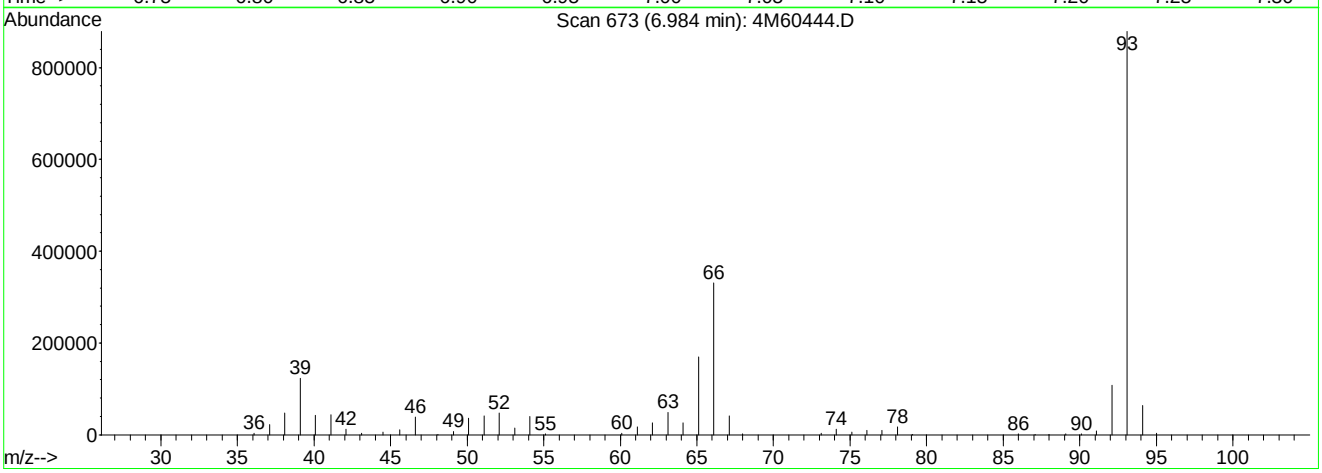


Quantitation Report (Qedit)

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

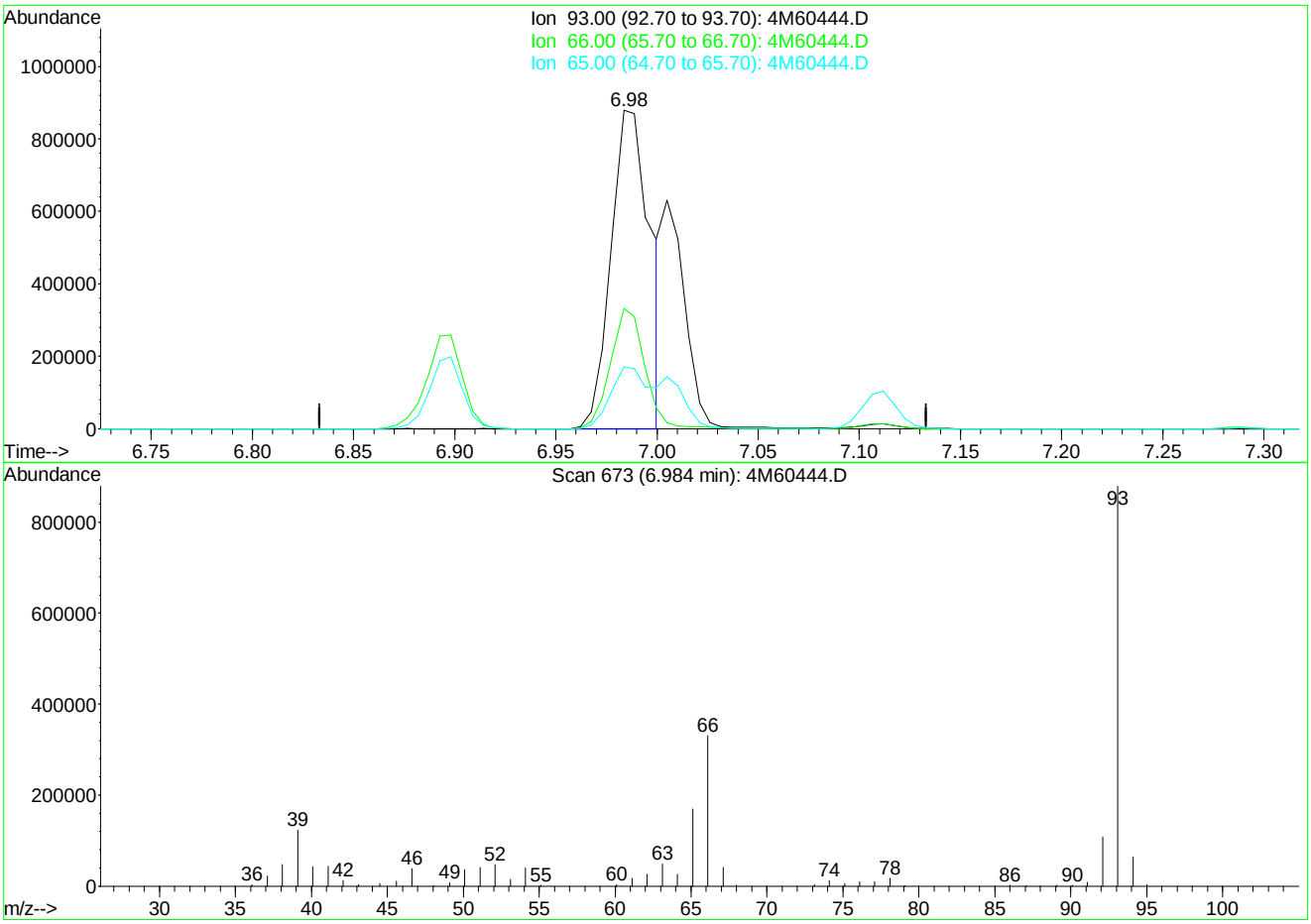
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.77
65.00	29.20	20.73
0.00	0.00	0.00

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 [illegible] 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

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
4M60445.D MEGAMIX.M Fri Apr 20 08:19:01 2012 Page 2

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

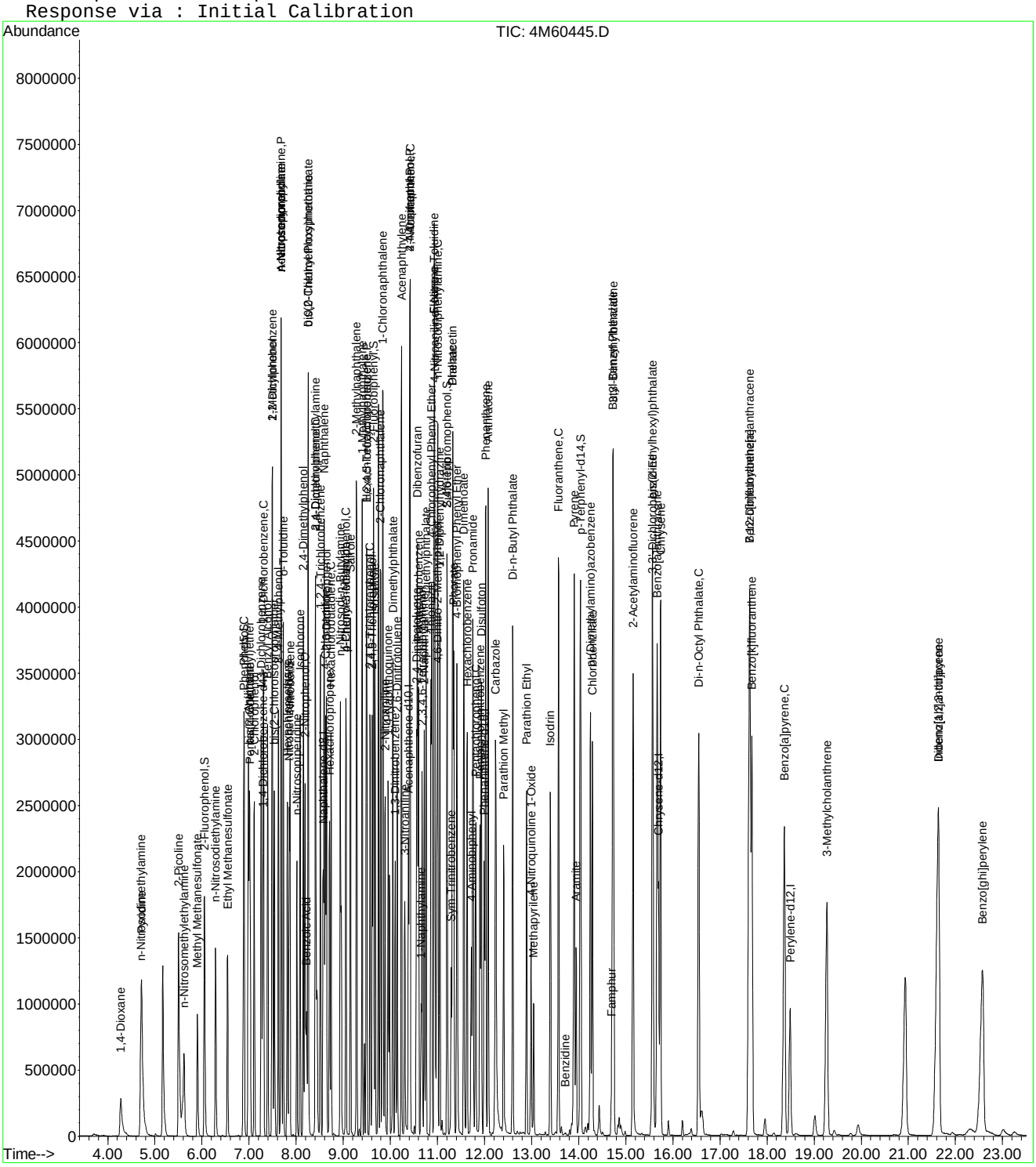
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.56	87	501935	100.9365	ug/ml	99
98)	4-Aminobiphenyl	11.72	169	862423	134.3000	ug/ml	100
99)	Pentachlorophenol	11.81	266	367513	111.8825	ug/ml	99
100)	Pronamide	11.75	173	823842	100.0678	ug/ml	100
101)	Pentachloronitrobenzene	11.90	237	193570	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

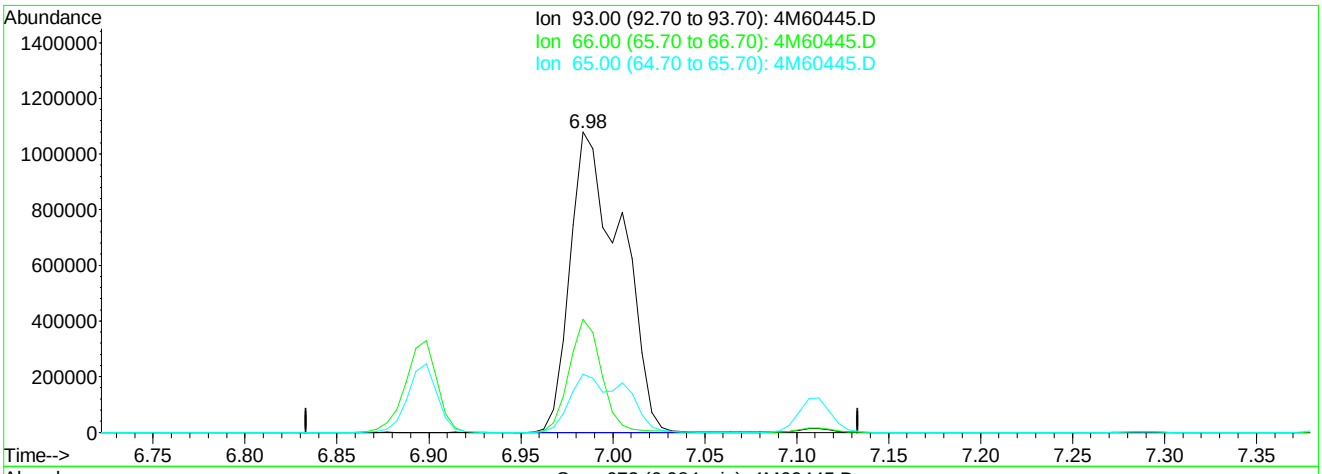
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration

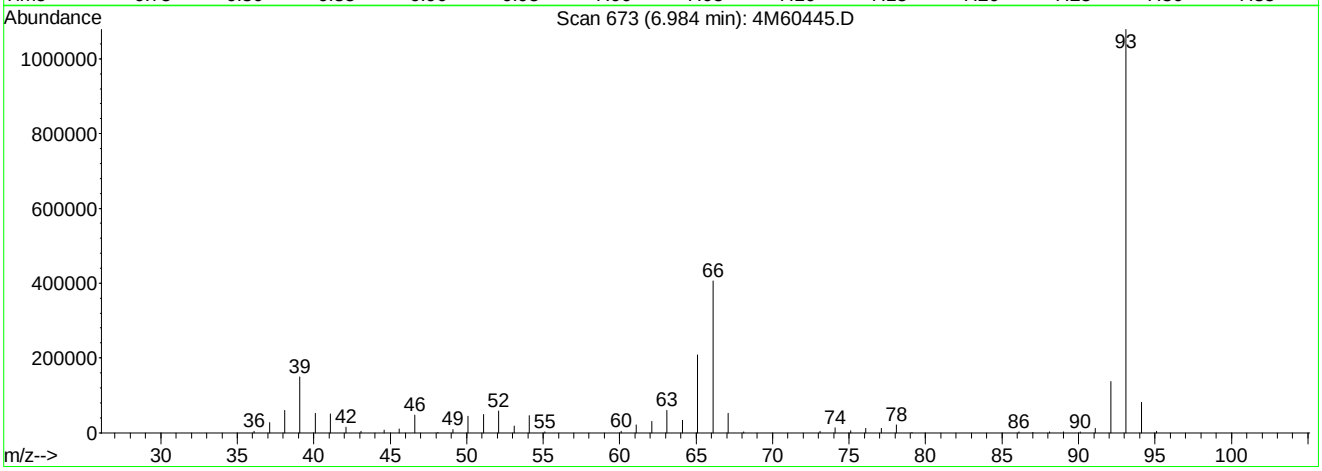


Quantitation Report (Qedit)

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

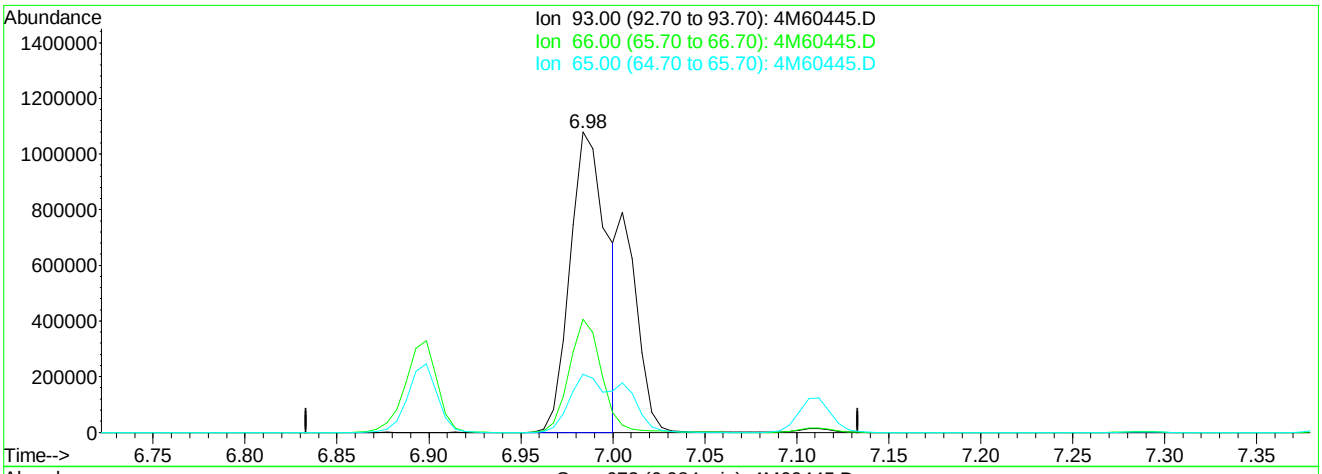
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.95
65.00	29.20	20.71
0.00	0.00	0.00

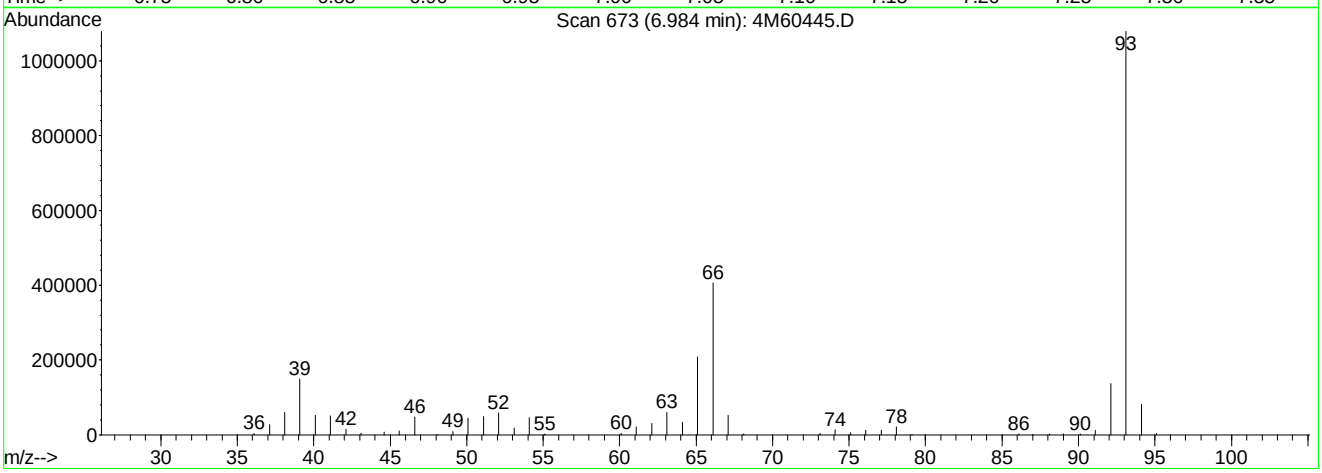
4M60445.D MEGAMIX.M Thu Apr 19 14:23:57 2012

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

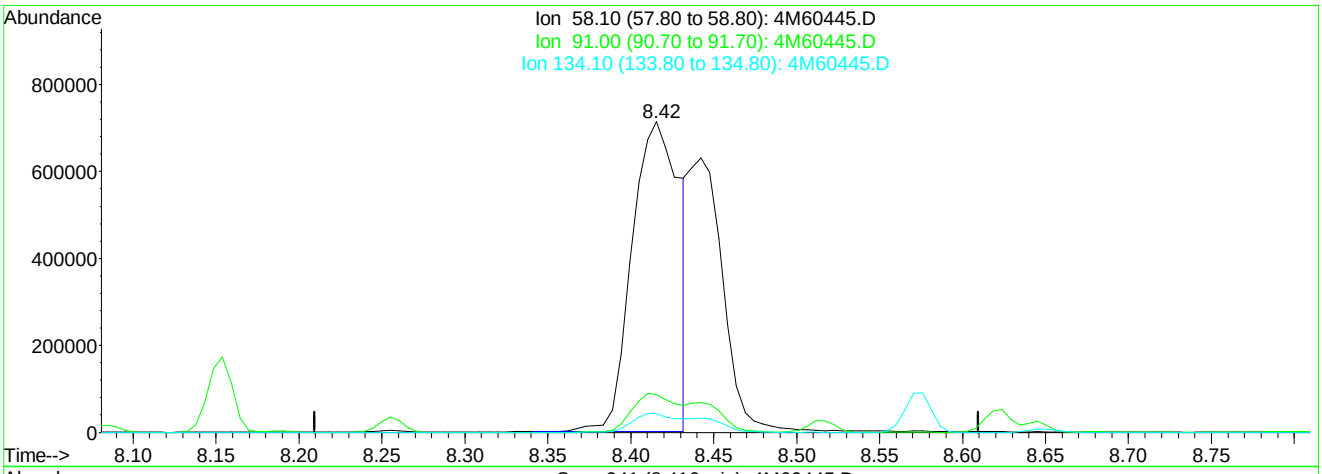
Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41

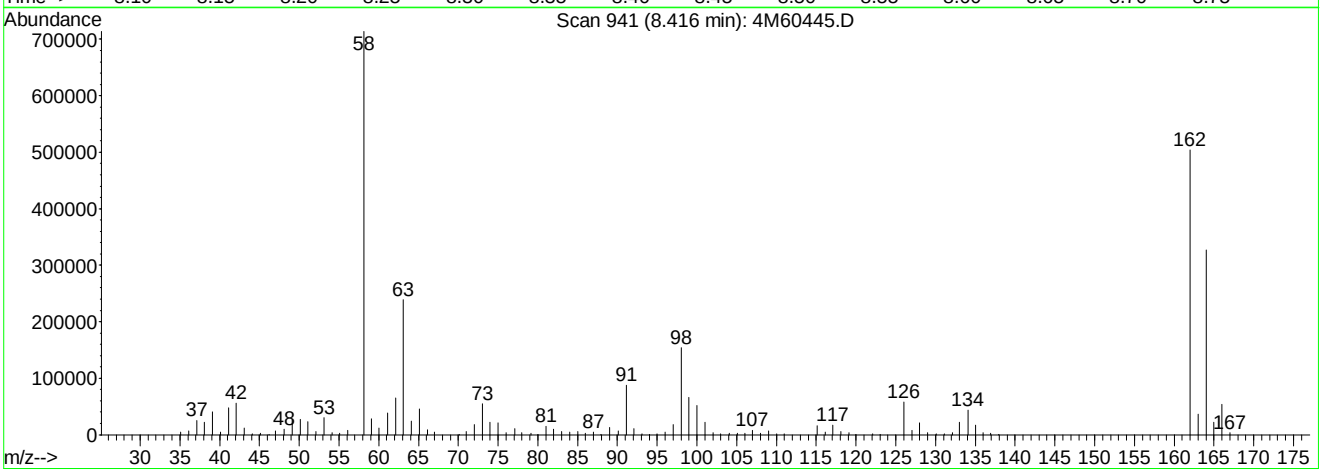
#3 - Improperly integrated isomers and/or coeluting compounds

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

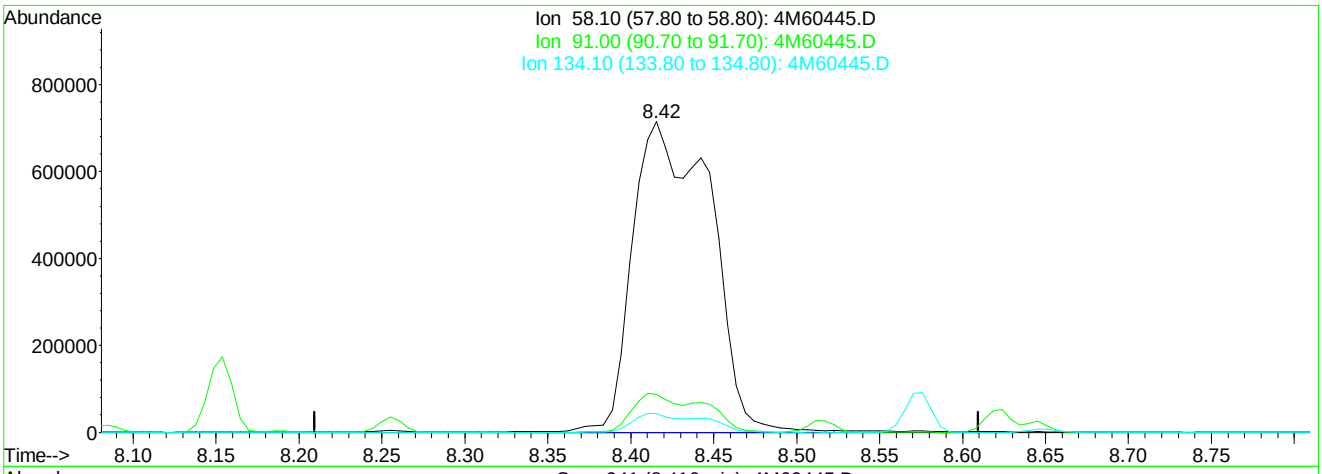
Ion	Exp%	Act%
58.10	100	100
91.00	12.60	11.82
134.10	6.20	5.67
0.00	0.00	0.00

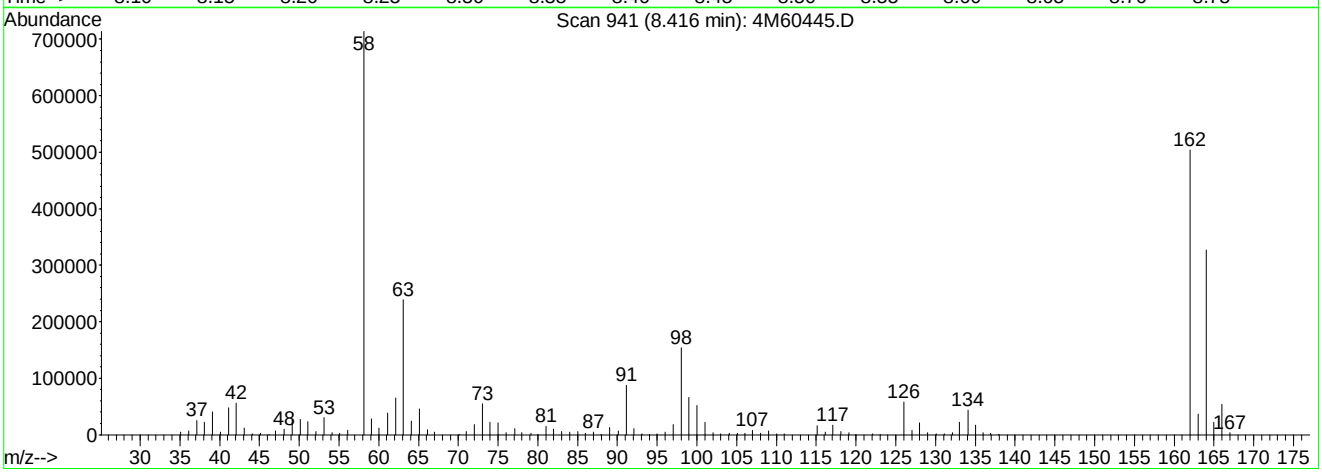
4M60445.D MEGAMIX.M Thu Apr 19 14:24:09 2012

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 [illegible] 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

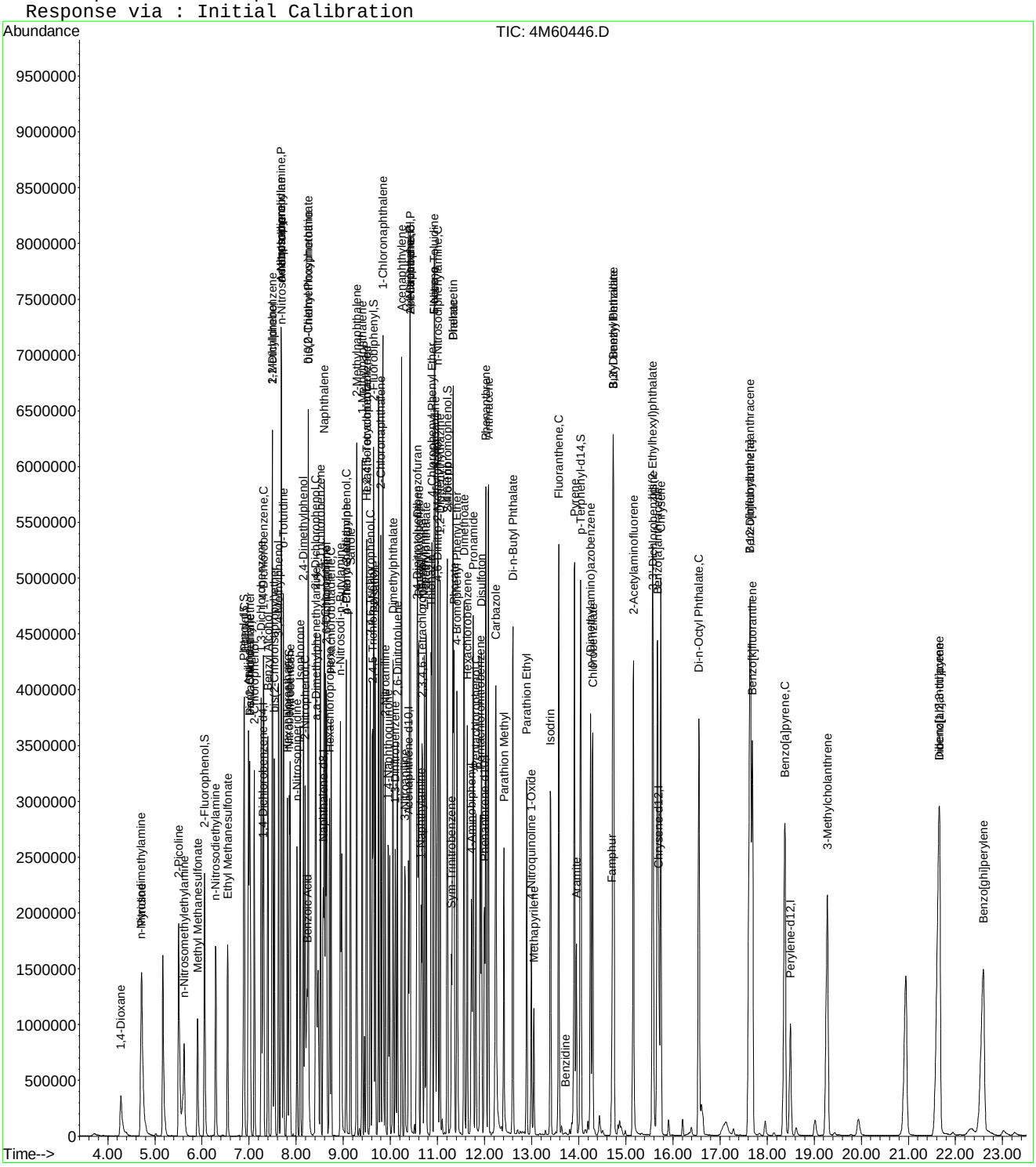
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.57	87	584529	113.1904	ug/ml	99
98)	4-Aminobiphenyl	11.72	169	1329903	179.9601	ug/ml	99
99)	Pentachlorophenol	11.82	266	458736	128.2299	ug/ml	99
100)	Pronamide	11.76	173	1019977	119.6949	ug/ml	99
101)	Pentachloronitrobenzene	11.91	237	235684	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

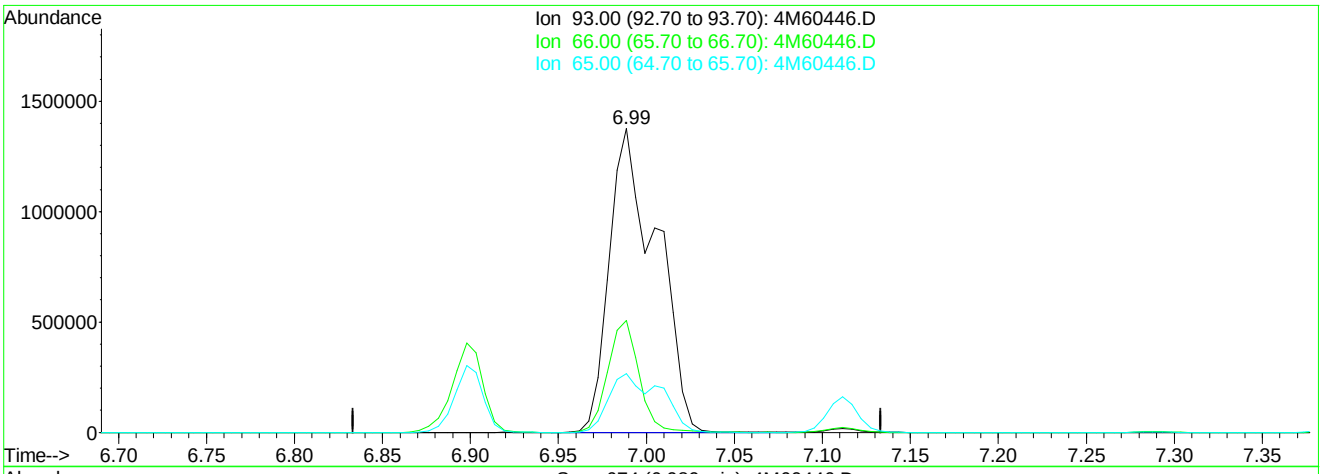
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration

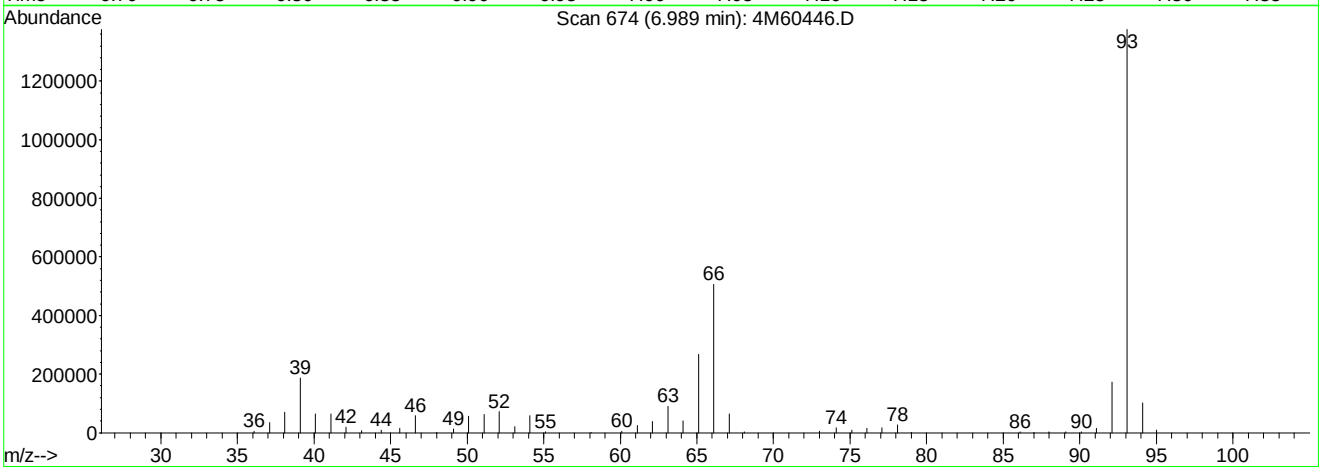


Quantitation Report (Qedit)

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

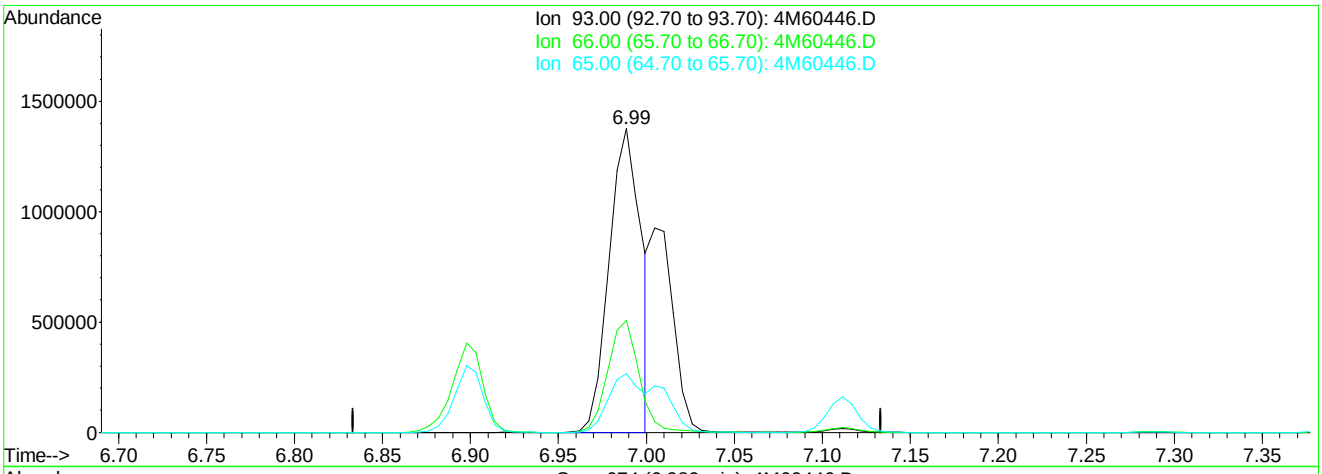
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	24.12
65.00	29.20	20.98
0.00	0.00	0.00

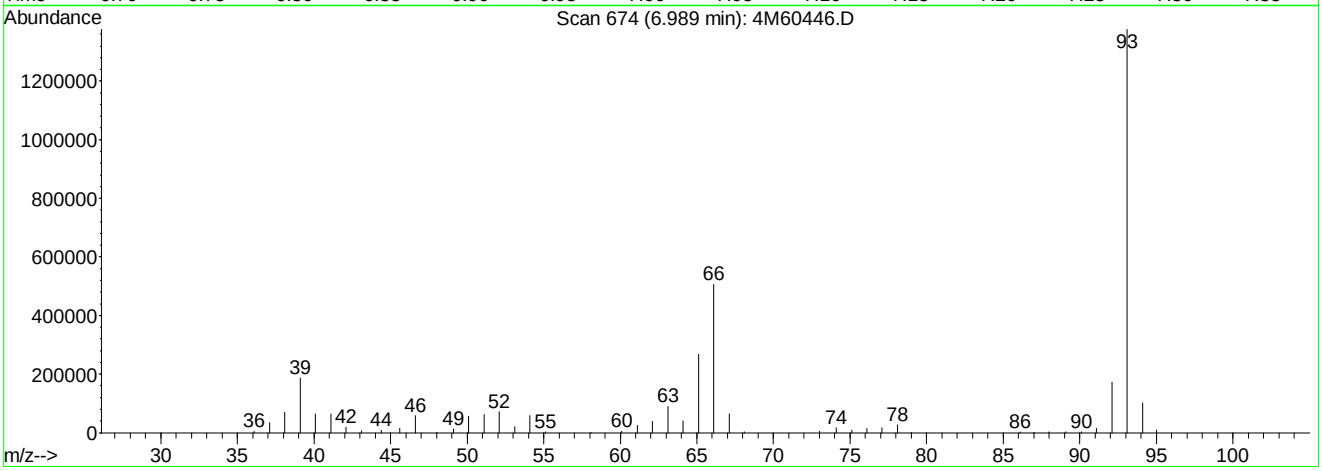
4M60446.D MEGAMIX.M Thu Apr 19 14:24:40 2012

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 [illegible] 2012

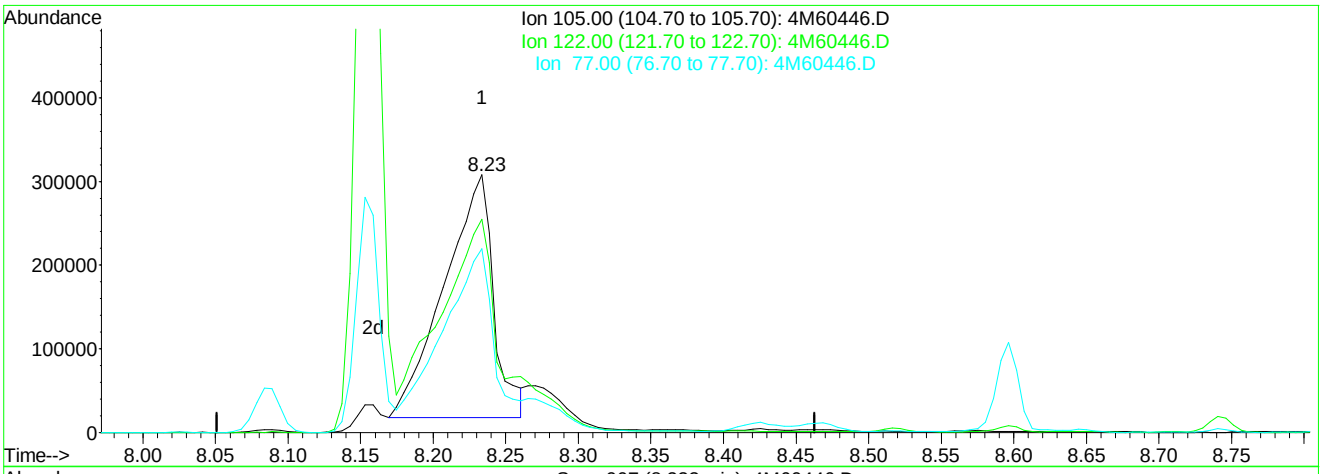
Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41

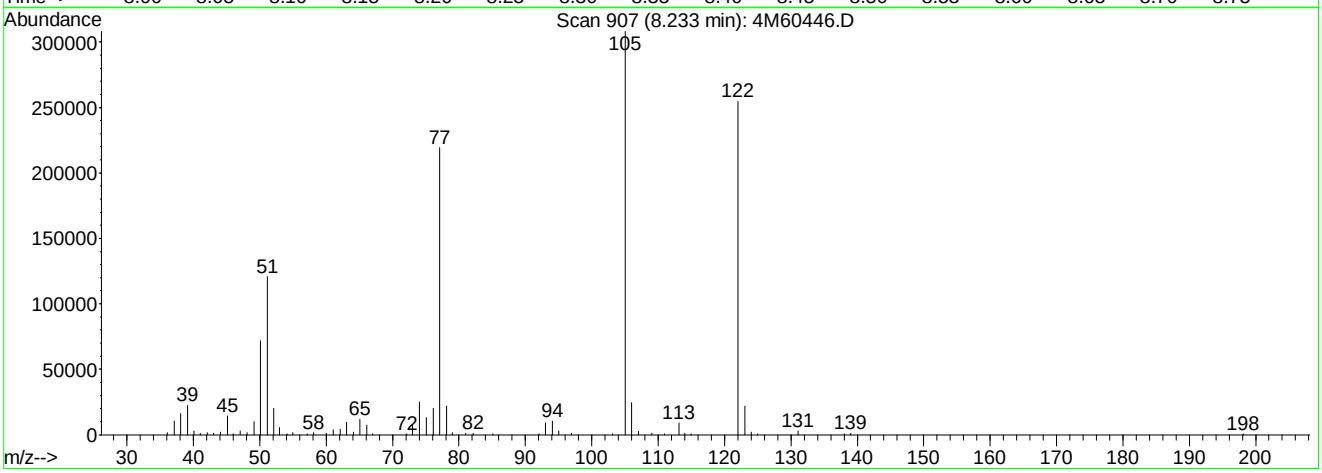
#3 - Improperly integrated isomers and/or coeluting compounds

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

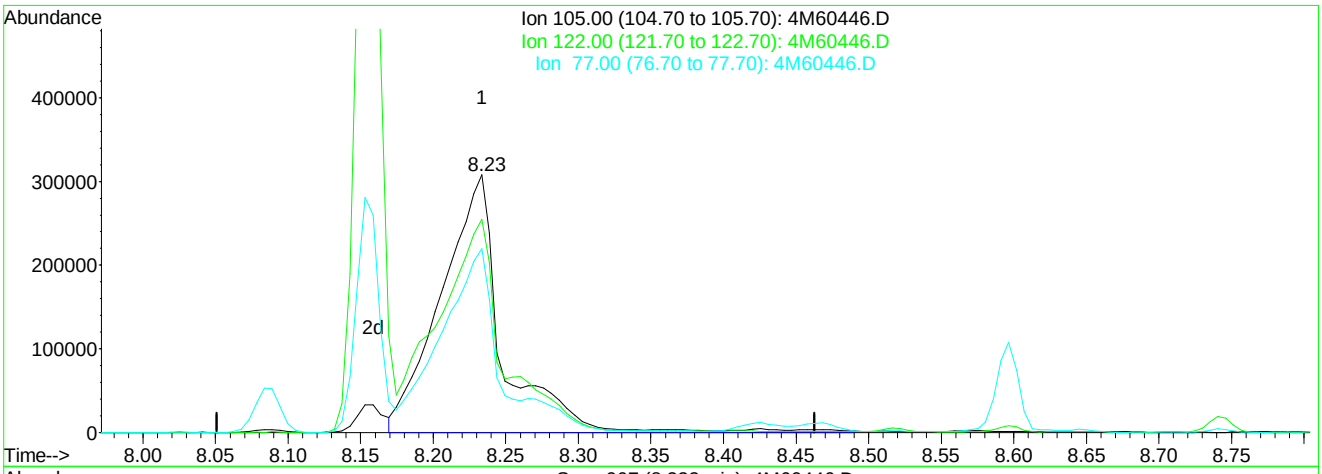
Ion	Exp%	Act%
105.00	100	100
122.00	87.10	111.94
77.00	70.40	62.20
0.00	0.00	0.00

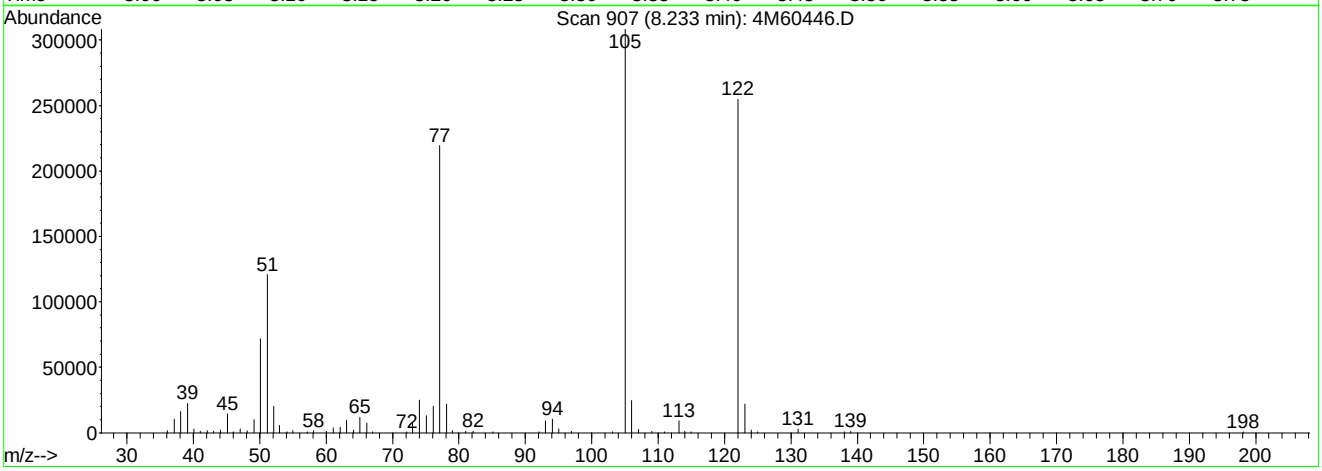
4M60446.D MEGAMIX.M Thu Apr 19 14:24:49 2012

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 [illegible] 2012

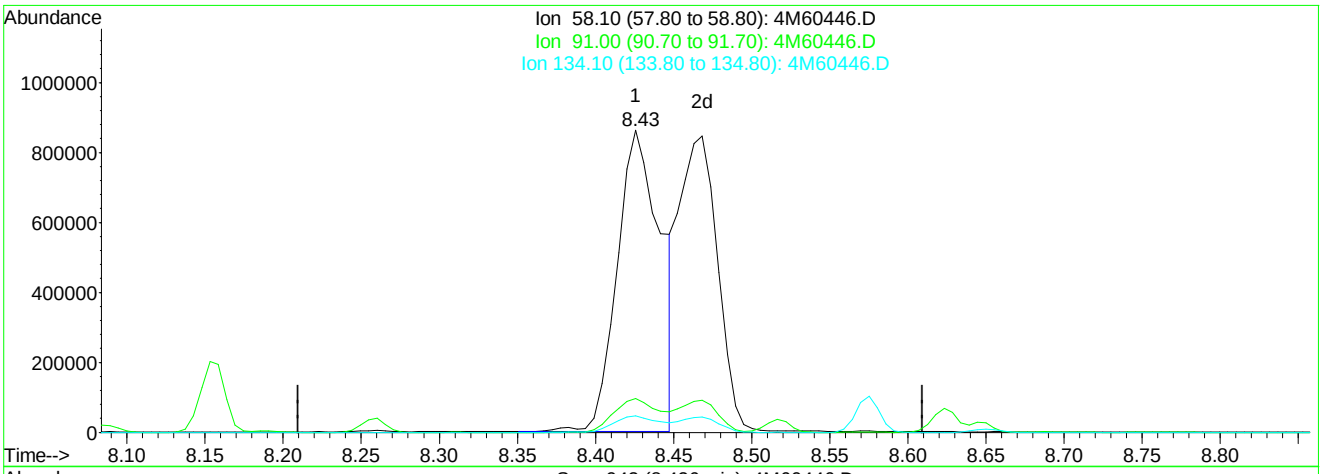
Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41

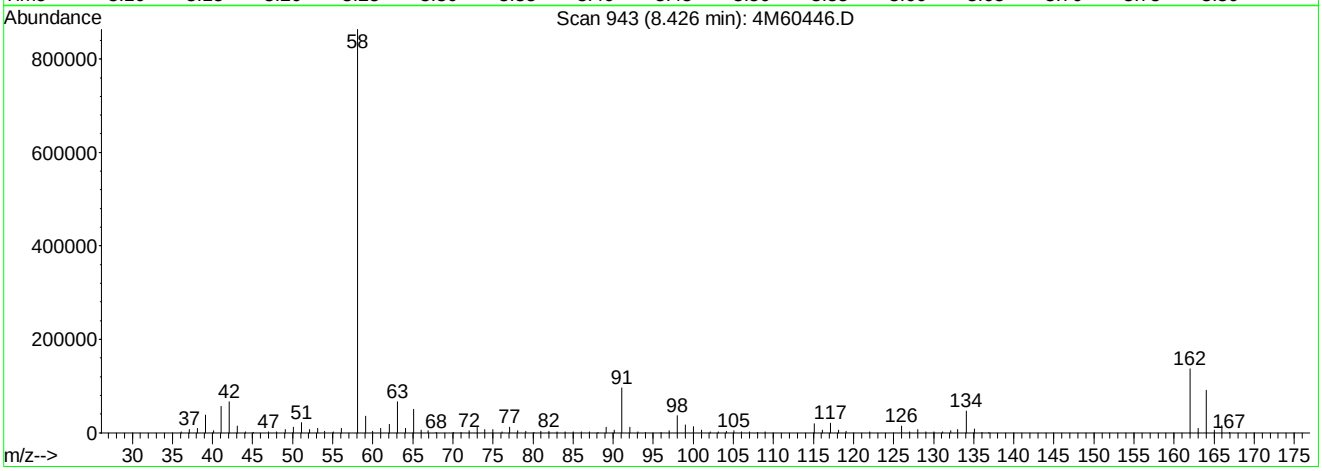
#2 - Data system splits the peak incorrectly or integrates a false peak as a rider peak

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

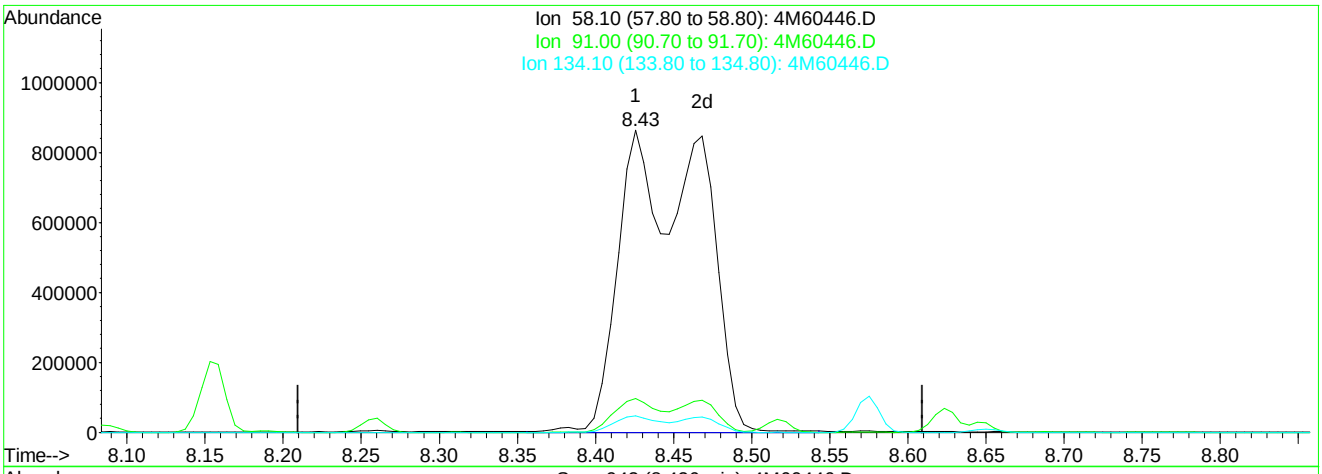
Ion	Exp%	Act%
58.10	100	100
91.00	12.60	11.80
134.10	6.20	5.71
0.00	0.00	0.00

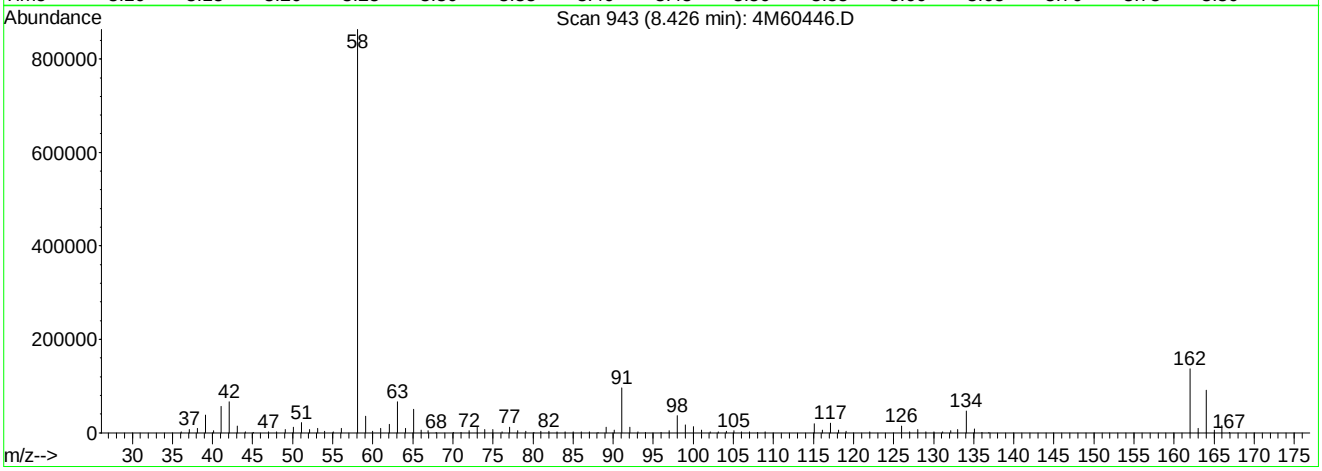
4M60446.D MEGAMIX.M Thu Apr 19 14:24:58 2012

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

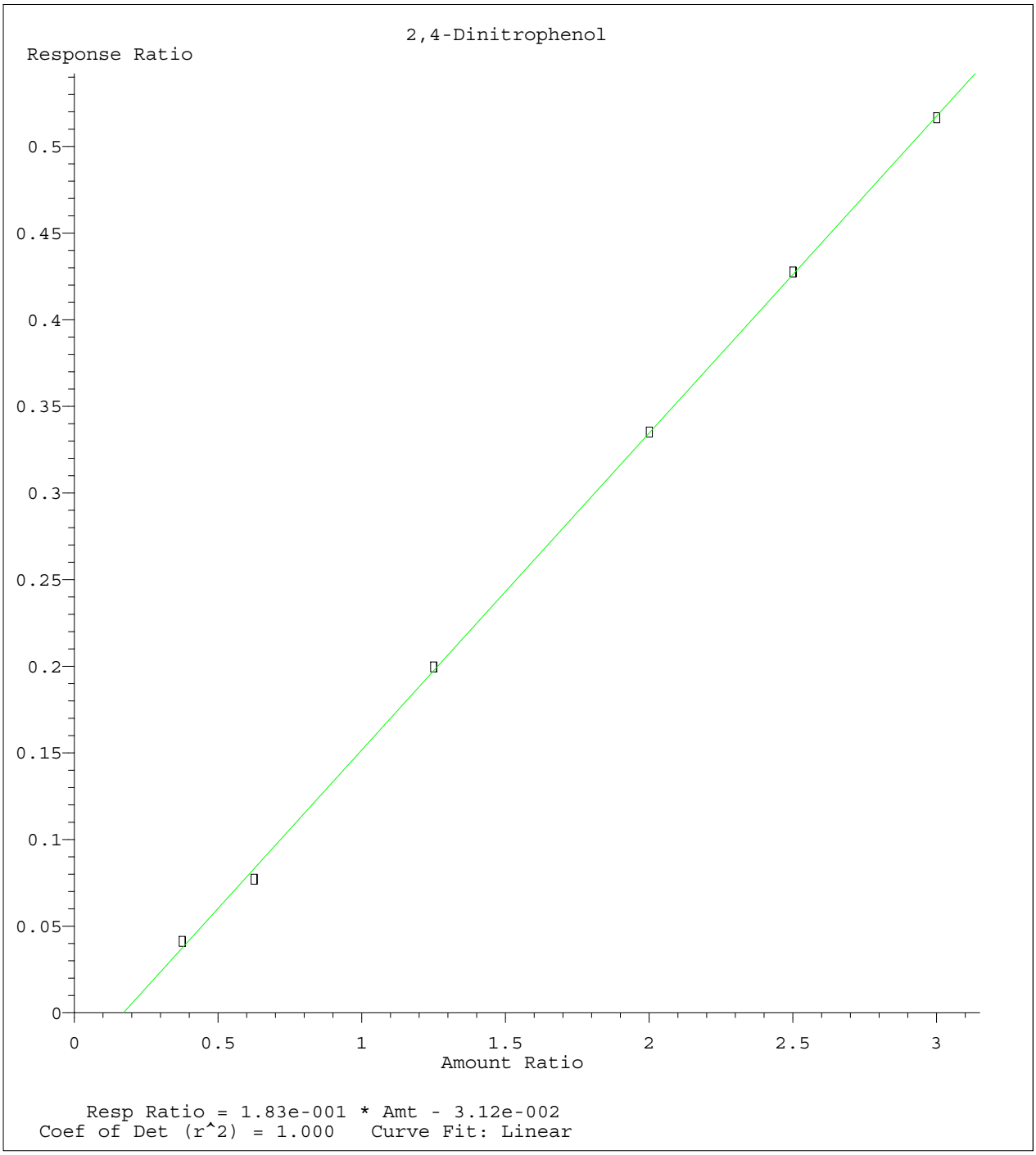
response 3126203

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

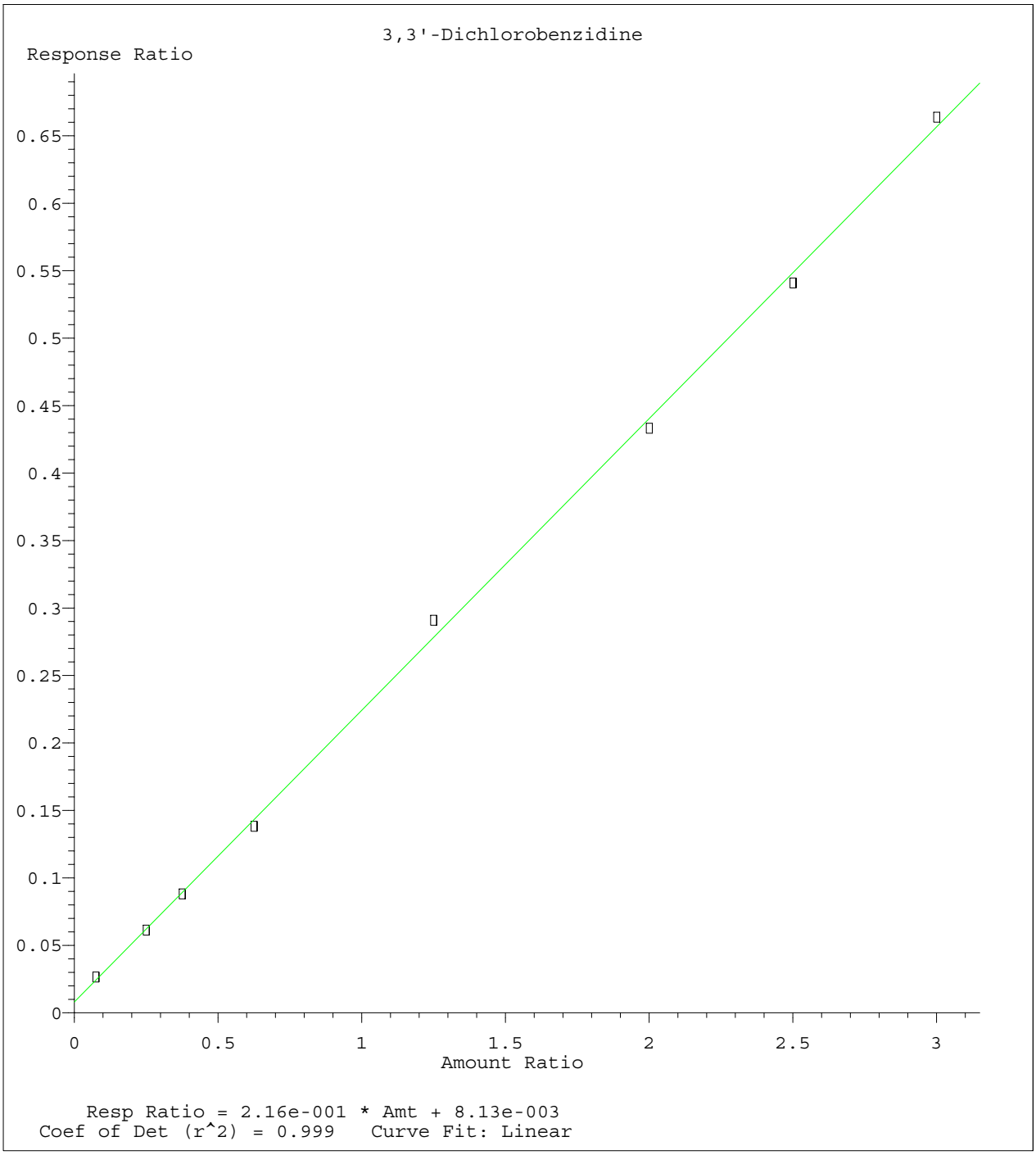
4M60446.D MEGAMIX.M Thu Apr 19 2012

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
4M60447.D MEGAMIX.M Fri Apr 20 08:39:54 2012 Page 2

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

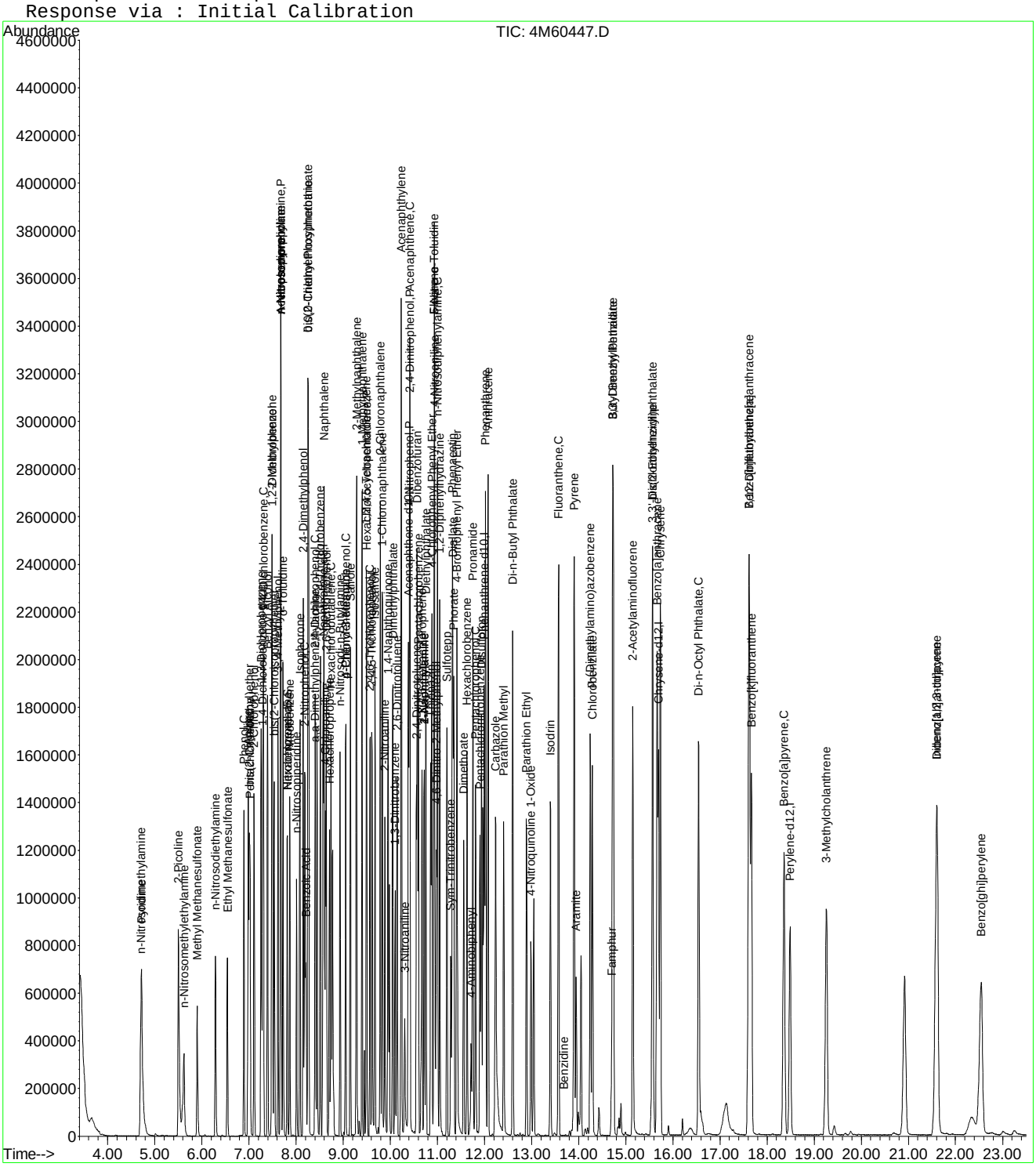
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
98)	4-Aminobiphenyl	11.72	169	299707	53.6701 ug/ml	100
99)	Pentachlorophenol	11.81	266	219981	65.8011 ug/ml	100
100)	Pronamide	11.75	173	435376	56.0268 ug/ml	100
101)	Pentachloronitrobenzene	11.90	237	100661	54.9377 ug/ml	99
102)	Disulfoton	11.93	88	465671	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

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

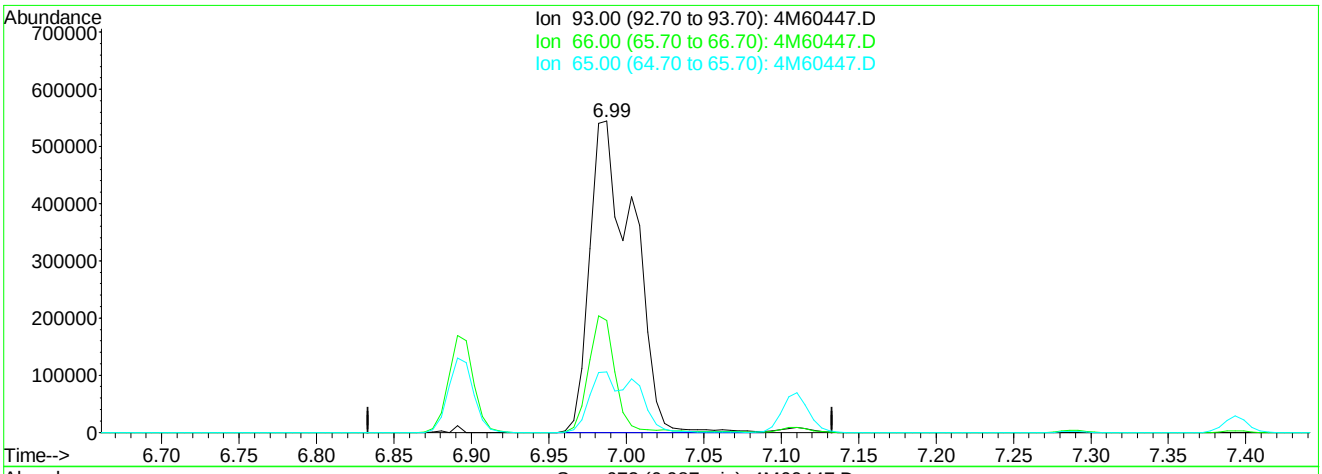
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Fri Apr 20 08:27:42 2012
Response via : Initial Calibration

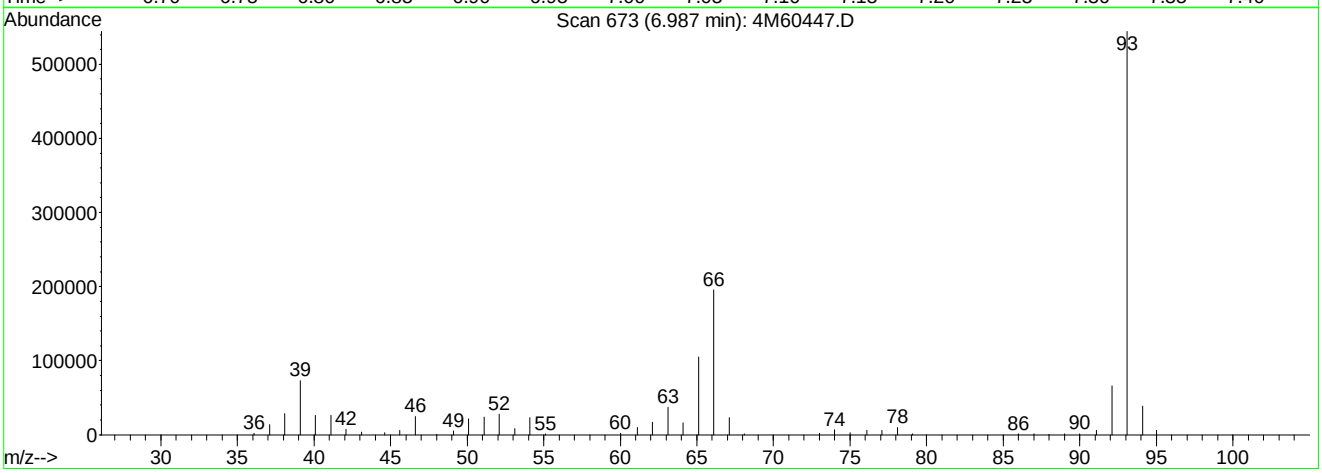


Quantitation Report (Qedit)

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

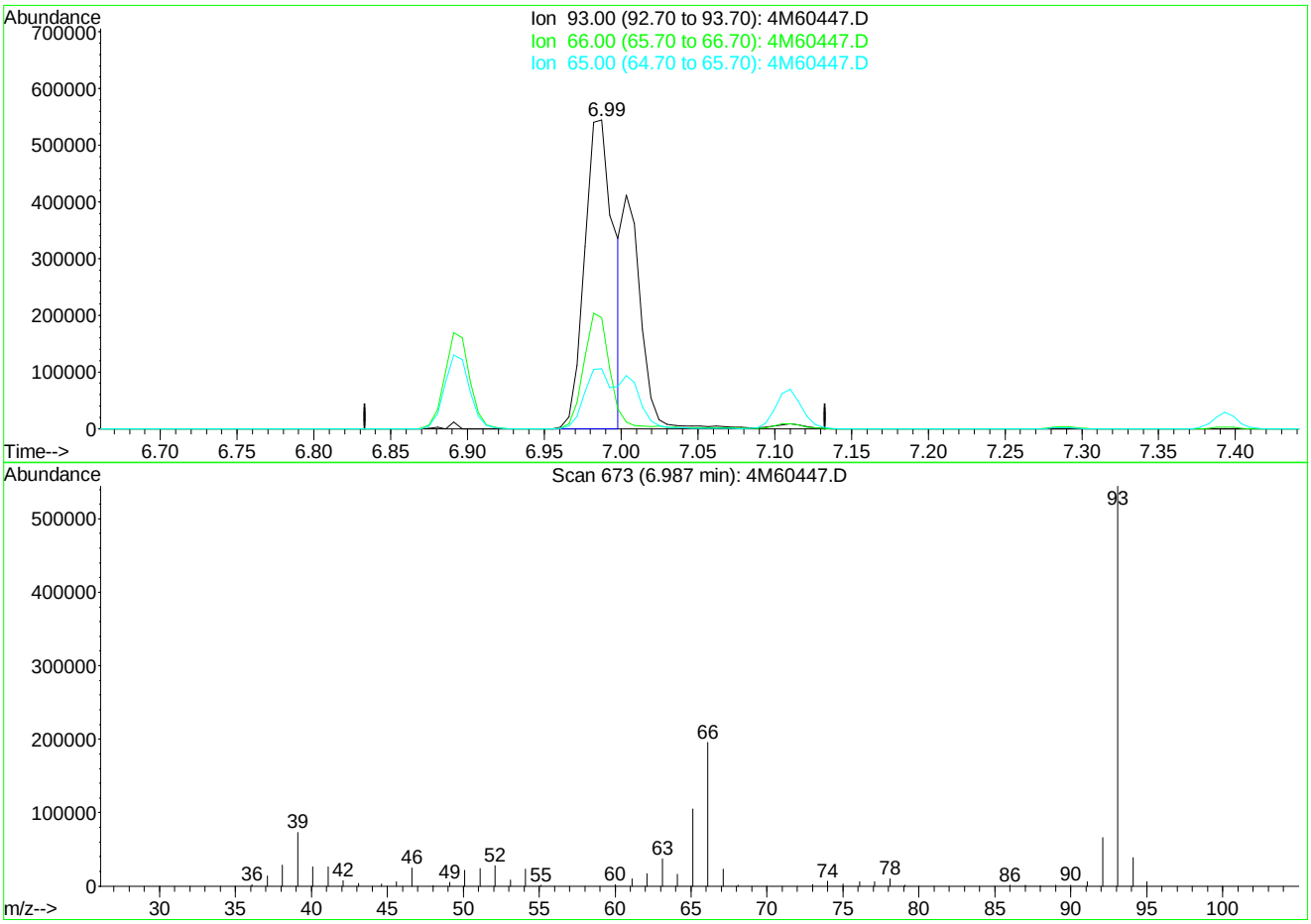
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.26
65.00	29.20	13.53#
0.00	0.00	0.00

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

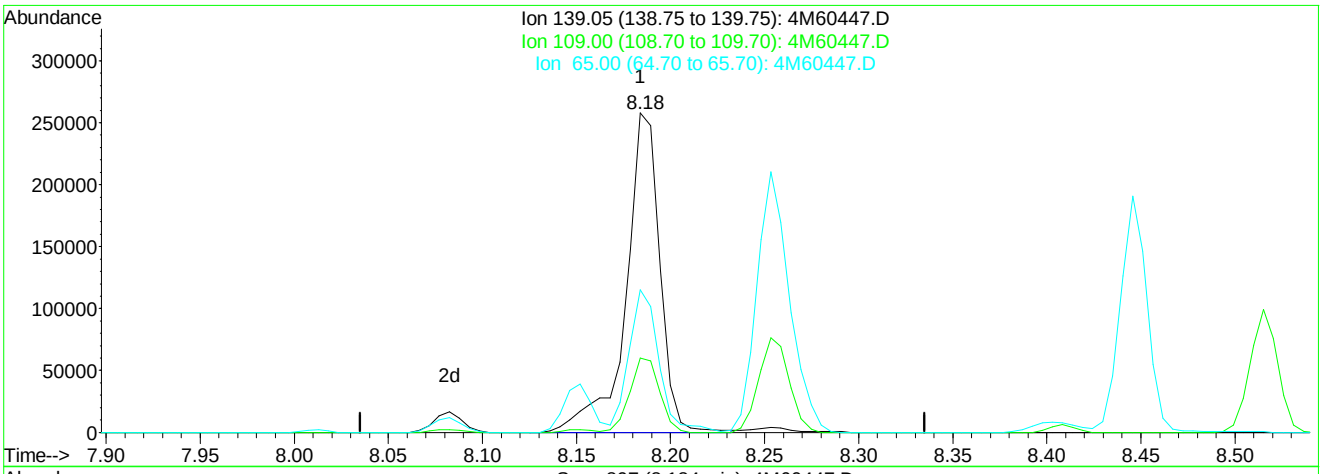
Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41

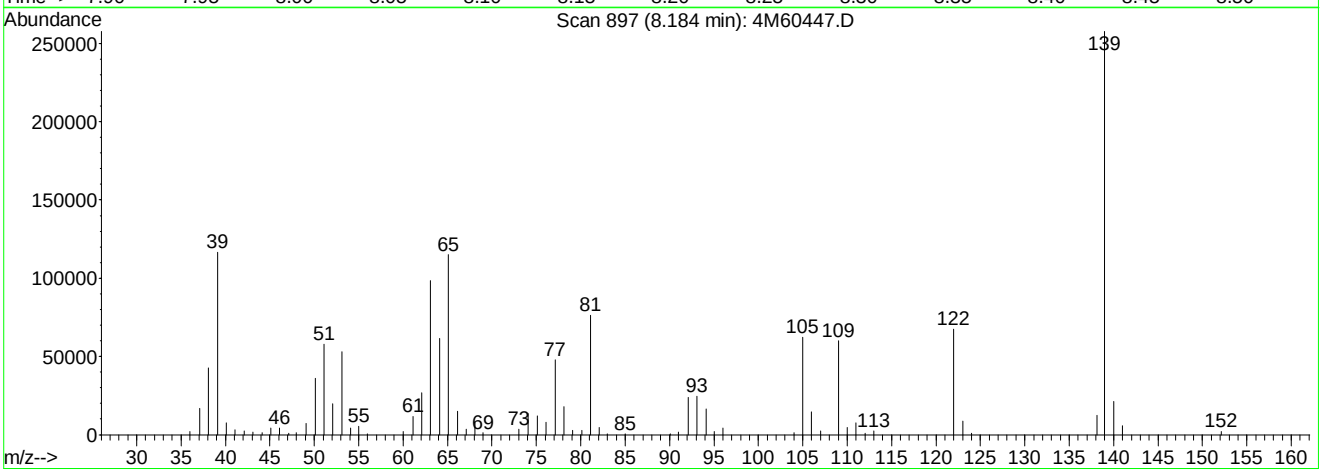
#3 - Improperly integrated isomers and/or coeluting compounds

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

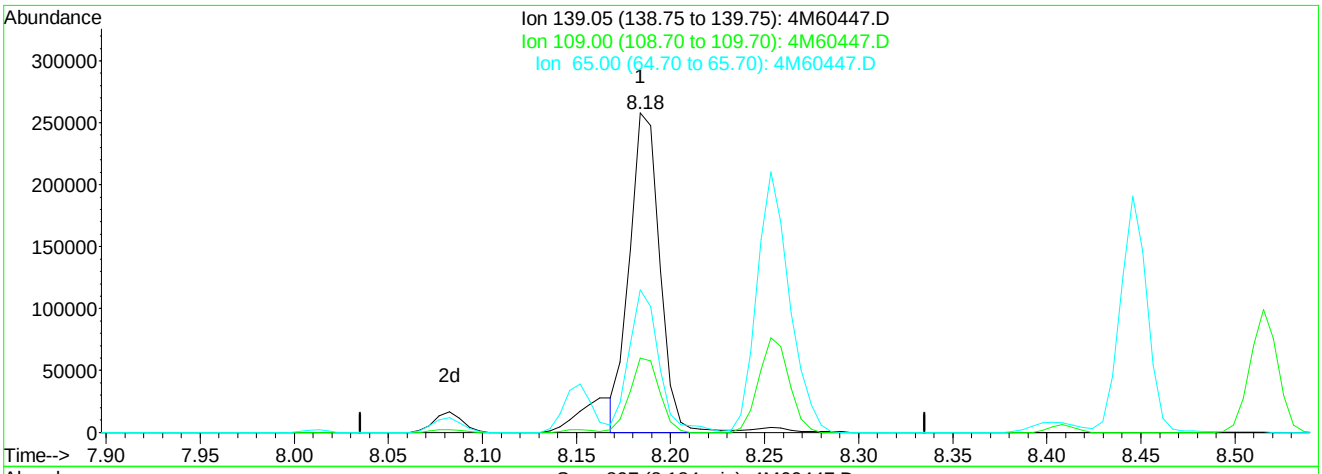
Ion	Exp%	Act%
139.05	100	100
109.00	22.80	20.32
65.00	43.50	39.41
0.00	0.00	0.00

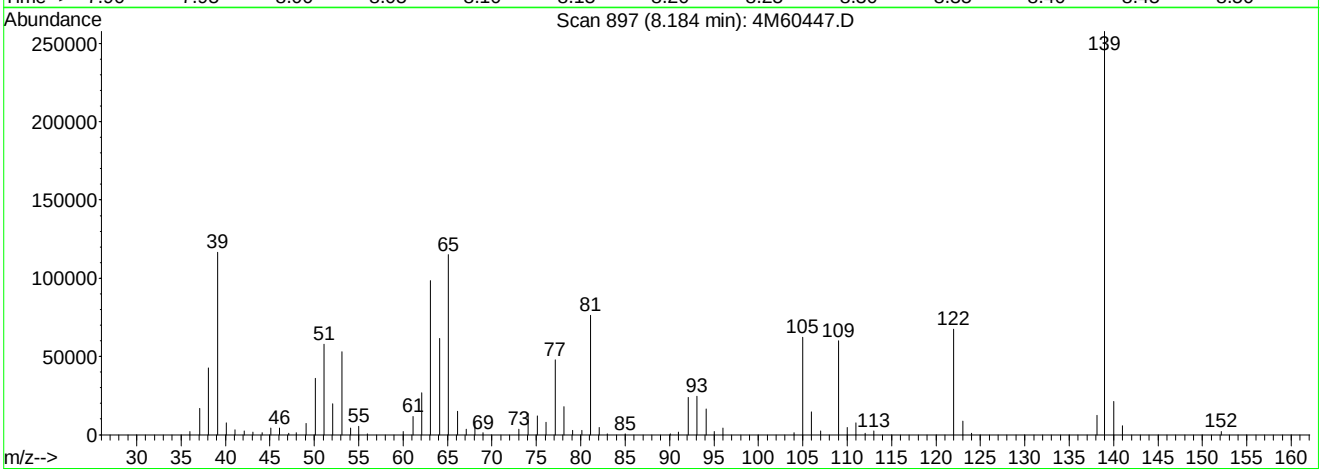
4M60447.D MEGAMIX.M Thu Apr 19 14:28:25 2012

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 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

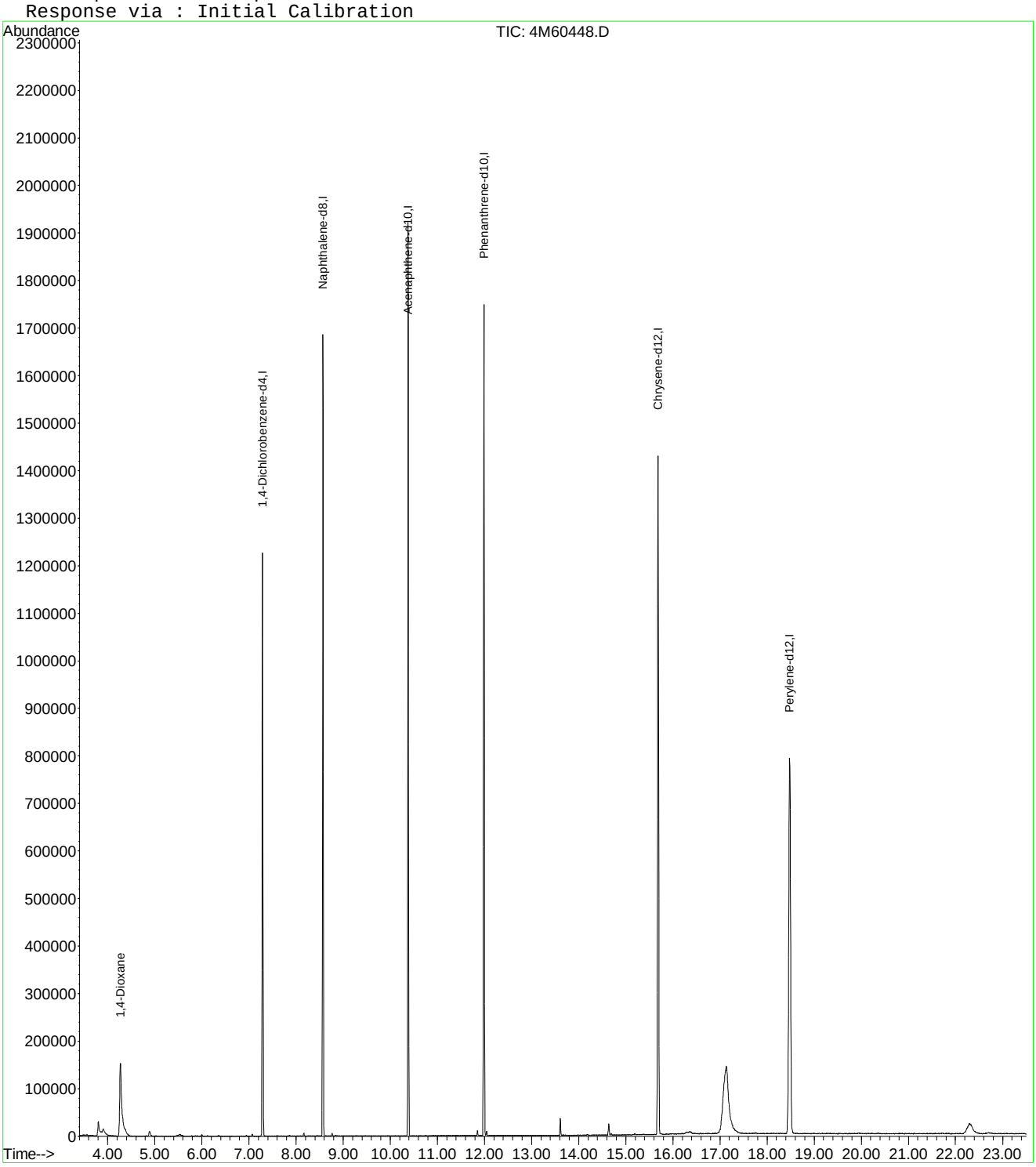
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	241408	40.00	ug/ml	0.00
30) Naphthalene-d8	8.57	136	908072	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.38	164	500473	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.99	188	872547	40.00	ug/ml	0.00
113) Chrysene-d12	15.68	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



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

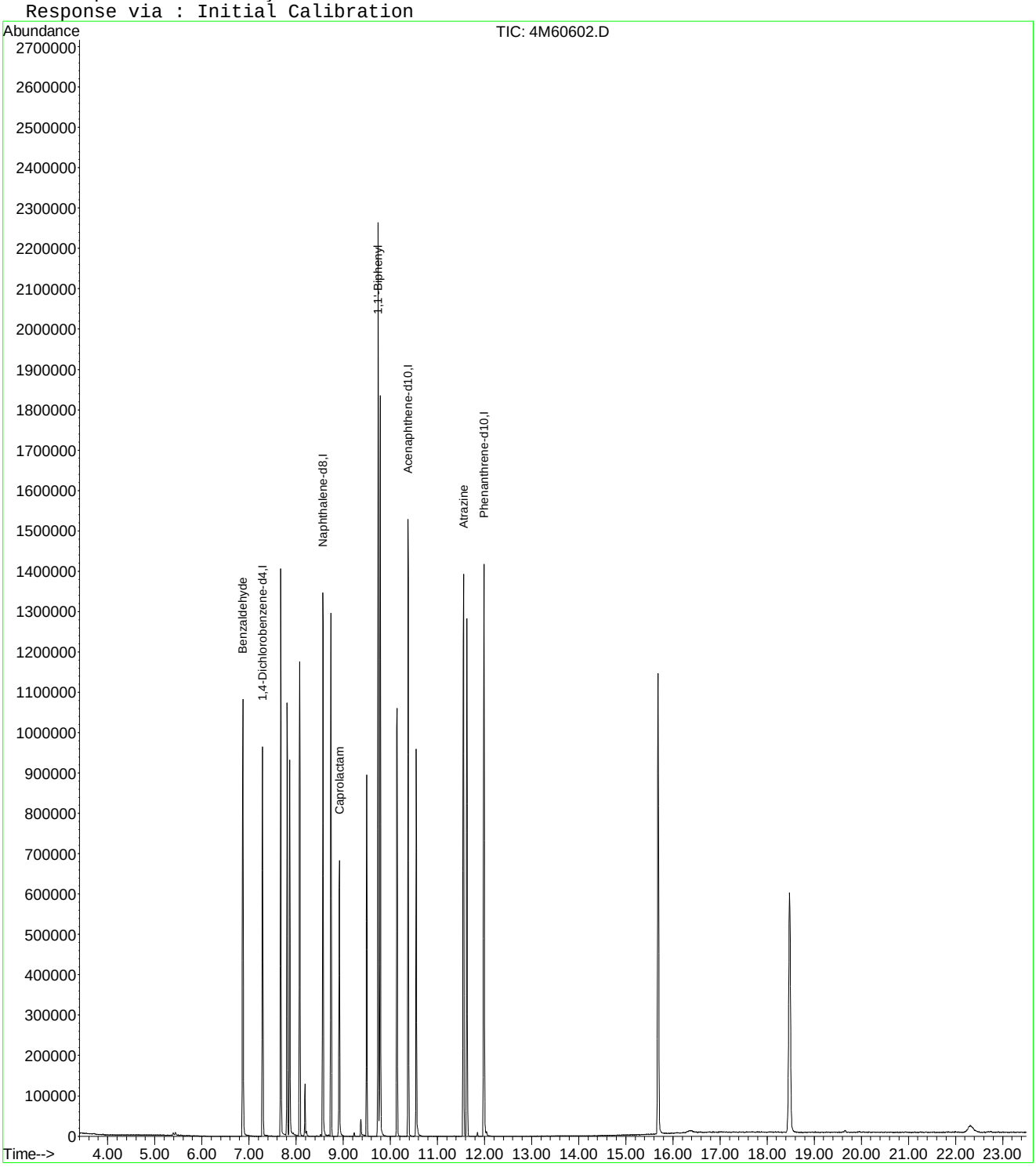
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	198785	40.00	ug/mL	0.00
3) Naphthalene-d8	8.57	136	762076	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.38	164	425534	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.99	188	753240	40.00	ug/mL	0.00
Target Compounds						Qvalue
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



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

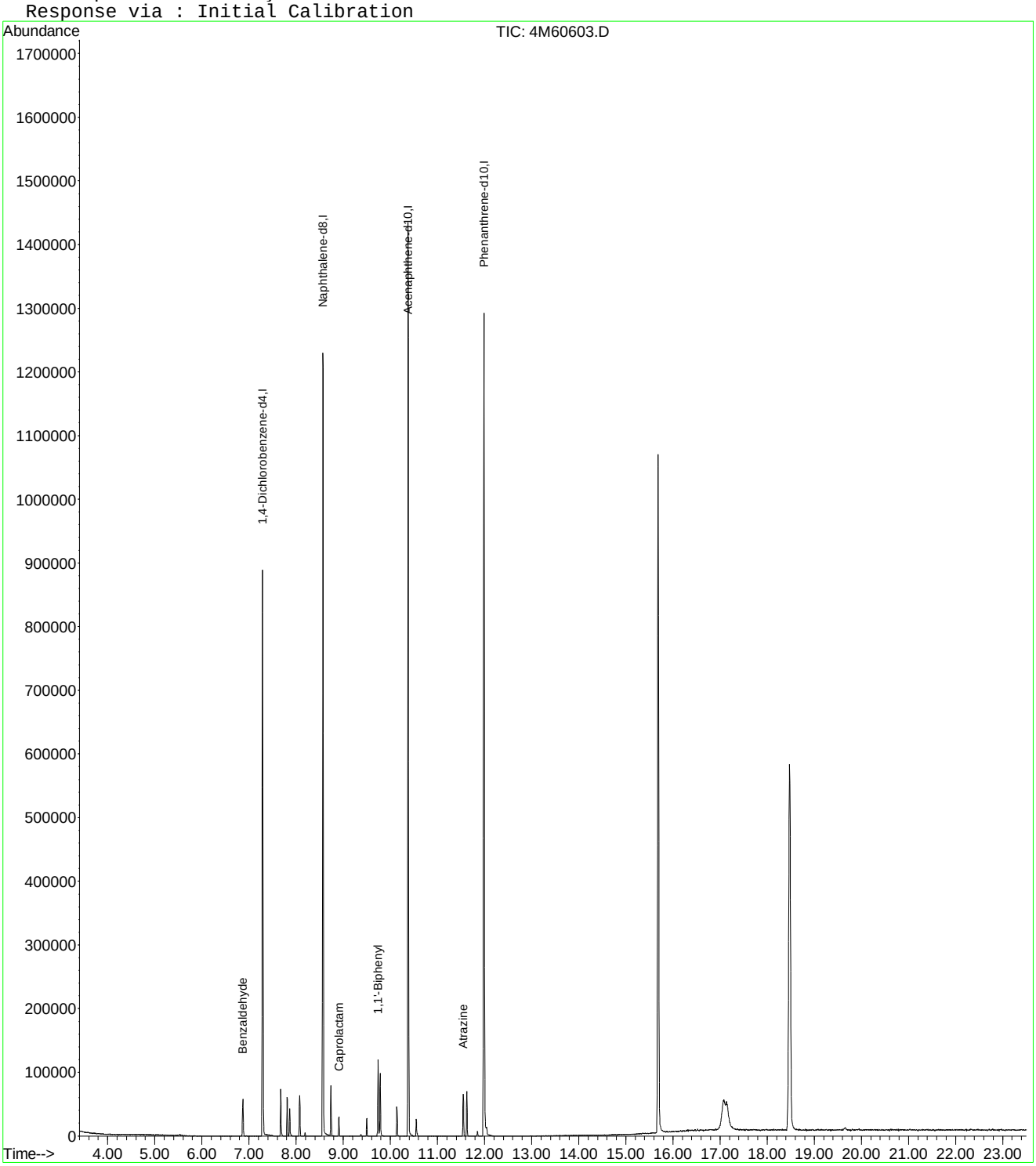
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	184318	40.00	ug/mL	0.00
3) Naphthalene-d8	8.57	136	711419	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.38	164	396131	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.99	188	705172	40.00	ug/mL	0.00
Target Compounds						Qvalue
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

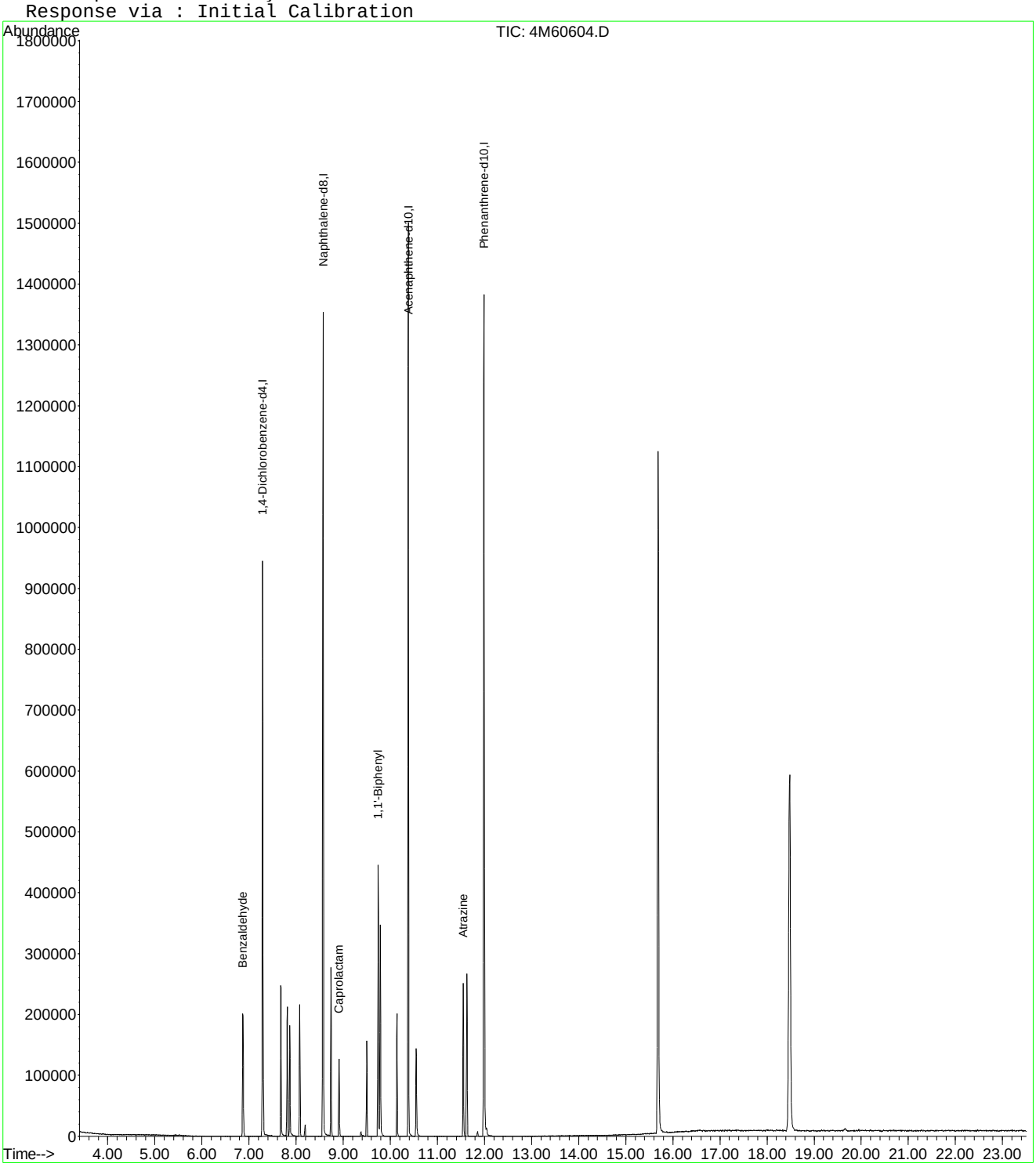
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	191577	40.00	ug/mL	0.00
3) Naphthalene-d8	8.57	136	738266	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.38	164	412816	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.99	188	727410	40.00	ug/mL	0.00
Target Compounds						Qvalue
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



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

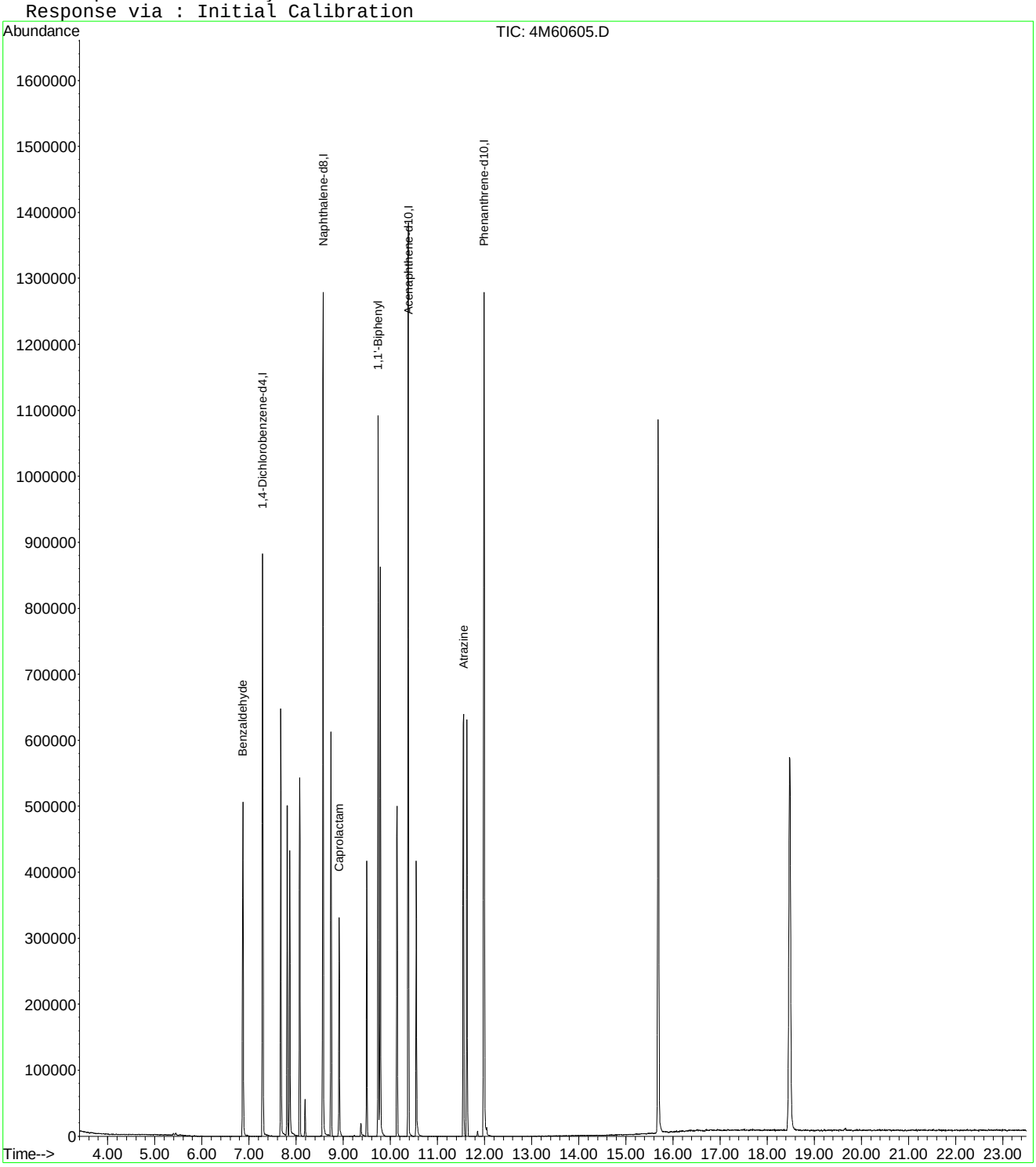
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	188543	40.00	ug/mL	0.00
3) Naphthalene-d8	8.57	136	712737	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.38	164	395022	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.99	188	719816	40.00	ug/mL	0.00
Target Compounds						Qvalue
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



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

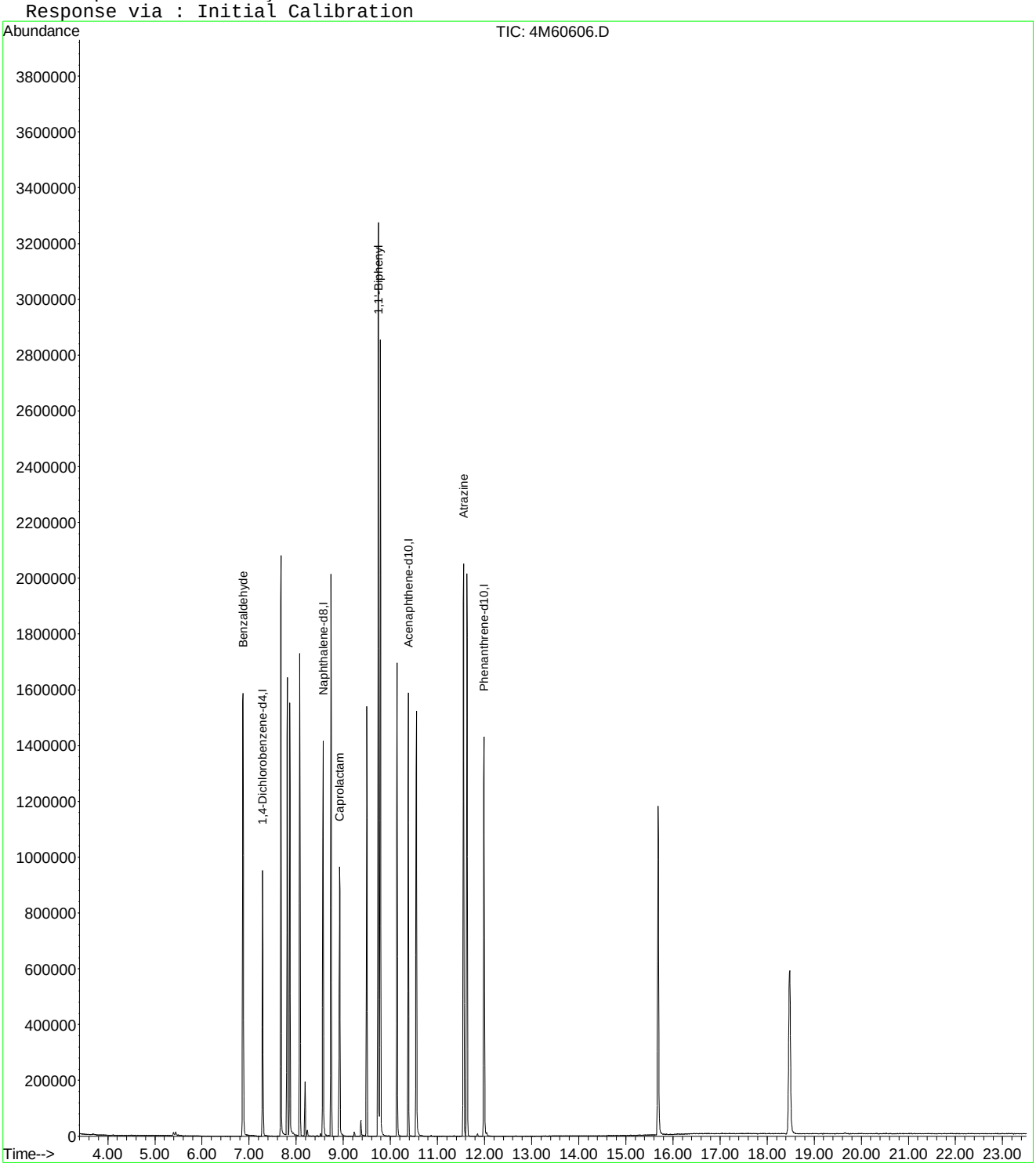
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	195973	40.00	ug/mL	0.00
3) Naphthalene-d8	8.57	136	750611	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.38	164	425817	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.99	188	761381	40.00	ug/mL	0.00
Target Compounds						Qvalue
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



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

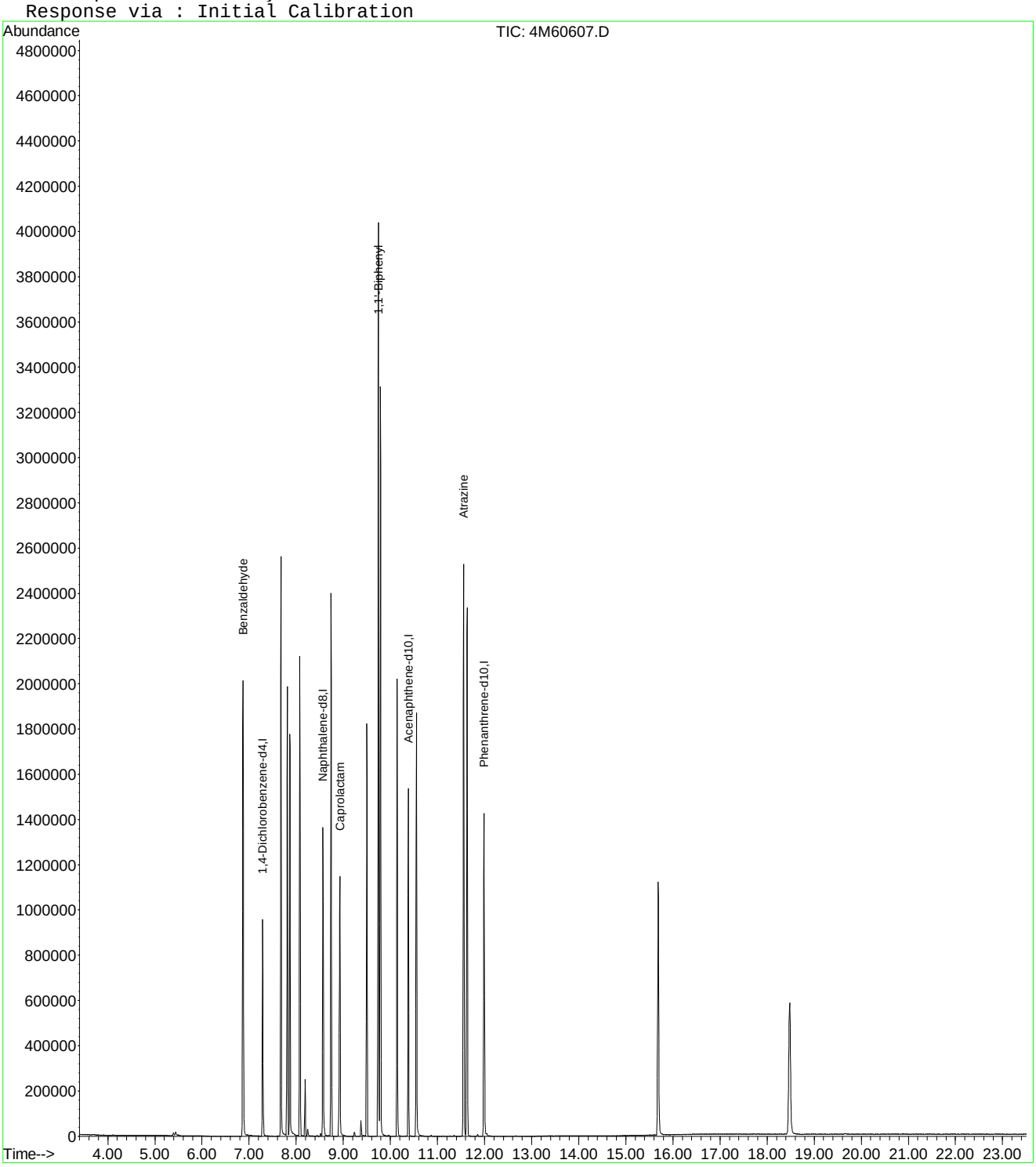
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	191003	40.00	ug/mL	0.00
3) Naphthalene-d8	8.57	136	734165	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.38	164	416593	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.99	188	754784	40.00	ug/mL	0.00
Target Compounds						Qvalue
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



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

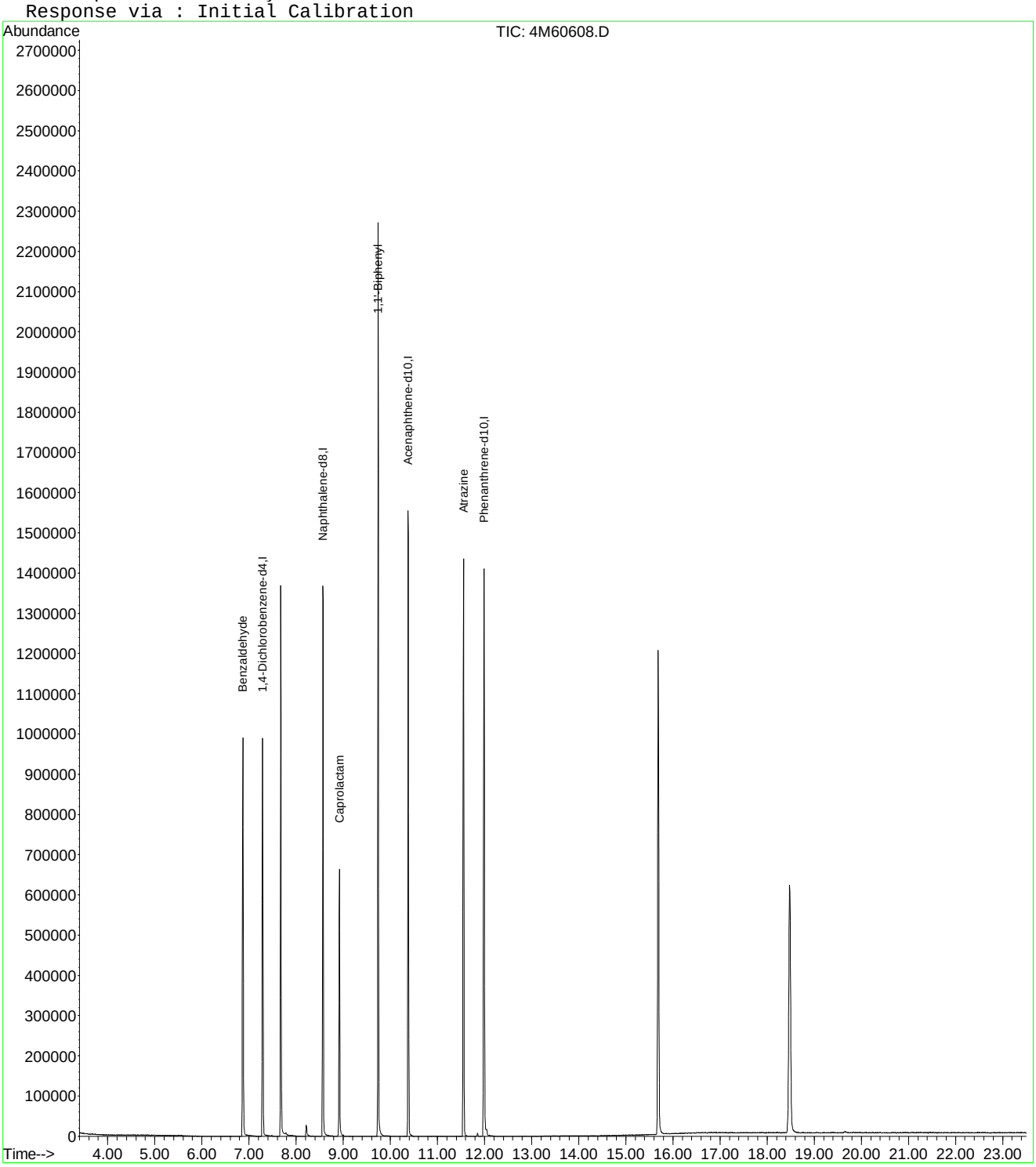
Quant Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Wed May 02 13:31:17 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

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

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



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
4M60817.D MEGAMIX.M Mon May 14 11:40:33 2012 Page 1

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

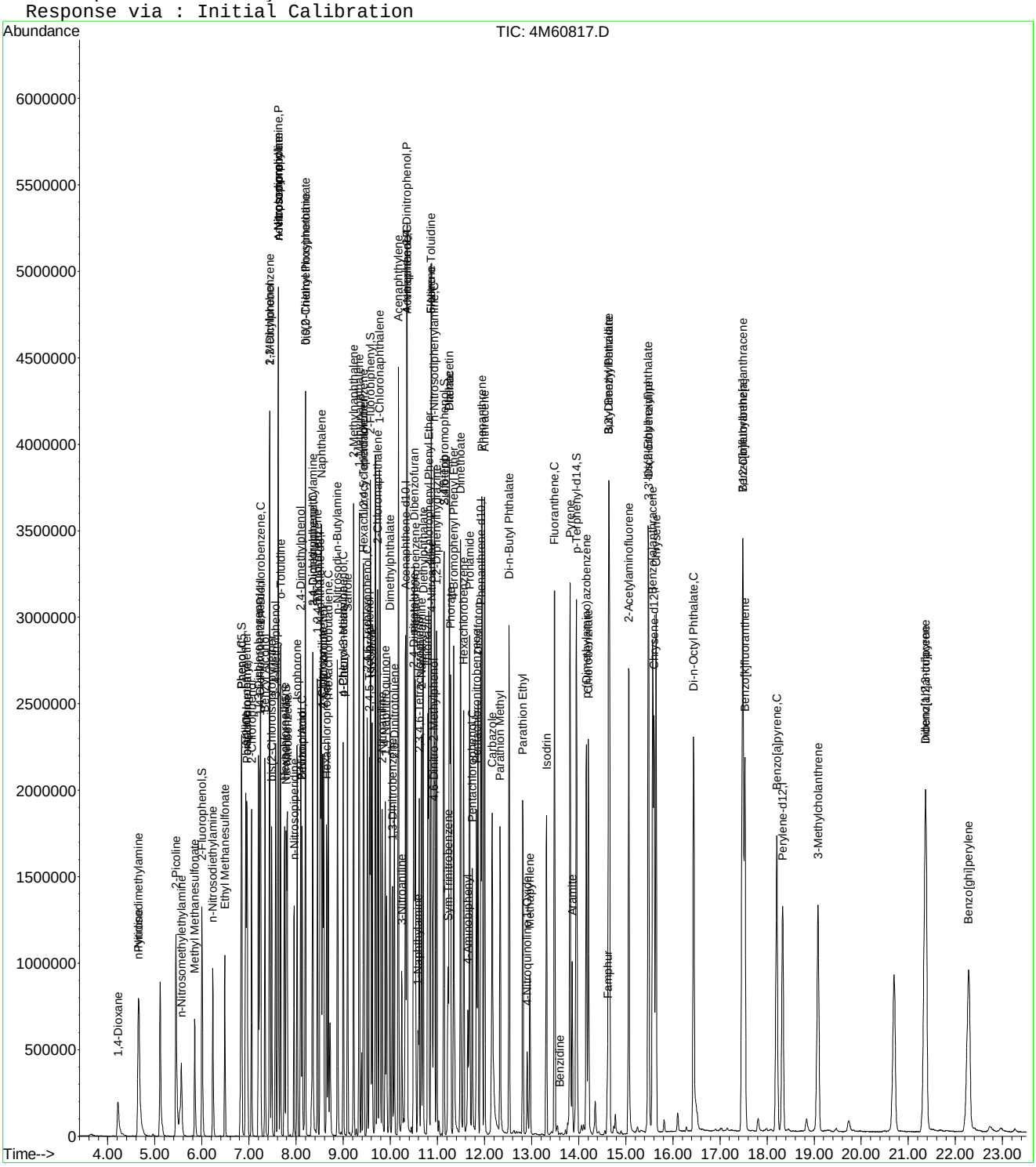
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.49	87	437047	53.6795	ug/ml	98
98)	4-Aminobiphenyl	11.65	169	511029	58.4551	ug/ml	99
99)	Pentachlorophenol	11.74	266	237796	47.0946	ug/ml	99
100)	Pronamide	11.69	173	592669	50.4965	ug/ml	99
101)	Pentachloronitrobenzene	11.83	237	153211	55.3627	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

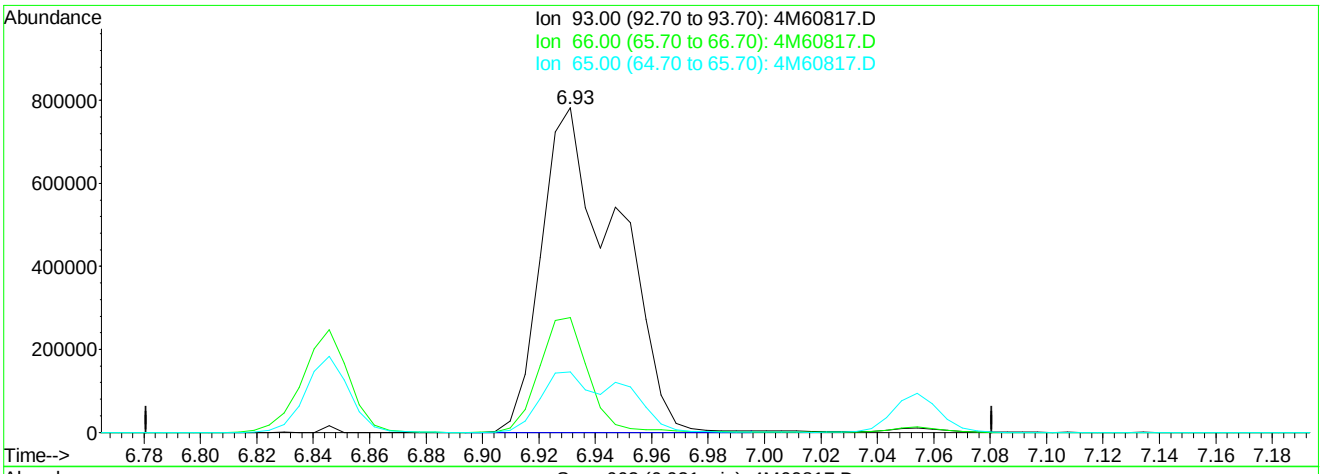
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Mon May 14 11:40:21 2012
Response via : Initial Calibration

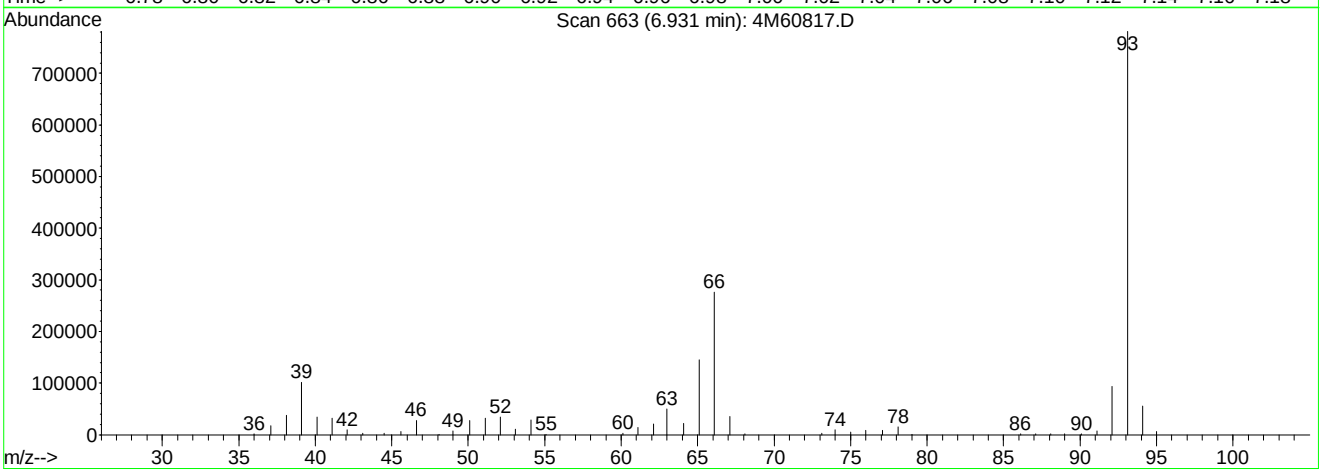


Quantitation Report (Qedit)

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

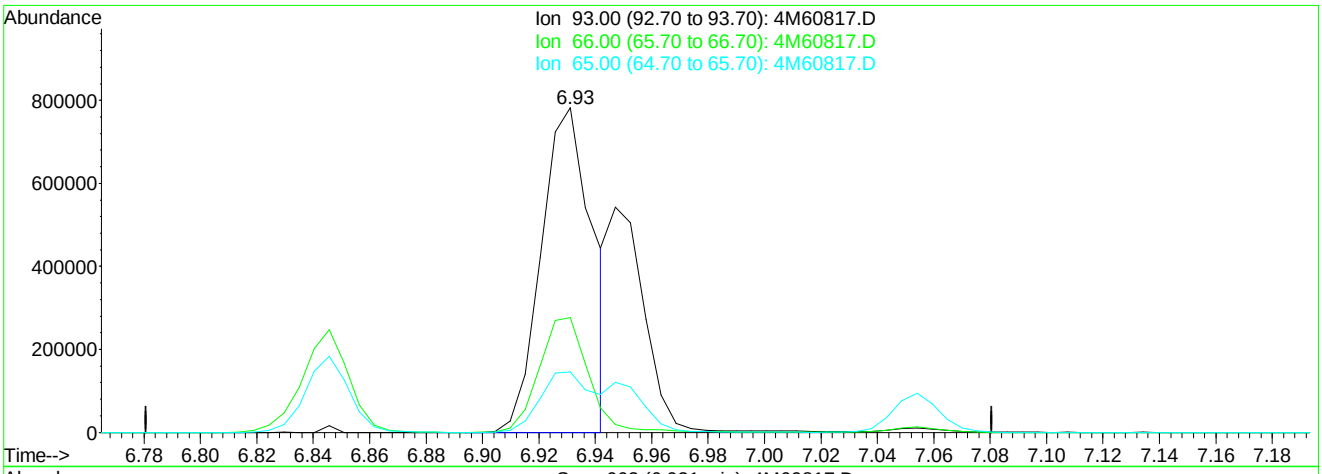
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.27
65.00	29.20	13.17#
0.00	0.00	0.00

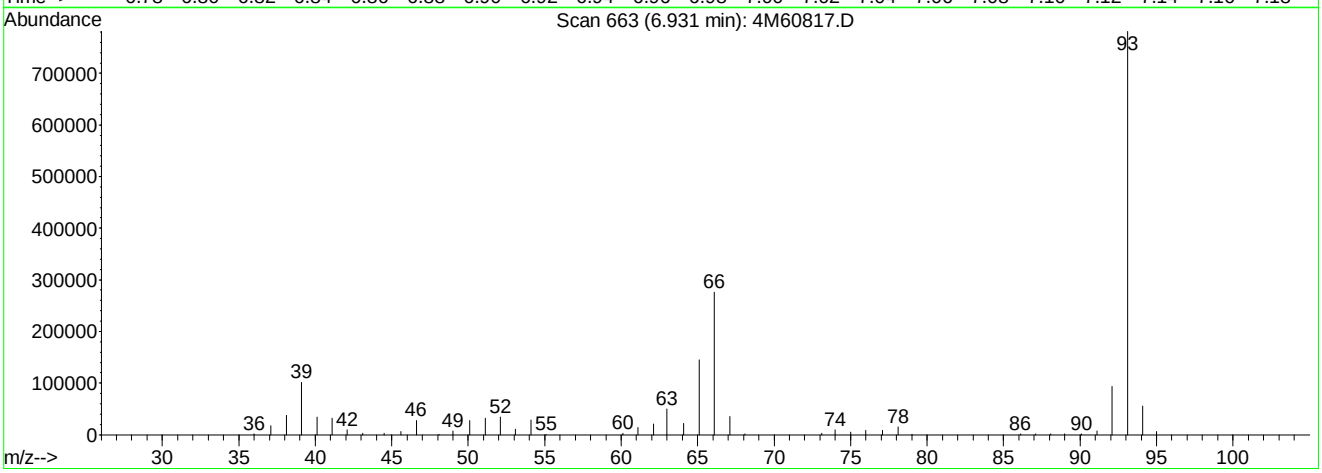
4M60817.D MEGAMIX.M Sun May 13 11:43:55 2012

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) 2012

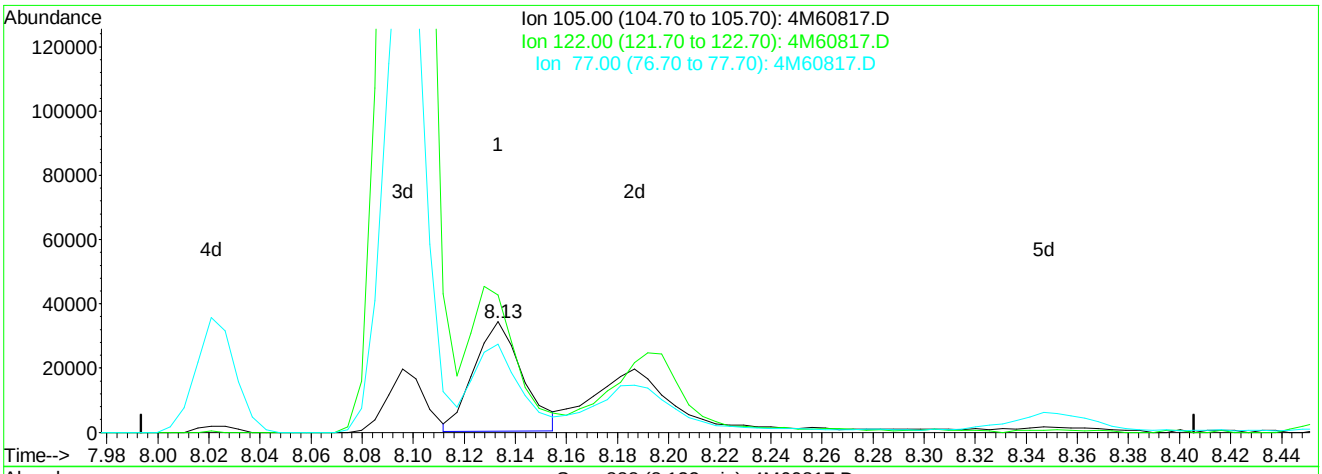
Analyst: 05/14/2012 13:56 Supervisor: 05/14/2012 15:22

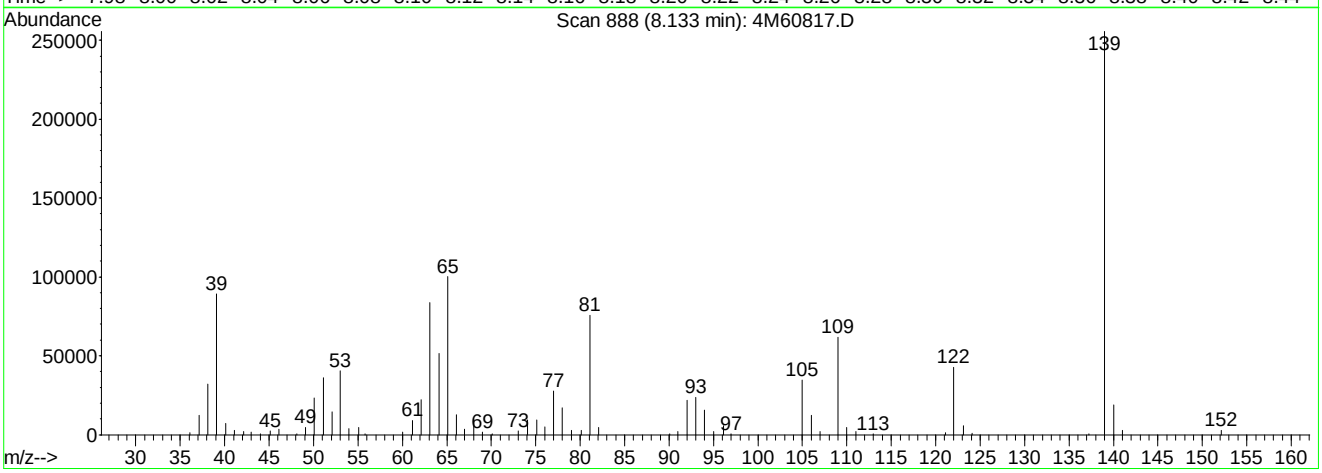
#3 - Improperly integrated isomers and/or coeluting compounds

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

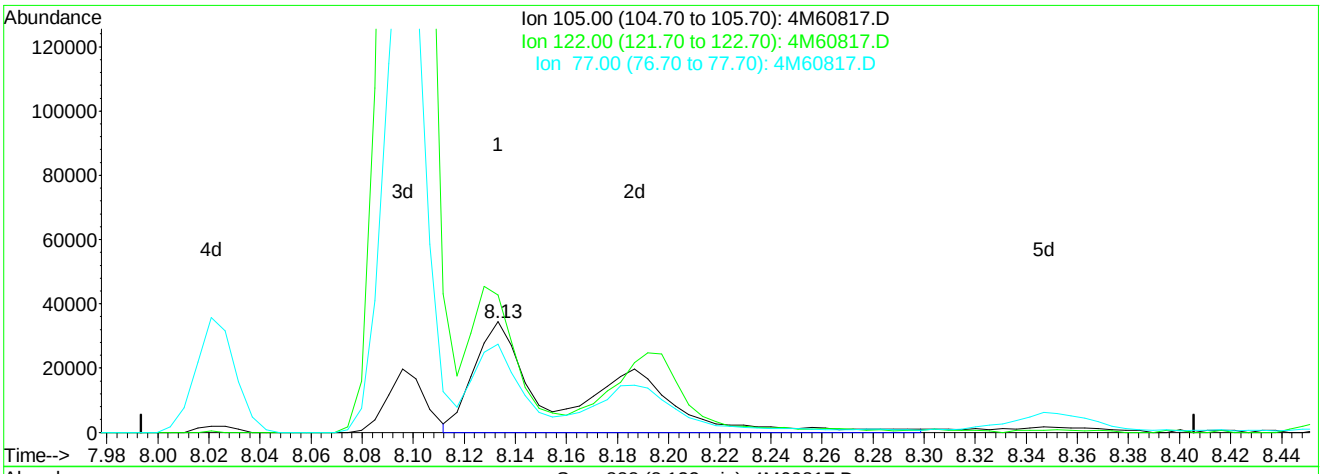
Ion	Exp%	Act%
105.00	100	100
122.00	87.10	126.40#
77.00	70.40	76.39
0.00	0.00	0.00

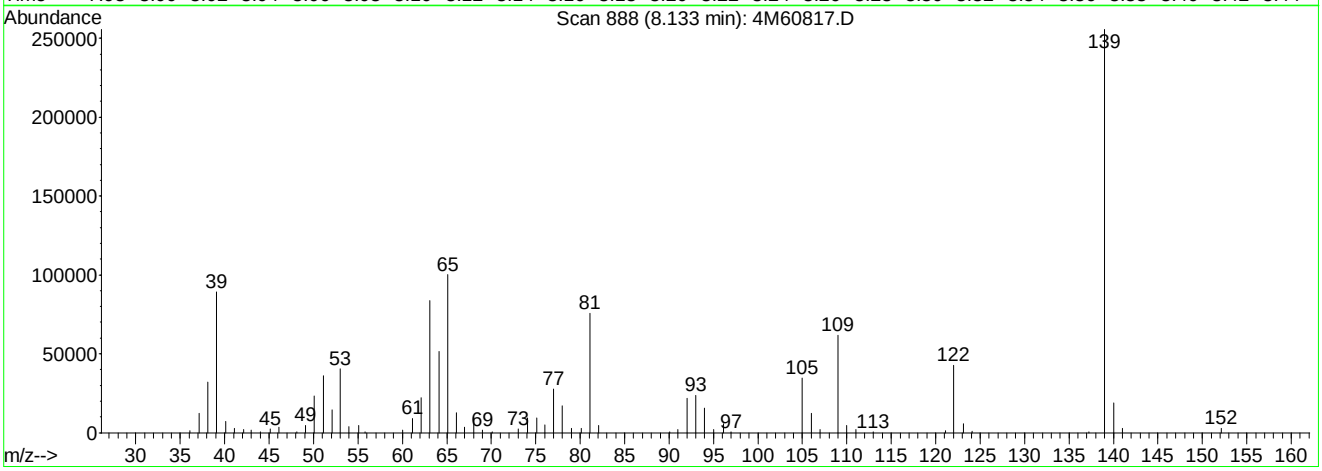
4M60817.D MEGAMIX.M Sun May 13 11:44:08 2012

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 [illegible] 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

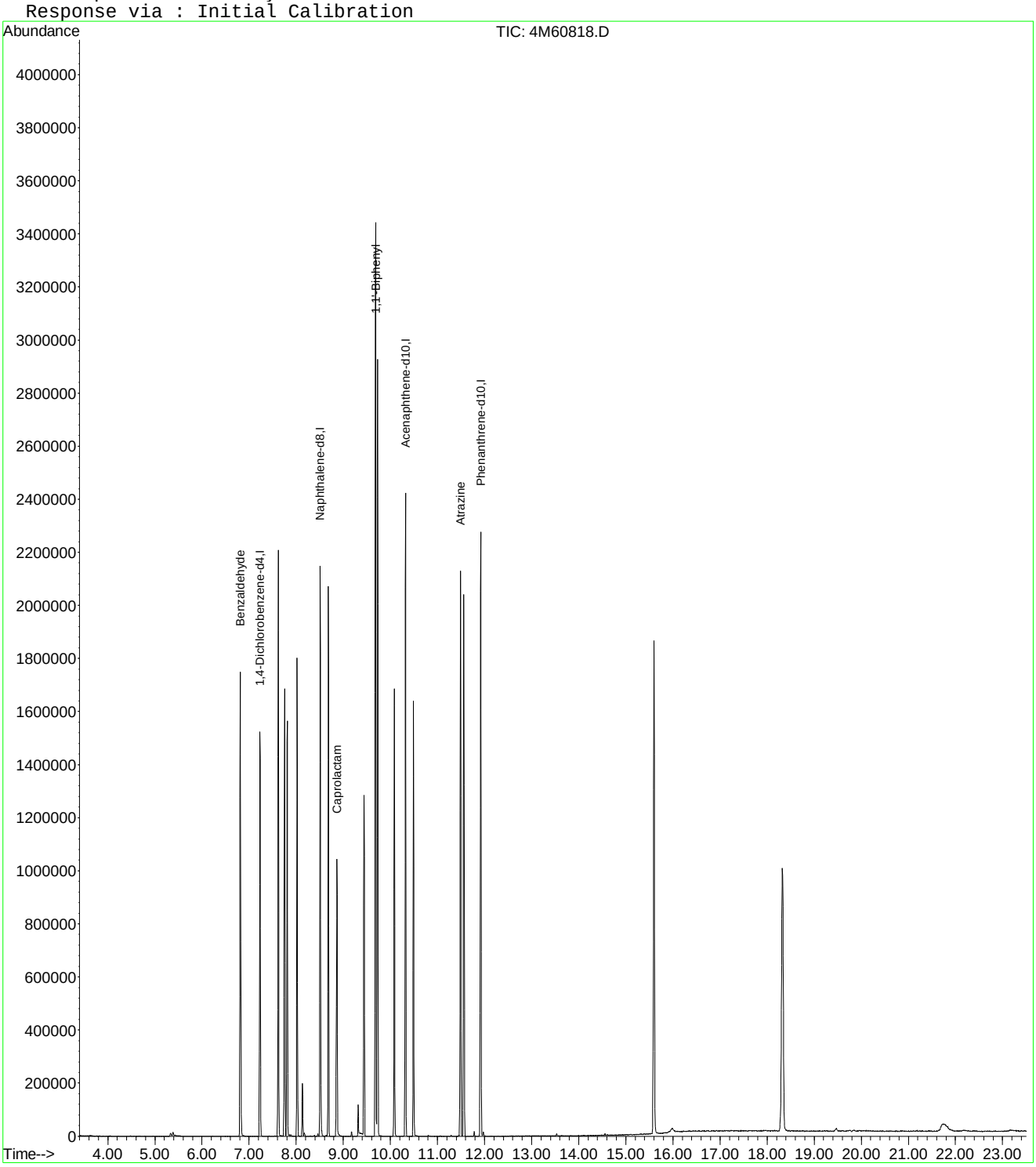
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.23	152	309271	40.00	ug/mL	0.00
3) Naphthalene-d8	8.51	136	1134960	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.32	164	640791	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.92	188	1155753	40.00	ug/mL	0.00
Target Compounds						Qvalue
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



Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051312\4M60839.D Vial: 2
Acq On : 13 May 2012 12:11 Operator: MDC
Sample : WG397839-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 13 12:36:47 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 : Sun May 13 11:44:59 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	388767	40.00	ug/ml	0.00
30) Naphthalene-d8	8.51	136	1450026	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.32	164	821112	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.92	188	1477190	40.00	ug/ml	0.00
113) Chrysene-d12	15.60	240	1391093	40.00	ug/ml	0.00
128) Perylene-d12	18.33	264	1315519	40.00	ug/ml	0.00
System Monitoring Compounds						
8) 2-Fluorophenol	6.00	112	569087	48.2801	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 48.28%			
12) Phenol-d5	6.83	99	683061	49.5140	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 49.51%			
31) Nitrobenzene-d5	7.79	82	636894	51.9315	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 103.86%			
59) 2-Fluorobiphenyl	9.58	172	1359283	49.5748	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 99.14%			
86) 2,4,6-Tribromophenol	11.14	330	196002	53.5286	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 53.53%			
117) p-Terphenyl-d14	13.95	244	1300068	50.7058	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 101.42%			
Target Compounds						Qvalue
2) 1,4-Dioxane	4.21	88	220237	45.4538	ug/ml#	96
3) n-Nitrosodimethylamine	4.64	74	345611	48.1713	ug/ml	94
4) Pyridine	4.65	79	598562	47.0570	ug/ml	88
5) 2-Picoline	5.45	93	662389	47.8573	ug/ml	99
6) n-Nitrosomethylethylamine	5.56	88	287269	48.1147	ug/ml	92
7) Methyl Methanesulfonate	5.85	80	335822	49.5417	ug/ml	97
9) n-Nitrosodiethylamine	6.23	102	298881	46.6934	ug/ml	95
10) Ethyl Methanesulfonate	6.49	79	432181	48.6782	ug/ml	97
11) Aniline	6.92	93	1054195m	51.7116	ug/ml	
13) Phenol	6.84	94	713695	48.4511	ug/ml	99
14) bis(2-Chloroethyl)ether	6.95	63	429978	46.6180	ug/ml	94
15) Pentachloroethane	6.96	167	247042	49.7240	ug/ml	99
16) 2-Chlorophenol	7.05	128	639384	48.4719	ug/ml	98
17) 1,3-Dichlorobenzene	7.20	146	711297	48.4469	ug/ml	99
18) 1,4-Dichlorobenzene	7.25	146	733687	48.9954	ug/ml	100
19) Benzyl Alcohol	7.34	108	412245	48.2679	ug/ml	95
20) 1,2-Dichlorobenzene	7.44	146	666731	47.9432	ug/ml	100
21) 2-Methylphenol	7.43	107	483226	47.5742	ug/ml	98
22) bis(2-Chloroisopropyl)ethe	7.48	45	754377	39.8378	ug/ml	92
23) 3-,4-Methylphenol	7.57	107	629262	47.6592	ug/ml	98
24) n-Nitrosopyrrolidine	7.61	100	299004	50.1604	ug/ml	91
25) n-Nitrosodipropylamine	7.61	70	409863	49.3486	ug/ml	95
26) Acetophenone	7.62	105	782170	47.8869	ug/ml	98
27) n-Nitrosomorpholine	7.62	56	337623	43.5734	ug/ml	93
28) o-Toluidine	7.67	106	985291	47.7152	ug/ml	99
29) Hexachloroethane	7.75	117	276040	49.7814	ug/ml	99
32) Nitrobenzene	7.81	77	628826	51.4445	ug/ml	98
33) n-Nitrosopiperidine	7.96	114	321439	49.1262	ug/ml	94
34) Isophorone	8.02	82	1111076	49.7992	ug/ml	100
35) 2-Nitrophenol	8.13	139	370502	51.4195	ug/ml	98
36) 2,4-Dimethylphenol	8.09	122	576941	46.6302	ug/ml	97
37) 0,0,0-Triethyl Phosphoroth	8.20	198	308448	49.9346	ug/ml	98
38) bis(2-Chloroethoxy)methane	8.20	93	865710	51.0569	ug/ml	99

(#) = qualifier out of range (m) = manual integration
4M60839.D MEGAMIX.M Tue May 15 13:49:14 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051312\4M60839.D Vial: 2
Acq On : 13 May 2012 12:11 Operator: MDC
Sample : WG397839-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 13 12:36:47 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 : Sun May 13 11:44:59 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39)	Benzoic Acid	8.13	105	98181m	11.5140 ug/ml	
40)	2,4-Dichlorophenol	8.35	162	531078	51.2736 ug/ml	99
41)	a,a-Dimethylphenethylamine	8.35	58	1055657	60.2841 ug/ml	98
42)	1,2,4-Trichlorobenzene	8.45	180	606507	51.5686 ug/ml	99
43)	Naphthalene	8.53	128	1875426	48.8367 ug/ml	98
44)	4-Chloroaniline	8.56	127	783466	55.3958 ug/ml	97
45)	2,6-Dichlorophenol	8.59	162	544167	50.9134 ug/ml	99
46)	Hexachloropropene	8.64	213	368998	55.9799 ug/ml	99
47)	Hexachlorobutadiene	8.68	225	318357	52.8726 ug/ml	100
48)	n-Nitrosodi-n-Butylamine	8.87	84	523476	50.7624 ug/ml	94
49)	p-Phenylenediamine	9.00	108	44109	49.4325 ug/ml	91
50)	4-Chloro-3-Methylphenol	9.00	107	528733	50.3042 ug/ml	99
51)	Safrole	9.09	162	505425	50.5606 ug/ml	99
52)	2-Methylnaphthalene	9.22	142	1235782	49.5325 ug/ml	99
53)	1-Methylnaphthalene	9.34	142	1167642	49.5019 ug/ml	99
55)	1,2,4,5-Tetrachlorobenzene	9.43	216	556728	51.7392 ug/ml	99
56)	Hexachlorocyclopentadiene	9.44	237	280528	50.4033 ug/ml	100
57)	2,4,6-Trichlorophenol	9.51	196	382593	50.7422 ug/ml	99
58)	2,4,5-Trichlorophenol	9.56	196	395632	50.9736 ug/ml	99
60)	Isosafrole	9.62	162	518664	49.9854 ug/ml	99
61)	2-Chloronaphthalene	9.73	162	1197598	51.6514 ug/ml	98
62)	1-Chloronaphthalene	9.77	162	1114360	50.7573 ug/ml	99
63)	2-Nitroaniline	9.83	65	339726	51.1169 ug/ml	100
64)	1,4-Naphthoquinone	9.89	158	445615	48.6687 ug/ml	99
65)	Dimethylphthalate	9.99	163	1303736	50.1845 ug/ml	100
66)	1,3-Dinitrobenzene	10.04	168	262114	52.6167 ug/ml	97
67)	2,6-Dinitrotoluene	10.09	165	335286	51.6654 ug/ml	99
68)	Acenaphthylene	10.17	152	1823227	48.9745 ug/ml	99
69)	3-Nitroaniline	10.24	138	238416	49.8074 ug/ml	99
70)	2,4-Dinitrophenol	10.34	184	146473	45.8106 ug/ml	82
71)	Acenaphthene	10.35	154	1184612	48.8537 ug/ml	99
72)	4-Nitrophenol	10.35	65	216574	45.2860 ug/ml	93
73)	2,4-Dinitrotoluene	10.49	165	434243	52.5891 ug/ml	98
74)	Pentachlorobenzene	10.54	250	505830	52.2103 ug/ml	99
75)	Dibenzofuran	10.51	168	1621381	49.9377 ug/ml	99
76)	2,3,4,6-Tetrachlorophenol	10.61	232	276894	46.2594 ug/ml	99
77)	1-Naphthylamine	10.58	143	170396	24.4023 ug/ml#	88
78)	2-Naphthylamine	10.65	143	59964	14.1078 ug/ml#	74
79)	Diethylphthalate	10.70	149	1319689	51.0064 ug/ml	100
80)	Thionazin	10.79	107	217284	50.4717 ug/ml	95
81)	Fluorene	10.87	166	1363579	49.4143 ug/ml	99
82)	4-Chlorophenyl Phenyl Ethe	10.82	204	667981	51.5159 ug/ml	99
83)	4-Nitroaniline	10.88	138	314644	53.1020 ug/ml	99
84)	5-Nitro-o-Toluidine	10.87	152	328677	50.4503 ug/ml	96
85)	1,2-Diphenylhydrazine	10.98	77	1274314	50.6424 ug/ml	99
88)	4,6-Dinitro-2-Methylphenol	10.92	198	234672	51.0320 ug/ml	93
89)	n-Nitrosodiphenylamine	10.94	169	1188765	49.7364 ug/ml	99
90)	Sulfotepp	11.14	322	230104	53.8857 ug/ml	98
91)	Sym-Trinitrobenzene	11.23	75	334148	57.1853 ug/ml	97
92)	Diallate	11.26	86	489512	50.2202 ug/ml	91
93)	Phenacetin	11.25	108	651411	52.0221 ug/ml	99
94)	Phorate	11.28	75	784935	50.4763 ug/ml#	99
95)	4-Bromophenyl Phenyl Ether	11.34	248	383853	51.3604 ug/ml	99
96)	Hexachlorobenzene	11.56	284	426836	52.2454 ug/ml	100

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

Data File : I:\MSDCHEM\1\DATA\051312\4M60839.D Vial: 2
Acq On : 13 May 2012 12:11 Operator: MDC
Sample : WG397839-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 13 12:36:47 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 : Sun May 13 11:44:59 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

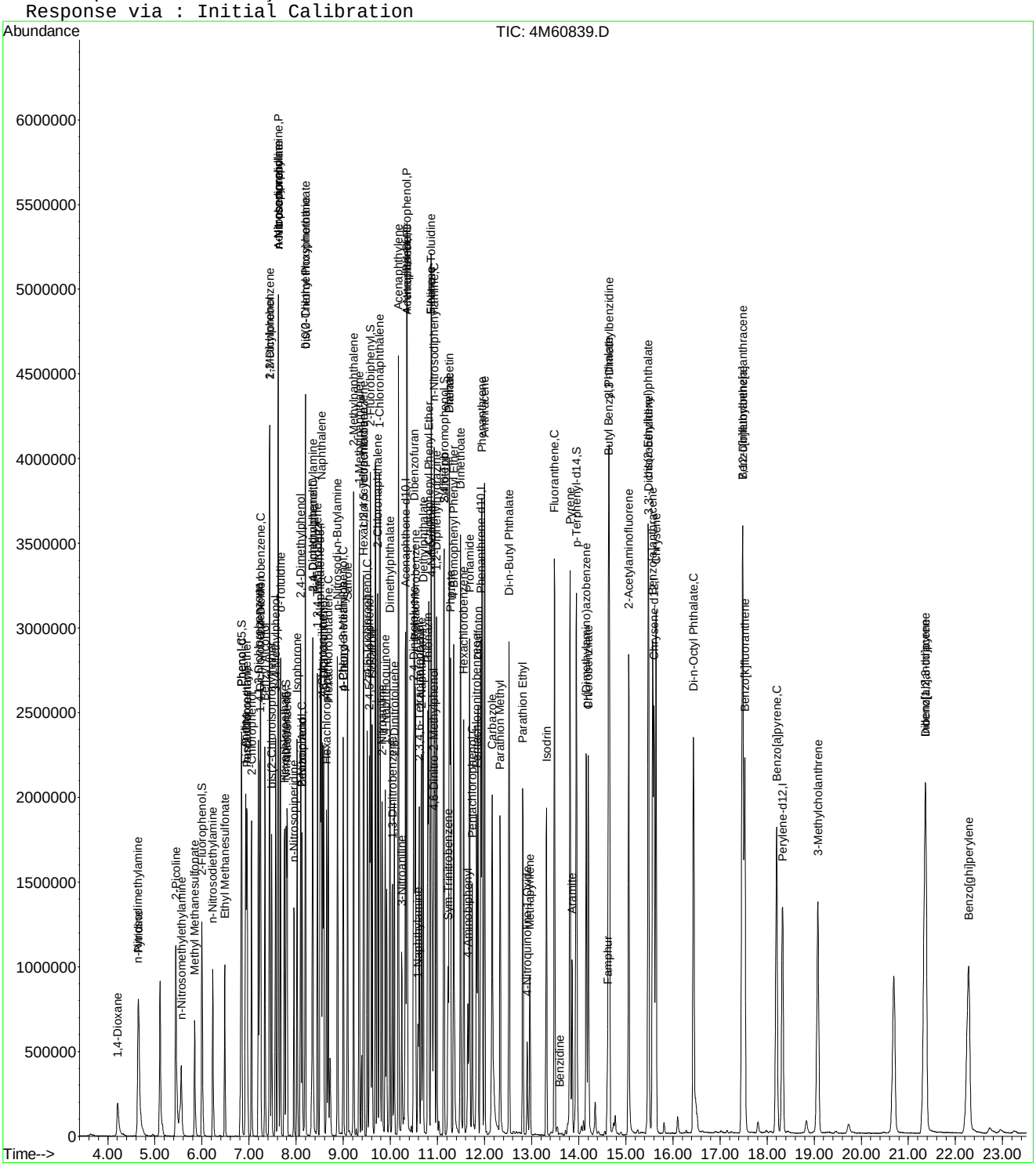
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.49	87	450605	54.1908	ug/ml	98
98)	4-Aminobiphenyl	11.65	169	548838	60.4229	ug/ml	99
99)	Pentachlorophenol	11.74	266	232920	45.0852	ug/ml	99
100)	Pronamide	11.68	173	607231	50.5667	ug/ml	98
101)	Pentachloronitrobenzene	11.83	237	155928	55.0697	ug/ml	97
102)	Disulfoton	11.86	88	675333	50.5281	ug/ml	98
103)	Phenanthrene	11.95	178	1900298	48.4998	ug/ml	100
104)	Anthracene	12.00	178	1962855	48.8575	ug/ml	100
105)	Carbazole	12.16	167	1771187	50.3493	ug/ml	98
106)	Parathion Methyl	12.33	109	420322	51.4054	ug/ml	99
107)	Di-n-Butyl Phthalate	12.52	149	2206197	50.4792	ug/ml	99
108)	Parathion Ethyl	12.81	97	271099	54.4578	ug/ml	98
109)	4-Nitroquinoline 1-Oxide	12.91	190	89544	24.8619	ug/ml	95
110)	Methapyrilene	12.96	58	347773	40.6058	ug/ml	86
111)	Isodrin	13.31	193	205578	48.8482	ug/ml	100
112)	Fluoranthene	13.48	202	2039202	49.6664	ug/ml	99
114)	Benzidine	13.60	184	19673	10.1465	ug/ml	100
115)	Pyrene	13.82	202	2063918	49.6045	ug/ml	99
116)	Aramite	13.86	185	129550	54.9866	ug/ml	98
118)	p-(Dimethylamino)azobenzen	14.16	225	442632	51.5255	ug/ml	97
119)	Chlorobenzilate	14.21	251	595932	52.6306	ug/ml	99
120)	Famphur	14.61	218	40147	81.3913	ug/ml#	75
121)	Butyl Benzyl Phthalate	14.63	149	964862	50.9829	ug/ml	99
122)	3,3'-Dimethylbenzidine	14.64	212	430196	32.7211	ug/ml	96
123)	2-Acetylaminofluorene	15.06	181	853733	52.7328	ug/ml	96
124)	bis(2-Ethylhexyl)phthalate	15.48	149	1316384	50.9714	ug/ml	99
125)	3,3'-Dichlorobenzidine	15.49	252	447057	57.9659	ug/ml	100
126)	Benzo[a]anthracene	15.57	228	1834086	49.6982	ug/ml	99
127)	Chrysene	15.64	228	1702010	49.1317	ug/ml	99
129)	Di-n-Octyl Phthalate	16.44	149	2253347	53.0404	ug/ml	97
130)	7,12-Dimethylbenz[a]anthra	17.49	256	899494	52.7982	ug/ml	99
131)	Benzo[b]fluoranthene	17.48	252	1972555	51.8529	ug/ml	99
132)	Benzo[k]fluoranthene	17.53	252	1841740	52.2291	ug/ml	100
133)	Benzo[a]pyrene	18.20	252	1791637	51.6219	ug/ml	98
134)	3-Methylcholanthrene	19.08	268	976998	51.8465	ug/ml	99
135)	Indeno[1,2,3-cd]pyrene	21.36	276	2073045	53.6319	ug/ml	97
136)	Dibenz[ah]anthracene	21.36	278	1759783	54.5894	ug/ml	98
137)	Benzo[ghi]perylene	22.28	276	1680581	52.5580	ug/ml	99

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051312\4M60839.D Vial: 2
Acq On : 13 May 2012 12:11 Operator: MDC
Sample : WG397839-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 13:48 2012 Quant Results File: MEGAMIX.RES

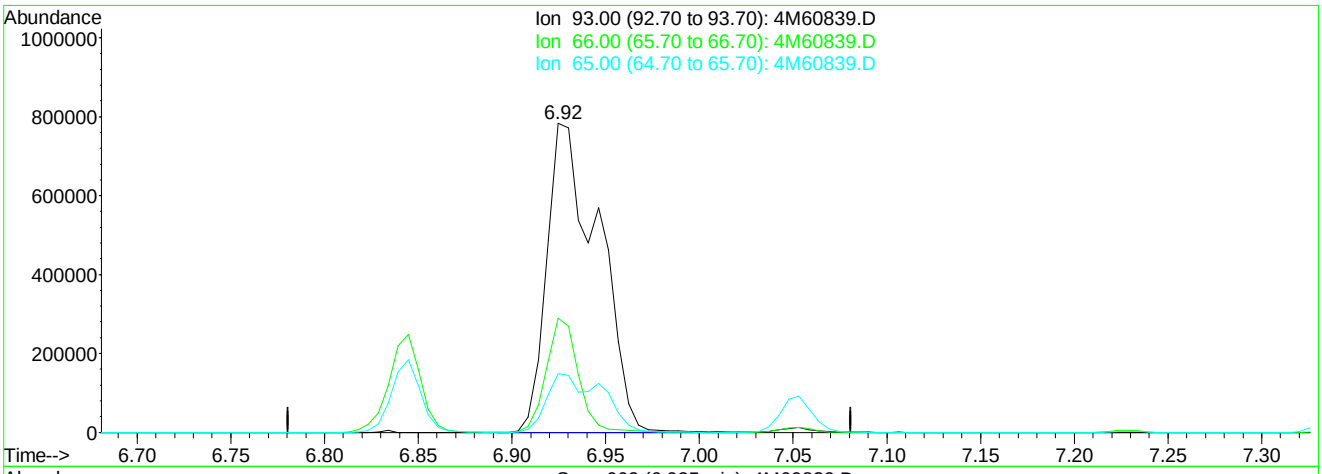
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Tue May 15 10:59:15 2012
Response via : Initial Calibration

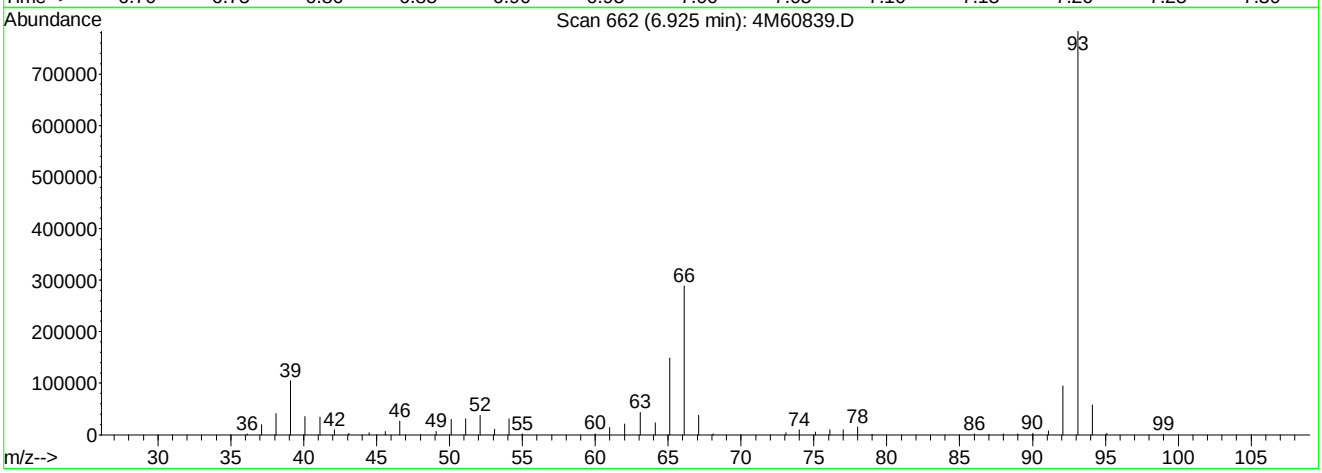


Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\051312\4M60839.D Vial: 2
Acq On : 13 May 2012 12:11 Operator: MDC
Sample : WG397839-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 13 12:36 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 : Tue May 15 10:59:15 2012
Response via : Multiple Level Calibration





TIC: 4M60839.D

(11) Aniline

6.92min 73.46ug/ml

response 1497474

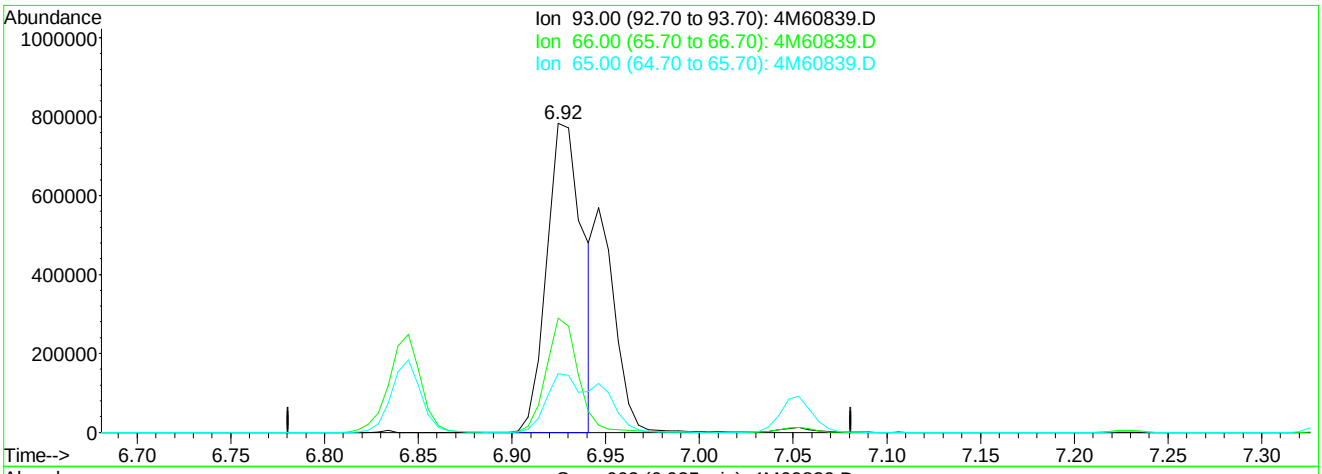
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	22.87
65.00	29.20	20.21
0.00	0.00	0.00

4M60839.D MEGAMIX.M Tue May 15 13:48:36 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\051312\4M60839.D Vial: 2
Acq On : 13 May 2012 12:11 Operator: MDC
Sample : WG397839-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 13:48 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 : Tue May 15 10:59:15 2012
Response via : Multiple Level Calibration



TIC: 4M60839.D

(11) Aniline

6.92min 51.71ug/ml mint

response 1054195

Ion	Exp%	Act%
93.00	100	100
66.00	33.40	32.48
65.00	29.20	28.71
0.00	0.00	0.00

4M60839.D MEGAMIX.M Tue May 15 2012

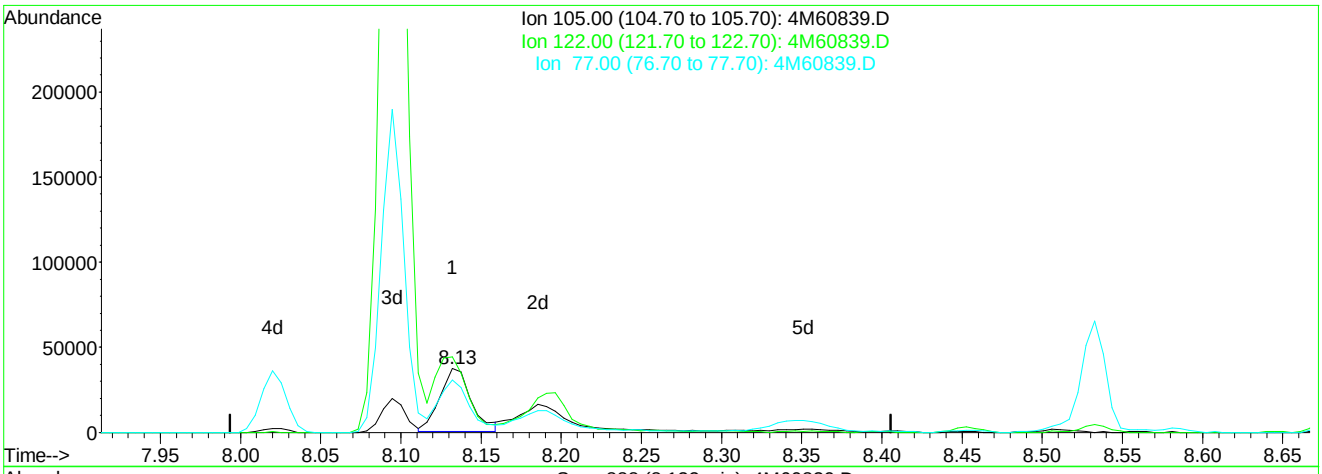
Analyst: 05/16/2012 15:09 Supervisor: 05/17/2012 11:53

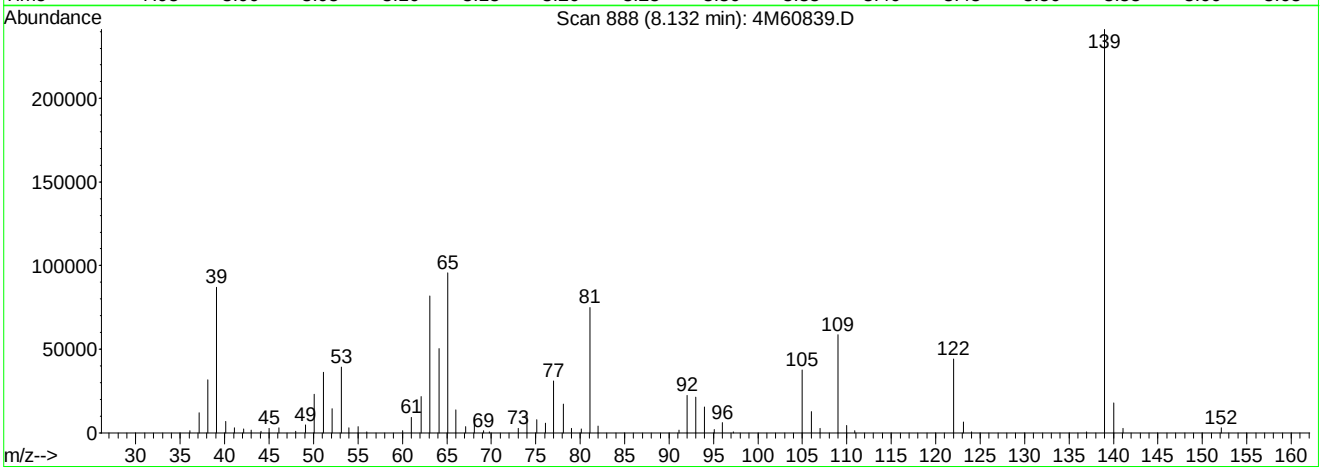
#3 - Improperly integrated isomers and/or coeluting compounds

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\051312\4M60839.D Vial: 2
Acq On : 13 May 2012 12:11 Operator: MDC
Sample : WG397839-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 13:48 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 : Tue May 15 10:59:15 2012
Response via : Single Level Calibration





TIC: 4M60839.D

(39) Benzoic Acid

8.13min 5.89ug/ml

response 50214

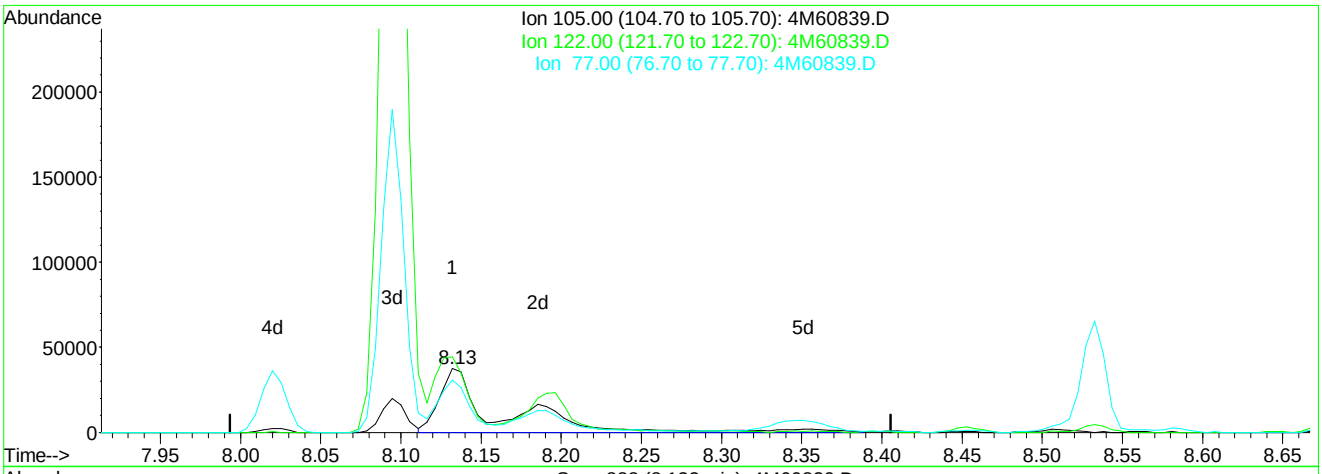
Ion	Exp%	Act%
105.00	100	100
122.00	87.10	122.44#
77.00	70.40	79.78
0.00	0.00	0.00

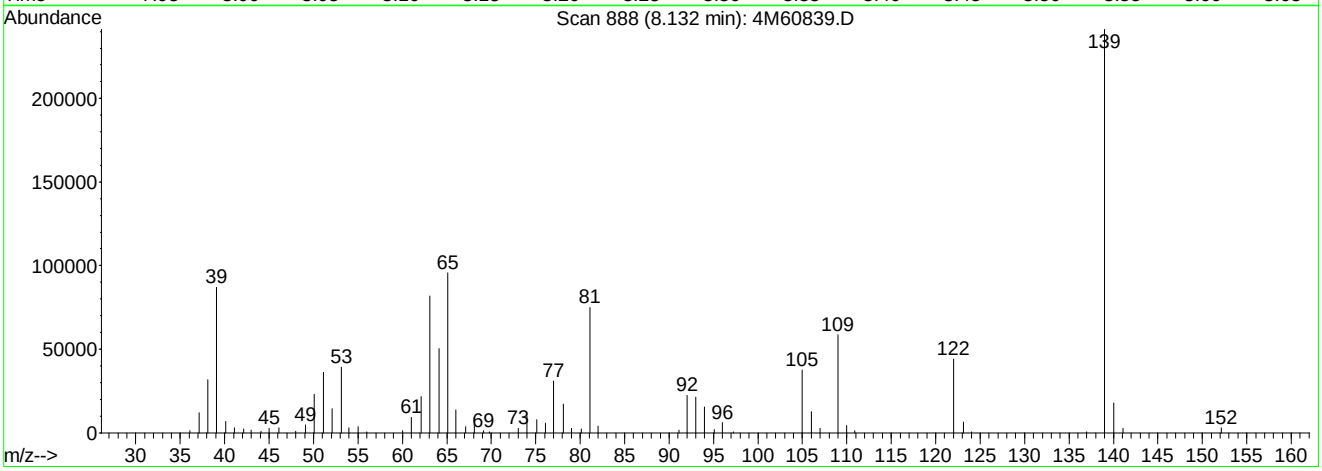
4M60839.D MEGAMIX.M Tue May 15 13:48:47 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\051312\4M60839.D Vial: 2
Acq On : 13 May 2012 12:11 Operator: MDC
Sample : WG397839-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 13:48 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 : Tue May 15 10:59:15 2012
Response via : Single Level Calibration





TIC: 4M60839.D

(39) Benzoic Acid

8.13min 11.51ug/ml mint

response 98181

Ion	Exp%	Act%
105.00	100	100
122.00	87.10	62.62
77.00	70.40	40.80#
0.00	0.00	0.00

4M60839.D MEGAMIX.M Tue May 15 2012

Analyst: 05/16/2012 15:09 Supervisor: 05/17/2012 11:53

#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\051312\4M60840.D Vial: 3
Acq On : 13 May 2012 12:45 Operator: MDC
Sample : WG397840-01 50PPM TCL STD Inst : HPMS4
Misc : 1,1 STD51428 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 17 09:23:02 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 : Thu May 17 08:35:33 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

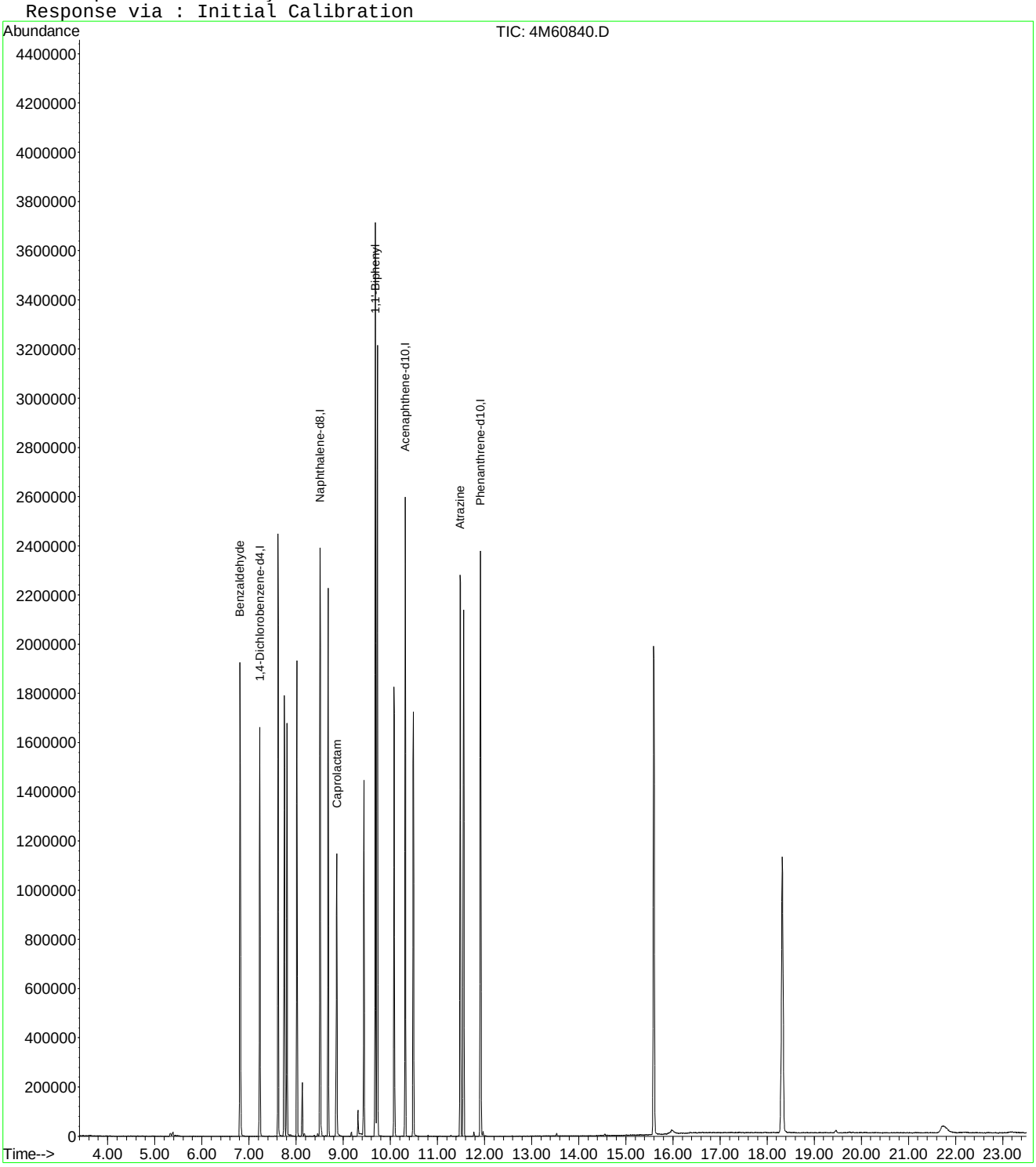
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.23	152	332438	40.00	ug/mL	0.00
3) Naphthalene-d8	8.51	136	1243406	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.32	164	695545	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.92	188	1249261	40.00	ug/mL	0.00
Target Compounds						Qvalue
2) Benzaldehyde	6.81	105	455766	51.4708	ug/L	99
4) Caprolactam	8.86	55	222266	54.7373	ug/L	99
6) 1,1'-Biphenyl	9.68	154	1416774	49.6295	ug/L	99
8) Atrazine	11.49	200	352938	51.0404	ug/L	99

(#) = qualifier out of range (m) = manual integration
4M60840.D TCL.M Thu May 17 09:23:09 2012 Page 1

Quantitation Report (Not Reviewed)

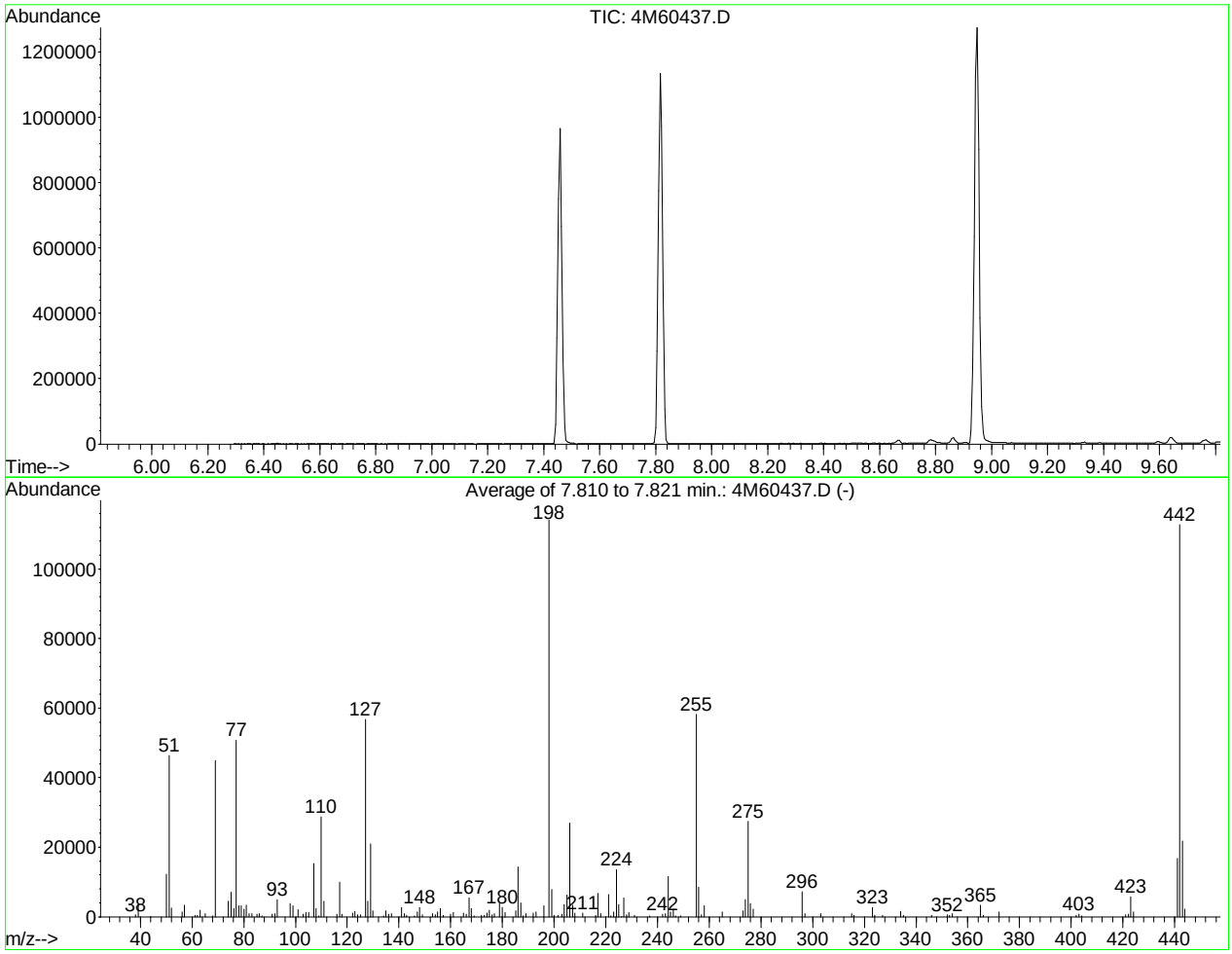
Data File : I:\MSDCHEM\1\DATA\051312\4M60840.D Vial: 3
Acq On : 13 May 2012 12:45 Operator: MDC
Sample : WG397840-01 50PPM TCL STD Inst : HPMS4
Misc : 1,1 STD51428 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 17 9:23 2012 Quant Results File: TCL.RES

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Thu May 17 08:35:33 2012
Response via : Initial Calibration



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

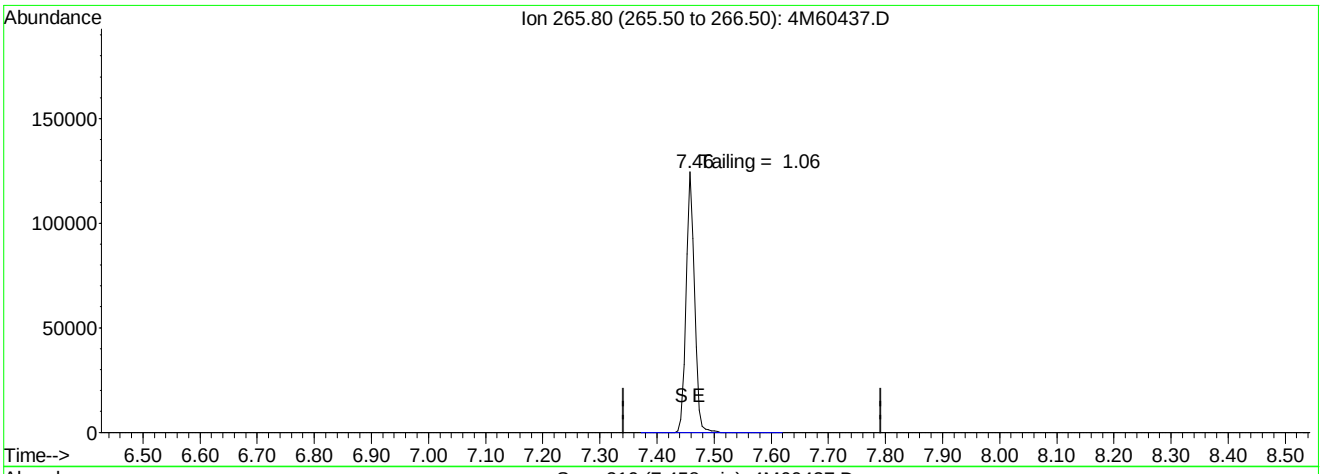
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	40.7	46389	PASS
68	69	0.00	2	0.7	296	PASS
69	198	0.00	100	39.4	44901	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	49.8	56768	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	114077	PASS
199	198	5	9	6.8	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

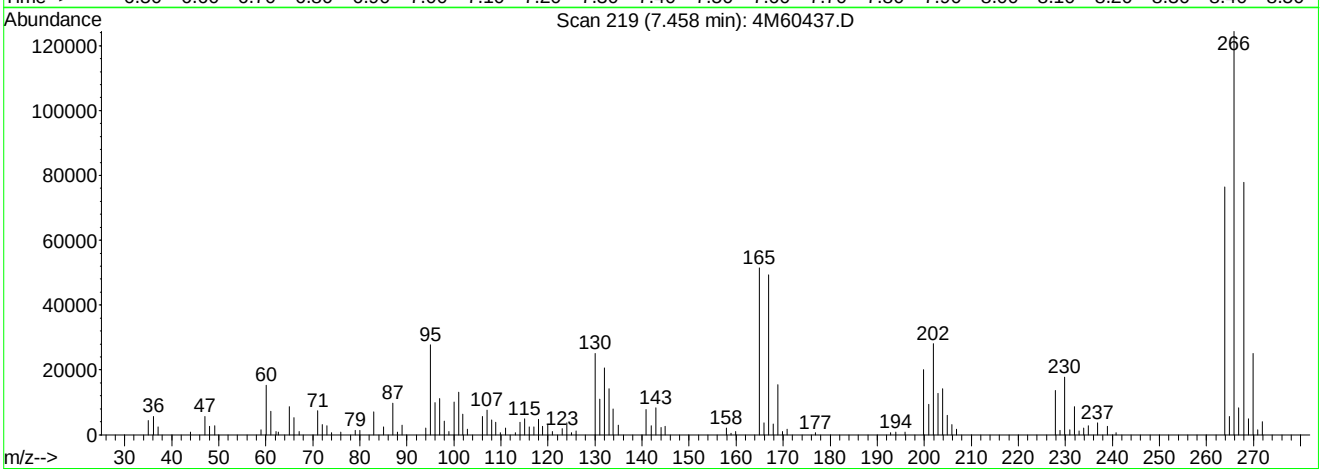
4M60437.D DFTPP.M Fri Apr 20 08:17:55 2012

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

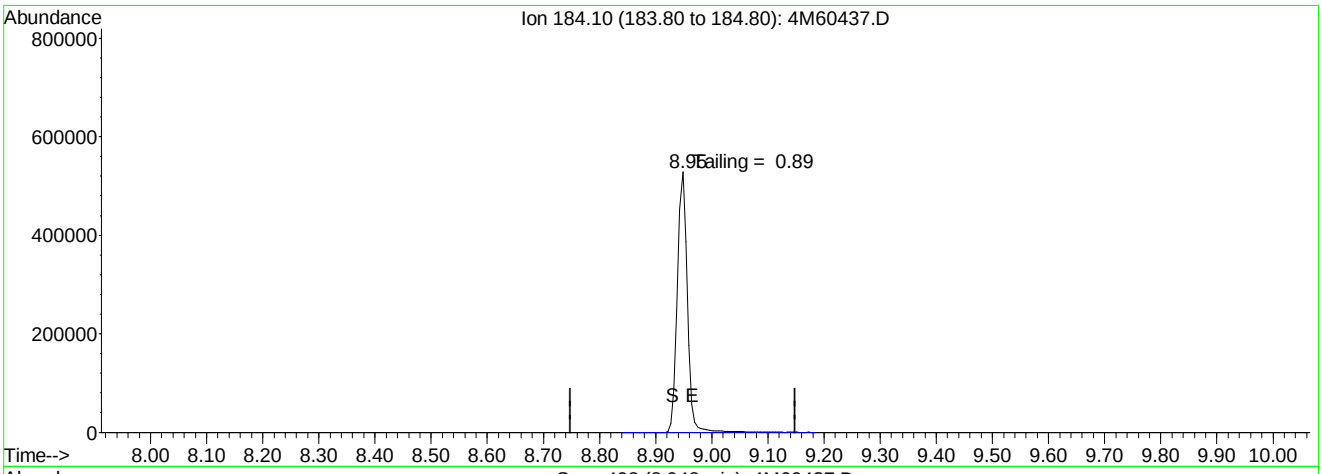
Ion	Exp%	Act%
265.80	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

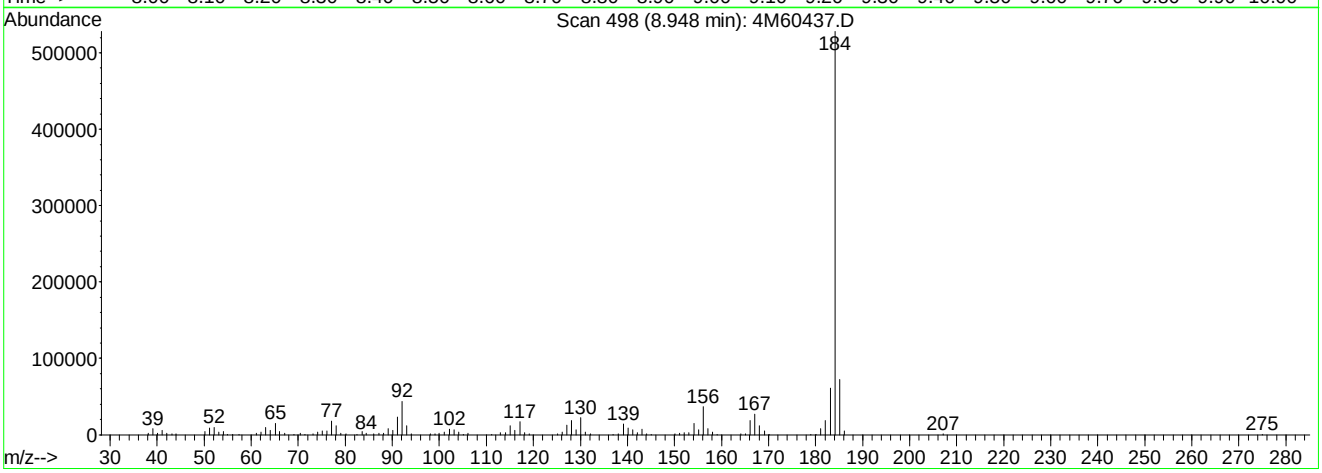
4M60437.D DFTPP.M Fri Apr 20 08:18:15 2012

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

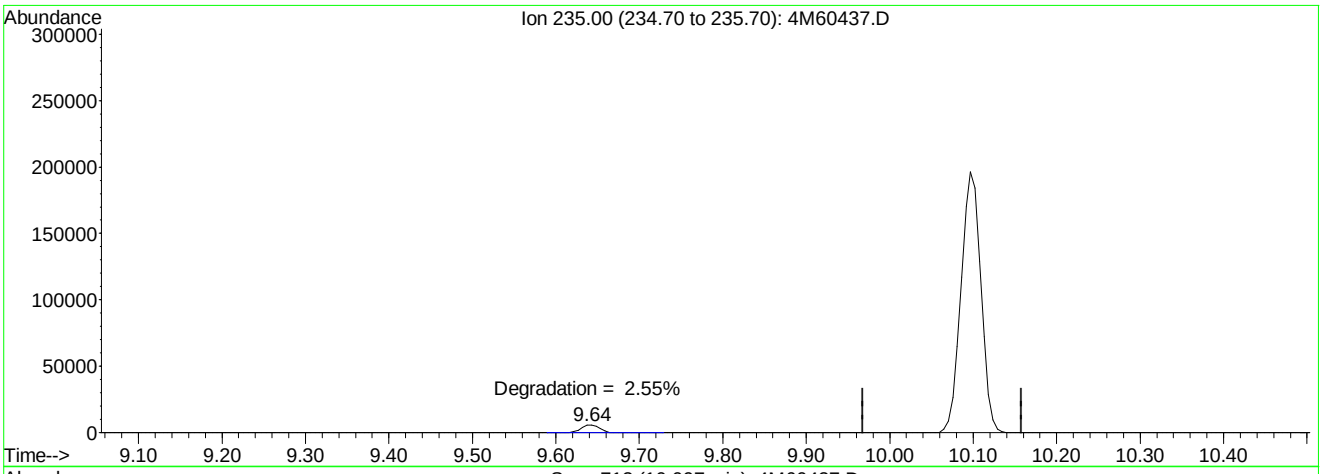
Ion	Exp%	Act%
184.10	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

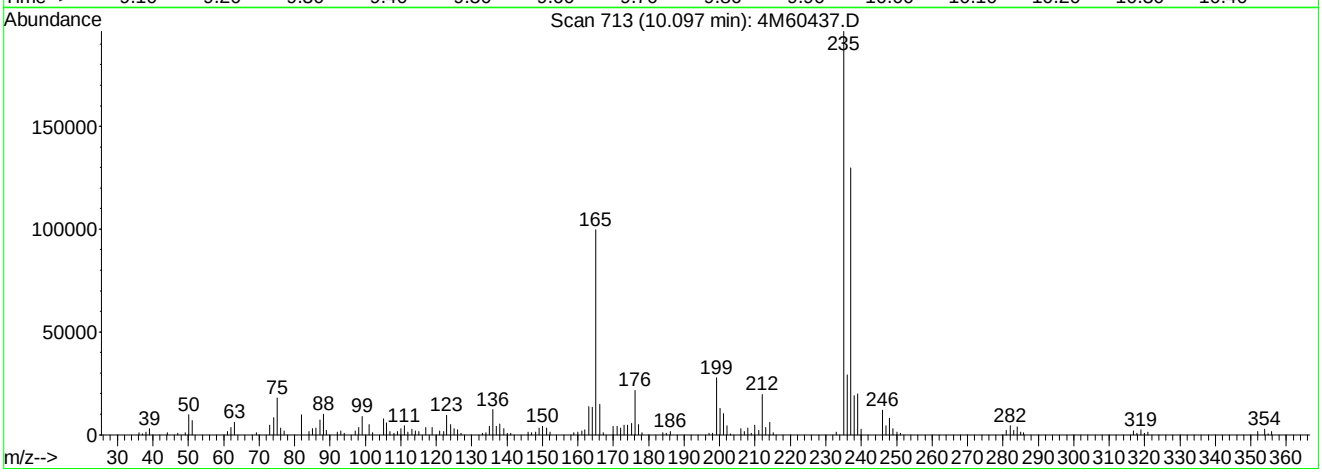
4M60437.D DFTPP.M Fri Apr 20 08:18:21 2012

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

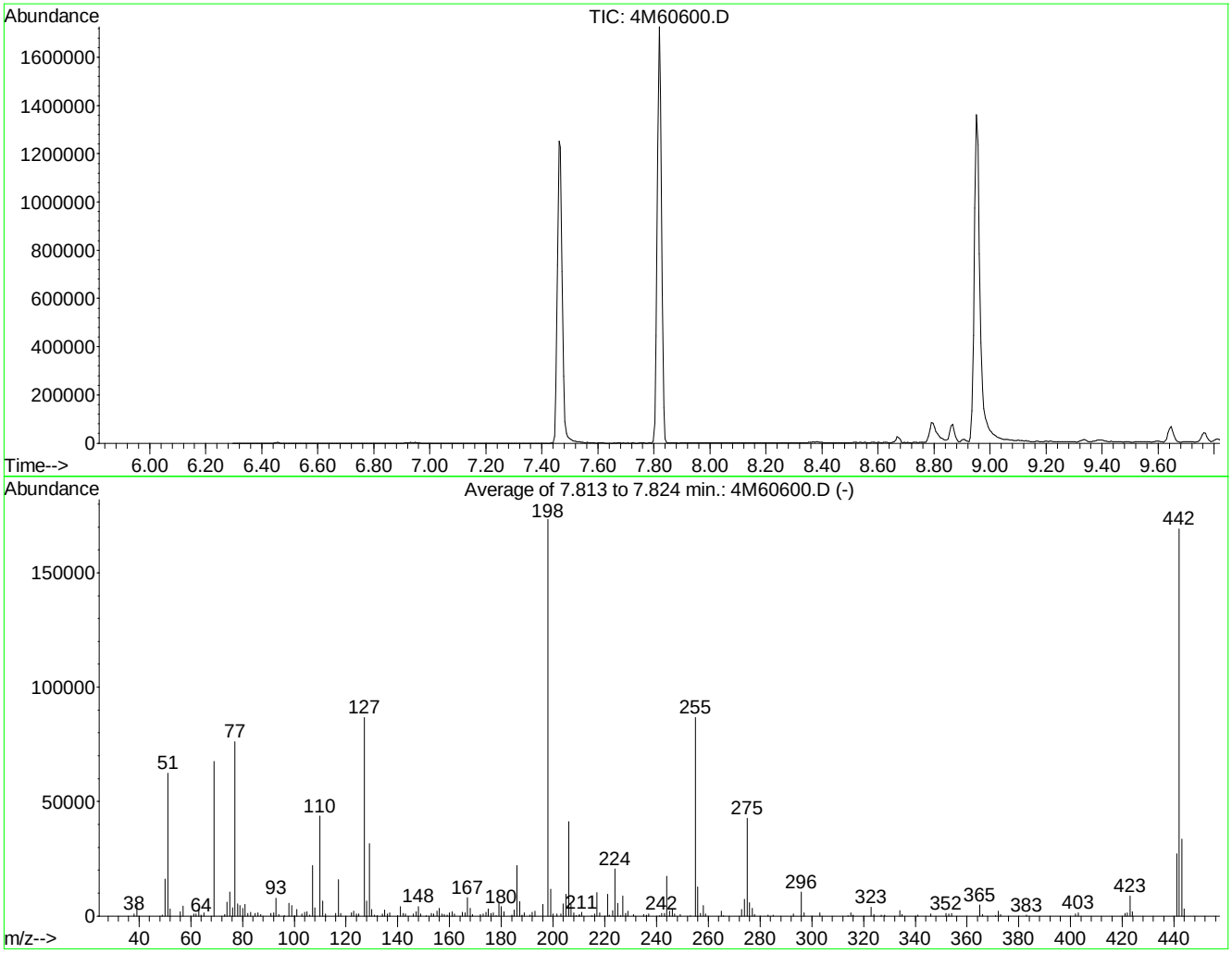
10.10min 0.00ug/ml

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

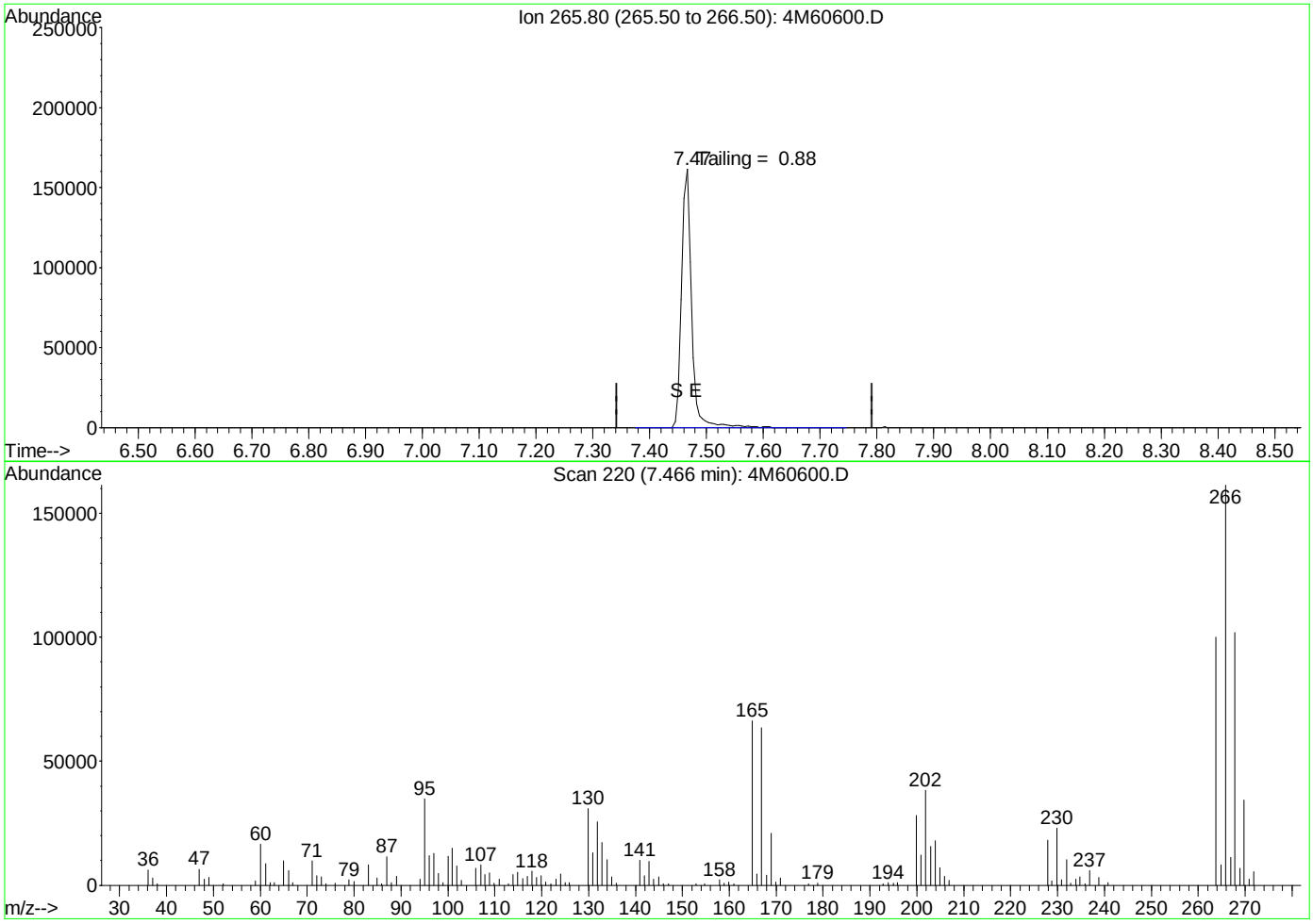
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	36.0	62456	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	39.0	67664	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	50.1	86805	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	173418	PASS
199	198	5	9	6.7	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

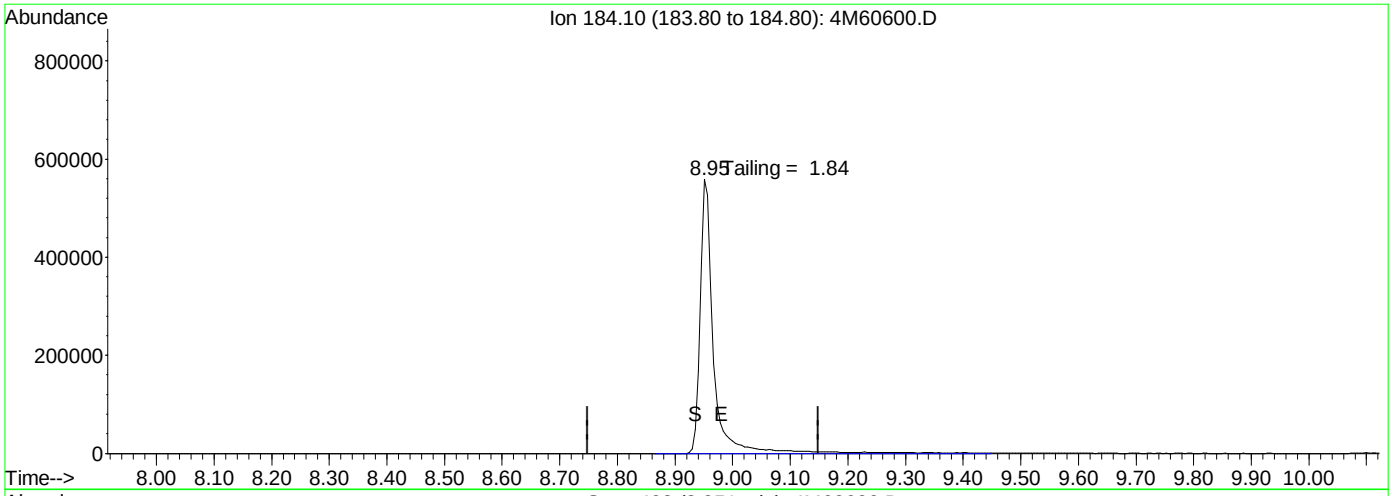
Ion	Exp%	Act%
265.80	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

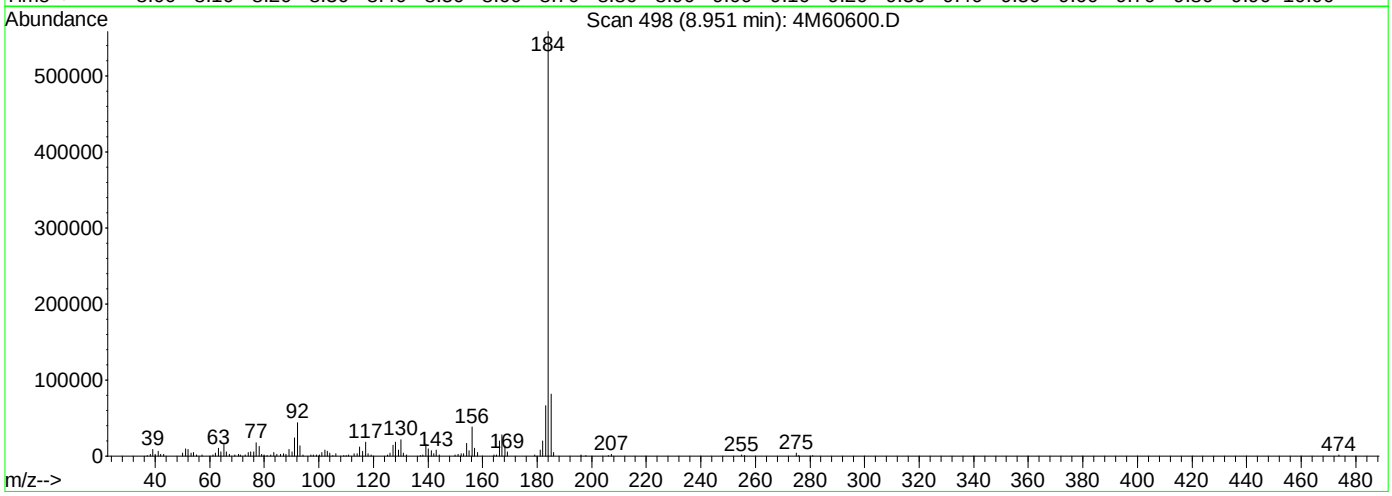
4M60600.D DFTPP.M Wed May 02 13:32:06 2012

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

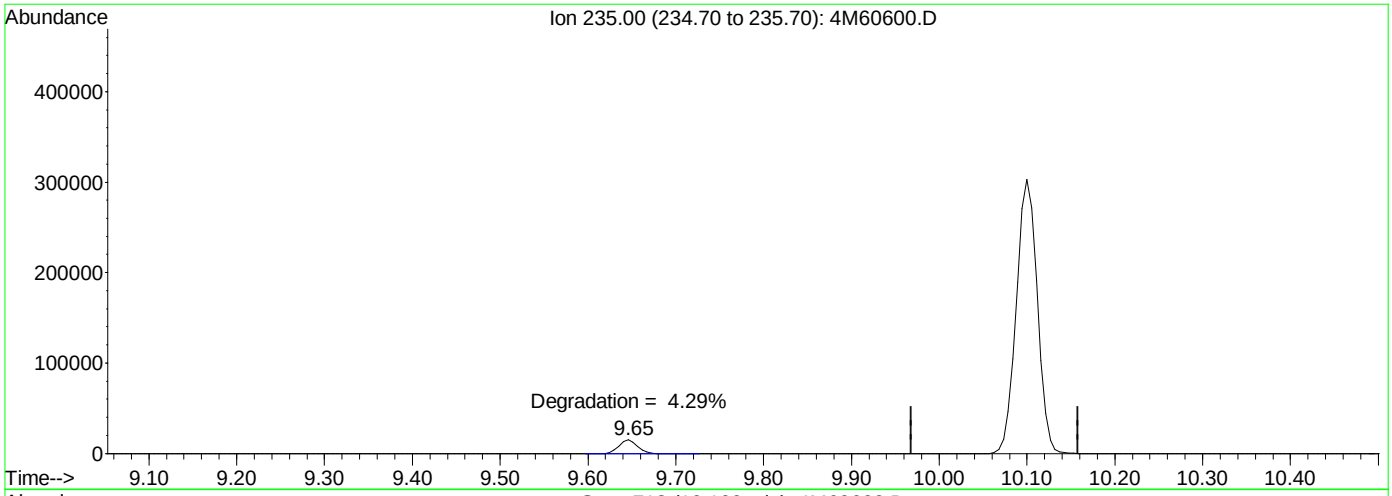
Ion	Exp%	Act%
184.10	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

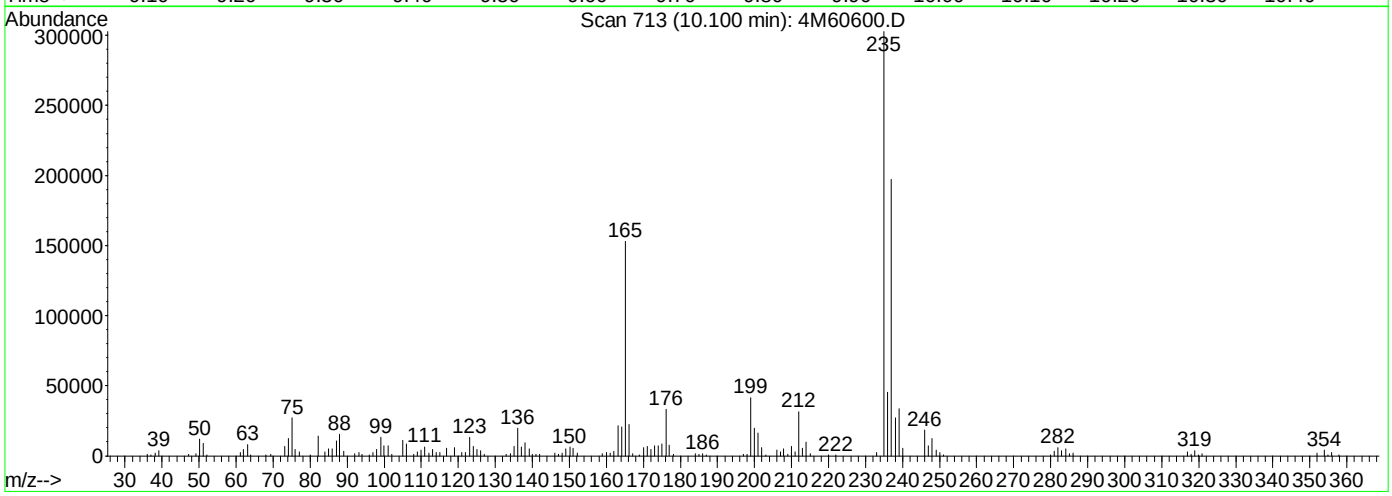
4M60600.D DFTPP.M Wed May 02 13:32:11 2012

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

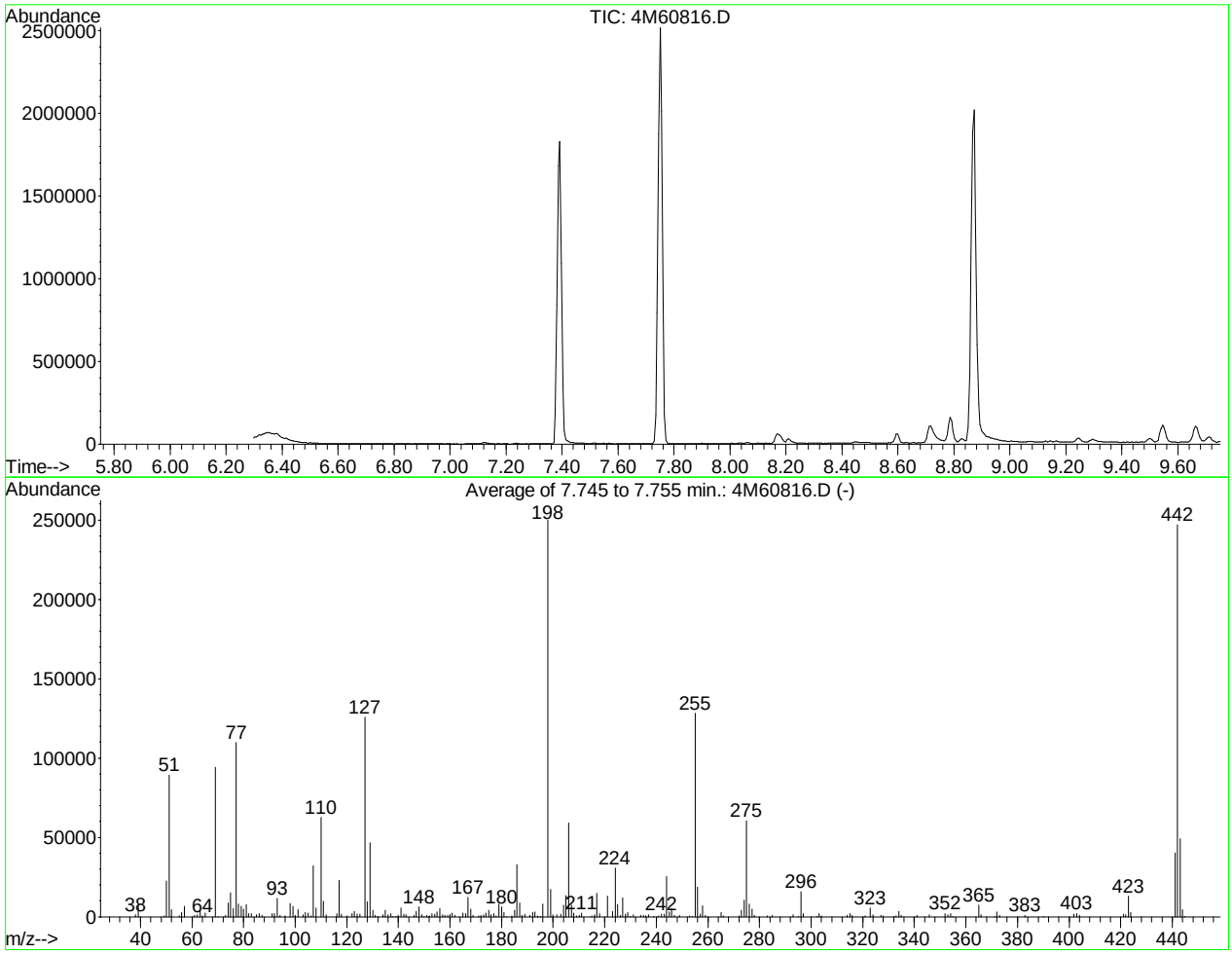
10.10min 0.00ug/ml

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

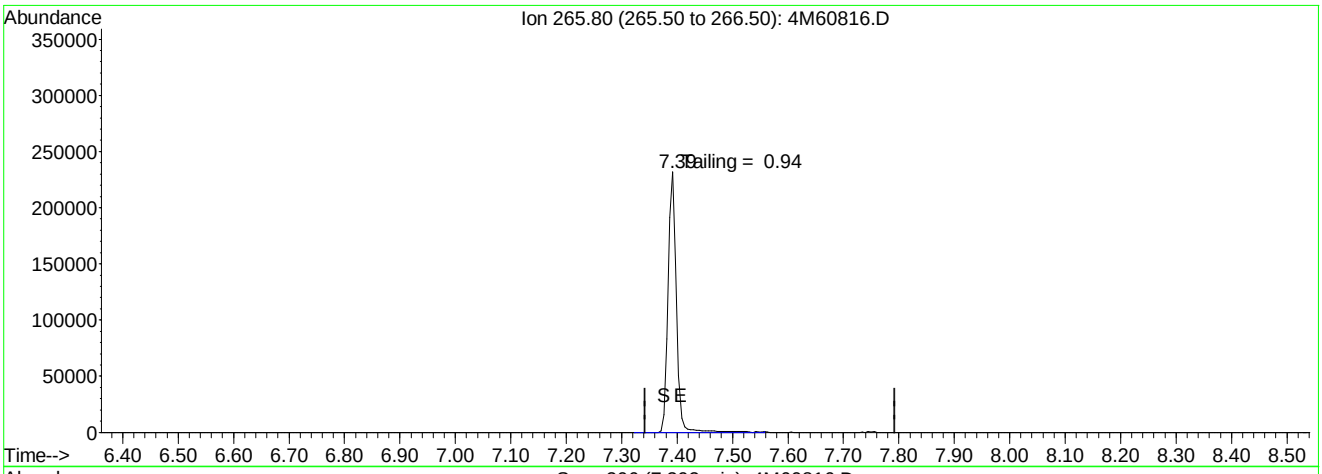
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	35.7	89354	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	37.7	94325	PASS
70	69	0.00	2	0.4	367	PASS
127	198	40	60	50.3	125853	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	249962	PASS
199	198	5	9	6.8	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

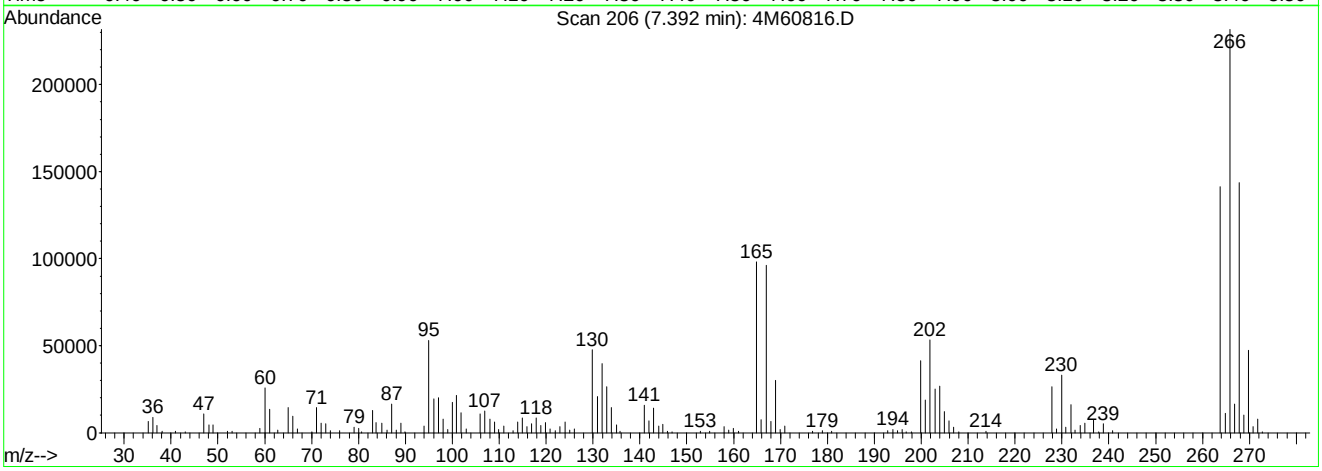
4M60816.D DFTPP.M Mon May 14 11:39:55 2012

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

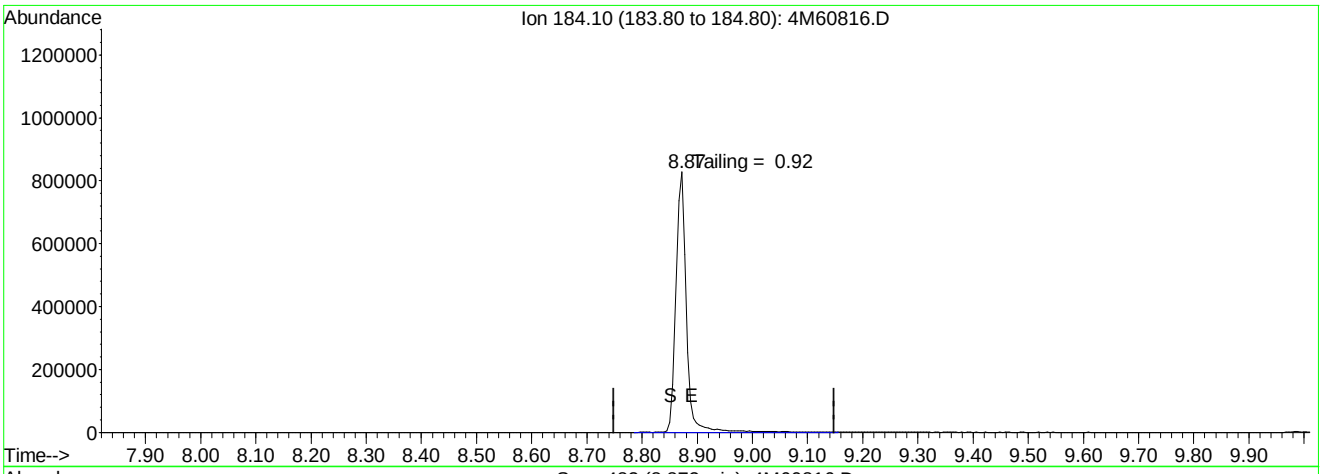
Ion	Exp%	Act%
265.80	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

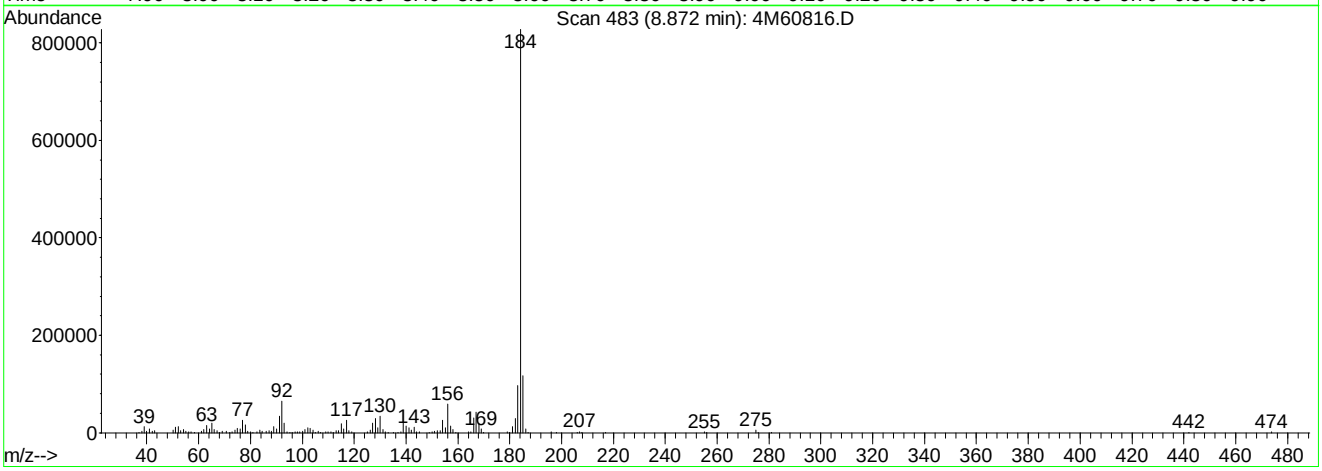
4M60816.D DFTPP.M Mon May 14 11:40:01 2012

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

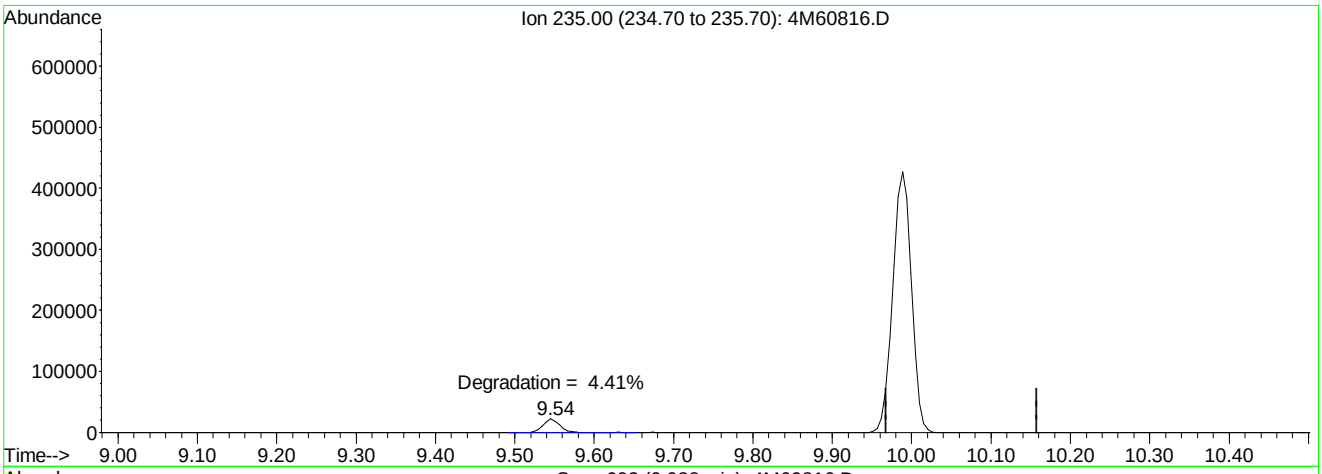
Ion	Exp%	Act%
184.10	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

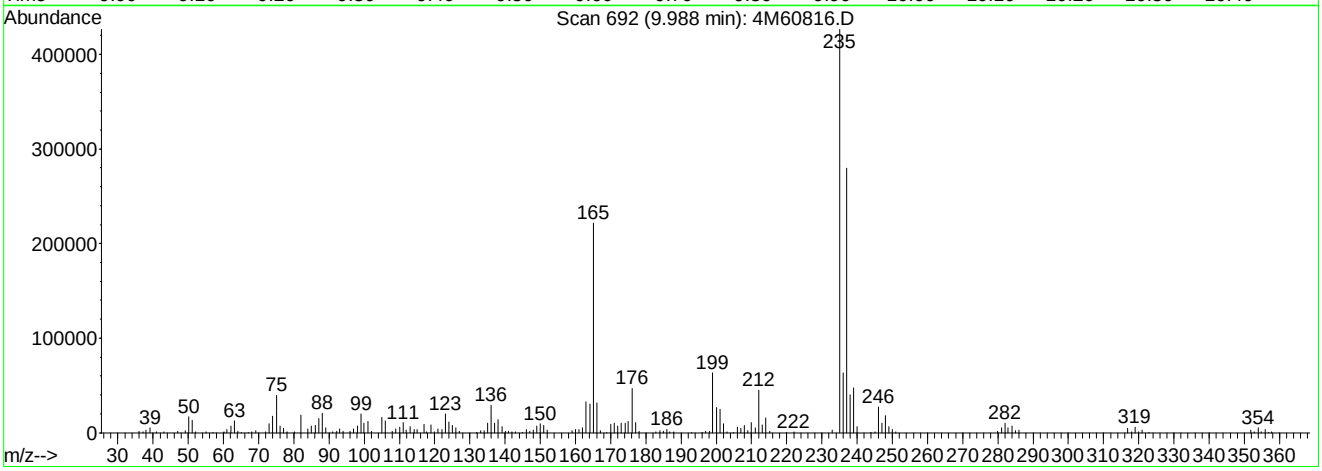
4M60816.D DFTPP.M Mon May 14 11:40:06 2012

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

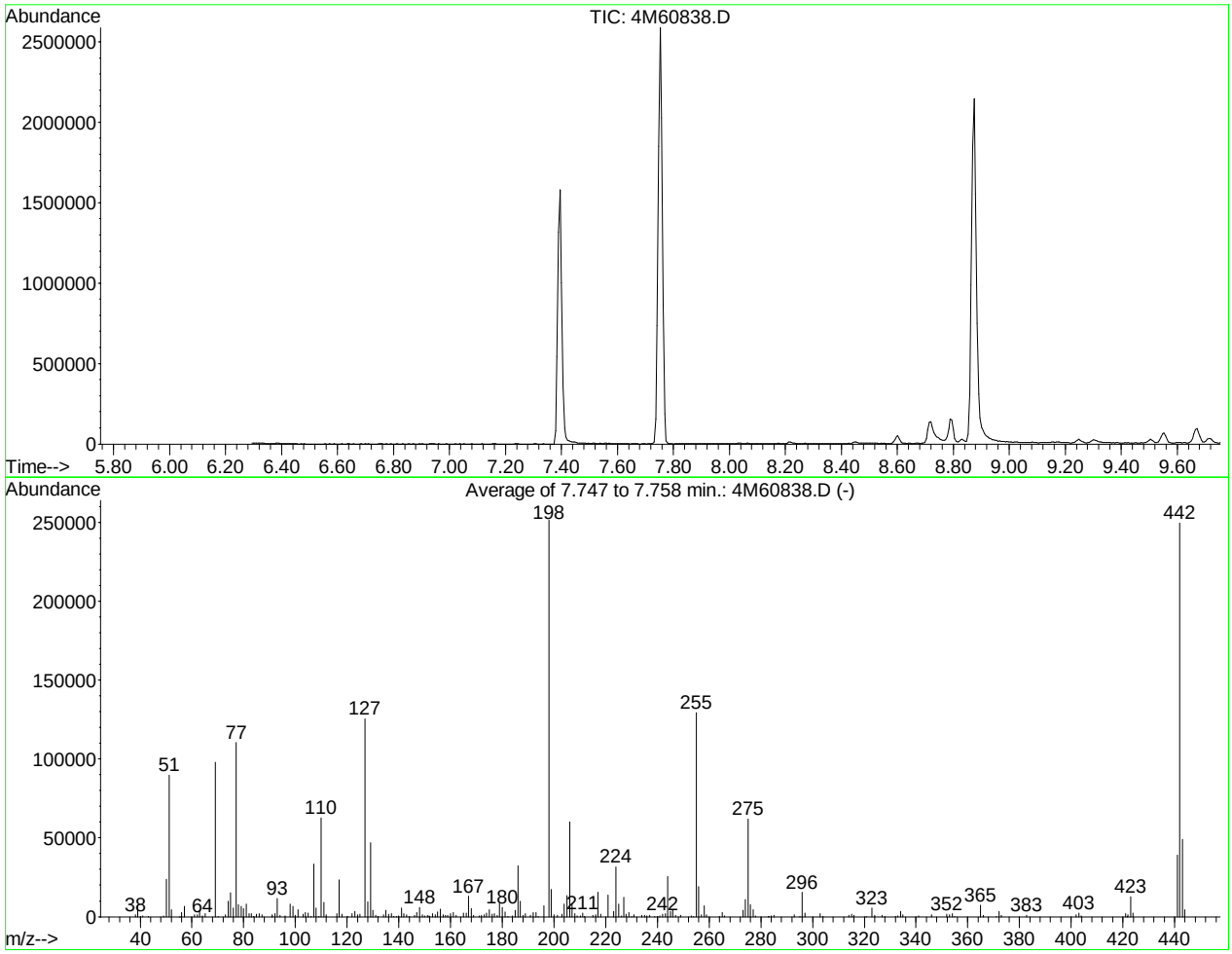
9.99min 0.00ug/ml

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

Data File : I:\MSDCHEM\1\DATA\051312\4M60838.D Vial: 1
Acq On : 13 May 2012 11:52 Operator: MDC
Sample : WG397839-01 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 273, 274, 275; Background Corrected with Scan 267

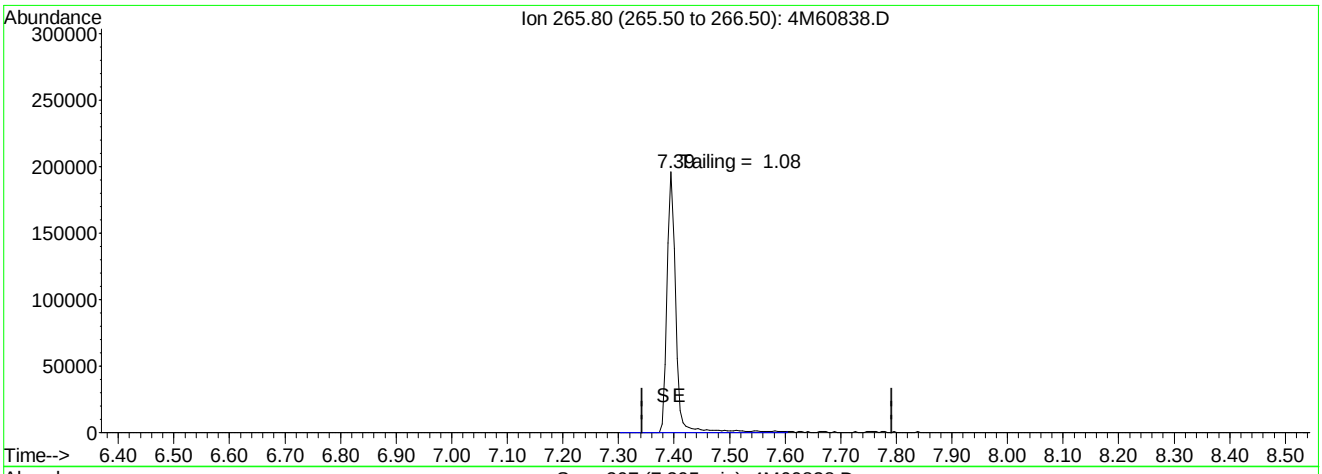
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	35.8	89941	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	38.9	97834	PASS
70	69	0.00	2	0.2	238	PASS
127	198	40	60	49.9	125634	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	251520	PASS
199	198	5	9	6.9	17407	PASS
275	198	10	30	24.7	62050	PASS
365	198	1	100	2.9	7319	PASS
441	443	0.01	100	79.8	39232	PASS
442	198	40	100	99.3	249685	PASS
443	442	17	23	19.7	49146	PASS

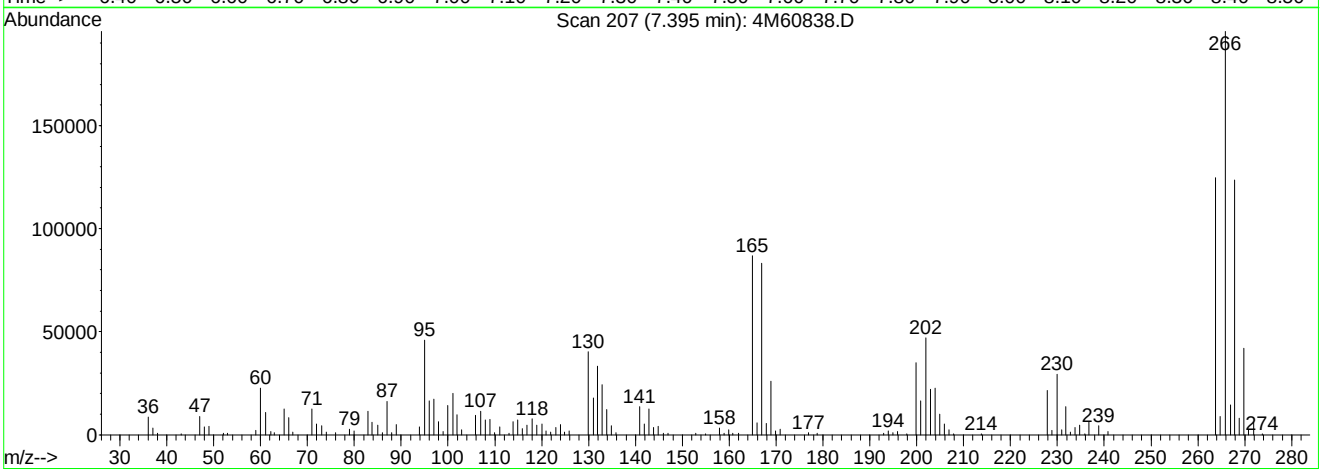
4M60838.D DFTPP.M Tue May 15 13:46:41 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\051312\4M60838.D Vial: 1
Acq On : 13 May 2012 11:52 Operator: MDC
Sample : WG397839-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 13:46 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: 4M60838.D

(1) Pentachlorophenol

7.39min 0.00ug/ml

response 207133

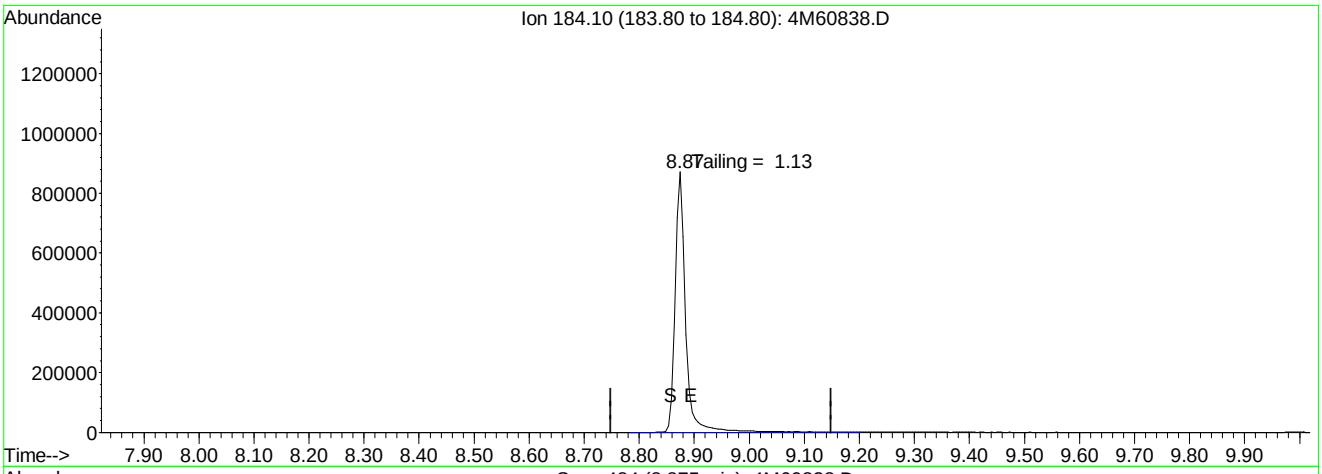
Ion	Exp%	Act%
265.80	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

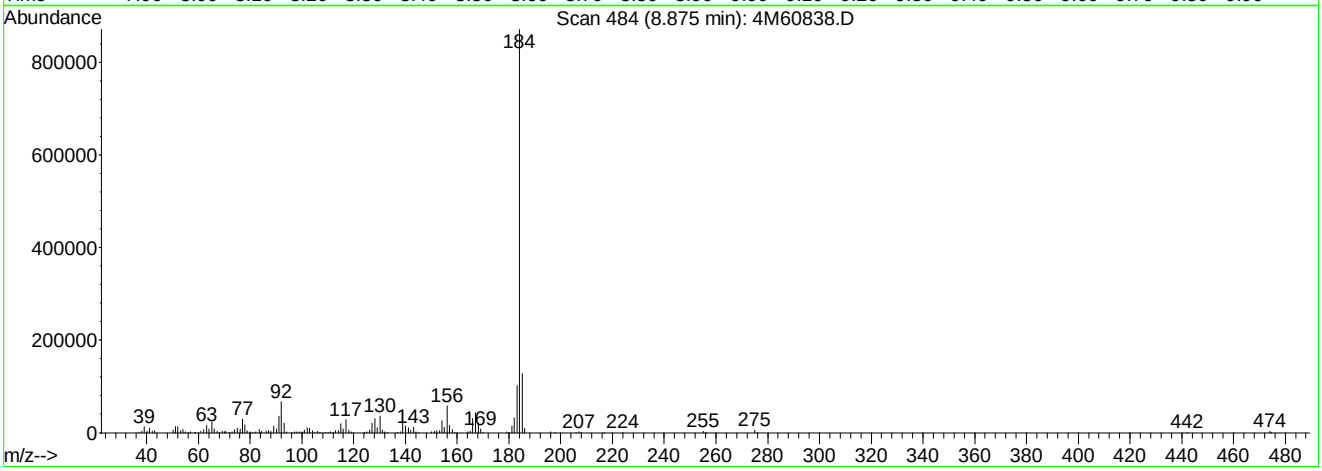
4M60838.D DFTPP.M Tue May 15 13:46:49 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\051312\4M60838.D Vial: 1
Acq On : 13 May 2012 11:52 Operator: MDC
Sample : WG397839-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 13:46 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: 4M60838.D

(2) Benzidine

8.87min 0.00ug/ml

response 1141831

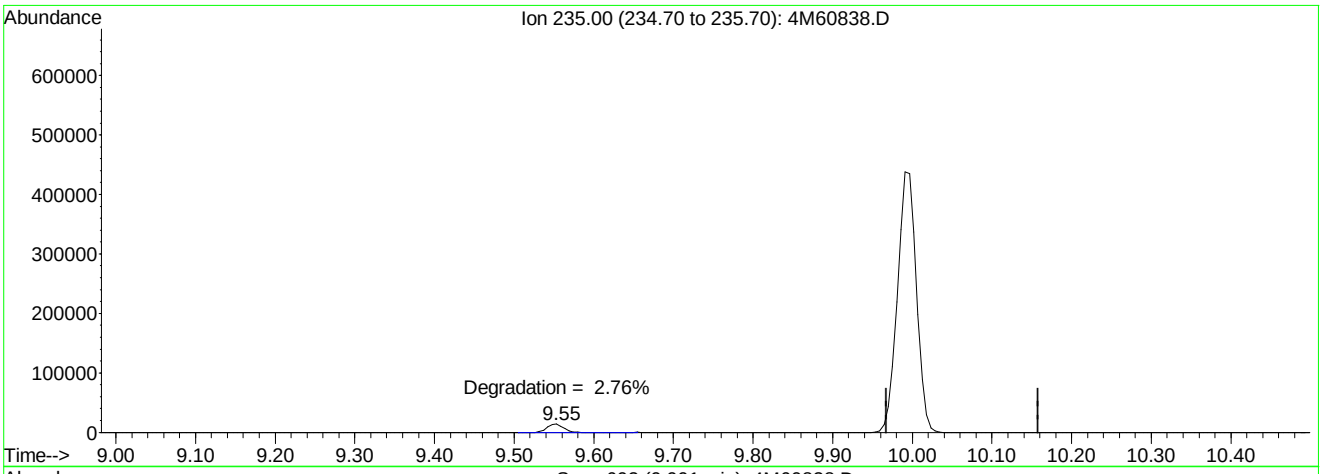
Ion	Exp%	Act%
184.10	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

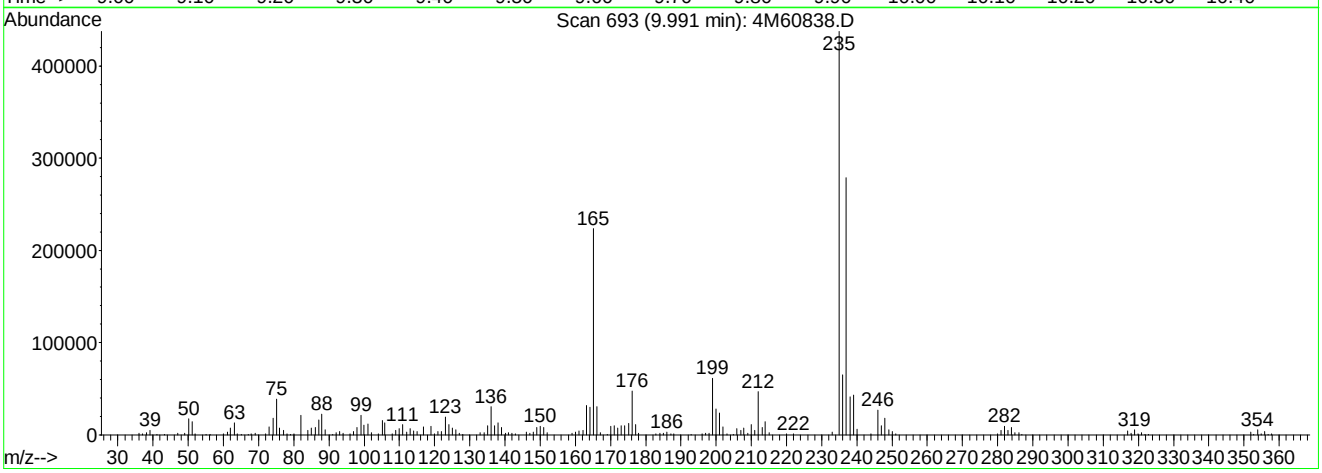
4M60838.D DFTPP.M Tue May 15 13:46:54 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\051312\4M60838.D Vial: 1
Acq On : 13 May 2012 11:52 Operator: MDC
Sample : WG397839-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 13:46 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: 4M60838.D

(3) DDT

9.99min 0.00ug/ml

response 601719

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

4M60838.D DFTPP.M Tue May 15 13:47:01 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%			

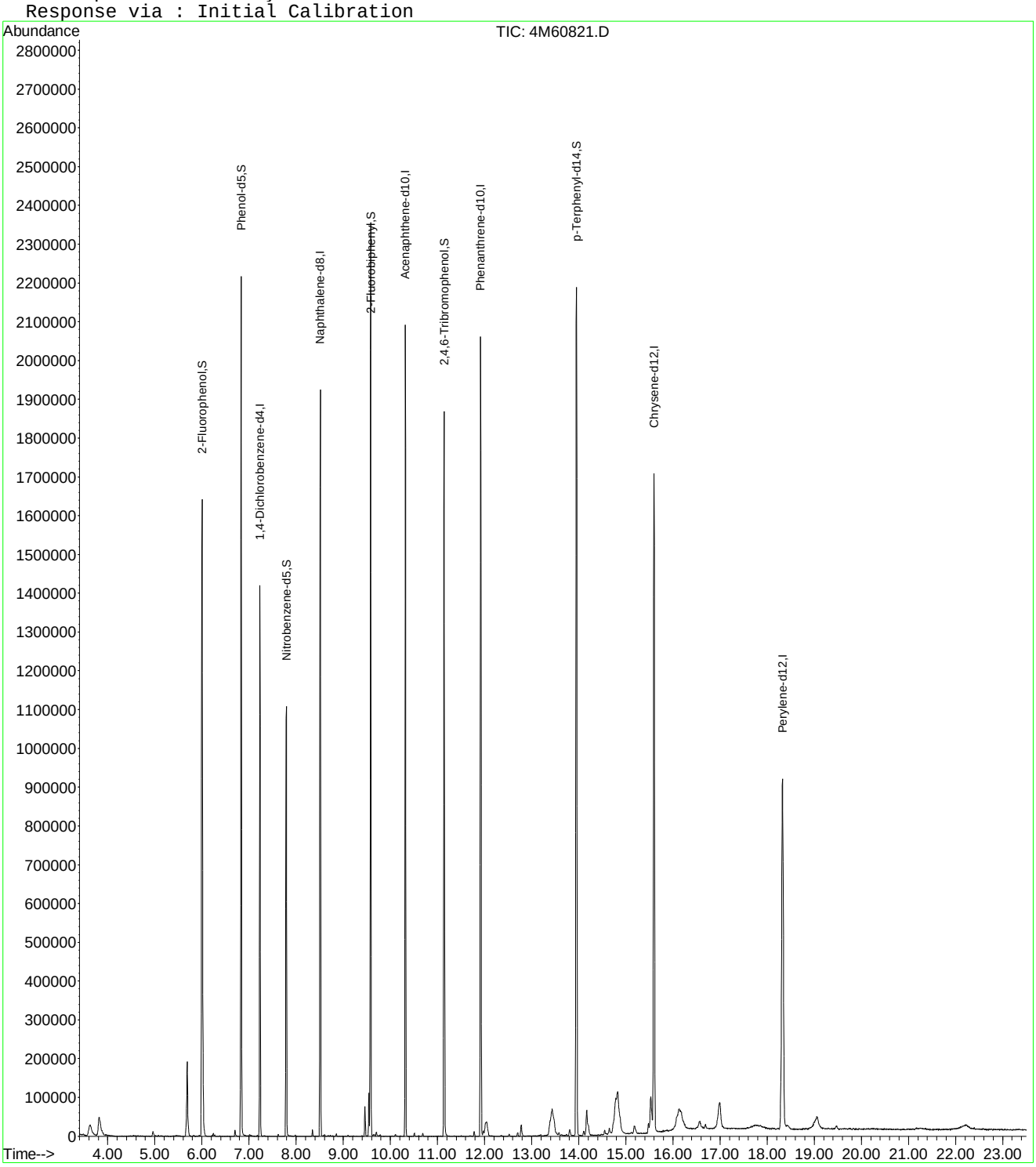
Target Compounds Qvalue

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

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

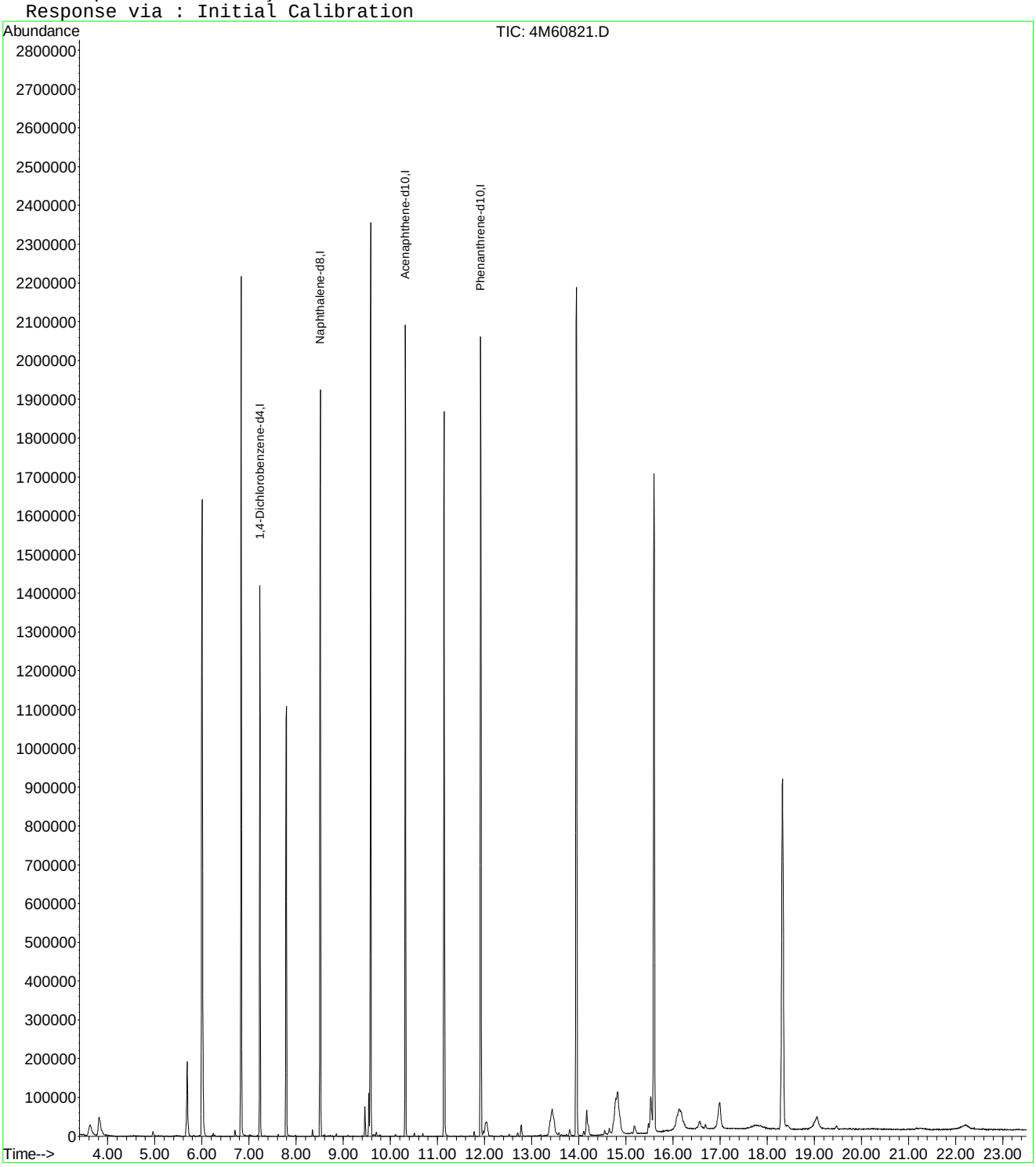
Target Compounds Qvalue

(#) = 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)
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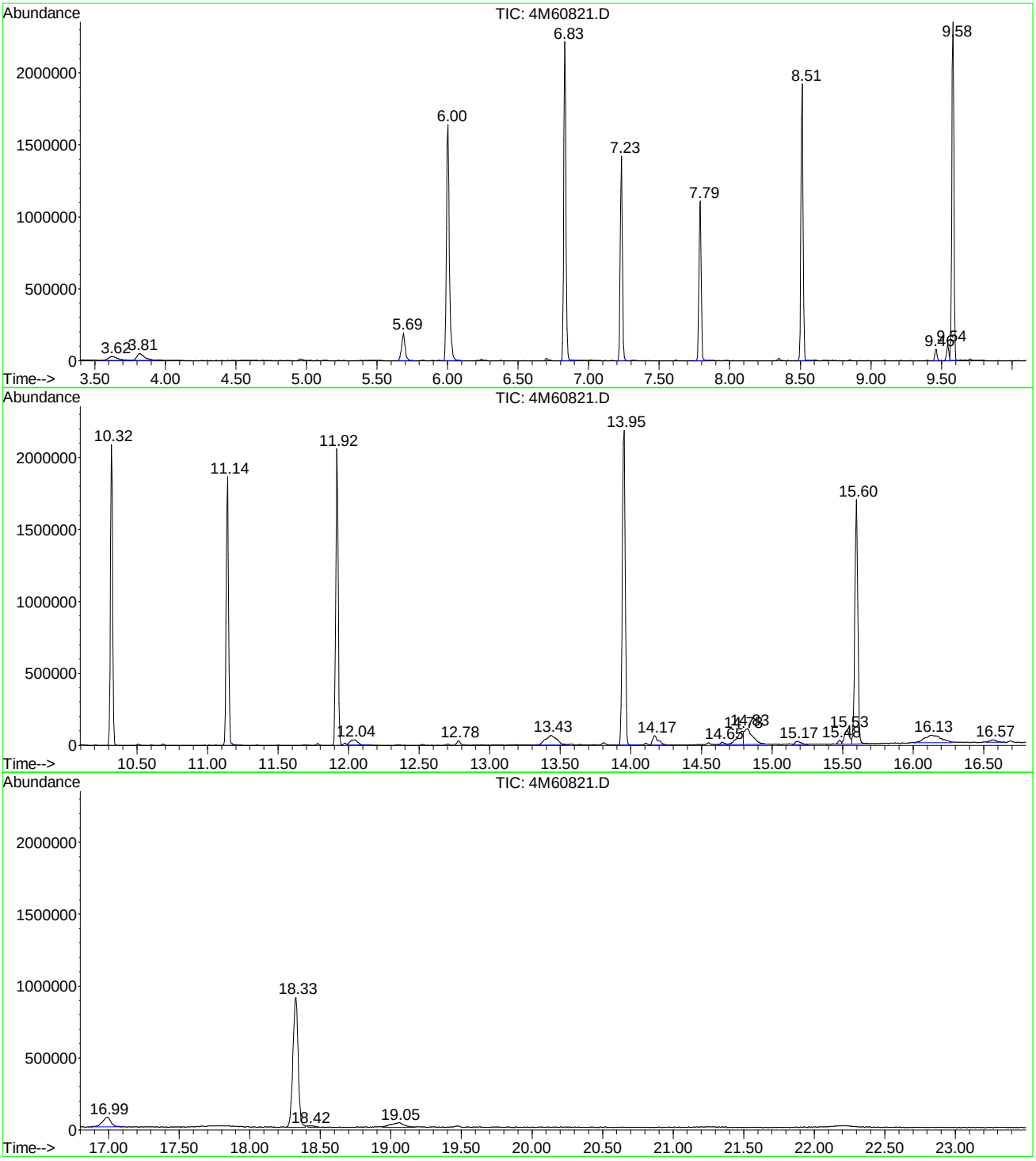


Data File : I:\MSDCHEM\1\DATA\051212\4M60821.D Vial: 6
Acq On : 12 May 2012 13:42 Operator: CAA
Sample : WG397140-02 BLK 05/07 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

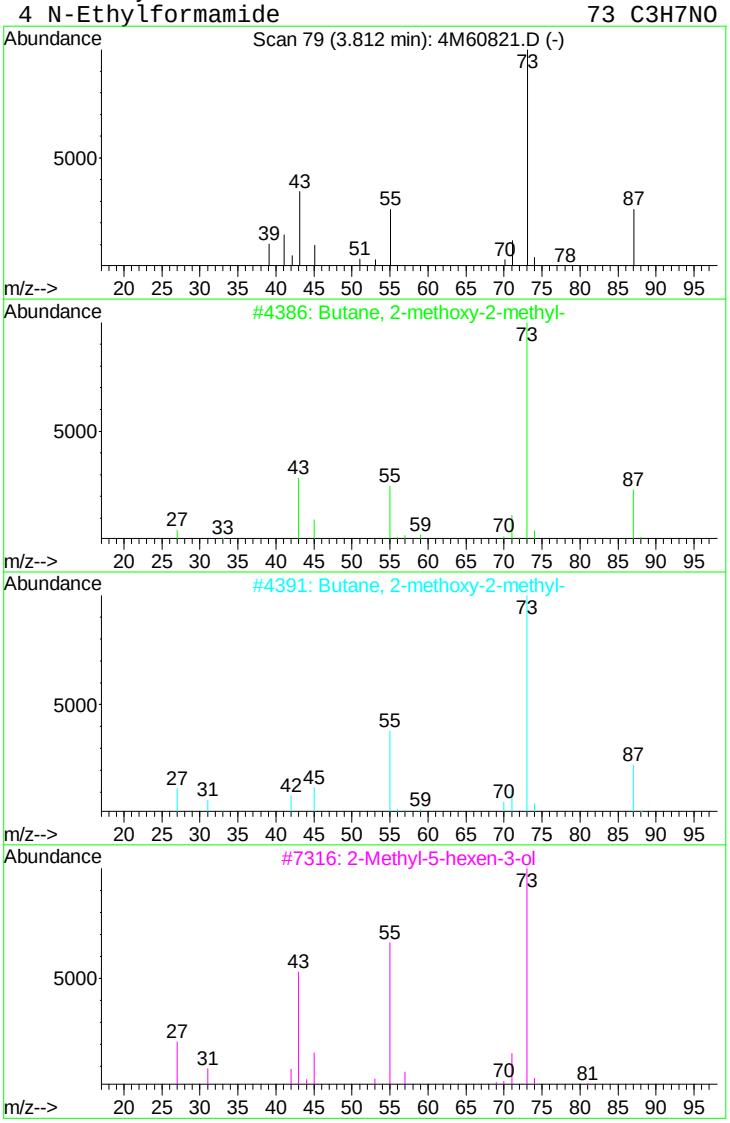
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

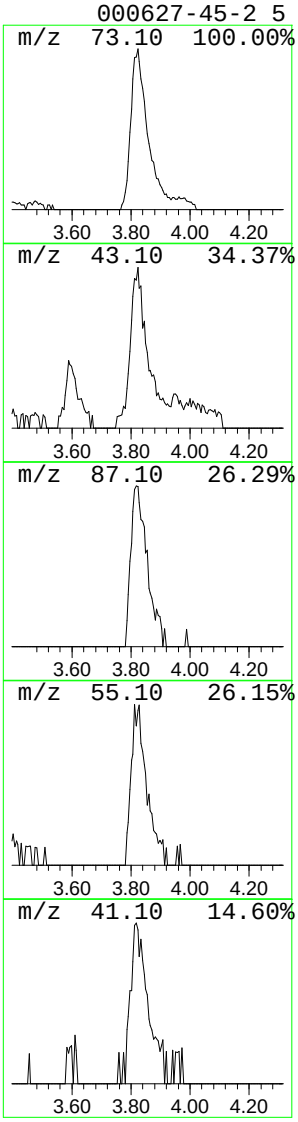
****

Peak Number 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

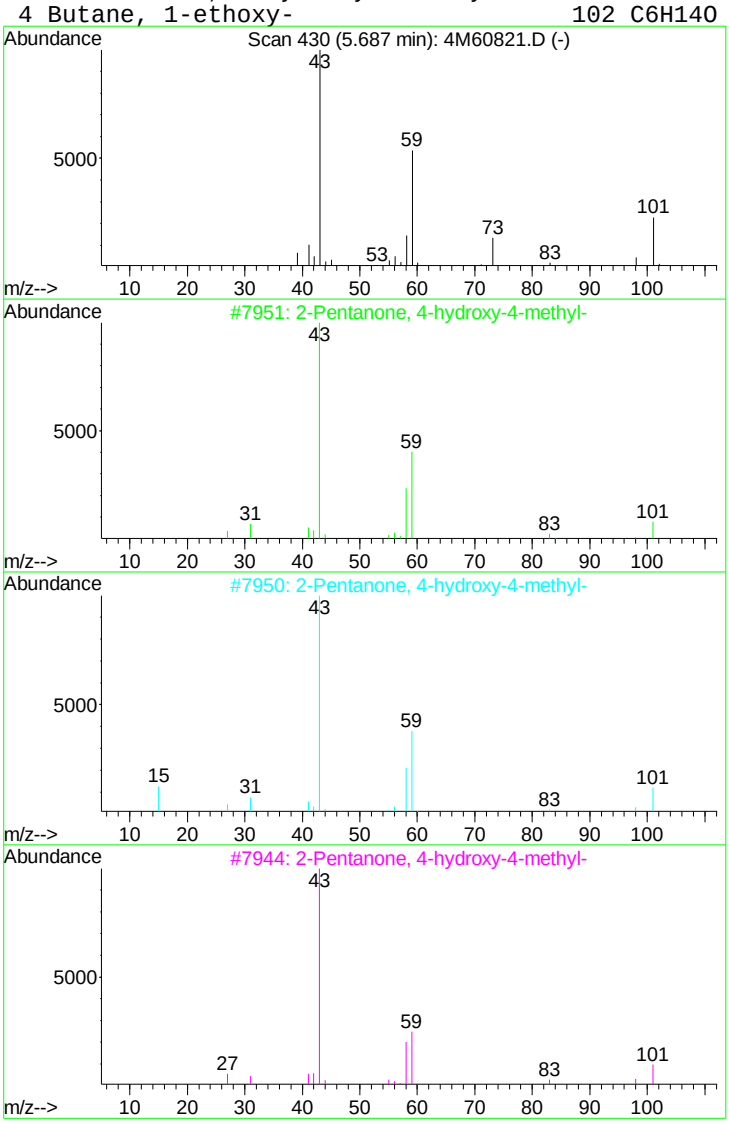
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

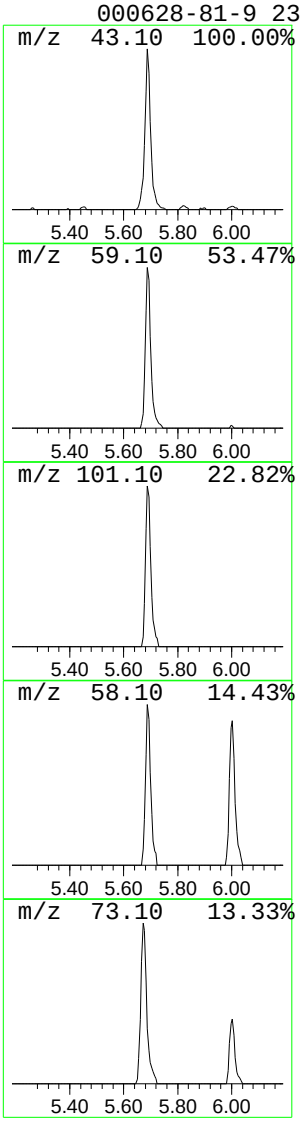
****

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





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

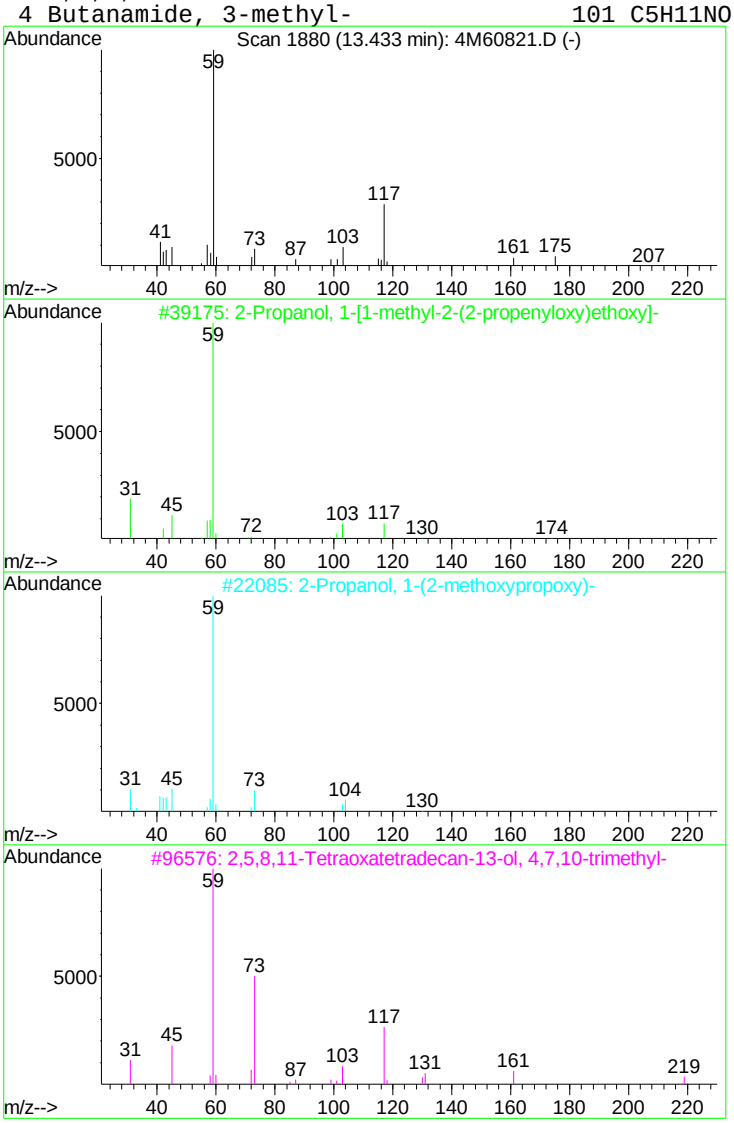
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

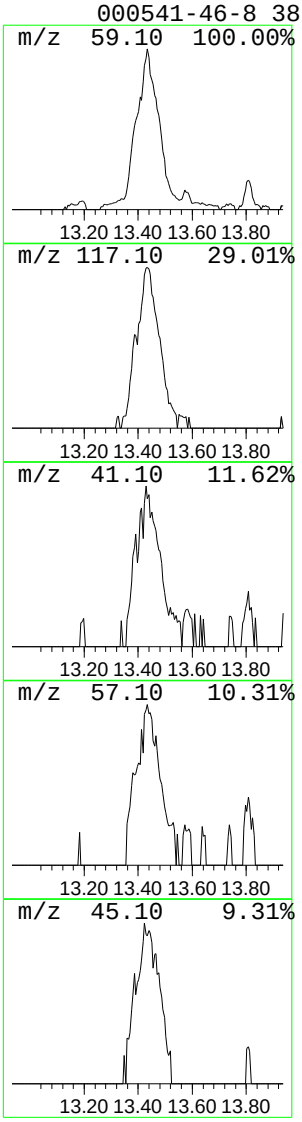
****

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

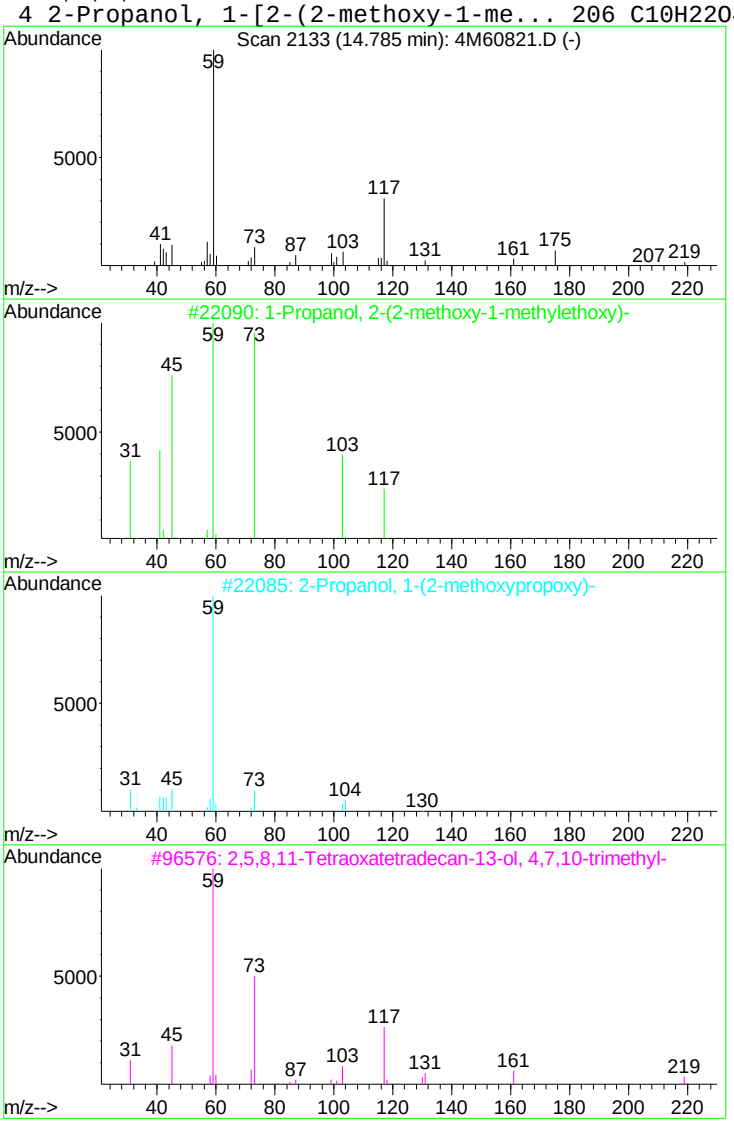
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

****

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



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

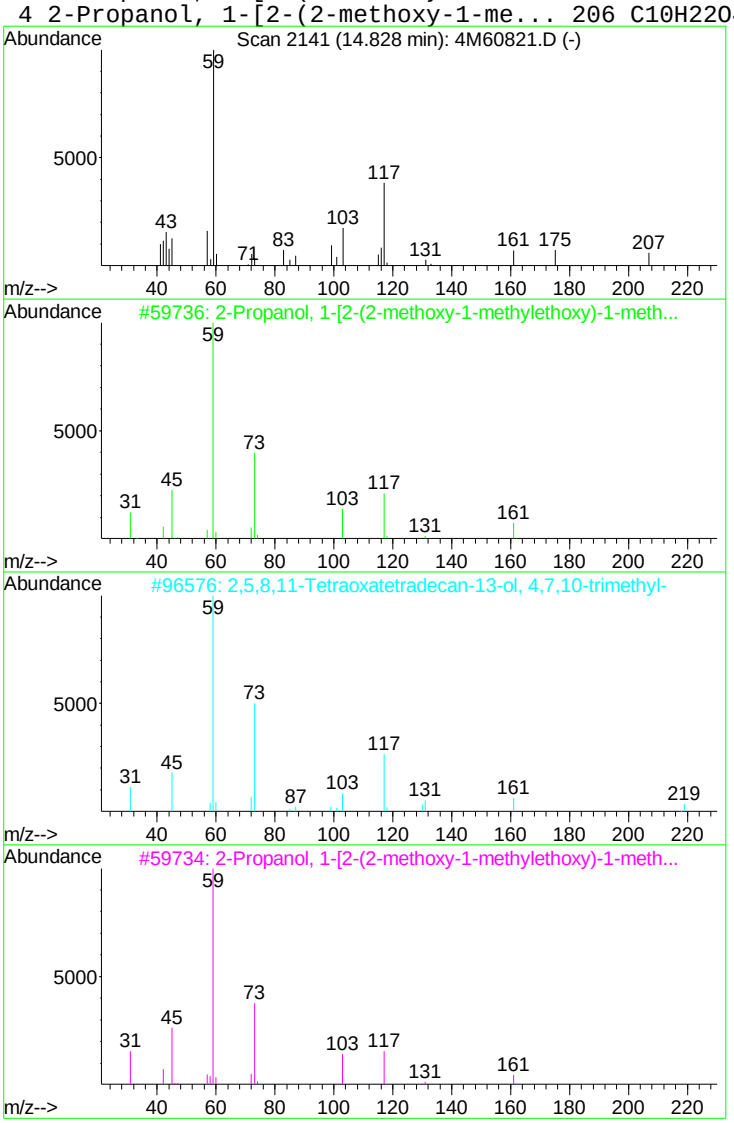
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

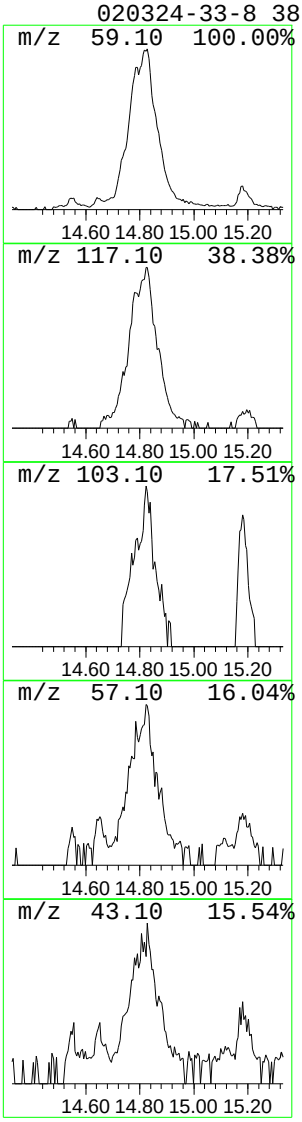
****

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





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

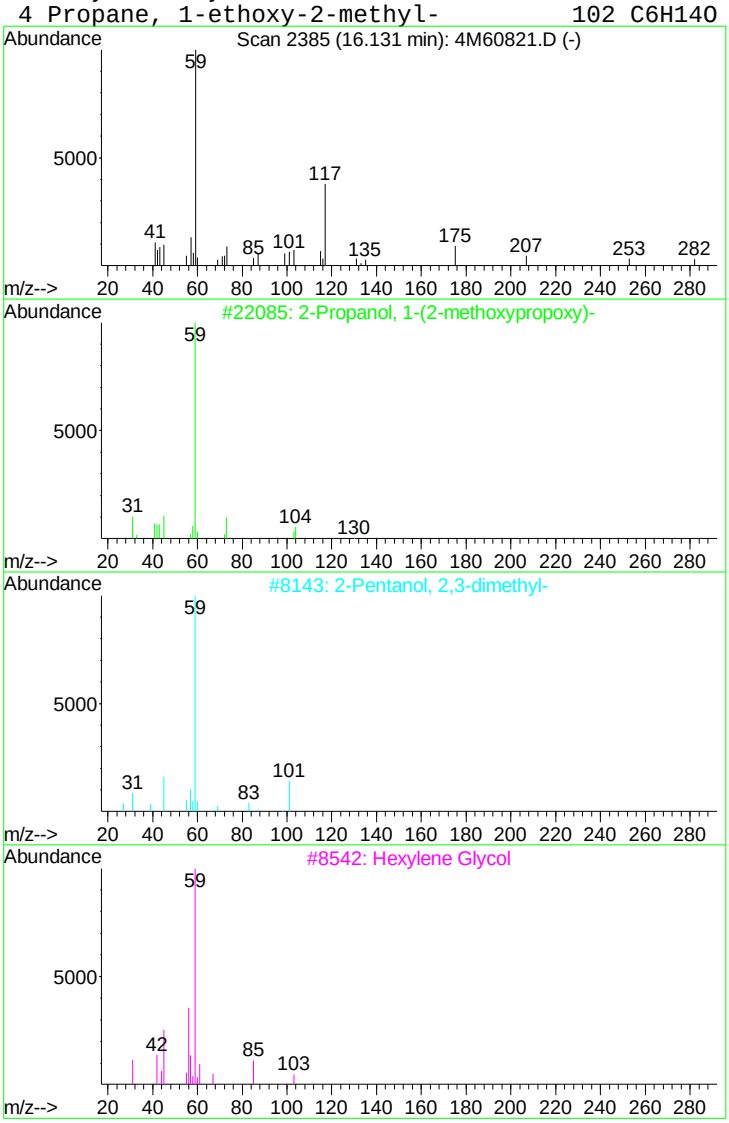
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

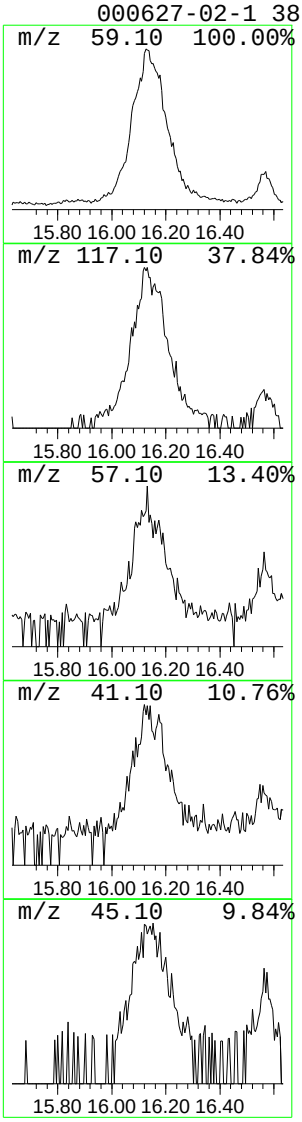
****

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





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

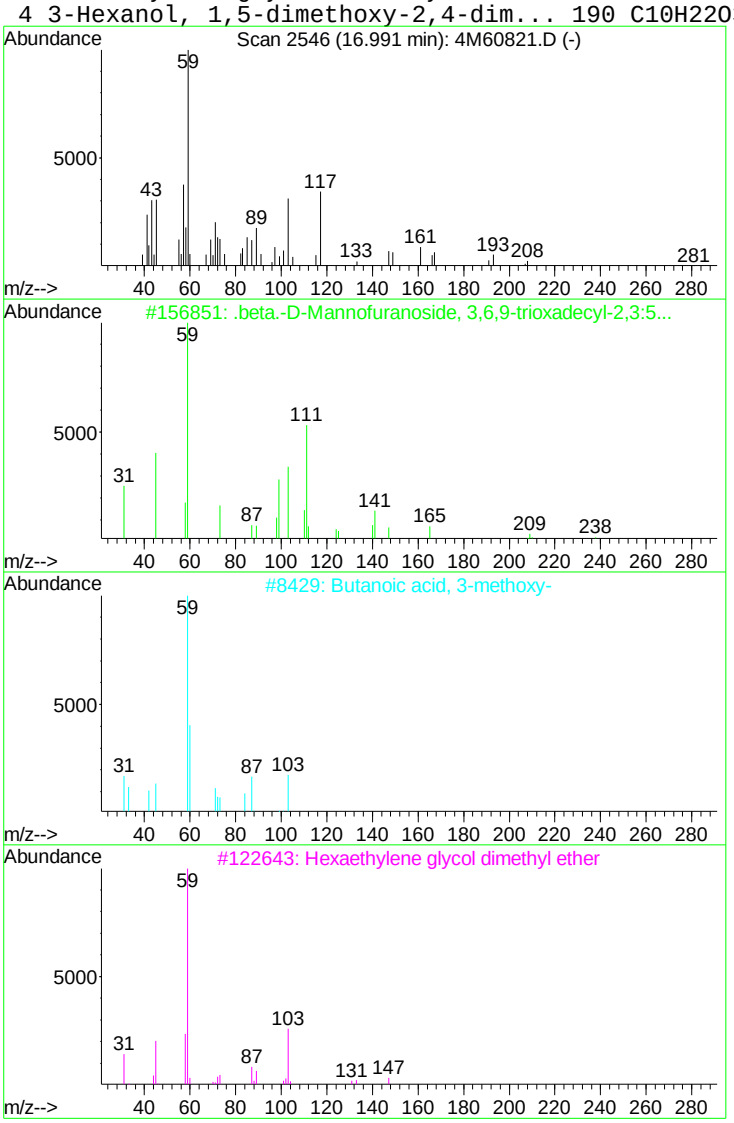
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

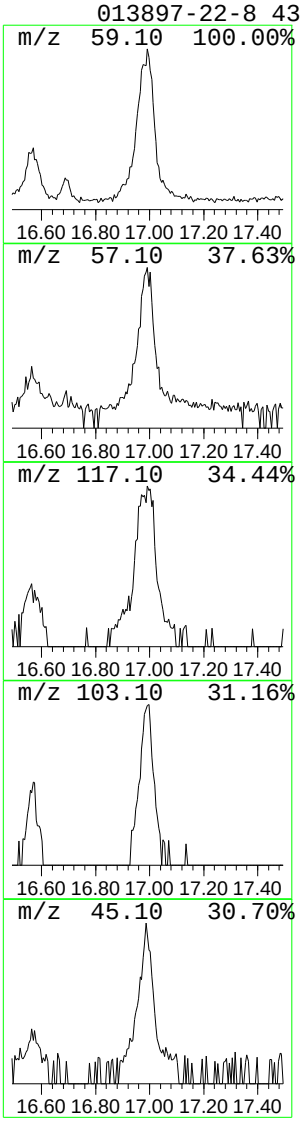
****

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

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	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

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
4M60822.D MEGAMIX.M Mon May 14 11:43:32 2012 Page 2

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

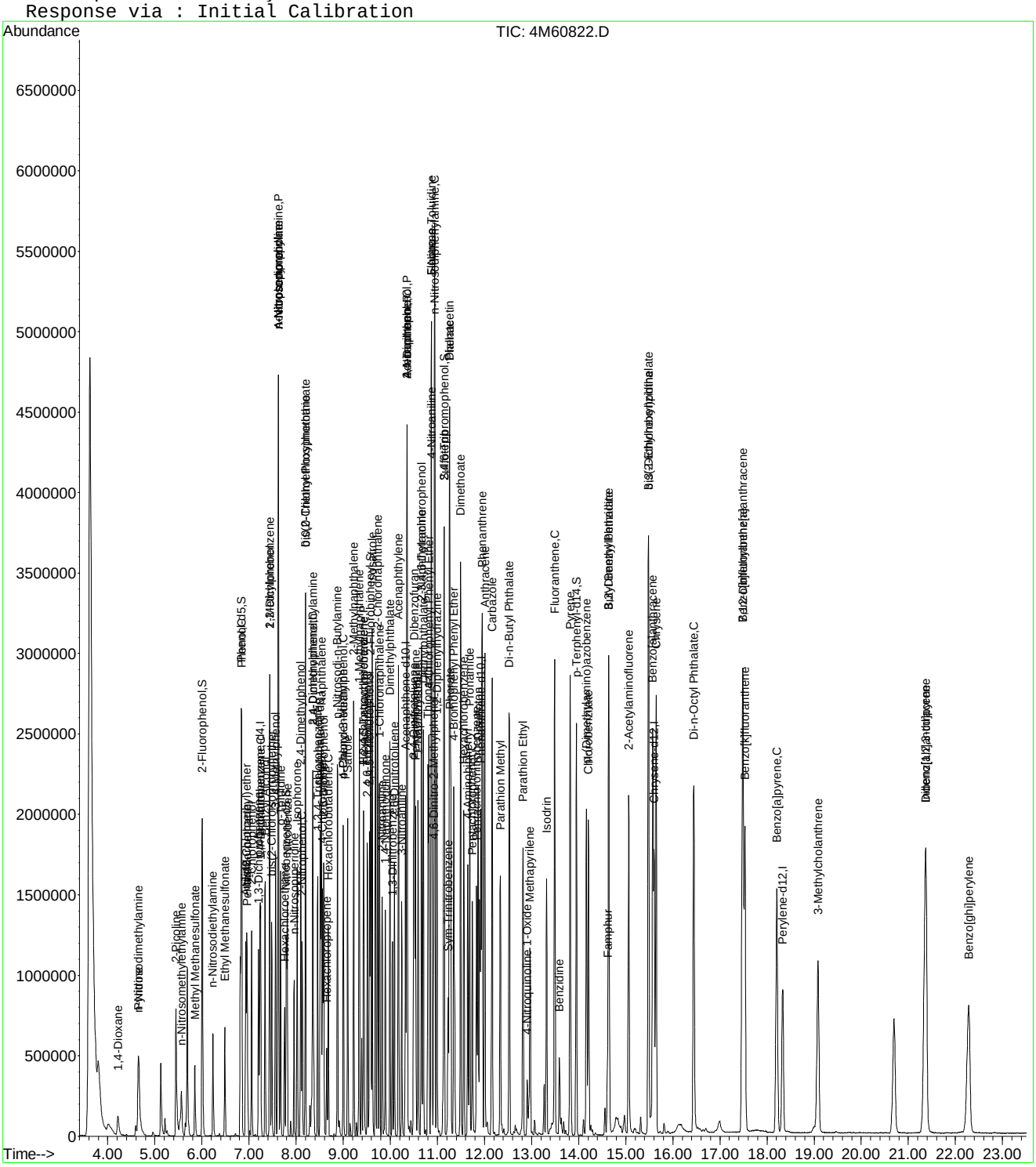
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	4-Aminobiphenyl	11.64	169	803295	96.0106	ug/ml	100
99)	Pentachlorophenol	11.74	266	219941	61.5716	ug/ml	99
100)	Pronamide	11.69	173	500977	60.3358	ug/ml	100
101)	Pentachloronitrobenzene	11.83	237	124379	63.5305	ug/ml	98
102)	Disulfoton	11.86	88	570201	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
4M60822.D MEGAMIX.M Mon May 14 11:43:32 2012 Page 3

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

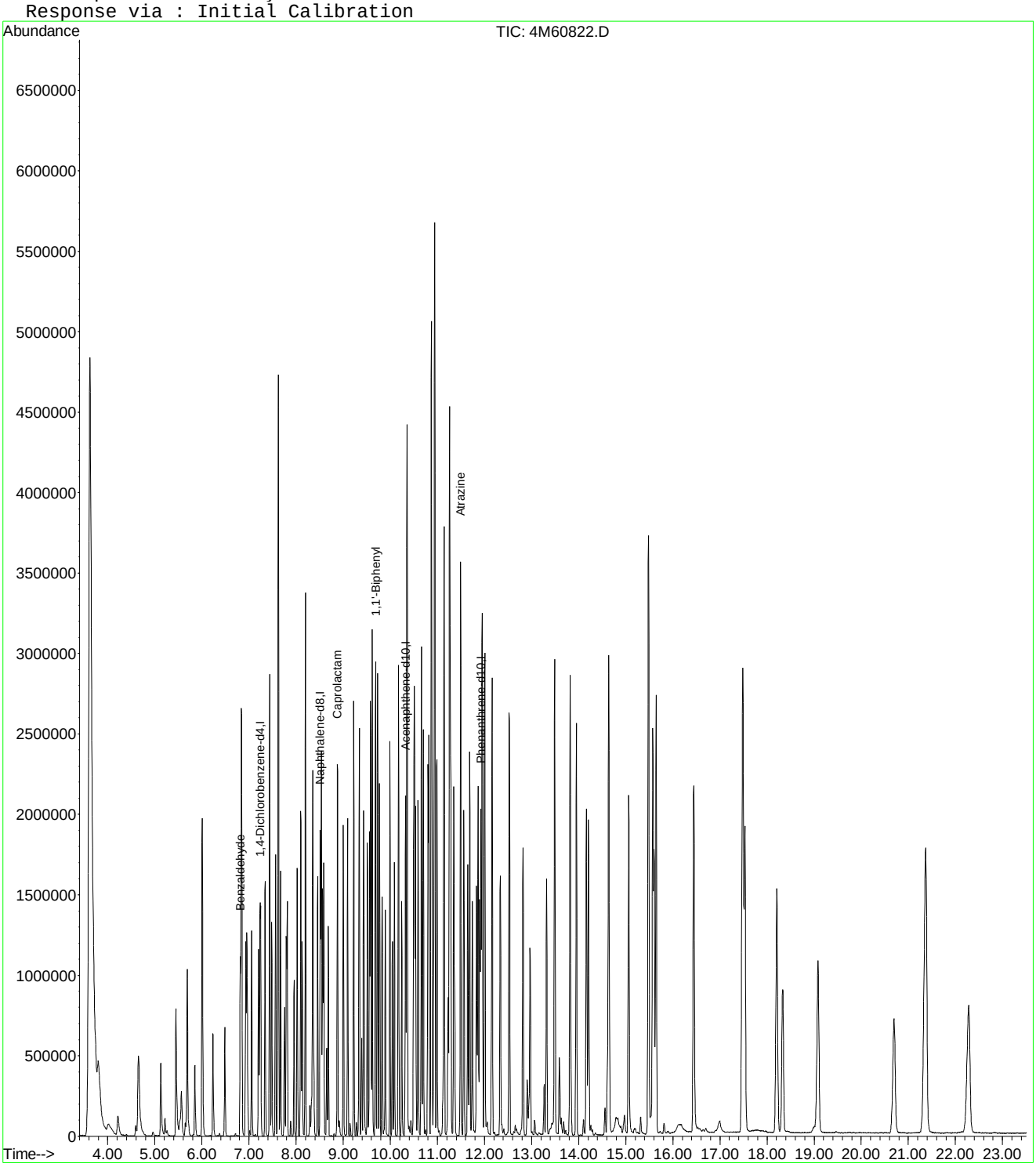
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.23	152	262198	40.00	ug/mL	0.00
3) Naphthalene-d8	8.51	136	999831	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.32	164	562715	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.92	188	1021385	40.00	ug/mL	0.00
Target Compounds						Qvalue
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



2.2.2 Semivolatiles GC/MS Data (827-PAHL)

2.2.2.1 Summary Data

Login Number: L12050153
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: 46194
Approved By: Mike Cochran

Certificate of Analysis

Sample #: L12050153-01 | **PrePrep Method:** N/A | **Instrument:** HPMS7
Client ID: MW-15-050312 | **Prep Method:** 3510C | **Prep Date:** 05/09/2012 11:00
Matrix: Water | **Analytical Method:** 8270C | **Cal Date:** 04/04/2012 12:53
Workgroup #: WG397601 | **Analyst:** CAA | **Run Date:** 05/10/2012 13:18
Collect Date: 05/03/2012 10:45 | **Dilution:** 1 | **File ID:** 7M54961
Sample Tag: 01 | **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
2-Methylnaphthalene	91-57-6		U	0.0549	0.0275
Acenaphthene	83-32-9		U	0.0549	0.0275
Acenaphthylene	208-96-8		U	0.0549	0.0275
Anthracene	120-12-7		U	0.0549	0.0275
Benzo(a)anthracene	56-55-3		U	0.0549	0.0275
Benzo(a)pyrene	50-32-8		U	0.0549	0.0275
Benzo(b)fluoranthene	205-99-2		U	0.0549	0.0275
Benzo(g,h,i)perylene	191-24-2		U	0.0549	0.0275
Benzo(k)fluoranthene	207-08-9		U	0.0549	0.0275
Chrysene	218-01-9		U	0.0549	0.0275
Dibenzo(a,h)anthracene	53-70-3		U	0.0549	0.0275
Fluoranthene	206-44-0		U	0.0549	0.0275
Fluorene	86-73-7		U	0.0549	0.0275
Indeno(1,2,3-cd)pyrene	193-39-5		U	0.0549	0.0275
Naphthalene	91-20-3		U	0.0549	0.0275
Phenanthrene	85-01-8		U	0.0549	0.0275
Pyrene	129-00-0		U	0.0549	0.0275

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2-Fluorobiphenyl	68.8	43	116	
Nitrobenzene-d5	76.7	35	114	
p-Terphenyl-d14	86.5	33	141	

U	Not detected at or above adjusted sample detection limit.

Sample #: L12050153-03 | **PrePrep Method:** N/A | **Instrument:** HPMS7
Client ID: MW-17-050312 | **Prep Method:** 3510C | **Prep Date:** 05/09/2012 11:00
Matrix: Water | **Analytical Method:** 8270C | **Cal Date:** 04/04/2012 12:53
Workgroup #: WG397601 | **Analyst:** CAA | **Run Date:** 05/10/2012 13:46
Collect Date: 05/03/2012 11:30 | **Dilution:** 1 | **File ID:** 7M54962
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

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
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	72.4	43	116	
Nitrobenzene-d5	80.0	35	114	
p-Terphenyl-d14	90.7	33	141	

U	Not detected at or above adjusted sample detection limit.

Sample #: L12050153-05
Client ID: MW-28050312
Matrix: Water
Workgroup #: WG397601
Collect Date: 05/03/2012 15:00
Sample Tag: 01

PrePrep Method: N/A
Prep Method: 3510C
Analytical Method: 8270C
Analyst: CAA
Dilution: 1
Units: ug/L

Instrument: HPMS7
Prep Date: 05/09/2012 11:00
Cal Date: 04/04/2012 12:53
Run Date: 05/10/2012 14:14
File ID: 7M54963

Analyte	CAS #	Result	Qual	RL	MDL
2-Methylnaphthalene	91-57-6		U	0.0556	0.0278
Acenaphthene	83-32-9	0.0292		0.0556	0.0278
Acenaphthylene	208-96-8	0.0418		0.0556	0.0278
Anthracene	120-12-7	0.0605		0.0556	0.0278
Benzo(a)anthracene	56-55-3	0.105		0.0556	0.0278
Benzo(a)pyrene	50-32-8	0.0978		0.0556	0.0278
Benzo(b)fluoranthene	205-99-2	0.0672		0.0556	0.0278
Benzo(g,h,i)perylene	191-24-2	0.0503		0.0556	0.0278
Benzo(k)fluoranthene	207-08-9	0.0940		0.0556	0.0278
Chrysene	218-01-9	0.0957		0.0556	0.0278
Dibenzo(a,h)anthracene	53-70-3		U	0.0556	0.0278

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Fluoranthene	206-44-0	0.183		0.0556	0.0278
Fluorene	86-73-7	0.0865		0.0556	0.0278
Indeno(1,2,3-cd)pyrene	193-39-5	0.0511		0.0556	0.0278
Naphthalene	91-20-3	0.0308		0.0556	0.0278
Phenanthrene	85-01-8	0.138		0.0556	0.0278
Pyrene	129-00-0	0.156		0.0556	0.0278

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2-Fluorobiphenyl	72.9	43	116	
Nitrobenzene-d5	82.1	35	114	
p-Terphenyl-d14	91.4	33	141	

U	Not detected at or above adjusted sample detection limit.

Sample #: L12050153-07
Client ID: TW-02-050312
Matrix: Water
Workgroup #: WG397601
Collect Date: 05/03/2012 13:30
Sample Tag: 01

PrePrep Method: N/A
Prep Method: 3510C
Analytical Method: 8270C
Analyst: CAA
Dilution: 1
Units: ug/L

Instrument: HPMS7
Prep Date: 05/09/2012 11:00
Cal Date: 04/04/2012 12:53
Run Date: 05/10/2012 14:42
File ID: 7M54964

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	0.0353		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	0.0278		0.0500	0.0250
Pyrene	129-00-0	0.0360		0.0500	0.0250

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2-Fluorobiphenyl	62.1	43	116	
Nitrobenzene-d5	70.2	35	114	

p-Terphenyl-d14		85.9	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: WG397431
Analyst: CAF
Spike Analyst: CAF
Method: 3510C
Run Date: 05/09/2012 11:00
SOP: EXA01 Revison 15
Spike Witness: CPD
Surr Solution: STD50786

Methylene Chloride Lot #: COA16058
Sodium Sulfate,Anhydrous,Granular (Lot # COA15998

	SAMPLE #	Type	Reference	pH	Prod	Init Amnt	Surr Amnt	Spike Amnt	Spike Sol	Final Vol	Color
1	L12050047-03	SAMP		N	827-PAHL	1000 mL	.25 mL			1 mL	Transparent
2	L12050099-01	SAMP		N	827-PAHL	980 mL	.25 mL			1 mL	Transparent
3	L12050099-03	SAMP		N	827-PAHL	890 mL	.25 mL			1 mL	Transparent
4	L12050099-05	SAMP		N	827-PAHL	840 mL	.25 mL			1 mL	Transparent
5	L12050099-07	SAMP		N	827-PAHL	1000 mL	.25 mL			1 mL	Transparent
6	L12050099-09	SAMP		N	827-PAHL	830 mL	.25 mL			1 mL	Transparent
7	L12050153-01	SAMP		N	827-PAHL	910 mL	.25 mL			1 mL	Transparent
8	L12050153-03	SAMP		N	827-PAHL	1000 mL	.25 mL			1 mL	Transparent
9	L12050153-05	SAMP		N	827-PAHL	900 mL	.25 mL			1 mL	Colored
10	L12050153-07	SAMP		N	827-PAHL	1000 mL	.25 mL			1 mL	Transparent
11	L12050171-01	RS01		N	827-PAHL	920 mL	.25 mL			1 mL	Transparent
12	L12050171-03	MS01	L12050171-01	N	827-PAHL	870 mL	.25 mL	1 mL	STD50386	1 mL	Colored
13	L12050171-05	SD01	L12050171-01	N	827-PAHL	870 mL	.25 mL	1 mL	STD50386	1 mL	Colored
14	L12050171-07	SAMP		N	827-PAHL	1000 mL	.25 mL			1 mL	Transparent
15	L12050223-05	SAMP		N	827-PAHL	1000 mL	.25 mL			1 mL	Transparent
16	L12050226-01	SAMP		N	827-PAHL	930 mL	.25 mL			1 mL	Colored
17	L12050226-03	SAMP		N	827-PAHL	730 mL	.25 mL			1 mL	Colored
18	L12050226-05	SAMP		N	827-PAHL	980 mL	.25 mL			1 mL	Transparent
19	L12050226-07	SAMP		N	827-PAHL	950 mL	.25 mL			1 mL	Colored
20	L12050226-10	SAMP		N	827-PAHL	950 mL	.25 mL			1 mL	Colored
21	WG397431-01	REF	L12050171-01	N	827-PAHL	920 mL	.25 mL			1 mL	Transparent
22	WG397431-02	BLANK		N	827-PAHL	1000 mL	.25 mL			1 mL	Transparent
23	WG397431-03	LCS		N	827-PAHL	1000 mL	.25 mL	1 mL	STD50386	1 mL	Transparent
24	WG397431-04	MS	L12050171-01	N	827-PAHL	870 mL	.25 mL	1 mL	STD50386	1 mL	Colored
25	WG397431-05	MSD	L12050171-01	N	827-PAHL	870 mL	.25 mL	1 mL	STD50386	1 mL	Colored

L12050047-03	RE-EXT OUT OF HOLD

Analyst: Cheryl A. Flowers

Reviewer: Chadwick Davis

EXTRACT - Modified 10/22/2008
PDF ID: 2408568
Report generated: 05/11/2012 07:47

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: 051012
Analyst1: CAA Analyst2: NA
Method: 8270L SOP: MSS03 Rev: 10

Maintenance Log ID: 41675 Syringe Filter Lot#:

Column 1 ID: RXI-5MS Column 2 ID: NA
Workgroups: WG397601
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	7M54950	WG397598-01 5PPM DFTPP STD	1	1	STD50659	05/10/12 08:22
2	7M54951	WG397598-02 1PPM PAHL STD	1	1	STD49560	05/10/12 08:39
3	7M54952	WG397431-02 BLK 05/09	1	1		05/10/12 09:07
4	7M54953	WG397431-03 LCS 05/09	1	1		05/10/12 09:35
5	7M54954	L12050223-05	1	1		05/10/12 10:03
6	7M54955	L12050047-03 RE	1	1		05/10/12 10:31
7	7M54956	L12050099-01	1	1		05/10/12 10:58
8	7M54957	L12050099-03	1	1		05/10/12 11:26
9	7M54958	L12050099-05	1	1		05/10/12 11:54
10	7M54959	L12050099-07	1	1		05/10/12 12:22
11	7M54960	L12050099-09	1	1		05/10/12 12:49
12	7M54961	L12050153-01	1	1		05/10/12 13:18
13	7M54962	L12050153-03	1	1		05/10/12 13:46
14	7M54963	L12050153-05	1	1		05/10/12 14:14
15	7M54964	L12050153-07	1	1		05/10/12 14:42
16	7M54965	L12050171-01 REF	1	1		05/10/12 15:10
17	7M54966	L12050171-03 MS	1	1		05/10/12 15:37
18	7M54967	L12050171-05 MSD	1	1		05/10/12 16:06
19	7M54968	L12050171-07	1	1		05/10/12 16:34
20	7M54969	L12050226-01	1	1		05/10/12 17:02
21	7M54970	L12050226-05	1	1		05/10/12 17:30
22	7M54971	L12050226-10	1	1		05/10/12 17:57
23	7M54972	L12050226-07	1	1		05/10/12 18:25
24	7M54973	L12050226-03	1	1		05/10/12 18:53

Comments

Seq.	Rerun	Dil.	Reason	Analytes
20				
	L12050226-01 - Istd 1 high - SMI.			

Page: 1 Approved: 11-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: 10-MAY-2012
Analyst: CAA
Analyst: NA
Method: 8270L
Instrument: HPMS7
Curve Workgroup: NA
Runlog ID: 46683
Analytical Workgroups: L12050223, 050047, 050099, 050153, 050171, 050226

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	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:
11-MAY-2012

Secondary Reviewer:
11-MAY-2012

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-11-2012 09:18:02

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 8270C **AAB#:** WG397601

Login Number: L12050153

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-15-050312	01	05/03/12					05/09/12	6	7		05/10/12	1.1	40	
MW-17-050312	03	05/03/12					05/09/12	6	7		05/10/12	1.1	40	
MW-28050312	05	05/03/12					05/09/12	5.8	7		05/10/12	1.1	40	
TW-02-050312	07	05/03/12					05/09/12	5.9	7		05/10/12	1.2	40	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2410459
Report generated 05/11/2012 09:46

Login Number: L12050153
Instrument Id: HPMS7
Workgroup (AAB#): WG397601

Method: 8270L
CAL ID: HPMS7-04-APR-12
Matrix: Water

Sample Number	Dilution	Tag	1	2	3
L12050153-01	1.00	01	68.8	76.7	86.5
L12050153-03	1.00	01	72.4	80.0	90.7
L12050153-05	1.00	01	72.9	82.1	91.4
L12050153-07	1.00	01	62.1	70.2	85.9
WG397431-02	1.00	01	73.0	79.5	94.1
WG397431-03	1.00	01	68.9	74.9	90.4

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: 2410468
Report generated: 05/11/2012 09:47

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number:	L12050153	Work Group:	WG397601
Blank File ID:	7M54952	Blank Sample ID:	WG397431-02
Prep Date:	05/09/12 11:00	Instrument ID:	HPMS7
Analyzed Date:	05/10/12 09:07	Method:	8270C
Analyst:	CAA		

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG397431-03	7M54953	05/10/12 09:35	01
MW-15-050312	L12050153-01	7M54961	05/10/12 13:18	01
MW-17-050312	L12050153-03	7M54962	05/10/12 13:46	01
MW-28050312	L12050153-05	7M54963	05/10/12 14:14	01
TW-02-050312	L12050153-07	7M54964	05/10/12 14:42	01

Report Name: BLANK_SUMMARY
PDF File ID: 2410460
Report generated 05/11/2012 09:46

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050153 Prep Date: 05/09/12 11:00 Sample ID: WG397431-02
Instrument ID: HPMS7 Run Date: 05/10/12 09:07 Prep Method: 3510C
File ID: 7M54952 Analyst: CAA Method: 8270C
Workgroup (AAB#): WG397601 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	73.0	43	-	116	PASS
Nitrobenzene-d5	79.5	35	-	114	PASS
p-Terphenyl-d14	94.1	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: 2410461
11-MAY-2012 09:46

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050153 Run Date: 05/10/2012 Sample ID: WG397431-03
Instrument ID: HPMS7 Run Time: 09:35 Prep Method: 3510C
File ID: 7M54953 Analyst: CAA Method: 8270C
Workgroup (AAB#): WG397601 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	0.847	84.7	30 - 105	
Acenaphthene	1.00	0.727	72.7	30 - 110	
Acenaphthylene	1.00	0.761	76.1	30 - 115	
Anthracene	1.00	0.774	77.4	30 - 130	
Benzo(a)anthracene	1.00	0.801	80.1	50 - 150	
Benzo(a)pyrene	1.00	0.904	90.4	50 - 140	
Benzo(b)fluoranthene	1.00	0.830	83.0	40 - 150	
Benzo(g,h,i)perylene	1.00	0.824	82.4	30 - 150	
Benzo(k)fluoranthene	1.00	0.894	89.4	40 - 150	
Chrysene	1.00	0.884	88.4	45 - 145	
Dibenzo(a,h)anthracene	1.00	0.829	82.9	25 - 155	
Fluoranthene	1.00	0.881	88.1	40 - 150	
Fluorene	1.00	0.737	73.7	30 - 120	
Indeno(1,2,3-cd)pyrene	1.00	0.861	86.1	35 - 150	
Naphthalene	1.00	0.775	77.5	30 - 100	
Phenanthrene	1.00	0.719	71.9	30 - 130	
Pyrene	1.00	0.855	85.5	50 - 150	

Surrogates	% Recovery	Surrogate Limits	Qualifier
2-Fluorobiphenyl	68.9	43 - 116	PASS
Nitrobenzene-d5	74.9	35 - 114	PASS
p-Terphenyl-d14	90.4	33 - 141	PASS

* EXCEEDS %REC LIMIT

LCS - Modified 03/06/2008
PDF File ID: 2410462
Report generated: 05/11/2012 09:47

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

DFTPP

Login Number: L12050153
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: 2410465
Report generated 05/11/2012 09:47

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

DFTPP

Login Number: L12050153
Instrument: HPMS7
Analyst: CAA
Workgroup: WG397598

Tune ID: WG397598-01
Run Date: 05/10/2012
Run Time: 08:22
File ID: 7M54950
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	47.2	124912	PASS
68.0	69.0	0	2.00	0	0	PASS
69.0	198	0	100	48.0	127141	PASS
70.0	69.0	0	2.00	0	0	PASS
127	198	40.0	60.0	59.1	156453	PASS
197	198	0	1.00	0	0	PASS
198	198	100	100	100	264789	PASS
199	198	5.00	9.00	6.76	17904	PASS
275	198	10.0	30.0	22.3	58970	PASS
365	198	1.00	100	2.20	5832	PASS
441	443	0.0100	100	82.5	26460	PASS
442	198	40.0	100	63.0	166920	PASS
443	442	17.0	23.0	19.2	32073	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG397598-02	CCV	01	05/10/2012 08:39	
WG397431-02	BLANK	01	05/10/2012 09:07	
WG397431-03	LCS	01	05/10/2012 09:35	
L12050153-01	MW-15-050312	01	05/10/2012 13:18	
L12050153-03	MW-17-050312	01	05/10/2012 13:46	
L12050153-05	MW-28050312	01	05/10/2012 14:14	
L12050153-07	TW-02-050312	01	05/10/2012 14:42	

* Sample past 12 hour tune limit

TUNE - Modified 03/06/2008
PDF File ID: 2410465
Report generated 05/11/2012 09:47

Microbac Laboratories Inc.
INITIAL CALIBRATION SUMMARY

Login Number: L12050153 **Instrument ID:** HPMS7
Analytical Method: 8270C **Initial Calibration Date:** 04-APR-12 12:53
ICAL Workgroup: WG394111 **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: 2410463
Report generated 05/11/2012 09:47

Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L12050153
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: 2410463
Report generated 05/11/2012 09:47

Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L12050153
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: 2410463
Report generated 05/11/2012 09:47

Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L12050153
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: 2410463
Report generated 05/11/2012 09:47

Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12050153 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: 2410464
Report generated 05/11/2012 09:47

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050153 Run Date: 05/10/2012 Sample ID: WG397598-02

Instrument ID: HPMS7 Run Time: 08:39 Method: 8270C

File ID: 7M54951 Analyst: CAA QC Key: WATERLOO

Workgroup (AAB#): WG397601 Cal ID: HPMS7 - 04-APR-12

Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Acenaphthene	CCC	1000	935	ug/L	1.18	6.50	20	
Benzo[a]pyrene	CCC	1000	991	ug/L	1.27	0.920	20	
Fluoranthene	CCC	1000	984	ug/L	1.28	1.63	20	
2-Methylnaphthalene		1000	1020	ug/L	0.735	1.87	20	
Acenaphthylene		1000	974	ug/L	2.15	2.58	20	
Anthracene		1000	957	ug/L	1.20	4.30	20	
Benzo[a]anthracene		1000	948	ug/L	1.23	5.20	20	
Benzo[b]fluoranthene		1000	898	ug/L	1.24	10.2	20	
Benzo[ghi]perylene		1000	955	ug/L	1.18	4.55	20	
Benzo[k]fluoranthene		1000	1010	ug/L	1.31	0.610	20	
Chrysene		1000	971	ug/L	1.25	2.90	20	
Dibenz[ah]anthracene		1000	1000	ug/L	1.19	0.280	20	
Fluorene		1000	930	ug/L	1.40	7.00	20	
Indeno[1,2,3-cd]pyrene		1000	997	ug/L	1.40	0.280	20	
Naphthalene		1000	972	ug/L	1.15	2.84	20	
Phenanthrene		1000	898	ug/L	1.12	10.2	20	
Pyrene		1000	922	ug/L	1.48	7.81	20	

* Exceeds %D Criteria

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

CCV - Modified 03/05/2008
PDF File ID: 2410466
Report generated 05/11/2012 09:47

Microbac Laboratories Inc.

INTERNAL STANDARD AREA SUMMARY
(COMPARED TO CCV)

Login Number: L12050153
Instrument ID: HPMS7
Workgroup (AAB#): WG397601

CCV Number: WG397598-02
CAL ID: HPMS7-04-APR-12
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3	IS-4	IS-5
WG397598-02	NA	NA	88860	141597	151009	133982	145629
Upper Limit	NA	NA	177720	283194	302018	267964	291258
Lower Limit	NA	NA	44430	70799	75505	66991	72815
L12050153-01	1.00	01	87065	136326	136399	125424	143895
L12050153-03	1.00	01	82568	131437	128734	120499	137192
L12050153-05	1.00	01	84545	133894	131274	123088	140322
L12050153-07	1.00	01	82684	133094	128536	121812	137418
WG397431-02	1.00	01	86687	139178	137435	129158	143904
WG397431-03	1.00	01	86699	141383	139544	131125	145577

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: 2410467
Report generated 05/11/2012 09:47

Microbac Laboratories Inc.

INTERNAL STANDARD RETENTION TIME SUMMARY
(COMPARED TO CCV)

Login Number:L12050153 CCV Number:WG397598-02
Instrument ID:HPMS7 CAL ID: HPMS7-04-APR-12
Workgroup (AAB#):WG397601 Matrix:WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3	IS-4	IS-5
WG397598-02	NA	NA	8.22	13.47	6.02	15.7	10.08
Upper Limit	NA	NA	8.72	13.97	6.52	16.2	10.58
Lower Limit	NA	NA	7.72	12.97	5.52	15.2	9.58
L12050153-01	1.00	01	8.22	13.47	6.02	15.7	10.09
L12050153-03	1.00	01	8.22	13.47	6.02	15.7	10.08
L12050153-05	1.00	01	8.22	13.47	6.02	15.7	10.08
L12050153-07	1.00	01	8.21	13.47	6.02	15.7	10.08
WG397431-02	1.00	01	8.21	13.47	6.02	15.7	10.08
WG397431-03	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: 2410469
Report generated 05/11/2012 09:47

2.2.2.3 Sample Data

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\051012\7M54961.D Vial: 12
Acq On : 10 May 2012 1:18 pm Operator: CAA
Sample : L12050153-01 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 07:17:22 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 : Fri May 11 07:17:07 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.02	136	136399	1.00	ug/ml	-0.01
6) Acenaphthene-d10	8.22	164	87065	1.00	ug/ml	-0.01
11) Phenanthrene-d10	10.09	188	143895	1.00	ug/ml	0.00
15) Chrysene-d12	13.47	240	136326	1.00	ug/ml	-0.01
20) Perylene-d12	15.70	264	125424	1.00	ug/ml	-0.01

System Monitoring Compounds						
2) Nitrobenzene-d5	5.17	82	109250	1.9178	ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery = 76.80%			
7) 2-Fluorobiphenyl	7.33	172	247828	1.7210	ug/ml	-0.01
Spiked Amount 2.500	Range 43 - 116		Recovery = 68.80%			
17) p-Terphenyl-d14	12.08	244	273660	2.1637	ug/ml	-0.01
Spiked Amount 2.500	Range 33 - 141		Recovery = 86.40%			

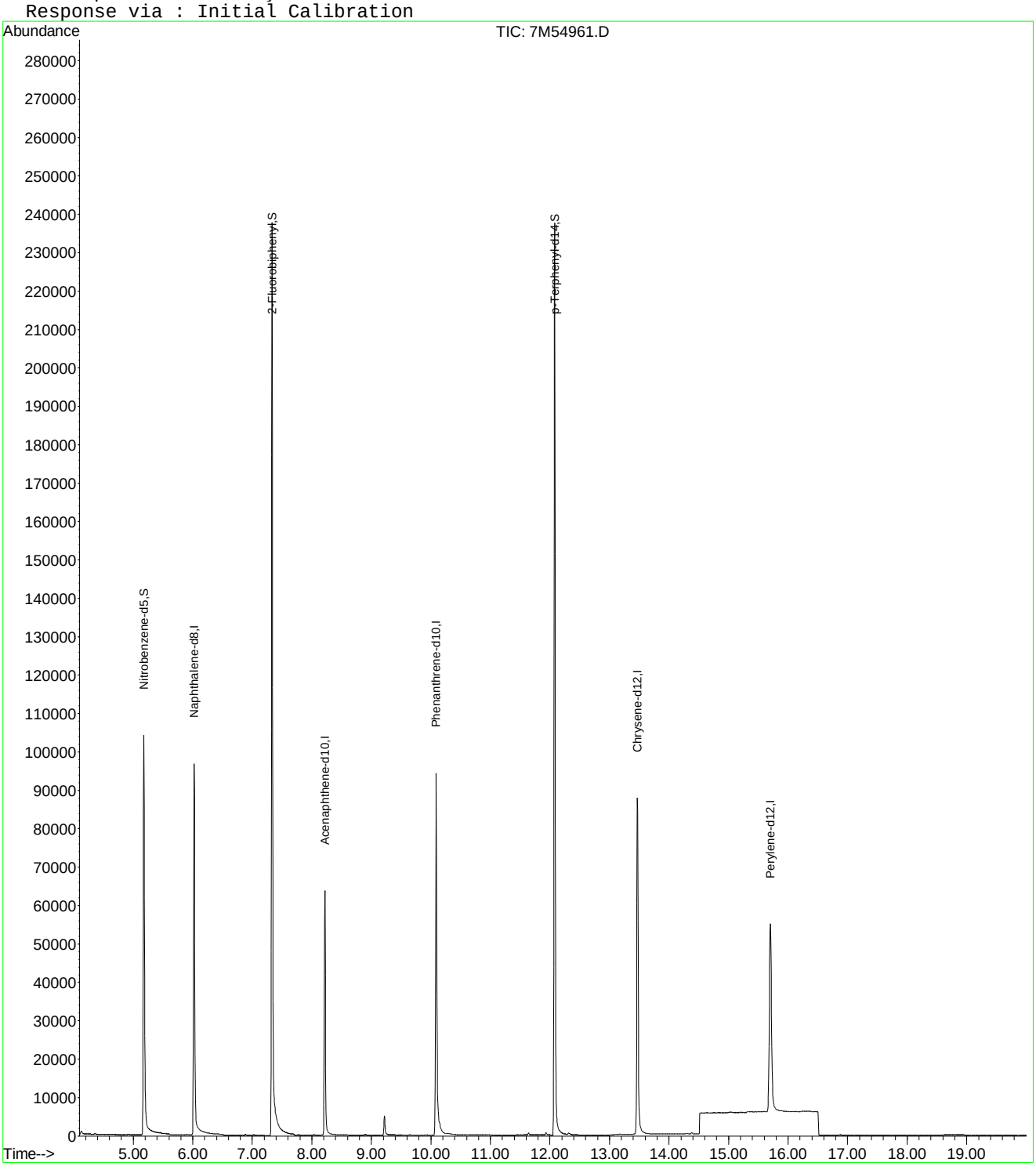
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
7M54961.D SIMPAHL.M Fri May 11 07:24:05 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\051012\7M54961.D Vial: 12
Acq On : 10 May 2012 1:18 pm Operator: CAA
Sample : L12050153-01 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 7:17 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 : Fri May 11 07:17:07 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\051012\7M54962.D Vial: 13
Acq On : 10 May 2012 1:46 pm Operator: CAA
Sample : L12050153-03 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 07:17:22 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 : Fri May 11 07:17:07 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

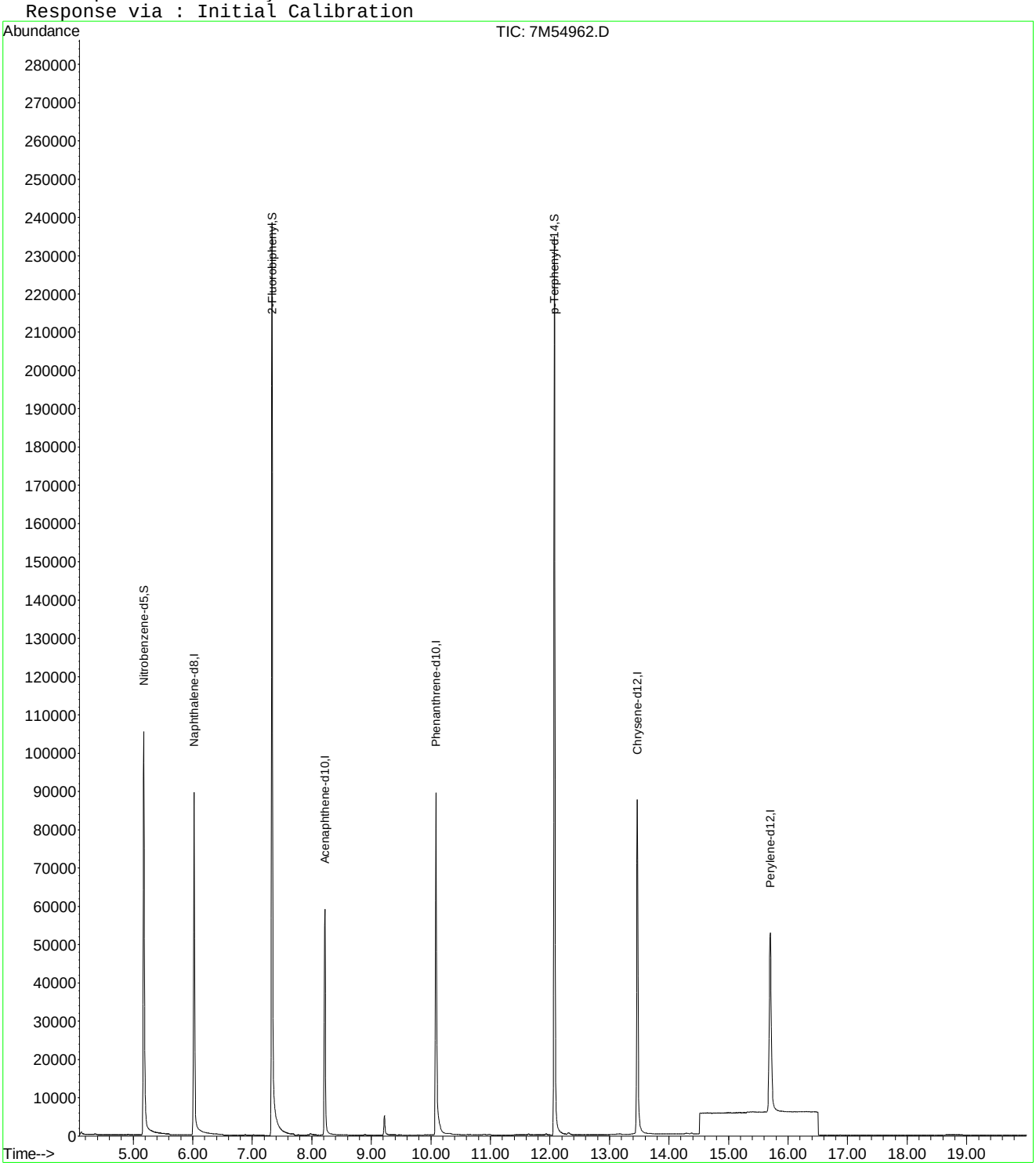
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.02	136	128734	1.00	ug/ml	-0.01
6) Acenaphthene-d10	8.22	164	82568	1.00	ug/ml	-0.01
11) Phenanthrene-d10	10.08	188	137192	1.00	ug/ml	-0.01
15) Chrysene-d12	13.47	240	131437	1.00	ug/ml	-0.01
20) Perylene-d12	15.70	264	120499	1.00	ug/ml	-0.01
System Monitoring Compounds						
2) Nitrobenzene-d5	5.18	82	107595	2.0012	ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery = 80.00%			
7) 2-Fluorobiphenyl	7.33	172	247223	1.8103	ug/ml	-0.02
Spiked Amount 2.500	Range 43 - 116		Recovery = 72.40%			
17) p-Terphenyl-d14	12.08	244	276641	2.2687	ug/ml	-0.01
Spiked Amount 2.500	Range 33 - 141		Recovery = 90.80%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration
7M54962.D SIMPAHL.M Fri May 11 07:24:06 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\051012\7M54962.D Vial: 13
Acq On : 10 May 2012 1:46 pm Operator: CAA
Sample : L12050153-03 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 7:17 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 : Fri May 11 07:17:07 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\051012\7M54963.D Vial: 14
Acq On : 10 May 2012 2:14 pm Operator: CAA
Sample : L12050153-05 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 07:17:22 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 : Fri May 11 07:17:07 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

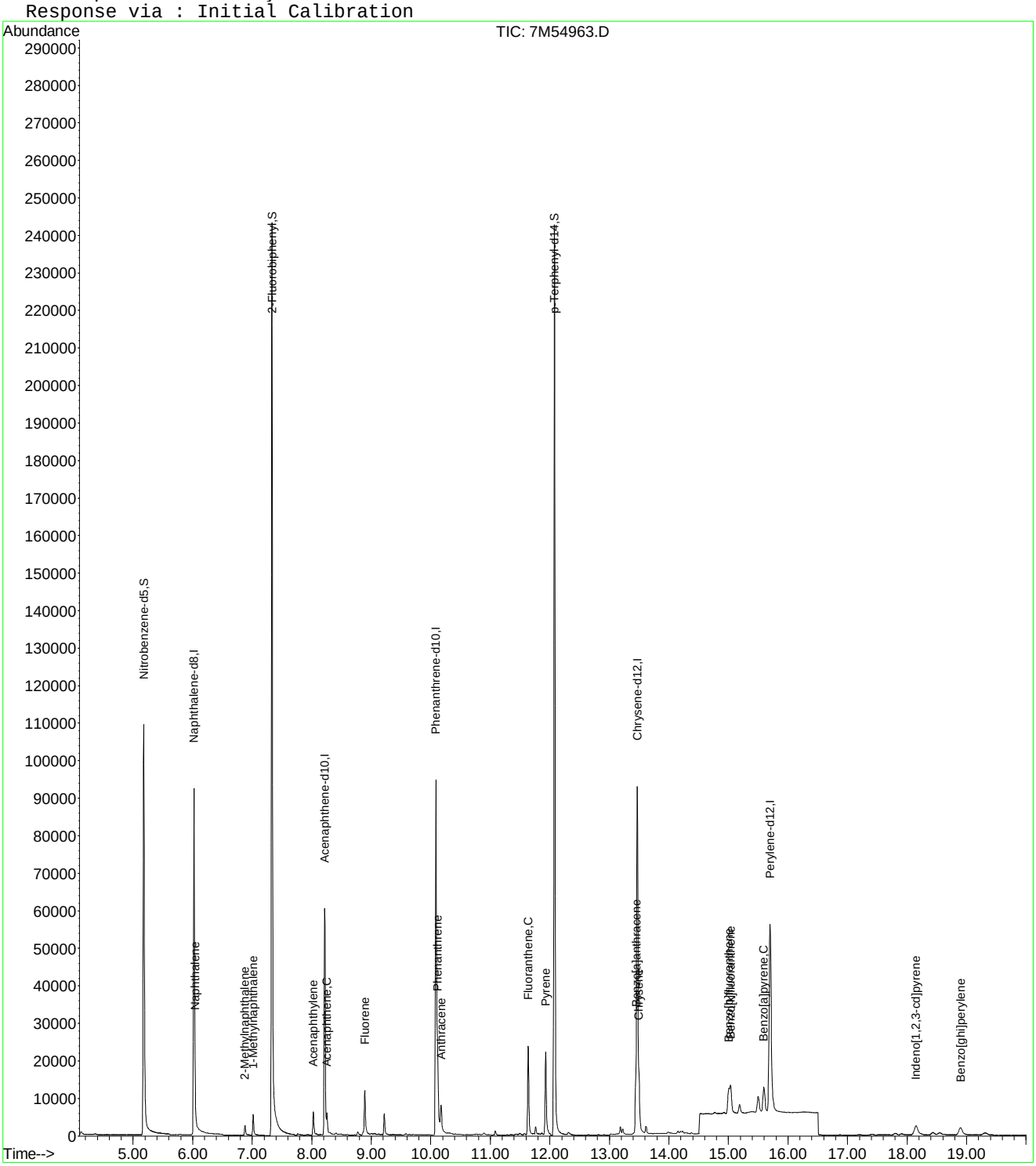
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.02	136	131274	1.00	ug/ml	-0.01
6) Acenaphthene-d10	8.22	164	84545	1.00	ug/ml	-0.02
11) Phenanthrene-d10	10.08	188	140322	1.00	ug/ml	-0.01
15) Chrysene-d12	13.47	240	133894	1.00	ug/ml	-0.01
20) Perylene-d12	15.70	264	123088	1.00	ug/ml	-0.02
System Monitoring Compounds						
2) Nitrobenzene-d5	5.18	82	112546	2.0528	ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery = 82.00%			
7) 2-Fluorobiphenyl	7.33	172	254835	1.8224	ug/ml	-0.01
Spiked Amount 2.500	Range 43 - 116		Recovery = 72.80%			
17) p-Terphenyl-d14	12.07	244	283975	2.2861	ug/ml	-0.02
Spiked Amount 2.500	Range 33 - 141		Recovery = 91.60%			
Target Compounds						Qvalue
3) Naphthalene	6.04	128	4314	0.0278	ug/ml	100
4) 2-Methylnaphthalene	6.88	142	2184	0.0231	ug/ml	96
5) 1-Methylnaphthalene	7.02	142	3901	0.0403	ug/ml	100
8) Acenaphthylene	8.03	152	7029	0.0376	ug/ml	98
9) Acenaphthene	8.26	154	2814	0.0263	ug/ml	87
10) Fluorene	8.89	166	9897	0.0779	ug/ml	96
12) Phenanthrene	10.11	178	21710	0.1244	ug/ml	99
13) Anthracene	10.17	178	9546	0.0544	ug/ml	96
14) Fluoranthene	11.63	202	30127	0.1647	ug/ml	99
16) Pyrene	11.93	202	30262	0.1406	ug/ml	99
18) Benzo[a]anthracene	13.44	228	16350	0.0941	ug/ml	84
19) Chrysene	13.50	228	14886	0.0861	ug/ml	90
21) Benzo[b]fluoranthene	15.01	252	10267	0.0605	ug/ml	98
22) Benzo[k]fluoranthene	15.03	252	13589m	0.0846	ug/ml	
23) Benzo[a]pyrene	15.59	252	13920	0.0880	ug/ml	95
24) Indeno[1,2,3-cd]pyrene	18.15	276	7957	0.0460	ug/ml	100
26) Benzo[ghi]perylene	18.90	276	6911	0.0453	ug/ml	90

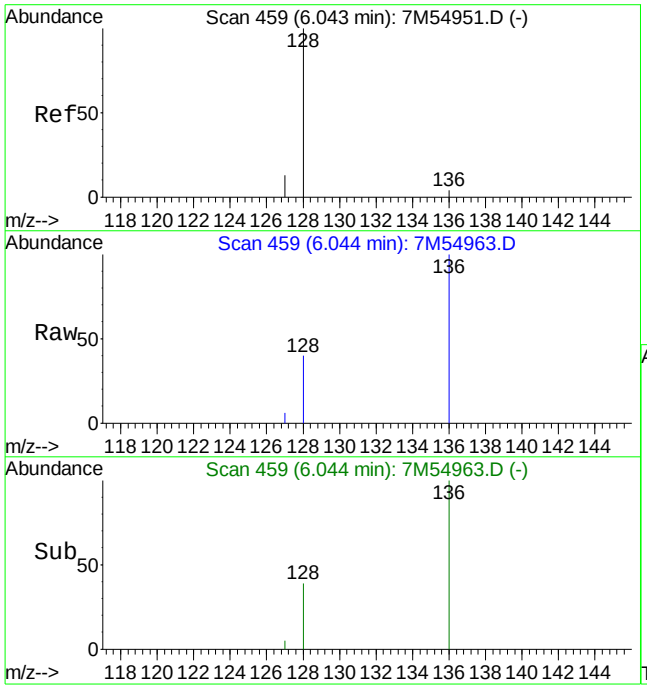
(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\051012\7M54963.D Vial: 14
Acq On : 10 May 2012 2:14 pm Operator: CAA
Sample : L12050153-05 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 7:19 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 : Fri May 11 07:17:07 2012
Response via : Initial Calibration

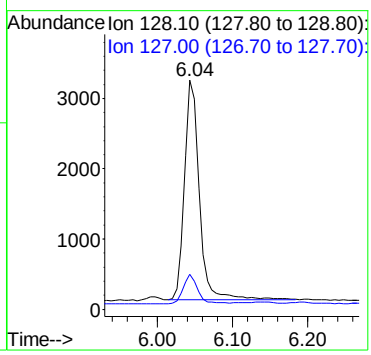


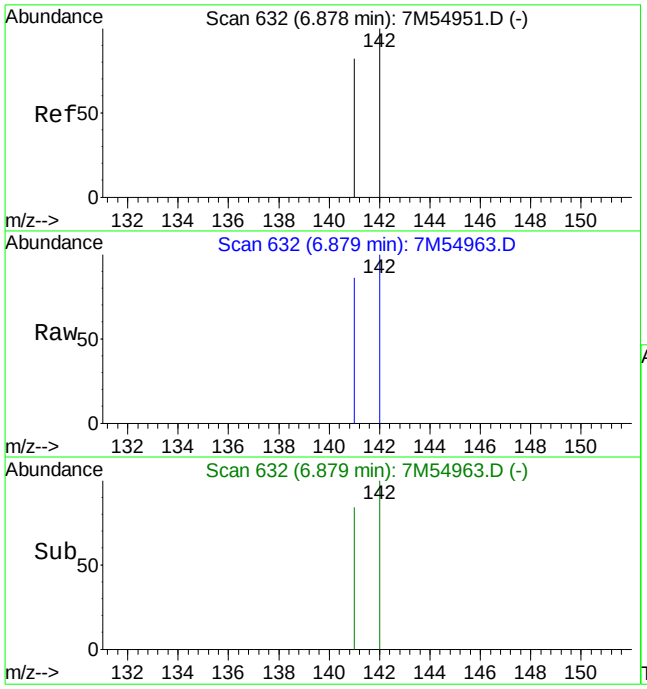


#3
Naphthalene
Concen: 0.03 ug/ml
RT: 6.04 min Scan# 459
Delta R.T. -0.01 min
Lab File: 7M54963.D
Acq: 10 May 2012 2:14 pm

Tgt Ion:128 Resp: 4314

Ion	Ratio	Lower	Upper
128	100		
127	13.0	7.7	18.1

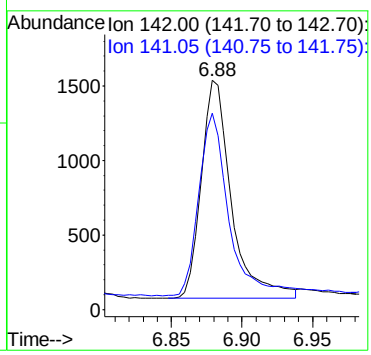


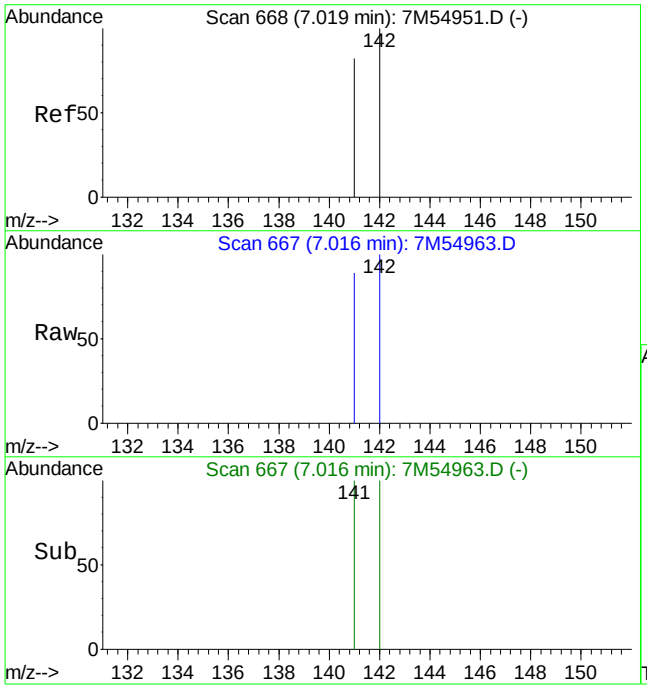


#4
2-Methylnaphthalene
Concen: 0.02 ug/ml
RT: 6.88 min Scan# 632
Delta R.T. -0.01 min
Lab File: 7M54963.D
Acq: 10 May 2012 2:14 pm

Tgt Ion:142 Resp: 2184

Ion	Ratio	Lower	Upper
142	100		
141	87.3	50.2	117.0

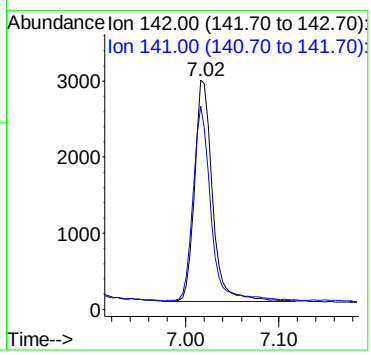


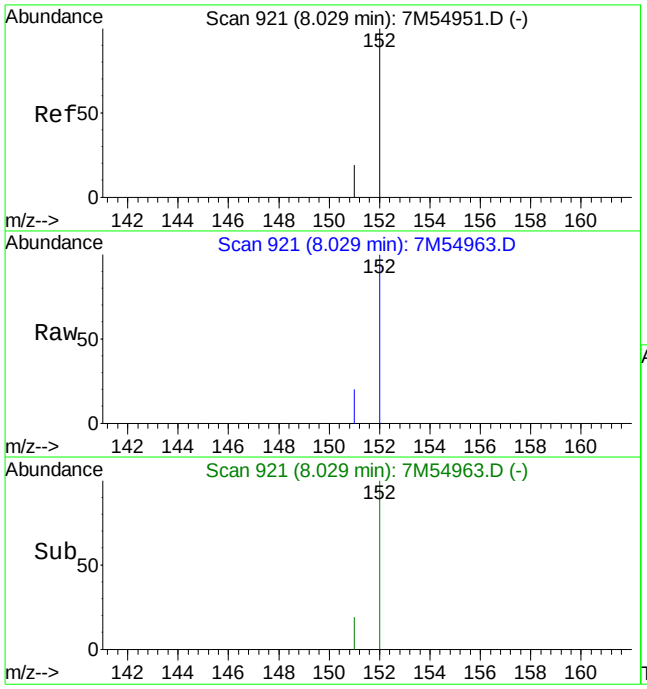


#5
1-Methylnaphthalene
Concen: 0.04 ug/ml
RT: 7.02 min Scan# 667
Delta R.T. -0.02 min
Lab File: 7M54963.D
Acq: 10 May 2012 2:14 pm

Tgt Ion:142 Resp: 3901

Ion	Ratio	Lower	Upper
142	100		
141	87.1	52.1	121.5

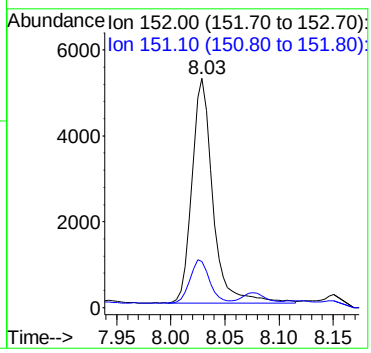


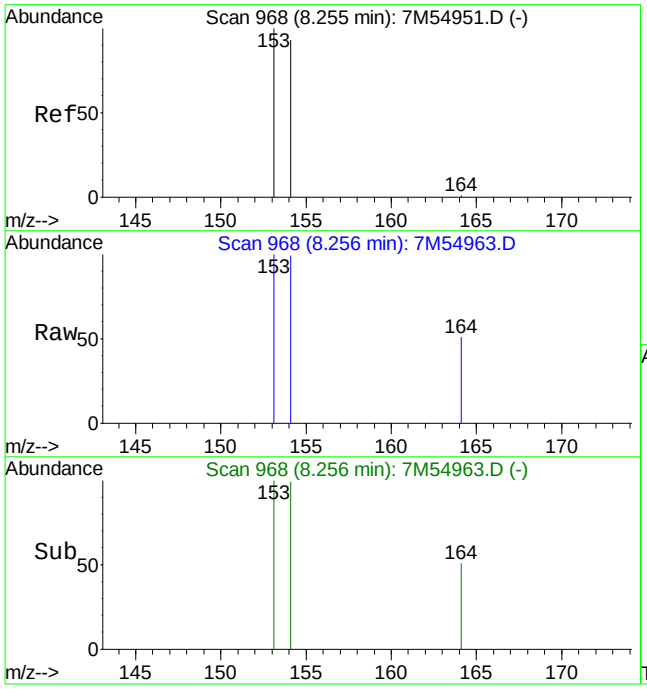


#8
Acenaphthylene
Concen: 0.04 ug/ml
RT: 8.03 min Scan# 921
Delta R.T. -0.01 min
Lab File: 7M54963.D
Acq: 10 May 2012 2:14 pm

Tgt Ion:152 Resp: 7029

Ion	Ratio	Lower	Upper
152	100		
151	18.5	11.8	27.4

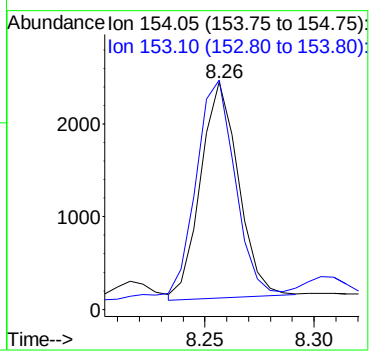


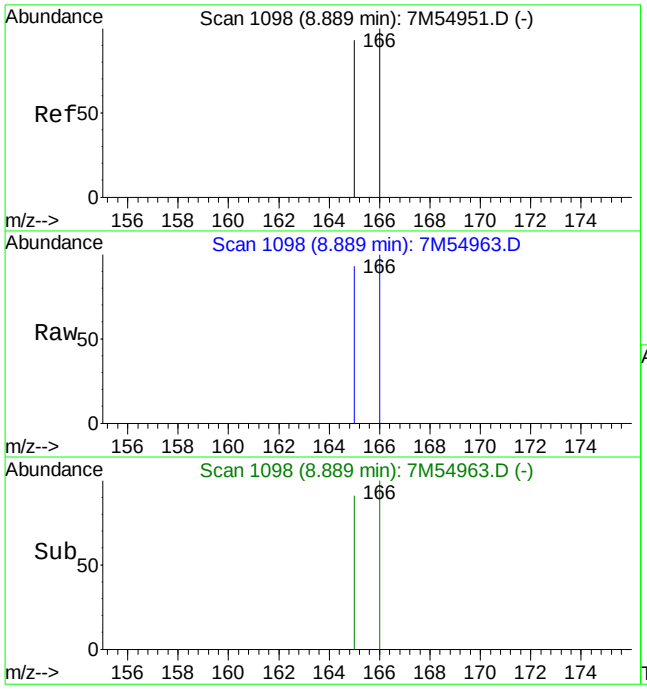


#9
Acenaphthene
Concen: 0.03 ug/ml
RT: 8.26 min Scan# 968
Delta R.T. -0.01 min
Lab File: 7M54963.D
Acq: 10 May 2012 2:14 pm

Tgt Ion:154 Resp: 2814

Ion	Ratio	Lower	Upper
154	100		
153	118.8	63.1	147.1

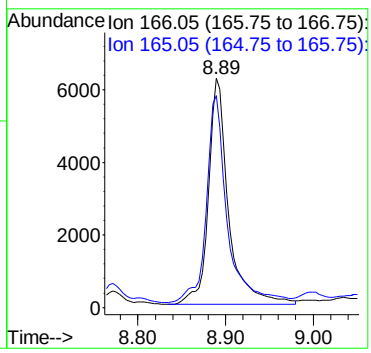


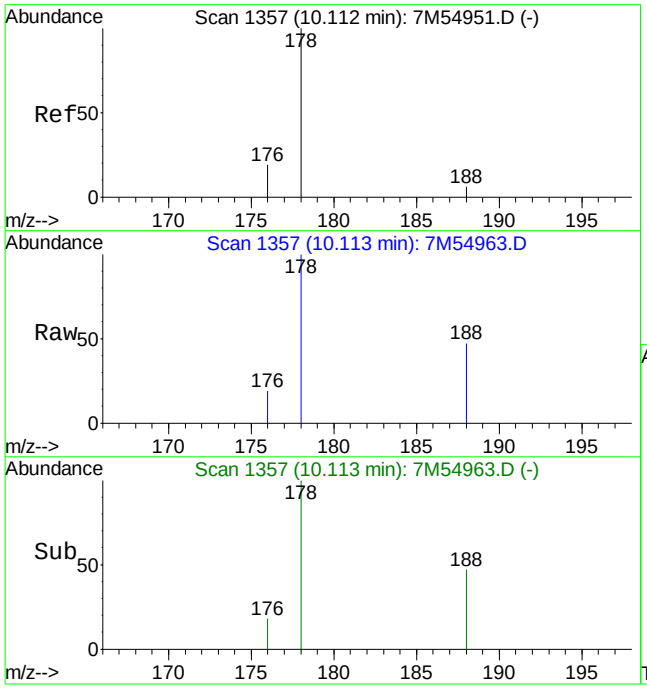


#10
Fluorene
Concen: 0.08 ug/ml
RT: 8.89 min Scan# 1098
Delta R.T. -0.01 min
Lab File: 7M54963.D
Acq: 10 May 2012 2:14 pm

Tgt Ion:166 Resp: 9897

Ion	Ratio	Lower	Upper
166	100		
165	94.5	54.5	127.1

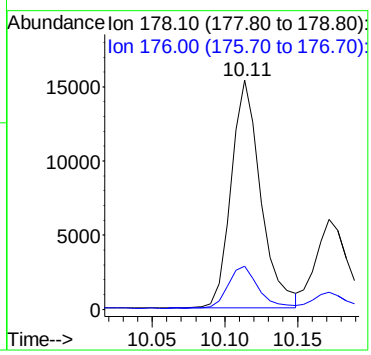


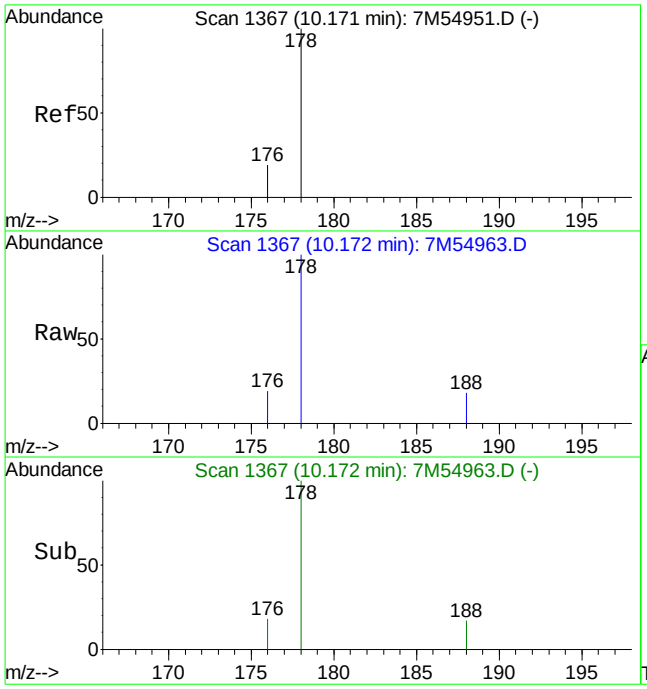


#12
Phenanthrene
Concen: 0.12 ug/ml
RT: 10.11 min Scan# 1357
Delta R.T. -0.01 min
Lab File: 7M54963.D
Acq: 10 May 2012 2:14 pm

Tgt Ion:178 Resp: 21710

Ion	Ratio	Lower	Upper
178	100		
176	18.7	11.4	26.6

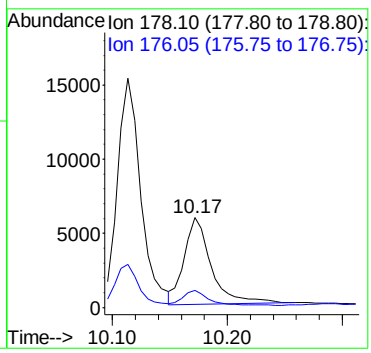


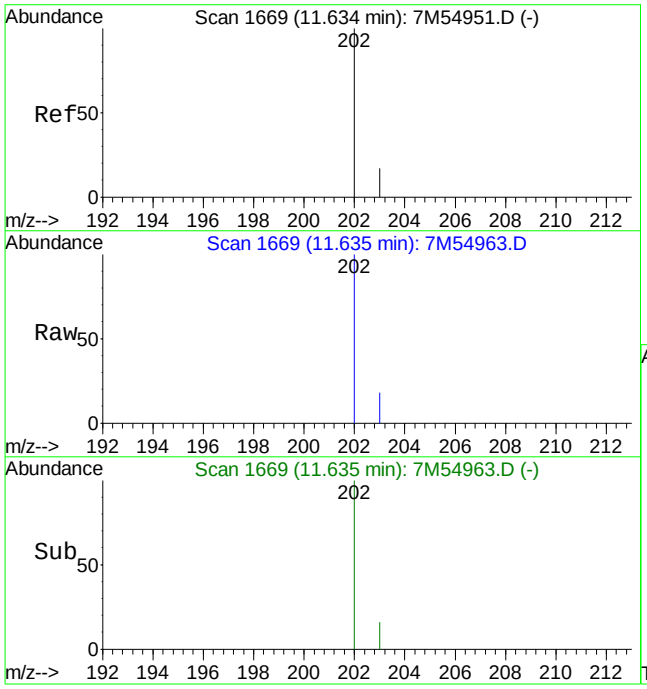


#13
Anthracene
Concen: 0.05 ug/ml
RT: 10.17 min Scan# 1367
Delta R.T. -0.01 min
Lab File: 7M54963.D
Acq: 10 May 2012 2:14 pm

Tgt Ion:178 Resp: 9546

Ion	Ratio	Lower	Upper
178	100		
176	16.2	10.9	25.5

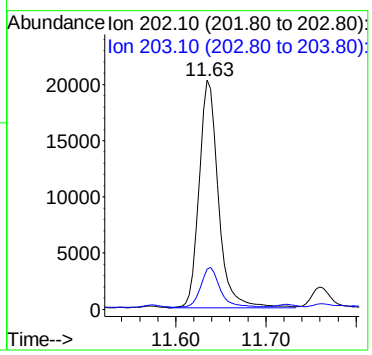


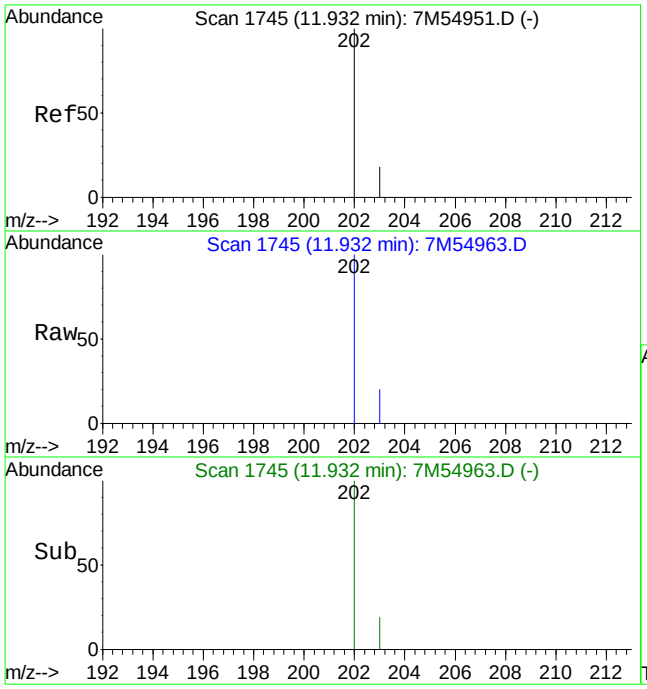


#14
Fluoranthene
Concen: 0.16 ug/ml
RT: 11.63 min Scan# 1669
Delta R.T. -0.01 min
Lab File: 7M54963.D
Acq: 10 May 2012 2:14 pm

Tgt Ion:202 Resp: 30127

Ion	Ratio	Lower	Upper
202	100		
203	17.3	10.6	24.6

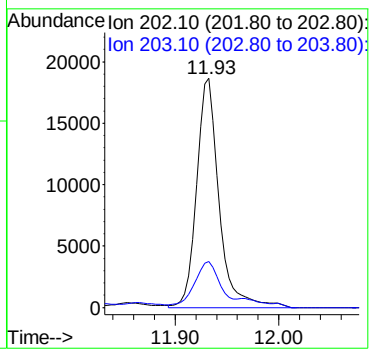


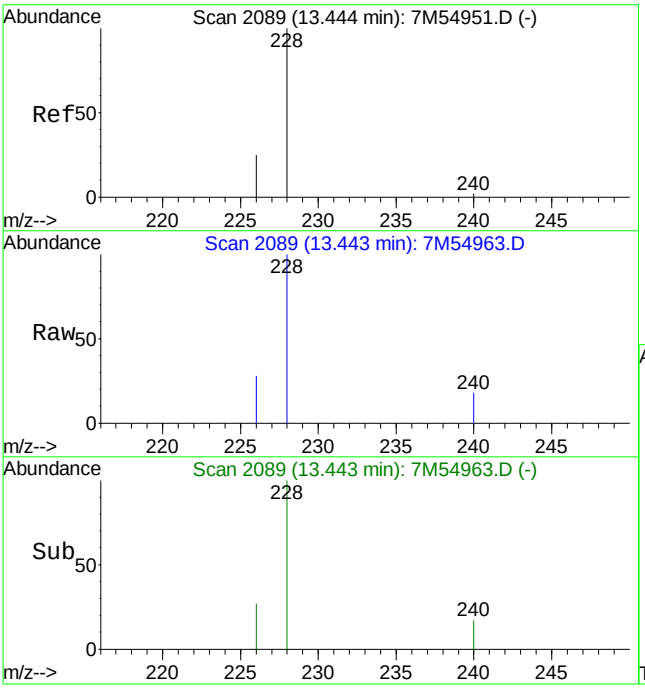


#16
Pyrene
Concen: 0.14 ug/ml
RT: 11.93 min Scan# 1745
Delta R.T. -0.01 min
Lab File: 7M54963.D
Acq: 10 May 2012 2:14 pm

Tgt Ion:202 Resp: 30262

Ion	Ratio	Lower	Upper
202	100		
203	18.8	11.0	25.6

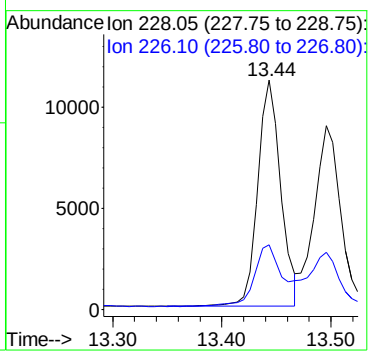


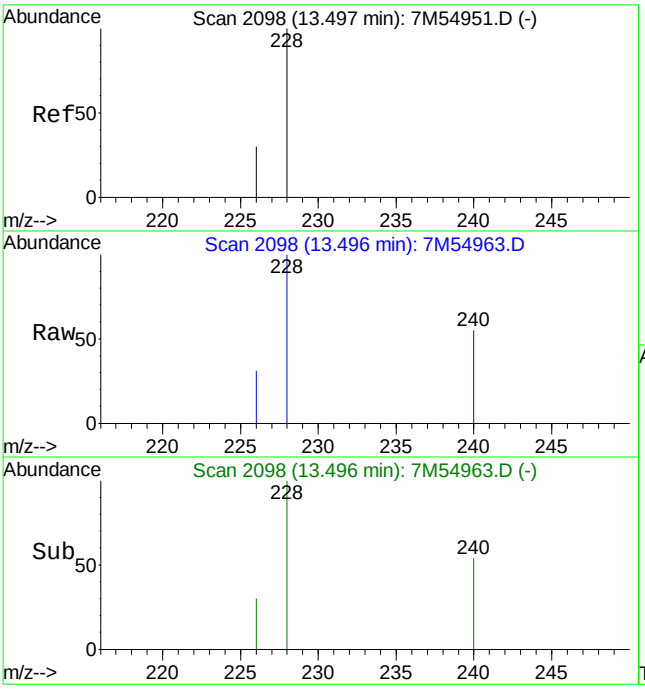


#18
Benzo[a]anthracene
Concen: 0.09 ug/ml
RT: 13.44 min Scan# 2089
Delta R.T. -0.01 min
Lab File: 7M54963.D
Acq: 10 May 2012 2:14 pm

Tgt Ion:228 Resp: 16350

Ion	Ratio	Lower	Upper
228	100		
226	33.9	15.4	36.0

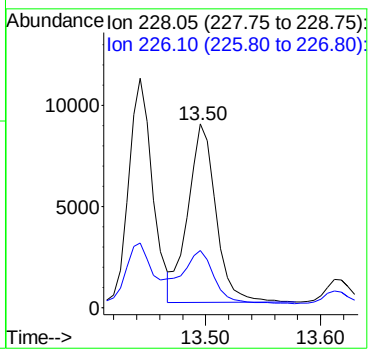


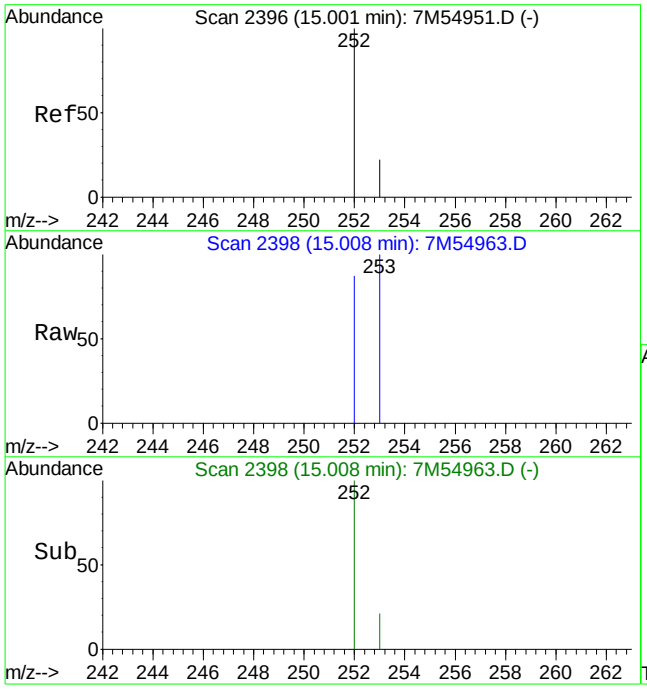


#19
Chrysene
Concen: 0.09 ug/ml
RT: 13.50 min Scan# 2098
Delta R.T. -0.01 min
Lab File: 7M54963.D
Acq: 10 May 2012 2:14 pm

Tgt Ion:228 Resp: 14886

Ion	Ratio	Lower	Upper
228	100		
226	34.2	17.2	40.0

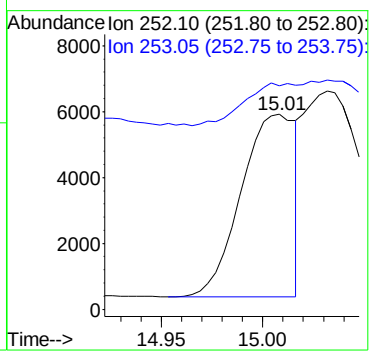


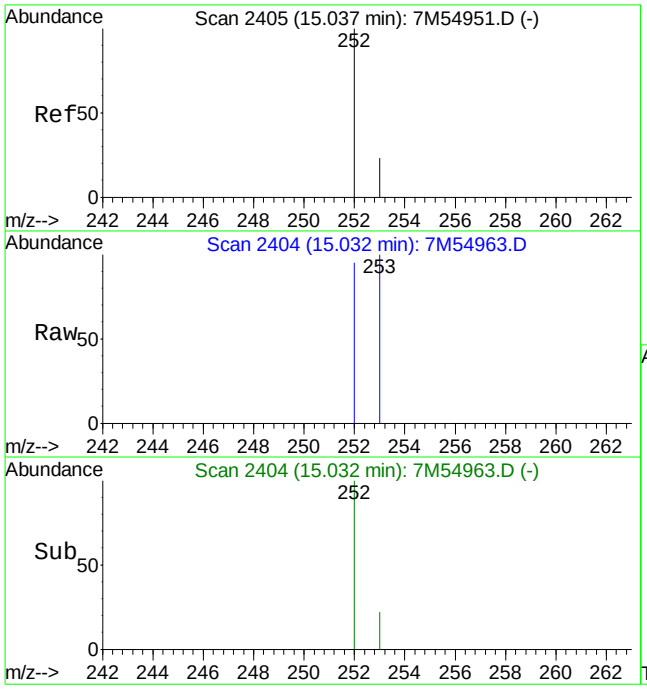


#21
Benzo[b]fluoranthene
Concen: 0.06 ug/ml
RT: 15.01 min Scan# 2398
Delta R.T. -0.00 min
Lab File: 7M54963.D
Acq: 10 May 2012 2:14 pm

Tgt Ion:252 Resp: 10267

Ion	Ratio	Lower	Upper
252	100		
253	22.1	13.8	32.2

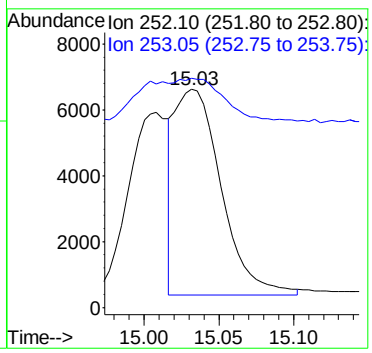


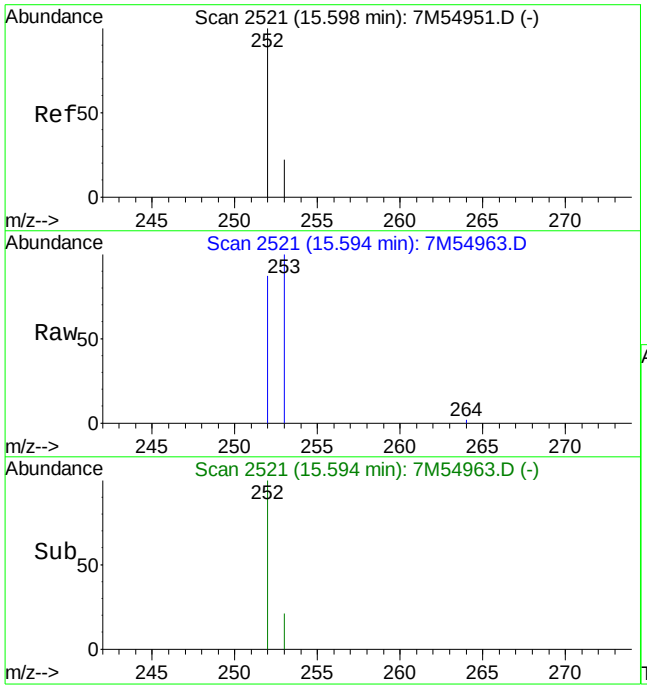


#22
Benzo[k]fluoranthene
Concen: 0.08 ug/ml m
RT: 15.03 min Scan# 2404
Delta R.T. -0.02 min
Lab File: 7M54963.D
Acq: 10 May 2012 2:14 pm

Tgt Ion:252 Resp: 13589

Ion	Ratio	Lower	Upper
252	100		
253	16.7	13.5	31.5

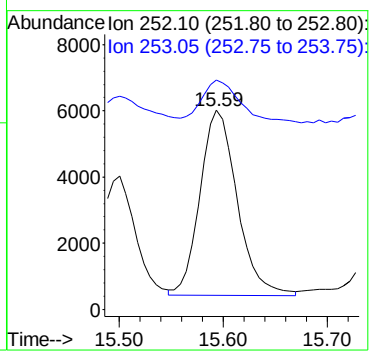


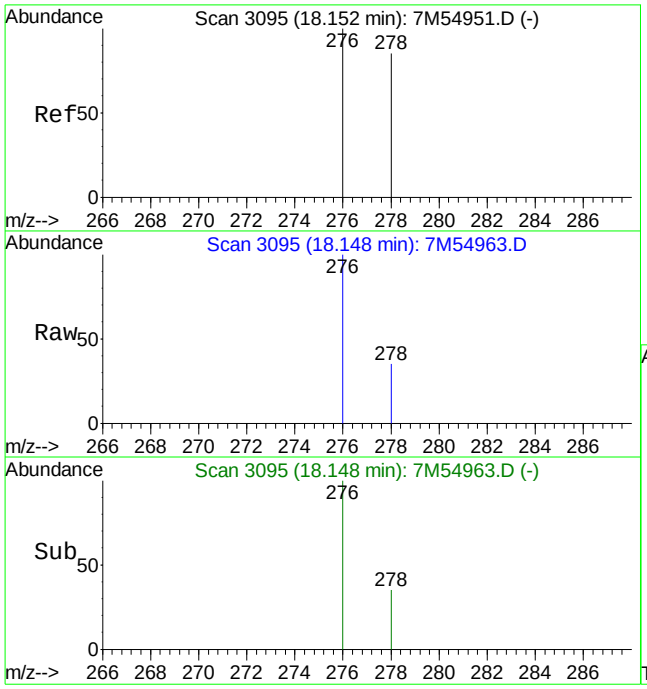


#23
Benzo[a]pyrene
Concen: 0.09 ug/ml
RT: 15.59 min Scan# 2521
Delta R.T. -0.02 min
Lab File: 7M54963.D
Acq: 10 May 2012 2:14 pm

Tgt Ion:252 Resp: 13920

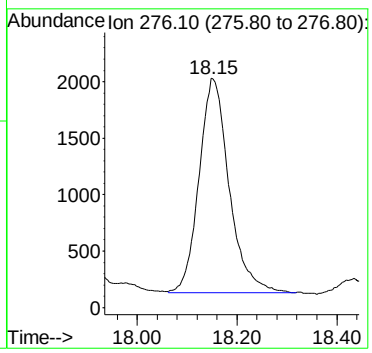
Ion	Ratio	Lower	Upper
252	100		
253	24.1	13.0	30.4

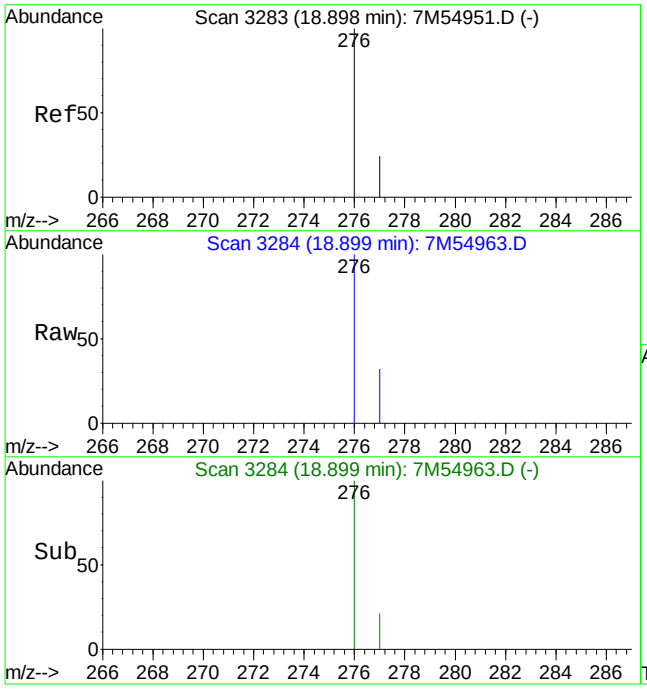




#24
Indeno[1,2,3-cd]pyrene
Concen: 0.05 ug/ml
RT: 18.15 min Scan# 3095
Delta R.T. -0.02 min
Lab File: 7M54963.D
Acq: 10 May 2012 2:14 pm

Tgt Ion:276 Resp: 7957

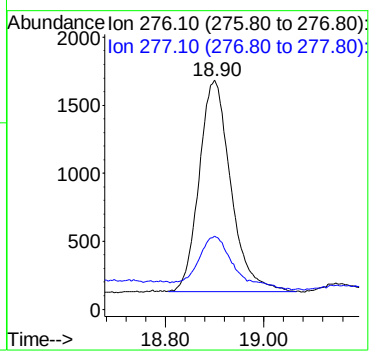




#26
Benzo[ghi]perylene
Concen: 0.05 ug/ml
RT: 18.90 min Scan# 3284
Delta R.T. -0.01 min
Lab File: 7M54963.D
Acq: 10 May 2012 2:14 pm

Tgt Ion:276 Resp: 6911

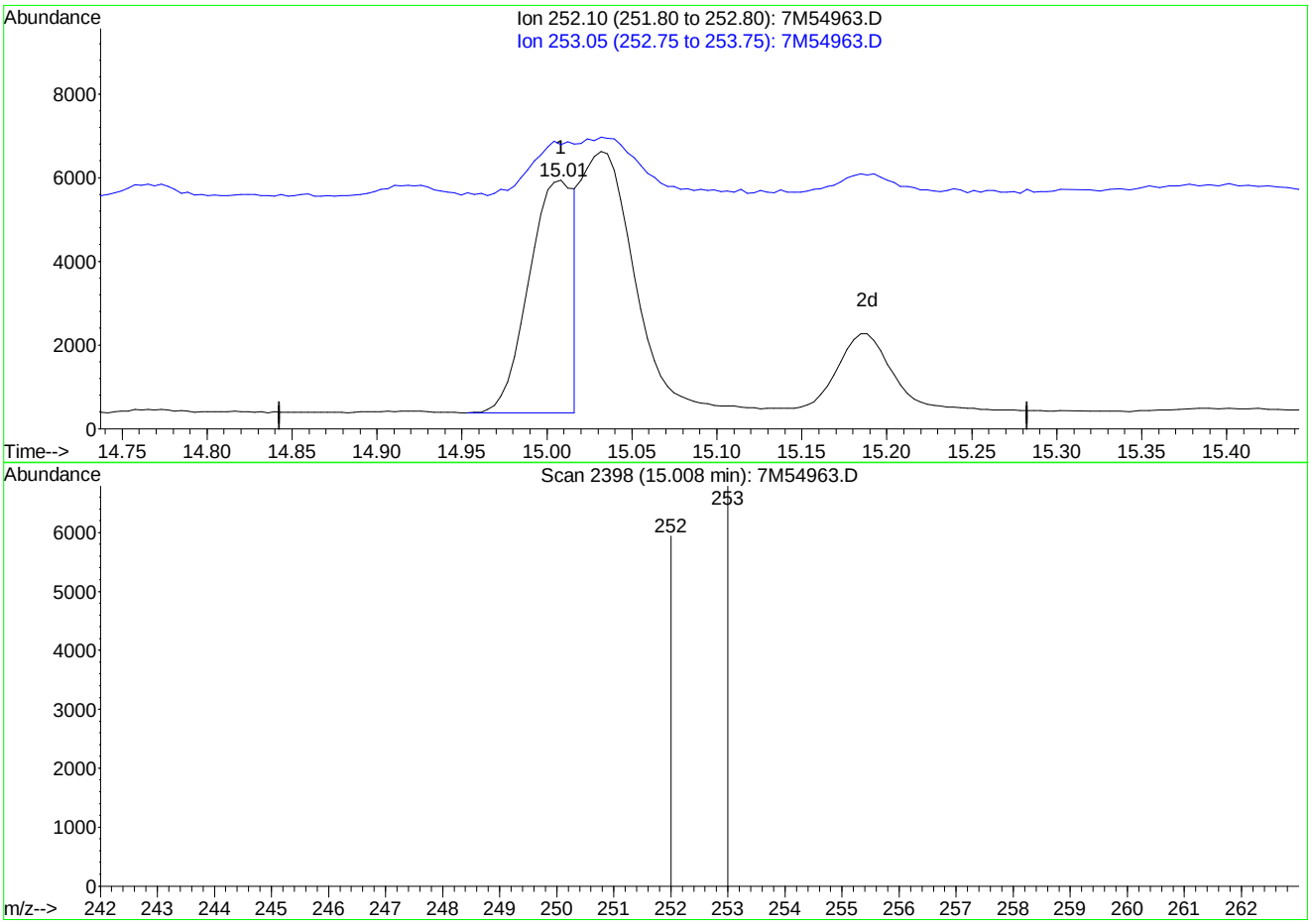
Ion	Ratio	Lower	Upper
276	100		
277	28.8	14.3	33.3



Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\051012\7M54963.D Vial: 14
Acq On : 10 May 2012 2:14 pm Operator: CAA
Sample : L12050153-05 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 7:17 2012 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Fri May 11 07:17:07 2012
Response via : Multiple Level Calibration



TIC: 7M54963.D

(22) Benzo[k]fluoranthene

15.01min 0.06ug/ml

response 10267

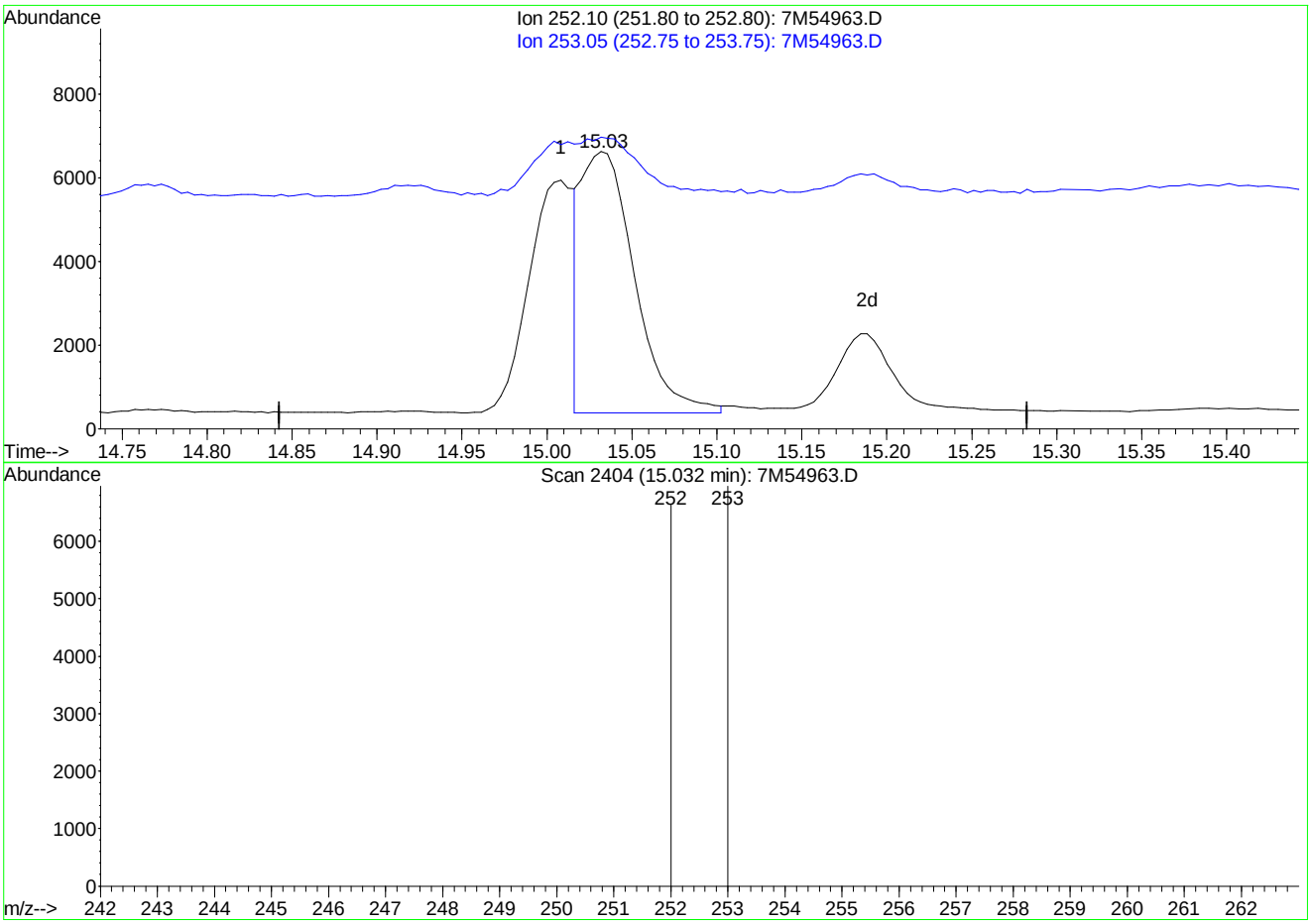
Ion	Exp%	Act%
252.10	100	100
253.05	22.50	22.15
0.00	0.00	0.00
0.00	0.00	0.00

7M54963.D SIMPAHL.M Fri May 11 07:19:32 2012

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\051012\7M54963.D Vial: 14
Acq On : 10 May 2012 2:14 pm Operator: CAA
Sample : L12050153-05 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 7:19 2012 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Fri May 11 07:17:07 2012
Response via : Multiple Level Calibration



TIC: 7M54963.D

(22) Benzo[k]fluoranthene

15.03min 0.08ug/ml mint

response 13589

Ion	Exp%	Act%
252.10	100	100
253.05	22.50	16.73
0.00	0.00	0.00
0.00	0.00	0.00

7M54963.D SIMPAHL.M Fri May 11 2012

Analyst: 05/11/2012 08:03 Supervisor: 05/11/2012 09:19

#3 - Improperly integrated isomers and/or coeluting compounds

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\051012\7M54964.D Vial: 15
Acq On : 10 May 2012 2:42 pm Operator: CAA
Sample : L12050153-07 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 07:17:22 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 : Fri May 11 07:17:07 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

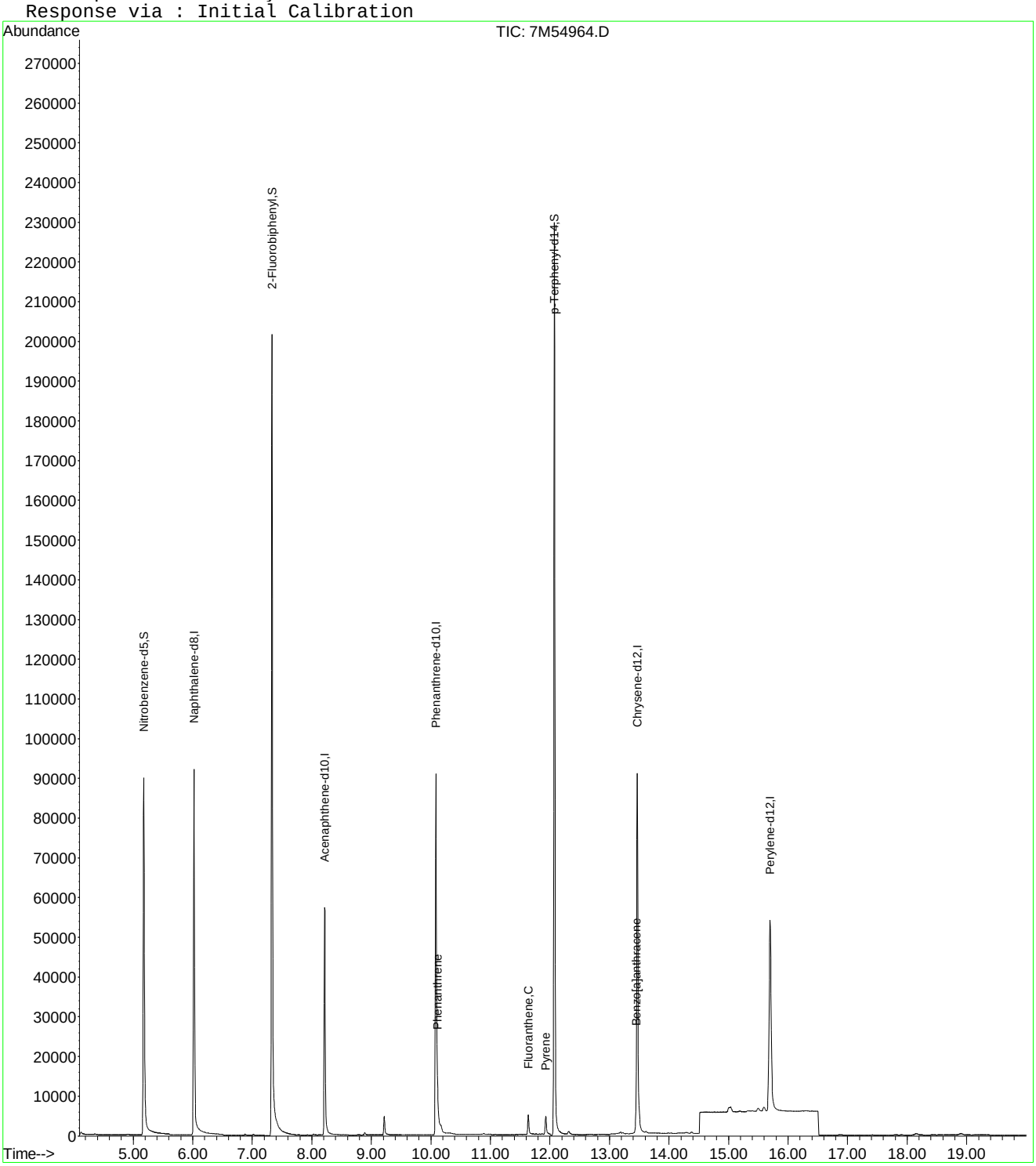
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.02	136	128536	1.00	ug/ml	-0.01
6) Acenaphthene-d10	8.21	164	82684	1.00	ug/ml	-0.02
11) Phenanthrene-d10	10.08	188	137418	1.00	ug/ml	-0.01
15) Chrysene-d12	13.47	240	133094	1.00	ug/ml	-0.01
20) Perylene-d12	15.70	264	121812	1.00	ug/ml	-0.02
System Monitoring Compounds						
2) Nitrobenzene-d5	5.18	82	94175	1.7543	ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery = 70.00%			
7) 2-Fluorobiphenyl	7.33	172	212296	1.5524	ug/ml	-0.02
Spiked Amount 2.500	Range 43 - 116		Recovery = 62.00%			
17) p-Terphenyl-d14	12.07	244	265175	2.1475	ug/ml	-0.02
Spiked Amount 2.500	Range 33 - 141		Recovery = 86.00%			
Target Compounds						Qvalue
12) Phenanthrene	10.11	178	4749	0.0278	ug/ml	100
14) Fluoranthene	11.64	202	6322	0.0353	ug/ml	100
16) Pyrene	11.93	202	7710	0.0360	ug/ml	99
18) Benzo[a]anthracene	13.44	228	3899	0.0226	ug/ml#	56

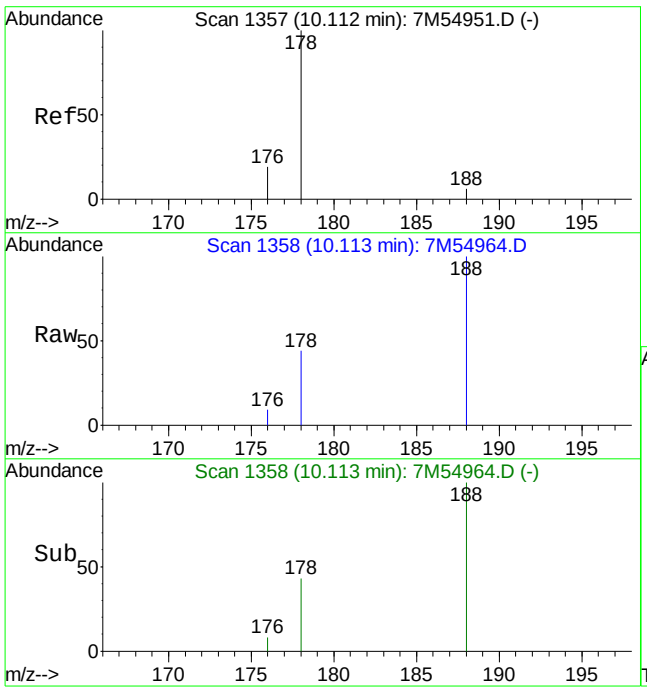
(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\051012\7M54964.D Vial: 15
Acq On : 10 May 2012 2:42 pm Operator: CAA
Sample : L12050153-07 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 7:17 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 : Fri May 11 07:17:07 2012
Response via : Initial Calibration

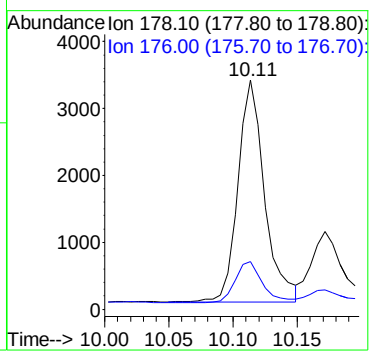


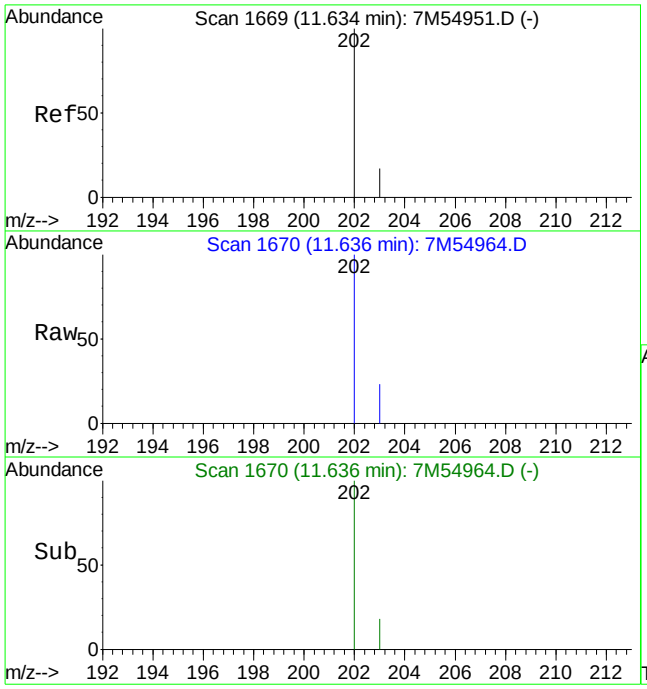


#12
Phenanthrene
Concen: 0.03 ug/ml
RT: 10.11 min Scan# 1358
Delta R.T. -0.01 min
Lab File: 7M54964.D
Acq: 10 May 2012 2:42 pm

Tgt Ion:178 Resp: 4749

Ion	Ratio	Lower	Upper
178	100		
176	19.1	11.4	26.6

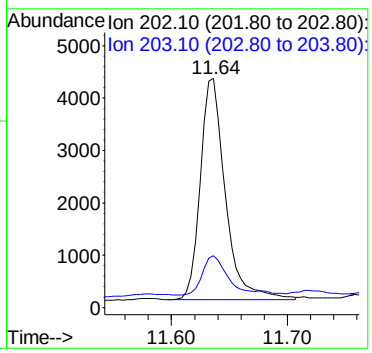


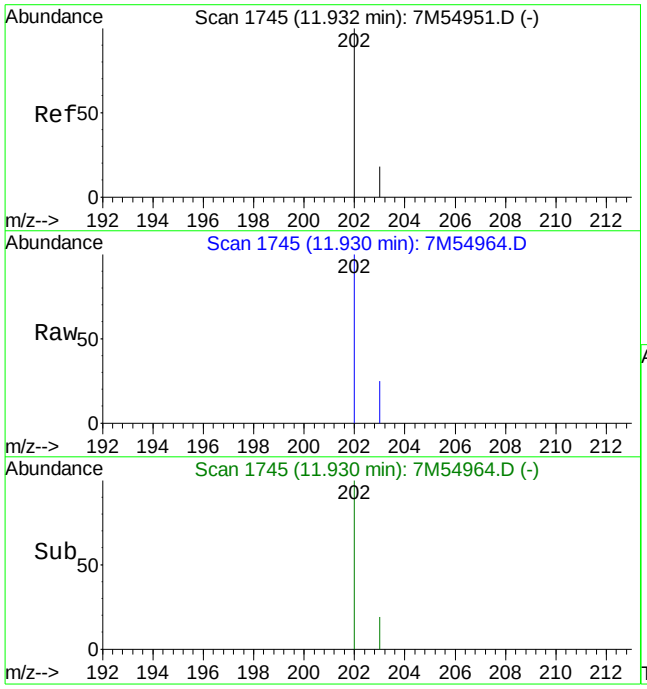


#14
Fluoranthene
Concen: 0.04 ug/ml
RT: 11.64 min Scan# 1670
Delta R.T. -0.01 min
Lab File: 7M54964.D
Acq: 10 May 2012 2:42 pm

Tgt Ion:202 Resp: 6322

Ion	Ratio	Lower	Upper
202	100		
203	17.7	10.6	24.6

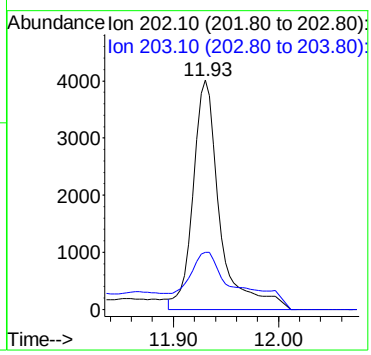


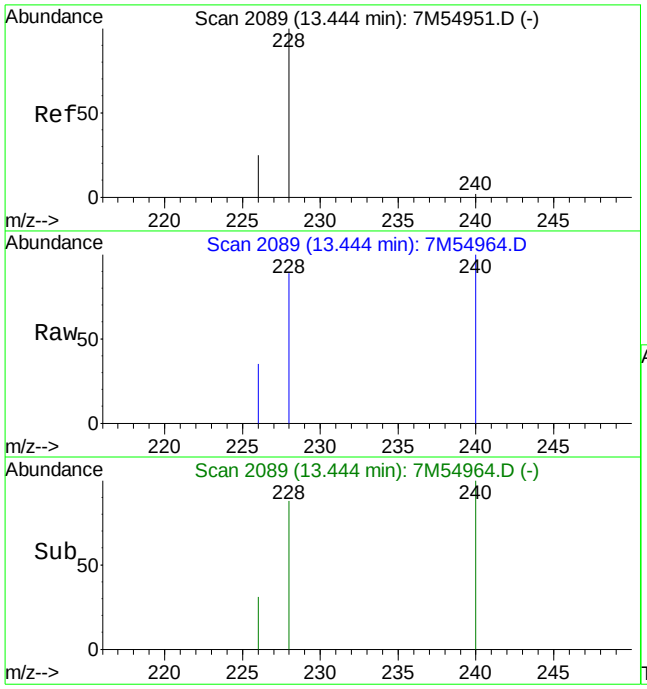


#16
Pyrene
Concen: 0.04 ug/ml
RT: 11.93 min Scan# 1745
Delta R.T. -0.01 min
Lab File: 7M54964.D
Acq: 10 May 2012 2:42 pm

Tgt Ion:202 Resp: 7710

Ion	Ratio	Lower	Upper
202	100		
203	17.8	11.0	25.6

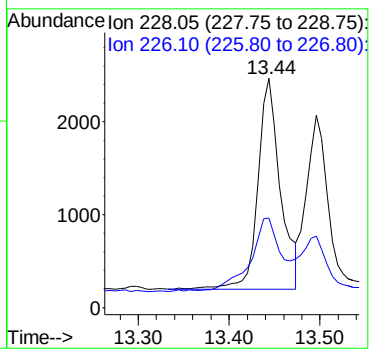




#18
Benzo[a]anthracene
Concen: 0.02 ug/ml
RT: 13.44 min Scan# 2089
Delta R.T. -0.01 min
Lab File: 7M54964.D
Acq: 10 May 2012 2:42 pm

Tgt Ion:228 Resp: 3899

Ion	Ratio	Lower	Upper
228	100		
226	47.8	15.4	36.0#



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

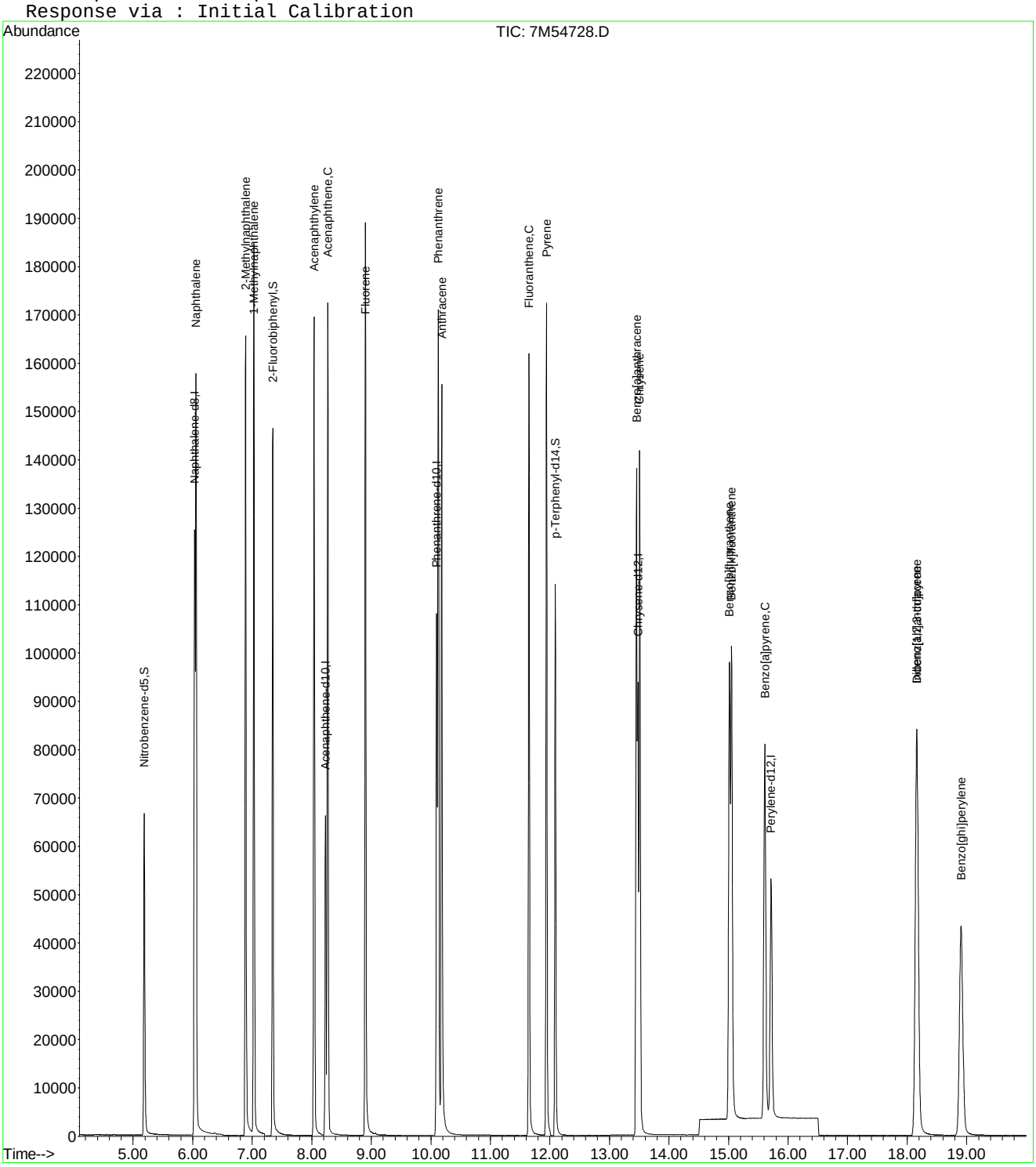
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.03	136	153463	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.23	164	85143	1.00	ug/ml	0.00
11) Phenanthrene-d10	10.10	188	143225	1.00	ug/ml	0.00
15) Chrysene-d12	13.48	240	118114	1.00	ug/ml	0.00
20) Perylene-d12	15.71	264	116508	1.00	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

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



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

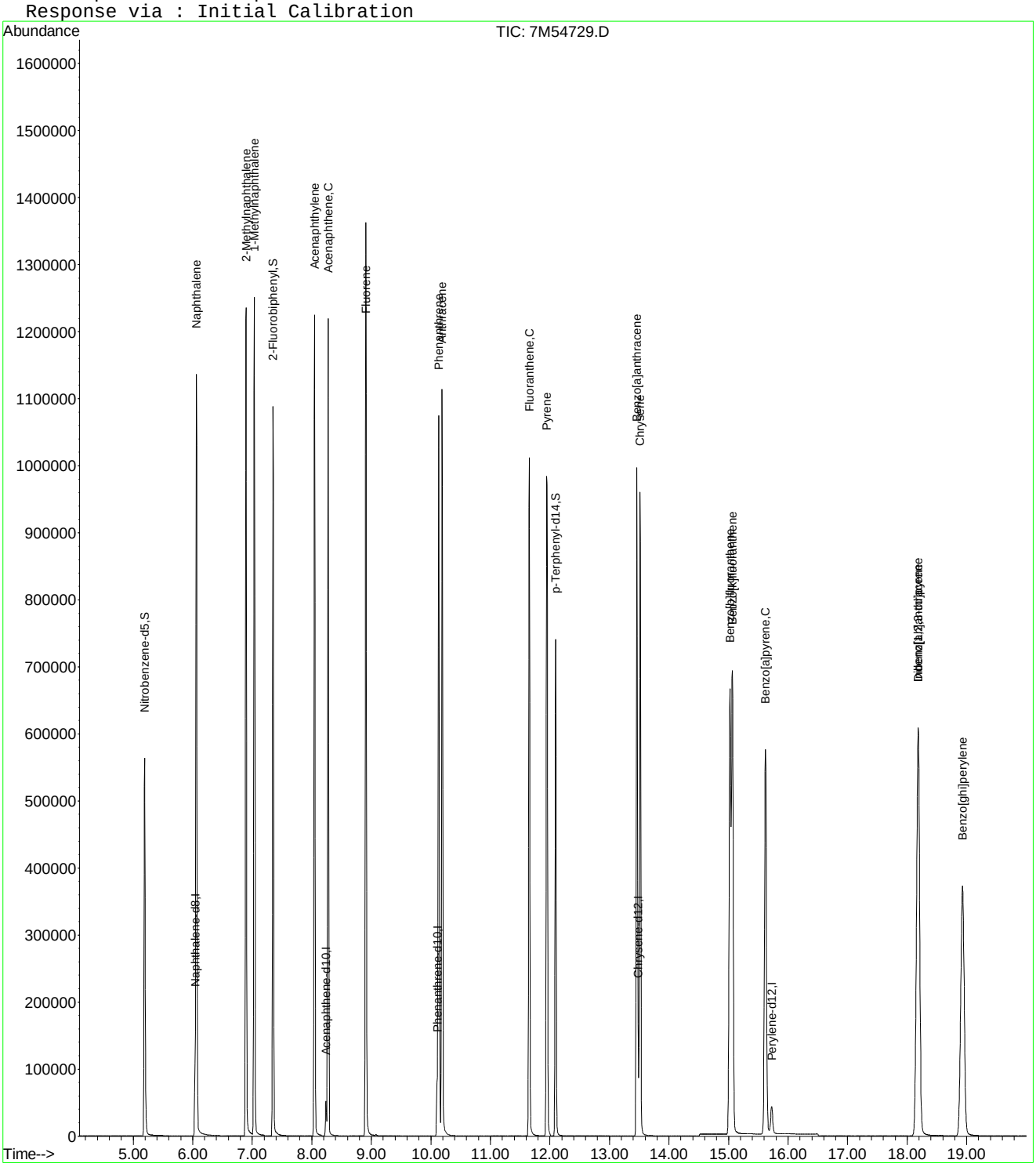
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.04	136	128908	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.24	164	64023	1.00	ug/ml	0.00
11) Phenanthrene-d10	10.10	188	105133	1.00	ug/ml	0.00
15) Chrysene-d12	13.49	240	92409	1.00	ug/ml	0.00
20) Perylene-d12	15.73	264	91750	1.00	ug/ml	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
7M54729.D SIMPAHL.M Thu Apr 05 13:50:24 2012 Page 1

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



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

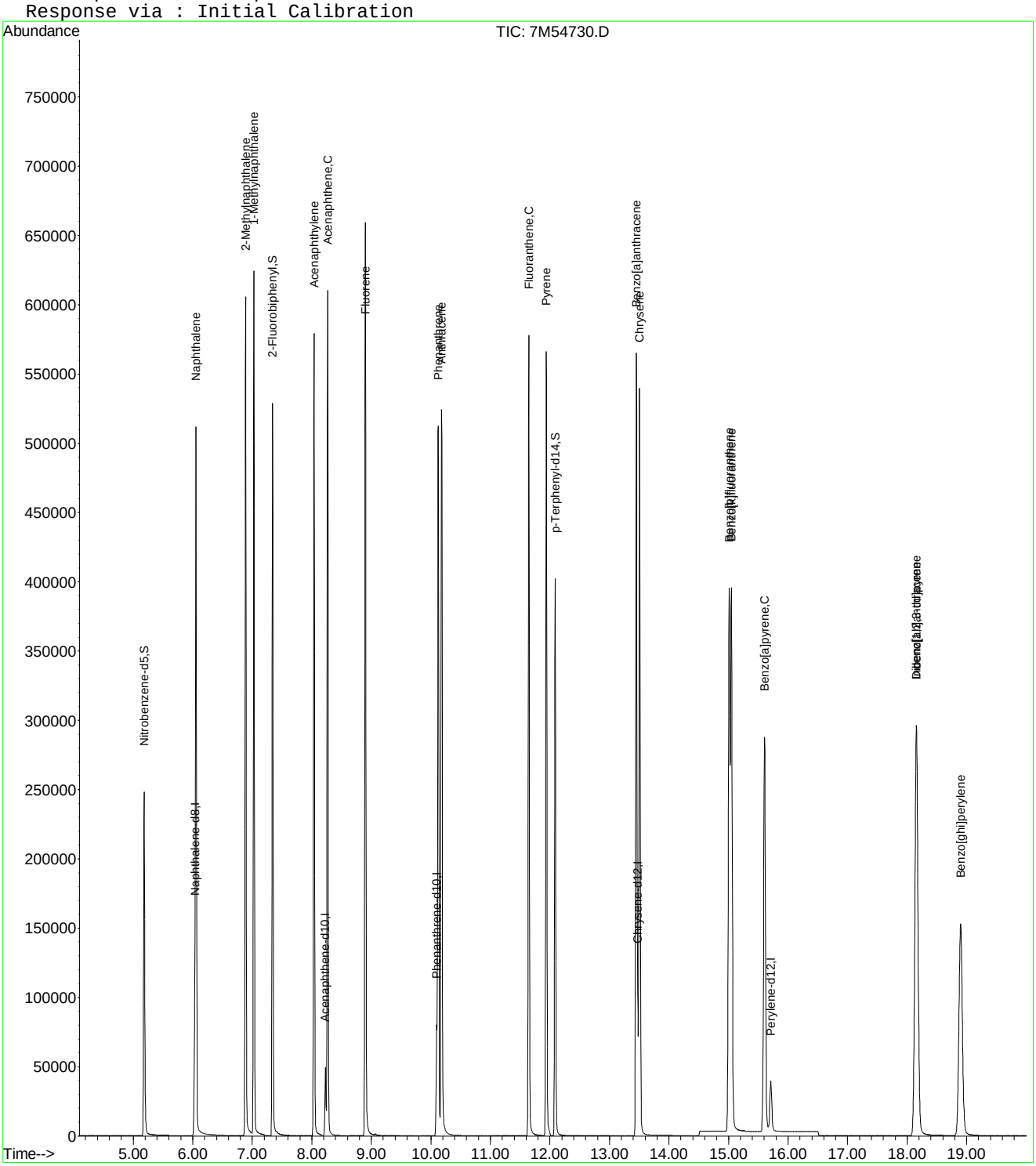
Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu Apr 05 10:57:04 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

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

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

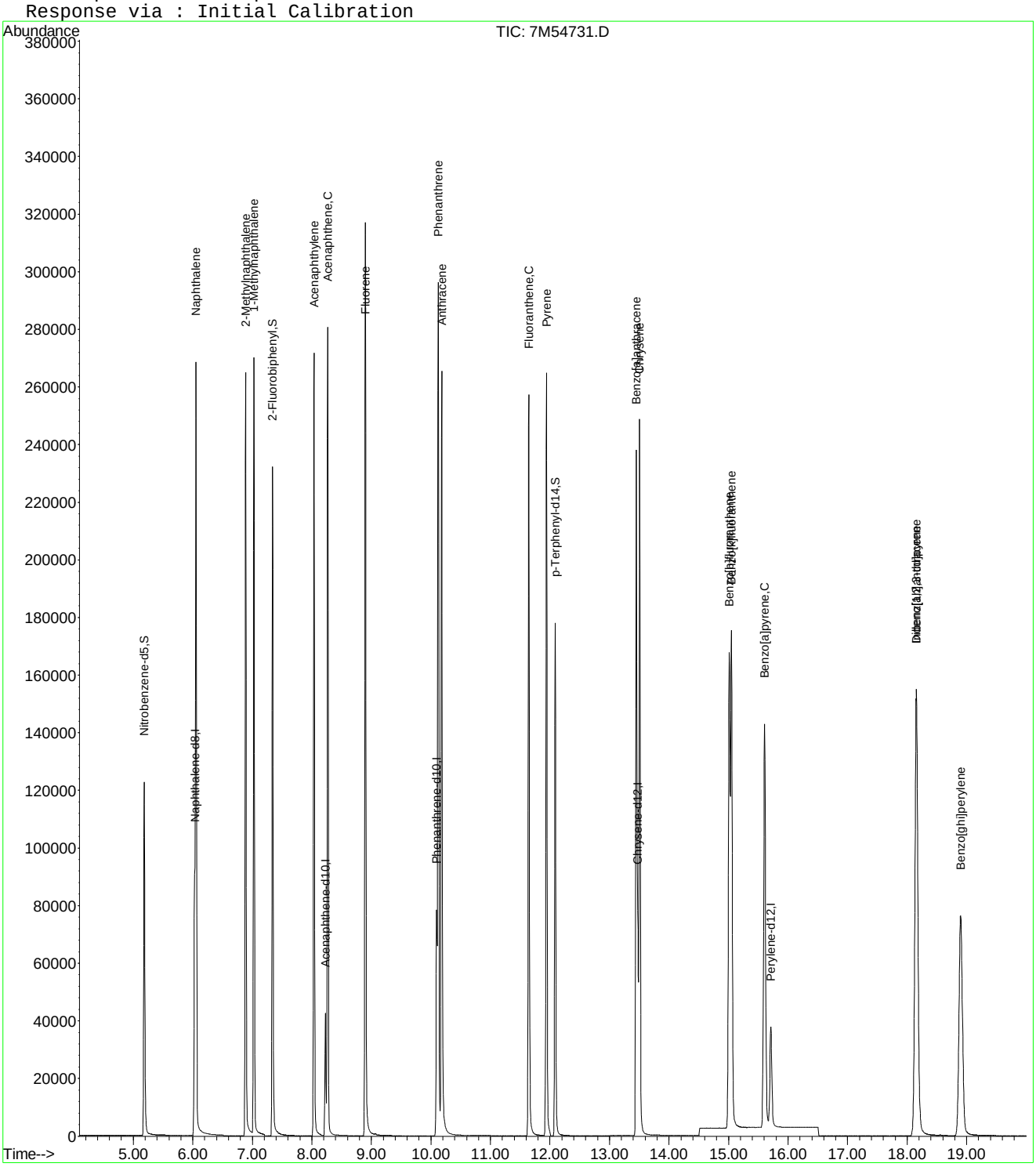
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.03	136	107923	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.23	164	51916	1.00	ug/ml	0.00
11) Phenanthrene-d10	10.10	188	98158	1.00	ug/ml	0.00
15) Chrysene-d12	13.48	240	84003	1.00	ug/ml	0.00
20) Perylene-d12	15.71	264	82066	1.00	ug/ml	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

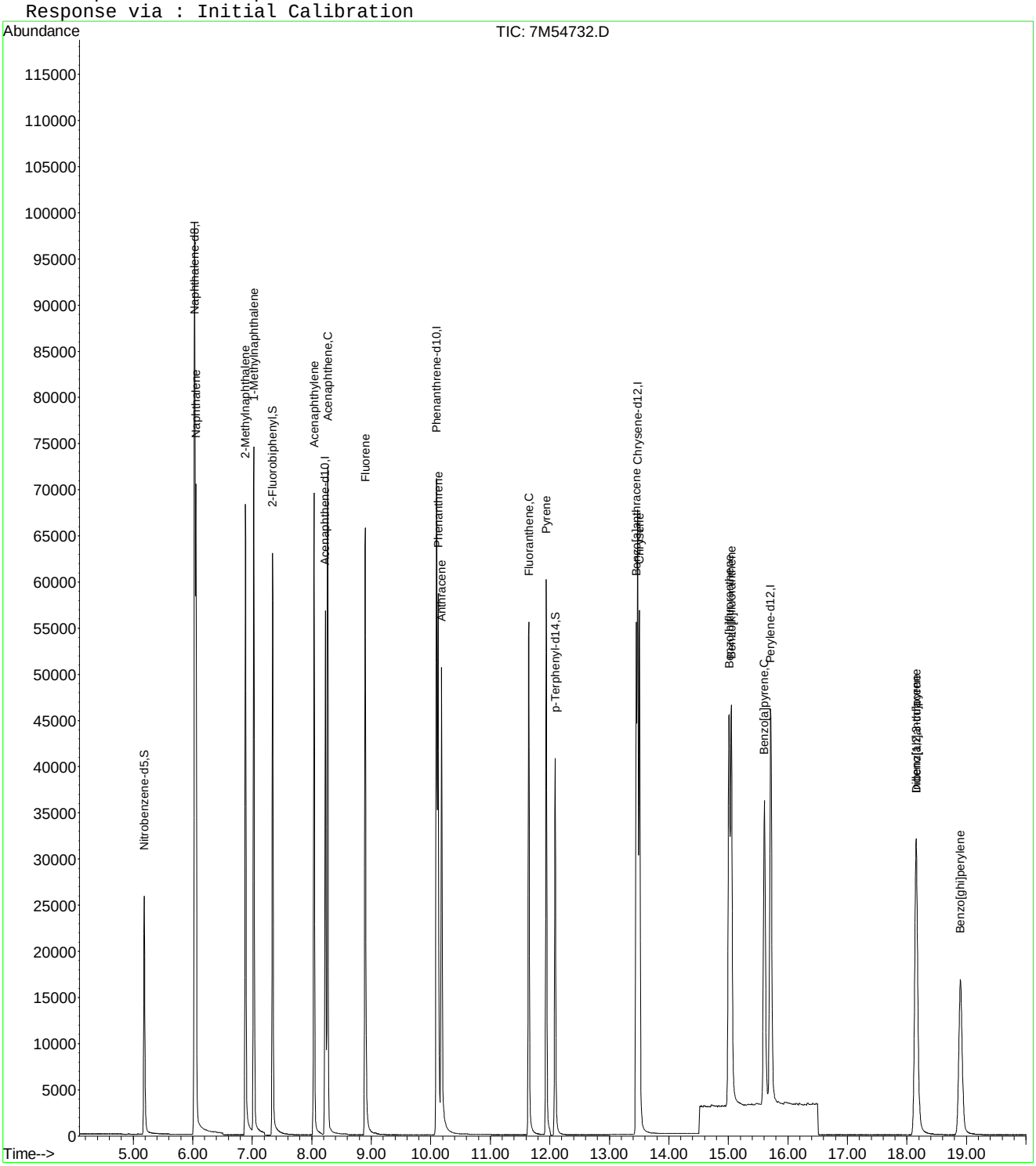
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.03	136	124416	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.23	164	72846	1.00	ug/ml	0.00
11) Phenanthrene-d10	10.09	188	97007	1.00	ug/ml	0.00
15) Chrysene-d12	13.48	240	93356	1.00	ug/ml	0.00
20) Perylene-d12	15.71	264	102269	1.00	ug/ml	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
7M54732.D SIMPAHL.M Thu Apr 05 13:50:26 2012 Page 1

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



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

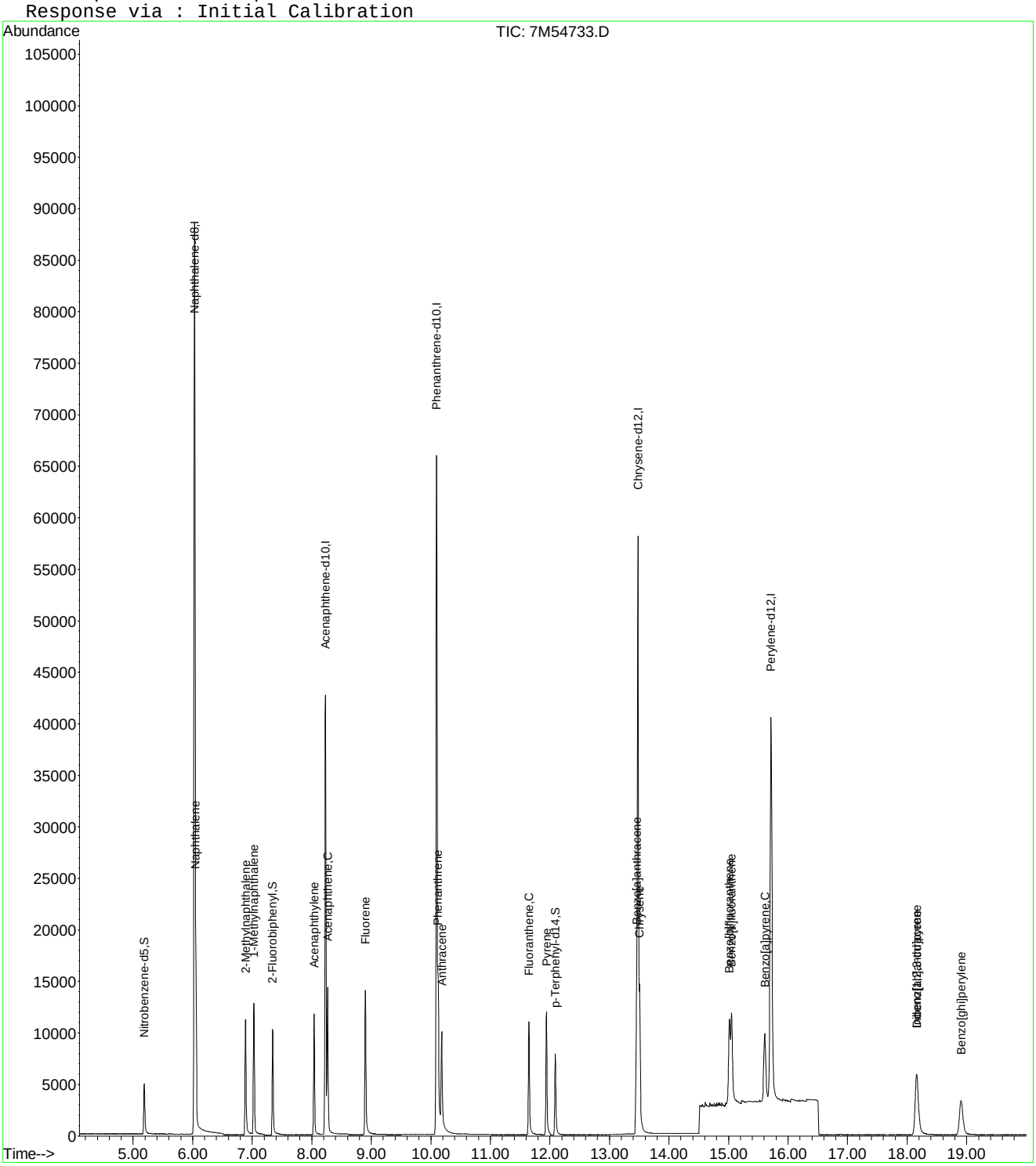
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.03	136	111904	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.23	164	58154	1.00	ug/ml	0.00
11) Phenanthrene-d10	10.10	188	92508	1.00	ug/ml	0.00
15) Chrysene-d12	13.48	240	83643	1.00	ug/ml	0.00
20) Perylene-d12	15.71	264	89887	1.00	ug/ml	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
7M54733.D SIMPAHL.M Thu Apr 05 13:50:27 2012 Page 1

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

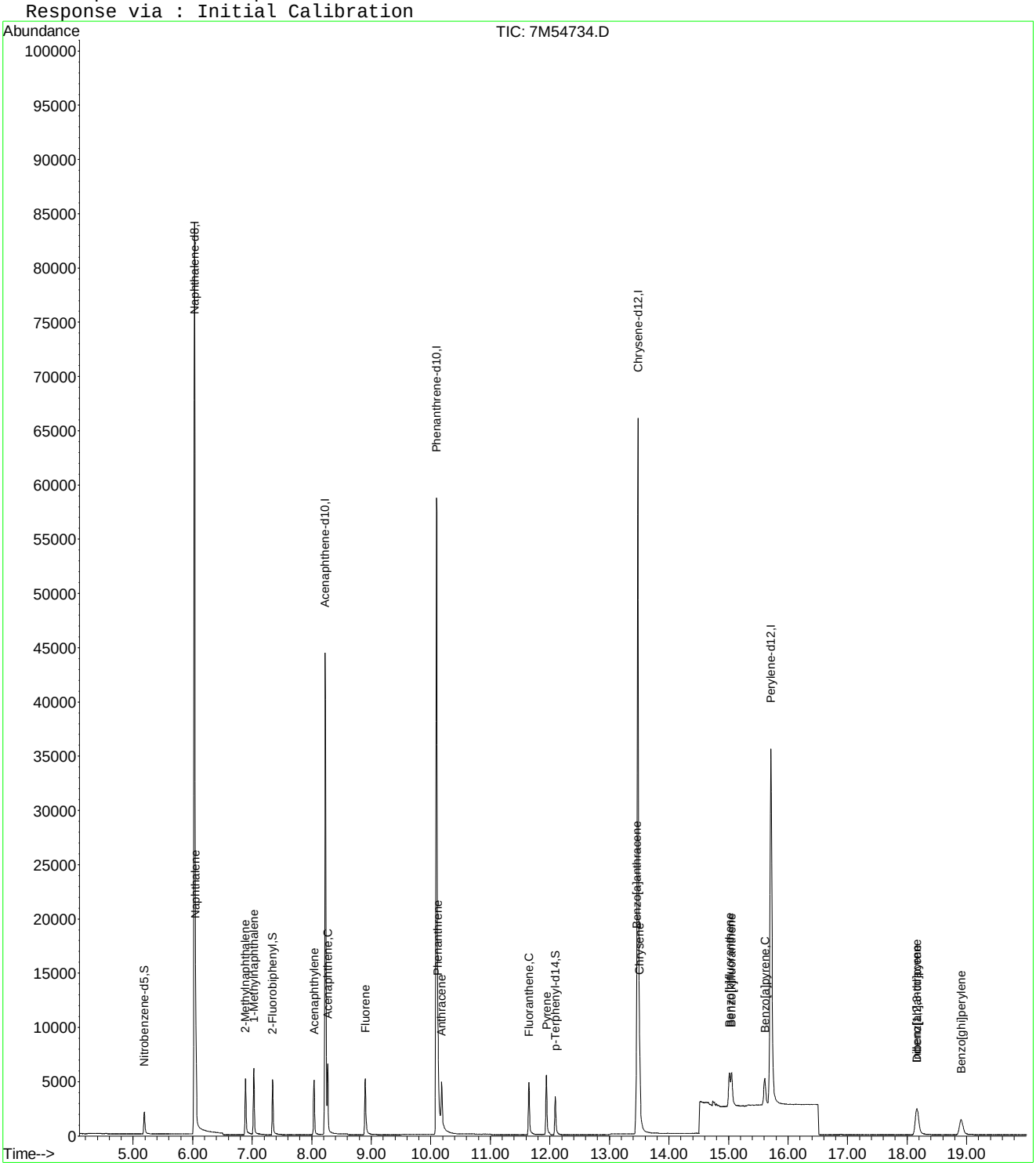
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.03	136	109028	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.23	164	59339	1.00	ug/ml	0.00
11) Phenanthrene-d10	10.09	188	88697	1.00	ug/ml	0.00
15) Chrysene-d12	13.48	240	96074	1.00	ug/ml	0.00
20) Perylene-d12	15.71	264	80216	1.00	ug/ml	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



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

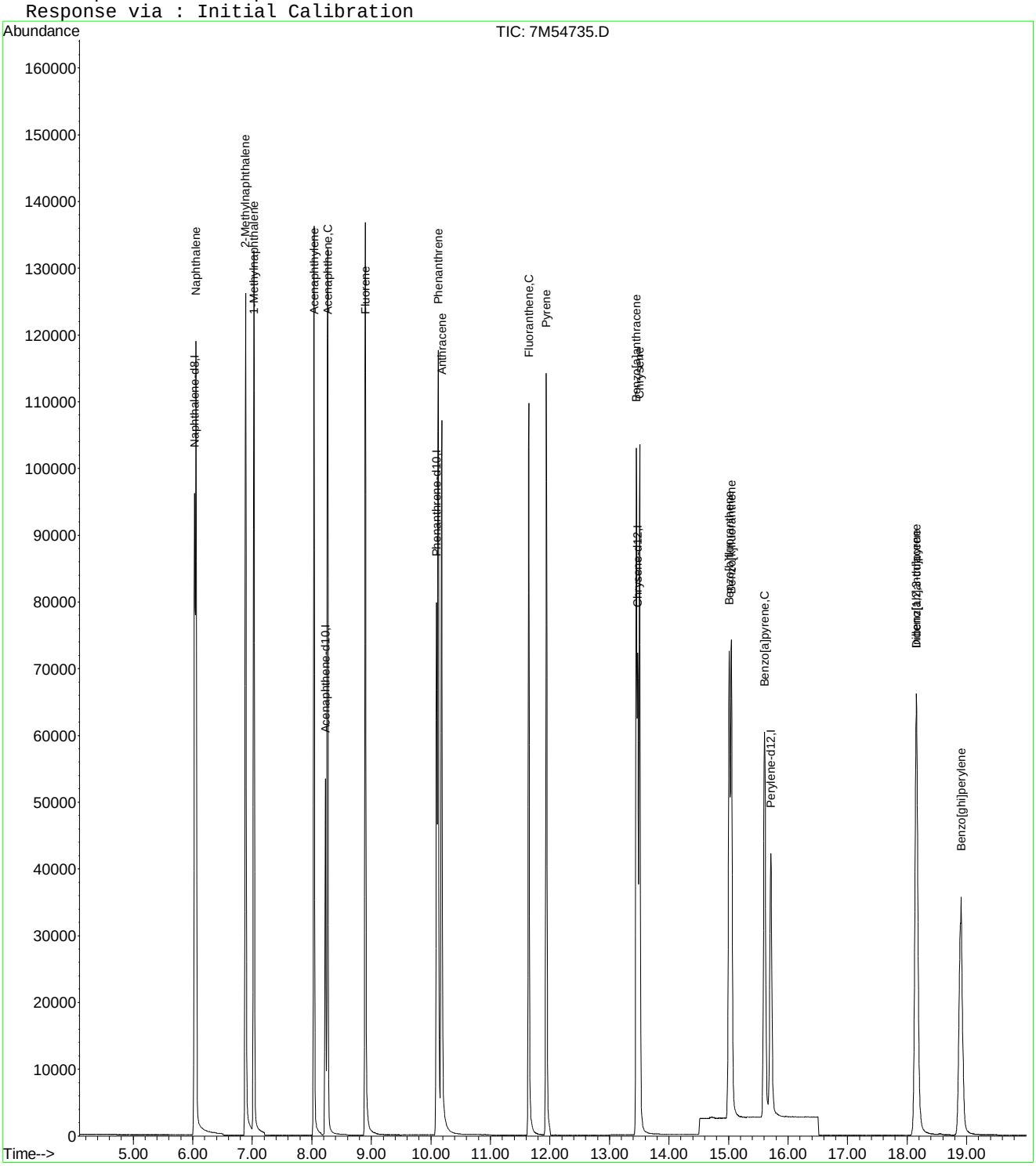
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.03	136	120214	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.23	164	64322	1.00	ug/ml	0.00
11) Phenanthrene-d10	10.09	188	106999	1.00	ug/ml	0.00
15) Chrysene-d12	13.48	240	92251	1.00	ug/ml	0.00
20) Perylene-d12	15.71	264	93409	1.00	ug/ml	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



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\051012\7M54951.D Vial: 2
Acq On : 10 May 2012 8:39 am Operator: CAA
Sample : WG397598-02 1PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 10 09:00:20 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 10 07:59:35 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

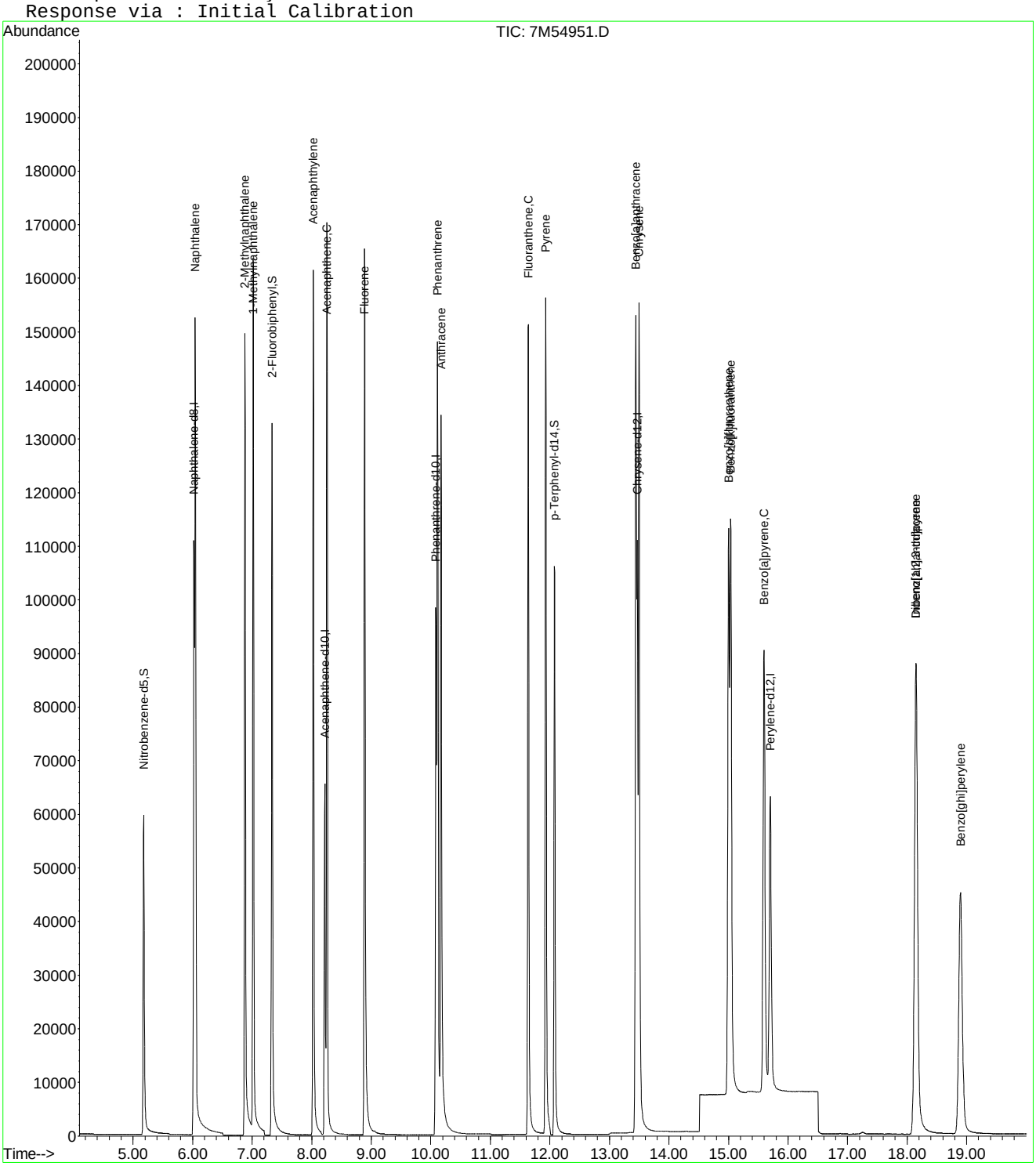
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.02	136	151009	1.00	ug/ml	-0.01
6) Acenaphthene-d10	8.22	164	88860	1.00	ug/ml	-0.01
11) Phenanthrene-d10	10.08	188	145629	1.00	ug/ml	-0.01
15) Chrysene-d12	13.47	240	141597	1.00	ug/ml	-0.01
20) Perylene-d12	15.70	264	133982	1.00	ug/ml	-0.01
System Monitoring Compounds						
2) Nitrobenzene-d5	5.18	82	60811	0.9642	ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery = 38.40%			
7) 2-Fluorobiphenyl	7.33	172	138327	0.9412	ug/ml	-0.01
Spiked Amount 2.500	Range 43 - 116		Recovery = 37.60%#			
17) p-Terphenyl-d14	12.08	244	119417	0.9090	ug/ml	-0.01
Spiked Amount 2.500	Range 33 - 141		Recovery = 36.40%			
Target Compounds						Qvalue
3) Naphthalene	6.04	128	173712	0.9716	ug/ml	99
4) 2-Methylnaphthalene	6.88	142	110975	1.0187	ug/ml	99
5) 1-Methylnaphthalene	7.02	142	114425	1.0288	ug/ml	99
8) Acenaphthylene	8.03	152	191403	0.9742	ug/ml	100
9) Acenaphthene	8.26	154	105105	0.9350	ug/ml	99
10) Fluorene	8.89	166	124213	0.9300	ug/ml	100
12) Phenanthrene	10.11	178	162657	0.8979	ug/ml	100
13) Anthracene	10.17	178	174142	0.9570	ug/ml	100
14) Fluoranthene	11.63	202	186695	0.9837	ug/ml	100
16) Pyrene	11.93	202	209820	0.9219	ug/ml	99
18) Benzo[a]anthracene	13.44	228	174163	0.9480	ug/ml	99
19) Chrysene	13.50	228	177447	0.9710	ug/ml	99
21) Benzo[b]fluoranthene	15.00	252	165918	0.8977	ug/ml	100
22) Benzo[k]fluoranthene	15.04	252	175964	1.0061	ug/ml	95
23) Benzo[a]pyrene	15.60	252	170497	0.9908	ug/ml	100
24) Indeno[1,2,3-cd]pyrene	18.15	276	187797	0.9972	ug/ml	100
25) Dibenz[ah]anthracene	18.15	278	159844	1.0028	ug/ml	100
26) Benzo[ghi]perylene	18.90	276	158511	0.9545	ug/ml	100

(#) = qualifier out of range (m) = manual integration
7M54951.D SIMPAHL.M Fri May 11 07:17:06 2012 Page 1

Quantitation Report (QT Reviewed)

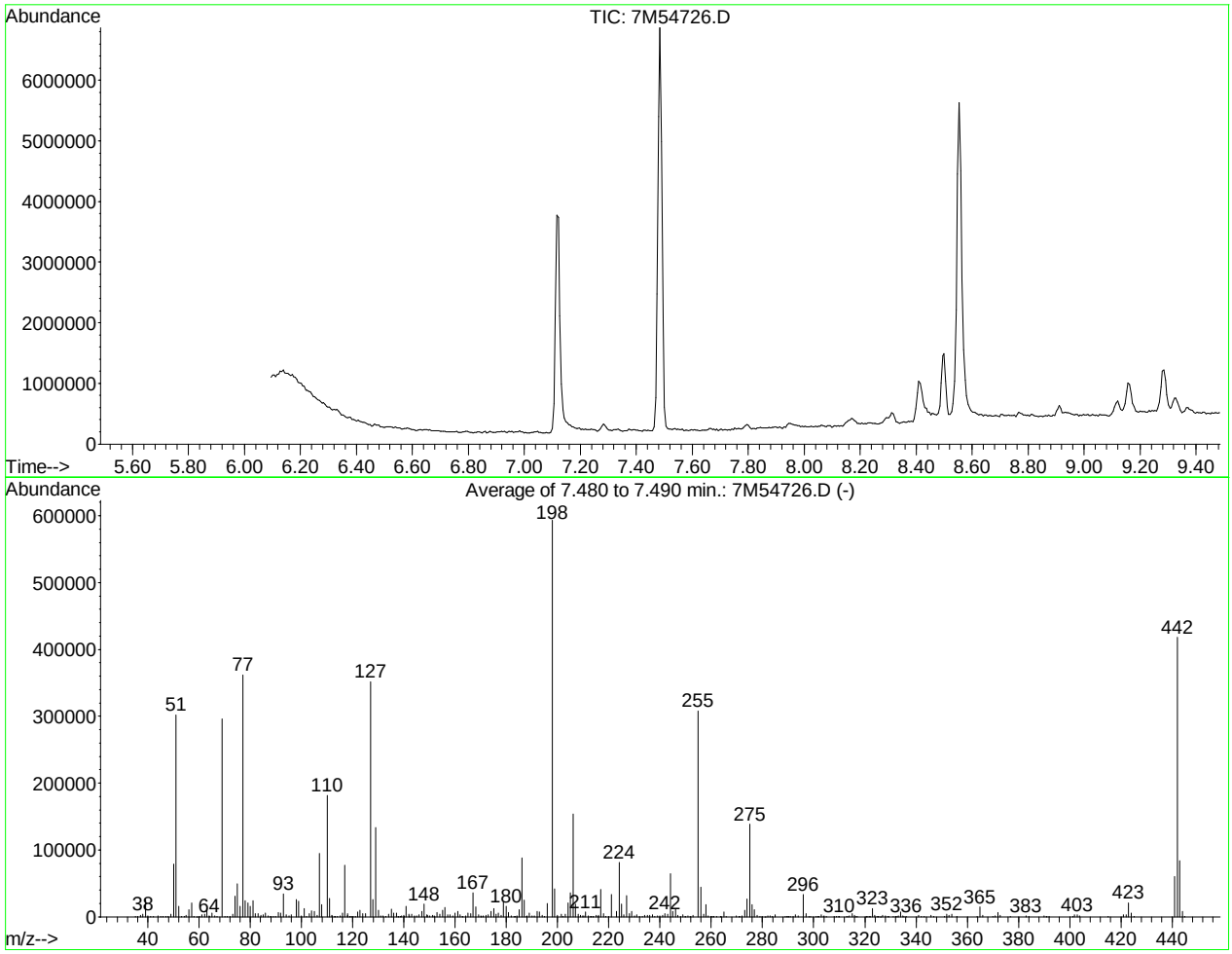
Data File : C:\MSDCHEM\1\DATA\051012\7M54951.D Vial: 2
Acq On : 10 May 2012 8:39 am Operator: CAA
Sample : WG397598-02 1PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 10 9:00 2012 Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu May 10 07:59:35 2012
Response via : Initial Calibration



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

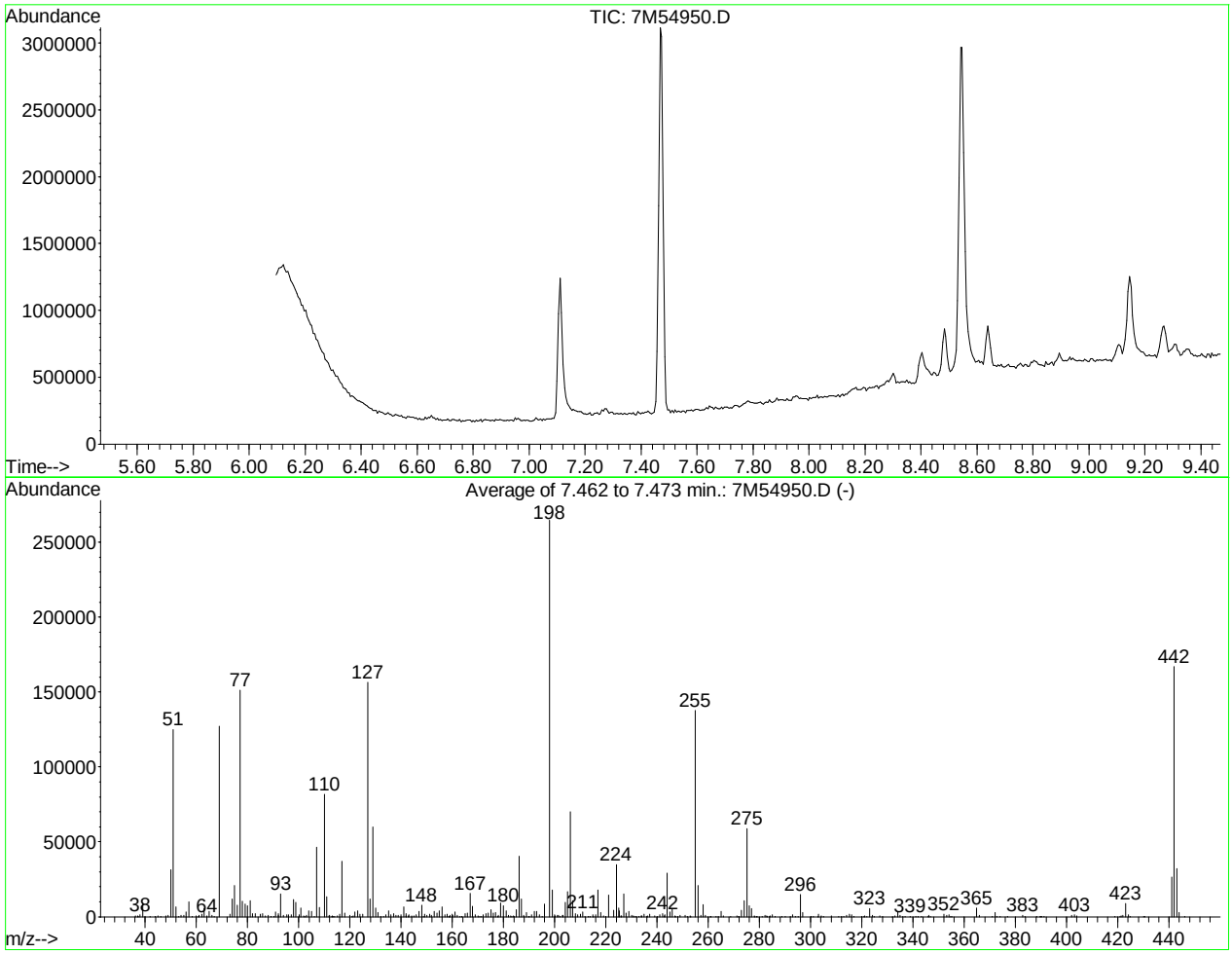


AutoFind: Scans 260, 261, 262; Background Corrected with Scan 254

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\051012\7M54950.D Vial: 1
Acq On : 10 May 2012 8:22 am Operator: CAA
Sample : WG397598-01 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



AutoFind: Scans 257, 258, 259; Background Corrected with Scan 248

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	47.2	124912	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	48.0	127141	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	59.1	156453	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	264789	PASS
199	198	5	9	6.8	17904	PASS
275	198	10	30	22.3	58970	PASS
365	198	1	100	2.2	5832	PASS
441	443	0.01	100	82.5	26460	PASS
442	198	40	100	63.0	166920	PASS
443	442	17	23	19.2	32073	PASS

7M54950.D DFTPP.M Fri May 11 07:16:49 2012

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\051012\7M54952.D Vial: 3
Acq On : 10 May 2012 9:07 am Operator: CAA
Sample : WG397431-02 BLK 05/09 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 07:17:20 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 : Fri May 11 07:17:07 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.02	136	137435	1.00	ug/ml	-0.01
6) Acenaphthene-d10	8.21	164	86687	1.00	ug/ml	-0.02
11) Phenanthrene-d10	10.08	188	143904	1.00	ug/ml	-0.01
15) Chrysene-d12	13.47	240	139178	1.00	ug/ml	-0.01
20) Perylene-d12	15.70	264	129158	1.00	ug/ml	-0.01

System Monitoring Compounds						
2) Nitrobenzene-d5	5.17	82	114023	1.9865	ug/ml	-0.01
Spiked Amount 2.500	Range 35 - 114		Recovery = 79.60%			
7) 2-Fluorobiphenyl	7.33	172	261745	1.8256	ug/ml	-0.01
Spiked Amount 2.500	Range 43 - 116		Recovery = 73.20%			
17) p-Terphenyl-d14	12.07	244	303866	2.3533	ug/ml	-0.01
Spiked Amount 2.500	Range 33 - 141		Recovery = 94.00%			

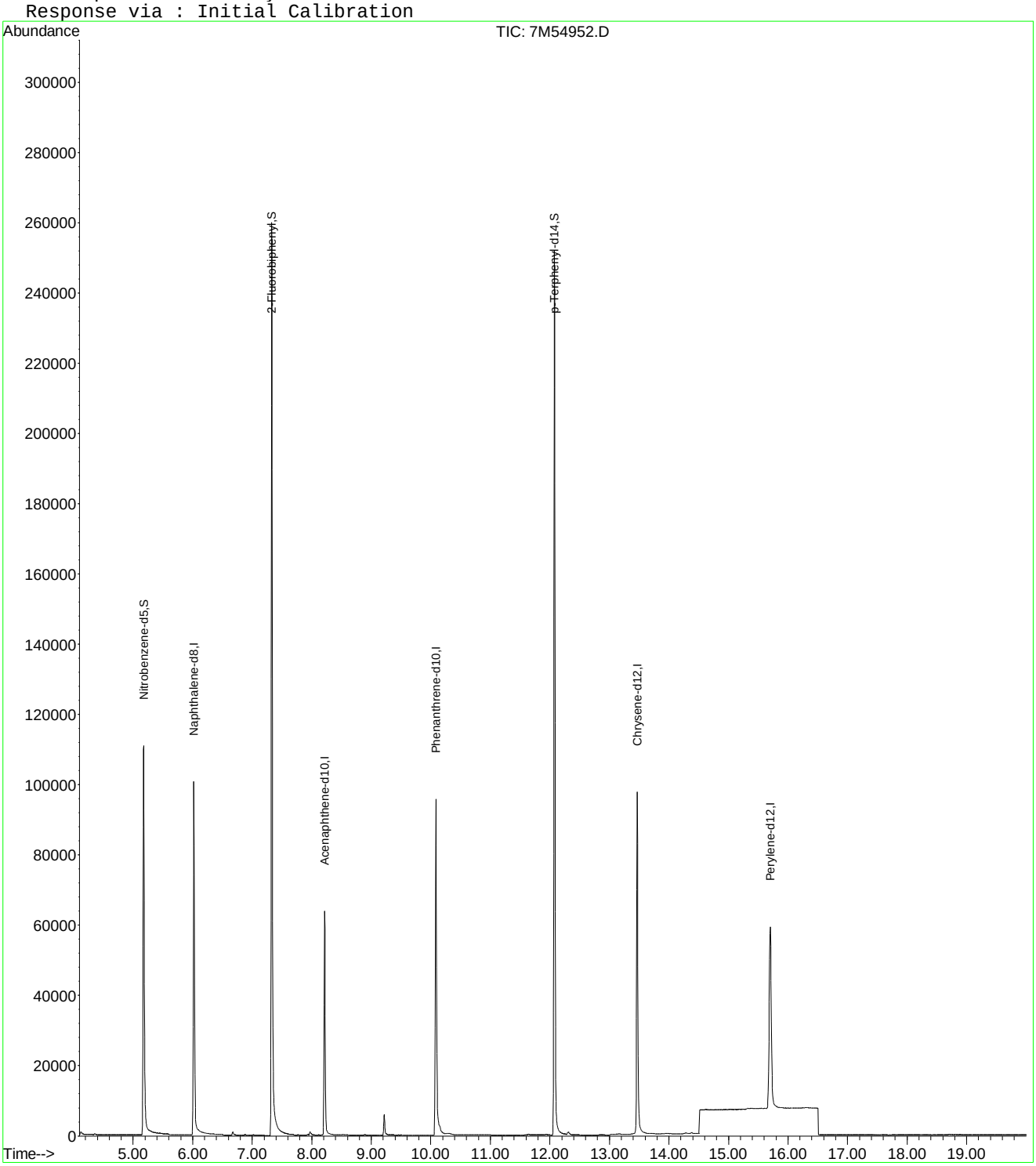
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
7M54952.D SIMPAHL.M Fri May 11 07:24:00 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\051012\7M54952.D Vial: 3
Acq On : 10 May 2012 9:07 am Operator: CAA
Sample : WG397431-02 BLK 05/09 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 7:17 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 : Fri May 11 07:17:07 2012
Response via : Initial Calibration



7M54952.D SIMPAHL.M Fri May 11 07:24:00 2012 Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\051012\7M54953.D Vial: 4
Acq On : 10 May 2012 9:35 am Operator: CAA
Sample : WG397431-03 LCS 05/09 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 07:17:20 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 : Fri May 11 07:17:07 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

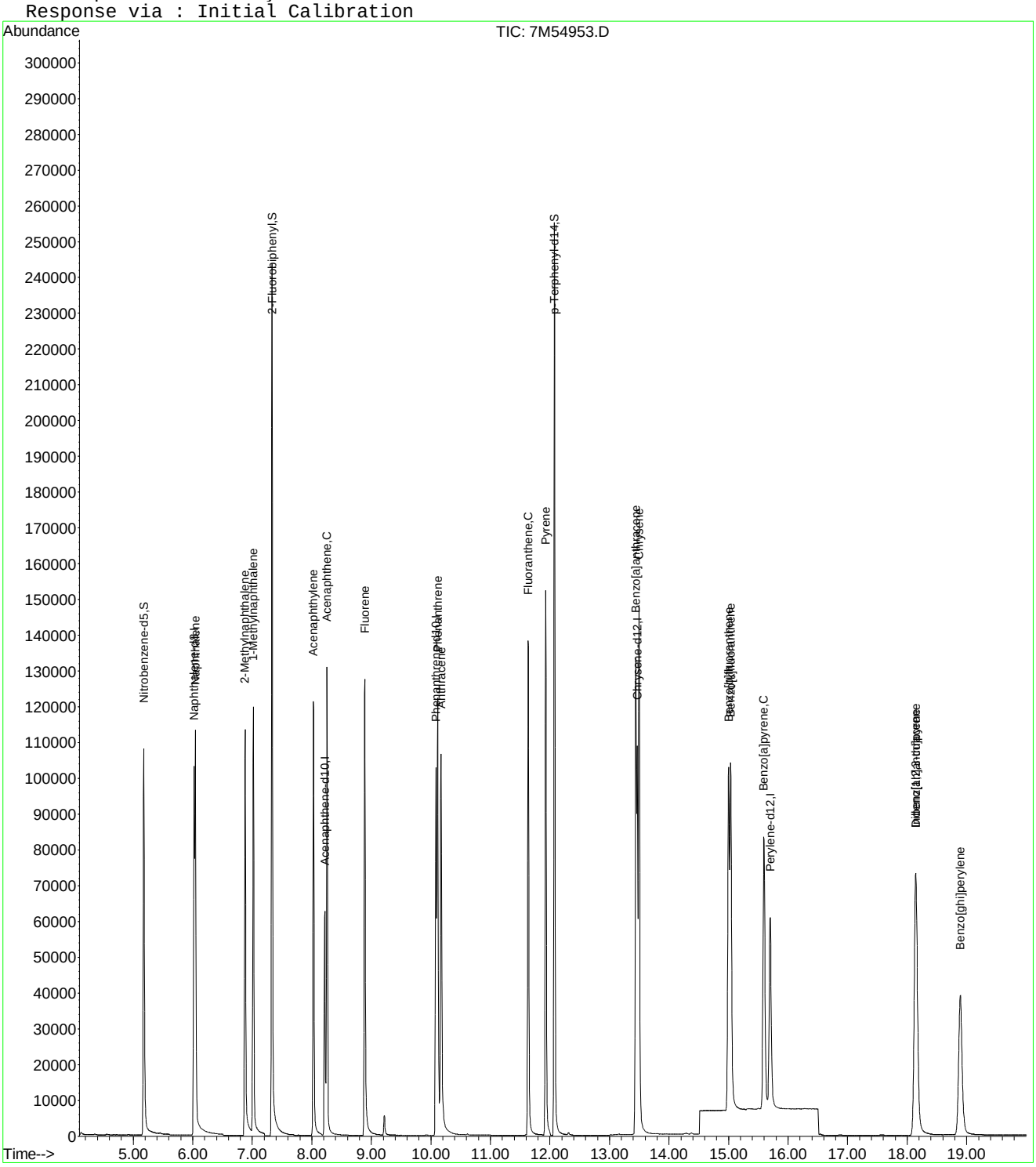
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.02	136	139544	1.00	ug/ml	-0.01
6) Acenaphthene-d10	8.22	164	86699	1.00	ug/ml	-0.01
11) Phenanthrene-d10	10.08	188	145577	1.00	ug/ml	-0.01
15) Chrysene-d12	13.47	240	141383	1.00	ug/ml	-0.01
20) Perylene-d12	15.70	264	131125	1.00	ug/ml	-0.01
System Monitoring Compounds						
2) Nitrobenzene-d5	5.18	82	109055	1.8713	ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery = 74.80%			
7) 2-Fluorobiphenyl	7.33	172	247068	1.7230	ug/ml	-0.02
Spiked Amount 2.500	Range 43 - 116		Recovery = 68.80%			
17) p-Terphenyl-d14	12.07	244	296494	2.2604	ug/ml	-0.02
Spiked Amount 2.500	Range 33 - 141		Recovery = 90.40%			
Target Compounds						Qvalue
3) Naphthalene	6.04	128	127979	0.7747	ug/ml	100
4) 2-Methylnaphthalene	6.88	142	85302	0.8473	ug/ml	99
5) 1-Methylnaphthalene	7.02	142	81866	0.7965	ug/ml	99
8) Acenaphthylene	8.02	152	145882	0.7610	ug/ml	99
9) Acenaphthene	8.25	154	79697	0.7267	ug/ml	100
10) Fluorene	8.89	166	96057	0.7371	ug/ml	100
12) Phenanthrene	10.11	178	130276	0.7194	ug/ml	100
13) Anthracene	10.17	178	140875	0.7745	ug/ml	99
14) Fluoranthene	11.63	202	167109	0.8808	ug/ml	100
16) Pyrene	11.93	202	194396	0.8555	ug/ml	99
18) Benzo[a]anthracene	13.44	228	146883	0.8007	ug/ml	99
19) Chrysene	13.50	228	161289	0.8839	ug/ml	99
21) Benzo[b]fluoranthene	15.00	252	150048	0.8295	ug/ml	100
22) Benzo[k]fluoranthene	15.04	252	152987	0.8938	ug/ml	99
23) Benzo[a]pyrene	15.59	252	152217	0.9038	ug/ml	100
24) Indeno[1,2,3-cd]pyrene	18.15	276	158773	0.8614	ug/ml	100
25) Dibenz[ah]anthracene	18.14	278	129340	0.8291	ug/ml	100
26) Benzo[ghi]perylene	18.89	276	133884	0.8237	ug/ml	99

(#) = qualifier out of range (m) = manual integration
7M54953.D SIMPAHL.M Fri May 11 07:20:46 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\051012\7M54953.D Vial: 4
Acq On : 10 May 2012 9:35 am Operator: CAA
Sample : WG397431-03 LCS 05/09 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 7:17 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 : Fri May 11 07:17:07 2012
Response via : Initial Calibration



2.3 Metals Data

2.3.1 Metals I C P Data

2.3.1.1 Summary Data

Login Number: L12050153
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: WG397367 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

Narrative ID: 46139
Approved By: Sheri Pfalzgraf

Certificate of Analysis

Sample #: L12050153-01 | **PrePrep Method:** N/A | **Instrument:** PE-ICP2
Client ID: MW-15-050312 | **Prep Method:** 3005A | **Prep Date:** 05/08/2012 13:08
Matrix: Water | **Analytical Method:** 6010B | **Cal Date:** 05/10/2012 09:21
Workgroup #: WG397367 | **Analyst:** KHR | **Run Date:** 05/10/2012 11:04
Collect Date: 05/03/2012 10:45 | **Dilution:** 1 | **File ID:** P2.051012.110419
Sample Tag: 01 | **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5		U	0.100	0.0500
Barium, Total	7440-39-3	0.0417		0.0100	0.00250
Beryllium, Total	7440-41-7		U	0.00200	0.000500
Cadmium, Total	7440-43-9	0.000373		0.000500	0.000250
Calcium, Total	7440-70-2	64.3		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	0.0129		0.0200	0.00500
Iron, Total	7439-89-6	0.0770		0.100	0.0250
Magnesium, Total	7439-95-4	14.2		0.500	0.250
Manganese, Total	7439-96-5	0.00503		0.0100	0.00500
Nickel, Total	7440-02-0		U	0.0400	0.00500
Potassium, Total	7440-09-7	3.16		1.00	0.250
Silver, Total	7440-22-4		U	0.0100	0.00500
Sodium, Total	7440-23-5	57.6		0.500	0.250
Vanadium, Total	7440-62-2	0.00794		0.0100	0.00500
Zinc, Total	7440-66-6	0.0815		0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Sample #: L12050153-02 | **PrePrep Method:** N/A | **Instrument:** PE-ICP2
Client ID: MW-15-050312 | **Prep Method:** 3005A | **Prep Date:** 05/08/2012 13:08
Matrix: Water | **Analytical Method:** 6010B | **Cal Date:** 05/10/2012 09:21
Workgroup #: WG397367 | **Analyst:** KHR | **Run Date:** 05/10/2012 11:11
Collect Date: 05/03/2012 10:45 | **Dilution:** 1 | **File ID:** P2.051012.111116
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	0.0414		0.0100	0.00250
Beryllium, Dissolved	7440-41-7		U	0.00200	0.000500
Cadmium, Dissolved	7440-43-9	0.000376		0.000500	0.000250
Calcium, Dissolved	7440-70-2	64.4		0.200	0.100
Chromium, Dissolved	7440-47-3		U	0.00500	0.00250

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Cobalt, Dissolved	7440-48-4		U	0.0200	0.00250
Copper, Dissolved	7440-50-8	0.0123		0.0200	0.00500
Iron, Dissolved	7439-89-6		U	0.100	0.0250
Magnesium, Dissolved	7439-95-4	14.2		0.500	0.250
Manganese, Dissolved	7439-96-5		U	0.0100	0.00500
Nickel, Dissolved	7440-02-0		U	0.0400	0.00500
Potassium, Dissolved	7440-09-7	3.07		1.00	0.250
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Sodium, Dissolved	7440-23-5	58.1		0.500	0.250
Vanadium, Dissolved	7440-62-2	0.00698		0.0100	0.00500
Zinc, Dissolved	7440-66-6	0.0821		0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Sample #: L12050153-03
Client ID: MW-17-050312
Matrix: Water
Workgroup #: WG397367
Collect Date: 05/03/2012 11:30
Sample Tag: 01

PrePrep Method: N/A
Prep Method: 3005A
Analytical Method: 6010B
Analyst: KHR
Dilution: 1
Units: mg/L

Instrument: PE-ICP2
Prep Date: 05/08/2012 13:08
Cal Date: 05/10/2012 09:21
Run Date: 05/10/2012 11:18
File ID: P2.051012.111816

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5		U	0.100	0.0500
Barium, Total	7440-39-3	0.141		0.0100	0.00250
Beryllium, Total	7440-41-7		U	0.00200	0.000500
Cadmium, Total	7440-43-9	0.000638		0.000500	0.000250
Calcium, Total	7440-70-2	249		0.200	0.100
Chromium, Total	7440-47-3		U	0.00500	0.00250
Cobalt, Total	7440-48-4	0.00783		0.0200	0.00250
Copper, Total	7440-50-8		U	0.0200	0.00500
Iron, Total	7439-89-6	6.66		0.100	0.0250
Magnesium, Total	7439-95-4	45.0		0.500	0.250
Manganese, Total	7439-96-5	0.696		0.0100	0.00500
Nickel, Total	7440-02-0	0.00577		0.0400	0.00500
Potassium, Total	7440-09-7	6.63		1.00	0.250
Silver, Total	7440-22-4		U	0.0100	0.00500
Sodium, Total	7440-23-5	75.9		0.500	0.250
Vanadium, Total	7440-62-2	0.00976		0.0100	0.00500
Zinc, Total	7440-66-6	0.0177		0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #: L12050153-04 | **PrePrep Method:** N/A | **Instrument:** PE-ICP2
Client ID: MW-17-050312 | **Prep Method:** 3005A | **Prep Date:** 05/08/2012 13:08
Matrix: Water | **Analytical Method:** 6010B | **Cal Date:** 05/10/2012 09:21
Workgroup #: WG397367 | **Analyst:** KHR | **Run Date:** 05/10/2012 11:49
Collect Date: 05/03/2012 11:30 | **Dilution:** 1 | **File ID:** P2.051012.114915
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	0.155		0.0100	0.00250
Beryllium, Dissolved	7440-41-7		U	0.00200	0.000500
Cadmium, Dissolved	7440-43-9	0.000784		0.000500	0.000250
Calcium, Dissolved	7440-70-2	252		0.200	0.100
Chromium, Dissolved	7440-47-3		U	0.00500	0.00250
Cobalt, Dissolved	7440-48-4	0.00780		0.0200	0.00250
Copper, Dissolved	7440-50-8		U	0.0200	0.00500
Iron, Dissolved	7439-89-6	7.28		0.100	0.0250
Magnesium, Dissolved	7439-95-4	46.6		0.500	0.250
Manganese, Dissolved	7439-96-5	0.677		0.0100	0.00500
Nickel, Dissolved	7440-02-0	0.00626		0.0400	0.00500
Potassium, Dissolved	7440-09-7	6.76		1.00	0.250
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Sodium, Dissolved	7440-23-5	79.2		0.500	0.250
Vanadium, Dissolved	7440-62-2	0.00881		0.0100	0.00500
Zinc, Dissolved	7440-66-6	0.0209		0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Sample #: L12050153-05 | **PrePrep Method:** N/A | **Instrument:** PE-ICP2
Client ID: MW-28050312 | **Prep Method:** 3005A | **Prep Date:** 05/08/2012 13:08
Matrix: Water | **Analytical Method:** 6010B | **Cal Date:** 05/10/2012 09:21
Workgroup #: WG397367 | **Analyst:** KHR | **Run Date:** 05/10/2012 11:55
Collect Date: 05/03/2012 15:00 | **Dilution:** 1 | **File ID:** P2.051012.115516
Sample Tag: 01 | **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	0.334		0.100	0.0500
Barium, Total	7440-39-3	0.113		0.0100	0.00250
Beryllium, Total	7440-41-7		U	0.00200	0.000500
Cadmium, Total	7440-43-9	0.00124		0.000500	0.000250
Calcium, Total	7440-70-2	138		0.200	0.100
Chromium, Total	7440-47-3		U	0.00500	0.00250

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Cobalt, Total	7440-48-4	0.0499		0.0200	0.00250
Copper, Total	7440-50-8	0.0410		0.0200	0.00500
Iron, Total	7439-89-6	9.15		0.100	0.0250
Magnesium, Total	7439-95-4	24.7		0.500	0.250
Manganese, Total	7439-96-5	1.29		0.0100	0.00500
Nickel, Total	7440-02-0	0.0151		0.0400	0.00500
Potassium, Total	7440-09-7	3.33		1.00	0.250
Silver, Total	7440-22-4		U	0.0100	0.00500
Sodium, Total	7440-23-5	72.3		0.500	0.250
Vanadium, Total	7440-62-2	0.00966		0.0100	0.00500
Zinc, Total	7440-66-6	0.152		0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Sample #: L12050153-06
Client ID: MW-28050312
Matrix: Water
Workgroup #: WG397367
Collect Date: 05/03/2012 15:00
Sample Tag: 01

PrePrep Method: N/A
Prep Method: 3005A
Analytical Method: 6010B
Analyst: KHR
Dilution: 1
Units: mg/L

Instrument: PE-ICP2
Prep Date: 05/08/2012 13:08
Cal Date: 05/10/2012 09:21
Run Date: 05/10/2012 12:01
File ID: P2.051012.120114

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Dissolved	7429-90-5		U	0.100	0.0500
Barium, Dissolved	7440-39-3	0.107		0.0100	0.00250
Beryllium, Dissolved	7440-41-7		U	0.00200	0.000500
Cadmium, Dissolved	7440-43-9	0.000945		0.000500	0.000250
Calcium, Dissolved	7440-70-2	131		0.200	0.100
Chromium, Dissolved	7440-47-3		U	0.00500	0.00250
Cobalt, Dissolved	7440-48-4	0.0480		0.0200	0.00250
Copper, Dissolved	7440-50-8	0.0123		0.0200	0.00500
Iron, Dissolved	7439-89-6	8.56		0.100	0.0250
Magnesium, Dissolved	7439-95-4	24.6		0.500	0.250
Manganese, Dissolved	7439-96-5	1.24		0.0100	0.00500
Nickel, Dissolved	7440-02-0	0.0139		0.0400	0.00500
Potassium, Dissolved	7440-09-7	3.22		1.00	0.250
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Sodium, Dissolved	7440-23-5	69.9		0.500	0.250
Vanadium, Dissolved	7440-62-2	0.00715		0.0100	0.00500
Zinc, Dissolved	7440-66-6	0.136		0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #: L12050153-07 **PrePrep Method:** N/A **Instrument:** PE-ICP2
Client ID: TW-02-050312 **Prep Method:** 3005A **Prep Date:** 05/08/2012 13:08
Matrix: Water **Analytical Method:** 6010B **Cal Date:** 05/10/2012 09:21
Workgroup #: WG397367 **Analyst:** KHR **Run Date:** 05/10/2012 12:07
Collect Date: 05/03/2012 13:30 **Dilution:** 1 **File ID:** P2.051012.120713
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	0.191		0.100	0.0500
Barium, Total	7440-39-3	0.217		0.0100	0.00250
Beryllium, Total	7440-41-7		U	0.00200	0.000500
Cadmium, Total	7440-43-9	0.000873		0.000500	0.000250
Calcium, Total	7440-70-2	285		0.200	0.100
Chromium, Total	7440-47-3	0.00252		0.00500	0.00250
Cobalt, Total	7440-48-4	0.00371		0.0200	0.00250
Copper, Total	7440-50-8		U	0.0200	0.00500
Iron, Total	7439-89-6	11.7		0.100	0.0250
Magnesium, Total	7439-95-4	68.1		0.500	0.250
Manganese, Total	7439-96-5	0.531		0.0100	0.00500
Nickel, Total	7440-02-0		U	0.0400	0.00500
Potassium, Total	7440-09-7	5.49		1.00	0.250
Silver, Total	7440-22-4		U	0.0100	0.00500
Sodium, Total	7440-23-5	144		0.500	0.250
Vanadium, Total	7440-62-2	0.0108		0.0100	0.00500
Zinc, Total	7440-66-6	0.0551		0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Sample #: L12050153-08 **PrePrep Method:** N/A **Instrument:** PE-ICP2
Client ID: TW-02-050312 **Prep Method:** 3005A **Prep Date:** 05/08/2012 13:08
Matrix: Water **Analytical Method:** 6010B **Cal Date:** 05/10/2012 09:21
Workgroup #: WG397367 **Analyst:** KHR **Run Date:** 05/10/2012 12:13
Collect Date: 05/03/2012 13:30 **Dilution:** 1 **File ID:** P2.051012.121312
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	0.224		0.0100	0.00250
Beryllium, Dissolved	7440-41-7		U	0.00200	0.000500
Cadmium, Dissolved	7440-43-9	0.000724		0.000500	0.000250
Calcium, Dissolved	7440-70-2	285		0.200	0.100
Chromium, Dissolved	7440-47-3		U	0.00500	0.00250

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Cobalt, Dissolved	7440-48-4	0.00380		0.0200	0.00250
Copper, Dissolved	7440-50-8		U	0.0200	0.00500
Iron, Dissolved	7439-89-6	11.7		0.100	0.0250
Magnesium, Dissolved	7439-95-4	67.0		0.500	0.250
Manganese, Dissolved	7439-96-5	0.526		0.0100	0.00500
Nickel, Dissolved	7440-02-0		U	0.0400	0.00500
Potassium, Dissolved	7440-09-7	5.59		1.00	0.250
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Sodium, Dissolved	7440-23-5	150		0.500	0.250
Vanadium, Dissolved	7440-62-2	0.0101		0.0100	0.00500
Zinc, Dissolved	7440-66-6	0.0453		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:	WG397283	**SOP:**	ME401 Revison 14
Analyst:	VC	**Spike Solution:**	STD51357
Spike Analyst:	VC	**Spike Witness:**	ERP
Method:	3005A	**HCL Lot #:**	COA16113
Run Date:	05/08/2012 13:08	**HNO3 Lot #:**	COA16033
Hotblock Start Temp:	95.1 @ 07:55	**Digestion Tubes Lot #:**	COA16074
Hotblock End Temp:	94.7 @ 11:55	**ICP;WG378021 Filter Lot**	COA15782

	SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Spike Amount	Due Date
1	WG397283-02	BLANK	1	50 mL	50 mL		
2	WG397283-03	LCS	1	50 mL	50 mL	5 mL	
3	WG397283-01	REF	1	50 mL	50 mL		
4	L12050105-01	RS01	1	50 mL	50 mL		05/17/12
5	L12050105-02	SAMP	1	50 mL	50 mL		05/17/12
6	WG397283-04	MS	1	50 mL	50 mL	5 mL	
7	L12050105-03	MS01	1	50 mL	50 mL	5 mL	05/17/12
8	WG397283-05	MSD	1	50 mL	50 mL	5 mL	
9	L12050105-04	SD01	1	50 mL	50 mL	5 mL	05/17/12
10	L12050105-05	SAMP	1	50 mL	50 mL		05/17/12
11	L12050105-06	SAMP	1	50 mL	50 mL		05/17/12
12	L12050105-07	SAMP	1	50 mL	50 mL		05/17/12
13	L12050105-08	SAMP	1	50 mL	50 mL		05/17/12
14	L12050105-09	SAMP	1	50 mL	50 mL		05/17/12
15	L12050105-10	SAMP	1	50 mL	50 mL		05/17/12
16	L12050153-01	SAMP	1	50 mL	50 mL		05/18/12
17	L12050153-02	SAMP	1	50 mL	50 mL		05/18/12
18	L12050153-03	SAMP	1	50 mL	50 mL		05/18/12
19	L12050153-04	SAMP	1	50 mL	50 mL		05/18/12
20	L12050153-05	SAMP	1	50 mL	50 mL		05/18/12
21	L12050153-06	SAMP	1	50 mL	50 mL		05/18/12
22	L12050153-07	SAMP	1	50 mL	50 mL		05/18/12
23	L12050153-08	SAMP	1	50 mL	50 mL		05/18/12

Analyst: Vicki Collins

Reviewer: Vicki Collins

HB_DIG - Modified 09/30/2009
PDF ID: 2405734
Report generated: 05/08/2012 13:08

Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 051012H.CSV
Analyst1: KHR Analyst2: N/A
Method: 6010 SOP: ME600E Rev: 12
Maintenance Log ID: 41676

Calibration Std: STD51542 ICV Std: STD51543 Post Spike: STD51356
ICSA: STD51556 ICSAB: STD51413 Int. Std: RGT17310
CCV: STD51453 LLCCV:

Workgroups: 397367, 397515, 397342, 397517

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	P2.051012.085514	WG397718-01	Calibration Point		1		05/10/12 08:55
2	P2.051012.090208	WG397718-02	Calibration Point		1		05/10/12 09:02
3	P2.051012.090902	WG397718-03	Calibration Point		1		05/10/12 09:09
4	P2.051012.091557	WG397718-04	Calibration Point		1		05/10/12 09:15
5	P2.051012.092156	WG397718-05	Calibration Point		1		05/10/12 09:21
6	P2.051012.092800	WG397718-06	Initial Calibration Verification		1		05/10/12 09:28
7	P2.051012.093358	WG397718-07	Initial Calib Blank		1		05/10/12 09:33
8	P2.051012.094051	WG397718-08	Interference Check		1		05/10/12 09:40
9	P2.051012.094648	WG397718-09	Interference Check		1		05/10/12 09:46
10	P2.051012.095245	WG397718-10	CCV		1		05/10/12 09:52
11	P2.051012.095847	WG397718-11	CCB		1		05/10/12 09:58
12	P2.051012.100549	ICP FILTER	ICP FILTER		1		05/10/12 10:05
13	P2.051012.101244	L0-.2	0.2 MICRON		1		05/10/12 10:12
14	P2.051012.101937	WG397718-12	CCV		1		05/10/12 10:19
15	P2.051012.102539	WG397718-13	CCB		1		05/10/12 10:25
16	P2.051012.103232	WG397283-02	Method/Prep Blank	50/50	1		05/10/12 10:32
17	P2.051012.103927	WG397283-03	Laboratory Control S	50/50	1		05/10/12 10:39
18	P2.051012.104526	WG397283-01	Reference Sample		10	L12050105-01	05/10/12 10:45
19	P2.051012.105221	WG397283-04	Matrix Spike	50/50	10	L12050105-01	05/10/12 10:52
20	P2.051012.105819	WG397283-05	Matrix Spike Duplica	50/50	10	L12050105-01	05/10/12 10:58
21	P2.051012.110419	L12050153-01	MW-15-050312	50/50	1		05/10/12 11:04
22	P2.051012.111116	L12050153-02	MW-15-050312	50/50	1		05/10/12 11:11
23	P2.051012.111816	L12050153-03	MW-17-050312	50/50	1		05/10/12 11:18
24	P2.051012.112421	WG397367-01	Post Digestion Spike		1	L12050153-03	05/10/12 11:24
25	P2.051012.113024	WG397367-02	Serial Dilution		5	L12050153-03	05/10/12 11:30
26	P2.051012.113621	WG397718-14	CCV		1		05/10/12 11:36
27	P2.051012.114221	WG397718-15	CCB		1		05/10/12 11:42
28	P2.051012.114915	L12050153-04	MW-17-050312	50/50	1		05/10/12 11:49
29	P2.051012.115516	L12050153-05	MW-28050312	50/50	1		05/10/12 11:55
30	P2.051012.120114	L12050153-06	MW-28050312	50/50	1		05/10/12 12:01
31	P2.051012.120713	L12050153-07	TW-02-050312	50/50	1		05/10/12 12:07
32	P2.051012.121312	L12050153-08	TW-02-050312	50/50	1		05/10/12 12:13
33	P2.051012.121915	WG397718-16	CCV		1		05/10/12 12:19
34	P2.051012.122516	WG397718-17	CCB		1		05/10/12 12:25

Page: 1 Approved: May 11, 2012

Microbac

Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 051012H.CSV
Analyst1: KHR Analyst2: N/A
Method: 6010 SOP: ME600E Rev: 12
Maintenance Log ID: 41676

Calibration Std: STD51542 ICV Std: STD51543 Post Spike: STD51356
ICSA: STD51556 ICSAB: STD51413 Int. Std: RGT17310
CCV: STD51453 LLCCV:

Workgroups: 397367, 397515, 397342, 397517

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
35	P2.051012.123210	WG397718-18	Interference Check		1		05/10/12 12:32
36	P2.051012.123806	WG397718-19	Interference Check		1		05/10/12 12:38
37	P2.051012.124402	WG397718-20	CCV		1		05/10/12 12:44
38	P2.051012.125003	WG397718-21	CCB		1		05/10/12 12:50
39	P2.051012.125656	L12050105-02	SPE-W-SW-01-DIS	50/50	10		05/10/12 12:56
40	P2.051012.130351	L12050105-05	SPE-W-SW-01-DUP	50/50	10		05/10/12 13:03
41	P2.051012.131046	L12050105-06	SPE-W-SW-05	50/50	10		05/10/12 13:10
42	P2.051012.131741	L12050105-07	SPE-W-SW-05-DIS	50/50	10		05/10/12 13:17
43	P2.051012.132437	L12050105-08	SPE-W-SW-06	50/50	10		05/10/12 13:24
44	P2.051012.133134	L12050105-09	SPE-W-SW-06-DIS	50/50	10		05/10/12 13:31
45	P2.051012.133843	L12050105-10	SPE-K-FB	50/50	1		05/10/12 13:38
46	P2.051012.134537	L12050177-02	2050150-02	5/50	5		05/10/12 13:45
47	P2.051012.135233	L12050177-02	2050150-02		10		05/10/12 13:52
48	P2.051012.135929	L12050104-50	SPE-K-FB-1	50/50	1		05/10/12 13:59
49	P2.051012.140624	WG397718-22	CCV		1		05/10/12 14:06
50	P2.051012.141225	WG397718-23	CCB		1		05/10/12 14:12
51	P2.051012.141918	L12050104-54	SPE-K-FB-2		1		05/10/12 14:19
52	P2.051012.142613	L12050104-55	SPE-K-FB-2-DIS		1		05/10/12 14:26
53	P2.051012.143307	L12050104-45	SPE-G-MW-46D-DIS		200		05/10/12 14:33
54	P2.051012.144002	L12050104-46	SPE-G-MW-47	50/50	20		05/10/12 14:40
55	P2.051012.144601	L12050104-46	SPE-G-MW-47		200		05/10/12 14:46
56	P2.051012.145201	WG397293-01	Reference Sample		500	L12050104-53	05/10/12 14:52
57	P2.051012.145856	WG397293-04	Matrix Spike		500	L12050104-53	05/10/12 14:58
58	P2.051012.150553	WG397293-05	Matrix Spike Duplica		500	L12050104-53	05/10/12 15:05
59	P2.051012.151249	WG397718-24	CCV		1		05/10/12 15:12
60	P2.051012.151850	WG397718-25	CCB		1		05/10/12 15:18
61	P2.051012.152543	WG397435-04	Method/Prep Blank		1		05/10/12 15:25
62	P2.051012.153941	WG397718-26	CCV		1		05/10/12 15:39
63	P2.051012.154542	WG397718-27	CCB		1		05/10/12 15:45
64	P2.051012.155241	WG397435-04	Method/Prep Blank	50/50	1		05/10/12 15:52
65	P2.051012.155935	WG397435-05	Laboratory Control S	50/50	1		05/10/12 15:59
66	P2.051012.160533	L12050125-02	SW1A.273.14	50/50	1		05/10/12 16:05
67	P2.051012.161130	L12050125-07	SW2A.273.14		1	WG397435-01	05/10/12 16:11
68	P2.051012.161728	L12050125-08	SW2A.273.14	50/50	1	WG397435-06	05/10/12 16:17

Page: 2 Approved: May 11, 2012

Sheri L. Babgard

Microbac

Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 051012H.CSV
Analyst1: KHR Analyst2: N/A
Method: 6010 SOP: ME600E Rev: 12
Maintenance Log ID: 41676

Calibration Std: STD51542 ICV Std: STD51543 Post Spike: STD51356
ICSA: STD51556 ICSAB: STD51413 Int. Std: RGT17310
CCV: STD51453 LLCCV:

Workgroups: 397367, 397515, 397342, 397517

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
69	P2.051012.162326	L12050125-09	SW2A.273.14	50/50	1	WG397435-07	05/10/12 16:23
70	P2.051012.162924	L12050125-14	SW3A.273.14	50/50	1		05/10/12 16:29
71	P2.051012.163522	L12050125-17	SW3B.273.14	50/50	1		05/10/12 16:35
72	P2.051012.164120	WG397517-01	Post Digestion Spike		1	L12050125-17	05/10/12 16:41
73	P2.051012.164719	WG397517-02	Serial Dilution		5	L12050125-17	05/10/12 16:47
74	P2.051012.165415	WG397718-28	CCV		1		05/10/12 16:54
75	P2.051012.170015	WG397718-29	CCB		1		05/10/12 17:00
76	P2.051012.170708	L12050125-20	SW4A.273.14		1		05/10/12 17:07
77	P2.051012.171405	L12050125-23	SW5A.273.14		1		05/10/12 17:14
78	P2.051012.172101	L12050230-01	USDA/4-1-12		1		05/10/12 17:21
79	P2.051012.172700	WG397435-02	Reference Sample		1	L12050231-01	05/10/12 17:27
80	P2.051012.173257	WG397435-08	Matrix Spike		1	L12050231-01	05/10/12 17:32
81	P2.051012.173856	WG397435-09	Matrix Spike Duplica		1	L12050231-01	05/10/12 17:38
82	P2.051012.174454	WG397435-03	Reference Sample		1	L12050232-01	05/10/12 17:44
83	P2.051012.175052	WG397435-10	Matrix Spike		1	L12050232-01	05/10/12 17:50
84	P2.051012.175651	WG397435-11	Matrix Spike Duplica		1	L12050232-01	05/10/12 17:56
85	P2.051012.180250	WG397718-30	CCV		1		05/10/12 18:02
86	P2.051012.180851	WG397718-31	CCB		1		05/10/12 18:08

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Microbac

Microbac Laboratories Inc.

Data Checklist

Date: 10-MAY-2012
Analyst: KHR
Analyst: NA
Method: 6010
Instrument: PE-ICP2
Curve Workgroup: 397718
Runlog ID: 46684
Analytical Workgroups: 397367, 397515, 397342, 397517

Calibration/Linearity	X
ICV/CCV	X
ICV RSD <= 3% (EPA 200.7 only)	
ICB/CCB	X
ICSA/ICSAB	X
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	
Case Narrative	X
Client Forms	X
Level X	
Level 3	
Level 4	153
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	SLP
Comments	

Primary Reviewer:
11-MAY-2012

Secondary Reviewer:
11-MAY-2012

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-11-2012 14:36:17

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 6010B AAB#: WG397367

Login Number: L12050153

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-15-050312	01	05/03/12					05/08/12	5.1	180		05/10/12	7	180	
MW-15-050312	02	05/03/12					05/08/12	5.1	180		05/10/12	7	180	
MW-17-050312	03	05/03/12					05/08/12	5.1	180		05/10/12	7	180	
MW-17-050312	04	05/03/12					05/08/12	5.1	180		05/10/12	7	180	
MW-28050312	05	05/03/12					05/08/12	4.9	180		05/10/12	6.9	180	
MW-28050312	06	05/03/12					05/08/12	4.9	180		05/10/12	6.9	180	
TW-02-050312	07	05/03/12					05/08/12	5	180		05/10/12	6.9	180	
TW-02-050312	08	05/03/12					05/08/12	5	180		05/10/12	6.9	180	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2410627
Report generated 05/11/2012 08:38

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number:	L12050153	Work Group:	WG397367
Blank File ID:	P2.051012.103232	Blank Sample ID:	WG397283-02
Prep Date:	05/08/12 13:08	Instrument ID:	PE-ICP2
Analyzed Date:	05/10/12 10:32	Method:	6010B
Analyst:	KHR		

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG397283-03	P2.051012.103927	05/10/12 10:39	01
MW-15-050312	L12050153-01	P2.051012.110419	05/10/12 11:04	01
MW-15-050312	L12050153-02	P2.051012.111116	05/10/12 11:11	01
MW-17-050312	L12050153-03	P2.051012.111816	05/10/12 11:18	01
MW-17-050312	L12050153-04	P2.051012.114915	05/10/12 11:49	01
MW-28050312	L12050153-05	P2.051012.115516	05/10/12 11:55	01
MW-28050312	L12050153-06	P2.051012.120114	05/10/12 12:01	01
TW-02-050312	L12050153-07	P2.051012.120713	05/10/12 12:07	01
TW-02-050312	L12050153-08	P2.051012.121312	05/10/12 12:13	01

Report Name: BLANK_SUMMARY
PDF File ID: 2410628
Report generated 05/11/2012 08:39

Microbac Laboratories Inc.
METHOD BLANK REPORT

Login Number: L12050153 Prep Date: 05/08/12 13:08 Sample ID: WG397283-02
Instrument ID: PE-ICP2 Run Date: 05/10/12 10:32 Prep Method: 3005A
File ID: P2.051012.103232 Analyst: KHR Method: 6010B
Workgroup (AAB#): WG397367 Matrix: Water Units: mg/L
Contract #: Cal ID: PE-ICP-10-MAY-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Aluminum, Total	0.0500	0.100	0.0500	1	U
Barium, Total	0.00250	0.0100	0.00250	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	0.100	1	U
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	0.00500	1	U
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: 2410629
11-MAY-2012 08:39

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050153 Run Date: 05/10/2012 Sample ID: WG397283-03
Instrument ID: PE-ICP2 Run Time: 10:39 Prep Method: 3005A
File ID: P2.051012.103927 Analyst: KHR Method: 6010B
Workgroup (AAB#): WG397367 Matrix: Water Units: mg/L
QC Key: WATERLOO Lot#: STD51357 Cal ID: PE-ICP-10-MAY-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Aluminum, Total	5.00	4.88	97.7	85 - 115	
Barium, Total	0.500	0.488	97.6	85 - 115	
Beryllium, Total	0.0250	0.0241	96.3	85 - 115	
Cadmium, Total	0.0250	0.0237	94.9	85 - 115	
Calcium, Total	5.00	4.93	98.5	85 - 115	
Chromium, Total	0.250	0.244	97.8	85 - 115	
Cobalt, Total	0.100	0.0969	96.9	85 - 115	
Copper, Total	0.250	0.246	98.6	85 - 115	
Iron, Total	2.00	1.92	96.0	85 - 115	
Magnesium, Total	5.00	4.89	97.8	85 - 115	
Manganese, Total	0.250	0.244	97.7	85 - 115	
Nickel, Total	0.250	0.258	103	85 - 115	
Potassium, Total	25.0	24.8	99.2	85 - 115	
Silver, Total	0.200	0.198	99.0	85 - 115	
Sodium, Total	25.0	26.0	104	85 - 115	
Vanadium, Total	0.500	0.492	98.4	85 - 115	
Zinc, Total	0.500	0.493	98.7	85 - 115	

LCS - Modified 03/06/2008
PDF File ID: 2410630
Report generated: 05/11/2012 08:39

Microbac Laboratories Inc.

MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

Loginnum:L12050153 Cal ID: PE-ICP2- Worknum:WG397367

Instrument ID:PE-ICP2 Contract #: Method:6010B

Parent ID:WG397283-01 File ID:P2.051012.104526 Dil:10 Matrix:WATER

Sample ID:WG397283-04 MS File ID:P2.051012.105221 Dil:10 Units:mg/L

Sample ID:WG397283-05 MSD File ID:P2.051012.105819 Dil:10

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Aluminum	0.0802	5.00	6.22	123	5.00	5.03	99.1	21.0	85 - 115	20	*#
Barium	0.0152	0.500	0.618	121	0.500	0.525	102	16.4	85 - 115	20	*
Beryllium	0.00204	0.0250	0.0356	134	0.0250	0.0271	100	27.0	85 - 115	20	*#
Cadmium	0.00105	0.0250	0.0327	127	0.0250	0.0316	122	3.45	85 - 115	20	*
Calcium	58.4	5.00	77.4	379	5.00	66.3	158	15.4	85 - 115	20	*
Chromium	ND	0.250	0.304	122	0.250	0.263	105	14.5	85 - 115	20	*
Cobalt	ND	0.100	0.119	119	0.100	0.104	104	13.3	85 - 115	20	*
Copper	ND	0.250	0.282	113	0.250	0.249	99.4	12.7	85 - 115	20	
Iron	0.147	2.00	2.73	129	2.00	2.14	99.5	24.2	85 - 115	20	*#
Magnesium	12.5	5.00	19.6	142	5.00	15.9	67.0	21.1	85 - 115	20	*#
Manganese	0.101	0.250	0.428	131	0.250	0.344	97.5	21.5	85 - 115	20	*#
Nickel	ND	0.250	0.316	126	0.250	0.271	108	15.2	85 - 115	20	*
Potassium	3.18	25.0	34.5	125	25.0	27.7	98.2	21.8	85 - 115	20	*#
Silver	ND	0.200	0.251	126	0.200	0.213	106	16.6	85 - 115	20	*
Sodium	12.9	25.0	46.1	133	25.0	36.6	94.7	23.1	85 - 115	20	*#
Vanadium	0.0221	0.500	0.623	120	0.500	0.537	103	14.9	85 - 115	20	*
Zinc	1.62	0.500	2.52	178	0.500	2.08	91.7	18.8	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: 2410631

Report generated 05/11/2012 08:39

Microbac Laboratories Inc.
Serial Dilution Report

Login: L12050153 **Worknum:** WG397367
Instrument: PE-ICP2 **Method:** 6010B
Serial Dil: WG397367-02 **File ID:** P2.051012.113024 **Dil:** 5 **Units:** mg/L
Sample: L12050153-03 **File ID:** P2.051012.111816 **Dil:** 1

Analyte	Sample	Qual	Serial Dil	Qual	% Diff	Q
Aluminum	ND	U	ND	U		
Barium	0.141		0.150		6.17	
Beryllium	ND	U	ND	U		
Cadmium	0.000638	X	0.00244	F	282.00	
Calcium	249		246		1.22	
Chromium	ND	U	ND	U		
Cobalt	0.00783	F	ND	U		
Copper	ND	U	ND	U		
Iron	6.66		6.84		2.64	
Magnesium	45.0		44.8		0.42	
Manganese	0.696		0.703		1.01	
Nickel	0.00577	F	ND	U		
Potassium	6.63	X	6.29	X	5.04	
Silver	ND	U	ND	U		
Sodium	75.9		77.9		2.54	
Vanadium	0.00976	F	0.0296	F	203.00	
Zinc	0.0177	F	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: 2410625
05/11/2012 08:39

Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L12050153 **Worknum:** WG397367
Instrument ID: PE-ICP2 **Method:** 6010B
Post Spike ID: WG397367-01 **File ID:** P2.051012.112421 **Dil:** 1 **Units:** mg/L
Sample ID: L12050153-03 **File ID:** P2.051012.111816 **Dil:** 1 **Matrix:** Water

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
ALUMINUM	5.05		0	U	5	100.9	75 - 125	
BARIUM	0.626		0.141		.5	99.7	75 - 125	
BERYLLIUM	0.0246		0	U	.025	98.4	75 - 125	
CADMIUM	0.0245		0.000638		.025	95.8	75 - 125	
CALCIUM	238		249		5	279.7	75 - 125	N
CHROMIUM	0.249		0	U	.25	99.7	75 - 125	
COBALT	0.105		0.00783	F	.1	97.5	75 - 125	
COPPER	0.243		0	U	.25	97.1	75 - 125	
IRON	7.92		6.66		2	96.1	75 - 125	
MAGNESIUM	44.8		45.0		5	85.9	75 - 125	
MANGANESE	0.864		0.696		.25	95.1	75 - 125	
NICKEL	0.264		0.00577	F	.25	103.5	75 - 125	
POTASSIUM	31.5		6.63		25	102.0	75 - 125	
SILVER	0.206		0	U	.2	102.8	75 - 125	
SODIUM	97.6		75.9		25	116.9	75 - 125	
VANADIUM	0.513		0.00976	F	.5	100.9	75 - 125	
ZINC	0.501		0.0177	F	.5	97.0	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: 2410626
Report generated: 05/11/2012 08:38

Microbac Laboratories Inc.
Initial Calibration Summary

Login:	**L12050153**	Workgroup (AAB#):	**WG397367**
Analytical Method:	**6010B**	Instrument ID:	**PE-ICP2**
ICAL Worknum:	**WG397718**	Initial Calibration Date:	**10-MAY-2012 09:21**

	WG397718-01		WG397718-02		WG397718-03		WG397718-04		WG397718-05			
	Conc	INT	Conc	INT	Conc	INT	Conc	INT	Conc	INT	R	Q
ALUMINUM	0	8.37	.1	795	.2	1620	10	78500	20	158000	.999992	
BARIUM	0	-174	.01	1520	.02	3060	1	152000	2	303000	1	
BERYLLIUM	0	-1710	.0005	622	.001	1210	.05	60800	.1	122000	.999995	
CADMIUM	0	65.7	.0005	30.2	.001	55.1	.05	2660	.1	5340	.999998	
CALCIUM	0	-66.0	NA	NA	.2	87.1	10	4610	20	9460	.99992	
CHROMIUM	0	173	.005	544	.01	1080	.5	53300	1	106000	.999999	
COBALT	0	0.927	.002	75.4	.004	149	.1	7600	.4	15200	.999999	
COPPER	0	-644	.005	1270	.01	2490	.5	137000	1	271000	.999988	
IRON	0	57.6	.04	624	.08	1260	4	62600	8	128000	.999938	
MAGNESIUM	0	30.6	.1	363	.2	735	10	35400	20	72300	.999943	
MANGANESE	0	472	.005	4540	.01	8320	.5	422000	1	828000	.999959	
NICKEL	0	-190	.005	348	.01	683	.5	33500	1	66400	.999992	
POTASSIUM	0	79.3	.5	1850	1	3640	50	171000	100	344000	1	
SILVER	0	-104	.004	1150	.008	2400	.4	123000	.8	245000	.99999	
SODIUM	0	1350	.5	10500	1	21000	50	1020000	100	2040000	1	
VANADIUM	0	15300	.01	1800	.02	3570	1	192000	2	382000	.999991	
ZINC	0	196	.01	390	.02	781	1	39500	2	79200	1	

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: 2410634
Report generated: 11-MAY-2012 09:21

Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L12050153 Run Date: 05/10/2012 Sample ID: WG397718-07
Instrument ID: PE-ICP2 Run Time: 09:33 Method: 6010B
File ID: P2.051012.093358 Analyst: KHR Units: mg/L
Workgroup (AAB#): WG397367 Cal ID: PE-ICP2 - 10-MAY-12
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
ALUMINUM	.05	.1	.05	U
BARIUM	.0025	.01	.0025	U
BERYLLIUM	.0005	.002	.0005	U
CADMIUM	.00025	.0005	.00025	U
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	.005	U
ZINC	.005	.02	.005	U

ICB - Modified 07/14/2009
PDF File ID: 2410636
Report generated 05/11/2012 08:39

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050153 Run Date: 05/10/2012 Sample ID: WG397718-11

Instrument ID: PE-ICP2 Run Time: 09:58 Method: 6010B

File ID: P2.051012.095847 Analyst: KHR Units: mg/L

Workgroup (AAB#): WG397367 Cal ID: PE-ICP - 10-MAY-12

Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00250	0.0100	0.00250	U
Beryllium	0.000500	0.00200	0.000500	U
Cadmium	0.000250	0.000500	0.000250	U
Calcium	0.100	0.200	0.100	U
Chromium	0.00250	0.00500	0.00250	U
Cobalt	0.00250	0.0200	0.00250	U
Copper	0.00500	0.0200	0.00500	U
Iron	0.0250	0.100	0.0278	F
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: 2410639
Report generated 05/11/2012 08:39

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050153 Run Date: 05/10/2012 Sample ID: WG397718-13

Instrument ID: PE-ICP2 Run Time: 10:25 Method: 6010B

File ID: P2.051012.102539 Analyst: KHR Units: mg/L

Workgroup (AAB#): WG397367 Cal ID: PE-ICP - 10-MAY-12

Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00250	0.0100	0.00250	U
Beryllium	0.000500	0.00200	0.000500	U
Cadmium	0.000250	0.000500	0.000250	U
Calcium	0.100	0.200	0.100	U
Chromium	0.00250	0.00500	0.00250	U
Cobalt	0.00250	0.0200	0.00250	U
Copper	0.00500	0.0200	0.00500	U
Iron	0.0250	0.100	0.0273	F
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: 2410639
Report generated 05/11/2012 08:39

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050153 Run Date: 05/10/2012 Sample ID: WG397718-15

Instrument ID: PE-ICP2 Run Time: 11:42 Method: 6010B

File ID: P2.051012.114221 Analyst: KHR Units: mg/L

Workgroup (AAB#): WG397367 Cal ID: PE-ICP - 10-MAY-12

Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00250	0.0100	0.00250	U
Beryllium	0.000500	0.00200	0.000500	U
Cadmium	0.000250	0.000500	0.000250	U
Calcium	0.100	0.200	0.100	U
Chromium	0.00250	0.00500	0.00250	U
Cobalt	0.00250	0.0200	0.00250	U
Copper	0.00500	0.0200	0.00500	U
Iron	0.0250	0.100	0.0274	F
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: 2410639
Report generated 05/11/2012 08:39

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050153 Run Date: 05/10/2012 Sample ID: WG397718-17

Instrument ID: PE-ICP2 Run Time: 12:25 Method: 6010B

File ID: P2.051012.122516 Analyst: KHR Units: mg/L

Workgroup (AAB#): WG397367 Cal ID: PE-ICP - 10-MAY-12

Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00250	0.0100	0.00250	U
Beryllium	0.000500	0.00200	0.000500	U
Cadmium	0.000250	0.000500	0.000250	U
Calcium	0.100	0.200	0.100	U
Chromium	0.00250	0.00500	0.00250	U
Cobalt	0.00250	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: 2410639
Report generated 05/11/2012 08:39

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050153 Run Date: 05/10/2012 Sample ID: WG397718-21

Instrument ID: PE-ICP2 Run Time: 12:50 Method: 6010B

File ID: P2.051012.125003 Analyst: KHR Units: mg/L

Workgroup (AAB#): WG397367 Cal ID: PE-ICP - 10-MAY-12

Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00250	0.0100	0.00250	U
Beryllium	0.000500	0.00200	0.000500	U
Cadmium	0.000250	0.000500	0.000250	U
Calcium	0.100	0.200	0.100	U
Chromium	0.00250	0.00500	0.00250	U
Cobalt	0.00250	0.0200	0.00250	U
Copper	0.00500	0.0200	0.00500	U
Iron	0.0250	0.100	0.0256	F
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: 2410639
Report generated 05/11/2012 08:39

Microbac Laboratories Inc.

INITIAL CALIBRATION VERIFICATION (ICV)
(Alternate Source)

Login Number: L12050153 Run Date: 05/10/2012 Sample ID: WG397718-06
Instrument ID: PE-ICP2 Run Time: 09:28 Method: 6010B
File ID: P2.051012.092800 Analyst: KHR Units: mg/L
Workgroup (AAB#): WG397367 Cal ID: PE-ICP - 10-MAY-12
QC Key: WATERLOO

Analyte		Expected	Found	%REC	LIMITS	Q
Aluminum		10	9.87	98.7	90 - 110	
Barium		1	1.01	101	90 - 110	
Beryllium		.05	0.0495	98.9	90 - 110	
Cadmium		.05	0.0488	97.6	90 - 110	
Calcium		10	10.3	103	90 - 110	
Chromium		.5	0.501	100	90 - 110	
Cobalt		.2	0.197	98.3	90 - 110	
Copper		.5	0.511	102	90 - 110	
Iron		4	3.94	98.6	90 - 110	
Magnesium		10	9.77	97.7	90 - 110	
Manganese		.5	0.508	102	90 - 110	
Nickel		.5	0.504	101	90 - 110	
Potassium		50	49.5	99.1	90 - 110	
Silver		.4	0.400	100	90 - 110	
Sodium		50	50.0	100	90 - 110	
Vanadium		1	0.989	98.9	90 - 110	
Zinc		1	1.01	101	90 - 110	

* Exceeds LIMITS Limit

ICV - Modified 03/06/2008
PDF File ID: 2410635
Report generated 05/11/2012 08:39

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050153 Run Date: 05/10/2012 Sample ID: WG397718-10
Instrument ID: PE-ICP2 Run Time: 09:52 Method: 6010B
File ID: P2.051012.095245 Analyst: KHR QC Key: WATERLOO
Workgroup (AAB#): WG397367 Cal ID: PE-ICP - 10-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	0.998	mg/L	99.8	90 - 110		
Beryllium		0.0500	0.0485	mg/L	97.1	90 - 110		
Cadmium		0.0500	0.0477	mg/L	95.3	90 - 110		
Calcium		10.0	10.1	mg/L	101	90 - 110		
Chromium		0.500	0.502	mg/L	100	90 - 110		
Cobalt		0.200	0.198	mg/L	99.0	90 - 110		
Copper		0.500	0.500	mg/L	100	90 - 110		
Iron		4.00	3.95	mg/L	98.8	90 - 110		
Magnesium		10.0	9.81	mg/L	98.1	90 - 110		
Manganese		0.500	0.506	mg/L	101	90 - 110		
Nickel		0.500	0.501	mg/L	100	90 - 110		
Potassium		50.0	49.7	mg/L	99.4	90 - 110		
Silver		0.400	0.401	mg/L	100	90 - 110		
Sodium		50.0	50.0	mg/L	100	90 - 110		
Vanadium		1.00	1.00	mg/L	100	90 - 110		
Zinc		1.00	0.999	mg/L	99.9	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
PDF File ID: 2410638
Report generated 05/11/2012 08:39

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050153 Run Date: 05/10/2012 Sample ID: WG397718-12

Instrument ID: PE-ICP2 Run Time: 10:19 Method: 6010B

File ID: P2.051012.101937 Analyst: KHR QC Key: WATERLOO

Workgroup (AAB#): WG397367 Cal ID: PE-ICP - 10-MAY-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	10.0	mg/L	100	90 - 110		
Barium		1.00	1.01	mg/L	101	90 - 110		
Beryllium		0.0500	0.0506	mg/L	101	90 - 110		
Cadmium		0.0500	0.0500	mg/L	99.9	90 - 110		
Calcium		10.0	10.5	mg/L	105	90 - 110		
Chromium		0.500	0.506	mg/L	101	90 - 110		
Cobalt		0.200	0.199	mg/L	99.3	90 - 110		
Copper		0.500	0.514	mg/L	103	90 - 110		
Iron		4.00	4.03	mg/L	101	90 - 110		
Magnesium		10.0	9.97	mg/L	99.7	90 - 110		
Manganese		0.500	0.511	mg/L	102	90 - 110		
Nickel		0.500	0.506	mg/L	101	90 - 110		
Potassium		50.0	50.1	mg/L	100	90 - 110		
Silver		0.400	0.415	mg/L	104	90 - 110		
Sodium		50.0	50.8	mg/L	102	90 - 110		
Vanadium		1.00	1.01	mg/L	101	90 - 110		
Zinc		1.00	1.02	mg/L	102	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2410638

Report generated 05/11/2012 08:39

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050153 Run Date: 05/10/2012 Sample ID: WG397718-14

Instrument ID: PE-ICP2 Run Time: 11:36 Method: 6010B

File ID: P2.051012.113621 Analyst: KHR QC Key: WATERLOO

Workgroup (AAB#): WG397367 Cal ID: PE-ICP - 10-MAY-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	9.88	mg/L	98.8	90 - 110		
Barium		1.00	1.01	mg/L	101	90 - 110		
Beryllium		0.0500	0.0519	mg/L	104	90 - 110		
Cadmium		0.0500	0.0512	mg/L	102	90 - 110		
Calcium		10.0	10.4	mg/L	104	90 - 110		
Chromium		0.500	0.508	mg/L	102	90 - 110		
Cobalt		0.200	0.199	mg/L	99.4	90 - 110		
Copper		0.500	0.505	mg/L	101	90 - 110		
Iron		4.00	4.11	mg/L	103	90 - 110		
Magnesium		10.0	10.1	mg/L	101	90 - 110		
Manganese		0.500	0.498	mg/L	99.6	90 - 110		
Nickel		0.500	0.522	mg/L	104	90 - 110		
Potassium		50.0	49.6	mg/L	99.2	90 - 110		
Silver		0.400	0.416	mg/L	104	90 - 110		
Sodium		50.0	50.5	mg/L	101	90 - 110		
Vanadium		1.00	0.990	mg/L	99.0	90 - 110		
Zinc		1.00	1.04	mg/L	104	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2410638

Report generated 05/11/2012 08:39

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050153 Run Date: 05/10/2012 Sample ID: WG397718-16
Instrument ID: PE-ICP2 Run Time: 12:19 Method: 6010B
File ID: P2.051012.121915 Analyst: KHR QC Key: WATERLOO
Workgroup (AAB#): WG397367 Cal ID: PE-ICP - 10-MAY-12
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	9.90	mg/L	99.0	90 - 110		
Barium		1.00	1.02	mg/L	102	90 - 110		
Beryllium		0.0500	0.0518	mg/L	104	90 - 110		
Cadmium		0.0500	0.0520	mg/L	104	90 - 110		
Calcium		10.0	10.4	mg/L	104	90 - 110		
Chromium		0.500	0.511	mg/L	102	90 - 110		
Cobalt		0.200	0.203	mg/L	101	90 - 110		
Copper		0.500	0.508	mg/L	102	90 - 110		
Iron		4.00	4.14	mg/L	103	90 - 110		
Magnesium		10.0	10.3	mg/L	103	90 - 110		
Manganese		0.500	0.512	mg/L	102	90 - 110		
Nickel		0.500	0.509	mg/L	102	90 - 110		
Potassium		50.0	50.1	mg/L	100	90 - 110		
Silver		0.400	0.422	mg/L	105	90 - 110		
Sodium		50.0	50.7	mg/L	101	90 - 110		
Vanadium		1.00	1.00	mg/L	100	90 - 110		
Zinc		1.00	1.05	mg/L	105	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
PDF File ID: 2410638
Report generated 05/11/2012 08:39

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050153 Run Date: 05/10/2012 Sample ID: WG397718-20

Instrument ID: PE-ICP2 Run Time: 12:44 Method: 6010B

File ID: P2.051012.124402 Analyst: KHR QC Key: WATERLOO

Workgroup (AAB#): WG397367 Cal ID: PE-ICP - 10-MAY-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	9.79	mg/L	97.9	90 - 110		
Barium		1.00	1.02	mg/L	102	90 - 110		
Beryllium		0.0500	0.0519	mg/L	104	90 - 110		
Cadmium		0.0500	0.0516	mg/L	103	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	0.200	mg/L	99.8	90 - 110		
Copper		0.500	0.507	mg/L	101	90 - 110		
Iron		4.00	4.08	mg/L	102	90 - 110		
Magnesium		10.0	10.1	mg/L	101	90 - 110		
Manganese		0.500	0.509	mg/L	102	90 - 110		
Nickel		0.500	0.507	mg/L	101	90 - 110		
Potassium		50.0	49.7	mg/L	99.3	90 - 110		
Silver		0.400	0.423	mg/L	106	90 - 110		
Sodium		50.0	49.1	mg/L	98.2	90 - 110		
Vanadium		1.00	0.995	mg/L	99.5	90 - 110		
Zinc		1.00	1.05	mg/L	105	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2410638

Report generated 05/11/2012 08:39

Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L12050153 **Workgroup (AAB#):** WG397367
Instrument ID: PE-ICP2 **Method:** 6010B
Sol. A : WG397718-08 **File ID:** P2.051012.094051 **Units:** mg/L
Sol. AB : WG397718-09 **File ID:** P2.051012.094648 **Matrix:** Water

	Sol. A			Sol. AB			
ANALYTE	True	Found	%Recovery	True	Found	%Recovery	Q
Aluminum	250	245	98.0	250	254	102	
Barium	NS	0.00236	NS	0.250	0.246	98.4	
Beryllium	NS	-0.000760	NS	0.250	0.246	98.4	
Cadmium	NS	0.000170	NS	0.500	0.415	83.0	
Calcium	250	251	100	250	264	106	
Chromium	NS	-0.000780	NS	0.250	0.247	98.8	
Cobalt	NS	-0.00211	NS	0.250	0.229	91.6	
Copper	NS	0.00234	NS	0.250	0.251	100	
Iron	100	91.3	91.3	100	93.7	93.7	
Magnesium	250	247	98.8	250	253	101	
Manganese	NS	-0.00175	NS	0.250	0.238	95.2	
Nickel	NS	-0.000260	NS	0.500	0.471	94.2	
Potassium	NS	-0.0648	NS	5.00	4.98	99.6	
Silver	NS	-0.00241	NS	0.500	0.505	101	
Sodium	NS	-0.00369	NS	5.00	5.18	104	
Vanadium	NS	0.00439	NS	0.250	0.246	98.4	
Zinc	NS	0.00226	NS	0.500	0.466	93.2	

NS = Not spiked
*** = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.**
 # = Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).
+ = Result for unspiked element is outside the acceptance limits of (+/-) 2 times the project method detection limit (MDL). This criteria is only applicable to specific QAPPs.

ICS - Modified 03/06/2008
PDF File ID: 2410637
Report generated 05/11/2012 08:39

Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L12050153 **Workgroup (AAB#):** WG397367
Instrument ID: PE-ICP2 **Method:** 6010B
Sol. A : WG397718-18 **File ID:** P2.051012.123210 **Units:** mg/L
Sol. AB : WG397718-19 **File ID:** P2.051012.123806 **Matrix:** Water

	Sol. A			Sol. AB			
ANALYTE	True	Found	%Recovery	True	Found	%Recovery	Q
Aluminum	250	251	100	250	256	102	
Barium	NS	0.00238	NS	0.250	0.258	103	
Beryllium	NS	-0.000350	NS	0.250	0.262	105	
Cadmium	NS	0.000190	NS	0.500	0.444	88.8	
Calcium	250	261	104	250	267	107	
Chromium	NS	-0.000650	NS	0.250	0.258	103	
Cobalt	NS	-0.00194	NS	0.250	0.238	95.2	
Copper	NS	0.00246	NS	0.250	0.254	102	
Iron	100	97.3	97.3	100	100	100	
Magnesium	250	261	104	250	268	107	
Manganese	NS	-0.00145	NS	0.250	0.246	98.4	
Nickel	NS	-0.000140	NS	0.500	0.489	97.8	
Potassium	NS	-0.0699	NS	5.00	5.01	100	
Silver	NS	-0.00190	NS	0.500	0.530	106	
Sodium	NS	-0.00968	NS	5.00	5.20	104	
Vanadium	NS	-0.00251	NS	0.250	0.246	98.4	
Zinc	NS	0.00283	NS	0.500	0.505	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: 2410637
Report generated 05/11/2012 08:39

Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12050153 **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: 2410633
Report generated: 05/11/2012 08:39

Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12050153 **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: 2410633
Report generated: 05/11/2012 08:39

Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12050153 **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: 2410633
Report generated: 05/11/2012 08:39

Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12050153 **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: 2410633
Report generated: 05/11/2012 08:39

Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12050153 **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: 2410633
Report generated: 05/11/2012 08:39

Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12050153 **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: 2410633
Report generated: 05/11/2012 08:39

Microbac Laboratories Inc.
LINEAR RANGE (QUARTERLY)

Login Number: L12050153 **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: 2410632
Report generated: 05/11/2012 08:39

2.3.1.3 Raw Data

==========

Analysis Begun

Start Time: 5/10/2012 8:55:11 AM **Plasma On Time: 5/10/2012 7:42:20 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\THURSDAY1.sif
Batch ID:
Results Data Set: 051012H
Results Library: C:\pe\peicp2\Results\Results.mdb

==========

Method Loaded
Method Name: 200.7-6010 PE-ICP2.1 **Method Last Saved: 5/7/2012 8:30:37 AM**
IEC File: CA227_LiBeMOD.iec **SMF File:**
Method Description: STANDARD

==========

Sequence No.: 1 **Autosampler Location: 1**
Sample ID: S0 **Date Collected: 5/10/2012 8:55:14 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: S0

Analyte	Back Pressure	Flow
All	155.0 kPa	0.50 L/min

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Y 371.029	2277620.7	16863.94	0.74%		
YRADIAL	313854.4	3045.16	0.97%		
Ga 417.206	1361767.1	11479.36	0.84%		
GaRADIAL	95429.4	2727.97	2.86%		
Ag 328.068†	-104.4	102.93	98.54%	[0.00]	mg/L
Al 396.153†	8.4	5.75	68.76%	[0.00]	mg/L
As 188.979†	-24.0	2.99	12.47%	[0.00]	mg/L
Ba 233.527†	-174.2	12.33	7.08%	[0.00]	mg/L
Be 234.861†	-1709.6	19.77	1.16%	[0.00]	mg/L
B 249.677†	73.5	9.28	12.62%	[0.00]	mg/L
Ca 227.546†	-66.0	12.21	18.51%	[0.00]	mg/L
Cd 228.802†	65.7	9.80	14.90%	[0.00]	mg/L
Co 228.616†	0.9	8.19	884.03%	[0.00]	mg/L
Cr 267.716†	173.1	7.94	4.59%	[0.00]	mg/L
Cu 327.393†	-644.4	148.14	22.99%	[0.00]	mg/L
Fe 239.562†	57.6	6.64	11.52%	[0.00]	mg/L
Mg 279.077†	30.6	7.98	26.11%	[0.00]	mg/L
Mn 257.610†	472.5	54.37	11.51%	[0.00]	mg/L
Mo 202.031†	79.8	6.03	7.55%	[0.00]	mg/L
Ni 231.604†	-190.3	14.80	7.78%	[0.00]	mg/L
Pb 220.353†	-95.3	13.45	14.12%	[0.00]	mg/L
Sb 206.836†	4.5	3.89	86.90%	[0.00]	mg/L
Se 196.026†	23.4	2.93	12.52%	[0.00]	mg/L
Si 251.611†	505.5	2.97	0.59%	[0.00]	mg/L
Sn 189.927†	83.0	1.83	2.21%	[0.00]	mg/L
Ti 334.940†	671.8	83.22	12.39%	[0.00]	mg/L
Tl 190.801†	-61.1	4.41	7.22%	[0.00]	mg/L
V 290.880†	15269.7	308.61	2.02%	[0.00]	mg/L
Zn 206.200†	195.8	13.33	6.81%	[0.00]	mg/L
K 766.490†	79.3	49.39	62.32%	[0.00]	mg/L
Na 589.592†	1347.4	499.96	37.10%	[0.00]	mg/L
Sr 407.771†	-661.9	492.13	74.35%	[0.00]	mg/L
Li 670.784†	85.0	22.99	27.05%	[0.00]	mg/L

==========

Sequence No.: 2 **Autosampler Location: 2**
Sample ID: S1 **Date Collected: 5/10/2012 9:02:08 AM**

Approved: May 11, 2012

Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: S1

Analyte	Back Pressure	Flow
All	155.0 kPa	0.50 L/min

Mean Data: S1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Y 371.029	2302310.0	17170.43	0.75%		
YRADIAL	319764.0	4314.56	1.35%		
Ga 417.206	1406894.2	30416.38	2.16%		
GaRADIAL	96365.7	1401.12	1.45%		
Ag 328.068†	1146.1	32.03	2.80%	[0.0040]	mg/L
Al 396.153†	794.5	10.82	1.36%	[0.10]	mg/L
Ba 233.527†	1518.1	19.05	1.26%	[0.010]	mg/L
Be 234.861†	621.7	29.19	4.70%	[0.0005]	mg/L
Cd 228.802†	30.2	11.67	38.68%	[0.00050]	mg/L
Co 228.616†	75.4	4.34	5.76%	[0.0020]	mg/L
Cr 267.716†	544.2	18.59	3.42%	[0.0050]	mg/L
Cu 327.393†	1269.3	67.83	5.34%	[0.0050]	mg/L
Fe 239.562†	624.2	6.69	1.07%	[0.040]	mg/L
Mg 279.077†	363.2	7.15	1.97%	[0.10]	mg/L
Mn 257.610†	4538.0	44.89	0.99%	[0.0050]	mg/L
Mo 202.031†	357.9	2.45	0.68%	[0.010]	mg/L
Ni 231.604†	348.0	17.24	4.95%	[0.0050]	mg/L
Pb 220.353†	63.1	16.90	26.77%	[0.0050]	mg/L
Sb 206.836†	47.5	5.85	12.33%	[0.012]	mg/L
Si 251.611†	2063.0	73.93	3.58%	[0.050]	mg/L
Sn 189.927†	99.7	2.92	2.93%	[0.010]	mg/L
Ti 334.940†	9854.9	56.35	0.57%	[0.010]	mg/L
V 290.880†	1800.0	360.10	20.01%	[0.010]	mg/L
Zn 206.200†	390.4	10.86	2.78%	[0.010]	mg/L
K 766.490†	1854.7	11.66	0.63%	[0.50]	mg/L
Na 589.592†	10526.7	309.87	2.94%	[0.50]	mg/L
Sr 407.771†	28764.3	185.35	0.64%	[0.010]	mg/L
Li 670.784†	1763.2	32.23	1.83%	[0.010]	mg/L

==========

Sequence No.: 3 **Autosampler Location: 3**
Sample ID: S2 **Date Collected: 5/10/2012 9:09:02 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: S2

Analyte	Back Pressure	Flow
All	155.0 kPa	0.50 L/min

Mean Data: S2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Y 371.029	2284679.6	17877.48	0.78%		
YRADIAL	310395.5	1370.42	0.44%		
Ga 417.206	1391305.6	20633.03	1.48%		
GaRADIAL	94333.9	1973.87	2.09%		
Ag 328.068†	2404.7	71.12	2.96%	[0.0080]	mg/L
Al 396.153†	1617.6	29.52	1.82%	[0.20]	mg/L
As 188.979†	18.9	5.44	28.74%	[0.0080]	mg/L
Ba 233.527†	3055.4	31.71	1.04%	[0.020]	mg/L
Be 234.861†	1206.1	8.58	0.71%	[0.0010]	mg/L
B 249.677†	786.1	17.74	2.26%	[0.010]	mg/L
Ca 227.546†	87.1	6.33	7.27%	[0.20]	mg/L
Cd 228.802†	55.1	10.91	19.80%	[0.0010]	mg/L
Co 228.616†	149.2	1.76	1.18%	[0.0040]	mg/L
Cr 267.716†	1078.2	0.90	0.08%	[0.010]	mg/L

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Cu 327.393†	2488.4	40.61	1.63%	[0.010]	mg/L
Fe 239.562†	1262.0	24.28	1.92%	[0.080]	mg/L
Mg 279.077†	734.8	20.40	2.78%	[0.20]	mg/L
Mn 257.610†	8320.6	96.69	1.16%	[0.010]	mg/L
Mo 202.031†	716.6	4.43	0.62%	[0.020]	mg/L
Ni 231.604†	682.7	14.26	2.09%	[0.010]	mg/L
Pb 220.353†	104.9	12.00	11.44%	[0.010]	mg/L
Sb 206.836†	90.9	7.80	8.59%	[0.024]	mg/L
Se 196.026†	6.7	2.72	40.34%	[0.0080]	mg/L
Si 251.611†	4185.4	83.01	1.98%	[0.10]	mg/L
Sn 189.927†	185.0	8.00	4.33%	[0.020]	mg/L
Ti 334.940†	19487.9	346.20	1.78%	[0.020]	mg/L
Tl 190.801†	35.0	2.05	5.86%	[0.010]	mg/L
V 290.880†	3566.2	412.89	11.58%	[0.020]	mg/L
Zn 206.200†	781.3	20.11	2.57%	[0.020]	mg/L
K 766.490†	3638.6	7.72	0.21%	[1.00]	mg/L
Na 589.592†	20958.3	1479.49	7.06%	[1.00]	mg/L
Sr 407.771†	57460.5	313.85	0.55%	[0.020]	mg/L
Li 670.784†	3532.0	95.40	2.70%	[0.020]	mg/L

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Sequence No.: 4 **Autosampler Location: 4**
Sample ID: S3 **Date Collected: 5/10/2012 9:15:57 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: S3

Analyte	Back Pressure	Flow
All	155.0 kPa	0.50 L/min

Mean Data: S3

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Y 371.029	2173368.1	12407.93	0.57%		
YRADIAL	310008.3	2621.41	0.85%		
Ga 417.206	1350176.3	35065.54	2.60%		
GaRADIAL	93882.9	646.54	0.69%		
Ag 328.068†	123478.1	3924.58	3.18%	[0.40]	mg/L
Al 396.153†	78503.8	133.10	0.17%	[10.00]	mg/L
As 188.979†	1091.0	28.25	2.59%	[0.40]	mg/L
Ba 233.527†	151635.5	1687.95	1.11%	[1.00]	mg/L
Be 234.861†	60816.0	2157.63	3.55%	[0.05]	mg/L
B 249.677†	40971.9	1223.22	2.99%	[0.50]	mg/L
Ca 227.546†	4614.6	139.33	3.02%	[10.00]	mg/L
Cd 228.802†	2660.3	114.80	4.32%	[0.05]	mg/L
Co 228.616†	7596.8	55.12	0.73%	[0.20]	mg/L
Cr 267.716†	53257.9	563.77	1.06%	[0.50]	mg/L
Cu 327.393†	136884.9	3228.15	2.36%	[0.50]	mg/L
Fe 239.562†	62623.6	553.16	0.88%	[4.00]	mg/L
Mg 279.077†	35351.3	498.28	1.41%	[10.00]	mg/L
Mn 257.610†	421721.2	5149.70	1.22%	[0.50]	mg/L
Mo 202.031†	36103.0	330.47	0.92%	[1.00]	mg/L
Ni 231.604†	33493.7	444.81	1.33%	[0.50]	mg/L
Pb 220.353†	5443.4	42.73	0.78%	[0.50]	mg/L
Sb 206.836†	4869.7	157.01	3.22%	[1.20]	mg/L
Se 196.026†	694.7	26.35	3.79%	[0.40]	mg/L
Si 251.611†	207448.1	5011.95	2.42%	[5.00]	mg/L
Sn 189.927†	10152.5	63.17	0.62%	[1.00]	mg/L
Ti 334.940†	994247.5	6192.53	0.62%	[1.00]	mg/L
Tl 190.801†	1915.2	24.03	1.25%	[0.50]	mg/L
V 290.880†	192404.8	1565.35	0.81%	[1.00]	mg/L
Zn 206.200†	39535.3	752.11	1.90%	[1.00]	mg/L
K 766.490†	171089.2	751.09	0.44%	[50.00]	mg/L
Na 589.592†	1018973.1	10469.90	1.03%	[50.00]	mg/L
Sr 407.771†	2812982.5	6044.17	0.21%	[1.00]	mg/L
Li 670.784†	172396.6	858.79	0.50%	[1.00]	mg/L

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Sequence No.: 5 **Autosampler Location: 5**

Approved: May 11, 2012

Sample ID: S4
Analyst:
Initial Sample Wt:
Dilution:

Date Collected: 5/10/2012 9:21:56 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: S4

Analyte	Back Pressure	Flow
All	156.0 kPa	0.50 L/min

Mean Data: S4

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Y 371.029	2103020.7	20215.79	0.96%		
YRADIAL	301264.8	1093.70	0.36%		
Ga 417.206	1318587.0	20959.98	1.59%		
GaRADIAL	93441.1	1130.37	1.21%		
Ag 328.068†	244804.9	5640.96	2.30%	[0.80]	mg/L
Al 396.153†	158296.4	166.74	0.11%	[20.00]	mg/L
As 188.979†	2194.1	43.65	1.99%	[0.80]	mg/L
Ba 233.527†	302902.1	2581.29	0.85%	[2.00]	mg/L
Be 234.861†	122406.9	2092.54	1.71%	[0.10]	mg/L
B 249.677†	82850.4	1880.47	2.27%	[1.00]	mg/L
Ca 227.546†	9463.0	223.08	2.36%	[20.00]	mg/L
Cd 228.802†	5339.0	185.70	3.48%	[0.10]	mg/L
Co 228.616†	15152.4	154.59	1.02%	[0.40]	mg/L
Cr 267.716†	106196.2	668.23	0.63%	[1.00]	mg/L
Cu 327.393†	271119.5	6064.40	2.24%	[1.00]	mg/L
Fe 239.562†	128170.4	1687.64	1.32%	[8.00]	mg/L
Mg 279.077†	72276.8	754.21	1.04%	[20.00]	mg/L
Mn 257.610†	827943.0	7709.79	0.93%	[1.00]	mg/L
Mo 202.031†	72550.2	355.50	0.49%	[2.00]	mg/L
Ni 231.604†	66419.2	758.18	1.14%	[1.00]	mg/L
Pb 220.353†	10839.0	80.33	0.74%	[1.00]	mg/L
Sb 206.836†	9767.3	208.80	2.14%	[2.40]	mg/L
Se 196.026†	1391.7	36.11	2.59%	[0.80]	mg/L
Si 251.611†	410309.7	7020.58	1.71%	[10.00]	mg/L
Sn 189.927†	20254.0	221.09	1.09%	[2.00]	mg/L
Ti 334.940†	2018381.1	3309.90	0.16%	[2.00]	mg/L
Tl 190.801†	3802.1	23.57	0.62%	[1.00]	mg/L
V 290.880†	381710.9	1053.24	0.28%	[2.00]	mg/L
Zn 206.200†	79224.8	1099.68	1.39%	[2.00]	mg/L
K 766.490†	343712.9	1510.30	0.44%	[100.00]	mg/L
Na 589.592†	2040214.1	52164.64	2.56%	[100.00]	mg/L
Sr 407.771†	5759410.8	54612.08	0.95%	[2.00]	mg/L
Li 670.784†	338536.8	3611.00	1.07%	[2.00]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	4	Lin, Calc Int	95.9	306400	0.00000	0.999990	
Al 396.153	4	Lin, Calc Int	-68.5	7906	0.00000	0.999992	
As 188.979	3	Wt. Lin	-3.0	2741	0.00000	0.999998	
Ba 233.527	4	Lin, Calc Int	32.3	151500	0.00000	1.000000	
Be 234.861	4	Lin, Calc Int	-50.8	1223000	0.00000	0.999995	
B 249.677	3	Lin, Calc Int	-101.7	82790	0.00000	0.999985	
Ca 227.546	3	Lin, Calc Int	-24.7	472.3	0.00000	0.999920	
Cd 228.802	4	Lin, Calc Int	0.5	53350	0.00000	0.999998	
Co 228.616	4	Lin, Calc Int	1.7	37900	0.00000	0.999999	
Cr 267.716	4	Lin, Calc Int	29.1	106200	0.00000	0.999999	
Cu 327.393	4	Lin, Calc Int	68.4	271600	0.00000	0.999988	
Fe 239.562	4	Lin, Calc Int	-193.4	15980	0.00000	0.999938	
Mg 279.077	4	Lin, Calc Int	-93.7	3604	0.00000	0.999943	
Mn 257.610	4	Lin, Calc Int	1103.2	829700	0.00000	0.999959	
Mo 202.031	4	Lin, Calc Int	-25.7	36260	0.00000	0.999997	
Ni 231.604	4	Lin, Calc Int	46.2	66480	0.00000	0.999992	
Pb 220.353	4	Lin, Calc Int	4.7	10840	0.00000	0.999997	
Sb 206.836	4	Lin, Calc Int	-4.3	4070	0.00000	0.999999	
Se 196.026	3	Wt. Lin	-7.3	1752	0.00000	0.999998	
Si 251.611	4	Lin, Calc Int	314.9	41080	0.00000	0.999985	

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Sn 189.927	4	Lin, Calc Int	-2.8	10130	0.00000	0.999999
Ti 334.940	4	Lin, Calc Int	-2152.8	1008000	0.00000	0.999974
Tl 190.801	3	Lin, Calc Int	1.2	3806	0.00000	0.999992
V 290.880	4	Lin, Calc Int	80.5	191100	0.00000	0.999991
Zn 206.200	4	Lin, Calc Int	-14.8	39610	0.00000	1.000000
K 766.490	4	Non Lin, Calc Int	128.4	3403	0.33042	1.000000
Na 589.592	4	Non Lin, Calc Int	317.8	20350	0.51165	1.000000
Sr 407.771	4	Lin, Calc Int	-8362.0	2871000	0.00000	0.999936
Li 670.784	4	Lin, Calc Int	457.5	169600	0.00000	0.999961

Sequence No.: 6 **Autosampler Location: 11**
Sample ID: ICV 2nd Vendor **Date Collected: 5/10/2012 9:28:00 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	155.0 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	2201296.6						21524.75	0.98%
YRADIAL	310167.0						2956.58	0.95%
Ga 417.206	1348104.0						32526.91	2.41%
GaRADIAL	93909.2						889.70	0.95%
Ag 328.068†	121571.3	0.400	mg/L	0.0136	0.400	mg/L	0.0136	3.40%
QC value within limits for Ag 328.068 Recovery = 99.99%								
Al 396.153†	78520.8	9.87	mg/L	0.026	9.87	mg/L	0.026	0.27%
QC value within limits for Al 396.153 Recovery = 98.74%								
As 188.979†	1083.0	0.392	mg/L	0.0069	0.392	mg/L	0.0069	1.76%
QC value within limits for As 188.979 Recovery = 97.88%								
Ba 233.527†	152459.1	1.01	mg/L	0.021	1.01	mg/L	0.021	2.09%
QC value within limits for Ba 233.527 Recovery = 100.66%								
Be 234.861†	60991.1	0.0495	mg/L	0.00157	0.0495	mg/L	0.00157	3.18%
QC value within limits for Be 234.861 Recovery = 98.91%								
B 249.677†	41838.2	0.503	mg/L	0.0187	0.503	mg/L	0.0187	3.73%
QC value within limits for B 249.677 Recovery = 100.54%								
Ca 227.546†	4605.0	10.3	mg/L	0.28	10.3	mg/L	0.28	2.76%
QC value within limits for Ca 227.546 Recovery = 102.64%								
Cd 228.802†	2676.2	0.0488	mg/L	0.00210	0.0488	mg/L	0.00210	4.31%
QC value within limits for Cd 228.802 Recovery = 97.57%								
Co 228.616†	7485.8	0.197	mg/L	0.0026	0.197	mg/L	0.0026	1.34%
QC value within limits for Co 228.616 Recovery = 98.31%								
Cr 267.716†	53220.7	0.501	mg/L	0.0078	0.501	mg/L	0.0078	1.56%
QC value within limits for Cr 267.716 Recovery = 100.23%								
Cu 327.393†	138522.3	0.511	mg/L	0.0205	0.511	mg/L	0.0205	4.01%
QC value within limits for Cu 327.393 Recovery = 102.30%								
Fe 239.562†	62813.1	3.94	mg/L	0.001	3.94	mg/L	0.001	0.03%
QC value within limits for Fe 239.562 Recovery = 98.57%								
Mg 279.077†	35051.1	9.77	mg/L	0.050	9.77	mg/L	0.050	0.51%
QC value within limits for Mg 279.077 Recovery = 97.68%								
Mn 257.610†	421829.2	0.508	mg/L	0.0108	0.508	mg/L	0.0108	2.13%
QC value within limits for Mn 257.610 Recovery = 101.54%								
Mo 202.031†	35068.8	0.969	mg/L	0.0146	0.969	mg/L	0.0146	1.50%
QC value within limits for Mo 202.031 Recovery = 96.87%								
Ni 231.604†	33581.0	0.504	mg/L	0.0105	0.504	mg/L	0.0105	2.08%
QC value within limits for Ni 231.604 Recovery = 100.82%								
Pb 220.353†	5382.5	0.497	mg/L	0.0045	0.497	mg/L	0.0045	0.90%
QC value within limits for Pb 220.353 Recovery = 99.45%								
Sb 206.836†	5005.8	1.23	mg/L	0.036	1.23	mg/L	0.036	2.92%
QC value within limits for Sb 206.836 Recovery = 102.49%								
Se 196.026†	693.7	0.402	mg/L	0.0100	0.402	mg/L	0.0100	2.49%
QC value within limits for Se 196.026 Recovery = 100.40%								
Si 251.611†	208628.2	5.06	mg/L	0.156	5.06	mg/L	0.156	3.08%
QC value within limits for Si 251.611 Recovery = 101.19%								
Sn 189.927†	10354.6	1.02	mg/L	0.011	1.02	mg/L	0.011	1.12%
QC value within limits for Sn 189.927 Recovery = 102.21%								

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Ti 334.940†          998085.9       0.994 mg/L        0.0030       0.994 mg/L        0.0030   0.31%
   QC value within limits for Ti 334.940  Recovery = 99.41%
Tl 190.801†            1908.8       0.515 mg/L        0.0008       0.515 mg/L        0.0008   0.16%
   QC value within limits for Tl 190.801  Recovery = 103.10%
V 290.880†           189221.4       0.989 mg/L        0.0113       0.989 mg/L        0.0113   1.14%
   QC value within limits for V 290.880  Recovery = 98.85%
Zn 206.200†           39764.1        1.01 mg/L         0.028        1.01 mg/L         0.028   2.76%
   QC value within limits for Zn 206.200  Recovery = 100.91%
K 766.490†           169639.5        49.5 mg/L          0.53        49.5 mg/L          0.53   1.08%
   QC value within limits for K 766.490  Recovery = 99.05%
Na 589.592†         1018861.2        50.0 mg/L          0.47        50.0 mg/L          0.47   0.94%
   QC value within limits for Na 589.592  Recovery = 99.99%
Sr 407.771†          2807147.8       0.980 mg/L        0.0095       0.980 mg/L        0.0095   0.97%
   QC value within limits for Sr 407.771  Recovery = 98.03%
Li 670.784†           171742.5        1.01 mg/L         0.004        1.01 mg/L         0.004   0.38%
   QC value within limits for Li 670.784  Recovery = 100.98%
All analyte(s) passed QC.

================================================================================================================
Sequence No.: 7                                        Autosampler Location: 1
Sample ID: ICB                                         Date Collected: 5/10/2012 9:33:58 AM
Analyst:                                               Data Type: Original
Initial Sample Wt:                                     Initial Sample Vol:
Dilution:                                              Sample Prep Vol:

----------------------------------------------------------------------------------------------------------------
Nebulizer Parameters: ICB
Analyte                Back Pressure     Flow
All                     156.0 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          2244622.3                                                    13306.07   0.59%
YRADIAL             333352.5                                                    31004.09   9.30%
Ga 417.206         1406400.9                                                    29081.83   2.07%
GaRADIAL            101703.9                                                     6529.53   6.42%
Ag 328.068†           -151.8    -0.00079 mg/L      0.000130    -0.00079 mg/L      0.000130  16.32%
   QC value within limits for Ag 328.068  Recovery = Not calculated
Al 396.153†             -0.0     0.00861 mg/L      0.000317     0.00861 mg/L      0.000317   3.68%
   QC value within limits for Al 396.153  Recovery = Not calculated
As 188.979†             -2.4     0.00021 mg/L      0.001167     0.00021 mg/L      0.001167 562.97%
   QC value within limits for As 188.979  Recovery = Not calculated
Ba 233.527†             -6.1    -0.00025 mg/L      0.000098    -0.00025 mg/L      0.000098  38.29%
   QC value within limits for Ba 233.527  Recovery = Not calculated
Be 234.861†             28.5     0.00006 mg/L      0.000033     0.00006 mg/L      0.000033  55.55%
   QC value within limits for Be 234.861  Recovery = Not calculated
B 249.677†             570.9     0.00812 mg/L      0.000254     0.00812 mg/L      0.000254   3.13%
   QC value within limits for B 249.677  Recovery = Not calculated
Ca 227.546†             2.2      0.0568 mg/L       0.01412      0.0568 mg/L       0.01412  24.87%
   QC value within limits for Ca 227.546  Recovery = Not calculated
Cd 228.802†             7.3     0.00012 mg/L      0.000130     0.00012 mg/L      0.000130 104.16%
   QC value within limits for Cd 228.802  Recovery = Not calculated
Co 228.616†           -10.9    -0.00034 mg/L      0.000247    -0.00034 mg/L      0.000247  73.23%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†             8.7    -0.00019 mg/L      0.000048    -0.00019 mg/L      0.000048  25.07%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 327.393†           -41.4    -0.00040 mg/L      0.000353    -0.00040 mg/L      0.000353  88.64%
   QC value within limits for Cu 327.393  Recovery = Not calculated
Fe 239.562†           149.0      0.0214 mg/L       0.00104      0.0214 mg/L       0.00104   4.85%
   QC value within limits for Fe 239.562  Recovery = Not calculated
Mg 279.077†             9.9      0.0288 mg/L       0.00218      0.0288 mg/L       0.00218   7.56%
   QC value within limits for Mg 279.077  Recovery = Not calculated
Mn 257.610†           221.5    -0.00106 mg/L      0.000040    -0.00106 mg/L      0.000040   3.78%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†             0.3     0.00072 mg/L      0.000403     0.00072 mg/L      0.000403  56.01%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Ni 231.604†             -9.7    -0.00084 mg/L      0.000237    -0.00084 mg/L      0.000237  28.19%
   QC value within limits for Ni 231.604  Recovery = Not calculated
Pb 220.353†             2.4     -0.00021 mg/L      0.000697    -0.00021 mg/L      0.000697 337.28%
   QC value within limits for Pb 220.353  Recovery = Not calculated
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Sb 206.836†               0.2     0.00111 mg/L      0.000298     0.00111 mg/L      0.000298  26.78%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -5.7     0.00091 mg/L      0.001291     0.00091 mg/L      0.001291 142.65%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              20.2    -0.00718 mg/L      0.000279    -0.00718 mg/L      0.000279   3.89%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               0.6     0.00034 mg/L      0.000233     0.00034 mg/L      0.000233  68.82%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Ti 334.940†              88.9     0.00223 mg/L      0.000081     0.00223 mg/L      0.000081   3.62%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -0.7    -0.00047 mg/L      0.002509    -0.00047 mg/L      0.002509 536.17%
   QC value within limits for Tl 190.801  Recovery = Not calculated
V 290.880†              525.9     0.00233 mg/L      0.002484     0.00233 mg/L      0.002484 106.79%
   QC value within limits for V 290.880  Recovery = Not calculated
Zn 206.200†             -21.1    -0.00016 mg/L      0.000346    -0.00016 mg/L      0.000346 216.79%
   QC value within limits for Zn 206.200  Recovery = Not calculated
K 766.490†              -39.2     -0.0492 mg/L       0.01471     -0.0492 mg/L       0.01471  29.89%
   QC value within limits for K 766.490  Recovery = Not calculated
Na 589.592†            -188.6     -0.0249 mg/L       0.02138     -0.0249 mg/L       0.02138  85.90%
   QC value within limits for Na 589.592  Recovery = Not calculated
Sr 407.771†             -48.2     0.00289 mg/L      0.000137     0.00289 mg/L      0.000137   4.73%
   QC value within limits for Sr 407.771  Recovery = Not calculated
Li 670.784†             -53.6    -0.00301 mg/L      0.000646    -0.00301 mg/L      0.000646  21.45%
   QC value within limits for Li 670.784  Recovery = Not calculated
All analyte(s) passed QC.

================================================================================================
Sequence No.: 8                                   Autosampler Location: 12
Sample ID: ICSA                                   Date Collected: 5/10/2012 9:40:51 AM
Analyst:                                          Data Type: Original
Initial Sample Wt:                                Initial Sample Vol:
Dilution:                                         Sample Prep Vol:

------------------------------------------------------------------------------------------------
Nebulizer Parameters: ICSA
Analyte                 Back Pressure     Flow
All                    156.0 kPa         0.50 L/min

------------------------------------------------------------------------------------------------
Mean Data: ICSA
                  Mean Corrected          Calib.                          Sample
Analyte              Intensity      Conc. Units      Std.Dev.      Conc. Units      Std.Dev.   RSD
Y 371.029          2034163.2                                                      11467.93   0.56%
YRADIAL             298623.5                                                        980.99   0.33%
Ga 417.206         1325239.2                                                      14127.47   1.07%
GaRADIAL             93773.6                                                       615.64   0.66%
Ag 328.068†         -13048.3    -0.00241 mg/L      0.001176    -0.00241 mg/L      0.001176  48.82%
   QC value within limits for Ag 328.068  Recovery = Not calculated
Al 396.153†        1937183.7         245 mg/L           1.4         245 mg/L           1.4   0.59%
   QC value within limits for Al 396.153  Recovery = 98.02%
As 188.979†           -24.4    -0.00181 mg/L      0.001747    -0.00181 mg/L      0.001747  96.63%
   QC value within limits for As 188.979  Recovery = Not calculated
Ba 233.527†           737.4     0.00236 mg/L      0.000165     0.00236 mg/L      0.000165   6.98%
   QC value within limits for Ba 233.527  Recovery = Not calculated
Be 234.861†          23924.4    -0.00076 mg/L      0.000682    -0.00076 mg/L      0.000682  90.34%
   QC value within limits for Be 234.861  Recovery = Not calculated
B 249.677†            4759.2      0.0195 mg/L       0.00379      0.0195 mg/L       0.00379  19.47%
   QC value within limits for B 249.677  Recovery = Not calculated
Ca 227.546†         117281.4         251 mg/L           5.5         251 mg/L           5.5   2.19%
   QC value within limits for Ca 227.546  Recovery = 100.23%
Cd 228.802†           16.6     0.00017 mg/L      0.000458     0.00017 mg/L      0.000458 272.73%
   QC value within limits for Cd 228.802  Recovery = Not calculated
Co 228.616†            9.2    -0.00211 mg/L      0.000173    -0.00211 mg/L      0.000173   8.18%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†           96.2    -0.00078 mg/L      0.000331    -0.00078 mg/L      0.000331  42.21%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 327.393†         -1376.4     0.00234 mg/L      0.000085     0.00234 mg/L      0.000085   3.63%
   QC value within limits for Cu 327.393  Recovery = Not calculated
Fe 239.562†         1458266.5        91.3 mg/L          0.36        91.3 mg/L          0.36   0.39%
   QC value within limits for Fe 239.562  Recovery = 91.28%
Mg 279.077†          888666.3         247 mg/L           1.0         247 mg/L           1.0   0.40%
   QC value within limits for Mg 279.077  Recovery = 98.63%
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Mn 257.610† -2477.5 -0.00175 mg/L 0.000687 -0.00175 mg/L 0.000687 39.16%
QC value within limits for Mn 257.610 Recovery = Not calculated
Mo 202.031† -59.3 0.00356 mg/L 0.000612 0.00356 mg/L 0.000612 17.20%
QC value within limits for Mo 202.031 Recovery = Not calculated
Ni 231.604† 29.0 -0.00025 mg/L 0.000555 -0.00025 mg/L 0.000555 218.09%
QC value within limits for Ni 231.604 Recovery = Not calculated
Pb 220.353† -357.1 0.00115 mg/L 0.001090 0.00115 mg/L 0.001090 94.76%
QC value within limits for Pb 220.353 Recovery = Not calculated
Sb 206.836† -33.8 -0.00390 mg/L 0.000690 -0.00390 mg/L 0.000690 17.70%
QC value within limits for Sb 206.836 Recovery = Not calculated
Se 196.026† -52.5 -0.00158 mg/L 0.001707 -0.00158 mg/L 0.001707 107.79%
QC value within limits for Se 196.026 Recovery = Not calculated
Si 251.611† 1045.9 0.0178 mg/L 0.00011 0.0178 mg/L 0.00011 0.63%
QC value within limits for Si 251.611 Recovery = Not calculated
Sn 189.927† -316.1 -0.0309 mg/L 0.00187 -0.0309 mg/L 0.00187 6.04%
QC value within limits for Sn 189.927 Recovery = Not calculated
Ti 334.940† -41747.3 -0.00204 mg/L 0.003127 -0.00204 mg/L 0.003127 152.98%
QC value within limits for Ti 334.940 Recovery = Not calculated
Tl 190.801† -40.2 -0.00466 mg/L 0.003454 -0.00466 mg/L 0.003454 74.07%
QC value within limits for Tl 190.801 Recovery = Not calculated
V 290.880† 4900.2 0.00439 mg/L 0.000956 0.00439 mg/L 0.000956 21.79%
QC value within limits for V 290.880 Recovery = Not calculated
Zn 206.200† 143.4 0.00226 mg/L 0.000504 0.00226 mg/L 0.000504 22.29%
QC value within limits for Zn 206.200 Recovery = Not calculated
K 766.490† -92.3 -0.0648 mg/L 0.01997 -0.0648 mg/L 0.01997 30.79%
QC value within limits for K 766.490 Recovery = Not calculated
Na 589.592† 242.8 -0.00369 mg/L 0.031733 -0.00369 mg/L 0.031733 860.63%
QC value within limits for Na 589.592 Recovery = Not calculated
Sr 407.771† 3211.0 -0.00143 mg/L 0.000275 -0.00143 mg/L 0.000275 19.18%
QC value within limits for Sr 407.771 Recovery = Not calculated
Li 670.784† 250.2 -0.00122 mg/L 0.000201 -0.00122 mg/L 0.000201 16.44%
QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

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Sequence No.: 9 **Autosampler Location: 13**
Sample ID: ICSAB **Date Collected: 5/10/2012 9:46:48 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICSAB

Analyte	Back Pressure	Flow
All	157.0 kPa	0.50 L/min

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2036669.9						13959.86	0.69%
YRADIAL	300824.0						1849.67	0.61%
Ga 417.206	1301008.4						36056.22	2.77%
GaRADIAL	93145.4						1114.58	1.20%
Ag 328.068†	141993.3	0.505	mg/L	0.0166	0.505	mg/L	0.0166	3.28%
QC value within limits for Ag 328.068 Recovery = 101.02%								
Al 396.153†	2010865.7	254	mg/L	2.6	254	mg/L	2.6	1.02%
QC value within limits for Al 396.153 Recovery = 101.75%								
As 188.979†	622.9	0.235	mg/L	0.0038	0.235	mg/L	0.0038	1.61%
QC value within limits for As 188.979 Recovery = 93.83%								
Ba 233.527†	37728.6	0.246	mg/L	0.0010	0.246	mg/L	0.0010	0.39%
QC value within limits for Ba 233.527 Recovery = 98.59%								
Be 234.861†	326529.0	0.246	mg/L	0.0091	0.246	mg/L	0.0091	3.69%
QC value within limits for Be 234.861 Recovery = 98.46%								
B 249.677†	4532.5	0.00395	mg/L	0.002523	0.00395	mg/L	0.002523	63.83%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	123246.1	264	mg/L	10.7	264	mg/L	10.7	4.07%
QC value within limits for Ca 227.546 Recovery = 105.44%								
Cd 228.802†	22143.3	0.415	mg/L	0.0122	0.415	mg/L	0.0122	2.94%
QC value within limits for Cd 228.802 Recovery = 82.92%								
Co 228.616†	8783.4	0.229	mg/L	0.0026	0.229	mg/L	0.0026	1.14%
QC value within limits for Co 228.616 Recovery = 91.71%								

Approved: May 11, 2012

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Cr 267.716†            26387.7       0.247 mg/L        0.0003       0.247 mg/L        0.0003   0.12%
   QC value within limits for Cr 267.716  Recovery = 98.72%
Cu 327.393†            66127.3       0.251 mg/L        0.0074       0.251 mg/L        0.0074   2.96%
   QC value within limits for Cu 327.393  Recovery = 100.44%
Fe 239.562†          1496478.3        93.7 mg/L          0.14        93.7 mg/L          0.14   0.15%
   QC value within limits for Fe 239.562  Recovery = 93.67%
Mg 279.077†           912812.4         253 mg/L           0.4         253 mg/L           0.4   0.15%
   QC value within limits for Mg 279.077  Recovery = 101.31%
Mn 257.610†           196051.0       0.238 mg/L        0.0005       0.238 mg/L        0.0005   0.22%
   QC value within limits for Mn 257.610  Recovery = 95.08%
Mo 202.031†             -58.9     0.00385 mg/L      0.000111     0.00385 mg/L      0.000111   2.88%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Ni 231.604†            31375.7       0.471 mg/L        0.0028       0.471 mg/L        0.0028   0.61%
   QC value within limits for Ni 231.604  Recovery = 94.18%
Pb 220.353†             4765.9       0.475 mg/L        0.0029       0.475 mg/L        0.0029   0.62%
   QC value within limits for Pb 220.353  Recovery = 94.94%
Sb 206.836†             1982.7       0.490 mg/L        0.0153       0.490 mg/L        0.0153   3.11%
   QC value within limits for Sb 206.836  Recovery = 98.04%
Se 196.026†              366.7       0.239 mg/L        0.0077       0.239 mg/L        0.0077   3.21%
   QC value within limits for Se 196.026  Recovery = 95.41%
Si 251.611†             -140.9     -0.0111 mg/L       0.00114     -0.0111 mg/L       0.00114  10.28%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†             -349.8     -0.0342 mg/L       0.00061     -0.0342 mg/L       0.00061   1.77%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Ti 334.940†           -43290.0    -0.00176 mg/L      0.004018    -0.00176 mg/L      0.004018 227.84%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†             1762.4       0.469 mg/L        0.0028       0.469 mg/L        0.0028   0.59%
   QC value within limits for Tl 190.801  Recovery = 93.87%
V 290.880†             51186.5       0.246 mg/L        0.0028       0.246 mg/L        0.0028   1.14%
   QC value within limits for V 290.880  Recovery = 98.39%
Zn 206.200†            18407.1       0.466 mg/L        0.0008       0.466 mg/L        0.0008   0.18%
   QC value within limits for Zn 206.200  Recovery = 93.15%
K 766.490†             17115.8        4.98 mg/L         0.023        4.98 mg/L         0.023   0.46%
   QC value within limits for K 766.490  Recovery = 99.69%
Na 589.592†           105741.1        5.18 mg/L         0.055        5.18 mg/L         0.055   1.06%
   QC value within limits for Na 589.592  Recovery = 103.61%
Sr 407.771†             3057.9    -0.00176 mg/L      0.000279    -0.00176 mg/L      0.000279  15.83%
   QC value within limits for Sr 407.771  Recovery = Not calculated
Li 670.784†              281.7    -0.00104 mg/L      0.000287    -0.00104 mg/L      0.000287  27.73%
   QC value within limits for Li 670.784  Recovery = Not calculated
All analyte(s) passed QC.

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Sequence No.: 10                                    Autosampler Location: 6
Sample ID: CCV                                      Date Collected: 5/10/2012 9:52:45 AM
Analyst:                                            Data Type: Original
Initial Sample Wt:                                  Initial Sample Vol:
Dilution:                                           Sample Prep Vol:

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Nebulizer Parameters: CCV
Analyte                Back Pressure     Flow
All                   156.0 kPa         0.50 L/min

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Mean Data: CCV
                  Mean Corrected          Calib.                          Sample
Analyte              Intensity      Conc. Units      Std.Dev.      Conc. Units      Std.Dev.   RSD
Y 371.029          2161190.9                                                      13662.79   0.63%
YRADIAL             313849.8                                                       4058.46   1.29%
Ga 417.206         1359437.3                                                      22011.66   1.62%
GaRADIAL             94504.4                                                       1897.14   2.01%
Ag 328.068†          121804.9       0.401 mg/L        0.0106       0.401 mg/L        0.0106   2.65%
   QC value within limits for Ag 328.068  Recovery = 100.19%
Al 396.153†           78357.6        9.85 mg/L         0.053        9.85 mg/L         0.053   0.54%
   QC value within limits for Al 396.153  Recovery = 98.51%
As 188.979†            1056.8       0.382 mg/L        0.0040       0.382 mg/L        0.0040   1.06%
   QC value within limits for As 188.979  Recovery = 95.44%
Ba 233.527†          151122.2       0.998 mg/L        0.0083       0.998 mg/L        0.0083   0.83%
   QC value within limits for Ba 233.527  Recovery = 99.78%
Be 234.861†           59859.6      0.0485 mg/L       0.00122      0.0485 mg/L       0.00122   2.51%
   QC value within limits for Be 234.861  Recovery = 97.08%
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B 249.677†	40881.5	0.491 mg/L	0.0140	0.491 mg/L	0.0140	2.85%
QC value within limits for B 249.677 Recovery = 98.24%						
Ca 227.546†	4543.9	10.1 mg/L	0.22	10.1 mg/L	0.22	2.17%
QC value within limits for Ca 227.546 Recovery = 101.32%						
Cd 228.802†	2613.5	0.0477 mg/L	0.00192	0.0477 mg/L	0.00192	4.03%
QC value within limits for Cd 228.802 Recovery = 95.32%						
Co 228.616†	7537.7	0.198 mg/L	0.0017	0.198 mg/L	0.0017	0.86%
QC value within limits for Co 228.616 Recovery = 99.04%						
Cr 267.716†	53331.5	0.502 mg/L	0.0063	0.502 mg/L	0.0063	1.25%
QC value within limits for Cr 267.716 Recovery = 100.44%						
Cu 327.393†	135529.1	0.500 mg/L	0.0148	0.500 mg/L	0.0148	2.95%
QC value within limits for Cu 327.393 Recovery = 100.09%						
Fe 239.562†	62965.7	3.95 mg/L	0.042	3.95 mg/L	0.042	1.07%
QC value within limits for Fe 239.562 Recovery = 98.81%						
Mg 279.077†	35204.3	9.81 mg/L	0.103	9.81 mg/L	0.103	1.05%
QC value within limits for Mg 279.077 Recovery = 98.11%						
Mn 257.610†	420522.5	0.506 mg/L	0.0051	0.506 mg/L	0.0051	1.00%
QC value within limits for Mn 257.610 Recovery = 101.22%						
Mo 202.031†	36098.3	0.997 mg/L	0.0086	0.997 mg/L	0.0086	0.86%
QC value within limits for Mo 202.031 Recovery = 99.71%						
Ni 231.604†	33390.1	0.501 mg/L	0.0037	0.501 mg/L	0.0037	0.74%
QC value within limits for Ni 231.604 Recovery = 100.25%						
Pb 220.353†	5438.4	0.502 mg/L	0.0035	0.502 mg/L	0.0035	0.69%
QC value within limits for Pb 220.353 Recovery = 100.48%						
Sb 206.836†	4811.6	1.18 mg/L	0.026	1.18 mg/L	0.026	2.18%
QC value within limits for Sb 206.836 Recovery = 98.52%						
Se 196.026†	680.8	0.394 mg/L	0.0061	0.394 mg/L	0.0061	1.54%
QC value within limits for Se 196.026 Recovery = 98.56%						
Si 251.611†	203965.7	4.95 mg/L	0.109	4.95 mg/L	0.109	2.21%
QC value within limits for Si 251.611 Recovery = 98.92%						
Sn 189.927†	9988.2	0.986 mg/L	0.0100	0.986 mg/L	0.0100	1.01%
QC value within limits for Sn 189.927 Recovery = 98.59%						
Ti 334.940†	987575.6	0.984 mg/L	0.0066	0.984 mg/L	0.0066	0.67%
QC value within limits for Ti 334.940 Recovery = 98.37%						
Tl 190.801†	1917.7	0.518 mg/L	0.0073	0.518 mg/L	0.0073	1.41%
QC value within limits for Tl 190.801 Recovery = 103.55%						
V 290.880†	192288.0	1.00 mg/L	0.021	1.00 mg/L	0.021	2.09%
QC value within limits for V 290.880 Recovery = 100.45%						
Zn 206.200†	39361.9	0.999 mg/L	0.0067	0.999 mg/L	0.0067	0.68%
QC value within limits for Zn 206.200 Recovery = 99.89%						
K 766.490†	170150.6	49.7 mg/L	0.08	49.7 mg/L	0.08	0.16%
QC value within limits for K 766.490 Recovery = 99.35%						
Na 589.592†	1019242.2	50.0 mg/L	0.77	50.0 mg/L	0.77	1.54%
QC value within limits for Na 589.592 Recovery = 100.03%						
Sr 407.771†	2813407.6	0.982 mg/L	0.0134	0.982 mg/L	0.0134	1.36%
QC value within limits for Sr 407.771 Recovery = 98.25%						
Li 670.784†	171758.3	1.01 mg/L	0.006	1.01 mg/L	0.006	0.56%
QC value within limits for Li 670.784 Recovery = 100.99%						

All analyte(s) passed QC.

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Sequence No.: 11 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 5/10/2012 9:58:47 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	155.0 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	2329201.1						10130.42	0.43%
YRADIAL	315764.6						3071.16	0.97%
Ga 417.206	1431927.9						27200.35	1.90%
GaRADIAL	95672.1						1825.47	1.91%
Ag 328.068†	-63.5	-0.00051	mg/L	0.000162	-0.00051	mg/L	0.000162	31.90%
QC value within limits for Ag 328.068 Recovery = Not calculated								

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Al 396.153†               3.4     0.00904 mg/L      0.001452     0.00904 mg/L      0.001452  16.05%
   QC value within limits for Al 396.153  Recovery = Not calculated
As 188.979†              -0.5     0.00090 mg/L      0.000840     0.00090 mg/L      0.000840  93.10%
   QC value within limits for As 188.979  Recovery = Not calculated
Ba 233.527†              11.9    -0.00014 mg/L      0.000105    -0.00014 mg/L      0.000105  77.36%
   QC value within limits for Ba 233.527  Recovery = Not calculated
Be 234.861†             109.4     0.00012 mg/L      0.000018     0.00012 mg/L      0.000018  14.56%
   QC value within limits for Be 234.861  Recovery = Not calculated
B 249.677†              417.1     0.00625 mg/L      0.000607     0.00625 mg/L      0.000607   9.71%
   QC value within limits for B 249.677  Recovery = Not calculated
Ca 227.546†              -3.3      0.0454 mg/L       0.01600      0.0454 mg/L       0.01600  35.25%
   QC value within limits for Ca 227.546  Recovery = Not calculated
Cd 228.802†               4.2     0.00006 mg/L      0.000152     0.00006 mg/L      0.000152 235.09%
   QC value within limits for Cd 228.802  Recovery = Not calculated
Co 228.616†               2.2     0.00001 mg/L      0.000065     0.00001 mg/L      0.000065 862.96%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               1.9    -0.00026 mg/L      0.000039    -0.00026 mg/L      0.000039  15.12%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 327.393†              42.4    -0.00009 mg/L      0.000327    -0.00009 mg/L      0.000327 361.10%
   QC value within limits for Cu 327.393  Recovery = Not calculated
Fe 239.562†             251.6      0.0278 mg/L       0.00049      0.0278 mg/L       0.00049   1.78%
   QC value within limits for Fe 239.562  Recovery = Not calculated
Mg 279.077†              19.4      0.0314 mg/L       0.00336      0.0314 mg/L       0.00336  10.71%
   QC value within limits for Mg 279.077  Recovery = Not calculated
Mn 257.610†             167.6    -0.00113 mg/L      0.000010    -0.00113 mg/L      0.000010   0.85%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               1.2     0.00075 mg/L      0.000243     0.00075 mg/L      0.000243  32.62%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Ni 231.604†               2.5    -0.00066 mg/L      0.000095    -0.00066 mg/L      0.000095  14.47%
   QC value within limits for Ni 231.604  Recovery = Not calculated
Pb 220.353†               6.3     0.00014 mg/L      0.000878     0.00014 mg/L      0.000878 606.80%
   QC value within limits for Pb 220.353  Recovery = Not calculated
Sb 206.836†              -1.3     0.00075 mg/L      0.000593     0.00075 mg/L      0.000593  78.66%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -3.3     0.00227 mg/L      0.001737     0.00227 mg/L      0.001737  76.44%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              70.3    -0.00596 mg/L      0.003812    -0.00596 mg/L      0.003812  63.93%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†             -18.0    -0.00150 mg/L      0.000486    -0.00150 mg/L      0.000486  32.39%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Ti 334.940†              39.8     0.00218 mg/L      0.000165     0.00218 mg/L      0.000165   7.55%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -1.7    -0.00074 mg/L      0.001232    -0.00074 mg/L      0.001232 167.56%
   QC value within limits for Tl 190.801  Recovery = Not calculated
V 290.880†              141.6     0.00031 mg/L      0.001686     0.00031 mg/L      0.001686 536.36%
   QC value within limits for V 290.880  Recovery = Not calculated
Zn 206.200†             -49.1    -0.00087 mg/L      0.000244    -0.00087 mg/L      0.000244  28.20%
   QC value within limits for Zn 206.200  Recovery = Not calculated
K 766.490†                7.8     -0.0354 mg/L       0.01566     -0.0354 mg/L       0.01566  44.24%
   QC value within limits for K 766.490  Recovery = Not calculated
Na 589.592†            -244.5     -0.0276 mg/L       0.00434     -0.0276 mg/L       0.00434  15.69%
   QC value within limits for Na 589.592  Recovery = Not calculated
Sr 407.771†            -114.2     0.00287 mg/L      0.000012     0.00287 mg/L      0.000012   0.40%
   QC value within limits for Sr 407.771  Recovery = Not calculated
Li 670.784†              -6.3    -0.00273 mg/L      0.000595    -0.00273 mg/L      0.000595  21.75%
   QC value within limits for Li 670.784  Recovery = Not calculated
All analyte(s) passed QC.
User canceled analysis.
```

Approved: May 11, 2012

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Analysis Begun

Start Time: 5/10/2012 10:05:47 AM **Plasma On Time: 5/10/2012 7:42:20 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\THURSDAY1.sif
Batch ID:
Results Data Set: 051012H
Results Library: C:\pe\peicp2\Results\Results.mdb

==========

Sequence No.: 1 **Autosampler Location: 36**
Sample ID: ICP FILTER **Date Collected: 5/10/2012 10:05:49 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICP FILTER

Analyte	Back Pressure	Flow
All	156.0 kPa	0.50 L/min

Mean Data: ICP FILTER

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	2246323.8						6911.39	0.31%
YRADIAL	311537.0						7732.89	2.48%
Ga 417.206	1451422.5						22895.81	1.58%
GaRADIAL	95408.8						811.95	0.85%
Ag 328.068†	-48.3	-0.00045	mg/L	0.000305	-0.00045	mg/L	0.000305	67.18%
Al 396.153†	49.6	0.0149	mg/L	0.00158	0.0149	mg/L	0.00158	10.61%
As 188.979†	3.4	0.00233	mg/L	0.001727	0.00233	mg/L	0.001727	74.02%
Ba 233.527†	22.1	-0.00007	mg/L	0.000141	-0.00007	mg/L	0.000141	203.00%
Be 234.861†	256.3	0.00025	mg/L	0.000007	0.00025	mg/L	0.000007	2.64%
B 249.677†	210.2	0.00376	mg/L	0.000098	0.00376	mg/L	0.000098	2.60%
Ca 227.546†	16.3	0.0866	mg/L	0.02146	0.0866	mg/L	0.02146	24.78%
Cd 228.802†	-1.1	-0.00004	mg/L	0.000172	-0.00004	mg/L	0.000172	420.98%
Co 228.616†	6.4	0.00012	mg/L	0.000208	0.00012	mg/L	0.000208	174.66%
Cr 267.716†	-11.5	-0.00038	mg/L	0.000079	-0.00038	mg/L	0.000079	20.88%
Cu 327.393†	-71.0	-0.00051	mg/L	0.000409	-0.00051	mg/L	0.000409	80.75%
Fe 239.562†	106.0	0.0187	mg/L	0.00136	0.0187	mg/L	0.00136	7.24%
Mg 279.077†	51.4	0.0403	mg/L	0.00181	0.0403	mg/L	0.00181	4.50%
Mn 257.610†	-18.1	-0.00135	mg/L	0.000014	-0.00135	mg/L	0.000014	1.05%
Mo 202.031†	-6.4	0.00054	mg/L	0.000064	0.00054	mg/L	0.000064	11.87%
Ni 231.604†	-6.4	-0.00079	mg/L	0.000246	-0.00079	mg/L	0.000246	31.14%
Pb 220.353†	4.5	-0.00001	mg/L	0.001316	-0.00001	mg/L	0.001316	>999.9%
Sb 206.836†	-4.1	0.00007	mg/L	0.000539	0.00007	mg/L	0.000539	755.04%
Se 196.026†	-9.9	-0.00149	mg/L	0.002580	-0.00149	mg/L	0.002580	172.62%
Si 251.611†	-90.7	-0.00988	mg/L	0.000292	-0.00988	mg/L	0.000292	2.96%
Sn 189.927†	-53.2	-0.00497	mg/L	0.000158	-0.00497	mg/L	0.000158	3.18%
Ti 334.940†	-28.7	0.00212	mg/L	0.000060	0.00212	mg/L	0.000060	2.85%
Tl 190.801†	0.0	-0.00027	mg/L	0.000826	-0.00027	mg/L	0.000826	307.33%
V 290.880†	918.9	0.00438	mg/L	0.001046	0.00438	mg/L	0.001046	23.87%
Zn 206.200†	-1.4	0.00034	mg/L	0.000250	0.00034	mg/L	0.000250	74.34%
K 766.490†	-15.5	-0.0423	mg/L	0.01710	-0.0423	mg/L	0.01710	40.45%
Na 589.592†	281.8	-0.00177	mg/L	0.009538	-0.00177	mg/L	0.009538	538.45%
Sr 407.771†	-3.7	0.00291	mg/L	0.000069	0.00291	mg/L	0.000069	2.36%
Li 670.784†	-120.2	-0.00341	mg/L	0.000469	-0.00341	mg/L	0.000469	13.76%

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Sequence No.: 2 **Autosampler Location: 37**
Sample ID: 0.2 MICRON **Date Collected: 5/10/2012 10:12:44 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: 0.2 MICRON

Approved: May 11, 2012

Kym H. Rhoden

Analyte	Back Pressure	Flow
All	155.0 kPa	0.50 L/min

Mean Data: 0.2 MICRON

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	2267073.8						25293.48	1.12%
YRADIAL	309614.6						4386.36	1.42%
Ga 417.206	1422485.9						36548.87	2.57%
GaRADIAL	94116.6						1241.66	1.32%
Ag 328.068†	-106.2	-0.00065	mg/L	0.000022	-0.00065	mg/L	0.000022	3.41%
Al 396.153†	-1.6	0.00839	mg/L	0.000517	0.00839	mg/L	0.000517	6.15%
As 188.979†	-1.6	0.00048	mg/L	0.003112	0.00048	mg/L	0.003112	643.96%
Ba 233.527†	300.3	0.00177	mg/L	0.000126	0.00177	mg/L	0.000126	7.12%
Be 234.861†	37.3	0.00007	mg/L	0.000040	0.00007	mg/L	0.000040	57.60%
B 249.677†	205.8	0.00370	mg/L	0.000275	0.00370	mg/L	0.000275	7.42%
Ca 227.546†	7.9	0.0686	mg/L	0.01776	0.0686	mg/L	0.01776	25.90%
Cd 228.802†	14.9	0.00027	mg/L	0.000149	0.00027	mg/L	0.000149	55.76%
Co 228.616†	-2.5	-0.00012	mg/L	0.000116	-0.00012	mg/L	0.000116	99.82%
Cr 267.716†	12.8	-0.00015	mg/L	0.000096	-0.00015	mg/L	0.000096	63.76%
Cu 327.393†	-11.9	-0.00029	mg/L	0.000280	-0.00029	mg/L	0.000280	97.08%
Fe 239.562†	20.8	0.0134	mg/L	0.00038	0.0134	mg/L	0.00038	2.85%
Mg 279.077†	21.8	0.0321	mg/L	0.00317	0.0321	mg/L	0.00317	9.89%
Mn 257.610†	-13.7	-0.00134	mg/L	0.000021	-0.00134	mg/L	0.000021	1.55%
Mo 202.031†	9.1	0.00096	mg/L	0.000203	0.00096	mg/L	0.000203	21.04%
Ni 231.604†	-11.9	-0.00087	mg/L	0.000468	-0.00087	mg/L	0.000468	53.64%
Pb 220.353†	0.3	-0.00040	mg/L	0.001672	-0.00040	mg/L	0.001672	418.17%
Sb 206.836†	-5.5	-0.00029	mg/L	0.000852	-0.00029	mg/L	0.000852	299.09%
Se 196.026†	-5.9	0.00080	mg/L	0.000233	0.00080	mg/L	0.000233	28.92%
Si 251.611†	51.4	-0.00642	mg/L	0.000702	-0.00642	mg/L	0.000702	10.93%
Sn 189.927†	-20.6	-0.00176	mg/L	0.001167	-0.00176	mg/L	0.001167	66.39%
Ti 334.940†	345.3	0.00249	mg/L	0.000065	0.00249	mg/L	0.000065	2.62%
Tl 190.801†	-8.3	-0.00246	mg/L	0.001471	-0.00246	mg/L	0.001471	59.88%
V 290.880†	798.0	0.00375	mg/L	0.001891	0.00375	mg/L	0.001891	50.43%
Zn 206.200†	808.4	0.0208	mg/L	0.00062	0.0208	mg/L	0.00062	3.00%
K 766.490†	34.7	-0.0275	mg/L	0.00773	-0.0275	mg/L	0.00773	28.11%
Na 589.592†	-162.2	-0.0236	mg/L	0.00153	-0.0236	mg/L	0.00153	6.50%
Sr 407.771†	-81.9	0.00288	mg/L	0.000034	0.00288	mg/L	0.000034	1.19%
Li 670.784†	-81.3	-0.00318	mg/L	0.000123	-0.00318	mg/L	0.000123	3.88%

Sequence No.: 3 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 5/10/2012 10:19:37 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	155.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	2189308.6						8494.14	0.39%
YRADIAL	310240.1						652.46	0.21%
Ga 417.206	1326347.9						40820.53	3.08%
GaRADIAL	93478.1						629.83	0.67%
Ag 328.068†	126311.7	0.415	mg/L	0.0170	0.415	mg/L	0.0170	4.10%
QC value within limits for Ag 328.068 Recovery = 103.87%								
Al 396.153†	79570.1	10.0	mg/L	0.03	10.0	mg/L	0.03	0.30%
QC value within limits for Al 396.153 Recovery = 100.04%								
As 188.979†	1104.4	0.399	mg/L	0.0104	0.399	mg/L	0.0104	2.60%
QC value within limits for As 188.979 Recovery = 99.78%								
Ba 233.527†	152876.5	1.01	mg/L	0.005	1.01	mg/L	0.005	0.50%
QC value within limits for Ba 233.527 Recovery = 100.94%								
Be 234.861†	62404.8	0.0506	mg/L	0.00210	0.0506	mg/L	0.00210	4.16%
QC value within limits for Be 234.861 Recovery = 101.21%								
B 249.677†	42143.2	0.506	mg/L	0.0208	0.506	mg/L	0.0208	4.11%

Approved: May 11, 2012

	QC value within limits for B 249.677 Recovery = 101.27%						
Ca 227.546†	4717.0	10.5 mg/L	0.39	10.5 mg/L	0.39	3.73%	
	QC value within limits for Ca 227.546 Recovery = 105.04%						
Cd 228.802†	2740.7	0.0500 mg/L	0.00259	0.0500 mg/L	0.00259	5.19%	
	QC value within limits for Cd 228.802 Recovery = 99.92%						
Co 228.616†	7557.8	0.199 mg/L	0.0007	0.199 mg/L	0.0007	0.36%	
	QC value within limits for Co 228.616 Recovery = 99.28%						
Cr 267.716†	53761.9	0.506 mg/L	0.0055	0.506 mg/L	0.0055	1.09%	
	QC value within limits for Cr 267.716 Recovery = 101.25%						
Cu 327.393†	139218.3	0.514 mg/L	0.0189	0.514 mg/L	0.0189	3.67%	
	QC value within limits for Cu 327.393 Recovery = 102.82%						
Fe 239.562†	64282.6	4.03 mg/L	0.026	4.03 mg/L	0.026	0.64%	
	QC value within limits for Fe 239.562 Recovery = 100.87%						
Mg 279.077†	35768.1	9.97 mg/L	0.025	9.97 mg/L	0.025	0.25%	
	QC value within limits for Mg 279.077 Recovery = 99.67%						
Mn 257.610†	424650.1	0.511 mg/L	0.0020	0.511 mg/L	0.0020	0.39%	
	QC value within limits for Mn 257.610 Recovery = 102.22%						
Mo 202.031†	36258.2	1.00 mg/L	0.007	1.00 mg/L	0.007	0.74%	
	QC value within limits for Mo 202.031 Recovery = 100.16%						
Ni 231.604†	33693.2	0.506 mg/L	0.0037	0.506 mg/L	0.0037	0.74%	
	QC value within limits for Ni 231.604 Recovery = 101.16%						
Pb 220.353†	5444.0	0.503 mg/L	0.0013	0.503 mg/L	0.0013	0.26%	
	QC value within limits for Pb 220.353 Recovery = 100.59%						
Sb 206.836†	5006.9	1.23 mg/L	0.044	1.23 mg/L	0.044	3.58%	
	QC value within limits for Sb 206.836 Recovery = 102.52%						
Se 196.026†	705.8	0.409 mg/L	0.0169	0.409 mg/L	0.0169	4.15%	
	QC value within limits for Se 196.026 Recovery = 102.14%						
Si 251.611†	211601.4	5.13 mg/L	0.177	5.13 mg/L	0.177	3.46%	
	QC value within limits for Si 251.611 Recovery = 102.63%						
Sn 189.927†	10032.8	0.990 mg/L	0.0045	0.990 mg/L	0.0045	0.45%	
	QC value within limits for Sn 189.927 Recovery = 99.03%						
Ti 334.940†	1007862.0	1.00 mg/L	0.009	1.00 mg/L	0.009	0.90%	
	QC value within limits for Ti 334.940 Recovery = 100.38%						
Tl 190.801†	1917.1	0.518 mg/L	0.0072	0.518 mg/L	0.0072	1.39%	
	QC value within limits for Tl 190.801 Recovery = 103.57%						
V 290.880†	193487.8	1.01 mg/L	0.014	1.01 mg/L	0.014	1.37%	
	QC value within limits for V 290.880 Recovery = 101.08%						
Zn 206.200†	40257.3	1.02 mg/L	0.019	1.02 mg/L	0.019	1.81%	
	QC value within limits for Zn 206.200 Recovery = 102.16%						
K 766.490†	171516.7	50.1 mg/L	0.31	50.1 mg/L	0.31	0.63%	
	QC value within limits for K 766.490 Recovery = 100.14%						
Na 589.592†	1034781.9	50.8 mg/L	0.69	50.8 mg/L	0.69	1.35%	
	QC value within limits for Na 589.592 Recovery = 101.55%						
Sr 407.771†	2847294.0	0.994 mg/L	0.0068	0.994 mg/L	0.0068	0.68%	
	QC value within limits for Sr 407.771 Recovery = 99.43%						
Li 670.784†	174042.5	1.02 mg/L	0.011	1.02 mg/L	0.011	1.07%	
	QC value within limits for Li 670.784 Recovery = 102.34%						

All analyte(s) passed QC.

==========

Sequence No.: 4 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 5/10/2012 10:25:39 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	155.0 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	2260381.6						2748.56	0.12%
YRADIAL	313324.1						3165.57	1.01%
Ga 417.206	1391305.9						28813.00	2.07%
GaRADIAL	94184.1						2364.79	2.51%
Ag 328.068†	-80.5	-0.00056	mg/L	0.000366	-0.00056	mg/L	0.000366	65.39%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	10.0	0.00986	mg/L	0.000437	0.00986	mg/L	0.000437	4.43%

Approved: May 11, 2012

QC value within limits for Al 396.153 Recovery = Not calculated
As 188.979† -0.4 0.00095 mg/L 0.002124 0.00095 mg/L 0.002124 223.17%
QC value within limits for As 188.979 Recovery = Not calculated
Ba 233.527† 4.8 -0.00018 mg/L 0.000116 -0.00018 mg/L 0.000116 63.74%
QC value within limits for Ba 233.527 Recovery = Not calculated
Be 234.861† 13.4 0.00005 mg/L 0.000018 0.00005 mg/L 0.000018 38.03%
QC value within limits for Be 234.861 Recovery = Not calculated
B 249.677† 346.4 0.00540 mg/L 0.000307 0.00540 mg/L 0.000307 5.69%
QC value within limits for B 249.677 Recovery = Not calculated
Ca 227.546† -9.5 0.0322 mg/L 0.00887 0.0322 mg/L 0.00887 27.55%
QC value within limits for Ca 227.546 Recovery = Not calculated
Cd 228.802† 11.2 0.00020 mg/L 0.000282 0.00020 mg/L 0.000282 143.97%
QC value within limits for Cd 228.802 Recovery = Not calculated
Co 228.616† 0.5 -0.00004 mg/L 0.000099 -0.00004 mg/L 0.000099 269.92%
QC value within limits for Co 228.616 Recovery = Not calculated
Cr 267.716† 2.0 -0.00025 mg/L 0.000116 -0.00025 mg/L 0.000116 45.67%
QC value within limits for Cr 267.716 Recovery = Not calculated
Cu 327.393† 12.0 -0.00020 mg/L 0.000327 -0.00020 mg/L 0.000327 162.22%
QC value within limits for Cu 327.393 Recovery = Not calculated
Fe 239.562† 242.2 0.0273 mg/L 0.00006 0.0273 mg/L 0.00006 0.21%
QC value within limits for Fe 239.562 Recovery = Not calculated
Mg 279.077† 9.1 0.0285 mg/L 0.00162 0.0285 mg/L 0.00162 5.69%
QC value within limits for Mg 279.077 Recovery = Not calculated
Mn 257.610† 215.7 -0.00107 mg/L 0.000017 -0.00107 mg/L 0.000017 1.55%
QC value within limits for Mn 257.610 Recovery = Not calculated
Mo 202.031† 11.2 0.00102 mg/L 0.000099 0.00102 mg/L 0.000099 9.65%
QC value within limits for Mo 202.031 Recovery = Not calculated
Ni 231.604† -2.8 -0.00074 mg/L 0.000565 -0.00074 mg/L 0.000565 76.87%
QC value within limits for Ni 231.604 Recovery = Not calculated
Pb 220.353† -0.4 -0.00047 mg/L 0.000975 -0.00047 mg/L 0.000975 206.65%
QC value within limits for Pb 220.353 Recovery = Not calculated
Sb 206.836† -2.4 0.00047 mg/L 0.001138 0.00047 mg/L 0.001138 244.61%
QC value within limits for Sb 206.836 Recovery = Not calculated
Se 196.026† -0.5 0.00389 mg/L 0.003687 0.00389 mg/L 0.003687 94.83%
QC value within limits for Se 196.026 Recovery = Not calculated
Si 251.611† -0.8 -0.00770 mg/L 0.000376 -0.00770 mg/L 0.000376 4.88%
QC value within limits for Si 251.611 Recovery = Not calculated
Sn 189.927† -16.1 -0.00131 mg/L 0.000376 -0.00131 mg/L 0.000376 28.69%
QC value within limits for Sn 189.927 Recovery = Not calculated
Ti 334.940† 36.4 0.00218 mg/L 0.000031 0.00218 mg/L 0.000031 1.40%
QC value within limits for Ti 334.940 Recovery = Not calculated
Tl 190.801† -11.0 -0.00318 mg/L 0.000853 -0.00318 mg/L 0.000853 26.80%
QC value within limits for Tl 190.801 Recovery = Not calculated
V 290.880† 518.8 0.00229 mg/L 0.002280 0.00229 mg/L 0.002280 99.67%
QC value within limits for V 290.880 Recovery = Not calculated
Zn 206.200† -54.5 -0.00100 mg/L 0.000166 -0.00100 mg/L 0.000166 16.48%
QC value within limits for Zn 206.200 Recovery = Not calculated
K 766.490† 35.1 -0.0274 mg/L 0.01096 -0.0274 mg/L 0.01096 40.04%
QC value within limits for K 766.490 Recovery = Not calculated
Na 589.592† -105.2 -0.0208 mg/L 0.02755 -0.0208 mg/L 0.02755 132.53%
QC value within limits for Na 589.592 Recovery = Not calculated
Sr 407.771† -24.2 0.00290 mg/L 0.000073 0.00290 mg/L 0.000073 2.52%
QC value within limits for Sr 407.771 Recovery = Not calculated
Li 670.784† -49.4 -0.00299 mg/L 0.000459 -0.00299 mg/L 0.000459 15.35%
QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

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Sequence No.: 5 **Autosampler Location: 14**
Sample ID: PBW 66 WG397283-02 **Date Collected: 5/10/2012 10:32:32 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW 66 WG397283-02

Analyte	Back Pressure	Flow
All	154.0 kPa	0.50 L/min

Mean Data: PBW 66 WG397283-02

	Mean Corrected	Calib.	Sample

Approved: May 11, 2012
Kim H. Rhoden

Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Y 371.029	2282040.7						32857.67	1.44%
YRADIAL	310463.6						10424.40	3.36%
Ga 417.206	1456481.8						24371.54	1.67%
GaRADIAL	94662.8						1535.00	1.62%
Ag 328.068†	-63.7	-0.00051	mg/L	0.000113	-0.00051	mg/L	0.000113	22.18%
Al 396.153†	0.0	0.00860	mg/L	0.000367	0.00860	mg/L	0.000367	4.27%
As 188.979†	-2.0	0.00034	mg/L	0.001748	0.00034	mg/L	0.001748	509.63%
Ba 233.527†	15.1	-0.00011	mg/L	0.000113	-0.00011	mg/L	0.000113	99.20%
Be 234.861†	71.3	0.00010	mg/L	0.000020	0.00010	mg/L	0.000020	21.06%
B 249.677†	237.6	0.00409	mg/L	0.000129	0.00409	mg/L	0.000129	3.15%
Ca 227.546†	-7.8	0.0354	mg/L	0.00414	0.0354	mg/L	0.00414	11.68%
Cd 228.802†	6.6	0.00011	mg/L	0.000125	0.00011	mg/L	0.000125	111.61%
Co 228.616†	0.0	-0.00005	mg/L	0.000275	-0.00005	mg/L	0.000275	568.94%
Cr 267.716†	7.0	-0.00021	mg/L	0.000137	-0.00021	mg/L	0.000137	66.26%
Cu 327.393†	3.9	-0.00023	mg/L	0.000057	-0.00023	mg/L	0.000057	24.77%
Fe 239.562†	27.2	0.0138	mg/L	0.00074	0.0138	mg/L	0.00074	5.35%
Mg 279.077†	-1.2	0.0257	mg/L	0.00209	0.0257	mg/L	0.00209	8.15%
Mn 257.610†	-27.9	-0.00136	mg/L	0.000009	-0.00136	mg/L	0.000009	0.65%
Mo 202.031†	8.7	0.00095	mg/L	0.000059	0.00095	mg/L	0.000059	6.24%
Ni 231.604†	-14.2	-0.00091	mg/L	0.000231	-0.00091	mg/L	0.000231	25.42%
Pb 220.353†	7.5	0.00026	mg/L	0.000171	0.00026	mg/L	0.000171	65.16%
Sb 206.836†	-1.9	0.00060	mg/L	0.000591	0.00060	mg/L	0.000591	98.24%
Se 196.026†	-2.3	0.00282	mg/L	0.001556	0.00282	mg/L	0.001556	55.10%
Si 251.611†	33.9	-0.00685	mg/L	0.000382	-0.00685	mg/L	0.000382	5.57%
Sn 189.927†	-33.9	-0.00307	mg/L	0.000304	-0.00307	mg/L	0.000304	9.92%
Ti 334.940†	180.4	0.00232	mg/L	0.000033	0.00232	mg/L	0.000033	1.43%
Tl 190.801†	-0.8	-0.00048	mg/L	0.002283	-0.00048	mg/L	0.002283	475.38%
V 290.880†	715.8	0.00332	mg/L	0.001173	0.00332	mg/L	0.001173	35.31%
Zn 206.200†	-21.7	-0.00018	mg/L	0.000246	-0.00018	mg/L	0.000246	139.82%
K 766.490†	-23.0	-0.0445	mg/L	0.00812	-0.0445	mg/L	0.00812	18.26%
Na 589.592†	80.1	-0.0117	mg/L	0.01555	-0.0117	mg/L	0.01555	133.13%
Sr 407.771†	-220.4	0.00283	mg/L	0.000035	0.00283	mg/L	0.000035	1.24%
Li 670.784†	-86.1	-0.00320	mg/L	0.000157	-0.00320	mg/L	0.000157	4.90%

Sequence No.: 6 **Autosampler Location: 15**
Sample ID: LCSW 66 WG397283-03 **Date Collected: 5/10/2012 10:39:27 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW 66 WG397283-03

Analyte	Back Pressure	Flow
All	155.0 kPa	0.50 L/min

Mean Data: LCSW 66 WG397283-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2231771.5						12650.98	0.57%
YRADIAL	315251.6						6791.76	2.15%
Ga 417.206	1388116.8						30189.55	2.17%
GaRADIAL	94501.7						1138.58	1.20%
Ag 328.068†	60218.3	0.198	mg/L	0.0048	0.198	mg/L	0.0048	2.44%
Al 396.153†	38815.5	4.88	mg/L	0.012	4.88	mg/L	0.012	0.25%
As 188.979†	518.6	0.188	mg/L	0.0057	0.188	mg/L	0.0057	3.04%
Ba 233.527†	73959.2	0.488	mg/L	0.0010	0.488	mg/L	0.0010	0.20%
Be 234.861†	29653.0	0.0241	mg/L	0.00066	0.0241	mg/L	0.00066	2.73%
B 249.677†	80079.2	0.967	mg/L	0.0267	0.967	mg/L	0.0267	2.76%
Ca 227.546†	2191.1	4.93	mg/L	0.102	4.93	mg/L	0.102	2.07%
Cd 228.802†	1300.7	0.0237	mg/L	0.00102	0.0237	mg/L	0.00102	4.31%
Co 228.616†	3690.1	0.0969	mg/L	0.00058	0.0969	mg/L	0.00058	0.59%
Cr 267.716†	25979.1	0.244	mg/L	0.0021	0.244	mg/L	0.0021	0.85%
Cu 327.393†	66769.2	0.246	mg/L	0.0055	0.246	mg/L	0.0055	2.22%
Fe 239.562†	30505.1	1.92	mg/L	0.011	1.92	mg/L	0.011	0.60%
Mg 279.077†	17501.4	4.89	mg/L	0.058	4.89	mg/L	0.058	1.18%
Mn 257.610†	203500.6	0.244	mg/L	0.0018	0.244	mg/L	0.0018	0.74%
Mo 202.031†	17724.9	0.490	mg/L	0.0009	0.490	mg/L	0.0009	0.18%
Ni 231.604†	17199.8	0.258	mg/L	0.0003	0.258	mg/L	0.0003	0.10%
Pb 220.353†	2644.2	0.244	mg/L	0.0004	0.244	mg/L	0.0004	0.16%

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Sb 206.836†	2379.2	0.585	mg/L	0.0154	0.585	mg/L	0.0154 2.62%
Se 196.026†	336.2	0.197	mg/L	0.0081	0.197	mg/L	0.0081 4.12%
Si 251.611†	103064.7	2.50	mg/L	0.049	2.50	mg/L	0.049 1.97%
Sn 189.927†	5441.4	0.537	mg/L	0.0027	0.537	mg/L	0.0027 0.51%
Ti 334.940†	487420.5	0.487	mg/L	0.0025	0.487	mg/L	0.0025 0.52%
Tl 190.801†	951.7	0.257	mg/L	0.0004	0.257	mg/L	0.0004 0.17%
V 290.880†	94248.3	0.492	mg/L	0.0026	0.492	mg/L	0.0026 0.53%
Zn 206.200†	19436.0	0.493	mg/L	0.0075	0.493	mg/L	0.0075 1.52%
K 766.490†	84786.9	24.8	mg/L	0.10	24.8	mg/L	0.10 0.40%
Na 589.592†	528924.3	26.0	mg/L	0.36	26.0	mg/L	0.36 1.39%
Sr 407.771†	1401781.5	0.491	mg/L	0.0118	0.491	mg/L	0.0118 2.41%
Li 670.784†	88319.2	0.518	mg/L	0.0033	0.518	mg/L	0.0033 0.63%

Sequence No.: 7 **Autosampler Location: 16**
Sample ID: L1205010501 WG397283-01 **Date Collected: 5/10/2012 10:45:26 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205010501 WG397283-01

Analyte	Back Pressure	Flow
All	154.0 kPa	0.50 L/min

Mean Data: L1205010501 WG397283-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2288096.0						18850.66	0.82%
YRADIAL	317117.2						2574.67	0.81%
Ga 417.206	1451628.4						18763.64	1.29%
GaRADIAL	96480.4						2059.07	2.13%
Ag 328.068†	-89.6	-0.00060	mg/L	0.000073	-0.00060	mg/L	0.000073	12.24%
Al 396.153†	-4.7	0.00802	mg/L	0.001133	0.00802	mg/L	0.001133	14.12%
As 188.979†	0.9	0.00143	mg/L	0.002344	0.00143	mg/L	0.002344	164.23%
Ba 233.527†	263.0	0.00152	mg/L	0.000219	0.00152	mg/L	0.000219	14.37%
Be 234.861†	201.6	0.00020	mg/L	0.000028	0.00020	mg/L	0.000028	13.92%
B 249.677†	646.6	0.00903	mg/L	0.000120	0.00903	mg/L	0.000120	1.33%
Ca 227.546†	2733.0	5.84	mg/L	0.358	5.84	mg/L	0.358	6.14%
Cd 228.802†	6.5	0.00010	mg/L	0.000126	0.00010	mg/L	0.000126	120.26%
Co 228.616†	5.2	0.00009	mg/L	0.000108	0.00009	mg/L	0.000108	122.18%
Cr 267.716†	0.4	-0.00026	mg/L	0.000055	-0.00026	mg/L	0.000055	21.14%
Cu 327.393†	-95.1	-0.00059	mg/L	0.000132	-0.00059	mg/L	0.000132	22.43%
Fe 239.562†	42.1	0.0147	mg/L	0.00077	0.0147	mg/L	0.00077	5.27%
Mg 279.077†	4418.6	1.25	mg/L	0.048	1.25	mg/L	0.048	3.79%
Mn 257.610†	9444.4	0.0101	mg/L	0.00054	0.0101	mg/L	0.00054	5.36%
Mo 202.031†	-1.3	0.00068	mg/L	0.000274	0.00068	mg/L	0.000274	40.49%
Ni 231.604†	32.2	-0.00021	mg/L	0.000204	-0.00021	mg/L	0.000204	97.13%
Pb 220.353†	23.2	0.00174	mg/L	0.000934	0.00174	mg/L	0.000934	53.51%
Sb 206.836†	-3.4	0.00023	mg/L	0.001574	0.00023	mg/L	0.001574	682.32%
Se 196.026†	-8.2	-0.00050	mg/L	0.001457	-0.00050	mg/L	0.001457	291.30%
Si 251.611†	11581.4	0.274	mg/L	0.0152	0.274	mg/L	0.0152	5.54%
Sn 189.927†	-113.7	-0.0109	mg/L	0.00108	-0.0109	mg/L	0.00108	9.83%
Ti 334.940†	-1055.2	0.00197	mg/L	0.000194	0.00197	mg/L	0.000194	9.89%
Tl 190.801†	3.4	0.00060	mg/L	0.002428	0.00060	mg/L	0.002428	407.35%
V 290.880†	509.7	0.00221	mg/L	0.001120	0.00221	mg/L	0.001120	50.65%
Zn 206.200†	6418.5	0.162	mg/L	0.0067	0.162	mg/L	0.0067	4.15%
K 766.490†	1214.3	0.318	mg/L	0.0322	0.318	mg/L	0.0322	10.12%
Na 589.592†	26613.2	1.29	mg/L	0.068	1.29	mg/L	0.068	5.29%
Sr 407.771†	57488.1	0.0228	mg/L	0.00039	0.0228	mg/L	0.00039	1.70%
Li 670.784†	-29.9	-0.00287	mg/L	0.000377	-0.00287	mg/L	0.000377	13.13%

Sequence No.: 8 **Autosampler Location: 17**
Sample ID: L1205010503S WG397283-04 **Date Collected: 5/10/2012 10:52:21 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205010503S WG397283-04

Approved: May 11, 2012

Analyte	Back Pressure	Flow
All	153.0 kPa	0.50 L/min

Mean Data: L1205010503S WG397283-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2304728.0						16801.22	0.73%
YRADIAL	308801.3						5937.63	1.92%
Ga 417.206	1392747.1						45081.75	3.24%
GaRADIAL	93220.6						2191.72	2.35%
Ag 328.068†	7725.3	0.0251	mg/L	0.00190	0.0251	mg/L	0.00190	7.58%
Al 396.153†	4878.0	0.622	mg/L	0.0147	0.622	mg/L	0.0147	2.36%
As 188.979†	67.9	0.0256	mg/L	0.00190	0.0256	mg/L	0.00190	7.43%
Ba 233.527†	9397.9	0.0618	mg/L	0.00233	0.0618	mg/L	0.00233	3.77%
Be 234.861†	4345.2	0.00356	mg/L	0.000378	0.00356	mg/L	0.000378	10.63%
B 249.677†	10559.5	0.129	mg/L	0.0092	0.129	mg/L	0.0092	7.12%
Ca 227.546†	3615.1	7.74	mg/L	0.589	7.74	mg/L	0.589	7.61%
Cd 228.802†	180.0	0.00327	mg/L	0.000430	0.00327	mg/L	0.000430	13.14%
Co 228.616†	453.1	0.0119	mg/L	0.00036	0.0119	mg/L	0.00036	3.01%
Cr 267.716†	3254.4	0.0304	mg/L	0.00119	0.0304	mg/L	0.00119	3.92%
Cu 327.393†	7705.7	0.0282	mg/L	0.00199	0.0282	mg/L	0.00199	7.05%
Fe 239.562†	4164.8	0.273	mg/L	0.0044	0.273	mg/L	0.0044	1.61%
Mg 279.077†	6975.5	1.96	mg/L	0.056	1.96	mg/L	0.056	2.83%
Mn 257.610†	36545.9	0.0428	mg/L	0.00160	0.0428	mg/L	0.00160	3.73%
Mo 202.031†	2135.8	0.0597	mg/L	0.00252	0.0597	mg/L	0.00252	4.23%
Ni 231.604†	2145.7	0.0316	mg/L	0.00142	0.0316	mg/L	0.00142	4.49%
Pb 220.353†	330.3	0.0302	mg/L	0.00070	0.0302	mg/L	0.00070	2.33%
Sb 206.836†	285.8	0.0712	mg/L	0.00581	0.0712	mg/L	0.00581	8.16%
Se 196.026†	33.0	0.0231	mg/L	0.00302	0.0231	mg/L	0.00302	13.07%
Si 251.611†	26389.7	0.634	mg/L	0.0385	0.634	mg/L	0.0385	6.07%
Sn 189.927†	544.2	0.0540	mg/L	0.00127	0.0540	mg/L	0.00127	2.36%
Ti 334.940†	57237.0	0.0601	mg/L	0.00237	0.0601	mg/L	0.00237	3.95%
Tl 190.801†	121.5	0.0325	mg/L	0.00243	0.0325	mg/L	0.00243	7.48%
V 290.880†	12013.5	0.0623	mg/L	0.00321	0.0623	mg/L	0.00321	5.15%
Zn 206.200†	9938.5	0.252	mg/L	0.0107	0.252	mg/L	0.0107	4.26%
K 766.490†	11894.5	3.45	mg/L	0.113	3.45	mg/L	0.113	3.27%
Na 589.592†	94218.0	4.61	mg/L	0.059	4.61	mg/L	0.059	1.28%
Sr 407.771†	231667.4	0.0834	mg/L	0.00037	0.0834	mg/L	0.00037	0.45%
Li 670.784†	10945.2	0.0618	mg/L	0.00284	0.0618	mg/L	0.00284	4.59%

Sequence No.: 9 **Autosampler Location: 18**
Sample ID: L1205010504SD WG397283-05 **Date Collected: 5/10/2012 10:58:19 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205010504SD WG397283-05

Analyte	Back Pressure	Flow
All	154.0 kPa	0.50 L/min

Mean Data: L1205010504SD WG397283-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2270405.3						34914.96	1.54%
YRADIAL	309174.6						1473.49	0.48%
Ga 417.206	1349401.2						12114.98	0.90%
GaRADIAL	93078.0						344.85	0.37%
Ag 328.068†	6554.8	0.0213	mg/L	0.00061	0.0213	mg/L	0.00061	2.89%
Al 396.153†	3940.1	0.503	mg/L	0.0017	0.503	mg/L	0.0017	0.34%
As 188.979†	45.4	0.0174	mg/L	0.00168	0.0174	mg/L	0.00168	9.68%
Ba 233.527†	7976.9	0.0525	mg/L	0.00045	0.0525	mg/L	0.00045	0.87%
Be 234.861†	3297.4	0.00271	mg/L	0.000088	0.00271	mg/L	0.000088	3.25%
B 249.677†	8850.4	0.108	mg/L	0.0024	0.108	mg/L	0.0024	2.21%
Ca 227.546†	3094.0	6.63	mg/L	0.077	6.63	mg/L	0.077	1.17%
Cd 228.802†	172.1	0.00316	mg/L	0.000232	0.00316	mg/L	0.000232	7.34%
Co 228.616†	396.6	0.0104	mg/L	0.00018	0.0104	mg/L	0.00018	1.72%
Cr 267.716†	2819.7	0.0263	mg/L	0.00039	0.0263	mg/L	0.00039	1.50%
Cu 327.393†	6792.7	0.0249	mg/L	0.00024	0.0249	mg/L	0.00024	0.98%

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Fe 239.562†	3222.3	0.214	mg/L	0.0013	0.214	mg/L	0.0013 0.61%
Mg 279.077†	5623.6	1.59	mg/L	0.027	1.59	mg/L	0.027 1.68%
Mn 257.610†	29652.0	0.0344	mg/L	0.00058	0.0344	mg/L	0.00058 1.68%
Mo 202.031†	1860.2	0.0521	mg/L	0.00086	0.0521	mg/L	0.00086 1.65%
Ni 231.604†	1849.5	0.0271	mg/L	0.00008	0.0271	mg/L	0.00008 0.30%
Pb 220.353†	256.0	0.0233	mg/L	0.00147	0.0233	mg/L	0.00147 6.32%
Sb 206.836†	243.0	0.0607	mg/L	0.00103	0.0607	mg/L	0.00103 1.70%
Se 196.026†	31.7	0.0223	mg/L	0.00098	0.0223	mg/L	0.00098 4.38%
Si 251.611†	22569.4	0.541	mg/L	0.0018	0.541	mg/L	0.0018 0.34%
Sn 189.927†	476.8	0.0473	mg/L	0.00189	0.0473	mg/L	0.00189 3.99%
Ti 334.940†	48803.3	0.0516	mg/L	0.00030	0.0516	mg/L	0.00030 0.59%
Tl 190.801†	92.6	0.0247	mg/L	0.00384	0.0247	mg/L	0.00384 15.52%
V 290.880†	10360.6	0.0537	mg/L	0.00137	0.0537	mg/L	0.00137 2.55%
Zn 206.200†	8223.6	0.208	mg/L	0.0018	0.208	mg/L	0.0018 0.84%
K 766.490†	9580.8	2.77	mg/L	0.016	2.77	mg/L	0.016 0.57%
Na 589.592†	74769.3	3.66	mg/L	0.018	3.66	mg/L	0.018 0.49%
Sr 407.771†	188053.2	0.0683	mg/L	0.00072	0.0683	mg/L	0.00072 1.06%
Li 670.784†	8752.4	0.0489	mg/L	0.00115	0.0489	mg/L	0.00115 2.35%

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Sequence No.: 10 **Autosampler Location: 19**
Sample ID: L1205015301 **Date Collected: 5/10/2012 11:04:19 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205015301

Analyte	Back Pressure	Flow
All	154.0 kPa	0.50 L/min

Mean Data: L1205015301

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2132009.5						18495.20	0.87%
YRADIAL	297714.5						913.83	0.31%
Ga 417.206	1442926.7						39799.00	2.76%
GaRADIAL	93902.9						2360.10	2.51%
Ag 328.068†	126.3	0.00008	mg/L	0.000194	0.00008	mg/L	0.000194	249.50%
Al 396.153†	129.6	0.0249	mg/L	0.00107	0.0249	mg/L	0.00107	4.29%
As 188.979†	-10.5	-0.00274	mg/L	0.002772	-0.00274	mg/L	0.002772	101.19%
Ba 233.527†	6343.6	0.0417	mg/L	0.00008	0.0417	mg/L	0.00008	0.18%
Be 234.861†	112.1	0.00012	mg/L	0.000023	0.00012	mg/L	0.000023	19.56%
B 249.677†	2947.9	0.0368	mg/L	0.00120	0.0368	mg/L	0.00120	3.27%
Ca 227.546†	30348.7	64.3	mg/L	2.09	64.3	mg/L	2.09	3.25%
Cd 228.802†	19.7	0.00037	mg/L	0.000168	0.00037	mg/L	0.000168	45.11%
Co 228.616†	4.3	0.00008	mg/L	0.000039	0.00008	mg/L	0.000039	50.20%
Cr 267.716†	129.0	0.00095	mg/L	0.000149	0.00095	mg/L	0.000149	15.66%
Cu 327.393†	3560.9	0.0129	mg/L	0.00069	0.0129	mg/L	0.00069	5.39%
Fe 239.562†	1042.1	0.0770	mg/L	0.00059	0.0770	mg/L	0.00059	0.77%
Mg 279.077†	51142.7	14.2	mg/L	0.08	14.2	mg/L	0.08	0.59%
Mn 257.610†	5268.9	0.00503	mg/L	0.000048	0.00503	mg/L	0.000048	0.96%
Mo 202.031†	69.7	0.00264	mg/L	0.000387	0.00264	mg/L	0.000387	14.67%
Ni 231.604†	156.2	0.00166	mg/L	0.000330	0.00166	mg/L	0.000330	19.88%
Pb 220.353†	42.6	0.00399	mg/L	0.000932	0.00399	mg/L	0.000932	23.35%
Sb 206.836†	-1.0	0.00083	mg/L	0.000733	0.00083	mg/L	0.000733	88.48%
Se 196.026†	-5.8	0.00085	mg/L	0.001538	0.00085	mg/L	0.001538	179.95%
Si 251.611†	87146.5	2.11	mg/L	0.058	2.11	mg/L	0.058	2.75%
Sn 189.927†	-279.6	-0.0273	mg/L	0.00135	-0.0273	mg/L	0.00135	4.95%
Ti 334.940†	-12406.5	-0.00053	mg/L	0.001015	-0.00053	mg/L	0.001015	191.04%
Tl 190.801†	-33.3	-0.00916	mg/L	0.001098	-0.00916	mg/L	0.001098	11.98%
V 290.880†	1672.0	0.00794	mg/L	0.000425	0.00794	mg/L	0.000425	5.35%
Zn 206.200†	3213.7	0.0815	mg/L	0.00068	0.0815	mg/L	0.00068	0.84%
K 766.490†	11090.6	3.16	mg/L	0.020	3.16	mg/L	0.020	0.64%
Na 589.592†	1175042.5	57.6	mg/L	1.30	57.6	mg/L	1.30	2.25%
Sr 407.771†	1013807.6	0.355	mg/L	0.0054	0.355	mg/L	0.0054	1.52%
Li 670.784†	1906.6	0.00854	mg/L	0.000413	0.00854	mg/L	0.000413	4.84%

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Sequence No.: 11 **Autosampler Location: 20**
Sample ID: L1205015302 **Date Collected: 5/10/2012 11:11:16 AM**

Approved: May 11, 2012

Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205015302

Analyte	Back Pressure	Flow
All	153.0 kPa	0.50 L/min

Mean Data: L1205015302

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2166161.7						12044.04	0.56%
YRADIAL	303091.1						6649.43	2.19%
Ga 417.206	1458993.0						23019.74	1.58%
GaRADIAL	94403.3						2805.41	2.97%
Ag 328.068†	245.6	0.00044	mg/L	0.000133	0.00044	mg/L	0.000133	30.12%
Al 396.153†	-4.7	0.00790	mg/L	0.001283	0.00790	mg/L	0.001283	16.24%
As 188.979†	-10.4	-0.00273	mg/L	0.003434	-0.00273	mg/L	0.003434	125.57%
Ba 233.527†	6299.8	0.0414	mg/L	0.00061	0.0414	mg/L	0.00061	1.48%
Be 234.861†	68.9	0.00009	mg/L	0.000005	0.00009	mg/L	0.000005	5.57%
B 249.677†	2796.6	0.0350	mg/L	0.00117	0.0350	mg/L	0.00117	3.34%
Ca 227.546†	30395.9	64.4	mg/L	1.40	64.4	mg/L	1.40	2.17%
Cd 228.802†	19.9	0.00038	mg/L	0.000057	0.00038	mg/L	0.000057	15.22%
Co 228.616†	-2.9	-0.00011	mg/L	0.000281	-0.00011	mg/L	0.000281	256.69%
Cr 267.716†	122.5	0.00089	mg/L	0.000054	0.00089	mg/L	0.000054	6.08%
Cu 327.393†	3420.4	0.0123	mg/L	0.00056	0.0123	mg/L	0.00056	4.55%
Fe 239.562†	169.0	0.0224	mg/L	0.00061	0.0224	mg/L	0.00061	2.73%
Mg 279.077†	51051.1	14.2	mg/L	0.18	14.2	mg/L	0.18	1.24%
Mn 257.610†	5110.6	0.00484	mg/L	0.000066	0.00484	mg/L	0.000066	1.37%
Mo 202.031†	63.6	0.00247	mg/L	0.000144	0.00247	mg/L	0.000144	5.83%
Ni 231.604†	147.2	0.00152	mg/L	0.000303	0.00152	mg/L	0.000303	19.88%
Pb 220.353†	16.6	0.00160	mg/L	0.000580	0.00160	mg/L	0.000580	36.27%
Sb 206.836†	-1.5	0.00068	mg/L	0.001991	0.00068	mg/L	0.001991	290.91%
Se 196.026†	-3.4	0.00221	mg/L	0.000354	0.00221	mg/L	0.000354	16.03%
Si 251.611†	85922.2	2.08	mg/L	0.037	2.08	mg/L	0.037	1.78%
Sn 189.927†	-291.0	-0.0284	mg/L	0.00132	-0.0284	mg/L	0.00132	4.63%
Ti 334.940†	-12798.7	-0.00091	mg/L	0.000687	-0.00091	mg/L	0.000687	75.83%
Tl 190.801†	-43.9	-0.0120	mg/L	0.00170	-0.0120	mg/L	0.00170	14.20%
V 290.880†	1485.9	0.00698	mg/L	0.001456	0.00698	mg/L	0.001456	20.86%
Zn 206.200†	3236.5	0.0821	mg/L	0.00064	0.0821	mg/L	0.00064	0.78%
K 766.490†	10762.1	3.07	mg/L	0.020	3.07	mg/L	0.020	0.65%
Na 589.592†	1184643.3	58.1	mg/L	2.20	58.1	mg/L	2.20	3.79%
Sr 407.771†	998594.2	0.349	mg/L	0.0116	0.349	mg/L	0.0116	3.31%
Li 670.784†	1830.7	0.00810	mg/L	0.000637	0.00810	mg/L	0.000637	7.86%

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Sequence No.: 12 **Autosampler Location: 21**
Sample ID: L1205015303 **Date Collected: 5/10/2012 11:18:16 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205015303

Analyte	Back Pressure	Flow
All	153.0 kPa	0.50 L/min

Mean Data: L1205015303

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2115840.6						21743.50	1.03%
YRADIAL	293015.1						2208.79	0.75%
Ga 417.206	1393034.9						28942.49	2.08%
GaRADIAL	93353.1						604.17	0.65%
Ag 328.068†	149.6	0.00277	mg/L	0.000422	0.00277	mg/L	0.000422	15.22%
Al 396.153†	-142.4	-0.00873	mg/L	0.001911	-0.00873	mg/L	0.001911	21.90%
As 188.979†	22.5	0.0100	mg/L	0.00152	0.0100	mg/L	0.00152	15.19%
Ba 233.527†	21454.5	0.141	mg/L	0.0011	0.141	mg/L	0.0011	0.78%
Be 234.861†	1879.9	0.00016	mg/L	0.000022	0.00016	mg/L	0.000022	13.71%

Approved: May 11, 2012

B 249.677†	27843.6	0.335	mg/L	0.0078	0.335	mg/L	0.0078 2.32%
Ca 227.546†	117679.8	249	mg/L	6.5	249	mg/L	6.5 2.61%
Cd 228.802†	36.1	0.00064	mg/L	0.000311	0.00064	mg/L	0.000311 48.73%
Co 228.616†	303.6	0.00783	mg/L	0.000195	0.00783	mg/L	0.000195 2.49%
Cr 267.716†	155.5	0.00142	mg/L	0.000136	0.00142	mg/L	0.000136 9.57%
Cu 327.393†	-317.4	-0.00090	mg/L	0.000374	-0.00090	mg/L	0.000374 41.34%
Fe 239.562†	106293.7	6.66	mg/L	0.064	6.66	mg/L	0.064 0.96%
Mg 279.077†	161959.6	45.0	mg/L	0.38	45.0	mg/L	0.38 0.84%
Mn 257.610†	578294.4	0.696	mg/L	0.0131	0.696	mg/L	0.0131 1.88%
Mo 202.031†	66.3	0.00302	mg/L	0.000077	0.00302	mg/L	0.000077 2.54%
Ni 231.604†	430.3	0.00577	mg/L	0.000127	0.00577	mg/L	0.000127 2.20%
Pb 220.353†	-0.2	0.00055	mg/L	0.000951	0.00055	mg/L	0.000951 173.54%
Sb 206.836†	-8.2	-0.00071	mg/L	0.001274	-0.00071	mg/L	0.001274 178.80%
Se 196.026†	-5.5	0.00283	mg/L	0.001088	0.00283	mg/L	0.001088 38.47%
Si 251.611†	296519.7	7.21	mg/L	0.102	7.21	mg/L	0.102 1.42%
Sn 189.927†	-358.4	-0.0351	mg/L	0.00042	-0.0351	mg/L	0.00042 1.21%
Ti 334.940†	-41910.1	-0.00208	mg/L	0.003558	-0.00208	mg/L	0.003558 171.09%
Tl 190.801†	-38.5	-0.0116	mg/L	0.00495	-0.0116	mg/L	0.00495 42.77%
V 290.880†	2372.9	0.00976	mg/L	0.000404	0.00976	mg/L	0.000404 4.14%
Zn 206.200†	691.2	0.0177	mg/L	0.00019	0.0177	mg/L	0.00019 1.10%
K 766.490†	22950.1	6.63	mg/L	0.099	6.63	mg/L	0.099 1.50%
Na 589.592†	1548472.0	75.9	mg/L	0.56	75.9	mg/L	0.56 0.74%
Sr 407.771†	4128672.4	1.44	mg/L	0.020	1.44	mg/L	0.020 1.41%
Li 670.784†	8726.5	0.0488	mg/L	0.00113	0.0488	mg/L	0.00113 2.32%

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Sequence No.: 13 **Autosampler Location: 22**
Sample ID: L1205015303PS WG397367-01 **Date Collected: 5/10/2012 11:24:21 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205015303PS WG397367-01

Analyte	Back Pressure	Flow
All	153.0 kPa	0.50 L/min

Mean Data: L1205015303PS WG397367-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2099436.0						14362.86	0.68%
YRADIAL	291776.5						6189.00	2.12%
Ga 417.206	1355685.4						29041.58	2.14%
GaRADIAL	90494.0						885.70	0.98%
Ag 328.068†	61865.3	0.206	mg/L	0.0050	0.206	mg/L	0.0050	2.42%
Al 396.153†	40102.0	5.05	mg/L	0.030	5.05	mg/L	0.030	0.60%
As 188.979†	565.6	0.206	mg/L	0.0055	0.206	mg/L	0.0055	2.66%
Ba 233.527†	94827.2	0.626	mg/L	0.0116	0.626	mg/L	0.0116	1.86%
Be 234.861†	31860.4	0.0246	mg/L	0.00047	0.0246	mg/L	0.00047	1.93%
B 249.677†	109860.9	1.32	mg/L	0.036	1.32	mg/L	0.036	2.71%
Ca 227.546†	112403.7	238	mg/L	7.6	238	mg/L	7.6	3.20%
Cd 228.802†	1347.2	0.0245	mg/L	0.00113	0.0245	mg/L	0.00113	4.62%
Co 228.616†	3985.4	0.105	mg/L	0.0009	0.105	mg/L	0.0009	0.83%
Cr 267.716†	26474.1	0.249	mg/L	0.0009	0.249	mg/L	0.0009	0.37%
Cu 327.393†	65623.6	0.243	mg/L	0.0068	0.243	mg/L	0.0068	2.80%
Fe 239.562†	126342.2	7.92	mg/L	0.066	7.92	mg/L	0.066	0.84%
Mg 279.077†	161204.9	44.8	mg/L	0.47	44.8	mg/L	0.47	1.05%
Mn 257.610†	717496.5	0.864	mg/L	0.0077	0.864	mg/L	0.0077	0.89%
Mo 202.031†	18188.0	0.503	mg/L	0.0067	0.503	mg/L	0.0067	1.34%
Ni 231.604†	17601.5	0.264	mg/L	0.0020	0.264	mg/L	0.0020	0.75%
Pb 220.353†	2713.0	0.251	mg/L	0.0020	0.251	mg/L	0.0020	0.81%
Sb 206.836†	2454.9	0.604	mg/L	0.0150	0.604	mg/L	0.0150	2.48%
Se 196.026†	359.4	0.212	mg/L	0.0027	0.212	mg/L	0.0027	1.28%
Si 251.611†	381858.7	9.28	mg/L	0.187	9.28	mg/L	0.187	2.02%
Sn 189.927†	-358.1	-0.0351	mg/L	0.00056	-0.0351	mg/L	0.00056	1.59%
Ti 334.940†	465347.8	0.500	mg/L	0.0021	0.500	mg/L	0.0021	0.42%
Tl 190.801†	902.2	0.243	mg/L	0.0034	0.243	mg/L	0.0034	1.42%
V 290.880†	98641.3	0.513	mg/L	0.0039	0.513	mg/L	0.0039	0.77%
Zn 206.200†	19737.9	0.501	mg/L	0.0098	0.501	mg/L	0.0098	1.95%
K 766.490†	107866.8	31.5	mg/L	0.03	31.5	mg/L	0.03	0.09%
Na 589.592†	1990404.1	97.6	mg/L	0.04	97.6	mg/L	0.04	0.04%

Approved: May 11, 2012

Sr 407.771†	5168203.3	1.80	mg/L	0.027	1.80	mg/L	0.027 1.51%
Li 670.784†	94673.7	0.555	mg/L	0.0059	0.555	mg/L	0.0059 1.07%

Sequence No.: 14 **Autosampler Location: 23**
Sample ID: L1205015303DL WG397367-02 **Date Collected: 5/10/2012 11:30:24 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205015303DL WG397367-02

Analyte	Back Pressure	Flow
All	152.0 kPa	0.50 L/min

Mean Data: L1205015303DL WG397367-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2255807.7						18407.54	0.82%
YRADIAL	301346.8						1658.31	0.55%
Ga 417.206	1394523.4						37016.05	2.65%
GaRADIAL	92563.4						442.64	0.48%
Ag 328.068†	163.2	0.00076	mg/L	0.000440	0.00076	mg/L	0.000440	57.74%
Al 396.153†	-20.5	0.00611	mg/L	0.003917	0.00611	mg/L	0.003917	64.13%
As 188.979†	-5.2	-0.00066	mg/L	0.001547	-0.00066	mg/L	0.001547	233.72%
Ba 233.527†	4580.9	0.0300	mg/L	0.00032	0.0300	mg/L	0.00032	1.06%
Be 234.861†	518.5	0.00018	mg/L	0.000070	0.00018	mg/L	0.000070	40.19%
B 249.677†	6462.8	0.0787	mg/L	0.00462	0.0787	mg/L	0.00462	5.87%
Ca 227.546†	23228.6	49.3	mg/L	2.42	49.3	mg/L	2.42	4.92%
Cd 228.802†	26.1	0.00049	mg/L	0.000139	0.00049	mg/L	0.000139	28.45%
Co 228.616†	75.8	0.00193	mg/L	0.000366	0.00193	mg/L	0.000366	18.99%
Cr 267.716†	62.9	0.00037	mg/L	0.000026	0.00037	mg/L	0.000026	6.95%
Cu 327.393†	5.0	-0.00012	mg/L	0.000305	-0.00012	mg/L	0.000305	248.65%
Fe 239.562†	21667.0	1.37	mg/L	0.021	1.37	mg/L	0.021	1.54%
Mg 279.077†	32181.6	8.96	mg/L	0.093	8.96	mg/L	0.093	1.04%
Mn 257.610†	117705.0	0.141	mg/L	0.0020	0.141	mg/L	0.0020	1.44%
Mo 202.031†	40.2	0.00192	mg/L	0.000132	0.00192	mg/L	0.000132	6.90%
Ni 231.604†	122.1	0.00114	mg/L	0.000494	0.00114	mg/L	0.000494	43.22%
Pb 220.353†	-10.6	-0.00122	mg/L	0.001644	-0.00122	mg/L	0.001644	134.81%
Sb 206.836†	-7.3	-0.00067	mg/L	0.000988	-0.00067	mg/L	0.000988	146.91%
Se 196.026†	-8.7	-0.00046	mg/L	0.002052	-0.00046	mg/L	0.002052	447.10%
Si 251.611†	62026.0	1.50	mg/L	0.051	1.50	mg/L	0.051	3.42%
Sn 189.927†	-246.2	-0.0240	mg/L	0.00051	-0.0240	mg/L	0.00051	2.14%
Ti 334.940†	-7993.3	0.00159	mg/L	0.000941	0.00159	mg/L	0.000941	59.25%
Tl 190.801†	-23.3	-0.00664	mg/L	0.001382	-0.00664	mg/L	0.001382	20.82%
V 290.880†	1297.4	0.00592	mg/L	0.001863	0.00592	mg/L	0.001863	31.48%
Zn 206.200†	147.1	0.00406	mg/L	0.000098	0.00406	mg/L	0.000098	2.42%
K 766.490†	4464.4	1.26	mg/L	0.012	1.26	mg/L	0.012	0.92%
Na 589.592†	317329.5	15.6	mg/L	0.08	15.6	mg/L	0.08	0.54%
Sr 407.771†	832579.8	0.292	mg/L	0.0009	0.292	mg/L	0.0009	0.31%
Li 670.784†	1707.2	0.00737	mg/L	0.000258	0.00737	mg/L	0.000258	3.51%

Sequence No.: 15 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 5/10/2012 11:36:21 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	152.0 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	2238795.6						12743.39	0.57%
YRADIAL	303728.4						5614.52	1.85%
Ga 417.206	1337068.0						35783.85	2.68%

Approved: May 11, 2012

GaRADIAL	90053.0				924.82	1.03%
Ag 328.068†	126351.2	0.416 mg/L	0.0125	0.416 mg/L	0.0125	3.00%
QC value within limits for Ag 328.068 Recovery = 103.90%						
Al 396.153†	78613.4	9.88 mg/L	0.021	9.88 mg/L	0.021	0.22%
QC value within limits for Al 396.153 Recovery = 98.83%						
As 188.979†	1123.0	0.406 mg/L	0.0095	0.406 mg/L	0.0095	2.34%
QC value within limits for As 188.979 Recovery = 101.48%						
Ba 233.527†	152742.0	1.01 mg/L	0.010	1.01 mg/L	0.010	0.95%
QC value within limits for Ba 233.527 Recovery = 100.85%						
Be 234.861†	64053.3	0.0519 mg/L	0.00167	0.0519 mg/L	0.00167	3.22%
QC value within limits for Be 234.861 Recovery = 103.87%						
B 249.677†	42965.0	0.516 mg/L	0.0150	0.516 mg/L	0.0150	2.90%
QC value within limits for B 249.677 Recovery = 103.24%						
Ca 227.546†	4638.7	10.4 mg/L	0.38	10.4 mg/L	0.38	3.68%
QC value within limits for Ca 227.546 Recovery = 103.53%						
Cd 228.802†	2806.8	0.0512 mg/L	0.00234	0.0512 mg/L	0.00234	4.58%
QC value within limits for Cd 228.802 Recovery = 102.34%						
Co 228.616†	7568.5	0.199 mg/L	0.0014	0.199 mg/L	0.0014	0.69%
QC value within limits for Co 228.616 Recovery = 99.45%						
Cr 267.716†	53916.1	0.508 mg/L	0.0034	0.508 mg/L	0.0034	0.67%
QC value within limits for Cr 267.716 Recovery = 101.54%						
Cu 327.393†	136726.1	0.505 mg/L	0.0126	0.505 mg/L	0.0126	2.49%
QC value within limits for Cu 327.393 Recovery = 100.98%						
Fe 239.562†	65408.0	4.11 mg/L	0.060	4.11 mg/L	0.060	1.45%
QC value within limits for Fe 239.562 Recovery = 102.63%						
Mg 279.077†	36387.2	10.1 mg/L	0.14	10.1 mg/L	0.14	1.35%
QC value within limits for Mg 279.077 Recovery = 101.39%						
Mn 257.610†	413978.8	0.498 mg/L	0.0043	0.498 mg/L	0.0043	0.86%
QC value within limits for Mn 257.610 Recovery = 99.65%						
Mo 202.031†	36332.4	1.00 mg/L	0.012	1.00 mg/L	0.012	1.16%
QC value within limits for Mo 202.031 Recovery = 100.36%						
Ni 231.604†	34755.3	0.522 mg/L	0.0051	0.522 mg/L	0.0051	0.97%
QC value within limits for Ni 231.604 Recovery = 104.35%						
Pb 220.353†	5452.4	0.504 mg/L	0.0041	0.504 mg/L	0.0041	0.82%
QC value within limits for Pb 220.353 Recovery = 100.74%						
Sb 206.836†	5008.7	1.23 mg/L	0.042	1.23 mg/L	0.042	3.37%
QC value within limits for Sb 206.836 Recovery = 102.55%						
Se 196.026†	712.6	0.412 mg/L	0.0118	0.412 mg/L	0.0118	2.87%
QC value within limits for Se 196.026 Recovery = 103.11%						
Si 251.611†	210080.3	5.09 mg/L	0.117	5.09 mg/L	0.117	2.29%
QC value within limits for Si 251.611 Recovery = 101.89%						
Sn 189.927†	10060.0	0.993 mg/L	0.0093	0.993 mg/L	0.0093	0.94%
QC value within limits for Sn 189.927 Recovery = 99.30%						
Ti 334.940†	988038.1	0.984 mg/L	0.0025	0.984 mg/L	0.0025	0.25%
QC value within limits for Ti 334.940 Recovery = 98.41%						
Tl 190.801†	1914.8	0.517 mg/L	0.0072	0.517 mg/L	0.0072	1.39%
QC value within limits for Tl 190.801 Recovery = 103.39%						
V 290.880†	189523.6	0.990 mg/L	0.0047	0.990 mg/L	0.0047	0.48%
QC value within limits for V 290.880 Recovery = 99.00%						
Zn 206.200†	41056.2	1.04 mg/L	0.012	1.04 mg/L	0.012	1.16%
QC value within limits for Zn 206.200 Recovery = 104.18%						
K 766.490†	169915.7	49.6 mg/L	0.46	49.6 mg/L	0.46	0.92%
QC value within limits for K 766.490 Recovery = 99.21%						
Na 589.592†	1029957.6	50.5 mg/L	0.30	50.5 mg/L	0.30	0.60%
QC value within limits for Na 589.592 Recovery = 101.08%						
Sr 407.771†	2771821.6	0.968 mg/L	0.0154	0.968 mg/L	0.0154	1.59%
QC value within limits for Sr 407.771 Recovery = 96.80%						
Li 670.784†	166172.8	0.977 mg/L	0.0182	0.977 mg/L	0.0182	1.86%
QC value within limits for Li 670.784 Recovery = 97.70%						

All analyte(s) passed QC.

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Sequence No.: 16 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 5/10/2012 11:42:21 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	152.0 kPa	0.50 L/min

Approved: May 11, 2012

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2321819.6						4000.83	0.17%
YRADIAL	309056.5						4783.59	1.55%
Ga 417.206	1385210.5						20228.83	1.46%
GaRADIAL	92977.9						2156.62	2.32%
Ag 328.068†	-11.6	-0.00034	mg/L	0.000180	-0.00034	mg/L	0.000180	52.73%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	13.8	0.0103	mg/L	0.00135	0.0103	mg/L	0.00135	13.03%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	2.5	0.00198	mg/L	0.000797	0.00198	mg/L	0.000797	40.20%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	12.9	-0.00013	mg/L	0.000116	-0.00013	mg/L	0.000116	90.29%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-9.5	0.00003	mg/L	0.000005	0.00003	mg/L	0.000005	17.73%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	617.3	0.00867	mg/L	0.000585	0.00867	mg/L	0.000585	6.74%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	1.2	0.0549	mg/L	0.03063	0.0549	mg/L	0.03063	55.78%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	5.3	0.00008	mg/L	0.000193	0.00008	mg/L	0.000193	239.38%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	7.9	0.00016	mg/L	0.000095	0.00016	mg/L	0.000095	59.46%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	25.8	-0.00003	mg/L	0.000131	-0.00003	mg/L	0.000131	420.79%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-13.4	-0.00030	mg/L	0.000166	-0.00030	mg/L	0.000166	56.11%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	244.7	0.0274	mg/L	0.00019	0.0274	mg/L	0.00019	0.69%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	25.0	0.0329	mg/L	0.00274	0.0329	mg/L	0.00274	8.30%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	199.7	-0.00109	mg/L	0.000016	-0.00109	mg/L	0.000016	1.46%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	11.7	0.00103	mg/L	0.000188	0.00103	mg/L	0.000188	18.21%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	6.1	-0.00060	mg/L	0.000407	-0.00060	mg/L	0.000407	67.48%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-2.0	-0.00062	mg/L	0.002237	-0.00062	mg/L	0.002237	361.36%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-2.3	0.00051	mg/L	0.000412	0.00051	mg/L	0.000412	81.46%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-0.4	0.00396	mg/L	0.002723	0.00396	mg/L	0.002723	68.78%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	46.2	-0.00655	mg/L	0.000485	-0.00655	mg/L	0.000485	7.40%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	-24.2	-0.00211	mg/L	0.000860	-0.00211	mg/L	0.000860	40.81%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	33.2	0.00218	mg/L	0.000023	0.00218	mg/L	0.000023	1.07%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-1.6	-0.00070	mg/L	0.001467	-0.00070	mg/L	0.001467	210.24%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-41.9	-0.00065	mg/L	0.001615	-0.00065	mg/L	0.001615	249.86%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-57.0	-0.00107	mg/L	0.000290	-0.00107	mg/L	0.000290	27.14%
QC value within limits for Zn 206.200 Recovery = Not calculated								
K 766.490†	2.9	-0.0369	mg/L	0.02966	-0.0369	mg/L	0.02966	80.46%
QC value within limits for K 766.490 Recovery = Not calculated								
Na 589.592†	-123.3	-0.0217	mg/L	0.01548	-0.0217	mg/L	0.01548	71.39%
QC value within limits for Na 589.592 Recovery = Not calculated								
Sr 407.771†	-15.7	0.00291	mg/L	0.000019	0.00291	mg/L	0.000019	0.67%
QC value within limits for Sr 407.771 Recovery = Not calculated								
Li 670.784†	-58.4	-0.00304	mg/L	0.000353	-0.00304	mg/L	0.000353	11.59%
QC value within limits for Li 670.784 Recovery = Not calculated								

All analyte(s) passed QC.

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Sequence No.: 17 **Autosampler Location: 24**

Sample ID: L1205015304 **Date Collected: 5/10/2012 11:49:15 AM**

Approved: May 11, 2012

Lynn H. Rhoden

Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205015304

Analyte	Back Pressure	Flow
All	152.0 kPa	0.50 L/min

Mean Data: L1205015304

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2129170.2						30506.57	1.43%
YRADIAL	291801.1						934.13	0.32%
Ga 417.206	1398813.5						23760.29	1.70%
GaRADIAL	93026.8						1039.84	1.12%
Ag 328.068†	362.0	0.00374	mg/L	0.000301	0.00374	mg/L	0.000301	8.05%
Al 396.153†	-71.0	0.00039	mg/L	0.009072	0.00039	mg/L	0.009072	>999.9%
As 188.979†	24.1	0.0107	mg/L	0.00095	0.0107	mg/L	0.00095	8.91%
Ba 233.527†	23604.8	0.155	mg/L	0.0025	0.155	mg/L	0.0025	1.61%
Be 234.861†	2015.3	0.00013	mg/L	0.000068	0.00013	mg/L	0.000068	50.88%
B 249.677†	28301.3	0.340	mg/L	0.0093	0.340	mg/L	0.0093	2.73%
Ca 227.546†	118747.1	252	mg/L	5.0	252	mg/L	5.0	1.98%
Cd 228.802†	44.2	0.00078	mg/L	0.000257	0.00078	mg/L	0.000257	32.73%
Co 228.616†	303.1	0.00780	mg/L	0.000029	0.00780	mg/L	0.000029	0.37%
Cr 267.716†	118.5	0.00110	mg/L	0.000219	0.00110	mg/L	0.000219	20.01%
Cu 327.393†	-290.5	-0.00075	mg/L	0.000587	-0.00075	mg/L	0.000587	77.83%
Fe 239.562†	116210.2	7.28	mg/L	0.112	7.28	mg/L	0.112	1.54%
Mg 279.077†	167892.7	46.6	mg/L	0.66	46.6	mg/L	0.66	1.42%
Mn 257.610†	562533.3	0.677	mg/L	0.0100	0.677	mg/L	0.0100	1.48%
Mo 202.031†	59.6	0.00286	mg/L	0.000085	0.00286	mg/L	0.000085	2.98%
Ni 231.604†	462.6	0.00626	mg/L	0.000483	0.00626	mg/L	0.000483	7.72%
Pb 220.353†	-6.9	-0.00009	mg/L	0.000297	-0.00009	mg/L	0.000297	322.00%
Sb 206.836†	-6.4	-0.00024	mg/L	0.000738	-0.00024	mg/L	0.000738	312.26%
Se 196.026†	-8.7	0.00118	mg/L	0.001969	0.00118	mg/L	0.001969	166.39%
Si 251.611†	308998.1	7.51	mg/L	0.126	7.51	mg/L	0.126	1.68%
Sn 189.927†	-364.9	-0.0357	mg/L	0.00027	-0.0357	mg/L	0.00027	0.77%
Ti 334.940†	-42003.3	-0.00183	mg/L	0.003017	-0.00183	mg/L	0.003017	164.61%
Tl 190.801†	-49.8	-0.0145	mg/L	0.00277	-0.0145	mg/L	0.00277	19.05%
V 290.880†	2217.4	0.00881	mg/L	0.000893	0.00881	mg/L	0.000893	10.13%
Zn 206.200†	819.8	0.0209	mg/L	0.00013	0.0209	mg/L	0.00013	0.62%
K 766.490†	23419.3	6.76	mg/L	0.180	6.76	mg/L	0.180	2.67%
Na 589.592†	1615310.7	79.2	mg/L	0.19	79.2	mg/L	0.19	0.24%
Sr 407.771†	4162793.3	1.45	mg/L	0.015	1.45	mg/L	0.015	1.02%
Li 670.784†	9165.1	0.0513	mg/L	0.00155	0.0513	mg/L	0.00155	3.02%

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Sequence No.: 18 **Autosampler Location: 25**
Sample ID: L1205015305 **Date Collected: 5/10/2012 11:55:16 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205015305

Analyte	Back Pressure	Flow
All	152.0 kPa	0.50 L/min

Mean Data: L1205015305

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2171823.4						23591.15	1.09%
YRADIAL	305170.6						2444.60	0.80%
Ga 417.206	1381699.7						26699.89	1.93%
GaRADIAL	93319.9						1599.61	1.71%
Ag 328.068†	-464.2	0.00197	mg/L	0.000514	0.00197	mg/L	0.000514	26.03%
Al 396.153†	2566.1	0.334	mg/L	0.0058	0.334	mg/L	0.0058	1.73%
As 188.979†	2.8	0.00309	mg/L	0.002374	0.00309	mg/L	0.002374	76.93%
Ba 233.527†	17209.0	0.113	mg/L	0.0009	0.113	mg/L	0.0009	0.78%
Be 234.861†	2618.8	0.00027	mg/L	0.000074	0.00027	mg/L	0.000074	27.03%

Approved: May 11, 2012

Kym H. Rhoden

B 249.677†	3990.5	0.0452	mg/L	0.00108	0.0452	mg/L	0.00108 2.40%
Ca 227.546†	64927.6	138	mg/L	5.2	138	mg/L	5.2 3.79%
Cd 228.802†	58.6	0.00124	mg/L	0.000370	0.00124	mg/L	0.000370 29.76%
Co 228.616†	1901.5	0.0499	mg/L	0.00073	0.0499	mg/L	0.00073 1.47%
Cr 267.716†	189.8	0.00183	mg/L	0.000052	0.00183	mg/L	0.000052 2.86%
Cu 327.393†	11008.3	0.0410	mg/L	0.00179	0.0410	mg/L	0.00179 4.35%
Fe 239.562†	145998.1	9.15	mg/L	0.040	9.15	mg/L	0.040 0.44%
Mg 279.077†	88928.7	24.7	mg/L	0.05	24.7	mg/L	0.05 0.22%
Mn 257.610†	1072940.5	1.29	mg/L	0.012	1.29	mg/L	0.012 0.90%
Mo 202.031†	108.3	0.00442	mg/L	0.000278	0.00442	mg/L	0.000278 6.28%
Ni 231.604†	1052.0	0.0151	mg/L	0.00047	0.0151	mg/L	0.00047 3.11%
Pb 220.353†	48.3	0.00356	mg/L	0.000633	0.00356	mg/L	0.000633 17.80%
Sb 206.836†	-1.6	0.00097	mg/L	0.001728	0.00097	mg/L	0.001728 177.82%
Se 196.026†	-6.9	0.00259	mg/L	0.001253	0.00259	mg/L	0.001253 48.39%
Si 251.611†	254489.1	6.19	mg/L	0.108	6.19	mg/L	0.108 1.74%
Sn 189.927†	-323.8	-0.0317	mg/L	0.00051	-0.0317	mg/L	0.00051 1.60%
Ti 334.940†	-10022.5	0.0128	mg/L	0.00456	0.0128	mg/L	0.00456 35.55%
Tl 190.801†	-35.3	-0.0110	mg/L	0.00456	-0.0110	mg/L	0.00456 41.55%
V 290.880†	2326.3	0.00966	mg/L	0.003682	0.00966	mg/L	0.003682 38.12%
Zn 206.200†	6027.1	0.152	mg/L	0.0014	0.152	mg/L	0.0014 0.92%
K 766.490†	11714.3	3.33	mg/L	0.013	3.33	mg/L	0.013 0.39%
Na 589.592†	1474639.6	72.3	mg/L	1.27	72.3	mg/L	1.27 1.76%
Sr 407.771†	1506200.6	0.524	mg/L	0.0045	0.524	mg/L	0.0045 0.86%
Li 670.784†	4245.3	0.0223	mg/L	0.00041	0.0223	mg/L	0.00041 1.85%

Sequence No.: 19 **Autosampler Location: 26**
Sample ID: L1205015306 **Date Collected: 5/10/2012 12:01:14 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205015306

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205015306

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2173150.0						23037.97	1.06%
YRADIAL	291384.5						1334.83	0.46%
Ga 417.206	1395676.0						48340.11	3.46%
GaRADIAL	91200.9						1677.63	1.84%
Ag 328.068†	-304.5	0.00224	mg/L	0.000474	0.00224	mg/L	0.000474	21.17%
Al 396.153†	-46.0	0.00362	mg/L	0.004351	0.00362	mg/L	0.004351	120.04%
As 188.979†	-5.1	0.00016	mg/L	0.001344	0.00016	mg/L	0.001344	843.78%
Ba 233.527†	16283.6	0.107	mg/L	0.0012	0.107	mg/L	0.0012	1.08%
Be 234.861†	2487.0	0.00029	mg/L	0.000065	0.00029	mg/L	0.000065	22.55%
B 249.677†	3718.3	0.0422	mg/L	0.00158	0.0422	mg/L	0.00158	3.76%
Ca 227.546†	61924.7	131	mg/L	6.1	131	mg/L	6.1	4.61%
Cd 228.802†	42.2	0.00095	mg/L	0.000369	0.00095	mg/L	0.000369	39.01%
Co 228.616†	1829.9	0.0480	mg/L	0.00055	0.0480	mg/L	0.00055	1.14%
Cr 267.716†	173.8	0.00166	mg/L	0.000077	0.00166	mg/L	0.000077	4.62%
Cu 327.393†	3206.2	0.0123	mg/L	0.00049	0.0123	mg/L	0.00049	4.01%
Fe 239.562†	136645.6	8.56	mg/L	0.019	8.56	mg/L	0.019	0.22%
Mg 279.077†	88620.2	24.6	mg/L	0.07	24.6	mg/L	0.07	0.30%
Mn 257.610†	1029322.4	1.24	mg/L	0.013	1.24	mg/L	0.013	1.08%
Mo 202.031†	98.2	0.00410	mg/L	0.000311	0.00410	mg/L	0.000311	7.58%
Ni 231.604†	970.3	0.0139	mg/L	0.00054	0.0139	mg/L	0.00054	3.90%
Pb 220.353†	8.3	-0.00013	mg/L	0.002735	-0.00013	mg/L	0.002735	>999.9%
Sb 206.836†	-5.5	-0.00001	mg/L	0.001789	-0.00001	mg/L	0.001789	>999.9%
Se 196.026†	-9.7	0.00082	mg/L	0.002023	0.00082	mg/L	0.002023	246.27%
Si 251.611†	228934.1	5.56	mg/L	0.162	5.56	mg/L	0.162	2.91%
Sn 189.927†	-310.7	-0.0304	mg/L	0.00016	-0.0304	mg/L	0.00016	0.54%
Ti 334.940†	-21036.4	0.00093	mg/L	0.002112	0.00093	mg/L	0.002112	226.72%
Tl 190.801†	-29.0	-0.00941	mg/L	0.002581	-0.00941	mg/L	0.002581	27.42%
V 290.880†	1829.5	0.00715	mg/L	0.001549	0.00715	mg/L	0.001549	21.65%
Zn 206.200†	5387.5	0.136	mg/L	0.0017	0.136	mg/L	0.0017	1.25%
K 766.490†	11340.5	3.22	mg/L	0.019	3.22	mg/L	0.019	0.58%
Na 589.592†	1424886.0	69.9	mg/L	0.59	69.9	mg/L	0.59	0.84%

Approved: May 11, 2012

Sr 407.771†	1482872.5	0.516	mg/L	0.0056	0.516	mg/L	0.0056 1.09%
Li 670.784†	3945.4	0.0206	mg/L	0.00073	0.0206	mg/L	0.00073 3.55%

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Sequence No.: 20 **Autosampler Location: 27**
Sample ID: L1205015307 **Date Collected: 5/10/2012 12:07:13 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205015307

Analyte	Back Pressure	Flow
All	152.0 kPa	0.50 L/min

Mean Data: L1205015307

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2091783.5						32099.51	1.53%
YRADIAL	291786.6						3513.84	1.20%
Ga 417.206	1368988.8						13923.43	1.02%
GaRADIAL	91218.5						752.47	0.82%
Ag 328.068†	-205.6	0.00381	mg/L	0.000099	0.00381	mg/L	0.000099	2.60%
Al 396.153†	1429.0	0.191	mg/L	0.0150	0.191	mg/L	0.0150	7.85%
As 188.979†	4.6	0.00404	mg/L	0.000443	0.00404	mg/L	0.000443	10.98%
Ba 233.527†	32877.4	0.217	mg/L	0.0025	0.217	mg/L	0.0025	1.16%
Be 234.861†	3190.7	0.00010	mg/L	0.000033	0.00010	mg/L	0.000033	32.71%
B 249.677†	28077.8	0.335	mg/L	0.0077	0.335	mg/L	0.0077	2.30%
Ca 227.546†	134515.2	285	mg/L	6.8	285	mg/L	6.8	2.40%
Cd 228.802†	48.2	0.00087	mg/L	0.000277	0.00087	mg/L	0.000277	31.77%
Co 228.616†	153.2	0.00371	mg/L	0.000134	0.00371	mg/L	0.000134	3.61%
Cr 267.716†	254.0	0.00252	mg/L	0.000082	0.00252	mg/L	0.000082	3.27%
Cu 327.393†	59.7	0.00091	mg/L	0.000660	0.00091	mg/L	0.000660	72.90%
Fe 239.562†	186233.5	11.7	mg/L	0.05	11.7	mg/L	0.05	0.43%
Mg 279.077†	245362.9	68.1	mg/L	0.48	68.1	mg/L	0.48	0.71%
Mn 257.610†	441259.3	0.531	mg/L	0.0081	0.531	mg/L	0.0081	1.53%
Mo 202.031†	59.9	0.00305	mg/L	0.000360	0.00305	mg/L	0.000360	11.79%
Ni 231.604†	296.5	0.00377	mg/L	0.000842	0.00377	mg/L	0.000842	22.34%
Pb 220.353†	222.1	0.0210	mg/L	0.00182	0.0210	mg/L	0.00182	8.67%
Sb 206.836†	-6.7	-0.00016	mg/L	0.001813	-0.00016	mg/L	0.001813	>999.9%
Se 196.026†	-16.2	-0.00175	mg/L	0.003645	-0.00175	mg/L	0.003645	208.14%
Si 251.611†	339075.3	8.25	mg/L	0.081	8.25	mg/L	0.081	0.99%
Sn 189.927†	-369.5	-0.0362	mg/L	0.00131	-0.0362	mg/L	0.00131	3.63%
Ti 334.940†	-41735.9	0.00344	mg/L	0.003777	0.00344	mg/L	0.003777	109.81%
Tl 190.801†	-56.1	-0.0160	mg/L	0.00111	-0.0160	mg/L	0.00111	6.91%
V 290.880†	2839.9	0.0108	mg/L	0.00175	0.0108	mg/L	0.00175	16.15%
Zn 206.200†	2173.6	0.0551	mg/L	0.00095	0.0551	mg/L	0.00095	1.72%
K 766.490†	19304.1	5.49	mg/L	0.086	5.49	mg/L	0.086	1.57%
Na 589.592†	2939613.2	144	mg/L	1.3	144	mg/L	1.3	0.87%
Sr 407.771†	4854888.0	1.69	mg/L	0.036	1.69	mg/L	0.036	2.12%
Li 670.784†	14076.0	0.0803	mg/L	0.00070	0.0803	mg/L	0.00070	0.87%

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Sequence No.: 21 **Autosampler Location: 28**
Sample ID: L1205015308 **Date Collected: 5/10/2012 12:13:12 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205015308

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205015308

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2068305.3						23889.45	1.16%
YRADIAL	291244.6						1109.22	0.38%
Ga 417.206	1371633.2						28780.41	2.10%

Approved: May 11, 2012

Kym H. Rhoden

GaRADIAL	91034.7				819.83	0.90%
Ag 328.068†	-303.8	0.00349 mg/L	0.000280	0.00349 mg/L	0.000280	8.03%
Al 396.153†	-123.7	-0.00576 mg/L	0.009963	-0.00576 mg/L	0.009963	172.97%
As 188.979†	2.3	0.00319 mg/L	0.001683	0.00319 mg/L	0.001683	52.78%
Ba 233.527†	34036.0	0.224 mg/L	0.0048	0.224 mg/L	0.0048	2.16%
Be 234.861†	3084.1	0.00000 mg/L	0.000101	0.00000 mg/L	0.000101	>999.9%
B 249.677†	28724.7	0.343 mg/L	0.0067	0.343 mg/L	0.0067	1.95%
Ca 227.546†	134581.4	285 mg/L	7.1	285 mg/L	7.1	2.49%
Cd 228.802†	40.1	0.00072 mg/L	0.000218	0.00072 mg/L	0.000218	30.03%
Co 228.616†	156.5	0.00380 mg/L	0.000307	0.00380 mg/L	0.000307	8.06%
Cr 267.716†	188.0	0.00190 mg/L	0.000116	0.00190 mg/L	0.000116	6.08%
Cu 327.393†	-385.4	-0.00074 mg/L	0.000491	-0.00074 mg/L	0.000491	66.63%
Fe 239.562†	186930.1	11.7 mg/L	0.05	11.7 mg/L	0.05	0.44%
Mg 279.077†	241349.6	67.0 mg/L	0.47	67.0 mg/L	0.47	0.70%
Mn 257.610†	437248.0	0.526 mg/L	0.0093	0.526 mg/L	0.0093	1.77%
Mo 202.031†	64.8	0.00319 mg/L	0.000394	0.00319 mg/L	0.000394	12.34%
Ni 231.604†	250.9	0.00308 mg/L	0.000302	0.00308 mg/L	0.000302	9.80%
Pb 220.353†	-18.3	-0.00117 mg/L	0.000212	-0.00117 mg/L	0.000212	18.17%
Sb 206.836†	-3.4	0.00065 mg/L	0.001342	0.00065 mg/L	0.001342	207.40%
Se 196.026†	-5.6	0.00430 mg/L	0.001264	0.00430 mg/L	0.001264	29.42%
Si 251.611†	333503.7	8.11 mg/L	0.149	8.11 mg/L	0.149	1.84%
Sn 189.927†	-375.7	-0.0368 mg/L	0.00080	-0.0368 mg/L	0.00080	2.16%
Ti 334.940†	-47373.4	-0.00213 mg/L	0.003506	-0.00213 mg/L	0.003506	164.27%
Tl 190.801†	-40.2	-0.0119 mg/L	0.00193	-0.0119 mg/L	0.00193	16.23%
V 290.880†	2696.5	0.0101 mg/L	0.00329	0.0101 mg/L	0.00329	32.62%
Zn 206.200†	1786.9	0.0453 mg/L	0.00080	0.0453 mg/L	0.00080	1.76%
K 766.490†	19673.4	5.59 mg/L	0.089	5.59 mg/L	0.089	1.59%
Na 589.592†	3055527.0	150 mg/L	1.0	150 mg/L	1.0	0.70%
Sr 407.771†	5017709.6	1.74 mg/L	0.021	1.74 mg/L	0.021	1.19%
Li 670.784†	14414.5	0.0823 mg/L	0.00168	0.0823 mg/L	0.00168	2.04%

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Sequence No.: 22 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 5/10/2012 12:19:15 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

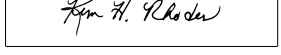
Nebulizer Parameters: CCV

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	2253239.0						6235.57	0.28%
YRADIAL	299638.1						1869.33	0.62%
Ga 417.206	1333296.0						33180.17	2.49%
GaRADIAL	89519.2						191.30	0.21%
Ag 328.068†	128228.2	0.422	mg/L	0.0102	0.422	mg/L	0.0102	2.43%
QC value within limits for Ag 328.068 Recovery = 105.44%								
Al 396.153†	78714.3	9.90	mg/L	0.040	9.90	mg/L	0.040	0.41%
QC value within limits for Al 396.153 Recovery = 98.96%								
As 188.979†	1143.4	0.413	mg/L	0.0067	0.413	mg/L	0.0067	1.63%
QC value within limits for As 188.979 Recovery = 103.34%								
Ba 233.527†	155009.2	1.02	mg/L	0.009	1.02	mg/L	0.009	0.91%
QC value within limits for Ba 233.527 Recovery = 102.35%								
Be 234.861†	63850.7	0.0518	mg/L	0.00128	0.0518	mg/L	0.00128	2.48%
QC value within limits for Be 234.861 Recovery = 103.53%								
B 249.677†	43007.9	0.517	mg/L	0.0111	0.517	mg/L	0.0111	2.14%
QC value within limits for B 249.677 Recovery = 103.33%								
Ca 227.546†	4686.4	10.4	mg/L	0.32	10.4	mg/L	0.32	3.04%
QC value within limits for Ca 227.546 Recovery = 104.43%								
Cd 228.802†	2853.3	0.0520	mg/L	0.00209	0.0520	mg/L	0.00209	4.01%
QC value within limits for Cd 228.802 Recovery = 104.03%								
Co 228.616†	7706.4	0.203	mg/L	0.0008	0.203	mg/L	0.0008	0.39%
QC value within limits for Co 228.616 Recovery = 101.26%								
Cr 267.716†	54289.8	0.511	mg/L	0.0033	0.511	mg/L	0.0033	0.64%
QC value within limits for Cr 267.716 Recovery = 102.24%								
Cu 327.393†	137460.1	0.508	mg/L	0.0126	0.508	mg/L	0.0126	2.48%

Approved: May 11, 2012



QC value within limits for Cu 327.393 Recovery = 101.52%
Fe 239.562† 65895.7 4.14 mg/L 0.034 4.14 mg/L 0.034 0.83%
QC value within limits for Fe 239.562 Recovery = 103.39%
Mg 279.077† 36851.9 10.3 mg/L 0.07 10.3 mg/L 0.07 0.70%
QC value within limits for Mg 279.077 Recovery = 102.68%
Mn 257.610† 425487.4 0.512 mg/L 0.0058 0.512 mg/L 0.0058 1.13%
QC value within limits for Mn 257.610 Recovery = 102.42%
Mo 202.031† 36465.2 1.01 mg/L 0.005 1.01 mg/L 0.005 0.52%
QC value within limits for Mo 202.031 Recovery = 100.73%
Ni 231.604† 33893.5 0.509 mg/L 0.0056 0.509 mg/L 0.0056 1.11%
QC value within limits for Ni 231.604 Recovery = 101.76%
Pb 220.353† 5532.6 0.511 mg/L 0.0030 0.511 mg/L 0.0030 0.59%
QC value within limits for Pb 220.353 Recovery = 102.22%
Sb 206.836† 5095.1 1.25 mg/L 0.034 1.25 mg/L 0.034 2.68%
QC value within limits for Sb 206.836 Recovery = 104.32%
Se 196.026† 722.6 0.418 mg/L 0.0141 0.418 mg/L 0.0141 3.38%
QC value within limits for Se 196.026 Recovery = 104.54%
Si 251.611† 214542.3 5.20 mg/L 0.088 5.20 mg/L 0.088 1.68%
QC value within limits for Si 251.611 Recovery = 104.06%
Sn 189.927† 10278.4 1.01 mg/L 0.005 1.01 mg/L 0.005 0.51%
QC value within limits for Sn 189.927 Recovery = 101.45%
Ti 334.940† 989455.4 0.986 mg/L 0.0020 0.986 mg/L 0.0020 0.20%
QC value within limits for Ti 334.940 Recovery = 98.56%
Tl 190.801† 1926.8 0.520 mg/L 0.0053 0.520 mg/L 0.0053 1.01%
QC value within limits for Tl 190.801 Recovery = 104.03%
V 290.880† 191585.6 1.00 mg/L 0.005 1.00 mg/L 0.005 0.51%
QC value within limits for V 290.880 Recovery = 100.08%
Zn 206.200† 41498.5 1.05 mg/L 0.010 1.05 mg/L 0.010 0.92%
QC value within limits for Zn 206.200 Recovery = 105.30%
K 766.490† 171458.7 50.1 mg/L 0.28 50.1 mg/L 0.28 0.56%
QC value within limits for K 766.490 Recovery = 100.11%
Na 589.592† 1033687.6 50.7 mg/L 0.44 50.7 mg/L 0.44 0.87%
QC value within limits for Na 589.592 Recovery = 101.44%
Sr 407.771† 2800925.8 0.978 mg/L 0.0067 0.978 mg/L 0.0067 0.68%
QC value within limits for Sr 407.771 Recovery = 97.81%
Li 670.784† 163703.7 0.962 mg/L 0.0048 0.962 mg/L 0.0048 0.50%
QC value within limits for Li 670.784 Recovery = 96.24%
All analyte(s) passed QC.

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Sequence No.: 23 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 5/10/2012 12:25:16 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	2333035.3						7936.51	0.34%
YRADIAL	307647.9						6232.94	2.03%
Ga 417.206	1388054.3						34042.20	2.45%
GaRADIAL	93313.7						667.13	0.71%
Ag 328.068†	-70.4	-0.00054	mg/L	0.000392	-0.00054	mg/L	0.000392	72.87%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	10.2	0.00990	mg/L	0.002007	0.00990	mg/L	0.002007	20.28%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-0.3	0.00098	mg/L	0.000964	0.00098	mg/L	0.000964	98.21%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	6.9	-0.00017	mg/L	0.000090	-0.00017	mg/L	0.000090	53.72%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-24.2	0.00002	mg/L	0.000039	0.00002	mg/L	0.000039	224.81%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	542.7	0.00777	mg/L	0.000477	0.00777	mg/L	0.000477	6.14%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	-7.5	0.0363	mg/L	0.00638	0.0363	mg/L	0.00638	17.61%

Approved: May 11, 2012

QC value within limits for Ca 227.546 Recovery = Not calculated
Cd 228.802† 13.0 0.00023 mg/L 0.000209 0.00023 mg/L 0.000209 90.42%
QC value within limits for Cd 228.802 Recovery = Not calculated
Co 228.616† 3.3 0.00004 mg/L 0.000232 0.00004 mg/L 0.000232 601.49%
QC value within limits for Co 228.616 Recovery = Not calculated
Cr 267.716† 14.9 -0.00013 mg/L 0.000014 -0.00013 mg/L 0.000014 10.33%
QC value within limits for Cr 267.716 Recovery = Not calculated
Cu 327.393† 12.1 -0.00020 mg/L 0.000327 -0.00020 mg/L 0.000327 160.64%
QC value within limits for Cu 327.393 Recovery = Not calculated
Fe 239.562† 143.3 0.0211 mg/L 0.00072 0.0211 mg/L 0.00072 3.42%
QC value within limits for Fe 239.562 Recovery = Not calculated
Mg 279.077† 16.1 0.0305 mg/L 0.00179 0.0305 mg/L 0.00179 5.87%
QC value within limits for Mg 279.077 Recovery = Not calculated
Mn 257.610† 80.2 -0.00123 mg/L 0.000022 -0.00123 mg/L 0.000022 1.80%
QC value within limits for Mn 257.610 Recovery = Not calculated
Mo 202.031† 2.5 0.00078 mg/L 0.000165 0.00078 mg/L 0.000165 21.21%
QC value within limits for Mo 202.031 Recovery = Not calculated
Ni 231.604† -3.0 -0.00074 mg/L 0.000321 -0.00074 mg/L 0.000321 43.43%
QC value within limits for Ni 231.604 Recovery = Not calculated
Pb 220.353† -3.5 -0.00075 mg/L 0.001192 -0.00075 mg/L 0.001192 158.56%
QC value within limits for Pb 220.353 Recovery = Not calculated
Sb 206.836† 1.4 0.00141 mg/L 0.000590 0.00141 mg/L 0.000590 41.96%
QC value within limits for Sb 206.836 Recovery = Not calculated
Se 196.026† -4.3 0.00172 mg/L 0.001227 0.00172 mg/L 0.001227 71.32%
QC value within limits for Se 196.026 Recovery = Not calculated
Si 251.611† 52.9 -0.00639 mg/L 0.000304 -0.00639 mg/L 0.000304 4.76%
QC value within limits for Si 251.611 Recovery = Not calculated
Sn 189.927† -30.0 -0.00268 mg/L 0.000375 -0.00268 mg/L 0.000375 14.01%
QC value within limits for Sn 189.927 Recovery = Not calculated
Ti 334.940† 27.8 0.00217 mg/L 0.000023 0.00217 mg/L 0.000023 1.04%
QC value within limits for Ti 334.940 Recovery = Not calculated
Tl 190.801† -8.4 -0.00249 mg/L 0.001243 -0.00249 mg/L 0.001243 49.87%
QC value within limits for Tl 190.801 Recovery = Not calculated
V 290.880† -249.0 -0.00173 mg/L 0.002477 -0.00173 mg/L 0.002477 143.29%
QC value within limits for V 290.880 Recovery = Not calculated
Zn 206.200† -61.8 -0.00119 mg/L 0.000139 -0.00119 mg/L 0.000139 11.70%
QC value within limits for Zn 206.200 Recovery = Not calculated
K 766.490† -35.9 -0.0482 mg/L 0.00876 -0.0482 mg/L 0.00876 18.15%
QC value within limits for K 766.490 Recovery = Not calculated
Na 589.592† -347.3 -0.0327 mg/L 0.01106 -0.0327 mg/L 0.01106 33.84%
QC value within limits for Na 589.592 Recovery = Not calculated
Sr 407.771† -29.6 0.00290 mg/L 0.000029 0.00290 mg/L 0.000029 1.01%
QC value within limits for Sr 407.771 Recovery = Not calculated
Li 670.784† -63.8 -0.00307 mg/L 0.000453 -0.00307 mg/L 0.000453 14.73%
QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

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Sequence No.: 24 **Autosampler Location: 12**
Sample ID: ICSA **Date Collected: 5/10/2012 12:32:10 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICSA

Analyte	Back Pressure	Flow
All	151.0 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	2065187.4						9428.84	0.46%
YRADIAL	289237.2						2486.81	0.86%
Ga 417.206	1278444.8						16652.11	1.30%
GaRADIAL	88580.6						819.53	0.93%
Ag 328.068†	-13708.1	-0.00190	mg/L	0.001262	-0.00190	mg/L	0.001262	66.41%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	1982339.6	251	mg/L	2.3	251	mg/L	2.3	0.90%
QC value within limits for Al 396.153 Recovery = 100.30%								
As 188.979†	-26.6	-0.00204	mg/L	0.001080	-0.00204	mg/L	0.001080	52.92%

Approved: May 11, 2012

QC value within limits for As 188.979 Recovery = Not calculated

Ba 233.527†	762.4	0.00238 mg/L	0.000150	0.00238 mg/L	0.000150	6.30%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 234.861†	26071.3	-0.00035 mg/L	0.000733	-0.00035 mg/L	0.000733	211.69%
QC value within limits for Be 234.861 Recovery = Not calculated							
B 249.677†	4872.3	0.0182 mg/L	0.00286	0.0182 mg/L	0.00286	15.70%
QC value within limits for B 249.677 Recovery = Not calculated							
Ca 227.546†	122259.3	261 mg/L	5.9	261 mg/L	5.9	2.25%
QC value within limits for Ca 227.546 Recovery = 104.50%							
Cd 228.802†	17.8	0.00019 mg/L	0.000176	0.00019 mg/L	0.000176	94.62%
QC value within limits for Cd 228.802 Recovery = Not calculated							
Co 228.616†	21.8	-0.00194 mg/L	0.000083	-0.00194 mg/L	0.000083	4.30%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	99.8	-0.00065 mg/L	0.000124	-0.00065 mg/L	0.000124	18.95%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 327.393†	-1480.6	0.00246 mg/L	0.000087	0.00246 mg/L	0.000087	3.55%
QC value within limits for Cu 327.393 Recovery = Not calculated							
Fe 239.562†	1554711.6	97.3 mg/L	1.15	97.3 mg/L	1.15	1.19%
QC value within limits for Fe 239.562 Recovery = 97.31%							
Mg 279.077†	940745.2	261 mg/L	2.9	261 mg/L	2.9	1.10%
QC value within limits for Mg 279.077 Recovery = 104.41%							
Mn 257.610†	-2361.7	-0.00145 mg/L	0.000749	-0.00145 mg/L	0.000749	51.79%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	-62.3	0.00377 mg/L	0.000891	0.00377 mg/L	0.000891	23.65%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Ni 231.604†	36.7	-0.00014 mg/L	0.000493	-0.00014 mg/L	0.000493	359.72%
QC value within limits for Ni 231.604 Recovery = Not calculated							
Pb 220.353†	-371.0	0.00037 mg/L	0.004057	0.00037 mg/L	0.004057	>999.9%
QC value within limits for Pb 220.353 Recovery = Not calculated							
Sb 206.836†	-24.7	-0.00145 mg/L	0.002498	-0.00145 mg/L	0.002498	172.25%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-57.7	-0.00282 mg/L	0.008004	-0.00282 mg/L	0.008004	283.72%
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	1159.0	0.0206 mg/L	0.00077	0.0206 mg/L	0.00077	3.73%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-358.5	-0.0351 mg/L	0.00084	-0.0351 mg/L	0.00084	2.40%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Ti 334.940†	-40070.9	0.00120 mg/L	0.003132	0.00120 mg/L	0.003132	260.88%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-53.4	-0.00798 mg/L	0.002814	-0.00798 mg/L	0.002814	35.28%
QC value within limits for Tl 190.801 Recovery = Not calculated							
V 290.880†	3837.0	-0.00251 mg/L	0.003121	-0.00251 mg/L	0.003121	124.49%
QC value within limits for V 290.880 Recovery = Not calculated							
Zn 206.200†	170.5	0.00283 mg/L	0.000510	0.00283 mg/L	0.000510	18.01%
QC value within limits for Zn 206.200 Recovery = Not calculated							
K 766.490†	-109.7	-0.0699 mg/L	0.00502	-0.0699 mg/L	0.00502	7.18%
QC value within limits for K 766.490 Recovery = Not calculated							
Na 589.592†	120.8	-0.00968 mg/L	0.007685	-0.00968 mg/L	0.007685	79.36%
QC value within limits for Na 589.592 Recovery = Not calculated							
Sr 407.771†	2985.5	-0.00174 mg/L	0.000142	-0.00174 mg/L	0.000142	8.12%
QC value within limits for Sr 407.771 Recovery = Not calculated							
Li 670.784†	191.3	-0.00157 mg/L	0.000329	-0.00157 mg/L	0.000329	20.95%
QC value within limits for Li 670.784 Recovery = Not calculated							

All analyte(s) passed QC.

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Sequence No.: 25 **Autosampler Location: 13**
Sample ID: ICSAB **Date Collected: 5/10/2012 12:38:06 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICSAB

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	2079178.9				17207.89	0.83%

Approved: May 11, 2012

YRADIAL	287062.3					1964.13	0.68%
Ga 417.206	1291006.6					23343.94	1.81%
GaRADIAL	88542.3					319.11	0.36%
Ag 328.068†	148892.0	0.530 mg/L	0.0133	0.530 mg/L		0.0133	2.52%
QC value within limits for Ag 328.068 Recovery = 106.10%							
Al 396.153†	2024605.5	256 mg/L	2.8	256 mg/L		2.8	1.08%
QC value within limits for Al 396.153 Recovery = 102.44%							
As 188.979†	667.0	0.251 mg/L	0.0018	0.251 mg/L		0.0018	0.70%
QC value within limits for As 188.979 Recovery = 100.54%							
Ba 233.527†	39569.4	0.258 mg/L	0.0005	0.258 mg/L		0.0005	0.19%
QC value within limits for Ba 233.527 Recovery = 103.39%							
Be 234.861†	347330.7	0.262 mg/L	0.0058	0.262 mg/L		0.0058	2.24%
QC value within limits for Be 234.861 Recovery = 104.69%							
B 249.677†	4688.5	0.00228 mg/L	0.001845	0.00228 mg/L		0.001845	80.86%
QC value within limits for B 249.677 Recovery = Not calculated							
Ca 227.546†	124993.1	267 mg/L	6.8	267 mg/L		6.8	2.54%
QC value within limits for Ca 227.546 Recovery = 106.99%							
Cd 228.802†	23729.0	0.444 mg/L	0.0093	0.444 mg/L		0.0093	2.09%
QC value within limits for Cd 228.802 Recovery = 88.85%							
Co 228.616†	9135.4	0.238 mg/L	0.0022	0.238 mg/L		0.0022	0.91%
QC value within limits for Co 228.616 Recovery = 95.35%							
Cr 267.716†	27571.2	0.258 mg/L	0.0009	0.258 mg/L		0.0009	0.36%
QC value within limits for Cr 267.716 Recovery = 103.25%							
Cu 327.393†	66779.8	0.254 mg/L	0.0050	0.254 mg/L		0.0050	1.97%
QC value within limits for Cu 327.393 Recovery = 101.62%							
Fe 239.562†	1599276.4	100 mg/L	0.4	100 mg/L		0.4	0.42%
QC value within limits for Fe 239.562 Recovery = 100.10%							
Mg 279.077†	967098.7	268 mg/L	1.1	268 mg/L		1.1	0.40%
QC value within limits for Mg 279.077 Recovery = 107.33%							
Mn 257.610†	203060.6	0.246 mg/L	0.0009	0.246 mg/L		0.0009	0.37%
QC value within limits for Mn 257.610 Recovery = 98.53%							
Mo 202.031†	-61.2	0.00411 mg/L	0.000333	0.00411 mg/L		0.000333	8.12%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Ni 231.604†	32548.7	0.489 mg/L	0.0035	0.489 mg/L		0.0035	0.72%
QC value within limits for Ni 231.604 Recovery = 97.70%							
Pb 220.353†	4903.4	0.487 mg/L	0.0074	0.487 mg/L		0.0074	1.52%
QC value within limits for Pb 220.353 Recovery = 97.42%							
Sb 206.836†	2074.9	0.513 mg/L	0.0133	0.513 mg/L		0.0133	2.58%
QC value within limits for Sb 206.836 Recovery = 102.60%							
Se 196.026†	386.4	0.252 mg/L	0.0053	0.252 mg/L		0.0053	2.12%
QC value within limits for Se 196.026 Recovery = 100.68%							
Si 251.611†	-144.2	-0.0112 mg/L	0.00097	-0.0112 mg/L		0.00097	8.69%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-356.5	-0.0349 mg/L	0.00059	-0.0349 mg/L		0.00059	1.70%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Ti 334.940†	-41612.4	0.00046 mg/L	0.003310	0.00046 mg/L		0.003310	716.22%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	1829.4	0.487 mg/L	0.0043	0.487 mg/L		0.0043	0.89%
QC value within limits for Tl 190.801 Recovery = 97.40%							
V 290.880†	51488.8	0.246 mg/L	0.0046	0.246 mg/L		0.0046	1.89%
QC value within limits for V 290.880 Recovery = 98.45%							
Zn 206.200†	19945.2	0.505 mg/L	0.0030	0.505 mg/L		0.0030	0.59%
QC value within limits for Zn 206.200 Recovery = 100.91%							
K 766.490†	17215.8	5.01 mg/L	0.018	5.01 mg/L		0.018	0.36%
QC value within limits for K 766.490 Recovery = 100.28%							
Na 589.592†	106211.3	5.20 mg/L	0.044	5.20 mg/L		0.044	0.85%
QC value within limits for Na 589.592 Recovery = 104.07%							
Sr 407.771†	3221.1	-0.00179 mg/L	0.000282	-0.00179 mg/L		0.000282	15.76%
QC value within limits for Sr 407.771 Recovery = Not calculated							
Li 670.784†	205.2	-0.00149 mg/L	0.000419	-0.00149 mg/L		0.000419	28.19%
QC value within limits for Li 670.784 Recovery = Not calculated							

All analyte(s) passed QC.

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Sequence No.: 26 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 5/10/2012 12:44:02 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Approved: May 11, 2012

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	2275714.6						9196.26	0.40%
YRADIAL	310312.4						2971.35	0.96%
Ga 417.206	1338412.7						48142.06	3.60%
GaRADIAL	92672.2						718.88	0.78%
Ag 328.068†	128508.6	0.423	mg/L	0.0183	0.423	mg/L	0.0183	4.33%
QC value within limits for Ag 328.068 Recovery = 105.67%								
Al 396.153†	77847.7	9.79	mg/L	0.040	9.79	mg/L	0.040	0.40%
QC value within limits for Al 396.153 Recovery = 97.87%								
As 188.979†	1133.1	0.410	mg/L	0.0152	0.410	mg/L	0.0152	3.71%
QC value within limits for As 188.979 Recovery = 102.41%								
Ba 233.527†	153863.3	1.02	mg/L	0.006	1.02	mg/L	0.006	0.57%
QC value within limits for Ba 233.527 Recovery = 101.59%								
Be 234.861†	63941.6	0.0519	mg/L	0.00220	0.0519	mg/L	0.00220	4.25%
QC value within limits for Be 234.861 Recovery = 103.70%								
B 249.677†	42685.5	0.513	mg/L	0.0208	0.513	mg/L	0.0208	4.06%
QC value within limits for B 249.677 Recovery = 102.57%								
Ca 227.546†	4669.3	10.4	mg/L	0.44	10.4	mg/L	0.44	4.24%
QC value within limits for Ca 227.546 Recovery = 104.05%								
Cd 228.802†	2832.6	0.0516	mg/L	0.00285	0.0516	mg/L	0.00285	5.52%
QC value within limits for Cd 228.802 Recovery = 103.27%								
Co 228.616†	7593.7	0.200	mg/L	0.0008	0.200	mg/L	0.0008	0.42%
QC value within limits for Co 228.616 Recovery = 99.78%								
Cr 267.716†	53881.8	0.507	mg/L	0.0051	0.507	mg/L	0.0051	1.00%
QC value within limits for Cr 267.716 Recovery = 101.47%								
Cu 327.393†	137344.2	0.507	mg/L	0.0213	0.507	mg/L	0.0213	4.20%
QC value within limits for Cu 327.393 Recovery = 101.43%								
Fe 239.562†	65015.5	4.08	mg/L	0.038	4.08	mg/L	0.038	0.93%
QC value within limits for Fe 239.562 Recovery = 102.01%								
Mg 279.077†	36327.3	10.1	mg/L	0.05	10.1	mg/L	0.05	0.52%
QC value within limits for Mg 279.077 Recovery = 101.22%								
Mn 257.610†	423225.9	0.509	mg/L	0.0025	0.509	mg/L	0.0025	0.50%
QC value within limits for Mn 257.610 Recovery = 101.88%								
Mo 202.031†	36161.0	0.999	mg/L	0.0084	0.999	mg/L	0.0084	0.84%
QC value within limits for Mo 202.031 Recovery = 99.89%								
Ni 231.604†	33745.3	0.507	mg/L	0.0022	0.507	mg/L	0.0022	0.43%
QC value within limits for Ni 231.604 Recovery = 101.32%								
Pb 220.353†	5455.3	0.504	mg/L	0.0031	0.504	mg/L	0.0031	0.62%
QC value within limits for Pb 220.353 Recovery = 100.79%								
Sb 206.836†	5058.8	1.24	mg/L	0.053	1.24	mg/L	0.053	4.27%
QC value within limits for Sb 206.836 Recovery = 103.58%								
Se 196.026†	715.7	0.414	mg/L	0.0159	0.414	mg/L	0.0159	3.85%
QC value within limits for Se 196.026 Recovery = 103.56%								
Si 251.611†	214814.0	5.21	mg/L	0.199	5.21	mg/L	0.199	3.83%
QC value within limits for Si 251.611 Recovery = 104.20%								
Sn 189.927†	10080.8	0.995	mg/L	0.0046	0.995	mg/L	0.0046	0.46%
QC value within limits for Sn 189.927 Recovery = 99.51%								
Ti 334.940†	983474.2	0.980	mg/L	0.0051	0.980	mg/L	0.0051	0.52%
QC value within limits for Ti 334.940 Recovery = 97.96%								
Tl 190.801†	1908.8	0.515	mg/L	0.0044	0.515	mg/L	0.0044	0.86%
QC value within limits for Tl 190.801 Recovery = 103.06%								
V 290.880†	190536.1	0.995	mg/L	0.0201	0.995	mg/L	0.0201	2.02%
QC value within limits for V 290.880 Recovery = 99.53%								
Zn 206.200†	41220.2	1.05	mg/L	0.010	1.05	mg/L	0.010	0.91%
QC value within limits for Zn 206.200 Recovery = 104.59%								
K 766.490†	170087.5	49.7	mg/L	0.15	49.7	mg/L	0.15	0.31%
QC value within limits for K 766.490 Recovery = 99.32%								
Na 589.592†	1000318.4	49.1	mg/L	0.40	49.1	mg/L	0.40	0.82%
QC value within limits for Na 589.592 Recovery = 98.17%								
Sr 407.771†	2716014.8	0.949	mg/L	0.0101	0.949	mg/L	0.0101	1.06%
QC value within limits for Sr 407.771 Recovery = 94.86%								
Li 670.784†	163320.5	0.960	mg/L	0.0077	0.960	mg/L	0.0077	0.80%
QC value within limits for Li 670.784 Recovery = 96.02%								

All analyte(s) passed QC.

Approved: May 11, 2012

Sequence No.: 27 Autosampler Location: 1
Sample ID: CCB Date Collected: 5/10/2012 12:50:03 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	152.0 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	2312581.1						25305.23	1.09%
YRADIAL	302892.5						4485.30	1.48%
Ga 417.206	1353910.3						13071.45	0.97%
GaRADIAL	91291.4						814.99	0.89%
Ag 328.068†	145.1	0.00017	mg/L	0.000181	0.00017	mg/L	0.000181	105.13%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	14.9	0.0105	mg/L	0.00040	0.0105	mg/L	0.00040	3.84%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-2.0	0.00036	mg/L	0.001467	0.00036	mg/L	0.001467	409.19%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-2.1	-0.00023	mg/L	0.000103	-0.00023	mg/L	0.000103	45.18%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-76.7	-0.00003	mg/L	0.000012	-0.00003	mg/L	0.000012	43.50%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	458.4	0.00675	mg/L	0.000173	0.00675	mg/L	0.000173	2.57%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	2.0	0.0566	mg/L	0.01794	0.0566	mg/L	0.01794	31.70%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	9.7	0.00017	mg/L	0.000304	0.00017	mg/L	0.000304	178.16%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-2.0	-0.00010	mg/L	0.000198	-0.00010	mg/L	0.000198	195.18%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	8.9	-0.00019	mg/L	0.000145	-0.00019	mg/L	0.000145	76.58%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	71.4	0.00002	mg/L	0.000269	0.00002	mg/L	0.000269	>999.9%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	215.1	0.0256	mg/L	0.00012	0.0256	mg/L	0.00012	0.48%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	30.4	0.0344	mg/L	0.00531	0.0344	mg/L	0.00531	15.43%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	116.6	-0.00119	mg/L	0.000008	-0.00119	mg/L	0.000008	0.71%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	6.6	0.00089	mg/L	0.000185	0.00089	mg/L	0.000185	20.78%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	6.2	-0.00060	mg/L	0.000253	-0.00060	mg/L	0.000253	42.18%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	3.3	-0.00012	mg/L	0.000846	-0.00012	mg/L	0.000846	676.75%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	1.5	0.00143	mg/L	0.001291	0.00143	mg/L	0.001291	90.47%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-8.1	-0.00047	mg/L	0.000693	-0.00047	mg/L	0.000693	146.03%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	27.3	-0.00701	mg/L	0.000534	-0.00701	mg/L	0.000534	7.62%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	-22.9	-0.00198	mg/L	0.000881	-0.00198	mg/L	0.000881	44.46%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	70.5	0.00222	mg/L	0.000140	0.00222	mg/L	0.000140	6.33%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-6.3	-0.00195	mg/L	0.001527	-0.00195	mg/L	0.001527	78.51%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	137.3	0.00029	mg/L	0.000846	0.00029	mg/L	0.000846	289.84%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-68.4	-0.00135	mg/L	0.000354	-0.00135	mg/L	0.000354	26.19%
QC value within limits for Zn 206.200 Recovery = Not calculated								
K 766.490†	10.2	-0.0347	mg/L	0.02797	-0.0347	mg/L	0.02797	80.60%
QC value within limits for K 766.490 Recovery = Not calculated								
Na 589.592†	-263.3	-0.0286	mg/L	0.00540	-0.0286	mg/L	0.00540	18.92%

Approved: May 11, 2012

QC value within limits for Na 589.592 Recovery = Not calculated

Sr 407.771†	23.7	0.00292	mg/L	0.000029	0.00292	mg/L	0.000029	1.01%

QC value within limits for Sr 407.771 Recovery = Not calculated

Li 670.784†	-50.1	-0.00299	mg/L	0.000401	-0.00299	mg/L	0.000401	13.41%

QC value within limits for Li 670.784 Recovery = Not calculated

All analyte(s) passed QC.

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Sequence No.: 28 **Autosampler Location: 29**
Sample ID: L1205010502 0.1 **Date Collected: 5/10/2012 12:56:56 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205010502 0.1

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205010502 0.1

	Mean Corrected	Calib.			Sample			
Analyte	**Intensity**	**Conc.**	**Units**	**Std.Dev.**	**Conc.**	**Units**	**Std.Dev.**	**RSD**
Y 371.029	2267155.4						5260.81	0.23%
YRADIAL	301830.8						2802.42	0.93%
Ga 417.206	1386183.2						24913.44	1.80%
GaRADIAL	92384.1						2783.30	3.01%
Ag 328.068†	-10.1	-0.00034	mg/L	0.000330	-0.00034	mg/L	0.000330	97.32%
Al 396.153†	-0.7	0.00852	mg/L	0.001034	0.00852	mg/L	0.001034	12.13%
As 188.979†	-0.8	0.00080	mg/L	0.001290	0.00080	mg/L	0.001290	161.09%
Ba 233.527†	245.6	0.00141	mg/L	0.000085	0.00141	mg/L	0.000085	6.06%
Be 234.861†	134.7	0.00015	mg/L	0.000032	0.00015	mg/L	0.000032	21.76%
B 249.677†	484.0	0.00707	mg/L	0.000421	0.00707	mg/L	0.000421	5.96%
Ca 227.546†	2803.2	5.99	mg/L	0.201	5.99	mg/L	0.201	3.36%
Cd 228.802†	2.4	0.00003	mg/L	0.000250	0.00003	mg/L	0.000250	792.93%
Co 228.616†	3.1	0.00003	mg/L	0.000052	0.00003	mg/L	0.000052	152.78%
Cr 267.716†	21.6	-0.00006	mg/L	0.000074	-0.00006	mg/L	0.000074	116.73%
Cu 327.393†	-93.0	-0.00058	mg/L	0.000631	-0.00058	mg/L	0.000631	108.57%
Fe 239.562†	122.3	0.0197	mg/L	0.00128	0.0197	mg/L	0.00128	6.48%
Mg 279.077†	4093.7	1.16	mg/L	0.018	1.16	mg/L	0.018	1.53%
Mn 257.610†	7734.8	0.00800	mg/L	0.000039	0.00800	mg/L	0.000039	0.49%
Mo 202.031†	3.5	0.00081	mg/L	0.000194	0.00081	mg/L	0.000194	23.93%
Ni 231.604†	61.0	0.00022	mg/L	0.000222	0.00022	mg/L	0.000222	99.34%
Pb 220.353†	10.7	0.00060	mg/L	0.000777	0.00060	mg/L	0.000777	129.94%
Sb 206.836†	-1.2	0.00076	mg/L	0.000326	0.00076	mg/L	0.000326	43.09%
Se 196.026†	-9.7	-0.00139	mg/L	0.003028	-0.00139	mg/L	0.003028	217.80%
Si 251.611†	11838.9	0.280	mg/L	0.0084	0.280	mg/L	0.0084	3.01%
Sn 189.927†	-116.3	-0.0112	mg/L	0.00013	-0.0112	mg/L	0.00013	1.13%
Ti 334.940†	-1178.7	0.00187	mg/L	0.000061	0.00187	mg/L	0.000061	3.29%
Tl 190.801†	0.5	-0.00017	mg/L	0.002184	-0.00017	mg/L	0.002184	>999.9%
V 290.880†	400.6	0.00164	mg/L	0.001135	0.00164	mg/L	0.001135	69.16%
Zn 206.200†	6132.7	0.155	mg/L	0.0029	0.155	mg/L	0.0029	1.86%
K 766.490†	1096.7	0.283	mg/L	0.0170	0.283	mg/L	0.0170	5.99%
Na 589.592†	23043.2	1.12	mg/L	0.012	1.12	mg/L	0.012	1.10%
Sr 407.771†	49413.1	0.0200	mg/L	0.00024	0.0200	mg/L	0.00024	1.21%
Li 670.784†	-30.7	-0.00288	mg/L	0.000381	-0.00288	mg/L	0.000381	13.25%

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Sequence No.: 29 **Autosampler Location: 30**
Sample ID: L1205010505 0.1 **Date Collected: 5/10/2012 1:03:51 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205010505 0.1

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205010505 0.1

	Mean Corrected	Calib.			Sample			

Approved: May 11, 2012

Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Y 371.029	2322843.0						32165.55	1.38%
YRADIAL	310117.6						4306.17	1.39%
Ga 417.206	1447024.1						17884.11	1.24%
GaRADIAL	94283.7						2979.85	3.16%
Ag 328.068†	16.1	-0.00026	mg/L	0.000065	-0.00026	mg/L	0.000065	25.10%
Al 396.153†	-2.2	0.00834	mg/L	0.001359	0.00834	mg/L	0.001359	16.30%
As 188.979†	2.6	0.00203	mg/L	0.000917	0.00203	mg/L	0.000917	45.13%
Ba 233.527†	203.6	0.00113	mg/L	0.000109	0.00113	mg/L	0.000109	9.62%
Be 234.861†	176.0	0.00018	mg/L	0.000025	0.00018	mg/L	0.000025	13.69%
B 249.677†	414.6	0.00623	mg/L	0.000091	0.00623	mg/L	0.000091	1.46%
Ca 227.546†	2641.2	5.64	mg/L	0.099	5.64	mg/L	0.099	1.76%
Cd 228.802†	-1.4	-0.00004	mg/L	0.000164	-0.00004	mg/L	0.000164	366.06%
Co 228.616†	8.3	0.00017	mg/L	0.000157	0.00017	mg/L	0.000157	91.12%
Cr 267.716†	-2.8	-0.00029	mg/L	0.000106	-0.00029	mg/L	0.000106	36.17%
Cu 327.393†	-46.1	-0.00041	mg/L	0.000128	-0.00041	mg/L	0.000128	31.27%
Fe 239.562†	96.7	0.0181	mg/L	0.00027	0.0181	mg/L	0.00027	1.48%
Mg 279.077†	3935.8	1.12	mg/L	0.021	1.12	mg/L	0.021	1.90%
Mn 257.610†	9582.9	0.0102	mg/L	0.00012	0.0102	mg/L	0.00012	1.14%
Mo 202.031†	-1.1	0.00068	mg/L	0.000065	0.00068	mg/L	0.000065	9.59%
Ni 231.604†	42.1	-0.00006	mg/L	0.000196	-0.00006	mg/L	0.000196	327.05%
Pb 220.353†	14.0	0.00090	mg/L	0.001128	0.00090	mg/L	0.001128	125.77%
Sb 206.836†	-4.0	0.00009	mg/L	0.000526	0.00009	mg/L	0.000526	616.84%
Se 196.026†	-12.2	-0.00282	mg/L	0.001855	-0.00282	mg/L	0.001855	65.86%
Si 251.611†	11152.0	0.264	mg/L	0.0053	0.264	mg/L	0.0053	2.02%
Sn 189.927†	-115.4	-0.0111	mg/L	0.00056	-0.0111	mg/L	0.00056	5.04%
Ti 334.940†	-1182.3	0.00181	mg/L	0.000142	0.00181	mg/L	0.000142	7.83%
Tl 190.801†	-7.4	-0.00226	mg/L	0.001882	-0.00226	mg/L	0.001882	83.13%
V 290.880†	-2.4	-0.00047	mg/L	0.001863	-0.00047	mg/L	0.001863	399.62%
Zn 206.200†	6319.8	0.160	mg/L	0.0021	0.160	mg/L	0.0021	1.33%
K 766.490†	999.5	0.255	mg/L	0.0238	0.255	mg/L	0.0238	9.35%
Na 589.592†	22741.4	1.10	mg/L	0.067	1.10	mg/L	0.067	6.09%
Sr 407.771†	46148.7	0.0189	mg/L	0.00015	0.0189	mg/L	0.00015	0.78%
Li 670.784†	0.3	-0.00270	mg/L	0.000448	-0.00270	mg/L	0.000448	16.63%

Sequence No.: 30 **Autosampler Location: 31**
Sample ID: L1205010506 0.1 **Date Collected: 5/10/2012 1:10:46 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205010506 0.1

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205010506 0.1

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2237381.2						6642.31	0.30%
YRADIAL	300675.3						2786.35	0.93%
Ga 417.206	1429922.2						33846.22	2.37%
GaRADIAL	93576.6						1908.94	2.04%
Ag 328.068†	31.2	-0.00023	mg/L	0.000384	-0.00023	mg/L	0.000384	168.89%
Al 396.153†	-0.8	0.00851	mg/L	0.000957	0.00851	mg/L	0.000957	11.25%
As 188.979†	-1.6	0.00051	mg/L	0.001861	0.00051	mg/L	0.001861	364.20%
Ba 233.527†	228.7	0.00130	mg/L	0.000071	0.00130	mg/L	0.000071	5.44%
Be 234.861†	181.2	0.00019	mg/L	0.000034	0.00019	mg/L	0.000034	17.57%
B 249.677†	537.5	0.00771	mg/L	0.000330	0.00771	mg/L	0.000330	4.29%
Ca 227.546†	8121.8	17.3	mg/L	0.68	17.3	mg/L	0.68	3.93%
Cd 228.802†	9.0	0.00016	mg/L	0.000114	0.00016	mg/L	0.000114	71.51%
Co 228.616†	22.2	0.00054	mg/L	0.000016	0.00054	mg/L	0.000016	2.89%
Cr 267.716†	16.3	-0.00010	mg/L	0.000022	-0.00010	mg/L	0.000022	22.05%
Cu 327.393†	104.8	0.00016	mg/L	0.000289	0.00016	mg/L	0.000289	179.71%
Fe 239.562†	45.5	0.0149	mg/L	0.00015	0.0149	mg/L	0.00015	0.99%
Mg 279.077†	15773.9	4.40	mg/L	0.045	4.40	mg/L	0.045	1.03%
Mn 257.610†	39583.6	0.0464	mg/L	0.00096	0.0464	mg/L	0.00096	2.06%
Mo 202.031†	5.3	0.00087	mg/L	0.000352	0.00087	mg/L	0.000352	40.57%
Ni 231.604†	222.3	0.00265	mg/L	0.000176	0.00265	mg/L	0.000176	6.63%
Pb 220.353†	15.1	0.00107	mg/L	0.000489	0.00107	mg/L	0.000489	45.71%

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Sb 206.836†	-1.6	0.00067 mg/L	0.000990	0.00067 mg/L	0.000990	147.42%
Se 196.026†	-7.4	-0.00008 mg/L	0.002228	-0.00008 mg/L	0.002228	>999.9%
Si 251.611†	15242.0	0.363 mg/L	0.0103	0.363 mg/L	0.0103	2.83%
Sn 189.927†	-201.5	-0.0196 mg/L	0.00063	-0.0196 mg/L	0.00063	3.19%
Ti 334.940†	-3533.3	0.00122 mg/L	0.000211	0.00122 mg/L	0.000211	17.33%
Tl 190.801†	-16.3	-0.00465 mg/L	0.003125	-0.00465 mg/L	0.003125	67.21%
V 290.880†	605.5	0.00263 mg/L	0.002120	0.00263 mg/L	0.002120	80.62%
Zn 206.200†	17061.1	0.431 mg/L	0.0099	0.431 mg/L	0.0099	2.29%
K 766.490†	1335.1	0.353 mg/L	0.0231	0.353 mg/L	0.0231	6.55%
Na 589.592†	26327.6	1.28 mg/L	0.021	1.28 mg/L	0.021	1.65%
Sr 407.771†	311050.4	0.111 mg/L	0.0005	0.111 mg/L	0.0005	0.41%
Li 670.784†	869.5	0.00243 mg/L	0.000441	0.00243 mg/L	0.000441	18.15%

Sequence No.: 31 **Autosampler Location: 32**
Sample ID: L1205010507 0.1 **Date Collected: 5/10/2012 1:17:41 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205010507 0.1

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205010507 0.1

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2253611.7						4331.19	0.19%
YRADIAL	295530.7						12412.69	4.20%
Ga 417.206	1429238.2						17007.80	1.19%
GaRADIAL	92321.0						1265.73	1.37%
Ag 328.068†	89.8	-0.00004	mg/L	0.000293	-0.00004	mg/L	0.000293	760.46%
Al 396.153†	-9.7	0.00734	mg/L	0.000386	0.00734	mg/L	0.000386	5.25%
As 188.979†	-4.8	-0.00067	mg/L	0.001334	-0.00067	mg/L	0.001334	199.73%
Ba 233.527†	236.2	0.00135	mg/L	0.000078	0.00135	mg/L	0.000078	5.77%
Be 234.861†	165.2	0.00018	mg/L	0.000008	0.00018	mg/L	0.000008	4.74%
B 249.677†	496.4	0.00722	mg/L	0.000175	0.00722	mg/L	0.000175	2.42%
Ca 227.546†	8351.3	17.7	mg/L	0.17	17.7	mg/L	0.17	0.96%
Cd 228.802†	1.9	0.00003	mg/L	0.000137	0.00003	mg/L	0.000137	438.05%
Co 228.616†	19.4	0.00047	mg/L	0.000209	0.00047	mg/L	0.000209	44.52%
Cr 267.716†	22.1	-0.00005	mg/L	0.000113	-0.00005	mg/L	0.000113	239.39%
Cu 327.393†	2.4	-0.00022	mg/L	0.000541	-0.00022	mg/L	0.000541	250.34%
Fe 239.562†	14.2	0.0129	mg/L	0.00062	0.0129	mg/L	0.00062	4.81%
Mg 279.077†	16025.3	4.47	mg/L	0.057	4.47	mg/L	0.057	1.27%
Mn 257.610†	40540.8	0.0476	mg/L	0.00015	0.0476	mg/L	0.00015	0.32%
Mo 202.031†	22.4	0.00134	mg/L	0.000092	0.00134	mg/L	0.000092	6.86%
Ni 231.604†	218.1	0.00259	mg/L	0.000123	0.00259	mg/L	0.000123	4.75%
Pb 220.353†	9.0	0.00051	mg/L	0.000978	0.00051	mg/L	0.000978	191.53%
Sb 206.836†	-3.5	0.00021	mg/L	0.000236	0.00021	mg/L	0.000236	111.10%
Se 196.026†	-6.3	0.00055	mg/L	0.002665	0.00055	mg/L	0.002665	485.49%
Si 251.611†	15729.3	0.375	mg/L	0.0067	0.375	mg/L	0.0067	1.80%
Sn 189.927†	-199.6	-0.0194	mg/L	0.00040	-0.0194	mg/L	0.00040	2.07%
Ti 334.940†	-3535.7	0.00129	mg/L	0.000243	0.00129	mg/L	0.000243	18.88%
Tl 190.801†	-9.7	-0.00292	mg/L	0.003154	-0.00292	mg/L	0.003154	108.02%
V 290.880†	509.6	0.00213	mg/L	0.001949	0.00213	mg/L	0.001949	91.62%
Zn 206.200†	17573.2	0.444	mg/L	0.0061	0.444	mg/L	0.0061	1.37%
K 766.490†	1442.4	0.385	mg/L	0.0282	0.385	mg/L	0.0282	7.34%
Na 589.592†	26454.0	1.28	mg/L	0.051	1.28	mg/L	0.051	3.94%
Sr 407.771†	315791.8	0.112	mg/L	0.0031	0.112	mg/L	0.0031	2.71%
Li 670.784†	751.6	0.00173	mg/L	0.000475	0.00173	mg/L	0.000475	27.40%

Sequence No.: 32 **Autosampler Location: 33**
Sample ID: L1205010508 0.1 **Date Collected: 5/10/2012 1:24:37 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205010508 0.1

Approved: May 11, 2012

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205010508 0.1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	2275038.2						10775.46	0.47%
YRADIAL	303618.1						6898.42	2.27%
Ga 417.206	1441342.4						17085.08	1.19%
GaRADIAL	92506.9						1333.10	1.44%
Ag 328.068†	-68.7	-0.00051	mg/L	0.000324	-0.00051	mg/L	0.000324	64.01%
Al 396.153†	80.2	0.0188	mg/L	0.00095	0.0188	mg/L	0.00095	5.07%
As 188.979†	-0.9	0.00075	mg/L	0.002575	0.00075	mg/L	0.002575	342.80%
Ba 233.527†	400.3	0.00243	mg/L	0.000109	0.00243	mg/L	0.000109	4.48%
Be 234.861†	205.3	0.00019	mg/L	0.000020	0.00019	mg/L	0.000020	10.38%
B 249.677†	291.5	0.00472	mg/L	0.000156	0.00472	mg/L	0.000156	3.31%
Ca 227.546†	1390.1	3.00	mg/L	0.016	3.00	mg/L	0.016	0.54%
Cd 228.802†	-1.2	-0.00004	mg/L	0.000108	-0.00004	mg/L	0.000108	301.56%
Co 228.616†	2.7	0.00002	mg/L	0.000157	0.00002	mg/L	0.000157	748.92%
Cr 267.716†	-6.9	-0.00034	mg/L	0.000060	-0.00034	mg/L	0.000060	17.86%
Cu 327.393†	-35.3	-0.00037	mg/L	0.000261	-0.00037	mg/L	0.000261	70.37%
Fe 239.562†	1088.3	0.0802	mg/L	0.00052	0.0802	mg/L	0.00052	0.65%
Mg 279.077†	1727.8	0.505	mg/L	0.0085	0.505	mg/L	0.0085	1.67%
Mn 257.610†	13245.4	0.0146	mg/L	0.00011	0.0146	mg/L	0.00011	0.72%
Mo 202.031†	3.7	0.00082	mg/L	0.000184	0.00082	mg/L	0.000184	22.44%
Ni 231.604†	31.3	-0.00022	mg/L	0.000147	-0.00022	mg/L	0.000147	65.72%
Pb 220.353†	2.8	-0.00016	mg/L	0.000936	-0.00016	mg/L	0.000936	589.45%
Sb 206.836†	-7.0	-0.00064	mg/L	0.000429	-0.00064	mg/L	0.000429	66.48%
Se 196.026†	-8.7	-0.00079	mg/L	0.001617	-0.00079	mg/L	0.001617	205.44%
Si 251.611†	2256.1	0.0472	mg/L	0.00044	0.0472	mg/L	0.00044	0.92%
Sn 189.927†	-97.9	-0.00938	mg/L	0.000480	-0.00938	mg/L	0.000480	5.12%
Ti 334.940†	-693.0	0.00190	mg/L	0.000179	0.00190	mg/L	0.000179	9.46%
Tl 190.801†	-7.4	-0.00225	mg/L	0.001282	-0.00225	mg/L	0.001282	57.07%
V 290.880†	52.9	-0.00017	mg/L	0.002159	-0.00017	mg/L	0.002159	>999.9%
Zn 206.200†	1082.5	0.0277	mg/L	0.00020	0.0277	mg/L	0.00020	0.72%
K 766.490†	1026.4	0.264	mg/L	0.0057	0.264	mg/L	0.0057	2.15%
Na 589.592†	6700.6	0.314	mg/L	0.0073	0.314	mg/L	0.0073	2.33%
Sr 407.771†	31260.3	0.0137	mg/L	0.00026	0.0137	mg/L	0.00026	1.92%
Li 670.784†	-12.0	-0.00277	mg/L	0.000083	-0.00277	mg/L	0.000083	3.02%

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Sequence No.: 33 **Autosampler Location: 34**
Sample ID: L1205010509 0.1 **Date Collected: 5/10/2012 1:31:34 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205010509 0.1

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205010509 0.1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	2279074.4						24053.10	1.06%
YRADIAL	299335.8						3924.76	1.31%
Ga 417.206	1381877.1						19698.80	1.43%
GaRADIAL	91700.6						1120.36	1.22%
Ag 328.068†	-64.7	-0.00051	mg/L	0.000435	-0.00051	mg/L	0.000435	84.94%
Al 396.153†	42.9	0.0140	mg/L	0.00150	0.0140	mg/L	0.00150	10.66%
As 188.979†	1.7	0.00173	mg/L	0.002311	0.00173	mg/L	0.002311	133.96%
Ba 233.527†	379.4	0.00229	mg/L	0.000067	0.00229	mg/L	0.000067	2.91%
Be 234.861†	122.4	0.00014	mg/L	0.000023	0.00014	mg/L	0.000023	16.99%
B 249.677†	290.0	0.00472	mg/L	0.000381	0.00472	mg/L	0.000381	8.08%
Ca 227.546†	1413.9	3.05	mg/L	0.049	3.05	mg/L	0.049	1.62%
Cd 228.802†	-1.5	-0.00004	mg/L	0.000144	-0.00004	mg/L	0.000144	327.48%
Co 228.616†	17.0	0.00040	mg/L	0.000115	0.00040	mg/L	0.000115	28.86%
Cr 267.716†	-3.7	-0.00031	mg/L	0.000138	-0.00031	mg/L	0.000138	44.91%
Cu 327.393†	-40.3	-0.00039	mg/L	0.000162	-0.00039	mg/L	0.000162	41.28%

Approved: May 11, 2012

Kym H. Rhoden

Fe 239.562†	359.7	0.0346	mg/L	0.00057	0.0346	mg/L	0.00057 1.65%
Mg 279.077†	1779.4	0.520	mg/L	0.0053	0.520	mg/L	0.0053 1.03%
Mn 257.610†	12791.9	0.0141	mg/L	0.00025	0.0141	mg/L	0.00025 1.78%
Mo 202.031†	5.7	0.00087	mg/L	0.000223	0.00087	mg/L	0.000223 25.51%
Ni 231.604†	23.4	-0.00034	mg/L	0.000053	-0.00034	mg/L	0.000053 15.43%
Pb 220.353†	16.8	0.00113	mg/L	0.000441	0.00113	mg/L	0.000441 38.88%
Sb 206.836†	-6.2	-0.00046	mg/L	0.000745	-0.00046	mg/L	0.000745 160.68%
Se 196.026†	-10.0	-0.00155	mg/L	0.000602	-0.00155	mg/L	0.000602 38.94%
Si 251.611†	2266.5	0.0475	mg/L	0.00103	0.0475	mg/L	0.00103 2.18%
Sn 189.927†	-93.0	-0.00891	mg/L	0.000497	-0.00891	mg/L	0.000497 5.59%
Ti 334.940†	-701.5	0.00190	mg/L	0.000128	0.00190	mg/L	0.000128 6.75%
Tl 190.801†	5.3	0.00107	mg/L	0.000199	0.00107	mg/L	0.000199 18.54%
V 290.880†	235.5	0.00079	mg/L	0.001562	0.00079	mg/L	0.001562 197.43%
Zn 206.200†	862.3	0.0221	mg/L	0.00018	0.0221	mg/L	0.00018 0.80%
K 766.490†	928.2	0.235	mg/L	0.0196	0.235	mg/L	0.0196 8.35%
Na 589.592†	7357.1	0.346	mg/L	0.0120	0.346	mg/L	0.0120 3.47%
Sr 407.771†	31932.8	0.0140	mg/L	0.00009	0.0140	mg/L	0.00009 0.64%
Li 670.784†	-59.5	-0.00305	mg/L	0.000222	-0.00305	mg/L	0.000222 7.28%

User canceled analysis.

Approved: May 11, 2012

Analysis Begun

Start Time: 5/10/2012 1:38:41 PM Plasma On Time: 5/10/2012 7:42:20 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\THURSDAY1.sif
Batch ID:
Results Data Set: 051012H
Results Library: C:\pe\peicp2\Results\Results.mdb

Sequence No.: 1 Autosampler Location: 35
Sample ID: L1205010510 Date Collected: 5/10/2012 1:38:43 PM
Analyst: KHR Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Nebulizer Parameters: L1205010510

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205010510

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2297056.6						30263.48	1.32%
YRADIAL	306916.2						2869.16	0.93%
Ga 417.206	1453497.0						3698.19	0.25%
GaRADIAL	93639.5						2064.73	2.20%
Ag 328.068†	-11.0	-0.00034	mg/L	0.000163	-0.00034	mg/L	0.000163	47.44%
Al 396.153†	4.7	0.00920	mg/L	0.000574	0.00920	mg/L	0.000574	6.24%
As 188.979†	-4.1	-0.00042	mg/L	0.000561	-0.00042	mg/L	0.000561	133.15%
Ba 233.527†	-15.1	-0.00031	mg/L	0.000050	-0.00031	mg/L	0.000050	15.88%
Be 234.861†	1.0	0.00004	mg/L	0.000013	0.00004	mg/L	0.000013	33.05%
B 249.677†	138.6	0.00290	mg/L	0.000234	0.00290	mg/L	0.000234	8.08%
Ca 227.546†	-3.3	0.0452	mg/L	0.03532	0.0452	mg/L	0.03532	78.23%
Cd 228.802†	1.9	0.00003	mg/L	0.000128	0.00003	mg/L	0.000128	441.81%
Co 228.616†	-5.4	-0.00019	mg/L	0.000262	-0.00019	mg/L	0.000262	136.94%
Cr 267.716†	25.7	-0.00003	mg/L	0.000078	-0.00003	mg/L	0.000078	241.64%
Cu 327.393†	65.6	-0.00001	mg/L	0.000223	-0.00001	mg/L	0.000223	>999.9%
Fe 239.562†	48.3	0.0151	mg/L	0.00051	0.0151	mg/L	0.00051	3.37%
Mg 279.077†	-7.3	0.0240	mg/L	0.00040	0.0240	mg/L	0.00040	1.69%
Mn 257.610†	-43.8	-0.00138	mg/L	0.000020	-0.00138	mg/L	0.000020	1.47%
Mo 202.031†	5.0	0.00085	mg/L	0.000296	0.00085	mg/L	0.000296	34.94%
Ni 231.604†	-5.3	-0.00077	mg/L	0.000193	-0.00077	mg/L	0.000193	24.99%
Pb 220.353†	3.0	-0.00016	mg/L	0.000550	-0.00016	mg/L	0.000550	346.94%
Sb 206.836†	2.7	0.00173	mg/L	0.000590	0.00173	mg/L	0.000590	34.06%
Se 196.026†	-7.4	-0.00006	mg/L	0.002541	-0.00006	mg/L	0.002541	>999.9%
Si 251.611†	44.9	-0.00658	mg/L	0.000259	-0.00658	mg/L	0.000259	3.94%
Sn 189.927†	-44.6	-0.00413	mg/L	0.000220	-0.00413	mg/L	0.000220	5.32%
Ti 334.940†	135.2	0.00228	mg/L	0.000099	0.00228	mg/L	0.000099	4.36%
Tl 190.801†	-12.5	-0.00356	mg/L	0.002018	-0.00356	mg/L	0.002018	56.66%
V 290.880†	-6.3	-0.00046	mg/L	0.002172	-0.00046	mg/L	0.002172	474.63%
Zn 206.200†	-22.3	-0.00019	mg/L	0.000222	-0.00019	mg/L	0.000222	117.22%
K 766.490†	-91.0	-0.0644	mg/L	0.01036	-0.0644	mg/L	0.01036	16.08%
Na 589.592†	-359.9	-0.0333	mg/L	0.01017	-0.0333	mg/L	0.01017	30.55%
Sr 407.771†	-17.8	0.00290	mg/L	0.000008	0.00290	mg/L	0.000008	0.26%
Li 670.784†	-111.5	-0.00335	mg/L	0.000250	-0.00335	mg/L	0.000250	7.45%

Sequence No.: 2 Autosampler Location: 36
Sample ID: L1205017702 0.2 Date Collected: 5/10/2012 1:45:37 PM
Analyst: KHR Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Nebulizer Parameters: L1205017702 0.2

Approved: May 11, 2012

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205017702 0.2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	2204804.9						14491.45	0.66%
YRADIAL	288302.6						6445.26	2.24%
Ga 417.206	1381965.8						23733.75	1.72%
GaRADIAL	90865.6						3472.97	3.82%
Ag 328.068†	-28207.1	-0.00318	mg/L	0.001275	-0.00318	mg/L	0.001275	40.12%
Al 396.153†	-33.5	0.0288	mg/L	0.00182	0.0288	mg/L	0.00182	6.30%
As 188.979†	-48.3	0.00571	mg/L	0.000908	0.00571	mg/L	0.000908	15.91%
Ba 233.527†	1066.1	0.00177	mg/L	0.000163	0.00177	mg/L	0.000163	9.20%
Be 234.861†	52419.6	-0.00191	mg/L	0.000647	-0.00191	mg/L	0.000647	33.80%
B 249.677†	10932.2	0.0464	mg/L	0.00203	0.0464	mg/L	0.00203	4.37%
Ca 227.546†	-1355.0	2.17	mg/L	0.324	2.17	mg/L	0.324	14.93%
Cd 228.802†	-21.3	-0.00065	mg/L	0.000210	-0.00065	mg/L	0.000210	32.14%
Co 228.616†	480.6	0.00731	mg/L	0.000101	0.00731	mg/L	0.000101	1.39%
Cr 267.716†	-577.3	0.00123	mg/L	0.000198	0.00123	mg/L	0.000198	16.11%
Cu 327.393†	-1887.7	0.00988	mg/L	0.000140	0.00988	mg/L	0.000140	1.42%
Fe 239.562†	3225411.6	202	mg/L	5.9	202	mg/L	5.9	2.93%
Mg 279.077†	487.5	0.0522	mg/L	0.00779	0.0522	mg/L	0.00779	14.92%
Mn 257.610†	1735957.6	2.10	mg/L	0.039	2.10	mg/L	0.039	1.84%
Mo 202.031†	-215.3	0.00511	mg/L	0.000217	0.00511	mg/L	0.000217	4.24%
Ni 231.604†	11772.2	0.176	mg/L	0.0039	0.176	mg/L	0.0039	2.24%
Pb 220.353†	230.8	0.00211	mg/L	0.001432	0.00211	mg/L	0.001432	67.94%
Sb 206.836†	-13.1	0.00540	mg/L	0.001394	0.00540	mg/L	0.001394	25.81%
Se 196.026†	-78.5	0.0194	mg/L	0.00479	0.0194	mg/L	0.00479	24.74%
Si 251.611†	-614.0	-0.0226	mg/L	0.00094	-0.0226	mg/L	0.00094	4.16%
Sn 189.927†	-66.8	-0.00632	mg/L	0.000767	-0.00632	mg/L	0.000767	12.14%
Ti 334.940†	-83.3	0.00163	mg/L	0.000043	0.00163	mg/L	0.000043	2.66%
Tl 190.801†	-12.7	-0.00568	mg/L	0.001785	-0.00568	mg/L	0.001785	31.41%
V 290.880†	3096.0	-0.0161	mg/L	0.00199	-0.0161	mg/L	0.00199	12.36%
Zn 206.200†	65325.5	1.65	mg/L	0.040	1.65	mg/L	0.040	2.40%
K 766.490†	369.3	0.0379	mg/L	0.00045	0.0379	mg/L	0.00045	1.19%
Na 589.592†	670307.9	32.9	mg/L	1.89	32.9	mg/L	1.89	5.74%
Sr 407.771†	2417.0	0.00382	mg/L	0.000034	0.00382	mg/L	0.000034	0.89%
Li 670.784†	-15.5	-0.00279	mg/L	0.000044	-0.00279	mg/L	0.000044	1.59%

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Sequence No.: 3 **Autosampler Location: 37**
Sample ID: L1205017702 0.1 **Date Collected: 5/10/2012 1:52:33 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205017702 0.1

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205017702 0.1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	2254223.6						7810.49	0.35%
YRADIAL	295149.9						4293.28	1.45%
Ga 417.206	1408851.3						38551.70	2.74%
GaRADIAL	92248.0						2000.43	2.17%
Ag 328.068†	-13942.5	-0.00131	mg/L	0.001746	-0.00131	mg/L	0.001746	133.59%
Al 396.153†	-29.9	0.0170	mg/L	0.00111	0.0170	mg/L	0.00111	6.51%
As 188.979†	-22.1	0.00411	mg/L	0.000102	0.00411	mg/L	0.000102	2.49%
Ba 233.527†	525.0	0.00073	mg/L	0.000093	0.00073	mg/L	0.000093	12.75%
Be 234.861†	26249.1	-0.00086	mg/L	0.000967	-0.00086	mg/L	0.000967	112.32%
B 249.677†	5494.1	0.0242	mg/L	0.00440	0.0242	mg/L	0.00440	18.15%
Ca 227.546†	-669.8	1.12	mg/L	0.182	1.12	mg/L	0.182	16.18%
Cd 228.802†	-6.2	-0.00025	mg/L	0.000241	-0.00025	mg/L	0.000241	95.19%
Co 228.616†	238.4	0.00358	mg/L	0.000091	0.00358	mg/L	0.000091	2.53%
Cr 267.716†	-297.8	0.00038	mg/L	0.000171	0.00038	mg/L	0.000171	44.46%
Cu 327.393†	-884.1	0.00502	mg/L	0.000405	0.00502	mg/L	0.000405	8.07%

Approved: May 11, 2012

Kym H. Rhoden

Fe 239.562†	1609505.3	101	mg/L	2.5	101	mg/L	2.5	2.44%
Mg 279.077†	239.2	0.0379	mg/L	0.00477	0.0379	mg/L	0.00477	12.58%
Mn 257.610†	859527.3	1.04	mg/L	0.005	1.04	mg/L	0.005	0.47%
Mo 202.031†	-100.9	0.00308	mg/L	0.000252	0.00308	mg/L	0.000252	8.17%
Ni 231.604†	5902.4	0.0881	mg/L	0.00117	0.0881	mg/L	0.00117	1.33%
Pb 220.353†	116.0	0.00092	mg/L	0.000835	0.00092	mg/L	0.000835	90.85%
Sb 206.836†	-4.7	0.00367	mg/L	0.000208	0.00367	mg/L	0.000208	5.66%
Se 196.026†	-43.3	0.00936	mg/L	0.002314	0.00936	mg/L	0.002314	24.72%
Si 251.611†	-363.1	-0.0165	mg/L	0.00042	-0.0165	mg/L	0.00042	2.57%
Sn 189.927†	-49.5	-0.00461	mg/L	0.000258	-0.00461	mg/L	0.000258	5.60%
Ti 334.940†	-49.2	0.00188	mg/L	0.000013	0.00188	mg/L	0.000013	0.69%
Tl 190.801†	-9.5	-0.00379	mg/L	0.001107	-0.00379	mg/L	0.001107	29.18%
V 290.880†	1377.9	-0.00913	mg/L	0.002827	-0.00913	mg/L	0.002827	30.96%
Zn 206.200†	32173.6	0.811	mg/L	0.0077	0.811	mg/L	0.0077	0.95%
K 766.490†	212.2	0.00835	mg/L	0.002405	0.00835	mg/L	0.002405	28.78%
Na 589.592†	331721.0	16.3	mg/L	0.78	16.3	mg/L	0.78	4.82%
Sr 407.771†	982.3	0.00328	mg/L	0.000012	0.00328	mg/L	0.000012	0.36%
Li 670.784†	0.3	-0.00270	mg/L	0.000136	-0.00270	mg/L	0.000136	5.06%

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Sequence No.: 4 **Autosampler Location: 38**
Sample ID: L1205010450 **Date Collected: 5/10/2012 1:59:29 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205010450

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205010450

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2275390.7						26609.89	1.17%
YRADIAL	299355.7						204.18	0.07%
Ga 417.206	1454685.9						9039.25	0.62%
GaRADIAL	92025.4						2895.57	3.15%
Ag 328.068†	-200.7	-0.00096	mg/L	0.000232	-0.00096	mg/L	0.000232	24.23%
Al 396.153†	0.7	0.00869	mg/L	0.000977	0.00869	mg/L	0.000977	11.24%
As 188.979†	-4.4	-0.00053	mg/L	0.000824	-0.00053	mg/L	0.000824	156.87%
Ba 233.527†	-25.4	-0.00038	mg/L	0.000107	-0.00038	mg/L	0.000107	28.15%
Be 234.861†	23.2	0.00006	mg/L	0.000008	0.00006	mg/L	0.000008	13.34%
B 249.677†	104.8	0.00249	mg/L	0.000352	0.00249	mg/L	0.000352	14.17%
Ca 227.546†	0.9	0.0538	mg/L	0.00533	0.0538	mg/L	0.00533	9.90%
Cd 228.802†	2.8	0.00004	mg/L	0.000045	0.00004	mg/L	0.000045	99.57%
Co 228.616†	-3.1	-0.00013	mg/L	0.000168	-0.00013	mg/L	0.000168	128.05%
Cr 267.716†	40.6	0.00011	mg/L	0.000086	0.00011	mg/L	0.000086	78.54%
Cu 327.393†	-19.9	-0.00032	mg/L	0.000047	-0.00032	mg/L	0.000047	14.64%
Fe 239.562†	96.7	0.0182	mg/L	0.00034	0.0182	mg/L	0.00034	1.89%
Mg 279.077†	3.3	0.0269	mg/L	0.00119	0.0269	mg/L	0.00119	4.42%
Mn 257.610†	234.0	-0.00105	mg/L	0.000040	-0.00105	mg/L	0.000040	3.78%
Mo 202.031†	8.0	0.00093	mg/L	0.000098	0.00093	mg/L	0.000098	10.49%
Ni 231.604†	-14.1	-0.00091	mg/L	0.000374	-0.00091	mg/L	0.000374	41.31%
Pb 220.353†	-12.8	-0.00161	mg/L	0.001424	-0.00161	mg/L	0.001424	88.43%
Sb 206.836†	1.8	0.00151	mg/L	0.000356	0.00151	mg/L	0.000356	23.61%
Se 196.026†	-4.2	0.00179	mg/L	0.001416	0.00179	mg/L	0.001416	79.15%
Si 251.611†	89.2	-0.00551	mg/L	0.000752	-0.00551	mg/L	0.000752	13.65%
Sn 189.927†	-46.8	-0.00434	mg/L	0.000308	-0.00434	mg/L	0.000308	7.10%
Ti 334.940†	35.8	0.00218	mg/L	0.000149	0.00218	mg/L	0.000149	6.85%
Tl 190.801†	-12.4	-0.00355	mg/L	0.001495	-0.00355	mg/L	0.001495	42.12%
V 290.880†	442.3	0.00189	mg/L	0.002045	0.00189	mg/L	0.002045	108.25%
Zn 206.200†	22.3	0.00094	mg/L	0.000171	0.00094	mg/L	0.000171	18.23%
K 766.490†	-37.7	-0.0488	mg/L	0.01702	-0.0488	mg/L	0.01702	34.88%
Na 589.592†	-175.8	-0.0243	mg/L	0.02822	-0.0243	mg/L	0.02822	116.31%
Sr 407.771†	-331.4	0.00280	mg/L	0.000040	0.00280	mg/L	0.000040	1.43%
Li 670.784†	-17.0	-0.00280	mg/L	0.000036	-0.00280	mg/L	0.000036	1.30%

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Sequence No.: 5 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 5/10/2012 2:06:24 PM**

Approved: May 11, 2012

Kym H. Rhoden

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	2287067.3						39589.87	1.73%
YRADIAL	302451.3						2877.41	0.95%
Ga 417.206	1364026.0						10858.57	0.80%
GaRADIAL	91896.3						1289.95	1.40%
Ag 328.068†	126337.7	0.416	mg/L	0.0038	0.416	mg/L	0.0038	0.91%
QC value within limits for Ag 328.068 Recovery = 103.90%								
Al 396.153†	77597.1	9.75	mg/L	0.015	9.75	mg/L	0.015	0.15%
QC value within limits for Al 396.153 Recovery = 97.54%								
As 188.979†	1119.9	0.405	mg/L	0.0014	0.405	mg/L	0.0014	0.34%
QC value within limits for As 188.979 Recovery = 101.20%								
Ba 233.527†	155568.1	1.03	mg/L	0.022	1.03	mg/L	0.022	2.19%
QC value within limits for Ba 233.527 Recovery = 102.72%								
Be 234.861†	63375.4	0.0514	mg/L	0.00026	0.0514	mg/L	0.00026	0.51%
QC value within limits for Be 234.861 Recovery = 102.75%								
B 249.677†	41809.0	0.502	mg/L	0.0033	0.502	mg/L	0.0033	0.66%
QC value within limits for B 249.677 Recovery = 100.45%								
Ca 227.546†	4561.6	10.2	mg/L	0.15	10.2	mg/L	0.15	1.49%
QC value within limits for Ca 227.546 Recovery = 101.82%								
Cd 228.802†	2771.3	0.0505	mg/L	0.00167	0.0505	mg/L	0.00167	3.30%
QC value within limits for Cd 228.802 Recovery = 101.02%								
Co 228.616†	7602.4	0.200	mg/L	0.0033	0.200	mg/L	0.0033	1.68%
QC value within limits for Co 228.616 Recovery = 99.90%								
Cr 267.716†	54369.0	0.512	mg/L	0.0075	0.512	mg/L	0.0075	1.46%
QC value within limits for Cr 267.716 Recovery = 102.39%								
Cu 327.393†	134574.5	0.497	mg/L	0.0039	0.497	mg/L	0.0039	0.79%
QC value within limits for Cu 327.393 Recovery = 99.39%								
Fe 239.562†	66047.6	4.15	mg/L	0.028	4.15	mg/L	0.028	0.69%
QC value within limits for Fe 239.562 Recovery = 103.63%								
Mg 279.077†	36980.7	10.3	mg/L	0.08	10.3	mg/L	0.08	0.75%
QC value within limits for Mg 279.077 Recovery = 103.04%								
Mn 257.610†	426507.0	0.513	mg/L	0.0128	0.513	mg/L	0.0128	2.49%
QC value within limits for Mn 257.610 Recovery = 102.67%								
Mo 202.031†	36455.1	1.01	mg/L	0.020	1.01	mg/L	0.020	1.97%
QC value within limits for Mo 202.031 Recovery = 100.70%								
Ni 231.604†	34078.2	0.512	mg/L	0.0098	0.512	mg/L	0.0098	1.91%
QC value within limits for Ni 231.604 Recovery = 102.32%								
Pb 220.353†	5472.1	0.505	mg/L	0.0080	0.505	mg/L	0.0080	1.57%
QC value within limits for Pb 220.353 Recovery = 101.10%								
Sb 206.836†	4974.8	1.22	mg/L	0.020	1.22	mg/L	0.020	1.67%
QC value within limits for Sb 206.836 Recovery = 101.86%								
Se 196.026†	703.8	0.407	mg/L	0.0046	0.407	mg/L	0.0046	1.13%
QC value within limits for Se 196.026 Recovery = 101.86%								
Si 251.611†	212640.3	5.16	mg/L	0.010	5.16	mg/L	0.010	0.19%
QC value within limits for Si 251.611 Recovery = 103.14%								
Sn 189.927†	10124.8	0.999	mg/L	0.0165	0.999	mg/L	0.0165	1.65%
QC value within limits for Sn 189.927 Recovery = 99.94%								
Ti 334.940†	981411.4	0.978	mg/L	0.0023	0.978	mg/L	0.0023	0.23%
QC value within limits for Ti 334.940 Recovery = 97.75%								
Tl 190.801†	1899.5	0.513	mg/L	0.0027	0.513	mg/L	0.0027	0.53%
QC value within limits for Tl 190.801 Recovery = 102.57%								
V 290.880†	190674.9	0.996	mg/L	0.0206	0.996	mg/L	0.0206	2.07%
QC value within limits for V 290.880 Recovery = 99.60%								
Zn 206.200†	42102.0	1.07	mg/L	0.018	1.07	mg/L	0.018	1.64%
QC value within limits for Zn 206.200 Recovery = 106.82%								
K 766.490†	170689.8	49.8	mg/L	0.27	49.8	mg/L	0.27	0.54%
QC value within limits for K 766.490 Recovery = 99.67%								
Na 589.592†	1011705.6	49.6	mg/L	1.00	49.6	mg/L	1.00	2.02%
QC value within limits for Na 589.592 Recovery = 99.29%								
Sr 407.771†	2792748.3	0.975	mg/L	0.0054	0.975	mg/L	0.0054	0.55%

Approved: May 11, 2012

QC value within limits for Sr 407.771 Recovery = 97.53%
Li 670.784† 159645.2 0.939 mg/L 0.0048 0.939 mg/L 0.0048 0.51%
QC value within limits for Li 670.784 Recovery = 93.85%
All analyte(s) passed QC.

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Sequence No.: 6 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 5/10/2012 2:12:25 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	151.0 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	2313571.5						15407.03	0.67%
YRADIAL	300954.4						8179.79	2.72%
Ga 417.206	1365243.0						9498.53	0.70%
GaRADIAL	91183.4						1210.42	1.33%
Ag 328.068†	-110.8	-0.00067	mg/L	0.000197	-0.00067	mg/L	0.000197	29.48%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	7.8	0.00958	mg/L	0.000701	0.00958	mg/L	0.000701	7.32%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-1.4	0.00056	mg/L	0.001541	0.00056	mg/L	0.001541	275.55%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-17.2	-0.00033	mg/L	0.000140	-0.00033	mg/L	0.000140	42.86%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-65.9	-0.00002	mg/L	0.000015	-0.00002	mg/L	0.000015	83.46%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	240.3	0.00412	mg/L	0.000268	0.00412	mg/L	0.000268	6.50%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	0.7	0.0539	mg/L	0.00297	0.0539	mg/L	0.00297	5.51%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-0.2	-0.00002	mg/L	0.000176	-0.00002	mg/L	0.000176	>999.9%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-2.3	-0.00011	mg/L	0.000173	-0.00011	mg/L	0.000173	159.23%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	18.8	-0.00010	mg/L	0.000039	-0.00010	mg/L	0.000039	40.00%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-19.8	-0.00032	mg/L	0.000134	-0.00032	mg/L	0.000134	41.82%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	193.8	0.0242	mg/L	0.00087	0.0242	mg/L	0.00087	3.60%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	8.2	0.0283	mg/L	0.00144	0.0283	mg/L	0.00144	5.10%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	134.0	-0.00117	mg/L	0.000024	-0.00117	mg/L	0.000024	2.02%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	10.7	0.00101	mg/L	0.000308	0.00101	mg/L	0.000308	30.66%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	8.9	-0.00056	mg/L	0.000091	-0.00056	mg/L	0.000091	16.35%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	0.1	-0.00043	mg/L	0.000951	-0.00043	mg/L	0.000951	223.37%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-0.7	0.00089	mg/L	0.000468	0.00089	mg/L	0.000468	52.32%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-6.0	0.00071	mg/L	0.001589	0.00071	mg/L	0.001589	222.66%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	27.6	-0.00700	mg/L	0.000448	-0.00700	mg/L	0.000448	6.40%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	-32.7	-0.00295	mg/L	0.000257	-0.00295	mg/L	0.000257	8.74%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	150.4	0.00229	mg/L	0.000065	0.00229	mg/L	0.000065	2.83%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-12.5	-0.00358	mg/L	0.002088	-0.00358	mg/L	0.002088	58.32%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-220.9	-0.00158	mg/L	0.001285	-0.00158	mg/L	0.001285	81.23%

Approved: May 11, 2012

QC value within limits for V 290.880 Recovery = Not calculated

Zn 206.200†	-84.8	-0.00177 mg/L	0.000183	-0.00177 mg/L	0.000183	10.37%
QC value within limits for Zn 206.200 Recovery = Not calculated						
K 766.490†	-59.2	-0.0551 mg/L	0.03678	-0.0551 mg/L	0.03678	66.75%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592†	3.5	-0.0154 mg/L	0.03080	-0.0154 mg/L	0.03080	199.41%
QC value within limits for Na 589.592 Recovery = Not calculated						
Sr 407.771†	101.5	0.00295 mg/L	0.000027	0.00295 mg/L	0.000027	0.92%
QC value within limits for Sr 407.771 Recovery = Not calculated						
Li 670.784†	-58.2	-0.00304 mg/L	0.000296	-0.00304 mg/L	0.000296	9.73%
QC value within limits for Li 670.784 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 7 **Autosampler Location: 39**
Sample ID: L1205010454 **Date Collected: 5/10/2012 2:19:18 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205010454

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205010454

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2295631.5						25312.52	1.10%
YRADIAL	302964.9						683.61	0.23%
Ga 417.206	1429660.1						29331.18	2.05%
GaRADIAL	92863.9						3048.07	3.28%
Ag 328.068†	-122.0	-0.00071	mg/L	0.000252	-0.00071	mg/L	0.000252	35.76%
Al 396.153†	7.4	0.00955	mg/L	0.001155	0.00955	mg/L	0.001155	12.09%
As 188.979†	-2.2	0.00029	mg/L	0.001614	0.00029	mg/L	0.001614	559.11%
Ba 233.527†	-15.8	-0.00032	mg/L	0.000107	-0.00032	mg/L	0.000107	33.75%
Be 234.861†	-8.6	0.00003	mg/L	0.000027	0.00003	mg/L	0.000027	88.08%
B 249.677†	171.6	0.00330	mg/L	0.000425	0.00330	mg/L	0.000425	12.89%
Ca 227.546†	-2.7	0.0464	mg/L	0.01725	0.0464	mg/L	0.01725	37.20%
Cd 228.802†	-1.5	-0.00004	mg/L	0.000232	-0.00004	mg/L	0.000232	593.69%
Co 228.616†	-6.2	-0.00021	mg/L	0.000252	-0.00021	mg/L	0.000252	117.79%
Cr 267.716†	41.1	0.00011	mg/L	0.000087	0.00011	mg/L	0.000087	77.39%
Cu 327.393†	78.1	0.00004	mg/L	0.000108	0.00004	mg/L	0.000108	271.43%
Fe 239.562†	62.0	0.0160	mg/L	0.00033	0.0160	mg/L	0.00033	2.05%
Mg 279.077†	-18.4	0.0209	mg/L	0.00186	0.0209	mg/L	0.00186	8.88%
Mn 257.610†	11.1	-0.00132	mg/L	0.000005	-0.00132	mg/L	0.000005	0.38%
Mo 202.031†	1.9	0.00076	mg/L	0.000255	0.00076	mg/L	0.000255	33.34%
Ni 231.604†	-11.0	-0.00086	mg/L	0.000072	-0.00086	mg/L	0.000072	8.44%
Pb 220.353†	9.0	0.00040	mg/L	0.001347	0.00040	mg/L	0.001347	336.85%
Sb 206.836†	2.1	0.00156	mg/L	0.000636	0.00156	mg/L	0.000636	40.73%
Se 196.026†	-6.1	0.00067	mg/L	0.004223	0.00067	mg/L	0.004223	627.91%
Si 251.611†	92.6	-0.00542	mg/L	0.000424	-0.00542	mg/L	0.000424	7.83%
Sn 189.927†	-44.2	-0.00409	mg/L	0.000503	-0.00409	mg/L	0.000503	12.31%
Ti 334.940†	146.9	0.00229	mg/L	0.000190	0.00229	mg/L	0.000190	8.32%
Tl 190.801†	-22.4	-0.00617	mg/L	0.001852	-0.00617	mg/L	0.001852	30.00%
V 290.880†	-7.0	-0.00046	mg/L	0.001970	-0.00046	mg/L	0.001970	427.30%
Zn 206.200†	-29.7	-0.00037	mg/L	0.000208	-0.00037	mg/L	0.000208	55.56%
K 766.490†	-32.3	-0.0472	mg/L	0.02328	-0.0472	mg/L	0.02328	49.35%
Na 589.592†	-434.1	-0.0370	mg/L	0.00125	-0.0370	mg/L	0.00125	3.39%
Sr 407.771†	-375.0	0.00278	mg/L	0.000029	0.00278	mg/L	0.000029	1.05%
Li 670.784†	-79.7	-0.00317	mg/L	0.000152	-0.00317	mg/L	0.000152	4.79%

Sequence No.: 8 **Autosampler Location: 40**
Sample ID: L1205010455 **Date Collected: 5/10/2012 2:26:13 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205010455

Approved: May 11, 2012

Kym H. Rhoden

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205010455

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2295338.4						28507.25	1.24%
YRADIAL	300925.3						4916.13	1.63%
Ga 417.206	1448899.0						17939.79	1.24%
GaRADIAL	92099.9						1645.84	1.79%
Ag 328.068†	-12.3	-0.00035	mg/L	0.000227	-0.00035	mg/L	0.000227	65.54%
Al 396.153†	1.7	0.00882	mg/L	0.000543	0.00882	mg/L	0.000543	6.16%
As 188.979†	-5.7	-0.00100	mg/L	0.001168	-0.00100	mg/L	0.001168	116.55%
Ba 233.527†	-17.6	-0.00033	mg/L	0.000155	-0.00033	mg/L	0.000155	47.17%
Be 234.861†	-0.2	0.00004	mg/L	0.000051	0.00004	mg/L	0.000051	133.25%
B 249.677†	167.5	0.00325	mg/L	0.000374	0.00325	mg/L	0.000374	11.52%
Ca 227.546†	-2.2	0.0474	mg/L	0.01980	0.0474	mg/L	0.01980	41.75%
Cd 228.802†	4.5	0.00008	mg/L	0.000108	0.00008	mg/L	0.000108	134.96%
Co 228.616†	-0.2	-0.00005	mg/L	0.000206	-0.00005	mg/L	0.000206	387.57%
Cr 267.716†	26.3	-0.00003	mg/L	0.000083	-0.00003	mg/L	0.000083	309.83%
Cu 327.393†	-40.4	-0.00040	mg/L	0.000484	-0.00040	mg/L	0.000484	122.12%
Fe 239.562†	35.6	0.0143	mg/L	0.00031	0.0143	mg/L	0.00031	2.18%
Mg 279.077†	-4.4	0.0248	mg/L	0.00234	0.0248	mg/L	0.00234	9.43%
Mn 257.610†	361.0	-0.00089	mg/L	0.000013	-0.00089	mg/L	0.000013	1.42%
Mo 202.031†	8.5	0.00094	mg/L	0.000257	0.00094	mg/L	0.000257	27.26%
Ni 231.604†	-4.9	-0.00077	mg/L	0.000125	-0.00077	mg/L	0.000125	16.31%
Pb 220.353†	3.3	-0.00013	mg/L	0.000556	-0.00013	mg/L	0.000556	422.90%
Sb 206.836†	0.9	0.00127	mg/L	0.001271	0.00127	mg/L	0.001271	99.99%
Se 196.026†	-6.4	0.00050	mg/L	0.001459	0.00050	mg/L	0.001459	290.66%
Si 251.611†	176.0	-0.00339	mg/L	0.000253	-0.00339	mg/L	0.000253	7.47%
Sn 189.927†	-42.6	-0.00393	mg/L	0.000738	-0.00393	mg/L	0.000738	18.77%
Ti 334.940†	157.2	0.00230	mg/L	0.000059	0.00230	mg/L	0.000059	2.58%
Tl 190.801†	-19.6	-0.00544	mg/L	0.001004	-0.00544	mg/L	0.001004	18.45%
V 290.880†	115.0	0.00018	mg/L	0.002008	0.00018	mg/L	0.002008	>999.9%
Zn 206.200†	-36.4	-0.00055	mg/L	0.000068	-0.00055	mg/L	0.000068	12.42%
K 766.490†	-55.6	-0.0540	mg/L	0.03720	-0.0540	mg/L	0.03720	68.86%
Na 589.592†	-483.9	-0.0394	mg/L	0.00677	-0.0394	mg/L	0.00677	17.19%
Sr 407.771†	-371.2	0.00278	mg/L	0.000028	0.00278	mg/L	0.000028	1.02%
Li 670.784†	-88.9	-0.00322	mg/L	0.000125	-0.00322	mg/L	0.000125	3.87%

Sequence No.: 9 **Autosampler Location: 41**
Sample ID: L1205010445 200X **Date Collected: 5/10/2012 2:33:07 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205010445 200X

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205010445 200X

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2245844.5						8582.80	0.38%
YRADIAL	294087.5						4347.79	1.48%
Ga 417.206	1398277.7						34264.60	2.45%
GaRADIAL	90280.9						2417.11	2.68%
Ag 328.068†	-1.7	-0.00031	mg/L	0.000080	-0.00031	mg/L	0.000080	25.60%
Al 396.153†	-5.2	0.00798	mg/L	0.000393	0.00798	mg/L	0.000393	4.93%
As 188.979†	4.4	0.00270	mg/L	0.001916	0.00270	mg/L	0.001916	71.06%
Ba 233.527†	-2.0	-0.00023	mg/L	0.000084	-0.00023	mg/L	0.000084	36.83%
Be 234.861†	163.3	0.00017	mg/L	0.000042	0.00017	mg/L	0.000042	24.41%
B 249.677†	73.4	0.00211	mg/L	0.000084	0.00211	mg/L	0.000084	3.96%
Ca 227.546†	570.4	1.26	mg/L	0.014	1.26	mg/L	0.014	1.10%
Cd 228.802†	-7.3	-0.00016	mg/L	0.000116	-0.00016	mg/L	0.000116	72.86%
Co 228.616†	2.3	0.00001	mg/L	0.000143	0.00001	mg/L	0.000143	>999.9%
Cr 267.716†	5.8	-0.00022	mg/L	0.000053	-0.00022	mg/L	0.000053	24.31%
Cu 327.393†	38.5	-0.00010	mg/L	0.000312	-0.00010	mg/L	0.000312	297.62%

Approved: May 11, 2012

Kym H. Rhoden

Fe 239.562†	51.6	0.0153	mg/L	0.00034	0.0153	mg/L	0.00034 2.22%
Mg 279.077†	1212.9	0.363	mg/L	0.0052	0.363	mg/L	0.0052 1.43%
Mn 257.610†	-82.9	-0.00143	mg/L	0.000019	-0.00143	mg/L	0.000019 1.36%
Mo 202.031†	-10.9	0.00041	mg/L	0.000172	0.00041	mg/L	0.000172 41.97%
Ni 231.604†	-1.4	-0.00071	mg/L	0.000203	-0.00071	mg/L	0.000203 28.42%
Pb 220.353†	11.5	0.00064	mg/L	0.000384	0.00064	mg/L	0.000384 60.19%
Sb 206.836†	-0.1	0.00104	mg/L	0.000218	0.00104	mg/L	0.000218 20.86%
Se 196.026†	-11.4	-0.00235	mg/L	0.004232	-0.00235	mg/L	0.004232 180.44%
Si 251.611†	939.5	0.0152	mg/L	0.00141	0.0152	mg/L	0.00141 9.30%
Sn 189.927†	-71.5	-0.00678	mg/L	0.000477	-0.00678	mg/L	0.000477 7.03%
Ti 334.940†	-386.1	0.00194	mg/L	0.000036	0.00194	mg/L	0.000036 1.83%
Tl 190.801†	-8.8	-0.00259	mg/L	0.002091	-0.00259	mg/L	0.002091 80.76%
V 290.880†	302.3	0.00115	mg/L	0.002011	0.00115	mg/L	0.002011 175.11%
Zn 206.200†	563.7	0.0146	mg/L	0.00008	0.0146	mg/L	0.00008 0.54%
K 766.490†	63.6	-0.0191	mg/L	0.00890	-0.0191	mg/L	0.00890 46.66%
Na 589.592†	1294.6	0.0480	mg/L	0.00851	0.0480	mg/L	0.00851 17.73%
Sr 407.771†	19637.8	0.00972	mg/L	0.000145	0.00972	mg/L	0.000145 1.49%
Li 670.784†	-40.6	-0.00294	mg/L	0.000040	-0.00294	mg/L	0.000040 1.36%

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Sequence No.: 10 **Autosampler Location: 42**
Sample ID: L1205010446 0.05 **Date Collected: 5/10/2012 2:40:02 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205010446 0.05

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205010446 0.05

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2326394.4						14749.07	0.63%
YRADIAL	303679.8						1174.19	0.39%
Ga 417.206	1389376.5						43263.52	3.11%
GaRADIAL	91739.2						1087.27	1.19%
Ag 328.068†	-375.8	0.00025	mg/L	0.000396	0.00025	mg/L	0.000396	159.03%
Al 396.153†	1338.5	0.179	mg/L	0.0079	0.179	mg/L	0.0079	4.41%
As 188.979†	-5.1	-0.00020	mg/L	0.001087	-0.00020	mg/L	0.001087	536.32%
Ba 233.527†	74.1	0.00016	mg/L	0.000336	0.00016	mg/L	0.000336	214.45%
Be 234.861†	1588.0	0.00056	mg/L	0.000150	0.00056	mg/L	0.000150	26.49%
B 249.677†	3100.1	0.0354	mg/L	0.00178	0.0354	mg/L	0.00178	5.04%
Ca 227.546†	4855.4	10.5	mg/L	0.45	10.5	mg/L	0.45	4.26%
Cd 228.802†	1152.1	0.0219	mg/L	0.00091	0.0219	mg/L	0.00091	4.14%
Co 228.616†	2831.6	0.0745	mg/L	0.00037	0.0745	mg/L	0.00037	0.49%
Cr 267.716†	44.6	0.00198	mg/L	0.000043	0.00198	mg/L	0.000043	2.14%
Cu 327.393†	123413.6	0.457	mg/L	0.0209	0.457	mg/L	0.0209	4.57%
Fe 239.562†	85171.0	5.34	mg/L	0.096	5.34	mg/L	0.096	1.79%
Mg 279.077†	19254.3	5.37	mg/L	0.070	5.37	mg/L	0.070	1.31%
Mn 257.610†	3443407.8	4.15	mg/L	0.040	4.15	mg/L	0.040	0.97%
Mo 202.031†	-4.4	0.00172	mg/L	0.000130	0.00172	mg/L	0.000130	7.60%
Ni 231.604†	6027.9	0.0899	mg/L	0.00229	0.0899	mg/L	0.00229	2.55%
Pb 220.353†	19.9	-0.00191	mg/L	0.000366	-0.00191	mg/L	0.000366	19.18%
Sb 206.836†	-8.0	-0.00071	mg/L	0.000726	-0.00071	mg/L	0.000726	102.40%
Se 196.026†	-4.7	0.00186	mg/L	0.002745	0.00186	mg/L	0.002745	147.19%
Si 251.611†	28387.7	0.683	mg/L	0.0275	0.683	mg/L	0.0275	4.02%
Sn 189.927†	-139.8	-0.0135	mg/L	0.00025	-0.0135	mg/L	0.00025	1.81%
Ti 334.940†	-1802.1	0.00190	mg/L	0.000285	0.00190	mg/L	0.000285	15.04%
Tl 190.801†	-8.5	-0.00675	mg/L	0.001452	-0.00675	mg/L	0.001452	21.52%
V 290.880†	96.7	-0.00090	mg/L	0.002239	-0.00090	mg/L	0.002239	249.01%
Zn 206.200†	1642445.2	41.5	mg/L	0.08	41.5	mg/L	0.08	0.19%
K 766.490†	2365.4	0.653	mg/L	0.0033	0.653	mg/L	0.0033	0.51%
Na 589.592†	79893.4	3.91	mg/L	0.007	3.91	mg/L	0.007	0.19%
Sr 407.771†	103278.9	0.0387	mg/L	0.00029	0.0387	mg/L	0.00029	0.74%
Li 670.784†	2491.7	0.0120	mg/L	0.00055	0.0120	mg/L	0.00055	4.56%

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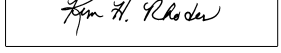
Sequence No.: 11 **Autosampler Location: 43**
Sample ID: L1205010446 200X **Date Collected: 5/10/2012 2:46:01 PM**

Approved: May 11, 2012



Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205010446 200X

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205010446 200X

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2329740.6						31357.44	1.35%
YRADIAL	308177.9						3225.08	1.05%
Ga 417.206	1382432.9						33571.22	2.43%
GaRADIAL	91348.8						405.76	0.44%
Ag 328.068†	68.5	0.00009	mg/L	0.000264	0.00009	mg/L	0.000264	303.22%
Al 396.153†	133.1	0.0255	mg/L	0.00851	0.0255	mg/L	0.00851	33.37%
As 188.979†	-1.7	0.00054	mg/L	0.001459	0.00054	mg/L	0.001459	271.30%
Ba 233.527†	34.3	0.00000	mg/L	0.000185	0.00000	mg/L	0.000185	>999.9%
Be 234.861†	317.6	0.00022	mg/L	0.000044	0.00022	mg/L	0.000044	19.66%
B 249.677†	397.0	0.00569	mg/L	0.000247	0.00569	mg/L	0.000247	4.33%
Ca 227.546†	451.7	1.03	mg/L	0.022	1.03	mg/L	0.022	2.15%
Cd 228.802†	134.5	0.00254	mg/L	0.000206	0.00254	mg/L	0.000206	8.13%
Co 228.616†	293.7	0.00769	mg/L	0.000309	0.00769	mg/L	0.000309	4.02%
Cr 267.716†	-5.9	-0.00015	mg/L	0.000156	-0.00015	mg/L	0.000156	106.25%
Cu 327.393†	11998.2	0.0442	mg/L	0.00142	0.0442	mg/L	0.00142	3.20%
Fe 239.562†	8319.3	0.533	mg/L	0.0034	0.533	mg/L	0.0034	0.63%
Mg 279.077†	1909.0	0.555	mg/L	0.0059	0.555	mg/L	0.0059	1.06%
Mn 257.610†	341268.1	0.410	mg/L	0.0031	0.410	mg/L	0.0031	0.76%
Mo 202.031†	6.4	0.00100	mg/L	0.000139	0.00100	mg/L	0.000139	13.91%
Ni 231.604†	670.5	0.00938	mg/L	0.000525	0.00938	mg/L	0.000525	5.59%
Pb 220.353†	-1.3	-0.00088	mg/L	0.001383	-0.00088	mg/L	0.001383	157.49%
Sb 206.836†	-7.2	-0.00070	mg/L	0.000778	-0.00070	mg/L	0.000778	111.46%
Se 196.026†	-4.3	0.00175	mg/L	0.002881	0.00175	mg/L	0.002881	164.59%
Si 251.611†	3008.0	0.0655	mg/L	0.00255	0.0655	mg/L	0.00255	3.88%
Sn 189.927†	-46.8	-0.00434	mg/L	0.000527	-0.00434	mg/L	0.000527	12.12%
Ti 334.940†	-41.9	0.00225	mg/L	0.000148	0.00225	mg/L	0.000148	6.57%
Tl 190.801†	-2.9	-0.00146	mg/L	0.001189	-0.00146	mg/L	0.001189	81.55%
V 290.880†	-84.9	-0.00096	mg/L	0.001370	-0.00096	mg/L	0.001370	142.07%
Zn 206.200†	163991.9	4.14	mg/L	0.018	4.14	mg/L	0.018	0.43%
K 766.490†	273.1	0.0422	mg/L	0.01979	0.0422	mg/L	0.01979	46.93%
Na 589.592†	7830.0	0.369	mg/L	0.0217	0.369	mg/L	0.0217	5.87%
Sr 407.771†	10164.6	0.00643	mg/L	0.000116	0.00643	mg/L	0.000116	1.81%
Li 670.784†	228.8	-0.00135	mg/L	0.000277	-0.00135	mg/L	0.000277	20.52%

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Sequence No.: 12 **Autosampler Location: 44**
Sample ID: L1205010453 WG397293-01 **Date Collected: 5/10/2012 2:52:01 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205010453 WG397293-01

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205010453 WG397293-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2235552.5						6008.96	0.27%
YRADIAL	296163.0						9153.82	3.09%
Ga 417.206	1374823.0						17261.82	1.26%
GaRADIAL	91339.7						769.18	0.84%
Ag 328.068†	13.7	-0.00028	mg/L	0.000318	-0.00028	mg/L	0.000318	114.01%
Al 396.153†	570.9	0.0808	mg/L	0.00094	0.0808	mg/L	0.00094	1.16%
As 188.979†	-2.4	0.00020	mg/L	0.001474	0.00020	mg/L	0.001474	735.32%
Ba 233.527†	-13.7	-0.00030	mg/L	0.000077	-0.00030	mg/L	0.000077	25.41%
Be 234.861†	177.6	0.00020	mg/L	0.000012	0.00020	mg/L	0.000012	5.92%

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B 249.677†	90.7	0.00227	mg/L	0.000235	0.00227	mg/L	0.000235 10.32%
Ca 227.546†	133.1	0.335	mg/L	0.0348	0.335	mg/L	0.0348 10.38%
Cd 228.802†	17.4	0.00034	mg/L	0.000168	0.00034	mg/L	0.000168 49.45%
Co 228.616†	242.0	0.00634	mg/L	0.000118	0.00634	mg/L	0.000118 1.87%
Cr 267.716†	-10.3	-0.00021	mg/L	0.000055	-0.00021	mg/L	0.000055 25.97%
Cu 327.393†	2595.9	0.00955	mg/L	0.000322	0.00955	mg/L	0.000322 3.37%
Fe 239.562†	37.8	0.0144	mg/L	0.00008	0.0144	mg/L	0.00008 0.57%
Mg 279.077†	508.0	0.167	mg/L	0.0018	0.167	mg/L	0.0018 1.08%
Mn 257.610†	117053.8	0.140	mg/L	0.0011	0.140	mg/L	0.0011 0.79%
Mo 202.031†	-3.5	0.00064	mg/L	0.000066	0.00064	mg/L	0.000066 10.32%
Ni 231.604†	223.0	0.00265	mg/L	0.000373	0.00265	mg/L	0.000373 14.07%
Pb 220.353†	5.0	-0.00005	mg/L	0.000675	-0.00005	mg/L	0.000675 >999.9%
Sb 206.836†	-3.5	0.00021	mg/L	0.000895	0.00021	mg/L	0.000895 421.73%
Se 196.026†	-7.1	0.00009	mg/L	0.002910	0.00009	mg/L	0.002910 >999.9%
Si 251.611†	1691.3	0.0335	mg/L	0.00058	0.0335	mg/L	0.00058 1.73%
Sn 189.927†	-64.2	-0.00605	mg/L	0.000464	-0.00605	mg/L	0.000464 7.67%
Ti 334.940†	-146.0	0.00204	mg/L	0.000266	0.00204	mg/L	0.000266 13.02%
Tl 190.801†	5.5	0.00103	mg/L	0.000167	0.00103	mg/L	0.000167 16.21%
V 290.880†	366.9	0.00149	mg/L	0.001659	0.00149	mg/L	0.001659 111.19%
Zn 206.200†	156590.6	3.95	mg/L	0.048	3.95	mg/L	0.048 1.22%
K 766.490†	2.7	-0.0371	mg/L	0.01720	-0.0371	mg/L	0.01720 46.36%
Na 589.592†	4151.0	0.188	mg/L	0.0166	0.188	mg/L	0.0166 8.83%
Sr 407.771†	5169.2	0.00471	mg/L	0.000038	0.00471	mg/L	0.000038 0.81%
Li 670.784†	53.2	-0.00238	mg/L	0.000568	-0.00238	mg/L	0.000568 23.82%

Sequence No.: 13 **Autosampler Location: 45**
Sample ID: L1205010453S WG397293-04 **Date Collected: 5/10/2012 2:58:56 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205010453S WG397293-04

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205010453S WG397293-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2229573.4						18031.00	0.81%
YRADIAL	300862.8						6176.81	2.05%
Ga 417.206	1374733.8						12800.47	0.93%
GaRADIAL	93190.8						1322.26	1.42%
Ag 328.068†	75.6	-0.00007	mg/L	0.000185	-0.00007	mg/L	0.000185	252.74%
Al 396.153†	625.3	0.0877	mg/L	0.00130	0.0877	mg/L	0.00130	1.48%
As 188.979†	5.1	0.00293	mg/L	0.001112	0.00293	mg/L	0.001112	38.00%
Ba 233.527†	160.3	0.00085	mg/L	0.000071	0.00085	mg/L	0.000071	8.37%
Be 234.861†	275.5	0.00028	mg/L	0.000016	0.00028	mg/L	0.000016	5.62%
B 249.677†	241.3	0.00409	mg/L	0.000080	0.00409	mg/L	0.000080	1.96%
Ca 227.546†	137.6	0.346	mg/L	0.0108	0.346	mg/L	0.0108	3.13%
Cd 228.802†	22.3	0.00042	mg/L	0.000005	0.00042	mg/L	0.000005	1.16%
Co 228.616†	247.1	0.00647	mg/L	0.000166	0.00647	mg/L	0.000166	2.56%
Cr 267.716†	57.2	0.00042	mg/L	0.000092	0.00042	mg/L	0.000092	22.01%
Cu 327.393†	2663.9	0.00980	mg/L	0.000235	0.00980	mg/L	0.000235	2.40%
Fe 239.562†	78.3	0.0170	mg/L	0.00110	0.0170	mg/L	0.00110	6.46%
Mg 279.077†	510.8	0.168	mg/L	0.0052	0.168	mg/L	0.0052	3.07%
Mn 257.610†	116232.6	0.139	mg/L	0.0013	0.139	mg/L	0.0013	0.91%
Mo 202.031†	24.8	0.00142	mg/L	0.000185	0.00142	mg/L	0.000185	12.96%
Ni 231.604†	261.2	0.00323	mg/L	0.000219	0.00323	mg/L	0.000219	6.78%
Pb 220.353†	12.7	0.00066	mg/L	0.000927	0.00066	mg/L	0.000927	140.23%
Sb 206.836†	-0.3	0.00099	mg/L	0.000647	0.00099	mg/L	0.000647	65.57%
Se 196.026†	-12.2	-0.00283	mg/L	0.001465	-0.00283	mg/L	0.001465	51.72%
Si 251.611†	1884.0	0.0382	mg/L	0.00078	0.0382	mg/L	0.00078	2.04%
Sn 189.927†	-50.3	-0.00469	mg/L	0.000491	-0.00469	mg/L	0.000491	10.46%
Ti 334.940†	948.1	0.00313	mg/L	0.000214	0.00313	mg/L	0.000214	6.85%
Tl 190.801†	3.6	0.00052	mg/L	0.003566	0.00052	mg/L	0.003566	680.76%
V 290.880†	581.4	0.00261	mg/L	0.001569	0.00261	mg/L	0.001569	60.05%
Zn 206.200†	153424.2	3.87	mg/L	0.072	3.87	mg/L	0.072	1.86%
K 766.490†	268.7	0.0410	mg/L	0.02088	0.0410	mg/L	0.02088	50.96%
Na 589.592†	5657.6	0.262	mg/L	0.0337	0.262	mg/L	0.0337	12.82%

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Sr 407.771†	8039.4	0.00570	mg/L	0.000088	0.00570	mg/L	0.000088	1.55%
Li 670.784†	221.4	-0.00139	mg/L	0.000245	-0.00139	mg/L	0.000245	17.63%

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Sequence No.: 14 **Autosampler Location: 46**
Sample ID: L1205010453SD WG397293-05 **Date Collected: 5/10/2012 3:05:53 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205010453SD WG397293-05

Analyte	Back Pressure	Flow
All	152.0 kPa	0.50 L/min

Mean Data: L1205010453SD WG397293-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2277497.7						10067.76	0.44%
YRADIAL	305728.8						9770.11	3.20%
Ga 417.206	1413081.9						23011.34	1.63%
GaRADIAL	94090.6						958.15	1.02%
Ag 328.068†	102.0	0.00001	mg/L	0.000207	0.00001	mg/L	0.000207	>999.9%
Al 396.153†	630.2	0.0883	mg/L	0.00094	0.0883	mg/L	0.00094	1.06%
As 188.979†	0.9	0.00143	mg/L	0.000497	0.00143	mg/L	0.000497	34.84%
Ba 233.527†	150.9	0.00078	mg/L	0.000109	0.00078	mg/L	0.000109	13.87%
Be 234.861†	268.3	0.00027	mg/L	0.000031	0.00027	mg/L	0.000031	11.45%
B 249.677†	230.4	0.00396	mg/L	0.000062	0.00396	mg/L	0.000062	1.57%
Ca 227.546†	136.8	0.344	mg/L	0.0109	0.344	mg/L	0.0109	3.16%
Cd 228.802†	24.6	0.00047	mg/L	0.000221	0.00047	mg/L	0.000221	47.15%
Co 228.616†	247.7	0.00649	mg/L	0.000054	0.00649	mg/L	0.000054	0.84%
Cr 267.716†	53.3	0.00038	mg/L	0.000059	0.00038	mg/L	0.000059	15.43%
Cu 327.393†	2697.5	0.00992	mg/L	0.000214	0.00992	mg/L	0.000214	2.16%
Fe 239.562†	59.4	0.0158	mg/L	0.00054	0.0158	mg/L	0.00054	3.40%
Mg 279.077†	517.5	0.170	mg/L	0.0056	0.170	mg/L	0.0056	3.32%
Mn 257.610†	114560.2	0.137	mg/L	0.0012	0.137	mg/L	0.0012	0.84%
Mo 202.031†	23.8	0.00140	mg/L	0.000219	0.00140	mg/L	0.000219	15.69%
Ni 231.604†	252.5	0.00310	mg/L	0.000077	0.00310	mg/L	0.000077	2.48%
Pb 220.353†	14.4	0.00082	mg/L	0.001822	0.00082	mg/L	0.001822	222.43%
Sb 206.836†	1.8	0.00149	mg/L	0.001247	0.00149	mg/L	0.001247	83.69%
Se 196.026†	-9.3	-0.00121	mg/L	0.003519	-0.00121	mg/L	0.003519	290.55%
Si 251.611†	1856.2	0.0375	mg/L	0.00057	0.0375	mg/L	0.00057	1.52%
Sn 189.927†	-51.9	-0.00484	mg/L	0.000333	-0.00484	mg/L	0.000333	6.89%
Ti 334.940†	932.0	0.00311	mg/L	0.000154	0.00311	mg/L	0.000154	4.93%
Tl 190.801†	1.3	-0.00008	mg/L	0.001504	-0.00008	mg/L	0.001504	>999.9%
V 290.880†	321.6	0.00125	mg/L	0.001246	0.00125	mg/L	0.001246	99.34%
Zn 206.200†	154170.9	3.89	mg/L	0.021	3.89	mg/L	0.021	0.55%
K 766.490†	218.7	0.0263	mg/L	0.02123	0.0263	mg/L	0.02123	80.75%
Na 589.592†	5198.0	0.240	mg/L	0.0132	0.240	mg/L	0.0132	5.49%
Sr 407.771†	7981.2	0.00568	mg/L	0.000127	0.00568	mg/L	0.000127	2.23%
Li 670.784†	149.1	-0.00182	mg/L	0.000312	-0.00182	mg/L	0.000312	17.17%

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Sequence No.: 15 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 5/10/2012 3:12:49 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	2182960.8						36377.58	1.67%
YRADIAL	293998.8						4363.81	1.48%
Ga 417.206	1310606.8						32022.65	2.44%

Approved: May 11, 2012

GaRADIAL	89003.6					1344.26	1.51%
Ag 328.068†	131677.2	0.433 mg/L	0.0123	0.433 mg/L	0.0123	2.84%	
QC value within limits for Ag 328.068 Recovery = 108.30%							
Al 396.153†	80598.6	10.1 mg/L	0.03	10.1 mg/L	0.03	0.34%	
QC value within limits for Al 396.153 Recovery = 101.31%							
As 188.979†	1170.7	0.423 mg/L	0.0069	0.423 mg/L	0.0069	1.63%	
QC value within limits for As 188.979 Recovery = 105.76%							
Ba 233.527†	163782.0	1.08 mg/L	0.028	1.08 mg/L	0.028	2.61%	
QC value within limits for Ba 233.527 Recovery = 108.14%							
Be 234.861†	66305.5	0.0538 mg/L	0.00139	0.0538 mg/L	0.00139	2.58%	
QC value within limits for Be 234.861 Recovery = 107.54%							
B 249.677†	43596.7	0.524 mg/L	0.0164	0.524 mg/L	0.0164	3.14%	
QC value within limits for B 249.677 Recovery = 104.74%							
Ca 227.546†	4791.1	10.7 mg/L	0.30	10.7 mg/L	0.30	2.80%	
QC value within limits for Ca 227.546 Recovery = 106.90%							
Cd 228.802†	2891.3	0.0527 mg/L	0.00213	0.0527 mg/L	0.00213	4.05%	
QC value within limits for Cd 228.802 Recovery = 105.40%							
Co 228.616†	8014.0	0.211 mg/L	0.0036	0.211 mg/L	0.0036	1.71%	
QC value within limits for Co 228.616 Recovery = 105.32%							
Cr 267.716†	56950.2	0.536 mg/L	0.0132	0.536 mg/L	0.0132	2.46%	
QC value within limits for Cr 267.716 Recovery = 107.25%							
Cu 327.393†	141105.0	0.521 mg/L	0.0182	0.521 mg/L	0.0182	3.50%	
QC value within limits for Cu 327.393 Recovery = 104.22%							
Fe 239.562†	67935.5	4.26 mg/L	0.031	4.26 mg/L	0.031	0.72%	
QC value within limits for Fe 239.562 Recovery = 106.58%							
Mg 279.077†	38109.7	10.6 mg/L	0.09	10.6 mg/L	0.09	0.86%	
QC value within limits for Mg 279.077 Recovery = 106.18%							
Mn 257.610†	450639.4	0.542 mg/L	0.0150	0.542 mg/L	0.0150	2.76%	
QC value within limits for Mn 257.610 Recovery = 108.49%							
Mo 202.031†	38339.2	1.06 mg/L	0.028	1.06 mg/L	0.028	2.62%	
QC value within limits for Mo 202.031 Recovery = 105.90%							
Ni 231.604†	35822.7	0.538 mg/L	0.0139	0.538 mg/L	0.0139	2.58%	
QC value within limits for Ni 231.604 Recovery = 107.56%							
Pb 220.353†	5745.4	0.531 mg/L	0.0080	0.531 mg/L	0.0080	1.51%	
QC value within limits for Pb 220.353 Recovery = 106.15%							
Sb 206.836†	5198.3	1.28 mg/L	0.039	1.28 mg/L	0.039	3.09%	
QC value within limits for Sb 206.836 Recovery = 106.43%							
Se 196.026†	743.4	0.430 mg/L	0.0129	0.430 mg/L	0.0129	2.99%	
QC value within limits for Se 196.026 Recovery = 107.53%							
Si 251.611†	222774.4	5.40 mg/L	0.148	5.40 mg/L	0.148	2.74%	
QC value within limits for Si 251.611 Recovery = 108.06%							
Sn 189.927†	10657.2	1.05 mg/L	0.018	1.05 mg/L	0.018	1.73%	
QC value within limits for Sn 189.927 Recovery = 105.19%							
Ti 334.940†	1027899.9	1.02 mg/L	0.010	1.02 mg/L	0.010	0.96%	
QC value within limits for Ti 334.940 Recovery = 102.38%							
Tl 190.801†	1996.3	0.539 mg/L	0.0068	0.539 mg/L	0.0068	1.26%	
QC value within limits for Tl 190.801 Recovery = 107.80%							
V 290.880†	201493.1	1.05 mg/L	0.022	1.05 mg/L	0.022	2.14%	
QC value within limits for V 290.880 Recovery = 105.26%							
Zn 206.200†	44051.8	1.12 mg/L	0.035	1.12 mg/L	0.035	3.14%	
QC value greater than the upper limit for Zn 206.200 Recovery = 111.77%							
K 766.490†	176218.2	51.4 mg/L	0.21	51.4 mg/L	0.21	0.42%	
QC value within limits for K 766.490 Recovery = 102.88%							
Na 589.592†	1056084.1	51.8 mg/L	0.83	51.8 mg/L	0.83	1.59%	
QC value within limits for Na 589.592 Recovery = 103.64%							
Sr 407.771†	2913925.6	1.02 mg/L	0.018	1.02 mg/L	0.018	1.74%	
QC value within limits for Sr 407.771 Recovery = 101.75%							
Li 670.784†	166059.7	0.976 mg/L	0.0049	0.976 mg/L	0.0049	0.50%	
QC value within limits for Li 670.784 Recovery = 97.63%							
QC Failed. Continue with analysis.							

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Sequence No.: 16 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 5/10/2012 3:18:50 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Approved: May 11, 2012

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	2284806.1						10273.41	0.45%
YRADIAL	303486.1						2673.15	0.88%
Ga 417.206	1440089.9						39664.26	2.75%
GaRADIAL	92338.6						1707.53	1.85%
Ag 328.068†	-55.0	-0.00049	mg/L	0.000334	-0.00049	mg/L	0.000334	68.25%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	13.6	0.0103	mg/L	0.00041	0.0103	mg/L	0.00041	4.01%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-1.1	0.00069	mg/L	0.001202	0.00069	mg/L	0.001202	173.12%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-24.5	-0.00037	mg/L	0.000046	-0.00037	mg/L	0.000046	12.40%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	5.4	0.00004	mg/L	0.000029	0.00004	mg/L	0.000029	69.45%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	190.7	0.00353	mg/L	0.000069	0.00353	mg/L	0.000069	1.96%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	5.2	0.0631	mg/L	0.00836	0.0631	mg/L	0.00836	13.24%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-1.0	-0.00003	mg/L	0.000134	-0.00003	mg/L	0.000134	411.13%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-4.7	-0.00017	mg/L	0.000361	-0.00017	mg/L	0.000361	207.60%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	27.7	-0.00001	mg/L	0.000022	-0.00001	mg/L	0.000022	146.66%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-18.6	-0.00032	mg/L	0.000351	-0.00032	mg/L	0.000351	110.87%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	145.9	0.0212	mg/L	0.00075	0.0212	mg/L	0.00075	3.54%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	-0.5	0.0259	mg/L	0.00207	0.0259	mg/L	0.00207	8.02%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	146.5	-0.00115	mg/L	0.000012	-0.00115	mg/L	0.000012	1.03%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	2.5	0.00078	mg/L	0.000320	0.00078	mg/L	0.000320	41.12%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	-12.7	-0.00088	mg/L	0.000046	-0.00088	mg/L	0.000046	5.24%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	10.3	0.00052	mg/L	0.001707	0.00052	mg/L	0.001707	328.52%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-1.3	0.00074	mg/L	0.000738	0.00074	mg/L	0.000738	99.63%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-4.6	0.00155	mg/L	0.001748	0.00155	mg/L	0.001748	112.42%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	-3.7	-0.00776	mg/L	0.000149	-0.00776	mg/L	0.000149	1.92%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	-26.9	-0.00237	mg/L	0.000686	-0.00237	mg/L	0.000686	28.89%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	31.1	0.00218	mg/L	0.000176	0.00218	mg/L	0.000176	8.06%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-10.6	-0.00308	mg/L	0.002172	-0.00308	mg/L	0.002172	70.57%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-456.1	-0.00281	mg/L	0.002103	-0.00281	mg/L	0.002103	74.80%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-32.2	-0.00044	mg/L	0.000272	-0.00044	mg/L	0.000272	61.79%
QC value within limits for Zn 206.200 Recovery = Not calculated								
K 766.490†	-20.3	-0.0437	mg/L	0.02251	-0.0437	mg/L	0.02251	51.55%
QC value within limits for K 766.490 Recovery = Not calculated								
Na 589.592†	-238.5	-0.0273	mg/L	0.00817	-0.0273	mg/L	0.00817	29.87%
QC value within limits for Na 589.592 Recovery = Not calculated								
Sr 407.771†	23.9	0.00292	mg/L	0.000059	0.00292	mg/L	0.000059	2.04%
QC value within limits for Sr 407.771 Recovery = Not calculated								
Li 670.784†	-73.2	-0.00313	mg/L	0.000225	-0.00313	mg/L	0.000225	7.20%
QC value within limits for Li 670.784 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 17 **Autosampler Location: 47**

Sample ID: PBW 64 WG397435-04 **Date Collected: 5/10/2012 3:25:43 PM**

Approved: May 11, 2012

Lynn H. Rhoden

Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW 64 WG397435-04

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: PBW 64 WG397435-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2320348.2						25410.54	1.10%
YRADIAL	311084.9						5018.95	1.61%
Ga 417.206	1473332.5						13127.23	0.89%
GaRADIAL	95979.8						871.98	0.91%
Ag 328.068†	-193.0	-0.00094	mg/L	0.000348	-0.00094	mg/L	0.000348	37.15%
Al 396.153†	20.5	0.0112	mg/L	0.00056	0.0112	mg/L	0.00056	5.00%
As 188.979†	0.6	0.00130	mg/L	0.000336	0.00130	mg/L	0.000336	25.81%
Ba 233.527†	6.7	-0.00017	mg/L	0.000152	-0.00017	mg/L	0.000152	90.01%
Be 234.861†	48.0	0.00008	mg/L	0.000022	0.00008	mg/L	0.000022	28.96%
B 249.677†	125.9	0.00274	mg/L	0.000147	0.00274	mg/L	0.000147	5.36%
Ca 227.546†	16.1	0.0861	mg/L	0.00292	0.0861	mg/L	0.00292	3.39%
Cd 228.802†	10.7	0.00018	mg/L	0.000216	0.00018	mg/L	0.000216	117.49%
Co 228.616†	-4.1	-0.00016	mg/L	0.000139	-0.00016	mg/L	0.000139	87.38%
Cr 267.716†	24.7	-0.00004	mg/L	0.000086	-0.00004	mg/L	0.000086	208.84%
Cu 327.393†	170.8	0.00038	mg/L	0.000495	0.00038	mg/L	0.000495	129.73%
Fe 239.562†	66.8	0.0163	mg/L	0.00034	0.0163	mg/L	0.00034	2.07%
Mg 279.077†	3.7	0.0270	mg/L	0.00099	0.0270	mg/L	0.00099	3.68%
Mn 257.610†	339.2	-0.00092	mg/L	0.000014	-0.00092	mg/L	0.000014	1.53%
Mo 202.031†	-0.5	0.00070	mg/L	0.000112	0.00070	mg/L	0.000112	16.14%
Ni 231.604†	-12.3	-0.00088	mg/L	0.000289	-0.00088	mg/L	0.000289	32.86%
Pb 220.353†	16.5	0.00109	mg/L	0.000622	0.00109	mg/L	0.000622	57.13%
Sb 206.836†	-0.3	0.00099	mg/L	0.000836	0.00099	mg/L	0.000836	84.20%
Se 196.026†	-8.8	-0.00088	mg/L	0.000481	-0.00088	mg/L	0.000481	54.96%
Si 251.611†	298.5	-0.00041	mg/L	0.000453	-0.00041	mg/L	0.000453	110.85%
Sn 189.927†	-41.2	-0.00379	mg/L	0.000406	-0.00379	mg/L	0.000406	10.71%
Ti 334.940†	250.8	0.00240	mg/L	0.000033	0.00240	mg/L	0.000033	1.39%
Tl 190.801†	-12.6	-0.00360	mg/L	0.000591	-0.00360	mg/L	0.000591	16.41%
V 290.880†	-76.2	-0.00082	mg/L	0.000851	-0.00082	mg/L	0.000851	103.29%
Zn 206.200†	34.5	0.00125	mg/L	0.000251	0.00125	mg/L	0.000251	20.20%
K 766.490†	-40.6	-0.0497	mg/L	0.02550	-0.0497	mg/L	0.02550	51.37%
Na 589.592†	-14.2	-0.0163	mg/L	0.00294	-0.0163	mg/L	0.00294	18.04%
Sr 407.771†	-104.2	0.00287	mg/L	0.000008	0.00287	mg/L	0.000008	0.28%
Li 670.784†	-83.5	-0.00319	mg/L	0.000252	-0.00319	mg/L	0.000252	7.90%

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Sequence No.: 18 **Autosampler Location: 48**
Sample ID: LCSW 64 WG397435-05 **Date Collected: 5/10/2012 3:32:37 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**
User canceled analysis.

Approved: May 11, 2012

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Analysis Begun

Start Time: 5/10/2012 3:39:40 PM **Plasma On Time: 5/10/2012 7:42:20 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\THURSDAY1.sif
Batch ID:
Results Data Set: 051012H
Results Library: C:\pe\peicp2\Results\Results.mdb

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Sequence No.: 1 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 5/10/2012 3:39:41 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	2239375.2						44375.16	1.98%
YRADIAL	298038.4						3128.09	1.05%
Ga 417.206	1326642.9						25736.42	1.94%
GaRADIAL	90707.5						1348.00	1.49%
Ag 328.068†	130133.7	0.428	mg/L	0.0093	0.428	mg/L	0.0093	2.18%
QC value within limits for Ag 328.068 Recovery = 107.01%								
Al 396.153†	79080.6	9.94	mg/L	0.012	9.94	mg/L	0.012	0.12%
QC value within limits for Al 396.153 Recovery = 99.41%								
As 188.979†	1141.1	0.412	mg/L	0.0054	0.412	mg/L	0.0054	1.30%
QC value within limits for As 188.979 Recovery = 103.10%								
Ba 233.527†	158376.6	1.05	mg/L	0.019	1.05	mg/L	0.019	1.85%
QC value within limits for Ba 233.527 Recovery = 104.57%								
Be 234.861†	65244.4	0.0529	mg/L	0.00143	0.0529	mg/L	0.00143	2.71%
QC value within limits for Be 234.861 Recovery = 105.81%								
B 249.677†	43259.8	0.520	mg/L	0.0148	0.520	mg/L	0.0148	2.85%
QC value within limits for B 249.677 Recovery = 103.94%								
Ca 227.546†	4703.9	10.5	mg/L	0.27	10.5	mg/L	0.27	2.53%
QC value within limits for Ca 227.546 Recovery = 104.90%								
Cd 228.802†	2838.3	0.0517	mg/L	0.00189	0.0517	mg/L	0.00189	3.65%
QC value within limits for Cd 228.802 Recovery = 103.48%								
Co 228.616†	7737.5	0.203	mg/L	0.0051	0.203	mg/L	0.0051	2.49%
QC value within limits for Co 228.616 Recovery = 101.67%								
Cr 267.716†	55241.3	0.520	mg/L	0.0094	0.520	mg/L	0.0094	1.81%
QC value within limits for Cr 267.716 Recovery = 104.03%								
Cu 327.393†	139589.5	0.515	mg/L	0.0104	0.515	mg/L	0.0104	2.01%
QC value within limits for Cu 327.393 Recovery = 103.09%								
Fe 239.562†	66573.5	4.18	mg/L	0.034	4.18	mg/L	0.034	0.81%
QC value within limits for Fe 239.562 Recovery = 104.45%								
Mg 279.077†	37359.1	10.4	mg/L	0.09	10.4	mg/L	0.09	0.82%
QC value within limits for Mg 279.077 Recovery = 104.09%								
Mn 257.610†	435330.5	0.524	mg/L	0.0116	0.524	mg/L	0.0116	2.22%
QC value within limits for Mn 257.610 Recovery = 104.80%								
Mo 202.031†	37211.1	1.03	mg/L	0.011	1.03	mg/L	0.011	1.09%
QC value within limits for Mo 202.031 Recovery = 102.79%								
Ni 231.604†	34594.9	0.519	mg/L	0.0088	0.519	mg/L	0.0088	1.70%
QC value within limits for Ni 231.604 Recovery = 103.87%								
Pb 220.353†	5547.3	0.512	mg/L	0.0110	0.512	mg/L	0.0110	2.15%
QC value within limits for Pb 220.353 Recovery = 102.49%								
Sb 206.836†	5108.7	1.26	mg/L	0.030	1.26	mg/L	0.030	2.41%
QC value within limits for Sb 206.836 Recovery = 104.60%								
Se 196.026†	720.9	0.417	mg/L	0.0091	0.417	mg/L	0.0091	2.18%
QC value within limits for Se 196.026 Recovery = 104.30%								
Si 251.611†	218379.7	5.30	mg/L	0.086	5.30	mg/L	0.086	1.63%

Approved: May 11, 2012

QC value within limits for Si 251.611 Recovery = 105.93%
Sn 189.927† 10286.7 1.02 mg/L 0.025 1.02 mg/L 0.025 2.44%
QC value within limits for Sn 189.927 Recovery = 101.54%
Ti 334.940† 1003516.3 1.000 mg/L 0.0073 1.000 mg/L 0.0073 0.73%
QC value within limits for Ti 334.940 Recovery = 99.95%
Tl 190.801† 1929.1 0.521 mg/L 0.0065 0.521 mg/L 0.0065 1.26%
QC value within limits for Tl 190.801 Recovery = 104.19%
V 290.880† 194961.6 1.02 mg/L 0.014 1.02 mg/L 0.014 1.36%
QC value within limits for V 290.880 Recovery = 101.85%
Zn 206.200† 42452.9 1.08 mg/L 0.018 1.08 mg/L 0.018 1.65%
QC value within limits for Zn 206.200 Recovery = 107.72%
K 766.490† 174112.8 50.8 mg/L 0.17 50.8 mg/L 0.17 0.33%
QC value within limits for K 766.490 Recovery = 101.66%
Na 589.592† 1027999.5 50.4 mg/L 0.49 50.4 mg/L 0.49 0.96%
QC value within limits for Na 589.592 Recovery = 100.88%
Sr 407.771† 2850036.6 0.995 mg/L 0.0151 0.995 mg/L 0.0151 1.52%
QC value within limits for Sr 407.771 Recovery = 99.52%
Li 670.784† 164393.7 0.967 mg/L 0.0046 0.967 mg/L 0.0046 0.48%
QC value within limits for Li 670.784 Recovery = 96.65%
All analyte(s) passed QC.

Sequence No.: 2 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 5/10/2012 3:45:42 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	152.0 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	2297051.7						5859.10	0.26%
YRADIAL	304091.2						1922.38	0.63%
Ga 417.206	1386962.2						47219.35	3.40%
GaRADIAL	92399.3						2202.77	2.38%
Ag 328.068†	-92.8	-0.00061	mg/L	0.000054	-0.00061	mg/L	0.000054	8.83%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-8.9	0.00749	mg/L	0.001259	0.00749	mg/L	0.001259	16.81%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-0.1	0.00104	mg/L	0.001176	0.00104	mg/L	0.001176	112.57%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-25.6	-0.00038	mg/L	0.000167	-0.00038	mg/L	0.000167	43.71%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-33.7	0.00001	mg/L	0.000046	0.00001	mg/L	0.000046	411.82%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	258.7	0.00435	mg/L	0.000111	0.00435	mg/L	0.000111	2.56%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	2.6	0.0573	mg/L	0.00571	0.0573	mg/L	0.00571	9.96%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	0.3	-0.00001	mg/L	0.000262	-0.00001	mg/L	0.000262	>999.9%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-5.6	-0.00020	mg/L	0.000038	-0.00020	mg/L	0.000038	19.37%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	18.3	-0.00010	mg/L	0.000086	-0.00010	mg/L	0.000086	83.30%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	9.4	-0.00021	mg/L	0.000335	-0.00021	mg/L	0.000335	156.85%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	11.0	0.0128	mg/L	0.00022	0.0128	mg/L	0.00022	1.74%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	0.9	0.0263	mg/L	0.00161	0.0263	mg/L	0.00161	6.13%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-52.1	-0.00139	mg/L	0.000010	-0.00139	mg/L	0.000010	0.72%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	3.1	0.00079	mg/L	0.000194	0.00079	mg/L	0.000194	24.35%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	-23.8	-0.00105	mg/L	0.000153	-0.00105	mg/L	0.000153	14.52%

Approved: May 11, 2012

QC value within limits for Ni 231.604 Recovery = Not calculated
Pb 220.353† 3.6 -0.00010 mg/L 0.001258 -0.00010 mg/L 0.001258 >999.9%
QC value within limits for Pb 220.353 Recovery = Not calculated
Sb 206.836† 1.4 0.00140 mg/L 0.000122 0.00140 mg/L 0.000122 8.66%
QC value within limits for Sb 206.836 Recovery = Not calculated
Se 196.026† -11.9 -0.00260 mg/L 0.004177 -0.00260 mg/L 0.004177 160.49%
QC value within limits for Se 196.026 Recovery = Not calculated
Si 251.611† -16.6 -0.00808 mg/L 0.000743 -0.00808 mg/L 0.000743 9.20%
QC value within limits for Si 251.611 Recovery = Not calculated
Sn 189.927† -32.1 -0.00289 mg/L 0.000420 -0.00289 mg/L 0.000420 14.51%
QC value within limits for Sn 189.927 Recovery = Not calculated
Ti 334.940† -8.0 0.00214 mg/L 0.000088 0.00214 mg/L 0.000088 4.10%
QC value within limits for Ti 334.940 Recovery = Not calculated
Tl 190.801† -17.2 -0.00482 mg/L 0.001811 -0.00482 mg/L 0.001811 37.56%
QC value within limits for Tl 190.801 Recovery = Not calculated
V 290.880† -273.2 -0.00185 mg/L 0.001907 -0.00185 mg/L 0.001907 102.87%
QC value within limits for V 290.880 Recovery = Not calculated
Zn 206.200† -99.3 -0.00213 mg/L 0.000076 -0.00213 mg/L 0.000076 3.58%
QC value within limits for Zn 206.200 Recovery = Not calculated
K 766.490† -116.4 -0.0719 mg/L 0.01718 -0.0719 mg/L 0.01718 23.89%
QC value within limits for K 766.490 Recovery = Not calculated
Na 589.592† -532.9 -0.0418 mg/L 0.00117 -0.0418 mg/L 0.00117 2.80%
QC value within limits for Na 589.592 Recovery = Not calculated
Sr 407.771† -402.7 0.00277 mg/L 0.000028 0.00277 mg/L 0.000028 1.03%
QC value within limits for Sr 407.771 Recovery = Not calculated
Li 670.784† 12.7 -0.00262 mg/L 0.000284 -0.00262 mg/L 0.000284 10.83%
QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 3 **Autosampler Location: 47**
Sample ID: PBW 64 WG397435-04 **Date Collected: 5/10/2012 3:52:41 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW 64 WG397435-04

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: PBW 64 WG397435-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2289754.4						16625.51	0.73%
YRADIAL	306545.2						2653.75	0.87%
Ga 417.206	1465255.6						45279.54	3.09%
GaRADIAL	94148.8						2782.35	2.96%
Ag 328.068†	-116.0	-0.00069	mg/L	0.000172	-0.00069	mg/L	0.000172	25.01%
Al 396.153†	38.8	0.0135	mg/L	0.00214	0.0135	mg/L	0.00214	15.83%
As 188.979†	-0.6	0.00085	mg/L	0.001941	0.00085	mg/L	0.001941	227.33%
Ba 233.527†	2.9	-0.00019	mg/L	0.000124	-0.00019	mg/L	0.000124	64.34%
Be 234.861†	35.4	0.00007	mg/L	0.000039	0.00007	mg/L	0.000039	58.34%
B 249.677†	179.1	0.00339	mg/L	0.000289	0.00339	mg/L	0.000289	8.53%
Ca 227.546†	23.9	0.103	mg/L	0.0085	0.103	mg/L	0.0085	8.32%
Cd 228.802†	-2.5	-0.00006	mg/L	0.000191	-0.00006	mg/L	0.000191	320.27%
Co 228.616†	-1.5	-0.00009	mg/L	0.000069	-0.00009	mg/L	0.000069	77.08%
Cr 267.716†	26.9	-0.00002	mg/L	0.000007	-0.00002	mg/L	0.000007	31.50%
Cu 327.393†	58.4	-0.00003	mg/L	0.000205	-0.00003	mg/L	0.000205	628.15%
Fe 239.562†	82.6	0.0173	mg/L	0.00048	0.0173	mg/L	0.00048	2.77%
Mg 279.077†	13.0	0.0296	mg/L	0.00341	0.0296	mg/L	0.00341	11.52%
Mn 257.610†	385.9	-0.00086	mg/L	0.000010	-0.00086	mg/L	0.000010	1.17%
Mo 202.031†	6.2	0.00088	mg/L	0.000182	0.00088	mg/L	0.000182	20.68%
Ni 231.604†	-18.1	-0.00097	mg/L	0.000153	-0.00097	mg/L	0.000153	15.83%
Pb 220.353†	2.6	-0.00020	mg/L	0.001109	-0.00020	mg/L	0.001109	567.90%
Sb 206.836†	-1.8	0.00062	mg/L	0.001009	0.00062	mg/L	0.001009	161.79%
Se 196.026†	-0.3	0.00401	mg/L	0.002657	0.00401	mg/L	0.002657	66.23%
Si 251.611†	322.7	0.00018	mg/L	0.000193	0.00018	mg/L	0.000193	107.72%
Sn 189.927†	-47.2	-0.00438	mg/L	0.000336	-0.00438	mg/L	0.000336	7.67%
Ti 334.940†	298.5	0.00245	mg/L	0.000127	0.00245	mg/L	0.000127	5.19%
Tl 190.801†	-10.8	-0.00313	mg/L	0.001482	-0.00313	mg/L	0.001482	47.29%

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V 290.880†	-125.9	-0.00108	mg/L	0.000870	-0.00108	mg/L	0.000870 80.24%
Zn 206.200†	6.9	0.00055	mg/L	0.000181	0.00055	mg/L	0.000181 32.96%
K 766.490†	-27.2	-0.0457	mg/L	0.01792	-0.0457	mg/L	0.01792 39.19%
Na 589.592†	117.0	-0.00987	mg/L	0.001123	-0.00987	mg/L	0.001123 11.38%
Sr 407.771†	235.4	0.00299	mg/L	0.000029	0.00299	mg/L	0.000029 0.97%
Li 670.784†	-87.5	-0.00321	mg/L	0.000540	-0.00321	mg/L	0.000540 16.80%

Sequence No.: 4 **Autosampler Location: 48**
Sample ID: LCSW 64 WG397435-05 **Date Collected: 5/10/2012 3:59:35 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW 64 WG397435-05

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: LCSW 64 WG397435-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2251581.1						15745.15	0.70%
YRADIAL	303058.0						1072.90	0.35%
Ga 417.206	1411641.8						34341.40	2.43%
GaRADIAL	92039.1						1199.76	1.30%
Ag 328.068†	60883.7	0.200	mg/L	0.0058	0.200	mg/L	0.0058	2.89%
Al 396.153†	38941.2	4.90	mg/L	0.009	4.90	mg/L	0.009	0.19%
As 188.979†	527.1	0.191	mg/L	0.0048	0.191	mg/L	0.0048	2.52%
Ba 233.527†	77538.2	0.512	mg/L	0.0042	0.512	mg/L	0.0042	0.82%
Be 234.861†	30179.7	0.0245	mg/L	0.00050	0.0245	mg/L	0.00050	2.03%
B 249.677†	80505.5	0.972	mg/L	0.0291	0.972	mg/L	0.0291	2.99%
Ca 227.546†	2170.0	4.88	mg/L	0.114	4.88	mg/L	0.114	2.33%
Cd 228.802†	1308.9	0.0239	mg/L	0.00126	0.0239	mg/L	0.00126	5.27%
Co 228.616†	3814.8	0.100	mg/L	0.0010	0.100	mg/L	0.0010	1.03%
Cr 267.716†	27177.0	0.256	mg/L	0.0007	0.256	mg/L	0.0007	0.26%
Cu 327.393†	66048.4	0.244	mg/L	0.0065	0.244	mg/L	0.0065	2.66%
Fe 239.562†	32109.8	2.02	mg/L	0.003	2.02	mg/L	0.003	0.13%
Mg 279.077†	18422.9	5.15	mg/L	0.019	5.15	mg/L	0.019	0.37%
Mn 257.610†	211754.9	0.254	mg/L	0.0032	0.254	mg/L	0.0032	1.27%
Mo 202.031†	18240.3	0.504	mg/L	0.0061	0.504	mg/L	0.0061	1.21%
Ni 231.604†	17136.1	0.257	mg/L	0.0027	0.257	mg/L	0.0027	1.04%
Pb 220.353†	2722.4	0.251	mg/L	0.0033	0.251	mg/L	0.0033	1.30%
Sb 206.836†	2371.9	0.583	mg/L	0.0178	0.583	mg/L	0.0178	3.06%
Se 196.026†	337.4	0.198	mg/L	0.0052	0.198	mg/L	0.0052	2.62%
Si 251.611†	104542.6	2.53	mg/L	0.056	2.53	mg/L	0.056	2.22%
Sn 189.927†	5660.8	0.559	mg/L	0.0059	0.559	mg/L	0.0059	1.05%
Ti 334.940†	492616.9	0.492	mg/L	0.0034	0.492	mg/L	0.0034	0.69%
Tl 190.801†	959.0	0.259	mg/L	0.0013	0.259	mg/L	0.0013	0.49%
V 290.880†	95969.0	0.501	mg/L	0.0007	0.501	mg/L	0.0007	0.13%
Zn 206.200†	20828.6	0.529	mg/L	0.0039	0.529	mg/L	0.0039	0.74%
K 766.490†	86445.1	25.3	mg/L	0.12	25.3	mg/L	0.12	0.46%
Na 589.592†	522054.8	25.6	mg/L	0.22	25.6	mg/L	0.22	0.86%
Sr 407.771†	1400957.1	0.491	mg/L	0.0014	0.491	mg/L	0.0014	0.30%
Li 670.784†	83606.1	0.490	mg/L	0.0029	0.490	mg/L	0.0029	0.58%

Sequence No.: 5 **Autosampler Location: 49**
Sample ID: L1205012502 **Date Collected: 5/10/2012 4:05:33 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205012502

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205012502

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD

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Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Y 371.029	2326717.0						15608.45	0.67%
YRADIAL	308097.3						533.12	0.17%
Ga 417.206	1414478.2						59346.85	4.20%
GaRADIAL	93096.3						487.31	0.52%
Ag 328.068†	-55.5	-0.00034	mg/L	0.000251	-0.00034	mg/L	0.000251	74.16%
Al 396.153†	1213.0	0.162	mg/L	0.0055	0.162	mg/L	0.0055	3.38%
As 188.979†	-3.7	-0.00024	mg/L	0.001424	-0.00024	mg/L	0.001424	585.73%
Ba 233.527†	1695.8	0.0110	mg/L	0.00015	0.0110	mg/L	0.00015	1.37%
Be 234.861†	248.8	0.00017	mg/L	0.000016	0.00017	mg/L	0.000016	9.41%
B 249.677†	710.7	0.00965	mg/L	0.000950	0.00965	mg/L	0.000950	9.85%
Ca 227.546†	955.4	2.08	mg/L	0.076	2.08	mg/L	0.076	3.63%
Cd 228.802†	23.2	0.00043	mg/L	0.000479	0.00043	mg/L	0.000479	112.00%
Co 228.616†	16.4	0.00037	mg/L	0.000146	0.00037	mg/L	0.000146	39.65%
Cr 267.716†	64.7	0.00035	mg/L	0.000078	0.00035	mg/L	0.000078	22.48%
Cu 327.393†	185.7	0.00047	mg/L	0.000215	0.00047	mg/L	0.000215	45.91%
Fe 239.562†	5444.1	0.353	mg/L	0.0051	0.353	mg/L	0.0051	1.45%
Mg 279.077†	3281.1	0.936	mg/L	0.0132	0.936	mg/L	0.0132	1.41%
Mn 257.610†	10158.4	0.0109	mg/L	0.00025	0.0109	mg/L	0.00025	2.28%
Mo 202.031†	24.1	0.00139	mg/L	0.000251	0.00139	mg/L	0.000251	17.97%
Ni 231.604†	88.5	0.00064	mg/L	0.000279	0.00064	mg/L	0.000279	43.87%
Pb 220.353†	-11.2	-0.00146	mg/L	0.002002	-0.00146	mg/L	0.002002	136.90%
Sb 206.836†	-4.6	-0.00006	mg/L	0.000920	-0.00006	mg/L	0.000920	>999.9%
Se 196.026†	-9.5	-0.00114	mg/L	0.003896	-0.00114	mg/L	0.003896	342.26%
Si 251.611†	193740.5	4.71	mg/L	0.212	4.71	mg/L	0.212	4.50%
Sn 189.927†	-73.3	-0.00696	mg/L	0.000025	-0.00696	mg/L	0.000025	0.36%
Ti 334.940†	2083.3	0.00452	mg/L	0.000285	0.00452	mg/L	0.000285	6.32%
Tl 190.801†	-5.4	-0.00168	mg/L	0.001901	-0.00168	mg/L	0.001901	113.04%
V 290.880†	551.1	0.00238	mg/L	0.002418	0.00238	mg/L	0.002418	101.54%
Zn 206.200†	71.1	0.00216	mg/L	0.000053	0.00216	mg/L	0.000053	2.43%
K 766.490†	1204.8	0.315	mg/L	0.0181	0.315	mg/L	0.0181	5.75%
Na 589.592†	35589.0	1.73	mg/L	0.008	1.73	mg/L	0.008	0.47%
Sr 407.771†	43518.0	0.0180	mg/L	0.00006	0.0180	mg/L	0.00006	0.35%
Li 670.784†	324.7	-0.00078	mg/L	0.000197	-0.00078	mg/L	0.000197	25.13%

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Sequence No.: 6 **Autosampler Location: 50**
Sample ID: L1205012507 WG397435-01 **Date Collected: 5/10/2012 4:11:30 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205012507 WG397435-01

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205012507 WG397435-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2299313.4						12877.31	0.56%
YRADIAL	309175.5						3808.77	1.23%
Ga 417.206	1418125.9						51440.13	3.63%
GaRADIAL	93526.0						457.84	0.49%
Ag 328.068†	26.7	-0.00008	mg/L	0.000446	-0.00008	mg/L	0.000446	529.18%
Al 396.153†	879.9	0.120	mg/L	0.0057	0.120	mg/L	0.0057	4.75%
As 188.979†	-4.4	-0.00050	mg/L	0.001858	-0.00050	mg/L	0.001858	372.55%
Ba 233.527†	1656.4	0.0107	mg/L	0.00015	0.0107	mg/L	0.00015	1.43%
Be 234.861†	263.5	0.00019	mg/L	0.000042	0.00019	mg/L	0.000042	22.67%
B 249.677†	526.8	0.00744	mg/L	0.000487	0.00744	mg/L	0.000487	6.55%
Ca 227.546†	852.4	1.86	mg/L	0.082	1.86	mg/L	0.082	4.42%
Cd 228.802†	24.7	0.00046	mg/L	0.000226	0.00046	mg/L	0.000226	49.51%
Co 228.616†	13.3	0.00029	mg/L	0.000209	0.00029	mg/L	0.000209	72.75%
Cr 267.716†	55.7	0.00026	mg/L	0.000105	0.00026	mg/L	0.000105	40.34%
Cu 327.393†	142.2	0.00030	mg/L	0.000042	0.00030	mg/L	0.000042	13.70%
Fe 239.562†	4946.3	0.322	mg/L	0.0016	0.322	mg/L	0.0016	0.49%
Mg 279.077†	3362.9	0.959	mg/L	0.0110	0.959	mg/L	0.0110	1.15%
Mn 257.610†	13390.3	0.0148	mg/L	0.00030	0.0148	mg/L	0.00030	2.01%
Mo 202.031†	23.8	0.00139	mg/L	0.000307	0.00139	mg/L	0.000307	22.15%
Ni 231.604†	71.1	0.00038	mg/L	0.000537	0.00038	mg/L	0.000537	143.13%
Pb 220.353†	-21.2	-0.00239	mg/L	0.002227	-0.00239	mg/L	0.002227	93.32%

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Sb 206.836†	-4.3	0.00002 mg/L	0.000923	0.00002 mg/L	0.000923	>999.9%
Se 196.026†	-6.7	0.00043 mg/L	0.005547	0.00043 mg/L	0.005547	>999.9%
Si 251.611†	194679.8	4.73 mg/L	0.116	4.73 mg/L	0.116	2.45%
Sn 189.927†	-69.7	-0.00661 mg/L	0.000855	-0.00661 mg/L	0.000855	12.94%
Ti 334.940†	1669.7	0.00407 mg/L	0.000309	0.00407 mg/L	0.000309	7.58%
Tl 190.801†	-9.6	-0.00279 mg/L	0.000794	-0.00279 mg/L	0.000794	28.48%
V 290.880†	504.1	0.00214 mg/L	0.002180	0.00214 mg/L	0.002180	101.85%
Zn 206.200†	67.1	0.00207 mg/L	0.000119	0.00207 mg/L	0.000119	5.74%
K 766.490†	1204.3	0.314 mg/L	0.0145	0.314 mg/L	0.0145	4.62%
Na 589.592†	38099.7	1.86 mg/L	0.013	1.86 mg/L	0.013	0.69%
Sr 407.771†	42371.5	0.0176 mg/L	0.00017	0.0176 mg/L	0.00017	0.97%
Li 670.784†	277.2	-0.00106 mg/L	0.000267	-0.00106 mg/L	0.000267	25.11%

Sequence No.: 7 **Autosampler Location: 51**
Sample ID: L1205012508S WG397435-06 **Date Collected: 5/10/2012 4:17:28 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205012508S WG397435-06

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205012508S WG397435-06

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2221371.7						18411.64	0.83%
YRADIAL	302143.7						4999.72	1.65%
Ga 417.206	1418024.9						39369.76	2.78%
GaRADIAL	91311.2						1548.03	1.70%
Ag 328.068†	59244.8	0.195	mg/L	0.0064	0.195	mg/L	0.0064	3.30%
Al 396.153†	39533.4	4.97	mg/L	0.019	4.97	mg/L	0.019	0.38%
As 188.979†	516.2	0.187	mg/L	0.0029	0.187	mg/L	0.0029	1.52%
Ba 233.527†	78860.6	0.521	mg/L	0.0077	0.521	mg/L	0.0077	1.49%
Be 234.861†	29440.5	0.0238	mg/L	0.00072	0.0238	mg/L	0.00072	3.03%
B 249.677†	78357.8	0.946	mg/L	0.0327	0.946	mg/L	0.0327	3.46%
Ca 227.546†	2953.1	6.54	mg/L	0.185	6.54	mg/L	0.185	2.83%
Cd 228.802†	1282.7	0.0234	mg/L	0.00100	0.0234	mg/L	0.00100	4.26%
Co 228.616†	3815.4	0.100	mg/L	0.0014	0.100	mg/L	0.0014	1.35%
Cr 267.716†	26960.9	0.254	mg/L	0.0037	0.254	mg/L	0.0037	1.47%
Cu 327.393†	63877.5	0.236	mg/L	0.0078	0.236	mg/L	0.0078	3.30%
Fe 239.562†	36194.1	2.28	mg/L	0.015	2.28	mg/L	0.015	0.68%
Mg 279.077†	21351.2	5.96	mg/L	0.071	5.96	mg/L	0.071	1.18%
Mn 257.610†	223071.6	0.268	mg/L	0.0050	0.268	mg/L	0.0050	1.86%
Mo 202.031†	18144.7	0.502	mg/L	0.0082	0.502	mg/L	0.0082	1.63%
Ni 231.604†	16989.1	0.255	mg/L	0.0038	0.255	mg/L	0.0038	1.50%
Pb 220.353†	2702.9	0.249	mg/L	0.0033	0.249	mg/L	0.0033	1.33%
Sb 206.836†	2314.8	0.569	mg/L	0.0168	0.569	mg/L	0.0168	2.94%
Se 196.026†	327.5	0.192	mg/L	0.0061	0.192	mg/L	0.0061	3.19%
Si 251.611†	293348.0	7.13	mg/L	0.163	7.13	mg/L	0.163	2.28%
Sn 189.927†	5641.7	0.557	mg/L	0.0092	0.557	mg/L	0.0092	1.66%
Ti 334.940†	488783.6	0.488	mg/L	0.0035	0.488	mg/L	0.0035	0.72%
Tl 190.801†	949.7	0.256	mg/L	0.0031	0.256	mg/L	0.0031	1.22%
V 290.880†	95395.4	0.498	mg/L	0.0106	0.498	mg/L	0.0106	2.13%
Zn 206.200†	20799.9	0.528	mg/L	0.0066	0.528	mg/L	0.0066	1.26%
K 766.490†	86217.6	25.2	mg/L	0.22	25.2	mg/L	0.22	0.87%
Na 589.592†	551159.2	27.1	mg/L	0.54	27.1	mg/L	0.54	1.99%
Sr 407.771†	1415000.1	0.496	mg/L	0.0076	0.496	mg/L	0.0076	1.52%
Li 670.784†	82457.3	0.483	mg/L	0.0011	0.483	mg/L	0.0011	0.23%

Sequence No.: 8 **Autosampler Location: 52**
Sample ID: L1205012509SD WG397435-07 **Date Collected: 5/10/2012 4:23:26 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205012509SD WG397435-07

Approved: May 11, 2012

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205012509SD WG397435-07

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2210447.8						15030.68	0.68%
YRADIAL	298248.9						1194.88	0.40%
Ga 417.206	1378217.6						26721.39	1.94%
GaRADIAL	91040.6						115.59	0.13%
Ag 328.068†	61092.0	0.201	mg/L	0.0049	0.201	mg/L	0.0049	2.46%
Al 396.153†	40283.6	5.07	mg/L	0.023	5.07	mg/L	0.023	0.44%
As 188.979†	528.0	0.191	mg/L	0.0038	0.191	mg/L	0.0038	1.98%
Ba 233.527†	78846.0	0.520	mg/L	0.0030	0.520	mg/L	0.0030	0.57%
Be 234.861†	30354.5	0.0246	mg/L	0.00063	0.0246	mg/L	0.00063	2.57%
B 249.677†	81526.0	0.984	mg/L	0.0227	0.984	mg/L	0.0227	2.31%
Ca 227.546†	3059.1	6.78	mg/L	0.163	6.78	mg/L	0.163	2.40%
Cd 228.802†	1334.0	0.0243	mg/L	0.00106	0.0243	mg/L	0.00106	4.35%
Co 228.616†	3858.8	0.101	mg/L	0.0008	0.101	mg/L	0.0008	0.81%
Cr 267.716†	27018.9	0.254	mg/L	0.0030	0.254	mg/L	0.0030	1.19%
Cu 327.393†	66837.8	0.247	mg/L	0.0065	0.247	mg/L	0.0065	2.62%
Fe 239.562†	37001.8	2.33	mg/L	0.010	2.33	mg/L	0.010	0.44%
Mg 279.077†	21701.7	6.06	mg/L	0.044	6.06	mg/L	0.044	0.73%
Mn 257.610†	224557.1	0.270	mg/L	0.0020	0.270	mg/L	0.0020	0.73%
Mo 202.031†	18251.2	0.505	mg/L	0.0069	0.505	mg/L	0.0069	1.37%
Ni 231.604†	17871.3	0.268	mg/L	0.0026	0.268	mg/L	0.0026	0.98%
Pb 220.353†	2756.4	0.254	mg/L	0.0022	0.254	mg/L	0.0022	0.87%
Sb 206.836†	2400.6	0.590	mg/L	0.0141	0.590	mg/L	0.0141	2.39%
Se 196.026†	344.4	0.202	mg/L	0.0065	0.202	mg/L	0.0065	3.24%
Si 251.611†	304797.7	7.41	mg/L	0.135	7.41	mg/L	0.135	1.82%
Sn 189.927†	5682.1	0.561	mg/L	0.0069	0.561	mg/L	0.0069	1.23%
Ti 334.940†	496222.2	0.496	mg/L	0.0021	0.496	mg/L	0.0021	0.42%
Tl 190.801†	960.5	0.259	mg/L	0.0018	0.259	mg/L	0.0018	0.68%
V 290.880†	96509.9	0.504	mg/L	0.0050	0.504	mg/L	0.0050	0.98%
Zn 206.200†	20670.5	0.525	mg/L	0.0019	0.525	mg/L	0.0019	0.37%
K 766.490†	87884.6	25.7	mg/L	0.08	25.7	mg/L	0.08	0.33%
Na 589.592†	559795.8	27.5	mg/L	0.19	27.5	mg/L	0.19	0.70%
Sr 407.771†	1457563.4	0.510	mg/L	0.0047	0.510	mg/L	0.0047	0.91%
Li 670.784†	83847.6	0.492	mg/L	0.0021	0.492	mg/L	0.0021	0.43%

Sequence No.: 9 **Autosampler Location: 53**
Sample ID: L1205012514 **Date Collected: 5/10/2012 4:29:24 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205012514

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205012514

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2330592.9						30468.99	1.31%
YRADIAL	306144.9						1511.89	0.49%
Ga 417.206	1407886.5						43199.29	3.07%
GaRADIAL	92929.5						691.05	0.74%
Ag 328.068†	13.6	-0.00007	mg/L	0.000280	-0.00007	mg/L	0.000280	429.05%
Al 396.153†	859.0	0.117	mg/L	0.0054	0.117	mg/L	0.0054	4.60%
As 188.979†	-2.7	0.00016	mg/L	0.002022	0.00016	mg/L	0.002022	>999.9%
Ba 233.527†	1945.6	0.0126	mg/L	0.00009	0.0126	mg/L	0.00009	0.75%
Be 234.861†	362.8	0.00024	mg/L	0.000040	0.00024	mg/L	0.000040	16.72%
B 249.677†	1025.8	0.0134	mg/L	0.00112	0.0134	mg/L	0.00112	8.33%
Ca 227.546†	1049.4	2.29	mg/L	0.089	2.29	mg/L	0.089	3.88%
Cd 228.802†	31.3	0.00058	mg/L	0.000179	0.00058	mg/L	0.000179	30.93%
Co 228.616†	18.6	0.00042	mg/L	0.000448	0.00042	mg/L	0.000448	106.05%
Cr 267.716†	51.0	0.00022	mg/L	0.000126	0.00022	mg/L	0.000126	57.26%
Cu 327.393†	74.9	0.00007	mg/L	0.000268	0.00007	mg/L	0.000268	393.88%

Approved: May 11, 2012

Fe 239.562†	7230.5	0.465	mg/L	0.0052	0.465	mg/L	0.0052 1.12%
Mg 279.077†	4242.9	1.20	mg/L	0.026	1.20	mg/L	0.026 2.12%
Mn 257.610†	13066.3	0.0144	mg/L	0.00027	0.0144	mg/L	0.00027 1.89%
Mo 202.031†	23.1	0.00137	mg/L	0.000239	0.00137	mg/L	0.000239 17.42%
Ni 231.604†	56.9	0.00016	mg/L	0.000646	0.00016	mg/L	0.000646 397.85%
Pb 220.353†	-19.2	-0.00222	mg/L	0.001551	-0.00222	mg/L	0.001551 70.04%
Sb 206.836†	-1.4	0.00073	mg/L	0.000794	0.00073	mg/L	0.000794 109.30%
Se 196.026†	-6.2	0.00076	mg/L	0.002499	0.00076	mg/L	0.002499 328.94%
Si 251.611†	240659.3	5.85	mg/L	0.197	5.85	mg/L	0.197 3.37%
Sn 189.927†	-70.9	-0.00672	mg/L	0.000355	-0.00672	mg/L	0.000355 5.28%
Ti 334.940†	1571.6	0.00404	mg/L	0.000038	0.00404	mg/L	0.000038 0.95%
Tl 190.801†	-12.3	-0.00351	mg/L	0.003058	-0.00351	mg/L	0.003058 87.08%
V 290.880†	440.1	0.00178	mg/L	0.000629	0.00178	mg/L	0.000629 35.40%
Zn 206.200†	-27.3	-0.00032	mg/L	0.000056	-0.00032	mg/L	0.000056 17.61%
K 766.490†	1559.4	0.418	mg/L	0.0075	0.418	mg/L	0.0075 1.79%
Na 589.592†	50526.3	2.47	mg/L	0.012	2.47	mg/L	0.012 0.49%
Sr 407.771†	55493.6	0.0222	mg/L	0.00014	0.0222	mg/L	0.00014 0.65%
Li 670.784†	180.5	-0.00163	mg/L	0.000087	-0.00163	mg/L	0.000087 5.35%

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Sequence No.: 10 **Autosampler Location: 54**
Sample ID: L1205012517 **Date Collected: 5/10/2012 4:35:22 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205012517

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205012517

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2311925.2						26150.11	1.13%
YRADIAL	310823.0						1538.37	0.49%
Ga 417.206	1416280.9						47015.98	3.32%
GaRADIAL	93903.1						571.38	0.61%
Ag 328.068†	52.2	0.00003	mg/L	0.000273	0.00003	mg/L	0.000273	977.07%
Al 396.153†	665.2	0.0928	mg/L	0.00370	0.0928	mg/L	0.00370	3.99%
As 188.979†	-4.5	-0.00053	mg/L	0.000435	-0.00053	mg/L	0.000435	82.13%
Ba 233.527†	1930.1	0.0125	mg/L	0.00020	0.0125	mg/L	0.00020	1.63%
Be 234.861†	318.8	0.00022	mg/L	0.000063	0.00022	mg/L	0.000063	29.02%
B 249.677†	789.5	0.0106	mg/L	0.00061	0.0106	mg/L	0.00061	5.79%
Ca 227.546†	1051.9	2.29	mg/L	0.094	2.29	mg/L	0.094	4.11%
Cd 228.802†	19.9	0.00037	mg/L	0.000107	0.00037	mg/L	0.000107	29.30%
Co 228.616†	13.4	0.00029	mg/L	0.000256	0.00029	mg/L	0.000256	88.85%
Cr 267.716†	51.1	0.00022	mg/L	0.000143	0.00022	mg/L	0.000143	65.20%
Cu 327.393†	128.6	0.00026	mg/L	0.000327	0.00026	mg/L	0.000327	126.07%
Fe 239.562†	6070.5	0.392	mg/L	0.0038	0.392	mg/L	0.0038	0.97%
Mg 279.077†	4120.6	1.17	mg/L	0.016	1.17	mg/L	0.016	1.36%
Mn 257.610†	12832.2	0.0141	mg/L	0.00017	0.0141	mg/L	0.00017	1.22%
Mo 202.031†	22.6	0.00136	mg/L	0.000065	0.00136	mg/L	0.000065	4.80%
Ni 231.604†	56.1	0.00015	mg/L	0.000354	0.00015	mg/L	0.000354	234.29%
Pb 220.353†	-14.6	-0.00179	mg/L	0.001047	-0.00179	mg/L	0.001047	58.55%
Sb 206.836†	-2.1	0.00056	mg/L	0.001527	0.00056	mg/L	0.001527	271.08%
Se 196.026†	-6.3	0.00067	mg/L	0.000827	0.00067	mg/L	0.000827	123.54%
Si 251.611†	237759.2	5.78	mg/L	0.164	5.78	mg/L	0.164	2.84%
Sn 189.927†	-74.1	-0.00703	mg/L	0.000568	-0.00703	mg/L	0.000568	8.08%
Ti 334.940†	1213.7	0.00368	mg/L	0.000334	0.00368	mg/L	0.000334	9.06%
Tl 190.801†	-9.7	-0.00282	mg/L	0.001419	-0.00282	mg/L	0.001419	50.28%
V 290.880†	395.3	0.00155	mg/L	0.000732	0.00155	mg/L	0.000732	47.11%
Zn 206.200†	-23.9	-0.00024	mg/L	0.000029	-0.00024	mg/L	0.000029	12.45%
K 766.490†	1499.1	0.400	mg/L	0.0198	0.400	mg/L	0.0198	4.96%
Na 589.592†	50695.7	2.48	mg/L	0.019	2.48	mg/L	0.019	0.77%
Sr 407.771†	55167.9	0.0221	mg/L	0.00016	0.0221	mg/L	0.00016	0.74%
Li 670.784†	194.9	-0.00155	mg/L	0.000291	-0.00155	mg/L	0.000291	18.80%

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Sequence No.: 11 **Autosampler Location: 55**
Sample ID: L1205012517PS WG397517-01 **Date Collected: 5/10/2012 4:41:20 PM**

Approved: May 11, 2012

Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205012517PS WG397517-01

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205012517PS WG397517-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2208661.5						15299.07	0.69%
YRADIAL	292495.8						3137.35	1.07%
Ga 417.206	1359327.6						25478.08	1.87%
GaRADIAL	88470.4						644.32	0.73%
Ag 328.068†	64081.9	0.211	mg/L	0.0054	0.211	mg/L	0.0054	2.56%
Al 396.153†	41253.5	5.19	mg/L	0.042	5.19	mg/L	0.042	0.82%
As 188.979†	556.7	0.202	mg/L	0.0028	0.202	mg/L	0.0028	1.38%
Ba 233.527†	82280.7	0.543	mg/L	0.0115	0.543	mg/L	0.0115	2.12%
Be 234.861†	32060.6	0.0259	mg/L	0.00058	0.0259	mg/L	0.00058	2.23%
B 249.677†	85576.5	1.03	mg/L	0.027	1.03	mg/L	0.027	2.65%
Ca 227.546†	3301.5	7.30	mg/L	0.210	7.30	mg/L	0.210	2.88%
Cd 228.802†	1399.7	0.0255	mg/L	0.00115	0.0255	mg/L	0.00115	4.49%
Co 228.616†	3985.0	0.105	mg/L	0.0009	0.105	mg/L	0.0009	0.88%
Cr 267.716†	28189.6	0.265	mg/L	0.0038	0.265	mg/L	0.0038	1.42%
Cu 327.393†	69198.2	0.255	mg/L	0.0067	0.255	mg/L	0.0067	2.63%
Fe 239.562†	39143.0	2.46	mg/L	0.018	2.46	mg/L	0.018	0.74%
Mg 279.077†	23175.3	6.46	mg/L	0.041	6.46	mg/L	0.041	0.63%
Mn 257.610†	231033.7	0.277	mg/L	0.0057	0.277	mg/L	0.0057	2.06%
Mo 202.031†	18864.1	0.521	mg/L	0.0062	0.521	mg/L	0.0062	1.19%
Ni 231.604†	17768.6	0.266	mg/L	0.0041	0.266	mg/L	0.0041	1.52%
Pb 220.353†	2838.7	0.262	mg/L	0.0021	0.262	mg/L	0.0021	0.82%
Sb 206.836†	2544.1	0.626	mg/L	0.0138	0.626	mg/L	0.0138	2.20%
Se 196.026†	360.7	0.211	mg/L	0.0052	0.211	mg/L	0.0052	2.46%
Si 251.611†	339601.6	8.25	mg/L	0.165	8.25	mg/L	0.165	2.00%
Sn 189.927†	-114.6	-0.0110	mg/L	0.00102	-0.0110	mg/L	0.00102	9.26%
Ti 334.940†	511506.8	0.511	mg/L	0.0023	0.511	mg/L	0.0023	0.44%
Tl 190.801†	1004.9	0.271	mg/L	0.0021	0.271	mg/L	0.0021	0.78%
V 290.880†	99572.9	0.520	mg/L	0.0081	0.520	mg/L	0.0081	1.56%
Zn 206.200†	21654.6	0.550	mg/L	0.0099	0.550	mg/L	0.0099	1.80%
K 766.490†	91169.9	26.7	mg/L	0.11	26.7	mg/L	0.11	0.43%
Na 589.592†	593107.9	29.1	mg/L	0.24	29.1	mg/L	0.24	0.81%
Sr 407.771†	1505192.3	0.527	mg/L	0.0048	0.527	mg/L	0.0048	0.91%
Li 670.784†	86130.1	0.505	mg/L	0.0059	0.505	mg/L	0.0059	1.17%

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Sequence No.: 12 **Autosampler Location: 56**
Sample ID: L1205012517DL WG397517-02 **Date Collected: 5/10/2012 4:47:19 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205012517DL WG397517-02

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205012517DL WG397517-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2310566.1						22583.27	0.98%
YRADIAL	302732.4						4624.44	1.53%
Ga 417.206	1425868.2						30847.17	2.16%
GaRADIAL	93490.1						2022.21	2.16%
Ag 328.068†	-13.2	-0.00032	mg/L	0.000295	-0.00032	mg/L	0.000295	91.51%
Al 396.153†	135.4	0.0257	mg/L	0.00146	0.0257	mg/L	0.00146	5.67%
As 188.979†	-4.9	-0.00070	mg/L	0.001513	-0.00070	mg/L	0.001513	216.14%
Ba 233.527†	357.8	0.00215	mg/L	0.000163	0.00215	mg/L	0.000163	7.59%
Be 234.861†	33.2	0.00005	mg/L	0.000011	0.00005	mg/L	0.000011	22.02%

Approved: May 11, 2012

Kym H. Rhoden

B 249.677†	748.9	0.0102	mg/L	0.00056	0.0102	mg/L	0.00056 5.49%
Ca 227.546†	211.4	0.501	mg/L	0.0084	0.501	mg/L	0.0084 1.67%
Cd 228.802†	0.4	0.00000	mg/L	0.000119	0.00000	mg/L	0.000119 >999.9%
Co 228.616†	-1.4	-0.00009	mg/L	0.000132	-0.00009	mg/L	0.000132 146.26%
Cr 267.716†	27.6	-0.00001	mg/L	0.000065	-0.00001	mg/L	0.000065 491.30%
Cu 327.393†	9.7	-0.00021	mg/L	0.000417	-0.00021	mg/L	0.000417 202.23%
Fe 239.562†	1247.4	0.0902	mg/L	0.00137	0.0902	mg/L	0.00137 1.52%
Mg 279.077†	881.0	0.270	mg/L	0.0034	0.270	mg/L	0.0034 1.27%
Mn 257.610†	3039.6	0.00234	mg/L	0.000056	0.00234	mg/L	0.000056 2.39%
Mo 202.031†	-0.0	0.00071	mg/L	0.000147	0.00071	mg/L	0.000147 20.67%
Ni 231.604†	2.3	-0.00066	mg/L	0.000189	-0.00066	mg/L	0.000189 28.79%
Pb 220.353†	9.2	0.00041	mg/L	0.000997	0.00041	mg/L	0.000997 242.62%
Sb 206.836†	-3.9	0.00009	mg/L	0.001048	0.00009	mg/L	0.001048 >999.9%
Se 196.026†	-3.8	0.00202	mg/L	0.003912	0.00202	mg/L	0.003912 193.34%
Si 251.611†	48532.0	1.17	mg/L	0.019	1.17	mg/L	0.019 1.59%
Sn 189.927†	-40.7	-0.00374	mg/L	0.000223	-0.00374	mg/L	0.000223 5.96%
Ti 334.940†	313.8	0.00252	mg/L	0.000034	0.00252	mg/L	0.000034 1.35%
Tl 190.801†	-20.3	-0.00561	mg/L	0.001652	-0.00561	mg/L	0.001652 29.43%
V 290.880†	-295.2	-0.00199	mg/L	0.002014	-0.00199	mg/L	0.002014 101.34%
Zn 206.200†	31.8	0.00117	mg/L	0.000129	0.00117	mg/L	0.000129 11.02%
K 766.490†	429.2	0.0880	mg/L	0.00470	0.0880	mg/L	0.00470 5.35%
Na 589.592†	9654.8	0.459	mg/L	0.0145	0.459	mg/L	0.0145 3.16%
Sr 407.771†	11111.6	0.00677	mg/L	0.000102	0.00677	mg/L	0.000102 1.51%
Li 670.784†	60.4	-0.00234	mg/L	0.000041	-0.00234	mg/L	0.000041 1.73%

Sequence No.: 13 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 5/10/2012 4:54:15 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	2250402.6						18135.89	0.81%
YRADIAL	301496.0						1692.83	0.56%
Ga 417.206	1328850.0						33656.64	2.53%
GaRADIAL	91573.5						393.02	0.43%
Ag 328.068†	127386.9	0.419	mg/L	0.0140	0.419	mg/L	0.0140	3.33%
QC value within limits for Ag 328.068 Recovery = 104.76%								
Al 396.153†	78255.6	9.84	mg/L	0.023	9.84	mg/L	0.023	0.23%
QC value within limits for Al 396.153 Recovery = 98.37%								
As 188.979†	1139.4	0.412	mg/L	0.0132	0.412	mg/L	0.0132	3.21%
QC value within limits for As 188.979 Recovery = 102.96%								
Ba 233.527†	156205.9	1.03	mg/L	0.009	1.03	mg/L	0.009	0.86%
QC value within limits for Ba 233.527 Recovery = 103.14%								
Be 234.861†	65013.1	0.0527	mg/L	0.00169	0.0527	mg/L	0.00169	3.20%
QC value within limits for Be 234.861 Recovery = 105.44%								
B 249.677†	43329.8	0.521	mg/L	0.0190	0.521	mg/L	0.0190	3.65%
QC value within limits for B 249.677 Recovery = 104.12%								
Ca 227.546†	4633.6	10.3	mg/L	0.35	10.3	mg/L	0.35	3.41%
QC value within limits for Ca 227.546 Recovery = 103.46%								
Cd 228.802†	2818.3	0.0514	mg/L	0.00258	0.0514	mg/L	0.00258	5.02%
QC value within limits for Cd 228.802 Recovery = 102.72%								
Co 228.616†	7657.8	0.201	mg/L	0.0014	0.201	mg/L	0.0014	0.70%
QC value within limits for Co 228.616 Recovery = 100.62%								
Cr 267.716†	54440.4	0.513	mg/L	0.0025	0.513	mg/L	0.0025	0.48%
QC value within limits for Cr 267.716 Recovery = 102.52%								
Cu 327.393†	135993.3	0.502	mg/L	0.0156	0.502	mg/L	0.0156	3.11%
QC value within limits for Cu 327.393 Recovery = 100.44%								
Fe 239.562†	65985.0	4.14	mg/L	0.038	4.14	mg/L	0.038	0.91%
QC value within limits for Fe 239.562 Recovery = 103.53%								
Mg 279.077†	37042.5	10.3	mg/L	0.07	10.3	mg/L	0.07	0.68%
QC value within limits for Mg 279.077 Recovery = 103.21%								
Mn 257.610†	421921.1	0.508	mg/L	0.0033	0.508	mg/L	0.0033	0.64%

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QC value within limits for Mn 257.610 Recovery = 101.56%
Mo 202.031† 36768.8 1.02 mg/L 0.002 1.02 mg/L 0.002 0.23%
QC value within limits for Mo 202.031 Recovery = 101.56%
Ni 231.604† 35025.7 0.526 mg/L 0.0039 0.526 mg/L 0.0039 0.74%
QC value within limits for Ni 231.604 Recovery = 105.17%
Pb 220.353† 5493.0 0.507 mg/L 0.0021 0.507 mg/L 0.0021 0.41%
QC value within limits for Pb 220.353 Recovery = 101.49%
Sb 206.836† 5045.1 1.24 mg/L 0.044 1.24 mg/L 0.044 3.52%
QC value within limits for Sb 206.836 Recovery = 103.30%
Se 196.026† 717.8 0.415 mg/L 0.0177 0.415 mg/L 0.0177 4.26%
QC value within limits for Se 196.026 Recovery = 103.86%
Si 251.611† 214484.0 5.20 mg/L 0.134 5.20 mg/L 0.134 2.58%
QC value within limits for Si 251.611 Recovery = 104.03%
Sn 189.927† 10156.7 1.00 mg/L 0.007 1.00 mg/L 0.007 0.71%
QC value within limits for Sn 189.927 Recovery = 100.25%
Ti 334.940† 997168.5 0.993 mg/L 0.0019 0.993 mg/L 0.0019 0.19%
QC value within limits for Ti 334.940 Recovery = 99.32%
Tl 190.801† 1921.2 0.519 mg/L 0.0033 0.519 mg/L 0.0033 0.64%
QC value within limits for Tl 190.801 Recovery = 103.75%
V 290.880† 190854.4 0.997 mg/L 0.0036 0.997 mg/L 0.0036 0.36%
QC value within limits for V 290.880 Recovery = 99.70%
Zn 206.200† 42138.4 1.07 mg/L 0.006 1.07 mg/L 0.006 0.58%
QC value within limits for Zn 206.200 Recovery = 106.91%
K 766.490† 172957.9 50.5 mg/L 0.28 50.5 mg/L 0.28 0.55%
QC value within limits for K 766.490 Recovery = 100.99%
Na 589.592† 1010990.8 49.6 mg/L 0.46 49.6 mg/L 0.46 0.93%
QC value within limits for Na 589.592 Recovery = 99.22%
Sr 407.771† 2793536.2 0.976 mg/L 0.0138 0.976 mg/L 0.0138 1.42%
QC value within limits for Sr 407.771 Recovery = 97.56%
Li 670.784† 161932.4 0.952 mg/L 0.0049 0.952 mg/L 0.0049 0.51%
QC value within limits for Li 670.784 Recovery = 95.20%
All analyte(s) passed QC.

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Sequence No.: 14 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 5/10/2012 5:00:15 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	151.0 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	2284317.3						3712.30	0.16%
YRADIAL	299092.0						6117.72	2.05%
Ga 417.206	1375991.9						29659.86	2.16%
GaRADIAL	90795.0						794.06	0.87%
Ag 328.068†	-45.3	-0.00046	mg/L	0.000210	-0.00046	mg/L	0.000210	45.89%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-6.9	0.00772	mg/L	0.001438	0.00772	mg/L	0.001438	18.63%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	34.9	0.0138	mg/L	0.02105	0.0138	mg/L	0.02105	152.29%
QC value greater than the upper limit for As 188.979 Recovery = Not calculated								
Ba 233.527†	-35.2	-0.00045	mg/L	0.000099	-0.00045	mg/L	0.000099	22.14%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-87.7	-0.00003	mg/L	0.000012	-0.00003	mg/L	0.000012	36.44%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	618.2	0.00869	mg/L	0.000480	0.00869	mg/L	0.000480	5.52%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	-0.0	0.0517	mg/L	0.02057	0.0517	mg/L	0.02057	39.79%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	0.9	-0.00006	mg/L	0.000122	-0.00006	mg/L	0.000122	194.94%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-2.7	-0.00012	mg/L	0.000030	-0.00012	mg/L	0.000030	25.05%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	13.0	-0.00015	mg/L	0.000084	-0.00015	mg/L	0.000084	55.21%

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QC value within limits for Cr 267.716 Recovery = Not calculated
Cu 327.393† -88.7 -0.00058 mg/L 0.000226 -0.00058 mg/L 0.000226 39.34%
QC value within limits for Cu 327.393 Recovery = Not calculated
Fe 239.562† -0.6 0.0121 mg/L 0.00028 0.0121 mg/L 0.00028 2.36%
QC value within limits for Fe 239.562 Recovery = Not calculated
Mg 279.077† -0.2 0.0260 mg/L 0.00280 0.0260 mg/L 0.00280 10.79%
QC value within limits for Mg 279.077 Recovery = Not calculated
Mn 257.610† -40.0 -0.00138 mg/L 0.000004 -0.00138 mg/L 0.000004 0.26%
QC value within limits for Mn 257.610 Recovery = Not calculated
Mo 202.031† 7.9 0.00093 mg/L 0.000334 0.00093 mg/L 0.000334 35.99%
QC value within limits for Mo 202.031 Recovery = Not calculated
Ni 231.604† -12.2 -0.00088 mg/L 0.000117 -0.00088 mg/L 0.000117 13.38%
QC value within limits for Ni 231.604 Recovery = Not calculated
Pb 220.353† 3.1 -0.00014 mg/L 0.000242 -0.00014 mg/L 0.000242 167.70%
QC value within limits for Pb 220.353 Recovery = Not calculated
Sb 206.836† -1.4 0.00073 mg/L 0.001236 0.00073 mg/L 0.001236 168.43%
QC value within limits for Sb 206.836 Recovery = Not calculated
Se 196.026† -3.7 0.00207 mg/L 0.003601 0.00207 mg/L 0.003601 173.92%
QC value within limits for Se 196.026 Recovery = Not calculated
Si 251.611† 21.3 -0.00716 mg/L 0.000505 -0.00716 mg/L 0.000505 7.06%
QC value within limits for Si 251.611 Recovery = Not calculated
Sn 189.927† -30.0 -0.00269 mg/L 0.000449 -0.00269 mg/L 0.000449 16.73%
QC value within limits for Sn 189.927 Recovery = Not calculated
Ti 334.940† 22.5 0.00217 mg/L 0.000136 0.00217 mg/L 0.000136 6.27%
QC value within limits for Ti 334.940 Recovery = Not calculated
Tl 190.801† -17.6 -0.00490 mg/L 0.002304 -0.00490 mg/L 0.002304 47.01%
QC value within limits for Tl 190.801 Recovery = Not calculated
V 290.880† -171.3 -0.00132 mg/L 0.001875 -0.00132 mg/L 0.001875 141.72%
QC value within limits for V 290.880 Recovery = Not calculated
Zn 206.200† -110.3 -0.00241 mg/L 0.000173 -0.00241 mg/L 0.000173 7.19%
QC value within limits for Zn 206.200 Recovery = Not calculated
K 766.490† -37.3 -0.0486 mg/L 0.02042 -0.0486 mg/L 0.02042 41.99%
QC value within limits for K 766.490 Recovery = Not calculated
Na 589.592† -359.6 -0.0333 mg/L 0.01148 -0.0333 mg/L 0.01148 34.48%
QC value within limits for Na 589.592 Recovery = Not calculated
Sr 407.771† -321.1 0.00280 mg/L 0.000021 0.00280 mg/L 0.000021 0.74%
QC value within limits for Sr 407.771 Recovery = Not calculated
Li 670.784† -53.0 -0.00301 mg/L 0.000246 -0.00301 mg/L 0.000246 8.17%
QC value within limits for Li 670.784 Recovery = Not calculated
QC Failed. Continue with analysis.

Sequence No.: 15 **Autosampler Location: 57**
Sample ID: L1205012520 **Date Collected: 5/10/2012 5:07:08 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205012520

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205012520

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2302788.6						33944.04	1.47%
YRADIAL	306879.5						3310.27	1.08%
Ga 417.206	1439115.4						7729.11	0.54%
GaRADIAL	94900.4						1404.02	1.48%
Ag 328.068†	-70.8	-0.00054	mg/L	0.000145	-0.00054	mg/L	0.000145	26.89%
Al 396.153†	17.6	0.0108	mg/L	0.00129	0.0108	mg/L	0.00129	11.93%
As 188.979†	-3.2	-0.00007	mg/L	0.001921	-0.00007	mg/L	0.001921	>999.9%
Ba 233.527†	113.4	0.00054	mg/L	0.000138	0.00054	mg/L	0.000138	25.76%
Be 234.861†	25.3	0.00006	mg/L	0.000010	0.00006	mg/L	0.000010	17.68%
B 249.677†	626.6	0.00879	mg/L	0.000189	0.00879	mg/L	0.000189	2.15%
Ca 227.546†	14.5	0.0828	mg/L	0.01017	0.0828	mg/L	0.01017	12.28%
Cd 228.802†	2.8	0.00004	mg/L	0.000095	0.00004	mg/L	0.000095	216.68%
Co 228.616†	-1.0	-0.00008	mg/L	0.000313	-0.00008	mg/L	0.000313	409.42%
Cr 267.716†	35.4	0.00006	mg/L	0.000168	0.00006	mg/L	0.000168	285.20%
Cu 327.393†	115.6	0.00018	mg/L	0.000344	0.00018	mg/L	0.000344	193.66%

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Fe 239.562†	52.0	0.0154	mg/L	0.00062	0.0154	mg/L	0.00062 4.07%
Mg 279.077†	0.2	0.0261	mg/L	0.00378	0.0261	mg/L	0.00378 14.48%
Mn 257.610†	259.2	-0.00102	mg/L	0.000035	-0.00102	mg/L	0.000035 3.40%
Mo 202.031†	5.5	0.00086	mg/L	0.000405	0.00086	mg/L	0.000405 47.12%
Ni 231.604†	-1.8	-0.00072	mg/L	0.000124	-0.00072	mg/L	0.000124 17.23%
Pb 220.353†	11.7	0.00065	mg/L	0.001434	0.00065	mg/L	0.001434 221.62%
Sb 206.836†	-1.6	0.00066	mg/L	0.000352	0.00066	mg/L	0.000352 53.62%
Se 196.026†	-4.1	0.00184	mg/L	0.003407	0.00184	mg/L	0.003407 185.31%
Si 251.611†	8740.0	0.205	mg/L	0.0014	0.205	mg/L	0.0014 0.69%
Sn 189.927†	-48.1	-0.00447	mg/L	0.000527	-0.00447	mg/L	0.000527 11.79%
Ti 334.940†	239.6	0.00239	mg/L	0.000020	0.00239	mg/L	0.000020 0.84%
Tl 190.801†	-10.0	-0.00292	mg/L	0.000684	-0.00292	mg/L	0.000684 23.43%
V 290.880†	-212.5	-0.00154	mg/L	0.001287	-0.00154	mg/L	0.001287 83.77%
Zn 206.200†	-35.1	-0.00051	mg/L	0.000208	-0.00051	mg/L	0.000208 40.58%
K 766.490†	22.1	-0.0322	mg/L	0.01936	-0.0322	mg/L	0.01936 60.14%
Na 589.592†	19789.8	0.957	mg/L	0.0151	0.957	mg/L	0.0151 1.58%
Sr 407.771†	624.2	0.00313	mg/L	0.000034	0.00313	mg/L	0.000034 1.08%
Li 670.784†	-4.9	-0.00273	mg/L	0.000384	-0.00273	mg/L	0.000384 14.09%

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Sequence No.: 16 **Autosampler Location: 58**
Sample ID: L1205012523 **Date Collected: 5/10/2012 5:14:05 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205012523

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205012523

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2312507.3						12071.97	0.52%
YRADIAL	306569.9						1630.81	0.53%
Ga 417.206	1470080.0						29515.64	2.01%
GaRADIAL	94726.9						2543.72	2.69%
Ag 328.068†	-114.3	-0.00068	mg/L	0.000331	-0.00068	mg/L	0.000331	48.52%
Al 396.153†	8.2	0.00964	mg/L	0.002421	0.00964	mg/L	0.002421	25.12%
As 188.979†	-3.8	-0.00030	mg/L	0.000314	-0.00030	mg/L	0.000314	105.60%
Ba 233.527†	108.5	0.00050	mg/L	0.000090	0.00050	mg/L	0.000090	17.96%
Be 234.861†	4.8	0.00004	mg/L	0.000017	0.00004	mg/L	0.000017	40.72%
B 249.677†	480.2	0.00702	mg/L	0.000286	0.00702	mg/L	0.000286	4.08%
Ca 227.546†	14.8	0.0832	mg/L	0.02079	0.0832	mg/L	0.02079	24.97%
Cd 228.802†	6.1	0.00011	mg/L	0.000041	0.00011	mg/L	0.000041	38.63%
Co 228.616†	-4.9	-0.00018	mg/L	0.000055	-0.00018	mg/L	0.000055	30.86%
Cr 267.716†	25.3	-0.00004	mg/L	0.000092	-0.00004	mg/L	0.000092	251.80%
Cu 327.393†	69.1	0.00001	mg/L	0.000295	0.00001	mg/L	0.000295	>999.9%
Fe 239.562†	54.3	0.0155	mg/L	0.00034	0.0155	mg/L	0.00034	2.17%
Mg 279.077†	-8.3	0.0237	mg/L	0.00053	0.0237	mg/L	0.00053	2.24%
Mn 257.610†	213.0	-0.00107	mg/L	0.000032	-0.00107	mg/L	0.000032	3.01%
Mo 202.031†	9.2	0.00096	mg/L	0.000214	0.00096	mg/L	0.000214	22.20%
Ni 231.604†	-18.6	-0.00097	mg/L	0.000182	-0.00097	mg/L	0.000182	18.74%
Pb 220.353†	6.0	0.00012	mg/L	0.000621	0.00012	mg/L	0.000621	526.28%
Sb 206.836†	-3.5	0.00020	mg/L	0.001192	0.00020	mg/L	0.001192	602.51%
Se 196.026†	-4.7	0.00146	mg/L	0.004211	0.00146	mg/L	0.004211	289.09%
Si 251.611†	34723.4	0.837	mg/L	0.0262	0.837	mg/L	0.0262	3.13%
Sn 189.927†	-48.4	-0.00450	mg/L	0.000429	-0.00450	mg/L	0.000429	9.53%
Ti 334.940†	147.2	0.00230	mg/L	0.000191	0.00230	mg/L	0.000191	8.33%
Tl 190.801†	-16.8	-0.00471	mg/L	0.000748	-0.00471	mg/L	0.000748	15.88%
V 290.880†	-79.1	-0.00084	mg/L	0.001509	-0.00084	mg/L	0.001509	180.04%
Zn 206.200†	-47.7	-0.00083	mg/L	0.000400	-0.00083	mg/L	0.000400	48.10%
K 766.490†	-72.5	-0.0602	mg/L	0.01035	-0.0602	mg/L	0.01035	17.18%
Na 589.592†	24618.0	1.19	mg/L	0.025	1.19	mg/L	0.025	2.06%
Sr 407.771†	492.4	0.00308	mg/L	0.000027	0.00308	mg/L	0.000027	0.86%
Li 670.784†	-40.7	-0.00294	mg/L	0.000166	-0.00294	mg/L	0.000166	5.65%

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Sequence No.: 17 **Autosampler Location: 59**
Sample ID: L1205023001 **Date Collected: 5/10/2012 5:21:01 PM**

Approved: May 11, 2012

Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205023001

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205023001

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	1851158.2						7875.09	0.43%
YRADIAL	277865.8						277.39	0.10%
Ga 417.206	1261438.3						25637.67	2.03%
GaRADIAL	86452.6						166.81	0.19%
Ag 328.068†	-2223.2	0.00286	mg/L	0.000706	0.00286	mg/L	0.000706	24.65%
Al 396.153†	161940.0	20.5	mg/L	0.24	20.5	mg/L	0.24	1.18%
As 188.979†	28.1	0.0135	mg/L	0.00154	0.0135	mg/L	0.00154	11.35%
Ba 233.527†	483506.1	3.19	mg/L	0.027	3.19	mg/L	0.027	0.86%
Be 234.861†	7894.6	0.00130	mg/L	0.000146	0.00130	mg/L	0.000146	11.27%
B 249.677†	13882.8	0.158	mg/L	0.0038	0.158	mg/L	0.0038	2.38%
Ca 227.546†	112460.2	239	mg/L	7.1	239	mg/L	7.1	2.97%
Cd 228.802†	274.8	0.00510	mg/L	0.000301	0.00510	mg/L	0.000301	5.89%
Co 228.616†	683.5	0.0158	mg/L	0.00009	0.0158	mg/L	0.00009	0.58%
Cr 267.716†	3269.8	0.0310	mg/L	0.00040	0.0310	mg/L	0.00040	1.30%
Cu 327.393†	86401.8	0.320	mg/L	0.0076	0.320	mg/L	0.0076	2.37%
Fe 239.562†	385528.4	24.1	mg/L	0.23	24.1	mg/L	0.23	0.97%
Mg 279.077†	44564.4	12.4	mg/L	0.13	12.4	mg/L	0.13	1.06%
Mn 257.610†	1449940.8	1.75	mg/L	0.015	1.75	mg/L	0.015	0.89%
Mo 202.031†	784.9	0.0239	mg/L	0.00035	0.0239	mg/L	0.00035	1.47%
Ni 231.604†	2359.5	0.0348	mg/L	0.00072	0.0348	mg/L	0.00072	2.06%
Pb 220.353†	2445.3	0.227	mg/L	0.0012	0.227	mg/L	0.0012	0.55%
Sb 206.836†	3.7	0.00271	mg/L	0.002086	0.00271	mg/L	0.002086	76.98%
Se 196.026†	1.1	0.0113	mg/L	0.00420	0.0113	mg/L	0.00420	37.22%
Si 251.611†	1545826.5	37.6	mg/L	0.53	37.6	mg/L	0.53	1.40%
Sn 189.927†	-357.5	-0.0350	mg/L	0.00235	-0.0350	mg/L	0.00235	6.71%
Ti 334.940†	216082.7	0.252	mg/L	0.0053	0.252	mg/L	0.0053	2.09%
Tl 190.801†	-82.9	-0.0205	mg/L	0.00328	-0.0205	mg/L	0.00328	15.96%
V 290.880†	12947.4	0.0631	mg/L	0.00324	0.0631	mg/L	0.00324	5.15%
Zn 206.200†	19171.6	0.484	mg/L	0.0062	0.484	mg/L	0.0062	1.29%
K 766.490†	46220.8	13.5	mg/L	0.17	13.5	mg/L	0.17	1.22%
Na 589.592†	Saturated3							
Sr 407.771†	2143644.0	0.744	mg/L	0.0123	0.744	mg/L	0.0123	1.65%
Li 670.784†	4097.2	0.0215	mg/L	0.00018	0.0215	mg/L	0.00018	0.85%

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Sequence No.: 18 **Autosampler Location: 60**
Sample ID: L1205023101 WG397435-02 **Date Collected: 5/10/2012 5:27:00 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205023101 WG397435-02

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205023101 WG397435-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2246307.9						33675.35	1.50%
YRADIAL	296975.6						3317.74	1.12%
Ga 417.206	1429813.6						29809.19	2.08%
GaRADIAL	92141.3						1638.17	1.78%
Ag 328.068†	279.1	0.00082	mg/L	0.000468	0.00082	mg/L	0.000468	57.22%
Al 396.153†	110.8	0.0226	mg/L	0.00349	0.0226	mg/L	0.00349	15.47%
As 188.979†	-7.5	-0.00161	mg/L	0.002190	-0.00161	mg/L	0.002190	136.11%
Ba 233.527†	3386.8	0.0221	mg/L	0.00019	0.0221	mg/L	0.00019	0.87%
Be 234.861†	287.6	0.00016	mg/L	0.000110	0.00016	mg/L	0.000110	71.03%

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B 249.677†	1759.2	0.0222	mg/L	0.00053	0.0222	mg/L	0.00053 2.39%
Ca 227.546†	24961.4	52.9	mg/L	1.69	52.9	mg/L	1.69 3.19%
Cd 228.802†	31.0	0.00058	mg/L	0.000209	0.00058	mg/L	0.000209 36.12%
Co 228.616†	14.8	0.00034	mg/L	0.000100	0.00034	mg/L	0.000100 29.48%
Cr 267.716†	110.0	0.00078	mg/L	0.000141	0.00078	mg/L	0.000141 18.02%
Cu 327.393†	-78.1	-0.00049	mg/L	0.000278	-0.00049	mg/L	0.000278 56.36%
Fe 239.562†	9340.1	0.596	mg/L	0.0044	0.596	mg/L	0.0044 0.74%
Mg 279.077†	37078.9	10.3	mg/L	0.13	10.3	mg/L	0.13 1.25%
Mn 257.610†	90433.3	0.108	mg/L	0.0018	0.108	mg/L	0.0018 1.71%
Mo 202.031†	63.4	0.00251	mg/L	0.000170	0.00251	mg/L	0.000170 6.75%
Ni 231.604†	56.8	0.00016	mg/L	0.000650	0.00016	mg/L	0.000650 399.00%
Pb 220.353†	17.3	0.00148	mg/L	0.000300	0.00148	mg/L	0.000300 20.30%
Sb 206.836†	-8.4	-0.00099	mg/L	0.000604	-0.00099	mg/L	0.000604 61.17%
Se 196.026†	-7.4	0.00010	mg/L	0.002052	0.00010	mg/L	0.002052 >999.9%
Si 251.611†	146901.9	3.57	mg/L	0.062	3.57	mg/L	0.062 1.74%
Sn 189.927†	-268.9	-0.0263	mg/L	0.00093	-0.0263	mg/L	0.00093 3.52%
Ti 334.940†	-8239.8	0.00189	mg/L	0.000998	0.00189	mg/L	0.000998 52.73%
Tl 190.801†	-28.6	-0.00799	mg/L	0.002599	-0.00799	mg/L	0.002599 32.53%
V 290.880†	1148.1	0.00522	mg/L	0.000539	0.00522	mg/L	0.000539 10.32%
Zn 206.200†	-9.6	0.00013	mg/L	0.000058	0.00013	mg/L	0.000058 45.64%
K 766.490†	9736.8	2.81	mg/L	0.080	2.81	mg/L	0.080 2.84%
Na 589.592†	175668.2	8.62	mg/L	0.024	8.62	mg/L	0.024 0.28%
Sr 407.771†	581105.5	0.204	mg/L	0.0009	0.204	mg/L	0.0009 0.42%
Li 670.784†	99.6	-0.00211	mg/L	0.000271	-0.00211	mg/L	0.000271 12.86%

Sequence No.: 19 **Autosampler Location: 61**
Sample ID: L1205023102 WG397435-08 **Date Collected: 5/10/2012 5:32:57 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205023102 WG397435-08

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205023102 WG397435-08

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2187731.6						9969.08	0.46%
YRADIAL	296043.9						2534.14	0.86%
Ga 417.206	1364051.1						42418.00	3.11%
GaRADIAL	90890.8						792.81	0.87%
Ag 328.068†	63244.0	0.208	mg/L	0.0063	0.208	mg/L	0.0063	3.01%
Al 396.153†	40332.2	5.07	mg/L	0.013	5.07	mg/L	0.013	0.25%
As 188.979†	557.2	0.202	mg/L	0.0081	0.202	mg/L	0.0081	3.99%
Ba 233.527†	83130.4	0.549	mg/L	0.0036	0.549	mg/L	0.0036	0.66%
Be 234.861†	32061.2	0.0258	mg/L	0.00074	0.0258	mg/L	0.00074	2.86%
B 249.677†	86116.1	1.04	mg/L	0.033	1.04	mg/L	0.033	3.20%
Ca 227.546†	29540.5	62.9	mg/L	2.47	62.9	mg/L	2.47	3.92%
Cd 228.802†	1373.4	0.0250	mg/L	0.00138	0.0250	mg/L	0.00138	5.52%
Co 228.616†	3893.8	0.102	mg/L	0.0005	0.102	mg/L	0.0005	0.51%
Cr 267.716†	27931.7	0.263	mg/L	0.0012	0.263	mg/L	0.0012	0.46%
Cu 327.393†	66974.2	0.247	mg/L	0.0076	0.247	mg/L	0.0076	3.06%
Fe 239.562†	47648.1	2.99	mg/L	0.028	2.99	mg/L	0.028	0.94%
Mg 279.077†	56293.9	15.7	mg/L	0.13	15.7	mg/L	0.13	0.85%
Mn 257.610†	343198.0	0.413	mg/L	0.0035	0.413	mg/L	0.0035	0.86%
Mo 202.031†	18924.6	0.523	mg/L	0.0071	0.523	mg/L	0.0071	1.36%
Ni 231.604†	17331.2	0.260	mg/L	0.0019	0.260	mg/L	0.0019	0.73%
Pb 220.353†	2806.3	0.259	mg/L	0.0031	0.259	mg/L	0.0031	1.19%
Sb 206.836†	2489.7	0.612	mg/L	0.0220	0.612	mg/L	0.0220	3.59%
Se 196.026†	355.7	0.208	mg/L	0.0105	0.208	mg/L	0.0105	5.04%
Si 251.611†	272881.0	6.63	mg/L	0.172	6.63	mg/L	0.172	2.60%
Sn 189.927†	5580.3	0.551	mg/L	0.0035	0.551	mg/L	0.0035	0.63%
Ti 334.940†	495909.2	0.504	mg/L	0.0013	0.504	mg/L	0.0013	0.26%
Tl 190.801†	945.9	0.255	mg/L	0.0034	0.255	mg/L	0.0034	1.35%
V 290.880†	100102.3	0.522	mg/L	0.0038	0.522	mg/L	0.0038	0.72%
Zn 206.200†	21107.0	0.536	mg/L	0.0037	0.536	mg/L	0.0037	0.69%
K 766.490†	98096.6	28.7	mg/L	0.18	28.7	mg/L	0.18	0.63%
Na 589.592†	710598.8	34.9	mg/L	0.62	34.9	mg/L	0.62	1.79%

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Sr 407.771†	2011130.5	0.702	mg/L	0.0126	0.702	mg/L	0.0126	1.79%
Li 670.784†	84621.7	0.496	mg/L	0.0032	0.496	mg/L	0.0032	0.64%

Sequence No.: 20 **Autosampler Location: 62**
Sample ID: L1205023103SD WG397435-09 **Date Collected: 5/10/2012 5:38:56 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205023103SD WG397435-09

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205023103SD WG397435-09

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2191642.6						14389.94	0.66%
YRADIAL	289265.5						4581.13	1.58%
Ga 417.206	1365624.3						9207.96	0.67%
GaRADIAL	89454.0						327.38	0.37%
Ag 328.068†	62384.0	0.205	mg/L	0.0015	0.205	mg/L	0.0015	0.73%
Al 396.153†	40452.1	5.09	mg/L	0.013	5.09	mg/L	0.013	0.25%
As 188.979†	537.6	0.195	mg/L	0.0014	0.195	mg/L	0.0014	0.73%
Ba 233.527†	82361.0	0.544	mg/L	0.0084	0.544	mg/L	0.0084	1.54%
Be 234.861†	31805.9	0.0256	mg/L	0.00006	0.0256	mg/L	0.00006	0.25%
B 249.677†	85697.0	1.03	mg/L	0.006	1.03	mg/L	0.006	0.58%
Ca 227.546†	28889.3	61.5	mg/L	0.67	61.5	mg/L	0.67	1.09%
Cd 228.802†	1359.1	0.0248	mg/L	0.00083	0.0248	mg/L	0.00083	3.33%
Co 228.616†	3847.9	0.101	mg/L	0.0010	0.101	mg/L	0.0010	1.01%
Cr 267.716†	27786.9	0.262	mg/L	0.0030	0.262	mg/L	0.0030	1.15%
Cu 327.393†	66187.6	0.244	mg/L	0.0027	0.244	mg/L	0.0027	1.11%
Fe 239.562†	47632.1	2.99	mg/L	0.023	2.99	mg/L	0.023	0.77%
Mg 279.077†	56400.0	15.7	mg/L	0.18	15.7	mg/L	0.18	1.16%
Mn 257.610†	338835.9	0.407	mg/L	0.0068	0.407	mg/L	0.0068	1.68%
Mo 202.031†	18715.1	0.517	mg/L	0.0060	0.517	mg/L	0.0060	1.15%
Ni 231.604†	17086.8	0.256	mg/L	0.0032	0.256	mg/L	0.0032	1.24%
Pb 220.353†	2778.1	0.257	mg/L	0.0016	0.257	mg/L	0.0016	0.63%
Sb 206.836†	2458.8	0.605	mg/L	0.0061	0.605	mg/L	0.0061	1.01%
Se 196.026†	347.6	0.204	mg/L	0.0021	0.204	mg/L	0.0021	1.05%
Si 251.611†	266655.4	6.48	mg/L	0.020	6.48	mg/L	0.020	0.31%
Sn 189.927†	5551.8	0.548	mg/L	0.0033	0.548	mg/L	0.0033	0.60%
Ti 334.940†	496589.6	0.504	mg/L	0.0019	0.504	mg/L	0.0019	0.38%
Tl 190.801†	949.1	0.256	mg/L	0.0029	0.256	mg/L	0.0029	1.13%
V 290.880†	99226.5	0.518	mg/L	0.0049	0.518	mg/L	0.0049	0.94%
Zn 206.200†	20999.9	0.533	mg/L	0.0095	0.533	mg/L	0.0095	1.79%
K 766.490†	98634.0	28.8	mg/L	0.17	28.8	mg/L	0.17	0.59%
Na 589.592†	716786.1	35.2	mg/L	0.16	35.2	mg/L	0.16	0.46%
Sr 407.771†	2042087.6	0.713	mg/L	0.0143	0.713	mg/L	0.0143	2.01%
Li 670.784†	84660.0	0.496	mg/L	0.0017	0.496	mg/L	0.0017	0.34%

Sequence No.: 21 **Autosampler Location: 63**
Sample ID: L1205023201 WG397435-03 **Date Collected: 5/10/2012 5:44:54 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205023201 WG397435-03

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205023201 WG397435-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2263305.0						22378.77	0.99%
YRADIAL	294417.9						2856.68	0.97%
Ga 417.206	1427362.3						40245.14	2.82%

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GaRADIAL	90433.6					926.69	1.02%
Ag 328.068†	198.9	0.00092	mg/L	0.000476	0.00092 mg/L	0.000476	51.61%
Al 396.153†	-37.4	0.00396	mg/L	0.006210	0.00396 mg/L	0.006210	156.89%
As 188.979†	-6.5	-0.00113	mg/L	0.003597	-0.00113 mg/L	0.003597	317.46%
Ba 233.527†	1264.0	0.00809	mg/L	0.000217	0.00809 mg/L	0.000217	2.69%
Be 234.861†	595.0	0.00023	mg/L	0.000050	0.00023 mg/L	0.000050	22.18%
B 249.677†	3422.6	0.0419	mg/L	0.00182	0.0419 mg/L	0.00182	4.34%
Ca 227.546†	27233.0	57.7	mg/L	2.33	57.7 mg/L	2.33	4.04%
Cd 228.802†	27.9	0.00052	mg/L	0.000320	0.00052 mg/L	0.000320	61.74%
Co 228.616†	18.0	0.00041	mg/L	0.000346	0.00041 mg/L	0.000346	84.35%
Cr 267.716†	169.1	0.00137	mg/L	0.000169	0.00137 mg/L	0.000169	12.32%
Cu 327.393†	337.8	0.00111	mg/L	0.000246	0.00111 mg/L	0.000246	22.16%
Fe 239.562†	23082.5	1.46	mg/L	0.016	1.46 mg/L	0.016	1.11%
Mg 279.077†	71192.7	19.8	mg/L	0.26	19.8 mg/L	0.26	1.34%
Mn 257.610†	196182.5	0.235	mg/L	0.0022	0.235 mg/L	0.0022	0.93%
Mo 202.031†	48.8	0.00218	mg/L	0.000144	0.00218 mg/L	0.000144	6.62%
Ni 231.604†	89.4	0.00065	mg/L	0.000476	0.00065 mg/L	0.000476	72.91%
Pb 220.353†	3.9	0.00012	mg/L	0.000131	0.00012 mg/L	0.000131	107.52%
Sb 206.836†	-9.2	-0.00116	mg/L	0.001511	-0.00116 mg/L	0.001511	130.78%
Se 196.026†	-5.9	0.00117	mg/L	0.002572	0.00117 mg/L	0.002572	219.46%
Si 251.611†	259905.0	6.32	mg/L	0.185	6.32 mg/L	0.185	2.92%
Sn 189.927†	-271.8	-0.0265	mg/L	0.00056	-0.0265 mg/L	0.00056	2.10%
Ti 334.940†	-9672.9	0.00119	mg/L	0.000938	0.00119 mg/L	0.000938	78.66%
Tl 190.801†	-33.1	-0.00933	mg/L	0.002958	-0.00933 mg/L	0.002958	31.71%
V 290.880†	1148.3	0.00484	mg/L	0.001603	0.00484 mg/L	0.001603	33.10%
Zn 206.200†	176.9	0.00482	mg/L	0.000146	0.00482 mg/L	0.000146	3.02%
K 766.490†	4871.8	1.38	mg/L	0.025	1.38 mg/L	0.025	1.81%
Na 589.592†	306791.0	15.1	mg/L	0.04	15.1 mg/L	0.04	0.28%
Sr 407.771†	556166.8	0.195	mg/L	0.0013	0.195 mg/L	0.0013	0.66%
Li 670.784†	164.5	-0.00173	mg/L	0.000490	-0.00173 mg/L	0.000490	28.36%

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Sequence No.: 22 **Autosampler Location: 64**
Sample ID: L1205023202S WG397435-10 **Date Collected: 5/10/2012 5:50:52 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205023202S WG397435-10

Analyte	Back Pressure	Flow
All	150.0 kPa	0.50 L/min

Mean Data: L1205023202S WG397435-10

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2203654.4						15299.78	0.69%
YRADIAL	292484.3						795.02	0.27%
Ga 417.206	1388295.9						25145.76	1.81%
GaRADIAL	89630.2						576.82	0.64%
Ag 328.068†	61166.4	0.202	mg/L	0.0042	0.202	mg/L	0.0042	2.08%
Al 396.153†	39189.4	4.93	mg/L	0.014	4.93	mg/L	0.014	0.29%
As 188.979†	536.0	0.194	mg/L	0.0056	0.194	mg/L	0.0056	2.87%
Ba 233.527†	78501.8	0.518	mg/L	0.0052	0.518	mg/L	0.0052	1.01%
Be 234.861†	31343.4	0.0251	mg/L	0.00048	0.0251	mg/L	0.00048	1.92%
B 249.677†	85282.2	1.03	mg/L	0.023	1.03	mg/L	0.023	2.28%
Ca 227.546†	30436.5	64.8	mg/L	1.95	64.8	mg/L	1.95	3.01%
Cd 228.802†	1334.4	0.0243	mg/L	0.00088	0.0243	mg/L	0.00088	3.62%
Co 228.616†	3780.1	0.0993	mg/L	0.00047	0.0993	mg/L	0.00047	0.47%
Cr 267.716†	27371.0	0.258	mg/L	0.0019	0.258	mg/L	0.0019	0.73%
Cu 327.393†	64648.5	0.239	mg/L	0.0054	0.239	mg/L	0.0054	2.28%
Fe 239.562†	60639.0	3.81	mg/L	0.039	3.81	mg/L	0.039	1.03%
Mg 279.077†	88485.9	24.6	mg/L	0.17	24.6	mg/L	0.17	0.67%
Mn 257.610†	430519.3	0.518	mg/L	0.0067	0.518	mg/L	0.0067	1.30%
Mo 202.031†	18433.3	0.510	mg/L	0.0064	0.510	mg/L	0.0064	1.25%
Ni 231.604†	16749.9	0.251	mg/L	0.0054	0.251	mg/L	0.0054	2.13%
Pb 220.353†	2746.0	0.254	mg/L	0.0031	0.254	mg/L	0.0031	1.21%
Sb 206.836†	2416.7	0.594	mg/L	0.0152	0.594	mg/L	0.0152	2.55%
Se 196.026†	345.1	0.202	mg/L	0.0043	0.202	mg/L	0.0043	2.10%
Si 251.611†	374847.1	9.11	mg/L	0.152	9.11	mg/L	0.152	1.67%
Sn 189.927†	5411.8	0.534	mg/L	0.0033	0.534	mg/L	0.0033	0.61%

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Ti 334.940†	484781.4	0.493	mg/L	0.0003	0.493	mg/L	0.0003	0.05%
Tl 190.801†	927.1	0.250	mg/L	0.0014	0.250	mg/L	0.0014	0.54%
V 290.880†	97728.4	0.510	mg/L	0.0024	0.510	mg/L	0.0024	0.48%
Zn 206.200†	20677.4	0.525	mg/L	0.0060	0.525	mg/L	0.0060	1.14%
K 766.490†	92260.4	27.0	mg/L	0.19	27.0	mg/L	0.19	0.71%
Na 589.592†	833261.2	40.9	mg/L	1.09	40.9	mg/L	1.09	2.67%
Sr 407.771†	1965740.0	0.686	mg/L	0.0180	0.686	mg/L	0.0180	2.62%
Li 670.784†	82962.2	0.486	mg/L	0.0025	0.486	mg/L	0.0025	0.51%

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Sequence No.: 23 **Autosampler Location: 65**
Sample ID: L1205023203SD WG397435-11 **Date Collected: 5/10/2012 5:56:51 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205023203SD WG397435-11

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205023203SD WG397435-11

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2222858.9						29566.49	1.33%
YRADIAL	293593.9						4045.45	1.38%
Ga 417.206	1389739.0						45119.26	3.25%
GaRADIAL	90064.8						1277.64	1.42%
Ag 328.068†	62240.8	0.205	mg/L	0.0080	0.205	mg/L	0.0080	3.90%
Al 396.153†	39988.3	5.03	mg/L	0.057	5.03	mg/L	0.057	1.14%
As 188.979†	544.1	0.197	mg/L	0.0077	0.197	mg/L	0.0077	3.91%
Ba 233.527†	79683.0	0.526	mg/L	0.0077	0.526	mg/L	0.0077	1.46%
Be 234.861†	31953.4	0.0256	mg/L	0.00088	0.0256	mg/L	0.00088	3.45%
B 249.677†	87106.8	1.05	mg/L	0.043	1.05	mg/L	0.043	4.11%
Ca 227.546†	31162.8	66.3	mg/L	2.21	66.3	mg/L	2.21	3.33%
Cd 228.802†	1356.8	0.0247	mg/L	0.00142	0.0247	mg/L	0.00142	5.72%
Co 228.616†	3827.8	0.101	mg/L	0.0013	0.101	mg/L	0.0013	1.25%
Cr 267.716†	27620.2	0.260	mg/L	0.0010	0.260	mg/L	0.0010	0.37%
Cu 327.393†	66195.4	0.244	mg/L	0.0080	0.244	mg/L	0.0080	3.28%
Fe 239.562†	60903.2	3.82	mg/L	0.038	3.82	mg/L	0.038	0.99%
Mg 279.077†	89973.4	25.0	mg/L	0.24	25.0	mg/L	0.24	0.95%
Mn 257.610†	436089.8	0.525	mg/L	0.0085	0.525	mg/L	0.0085	1.62%
Mo 202.031†	18649.9	0.516	mg/L	0.0044	0.516	mg/L	0.0044	0.85%
Ni 231.604†	17617.9	0.264	mg/L	0.0032	0.264	mg/L	0.0032	1.21%
Pb 220.353†	2762.4	0.255	mg/L	0.0036	0.255	mg/L	0.0036	1.40%
Sb 206.836†	2463.3	0.606	mg/L	0.0204	0.606	mg/L	0.0204	3.37%
Se 196.026†	353.0	0.207	mg/L	0.0085	0.207	mg/L	0.0085	4.09%
Si 251.611†	381772.2	9.28	mg/L	0.253	9.28	mg/L	0.253	2.73%
Sn 189.927†	5556.7	0.549	mg/L	0.0076	0.549	mg/L	0.0076	1.39%
Ti 334.940†	491732.7	0.500	mg/L	0.0019	0.500	mg/L	0.0019	0.39%
Tl 190.801†	937.9	0.253	mg/L	0.0029	0.253	mg/L	0.0029	1.16%
V 290.880†	98784.1	0.515	mg/L	0.0077	0.515	mg/L	0.0077	1.50%
Zn 206.200†	20853.6	0.529	mg/L	0.0028	0.529	mg/L	0.0028	0.53%
K 766.490†	93595.3	27.4	mg/L	0.16	27.4	mg/L	0.16	0.58%
Na 589.592†	861554.4	42.3	mg/L	1.26	42.3	mg/L	1.26	2.97%
Sr 407.771†	2028280.5	0.708	mg/L	0.0223	0.708	mg/L	0.0223	3.15%
Li 670.784†	85059.2	0.499	mg/L	0.0072	0.499	mg/L	0.0072	1.45%

==========

Sequence No.: 24 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 5/10/2012 6:02:50 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

Approved: May 11, 2012

Kym H. Rhoden

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2183110.7						29024.90	1.33%
YRADIAL	294613.2						1181.45	0.40%
Ga 417.206	1313756.4						12790.90	0.97%
GaRADIAL	88299.6						960.41	1.09%
Ag 328.068†	134132.0	0.441	mg/L	0.0089	0.441	mg/L	0.0089	2.01%
QC value greater than the upper limit for Ag 328.068 Recovery = 110.32%								
Al 396.153†	82061.4	10.3	mg/L	0.03	10.3	mg/L	0.03	0.30%
QC value within limits for Al 396.153 Recovery = 103.14%								
As 188.979†	1188.9	0.430	mg/L	0.0023	0.430	mg/L	0.0023	0.55%
QC value within limits for As 188.979 Recovery = 107.40%								
Ba 233.527†	167815.0	1.11	mg/L	0.015	1.11	mg/L	0.015	1.36%
QC value greater than the upper limit for Ba 233.527 Recovery = 110.81%								
Be 234.861†	67748.1	0.0549	mg/L	0.00103	0.0549	mg/L	0.00103	1.87%
QC value within limits for Be 234.861 Recovery = 109.89%								
B 249.677†	45580.0	0.548	mg/L	0.0129	0.548	mg/L	0.0129	2.35%
QC value within limits for B 249.677 Recovery = 109.51%								
Ca 227.546†	4877.8	10.9	mg/L	0.20	10.9	mg/L	0.20	1.81%
QC value within limits for Ca 227.546 Recovery = 108.83%								
Cd 228.802†	2963.4	0.0540	mg/L	0.00165	0.0540	mg/L	0.00165	3.05%
QC value within limits for Cd 228.802 Recovery = 108.07%								
Co 228.616†	8193.6	0.215	mg/L	0.0035	0.215	mg/L	0.0035	1.63%
QC value within limits for Co 228.616 Recovery = 107.68%								
Cr 267.716†	58698.4	0.553	mg/L	0.0041	0.553	mg/L	0.0041	0.74%
QC value greater than the upper limit for Cr 267.716 Recovery = 110.55%								
Cu 327.393†	143081.4	0.528	mg/L	0.0107	0.528	mg/L	0.0107	2.02%
QC value within limits for Cu 327.393 Recovery = 105.68%								
Fe 239.562†	69082.8	4.34	mg/L	0.010	4.34	mg/L	0.010	0.23%
QC value within limits for Fe 239.562 Recovery = 108.38%								
Mg 279.077†	38760.0	10.8	mg/L	0.06	10.8	mg/L	0.06	0.59%
QC value within limits for Mg 279.077 Recovery = 107.99%								
Mn 257.610†	461535.7	0.556	mg/L	0.0081	0.556	mg/L	0.0081	1.45%
QC value greater than the upper limit for Mn 257.610 Recovery = 111.12%								
Mo 202.031†	39195.1	1.08	mg/L	0.006	1.08	mg/L	0.006	0.56%
QC value within limits for Mo 202.031 Recovery = 108.26%								
Ni 231.604†	36506.0	0.548	mg/L	0.0058	0.548	mg/L	0.0058	1.06%
QC value within limits for Ni 231.604 Recovery = 109.62%								
Pb 220.353†	5882.9	0.543	mg/L	0.0067	0.543	mg/L	0.0067	1.24%
QC value within limits for Pb 220.353 Recovery = 108.69%								
Sb 206.836†	5293.4	1.30	mg/L	0.021	1.30	mg/L	0.021	1.58%
QC value within limits for Sb 206.836 Recovery = 108.37%								
Se 196.026†	753.7	0.436	mg/L	0.0044	0.436	mg/L	0.0044	1.02%
QC value within limits for Se 196.026 Recovery = 109.00%								
Si 251.611†	227181.0	5.51	mg/L	0.064	5.51	mg/L	0.064	1.16%
QC value greater than the upper limit for Si 251.611 Recovery = 110.20%								
Sn 189.927†	10943.6	1.08	mg/L	0.016	1.08	mg/L	0.016	1.50%
QC value within limits for Sn 189.927 Recovery = 108.02%								
Ti 334.940†	1046059.8	1.04	mg/L	0.003	1.04	mg/L	0.003	0.29%
QC value within limits for Ti 334.940 Recovery = 104.18%								
Tl 190.801†	2051.4	0.554	mg/L	0.0044	0.554	mg/L	0.0044	0.80%
QC value greater than the upper limit for Tl 190.801 Recovery = 110.75%								
V 290.880†	206655.7	1.08	mg/L	0.009	1.08	mg/L	0.009	0.82%
QC value within limits for V 290.880 Recovery = 107.96%								
Zn 206.200†	45366.0	1.15	mg/L	0.010	1.15	mg/L	0.010	0.90%
QC value greater than the upper limit for Zn 206.200 Recovery = 115.10%								
K 766.490†	181038.8	52.8	mg/L	0.41	52.8	mg/L	0.41	0.77%
QC value within limits for K 766.490 Recovery = 105.68%								
Na 589.592†	1063537.0	52.2	mg/L	0.49	52.2	mg/L	0.49	0.93%
QC value within limits for Na 589.592 Recovery = 104.37%								
Sr 407.771†	2904325.8	1.01	mg/L	0.003	1.01	mg/L	0.003	0.30%
QC value within limits for Sr 407.771 Recovery = 101.41%								
Li 670.784†	171216.4	1.01	mg/L	0.005	1.01	mg/L	0.005	0.48%
QC value within limits for Li 670.784 Recovery = 100.67%								

QC Failed. Continue with analysis.

Sequence No.: 25 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 5/10/2012 6:08:51 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**

Approved: May 11, 2012

Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	2330663.5						14376.54	0.62%
YRADIAL	302868.4						2234.22	0.74%
Ga 417.206	1396161.2						16871.74	1.21%
GaRADIAL	92161.5						2288.15	2.48%
Ag 328.068†	-104.7	-0.00066	mg/L	0.000218	-0.00066	mg/L	0.000218	33.32%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-3.4	0.00817	mg/L	0.000288	0.00817	mg/L	0.000288	3.52%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-3.6	-0.00023	mg/L	0.001764	-0.00023	mg/L	0.001764	775.00%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-14.6	-0.00031	mg/L	0.000114	-0.00031	mg/L	0.000114	37.10%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-8.7	0.00003	mg/L	0.000015	0.00003	mg/L	0.000015	46.62%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	932.0	0.0125	mg/L	0.00035	0.0125	mg/L	0.00035	2.82%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	12.9	0.0793	mg/L	0.03103	0.0793	mg/L	0.03103	39.14%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	4.7	0.00008	mg/L	0.000028	0.00008	mg/L	0.000028	34.68%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	0.5	-0.00003	mg/L	0.000069	-0.00003	mg/L	0.000069	198.07%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	26.1	-0.00003	mg/L	0.000032	-0.00003	mg/L	0.000032	107.49%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	58.9	-0.00003	mg/L	0.000270	-0.00003	mg/L	0.000270	831.10%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	5.6	0.0125	mg/L	0.00027	0.0125	mg/L	0.00027	2.19%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	-4.5	0.0248	mg/L	0.00283	0.0248	mg/L	0.00283	11.41%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-31.8	-0.00137	mg/L	0.000009	-0.00137	mg/L	0.000009	0.65%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	9.6	0.00097	mg/L	0.000111	0.00097	mg/L	0.000111	11.37%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	-7.7	-0.00081	mg/L	0.000079	-0.00081	mg/L	0.000079	9.72%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-0.1	-0.00044	mg/L	0.001317	-0.00044	mg/L	0.001317	301.42%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	3.9	0.00202	mg/L	0.001267	0.00202	mg/L	0.001267	62.62%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	1.0	0.00475	mg/L	0.003005	0.00475	mg/L	0.003005	63.24%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	63.6	-0.00613	mg/L	0.000368	-0.00613	mg/L	0.000368	6.01%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	-30.4	-0.00272	mg/L	0.000712	-0.00272	mg/L	0.000712	26.17%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	154.2	0.00230	mg/L	0.000101	0.00230	mg/L	0.000101	4.38%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-13.7	-0.00390	mg/L	0.002469	-0.00390	mg/L	0.002469	63.26%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-453.7	-0.00280	mg/L	0.001483	-0.00280	mg/L	0.001483	52.99%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-109.5	-0.00239	mg/L	0.000246	-0.00239	mg/L	0.000246	10.27%
QC value within limits for Zn 206.200 Recovery = Not calculated								
K 766.490†	-91.0	-0.0644	mg/L	0.01598	-0.0644	mg/L	0.01598	24.80%
QC value within limits for K 766.490 Recovery = Not calculated								
Na 589.592†	-83.4	-0.0197	mg/L	0.02359	-0.0197	mg/L	0.02359	119.63%
QC value within limits for Na 589.592 Recovery = Not calculated								
Sr 407.771†	-125.4	0.00287	mg/L	0.000069	0.00287	mg/L	0.000069	2.41%
QC value within limits for Sr 407.771 Recovery = Not calculated								
Li 670.784†	7.5	-0.00265	mg/L	0.000662	-0.00265	mg/L	0.000662	24.93%

Approved: May 11, 2012

QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

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Sequence No.: 26 **Autosampler Location: 71**
Sample ID: PBW 99 WG397583-02 **Date Collected: 5/10/2012 6:15:45 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW 99 WG397583-02

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: PBW 99 WG397583-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2346561.9						9098.81	0.39%
YRADIAL	311746.6						4036.24	1.29%
Ga 417.206	1434681.7						4575.90	0.32%
GaRADIAL	95788.8						1686.95	1.76%
Ag 328.068†	-50.4	-0.00048	mg/L	0.000552	-0.00048	mg/L	0.000552	115.51%
Al 396.153†	0.5	0.00866	mg/L	0.001082	0.00866	mg/L	0.001082	12.50%
As 188.979†	-3.2	-0.00009	mg/L	0.001606	-0.00009	mg/L	0.001606	>999.9%
Ba 233.527†	40.7	0.00006	mg/L	0.000091	0.00006	mg/L	0.000091	161.92%
Be 234.861†	-19.8	0.00002	mg/L	0.000013	0.00002	mg/L	0.000013	56.82%
B 249.677†	766.4	0.0105	mg/L	0.00020	0.0105	mg/L	0.00020	1.87%
Ca 227.546†	9.4	0.0717	mg/L	0.04668	0.0717	mg/L	0.04668	65.07%
Cd 228.802†	5.7	0.00010	mg/L	0.000180	0.00010	mg/L	0.000180	181.94%
Co 228.616†	1.3	-0.00001	mg/L	0.000190	-0.00001	mg/L	0.000190	>999.9%
Cr 267.716†	17.7	-0.00011	mg/L	0.000047	-0.00011	mg/L	0.000047	43.11%
Cu 327.393†	48.1	-0.00007	mg/L	0.000155	-0.00007	mg/L	0.000155	215.64%
Fe 239.562†	-16.9	0.0110	mg/L	0.00061	0.0110	mg/L	0.00061	5.48%
Mg 279.077†	-3.6	0.0250	mg/L	0.00142	0.0250	mg/L	0.00142	5.66%
Mn 257.610†	-22.6	-0.00136	mg/L	0.000018	-0.00136	mg/L	0.000018	1.34%
Mo 202.031†	10.2	0.00099	mg/L	0.000294	0.00099	mg/L	0.000294	29.73%
Ni 231.604†	-10.5	-0.00085	mg/L	0.000087	-0.00085	mg/L	0.000087	10.21%
Pb 220.353†	6.8	0.00020	mg/L	0.001127	0.00020	mg/L	0.001127	563.21%
Sb 206.836†	1.5	0.00142	mg/L	0.000397	0.00142	mg/L	0.000397	28.08%
Se 196.026†	-3.1	0.00238	mg/L	0.000950	0.00238	mg/L	0.000950	39.98%
Si 251.611†	106.8	-0.00508	mg/L	0.000597	-0.00508	mg/L	0.000597	11.77%
Sn 189.927†	-44.8	-0.00414	mg/L	0.000228	-0.00414	mg/L	0.000228	5.51%
Ti 334.940†	162.4	0.00231	mg/L	0.000080	0.00231	mg/L	0.000080	3.45%
Tl 190.801†	-13.7	-0.00388	mg/L	0.001075	-0.00388	mg/L	0.001075	27.73%
V 290.880†	-362.1	-0.00232	mg/L	0.001595	-0.00232	mg/L	0.001595	68.81%
Zn 206.200†	-65.0	-0.00127	mg/L	0.000258	-0.00127	mg/L	0.000258	20.39%
K 766.490†	-54.1	-0.0536	mg/L	0.01843	-0.0536	mg/L	0.01843	34.38%
Na 589.592†	-223.3	-0.0266	mg/L	0.00298	-0.0266	mg/L	0.00298	11.22%
Sr 407.771†	-256.1	0.00282	mg/L	0.000004	0.00282	mg/L	0.000004	0.14%
Li 670.784†	-95.4	-0.00326	mg/L	0.000203	-0.00326	mg/L	0.000203	6.22%

==========

Sequence No.: 27 **Autosampler Location: 72**
Sample ID: LCSW 99 WG397583-03 **Date Collected: 5/10/2012 6:22:39 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW 99 WG397583-03

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: LCSW 99 WG397583-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2311254.5						8170.81	0.35%
YRADIAL	308604.0						3952.15	1.28%
Ga 417.206	1414634.0						32018.58	2.26%

Approved: May 11, 2012

2.3.2 Metals ICP-MS Data

2.3.2.1 Summary Data

Login Number: L12050153
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: WG397345 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

Narrative ID: 46127
Approved By: Sheri Pfalzgraf

Certificate of Analysis

Sample #: L12050153-01 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: MW-15-050312 **Prep Method:** 3015 **Prep Date:** 05/07/2012 11:15
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 05/10/2012 09:13
Workgroup #: WG397345 **Analyst:** JYH **Run Date:** 05/10/2012 10:19
Collect Date: 05/03/2012 10:45 **Dilution:** 1 **File ID:** NI.051012.101953
Sample Tag: 02 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		U	0.00100	0.000500
Arsenic, Total	7440-38-2	0.000699		0.00100	0.000500
Lead, Total	7439-92-1	0.00226		0.00100	0.000500
Selenium, Total	7782-49-2	0.00220		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 #: L12050153-02 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: MW-15-050312 **Prep Method:** 3015 **Prep Date:** 05/07/2012 11:15
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 05/10/2012 09:13
Workgroup #: WG397345 **Analyst:** JYH **Run Date:** 05/10/2012 10:22
Collect Date: 05/03/2012 10:45 **Dilution:** 1 **File ID:** NI.051012.102247
Sample Tag: 02 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Dissolved	7440-36-0		U	0.00100	0.000500
Arsenic, Dissolved	7440-38-2	0.000629		0.00100	0.000500
Lead, Dissolved	7439-92-1	0.000590		0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.00213		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 #: L12050153-03 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: MW-17-050312 **Prep Method:** 3015 **Prep Date:** 05/07/2012 11:15
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 05/10/2012 09:13
Workgroup #: WG397345 **Analyst:** JYH **Run Date:** 05/10/2012 10:25
Collect Date: 05/03/2012 11:30 **Dilution:** 1 **File ID:** NI.051012.102540
Sample Tag: 02 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		U	0.00100	0.000500
Arsenic, Total	7440-38-2	0.0150		0.00100	0.000500
Lead, Total	7439-92-1	0.000623		0.00100	0.000500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Selenium, Total	7782-49-2	0.00404		0.00100	0.000500
Thallium, Total	7440-28-0	0.000164		0.000200	0.000100
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12050153-04 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: MW-17-050312 **Prep Method:** 3015 **Prep Date:** 05/07/2012 11:15
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 05/10/2012 09:13
Workgroup #: WG397345 **Analyst:** JYH **Run Date:** 05/10/2012 10:28
Collect Date: 05/03/2012 11:30 **Dilution:** 1 **File ID:** NI.051012.102832
Sample Tag: 02 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Dissolved	7440-36-0		U	0.00100	0.000500
Arsenic, Dissolved	7440-38-2	0.0158		0.00100	0.000500
Lead, Dissolved	7439-92-1		U	0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.00392		0.00100	0.000500
Thallium, Dissolved	7440-28-0	0.000169		0.000200	0.000100
U	Not detected at or above adjusted sample detection limit.				

Sample #: L12050153-05 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: MW-28050312 **Prep Method:** 3015 **Prep Date:** 05/07/2012 11:15
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 05/10/2012 09:13
Workgroup #: WG397345 **Analyst:** JYH **Run Date:** 05/10/2012 10:31
Collect Date: 05/03/2012 15:00 **Dilution:** 1 **File ID:** NI.051012.103125
Sample Tag: 02 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0	0.000643		0.00100	0.000500
Arsenic, Total	7440-38-2	0.00503		0.00100	0.000500
Lead, Total	7439-92-1	0.00323		0.00100	0.000500
Selenium, Total	7782-49-2	0.00219		0.00100	0.000500
Thallium, Total	7440-28-0		U	0.000200	0.000100
U	Not detected at or above adjusted sample detection limit.				

Certificate of Analysis

Sample #: L12050153-06 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: MW-28050312 **Prep Method:** 3015 **Prep Date:** 05/07/2012 11:15
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 05/10/2012 09:13
Workgroup #: WG397345 **Analyst:** JYH **Run Date:** 05/10/2012 10:34
Collect Date: 05/03/2012 15:00 **Dilution:** 1 **File ID:** NI.051012.103418
Sample Tag: 02 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Dissolved	7440-36-0	0.000550		0.00100	0.000500
Arsenic, Dissolved	7440-38-2	0.00466		0.00100	0.000500
Lead, Dissolved	7439-92-1		U	0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.00190		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 #: L12050153-07 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: TW-02-050312 **Prep Method:** 3015 **Prep Date:** 05/07/2012 11:15
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 05/10/2012 09:13
Workgroup #: WG397345 **Analyst:** JYH **Run Date:** 05/10/2012 10:37
Collect Date: 05/03/2012 13:30 **Dilution:** 1 **File ID:** NI.051012.103711
Sample Tag: 02 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		U	0.00100	0.000500
Arsenic, Total	7440-38-2	0.00711		0.00100	0.000500
Lead, Total	7439-92-1	0.0218		0.00100	0.000500
Selenium, Total	7782-49-2	0.00504		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 #: L12050153-08 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: TW-02-050312 **Prep Method:** 3015 **Prep Date:** 05/07/2012 11:15
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 05/10/2012 09:13
Workgroup #: WG397345 **Analyst:** JYH **Run Date:** 05/10/2012 10:40
Collect Date: 05/03/2012 13:30 **Dilution:** 1 **File ID:** NI.051012.104004
Sample Tag: 02 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Dissolved	7440-36-0		U	0.00100	0.000500
Arsenic, Dissolved	7440-38-2	0.00640		0.00100	0.000500
Lead, Dissolved	7439-92-1	0.000840		0.00100	0.000500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Selenium, Dissolved	7782-49-2	0.00500		0.00100	0.000500
Thallium, Dissolved	7440-28-0		U	0.000200	0.000100

U	Not detected at or above adjusted sample detection limit.

2.3.2.2 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: WG397206
Analyst: VC
Spike Analyst: VC
Run Date: 05/07/2012 11:15
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	WG397206-03	BLANK	1	40 mL	100 mL	205.621 g	205.613 g		
2	WG397206-04	LCS	1	40 mL	100 mL	208.739 g	208.738 g	.25 mL	
3	L12050124-01	SAMP	2	40 mL	100 mL	206.429 g	206.422 g		05/11/12
4	WG397206-01	REF	2	40 mL	100 mL	205.948 g	205.938 g		
5	L12050124-02	SAMP	2	40 mL	100 mL	205.948 g	205.938 g		05/11/12
6	L12050125-02	SAMP	1	40 mL	100 mL	208.475 g	208.466 g		05/17/12
7	WG397206-02	REF	1	40 mL	100 mL	206.703 g	206.697 g		
8	L12050125-07	RS02	1	40 mL	100 mL	206.703 g	206.697 g		05/17/12
9	WG397206-07	MS	1	40 mL	100 mL	207.458 g	207.455 g	.25 mL	
10	L12050125-08	MS02	1	40 mL	100 mL	207.458 g	207.455 g	.25 mL	05/17/12
11	WG397206-08	MSD	1	40 mL	100 mL	208.243 g	208.242 g	.25 mL	
12	L12050125-09	SD02	1	40 mL	100 mL	208.243 g	208.242 g	.25 mL	05/17/12
13	L12050125-14	SAMP	1	40 mL	100 mL	206.672 g	206.668 g		05/17/12
14	L12050125-17	SAMP	1	40 mL	100 mL	207.163 g	207.164 g		05/17/12
15	L12050125-20	SAMP	1	40 mL	100 mL	206.696 g	206.693 g		05/17/12
16	L12050125-23	SAMP	1	40 mL	100 mL	209.178 g	209.164 g		05/17/12
17	L12050150-28	SAMP	1	40 mL	100 mL	208.744 g	208.737 g		05/10/12
18	L12050150-29	SAMP	1	40 mL	100 mL	206.76 g	206.752 g		05/10/12
19	L12050153-01	SAMP	1	40 mL	100 mL	208.664 g	208.653 g		05/18/12
20	L12050153-02	SAMP	1	40 mL	100 mL	206.279 g	206.272 g		05/18/12
21	L12050153-03	SAMP	1	40 mL	100 mL	207.49 g	207.468 g		05/18/12
22	L12050153-04	SAMP	1	40 mL	100 mL	205.719 g	205.719 g		05/18/12
23	L12050153-05	SAMP	1	40 mL	100 mL	206.41 g	206.398 g		05/18/12
24	L12050153-06	SAMP	1	40 mL	100 mL	207.171 g	207.156 g		05/18/12
25	L12050153-07	SAMP	1	40 mL	100 mL	206.521 g	206.516 g		05/18/12
26	L12050153-08	SAMP	1	40 mL	100 mL	210.263 g	210.259 g		05/18/12
27	WG397206-06	DUP	1	40 mL	100 mL	208.077 g	208.076 g		
28	WG397206-05	MS	1	40 mL	100 mL	208.264 g	208.253 g		

L12050150-29	filtered digestate

Analyst: Vicki Collins

Reviewer: Brenda Gregory

MW_DIG - Modified 09/30/2009
PDF ID: 2404263
Report generated: 05/07/2012 13:05

Microbac Laboratories Inc.

Instrument Run Log

Instrument: ICP-MS2 Dataset: 051012A.REP

Analyst1: JYH Analyst2: N/A

Method: 6020 SOP: ME700A Rev:

Maintenance Log ID: 41657

Calibration Std: STD51139 ICV Std: STD51515 Post Spike: STD47984

ICSA: STD51140 ICSAB: STD51239 Int. Std: RGT17150

CCV: STD51215 LLCCV: STD51549

Workgroups: 397345397362,397649,397650,397653

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	NI.051012.090223	Blank	Blank		1		05/10/12 09:02
2	NI.051012.090517	WG397640-01	Calibration Point		1		05/10/12 09:05
3	NI.051012.090809	WG397640-02	Calibration Point		1		05/10/12 09:08
4	NI.051012.091101	WG397640-03	Calibration Point		1		05/10/12 09:11
5	NI.051012.091354	WG397640-04	Calibration Point		1		05/10/12 09:13
6	NI.051012.091648	WG397640-05	Initial Calibration Verification		1		05/10/12 09:16
7	NI.051012.091943	WG397640-06	Initial Calib Blank		1		05/10/12 09:19
8	NI.051012.092238	WG397640-07	Low Level Initial Calibration V		1		05/10/12 09:22
9	NI.051012.092530	WG397640-08	Interference Check		1		05/10/12 09:25
10	NI.051012.092824	WG397640-09	Interference Check		1		05/10/12 09:28
11	NI.051012.093119	WG397640-10	QC Std 6		1		05/10/12 09:31
12	NI.051012.093847	WG397640-11	CCV		1		05/10/12 09:38
13	NI.051012.094201	WG397640-12	CCB		1		05/10/12 09:42
14	NI.051012.094514	WG397206-03	Method/Prep Blank	40/100	1		05/10/12 09:45
15	NI.051012.094807	WG397206-04	Laboratory Control S	40/100	1		05/10/12 09:48
16	NI.051012.095100	WG397206-02	Reference Sample		1	L12050125-07	05/10/12 09:51
17	NI.051012.095353	WG397206-07	Matrix Spike	40/100	1	L12050125-07	05/10/12 09:53
18	NI.051012.095646	WG397206-08	Matrix Spike Duplica	40/100	1	L12050125-07	05/10/12 09:56
19	NI.051012.095939	L12050150-28	SW-8	40/100	1		05/10/12 09:59
20	NI.051012.100232	L12050150-29	SW-9	40/100	1		05/10/12 10:02
21	NI.051012.100524	WG397345-01	Post Digestion Spike		1	L12050124-01	05/10/12 10:05
22	NI.051012.100818	WG397345-02	Serial Dilution		5	L12050124-01	05/10/12 10:08
23	NI.051012.101113	WG397640-13	CCV		1		05/10/12 10:11
24	NI.051012.101405	WG397640-14	CCB		1		05/10/12 10:14
25	NI.051012.101700	WG397640-15	Low Level Continuing Calibra		1		05/10/12 10:17
26	NI.051012.101953	L12050153-01	MW-15-050312	40/100	1		05/10/12 10:19
27	NI.051012.102247	L12050153-02	MW-15-050312	40/100	1		05/10/12 10:22
28	NI.051012.102540	L12050153-03	MW-17-050312	40/100	1		05/10/12 10:25
29	NI.051012.102832	L12050153-04	MW-17-050312	40/100	1		05/10/12 10:28
30	NI.051012.103125	L12050153-05	MW-28050312	40/100	1		05/10/12 10:31
31	NI.051012.103418	L12050153-06	MW-28050312	40/100	1		05/10/12 10:34
32	NI.051012.103711	L12050153-07	TW-02-050312	40/100	1		05/10/12 10:37
33	NI.051012.104004	L12050153-08	TW-02-050312	40/100	1		05/10/12 10:40
34	NI.051012.104258	WG397640-16	Interference Check		1		05/10/12 10:42

Page: 1 Approved: May 11, 2012

Sheri L. Babgard

Microbac

Microbac Laboratories Inc.

Instrument Run Log

Instrument: ICP-MS2 Dataset: 051012A.REP
Analyst1: JYH Analyst2: N/A
Method: 6020 SOP: ME700A Rev:
Maintenance Log ID: 41657

Calibration Std: STD51139 ICV Std: STD51515 Post Spike: STD47984
ICSA: STD51140 ICSAB: STD51239 Int. Std: RGT17150
CCV: STD51215 LLCCV: STD51549

Workgroups: 397345397362,397649,397650,397653

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
35	NI.051012.104551	WG397640-17	Interference Check		1		05/10/12 10:45
36	NI.051012.104847	WG397640-18	CCV		1		05/10/12 10:48
37	NI.051012.105139	WG397640-19	CCB		1		05/10/12 10:51
38	NI.051012.105724	L1-00	100 PPB SE		1		05/10/12 10:57
39	NI.051012.110017	200 PPB SE	200 PPB SE		1		05/10/12 11:00
40	NI.051012.110309	KIM BLK	KIM BLK		1		05/10/12 11:03
41	NI.051012.110601	BLK LOT8508	BLK LOT8508		1		05/10/12 11:06
42	NI.051012.110857	WG397640-20	QC Std 6		1		05/10/12 11:08
43	NI.051012.111150	WG397640-21	QC Std 7		1		05/10/12 11:11
44	NI.051012.111446	WG397298-02	Method/Prep Blank	.5/200	1		05/10/12 11:14
45	NI.051012.111738	WG397298-03	Laboratory Control S	.5/200	1		05/10/12 11:17
46	NI.051012.112030	WG397298-01	Reference Sample		5	L12050223-01	05/10/12 11:20
47	NI.051012.112323	L12050223-02	40BF1050312DUP	.522/200	5		05/10/12 11:23
48	NI.051012.112616	WG397298-04	Matrix Spike	.511/200	5	L12050223-01	05/10/12 11:26
49	NI.051012.112908	WG397298-05	Matrix Spike Duplica	.518/200	5	L12050223-01	05/10/12 11:29
50	NI.051012.113202	L12050223-06	40BF2050312TS	.526/200	5		05/10/12 11:32
51	NI.051012.113454	WG397362-01	Post Digestion Spike		5	L12050223-06	05/10/12 11:34
52	NI.051012.113746	WG397362-02	Serial Dilution		25	L12050223-06	05/10/12 11:37
53	NI.051012.114041	WG397640-22	CCV		1		05/10/12 11:40
54	NI.051012.114333	WG397640-23	CCB		1		05/10/12 11:43
55	NI.051012.114922	L12040384-06	MAPEP-12-MAW26		1		05/10/12 11:49
56	NI.051012.122157	WG397298-01	Reference Sample		50	L12050223-01	05/10/12 12:21
57	NI.051012.122450	L12050223-02	40BF1050312DUP	.522/200	50		05/10/12 12:24
58	NI.051012.122742	WG397298-04	Matrix Spike	.511/200	50	L12050223-01	05/10/12 12:27
59	NI.051012.123034	WG397298-05	Matrix Spike Duplica	.518/200	50	L12050223-01	05/10/12 12:30
60	NI.051012.123327	L12050223-06	40BF2050312TS	.526/200	50		05/10/12 12:33
61	NI.051012.123620	WG397362-01	Post Digestion Spike		50	L12050223-06	05/10/12 12:36
62	NI.051012.124844	WG397362-02	Serial Dilution		250	L12050223-06	05/10/12 12:48
63	NI.051012.125140	WG397640-24	CCV		1		05/10/12 12:51
64	NI.051012.125433	WG397640-25	CCB		1		05/10/12 12:54
65	NI.051012.125728	WG397022-03	Method/Prep Blank	40/100	1		05/10/12 12:57
66	NI.051012.130020	WG397022-04	Laboratory Control S	40/100	1		05/10/12 13:00
67	NI.051012.130312	WG397022-01	Reference Sample		10	L12050105-01	05/10/12 13:03
68	NI.051012.130605	L12050105-02	SPE-W-SW-01-DIS	40/100	10		05/10/12 13:06

Page: 2 Approved: May 11, 2012

Microbac Laboratories Inc.

Instrument Run Log

Instrument: ICP-MS2 Dataset: 051012A.REP
Analyst1: JYH Analyst2: N/A
Method: 6020 SOP: ME700A Rev:
Maintenance Log ID: 41657

Calibration Std: STD51139 ICV Std: STD51515 Post Spike: STD47984
ICSA: STD51140 ICSAB: STD51239 Int. Std: RGT17150
CCV: STD51215 LLCCV: STD51549

Workgroups: 397345397362,397649,397650,397653

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
69	NI.051012.130857	WG397022-05	Matrix Spike	40/100	10	L12050105-01	05/10/12 13:08
70	NI.051012.131149	WG397022-06	Matrix Spike Duplica	40/100	10	L12050105-01	05/10/12 13:11
71	NI.051012.131442	L12050105-05	SPE-W-SW-01-DUP	40/100	10		05/10/12 13:14
72	NI.051012.131734	L12050105-06	SPE-W-SW-05	40/100	10		05/10/12 13:17
73	NI.051012.132027	WG397649-01	Post Digestion Spike		10	L12050105-06	05/10/12 13:20
74	NI.051012.132319	WG397649-02	Serial Dilution		50	L12050105-06	05/10/12 13:23
75	NI.051012.132614	WG397640-26	CCV		1		05/10/12 13:26
76	NI.051012.132908	WG397640-27	CCB		1		05/10/12 13:29
77	NI.051012.133203	L12050105-07	SPE-W-SW-05-DIS	40/100	10		05/10/12 13:32
78	NI.051012.133456	L12050105-08	SPE-W-SW-06	40/100	10		05/10/12 13:34
79	NI.051012.133749	WG397022-02	Reference Sample		10	L12050105-09	05/10/12 13:37
80	NI.051012.134042	WG397022-07	Duplicate	40/100	10	L12050105-09	05/10/12 13:40
81	NI.051012.134334	L12050105-10	SPE-K-FB	40/100	1		05/10/12 13:43
82	NI.051012.134628	L12050099-01	MW-13-050212	40/100	1		05/10/12 13:46
83	NI.051012.134921	L12050099-02	MW-13-050212	40/100	1		05/10/12 13:49
84	NI.051012.135213	L12050099-03	MW-26-050212	40/100	1		05/10/12 13:52
85	NI.051012.135506	L12050099-04	MW-26-050212	40/100	1		05/10/12 13:55
86	NI.051012.135800	WG397640-28	CCV		1		05/10/12 13:58
87	NI.051012.140053	WG397640-29	CCB		1		05/10/12 14:00
88	NI.051012.140347	L12050099-05	MW-25-050212	40/100	1		05/10/12 14:03
89	NI.051012.140640	L12050099-06	MW-25-050212	40/100	1		05/10/12 14:06
90	NI.051012.140932	L12050099-07	PZ-03-050212	40/100	1		05/10/12 14:09
91	NI.051012.141225	L12050099-08	PZ-03-050212	40/100	1		05/10/12 14:12
92	NI.051012.141517	L12050099-09	DUP-GW-050212	40/100	1		05/10/12 14:15
93	NI.051012.141810	L12050099-10	DUP-GW-050212	40/100	1		05/10/12 14:18
94	NI.051012.142105	WG397640-30	Interference Check		1		05/10/12 14:21
95	NI.051012.142358	WG397640-31	Interference Check		1		05/10/12 14:23
96	NI.051012.142653	WG397640-32	CCV		1		05/10/12 14:26
97	NI.051012.142945	WG397640-33	CCB		1		05/10/12 14:29
98	NI.051012.143241	WG397640-34	Low Level Continuing Calibra		1		05/10/12 14:32
99	NI.051012.150236	WG397174-02	Method/Prep Blank	.5/200	1		05/10/12 15:02
100	NI.051012.150529	WG397174-03	Laboratory Control S	.5/200	1		05/10/12 15:05
101	NI.051012.150821	WG397174-01	Reference Sample		5	L12050134-26	05/10/12 15:08
102	NI.051012.151114	WG397174-04	Matrix Spike	.518/200	5	L12050134-26	05/10/12 15:11

Page: 3 Approved: May 11, 2012

Sheri L. Babgard

Microbac

Microbac Laboratories Inc.

Instrument Run Log

Instrument: ICP-MS2 Dataset: 051012A.REP
Analyst1: JYH Analyst2: N/A
Method: 6020 SOP: ME700A Rev:
Maintenance Log ID: 41657

Calibration Std: STD51139 ICV Std: STD51515 Post Spike: STD47984
ICSA: STD51140 ICSAB: STD51239 Int. Std: RGT17150
CCV: STD51215 LLCCV: STD51549

Workgroups: 397345397362,397649,397650,397653

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
103	NI.051012.151406	WG397174-05	Matrix Spike Duplica	.509/200	5	L12050134-26	05/10/12 15:14
104	NI.051012.151700	L12050134-10	TC-SS-316	.505/200	5		05/10/12 15:17
105	NI.051012.151953	L12050134-11	TC-SUB-316	.51/200	5		05/10/12 15:19
106	NI.051012.152424	WG397650-01	Post Digestion Spike		5	L12050134-11	05/10/12 15:24
107	NI.051012.152718	WG397650-02	Serial Dilution		25	L12050134-11	05/10/12 15:27
108	NI.051012.153013	WG397640-35	CCV		1		05/10/12 15:30
109	NI.051012.153306	WG397640-36	CCB		1		05/10/12 15:33
110	NI.051012.153601	L12050134-13	TC-SUB-317	.505/200	5		05/10/12 15:36
111	NI.051012.153854	L12050134-14	TC-SUB-317A	.503/200	5		05/10/12 15:38
112	NI.051012.154146	L12050134-15	TC-SUB-318	.519/200	5		05/10/12 15:41
113	NI.051012.154440	L12050134-17	TC-SED-301	.527/200	5		05/10/12 15:44
114	NI.051012.154733	L12050134-18	TC-SED-301A	.512/200	5		05/10/12 15:47
115	NI.051012.155025	L12050134-19	TC-SED-302	.523/200	5		05/10/12 15:50
116	NI.051012.155318	L12050134-20	TC-SED-303	.527/200	5		05/10/12 15:53
117	NI.051012.155611	L12050134-22	TC-SED-304	.518/200	5		05/10/12 15:56
118	NI.051012.155904	L12050134-23	TC-SED-305	.514/200	5		05/10/12 15:59
119	NI.051012.160156	L12050134-24	TC-SED-306	.525/200	5		05/10/12 16:01
120	NI.051012.160452	WG397640-37	CCV		1		05/10/12 16:04
121	NI.051012.160744	WG397640-38	CCB		1		05/10/12 16:07
122	NI.051012.161039	L12050134-25	TC-SS-305	.503/200	5		05/10/12 16:10
123	NI.051012.161331	WG397503-02	Method/Prep Blank	40/100	1		05/10/12 16:13
124	NI.051012.161623	WG397503-03	Laboratory Control S	40/100	1		05/10/12 16:16
125	NI.051012.161917	L12050259-03	W20B		1	WG397503-01	05/10/12 16:19
126	NI.051012.162209	L12050259-05	W20B/MS	40/100	1	WG397503-04	05/10/12 16:22
127	NI.051012.162501	L12050259-07	W20B/MSD	40/100	1	WG397503-05	05/10/12 16:25
128	NI.051012.162755	L12050259-08	W37WT	40/100	1		05/10/12 16:27
129	NI.051012.163047	WG397653-01	Post Digestion Spike		1	L12050259-08	05/10/12 16:30
130	NI.051012.163339	WG397653-02	Serial Dilution		5	L12050259-08	05/10/12 16:33
131	NI.051012.163634	WG397640-39	CCV		1		05/10/12 16:36
132	NI.051012.163926	WG397640-40	CCB		1		05/10/12 16:39
133	NI.051012.164221	L12050259-09	W18	40/100	1		05/10/12 16:42
134	NI.051012.164513	L12050259-11	W31WB	40/100	1		05/10/12 16:45
135	NI.051012.164805	L12050259-13	W29	40/100	1		05/10/12 16:48
136	NI.051012.165058	L12050242-08	MW-13A	40/100	1		05/10/12 16:50

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Sheri L. Babgard

Microbac

Microbac Laboratories Inc.

Instrument Run Log

Instrument: ICP-MS2 Dataset: 051012A.REP
Analyst1: JYH Analyst2: N/A
Method: 6020 SOP: ME700A Rev:
Maintenance Log ID: 41657

Calibration Std: STD51139 ICV Std: STD51515 Post Spike: STD47984
ICSA: STD51140 ICSAB: STD51239 Int. Std: RGT17150
CCV: STD51215 LLCCV: STD51549

Workgroups: 397345397362,397649,397650,397653

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
137	NI.051012.165350	L12050242-10	MW-13B	40/100	1		05/10/12 16:53
138	NI.051012.165642	L12050257-01	C\&B LEEK W-1	40/100	1		05/10/12 16:56
139	NI.051012.165936	L12050257-03	E\&D COLLINS W-1	40/100	1		05/10/12 16:59
140	NI.051012.170229	L12050257-05	D NEFF W-1	40/100	1		05/10/12 17:02
141	NI.051012.170521	L12050257-07	AS JENNA DS-1	40/100	1		05/10/12 17:05
142	NI.051012.170814	L12050257-09	AS GREEK RUIN DS-2	40/100	1		05/10/12 17:08
143	NI.051012.171108	WG397640-41	CCV		1		05/10/12 17:11
144	NI.051012.171400	WG397640-42	CCB		1		05/10/12 17:14
145	NI.051012.171655	L12050257-11	D SNOW W-1	40/100	1		05/10/12 17:16
146	NI.051012.171948	L12050257-13	T\&B JONES W-1	40/100	1		05/10/12 17:19
147	NI.051012.172244	WG397640-43	CCV		1		05/10/12 17:22
148	NI.051012.172536	WG397640-44	CCB		1		05/10/12 17:25
149	NI.051012.172830	WG397640-45	Low Level Continuing Calibra		1		05/10/12 17:28

Comments

Seq.	Rerun	Dil.	Reason	Analytes
11			Rerun for silver.	

Page: 5 Approved: May 11, 2012

Sheri L. Babgard

Microbac

Microbac Laboratories Inc.

Data Checklist

Date: 10-MAY-2012
Analyst: JYH
Analyst: NA
Method: 6020
Instrument: ICP-MS2
Curve Workgroup: 397640
Runlog ID: 46660
Analytical Workgroups: 397345397362,397649,397650,397653

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	153,223,099,105,134,257
Client Forms	X
Level X	
Level 3	
Level 4	153,223,099,134,257
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	JYH
Secondary Reviewer	SLP
Comments	

Primary Reviewer:

Secondary Reviewer:
11-MAY-2012

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-11-2012 13:41:09

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 6020 **AAB#:** WG397345

Login Number: L12050153

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-15-050312	01	05/03/12					05/07/12	4	180		05/10/12	7	180	
MW-15-050312	02	05/03/12					05/07/12	4	180		05/10/12	7	180	
MW-17-050312	03	05/03/12					05/07/12	4	180		05/10/12	7	180	
MW-17-050312	04	05/03/12					05/07/12	4	180		05/10/12	7	180	
MW-28050312	05	05/03/12					05/07/12	3.8	180		05/10/12	6.8	180	
MW-28050312	06	05/03/12					05/07/12	3.8	180		05/10/12	6.8	180	
TW-02-050312	07	05/03/12					05/07/12	3.9	180		05/10/12	6.9	180	
TW-02-050312	08	05/03/12					05/07/12	3.9	180		05/10/12	6.9	180	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2409411
Report generated 05/10/2012 11:24

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12050153
Work Group: WG397345
Blank File ID: NI.051012.094514
Blank Sample ID: WG397206-03
Prep Date: 05/07/12 11:15
Instrument ID: ICP-MS2
Analyzed Date: 05/10/12 09:45
Method: 6020
Analyst: JYH

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG397206-04	NI.050912.152857	05/09/12 15:28	01
DUP	WG397206-06	NI.050912.154321	05/09/12 15:43	01
LCS	WG397206-04	NI.051012.094807	05/10/12 09:48	02
MW-15-050312	L12050153-01	NI.051012.101953	05/10/12 10:19	02
MW-15-050312	L12050153-02	NI.051012.102247	05/10/12 10:22	02
MW-17-050312	L12050153-03	NI.051012.102540	05/10/12 10:25	02
MW-17-050312	L12050153-04	NI.051012.102832	05/10/12 10:28	02
MW-28050312	L12050153-05	NI.051012.103125	05/10/12 10:31	02
MW-28050312	L12050153-06	NI.051012.103418	05/10/12 10:34	02
TW-02-050312	L12050153-07	NI.051012.103711	05/10/12 10:37	02
TW-02-050312	L12050153-08	NI.051012.104004	05/10/12 10:40	02

Report Name: BLANK_SUMMARY
PDF File ID: 2409412
Report generated 05/10/2012 11:25

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050153 Prep Date: 05/07/12 11:15 Sample ID: WG397206-03
Instrument ID: ICP-MS2 Run Date: 05/10/12 09:45 Prep Method: 3015
File ID: NI.051012.094514 Analyst: JYH Method: 6020
Workgroup (AAB#): WG397345 Matrix: Water Units: mg/L
Contract #: Cal ID: ICP-MS-10-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: 2409413
10-MAY-2012 11:25

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050153 **Run Date:** 05/10/2012 **Sample ID:** WG397206-04
Instrument ID: ICP-MS2 **Run Time:** 09:48 **Prep Method:** 3015
File ID: NI.051012.094807 **Analyst:** JYH **Method:** 6020
Workgroup (AAB#): WG397345 **Matrix:** Water **Units:** mg/L
QC Key: WATERLOO **Lot#:** STD49281 **Cal ID:** ICP-MS-10-MAY-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Antimony, Total	0.0625	0.0599	95.9	80 - 120	
Arsenic, Total	0.0625	0.0601	96.1	80 - 120	
Lead, Total	0.0625	0.0623	99.7	80 - 120	
Selenium, Total	0.0625	0.0619	99.1	80 - 120	
Thallium, Total	0.0625	0.0623	99.8	80 - 120	

LCS - Modified 03/06/2008
PDF File ID: 2409414
Report generated: 05/10/2012 11:25

Microbac Laboratories Inc.

MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

Loginnum:L12050153 Cal ID:ICP-MS2- Worknum:WG397345

Instrument ID:ICP-MS2 Contract #: Method:6020

Parent ID:WG397206-02 File ID:NI.051012.095100 Dil:1 Matrix:WATER

Sample ID:WG397206-07 MS File ID:NI.051012.095353 Dil:1 Units:mg/L

Sample ID:WG397206-08 MSD File ID:NI.051012.095646 Dil:1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Antimony	ND	0.0625	0.0611	97.7	0.0625	0.0607	97.0	0.722	80 - 120	20	
Arsenic	ND	0.0625	0.0634	101	0.0625	0.0633	101	0.120	80 - 120	20	
Lead	ND	0.0625	0.0629	101	0.0625	0.0624	99.8	0.816	80 - 120	20	
Selenium	ND	0.0625	0.0639	102	0.0625	0.0640	102	0.179	80 - 120	20	
Thallium	ND	0.0625	0.0624	99.8	0.0625	0.0616	98.6	1.18	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: 2409770

Report generated 05/10/2012 13:26

Microbac Laboratories Inc.
Serial Dilution Report

Login: L12050153 **Worknum:** WG397345
Instrument: ICP-MS2 **Method:** 6020
Serial Dil: WG397345-04 **File ID:** NI.051012.100818 **Dil:** 5 **Units:** ug/L
Sample: L12050150-29 **File ID:** NI.051012.100232 **Dil:** 1

Analyte	Sample	Qual	Serial Dil	Qual	% Diff	Q
Antimony	ND	U	ND	U		
Arsenic	0.255	F	ND	U		
Lead	0.325	F	ND	U		
Selenium	0.435	X	ND	U		
Thallium	ND	U	ND	U		

U = Result is below MDL.
F = Result is greater than or equal to MDL and less than the RL.
X = Result is greater than or equal to RL and less than 100 times the MDL.
E = %D exceeds control limit of 10% and initial sample result is greater than or equal to 100 times the MDL.

SERIAL_DIL - Modified 09/22/2008
PDF File ID: 2409409
05/10/2012 11:32

Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L12050153 **Worknum:** WG397345
Instrument ID: ICP-MS2 **Method:** 6020
Post Spike ID: WG397345-03 **File ID:** NI.051012.100524 **Dil:** 1 **Units:** ug/L
Sample ID: L12050150-29 **File ID:** NI.051012.100232 **Dil:** 1 **Matrix:** Water

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
ANTIMONY	48.3		0	U	50	96.5	75 - 125	
ARSENIC	49.3		0.255	F	50	98.2	75 - 125	
LEAD	51.5		0.325	F	50	102.3	75 - 125	
SELENIUM	49.0		0.435		50	97.1	75 - 125	
THALLIUM	51.4		0	U	50	102.8	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: 2409410
Report generated: 05/10/2012 11:32

Microbac Laboratories Inc.
Initial Calibration Summary

Login:	**L12050153**	Workgroup (AAB#):	**WG397345**
Analytical Method:	**6020**	Instrument ID:	**ICP-MS2**
ICAL Worknum:	**WG397640**	Initial Calibration Date:	**10-MAY-2012 09:13**

	WG397640-01		WG397640-02		WG397640-03		WG397640-04			
	Conc	INT	Conc	INT	Conc	INT	Conc	INT	R	Q
ANTIMONY	0	18.9	.4	570	50	547000	100	1070000	.999994	
ARSENIC	0	-261	.4	-200	50	56800	100	110000	.999992	
LEAD	0	1080	.4	3750	50	2540000	100	4980000	.999983	
SELENIUM	0	23.6	.4	26.7	50	6450	100	12300	.999984	
THALLIUM	0	610	.4	1410	50	808000	100	1560000	.999999	

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: 2409418
Report generated: 10-MAY-2012 11:24

Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L12050153 Run Date: 05/10/2012 Sample ID: WG397640-06
Instrument ID: ICP-MS2 Run Time: 09:19 Method: 6020
File ID: NI.051012.091943 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG397345 Cal ID: ICP-MS2 - 10-MAY-12
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
ARSENIC	.2	.4	.2	U
LEAD	.2	.4	.2	U
ANTIMONY	.2	.4	.2	U
SELENIUM	.2	.4	.2	U
THALLIUM	.04	.08	.04	U

ICB - Modified 07/14/2009
PDF File ID: 2409420
Report generated 05/10/2012 11:24

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050153 Run Date: 05/10/2012 Sample ID: WG397640-12

Instrument ID: ICP-MS2 Run Time: 09:42 Method: 6020

File ID: NI.051012.094201 Analyst: JYH Units: ug/L

Workgroup (AAB#): WG397345 Cal ID: ICP-MS - 10-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: 2409423
Report generated 05/10/2012 11:25

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050153 Run Date: 05/10/2012 Sample ID: WG397640-14

Instrument ID: ICP-MS2 Run Time: 10:14 Method: 6020

File ID: NI.051012.101405 Analyst: JYH Units: ug/L

Workgroup (AAB#): WG397345 Cal ID: ICP-MS - 10-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: 2409423
Report generated 05/10/2012 11:25

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050153 Run Date: 05/10/2012 Sample ID: WG397640-19

Instrument ID: ICP-MS2 Run Time: 10:51 Method: 6020

File ID: NI.051012.105139 Analyst: JYH Units: ug/L

Workgroup (AAB#): WG397345 Cal ID: ICP-MS - 10-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: 2409423
Report generated 05/10/2012 11:25

Microbac Laboratories Inc.

INITIAL CALIBRATION VERIFICATION (ICV)
(Alternate Source)

Login Number: L12050153 Run Date: 05/10/2012 Sample ID: WG397640-05
Instrument ID: ICP-MS2 Run Time: 09:16 Method: 6020
File ID: NI.051012.091648 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG397345 Cal ID: ICP-MS - 10-MAY-12
QC Key: WATERLOO

Analyte		Expected	Found	%REC	LIMITS	Q
Antimony		50	51.2	102	90 - 110	
Arsenic		50	52.3	105	90 - 110	
Lead		50	51.3	103	90 - 110	
Selenium		50	52.9	106	90 - 110	
Thallium		50	51.5	103	90 - 110	

* Exceeds LIMITS Limit

ICV - Modified 03/06/2008
PDF File ID: 2409419
Report generated 05/10/2012 11:24

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050153 Run Date: 05/10/2012 Sample ID: WG397640-11

Instrument ID: ICP-MS2 Run Time: 09:38 Method: 6020

File ID: NI.051012.093847 Analyst: JYH QC Key: WATERLOO

Workgroup (AAB#): WG397345 Cal ID: ICP-MS - 10-MAY-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	50.8	ug/L	102	90 - 110		
Arsenic		50.0	50.8	ug/L	102	90 - 110		
Lead		50.0	49.8	ug/L	99.5	90 - 110		
Selenium		50.0	52.6	ug/L	105	90 - 110		
Thallium		50.0	50.1	ug/L	100	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2409422

Report generated 05/10/2012 11:25

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050153 Run Date: 05/10/2012 Sample ID: WG397640-13

Instrument ID: ICP-MS2 Run Time: 10:11 Method: 6020

File ID: NI.051012.101113 Analyst: JYH QC Key: WATERLOO

Workgroup (AAB#): WG397345 Cal ID: ICP-MS - 10-MAY-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	49.0	ug/L	97.9	90 - 110		
Arsenic		50.0	50.5	ug/L	101	90 - 110		
Lead		50.0	49.9	ug/L	99.8	90 - 110		
Selenium		50.0	51.0	ug/L	102	90 - 110		
Thallium		50.0	50.8	ug/L	102	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2409422

Report generated 05/10/2012 11:25

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050153 Run Date: 05/10/2012 Sample ID: WG397640-18
Instrument ID: ICP-MS2 Run Time: 10:48 Method: 6020
File ID: NI.051012.104847 Analyst: JYH QC Key: WATERLOO
Workgroup (AAB#): WG397345 Cal ID: ICP-MS - 10-MAY-12
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	49.8	ug/L	99.6	90 - 110		
Arsenic		50.0	50.5	ug/L	101	90 - 110		
Lead		50.0	50.0	ug/L	100	90 - 110		
Selenium		50.0	52.4	ug/L	105	90 - 110		
Thallium		50.0	51.1	ug/L	102	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
PDF File ID: 2409422
Report generated 05/10/2012 11:25

Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L12050153 **Workgroup (AAB#):** WG397345
Instrument ID: ICP-MS2 **Method:** 6020
Sol. A : WG397640-08 **File ID:** NI.051012.092530 **Units:** ug/L
Sol. AB : WG397640-09 **File ID:** NI.051012.092824 **Matrix:** Water

	Sol. A			Sol. AB			
ANALYTE	True	Found	%Recovery	True	Found	%Recovery	Q
Antimony	NS	0.0575	NS	100	101	101	
Arsenic	NS	0.0167	NS	100	102	102	
Lead	NS	0.0203	NS	100	102	102	
Selenium	NS	0.0349	NS	100	103	103	
Thallium	NS	0.00130	NS	100	99.5	99.5	

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: 2409421
Report generated 05/10/2012 11:25

Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L12050153 **Workgroup (AAB#):** WG397345
Instrument ID: ICP-MS2 **Method:** 6020
Sol. A : WG397640-16 **File ID:** NI.051012.104258 **Units:** ug/L
Sol. AB : WG397640-17 **File ID:** NI.051012.104551 **Matrix:** Water

	Sol. A			Sol. AB			
ANALYTE	True	Found	%Recovery	True	Found	%Recovery	Q
Antimony	NS	0.0422	NS	100	99.8	99.8	
Arsenic	NS	0.0169	NS	100	101	101	
Lead	NS	0.0199	NS	100	104	104	
Selenium	NS	0.115	NS	100	101	101	
Thallium	NS	-0.00910	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: 2409421
Report generated 05/10/2012 11:25

Microbac Laboratories Inc.

INTERNAL STANDARD REPORT

Login: L12050153 **Analytical Method:** 6020
Analytical Workgroup: WG397345 **Matrix:** 1
Instrument: ICP-MS2 **Analyst:** JYH
ICAL Date: 10-MAY-2012 09:05

			BISMUTH	GERMANIUM	INDIUM	TERBIUM
Sample	Type	Run Date	% Rec	% Rec	% Rec	% Rec
L12050153-01	SAMP	10-MAY-2012 10:19	95.226	102.805	103.212	105.025
L12050153-02	SAMP	10-MAY-2012 10:22	95.305	104.724	104.212	106.779
L12050153-03	SAMP	10-MAY-2012 10:25	89.911	98.645	102.228	105.773
L12050153-04	SAMP	10-MAY-2012 10:28	91.27	99.688	103.114	109.279
L12050153-05	SAMP	10-MAY-2012 10:31	92.398	100.909	104.461	107.319
L12050153-06	SAMP	10-MAY-2012 10:34	90.94	96.775	102.274	105.427
L12050153-07	SAMP	10-MAY-2012 10:37	87.218	97.889	102.776	107.184
L12050153-08	SAMP	10-MAY-2012 10:40	87.535	97.27	101.661	105.766
WG397206-03	BLANK	10-MAY-2012 09:45	98.189	100.451	99.374	99.528
WG397206-04	LCS	10-MAY-2012 09:48	102.355	108.328	105.857	107.601
WG397345-01	PSPK	10-MAY-2012 10:05	103.015	112.865	111.531	111.514
WG397345-02	SERIAL	10-MAY-2012 10:08	100.853	106.616	104.867	104.623
WG397640-05	ICV	10-MAY-2012 09:16	97.758	96.876	98.111	102.406
WG397640-06	ICB	10-MAY-2012 09:19	95.994	94.043	95.647	97.279
WG397640-07	LLICV	10-MAY-2012 09:22	95.834	93.814	95.078	97.51
WG397640-08	ICS	10-MAY-2012 09:25	92.569	95.008	96.191	99.752
WG397640-09	ICS	10-MAY-2012 09:28	97.575	100.691	101.099	105.958
WG397640-11	CCV	10-MAY-2012 09:38	99.829	103.184	101.508	105.393
WG397640-12	CCB	10-MAY-2012 09:42	96.98	98.797	98.456	99.632
WG397640-13	CCV	10-MAY-2012 10:11	99.641	105.713	106.245	106.714
WG397640-14	CCB	10-MAY-2012 10:14	97.898	103.812	103.055	101.619
WG397640-15	LLCCV	10-MAY-2012 10:17	99.886	103.436	102.217	101.693
WG397640-16	ICS	10-MAY-2012 10:42	96.796	102.077	105.465	109.287
WG397640-17	ICS	10-MAY-2012 10:45	98.28	103.174	106.934	110.43
WG397640-18	CCV	10-MAY-2012 10:48	101.548	103.639	108.858	111.939
WG397640-19	CCB	10-MAY-2012 10:51	96.713	96.939	103.221	102.411

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: 2409417
Report generated: 05/10/2012 11:24

Microbac Laboratories Inc.
LINEAR RANGE (QUARTERLY)

Login Number: L12050153 **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: 2409415
Report generated: 05/10/2012 11:24

2.3.2.3 Raw Data

MassCal File Name

Mass Calibration File Name Default.tun
MassCal File Path C:\NexION Data\MassCal\Default.tun
Peak Search Window: 1.00

Sample Information

Sample Date/Time: Thursday, May 10, 2012 08:45:30

Mass Calibration and Resolution

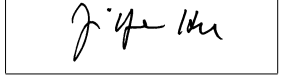
Analyte	E Mass	Meas Mass	Mass C DAC Val	Res DAC Value	Meas Peak WCustom Res
Li	7.016	7.025	1320	2021	0.699
Mg	23.985	23.975	4702	2020	0.707
In	114.904	114.875	22869	2022	0.720
U	238.050	238.025	47458	2033	0.723

Relative Std. Dev.

Mass	Meas. Intens. RSD
5.525	41.751
5.575	8.318
5.625	7.831
5.675	4.219
5.725	4.047
5.775	1.168
5.825	3.138
5.875	1.506
5.925	2.004
5.975	0.830
6.025	2.851
6.075	2.858
6.125	3.075
6.175	2.572
6.225	2.835
6.275	2.876
6.325	4.677
6.375	38.528
6.425	91.287
6.475	104.583
6.525	19.457
6.575	11.665
6.625	6.677
6.675	3.048
6.725	3.038
6.775	1.687
6.825	2.504
6.875	3.078

Report Date/Time: Thursday, May 10, 2012 08:48:04
Page 1

Approved: May 11, 2012



6.925	2.492
6.975	1.598
7.025	2.511
7.075	4.180
7.125	1.795
7.175	1.897
7.225	1.992
7.275	2.688
7.325	4.196
7.375	37.417
7.425	
7.475	136.931
7.525	
7.575	
7.625	91.287
7.675	
7.725	
7.775	55.902
7.825	223.607
7.875	223.607
7.925	
7.975	136.931
8.025	223.607
8.075	91.287
8.125	136.931
8.175	223.607
8.225	
8.275	223.607
8.325	223.607
8.375	
8.425	
8.475	
22.525	10.491
22.575	4.210
22.625	1.443
22.675	1.829
22.725	2.073
22.775	2.224
22.825	2.056
22.875	1.022
22.925	1.594
22.975	2.140
23.025	1.664
23.075	1.256
23.125	1.014
23.175	1.956
23.225	1.663

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23.275	1.780
23.325	1.439
23.375	57.601
23.425	149.071
23.475	91.287
23.525	20.946
23.575	9.533
23.625	3.883
23.675	2.445
23.725	2.231
23.775	2.346
23.825	2.366
23.875	1.261
23.925	1.796
23.975	0.933
24.025	1.547
24.075	1.718
24.125	1.183
24.175	1.902
24.225	1.692
24.275	1.398
24.325	3.393
24.375	149.071
24.425	223.607
24.475	223.607
24.525	67.420
24.575	24.728
24.625	4.911
24.675	9.322
24.725	8.408
24.775	5.558
24.825	3.612
24.875	4.567
24.925	3.304
24.975	3.373
25.025	6.285
25.075	4.544
25.125	6.183
25.175	3.303
25.225	3.707
25.275	3.019
25.325	8.558
25.375	70.711
25.425	70.711
25.475	91.287
113.525	7.850
113.575	4.000

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113.625	2.747
113.675	4.016
113.725	2.943
113.775	4.602
113.825	2.432
113.875	3.794
113.925	2.582
113.975	1.937
114.025	1.029
114.075	2.579
114.125	1.982
114.175	5.406
114.225	11.687
114.275	77.883
114.325	36.422
114.375	10.274
114.425	5.547
114.475	2.650
114.525	2.711
114.575	2.412
114.625	1.830
114.675	0.840
114.725	2.520
114.775	1.965
114.825	0.984
114.875	1.352
114.925	2.440
114.975	2.443
115.025	1.648
115.075	2.356
115.125	2.164
115.175	2.546
115.225	1.696
115.275	24.598
115.325	136.931
115.375	35.355
115.425	37.219
115.475	8.671
115.525	10.012
115.575	8.989
115.625	10.018
115.675	5.278
115.725	2.331
115.775	3.341
115.825	5.642
115.875	4.560
115.925	4.790

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115.975	4.706
116.025	4.363
116.075	4.555
116.125	4.030
116.175	13.305
116.225	9.667
116.275	70.711
116.325	223.607
116.375	136.931
116.425	104.583
116.475	26.726
236.525	
236.575	
236.625	
236.675	
236.725	223.607
236.775	
236.825	
236.875	
236.925	
236.975	
237.025	
237.075	
237.125	
237.175	
237.225	
237.275	
237.325	
237.375	
237.425	149.071
237.475	100.296
237.525	21.066
237.575	8.688
237.625	3.261
237.675	6.004
237.725	3.134
237.775	3.681
237.825	3.534
237.875	1.941
237.925	2.630
237.975	2.340
238.025	1.793
238.075	2.068
238.125	1.340
238.175	1.954
238.225	1.316
238.275	2.070

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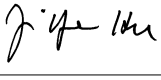
238.325	1.833
238.375	3.407
238.425	4.541
238.475	5.095
238.525	14.546
238.575	26.307
238.625	
238.675	
238.725	
238.775	223.607
238.825	
238.875	223.607
238.925	
238.975	223.607
239.025	223.607
239.075	
239.125	
239.175	
239.225	
239.275	223.607
239.325	
239.375	
239.425	
239.475	

Approved: May 11, 2012



Daily Performance Report

Sample ID: Daily Performance Check
Sample Date/Time: Thursday, May 10, 2012 08:50:07
Sample Description:
Method File: C:\NexION Data\Method\Daily Performance.mth
Dataset File: C:\NexION Data\DataSet\050212\Daily Performance Check.740
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

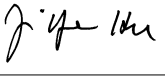
Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD	Mode
	Be	9.0	4147.5	4147.501	31.707	0.8	Standard
	Mg	24.0	47218.6	47218.602	484.271	1.0	Standard
	In	114.9	83320.4	83320.361	1013.162	1.2	Standard
	U	238.1	67461.5	67461.539	884.321	1.3	Standard
⌈	CeO	155.9	1720.6	0.019	0.000	1.1	Standard
| >	Ce	139.9	91903.0	91902.975	1025.367	1.1	Standard
⌊	Ce++	70.0	888.9	0.010	0.000	1.3	Standard
	Bkgd	220.0	0.1	0.100	0.149	149.1	Standard

Current Conditions File Data

Current Value	Description
0.98	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

Approved: May 11, 2012



SmartTune Wizard - Summary

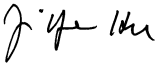
Optimization Summary

SmartTune file: C:\NexIONData\Wizard\SmartTune\ESI SmartTune Fullmicrobac.swz

Start Time: 5/10/2012 8:50:06 AM
End Time: 5/10/2012 8:52:27 AM

Daily Performance Check - [Passed] Optimum value(s): N/A
Obtained Intensity (Be 9.0122): 4147.50
Obtained Intensity (Mg 23.985): 47218.60
Obtained Intensity (In 114.904): 83320.36
Obtained Intensity (U 238.05): 67461.54
Obtained Intensity (Bkgd 220): 0.10
Obtained Formula (CeO 155.9 / Ce 139.905): 0.019 (=1720.63 / 91902.97)
Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.010 (=888.89 / 91902.97)

Approved: May 11, 2012



SmartTune Wizard - Details

```
Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ESI SmartTune Fullmicrobac.swz

Optimization Status

Start Time: 5/10/2012 8:50:06 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): 4147.50
                Obtained Intensity (Mg 23.985): 47218.60
                Obtained Intensity (In 114.904): 83320.36
                Obtained Intensity (U 238.05): 67461.54
                Obtained Intensity (Bkgd 220): 0.10
                Obtained Formula (CeO 155.9 / Ce 139.905): 0.019 (=1720.63 / 91902.97)
                Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.010 (=888.89 / 91902.97)
[Passed]  Optimum value(s): N/A

End Time: 5/10/2012 8:52:27 AM
```


Approved: May 11, 2012

Method 6020 - Summary Report

Sample ID: Blank
Sample Date/Time: Thursday, May 10, 2012 09:02:23
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	12600.2	3.2				ug/L		Standard
|	**Be**	9	5.0	100.0				ug/L		Standard
|	**Al**	27	16101.9	4.0				ug/L		Standard
⌊>	**Sc**	45	254528.8	1.7				ug/L		Standard
⌈	**Ti**	47	84.3	12.8				ug/L		Standard
|	**V**	51	5784.6	17.9				ug/L		Standard
|	**Cr**	52	12211.9	1.6				ug/L		Standard
|	**Cr**	53	5041.7	34.7				ug/L		Standard
|	**Mn**	55	1290.4	2.3				ug/L		Standard
|	**Co**	59	142.7	2.0				ug/L		Standard
|	**Ni**	60	79.3	7.2				ug/L		Standard
|	**Cu**	65	153.7	1.6				ug/L		Standard
|	**Zn**	66	194.0	5.4				ug/L		Standard
| >	**Ge**	72	232023.6	2.7				ug/L		Standard
|	**As**	75	-296.7	19.6				ug/L		Standard
|	**Se**	82	17.1	26.4				ug/L		Standard
⌊	**Se-1**	77	180.3	24.8				ug/L		Standard
	Ga	71	210138.7	2.3				mg/L		Standard
⌈	**Rb**	85	11.7	24.7				ug/L		Standard
| >	**Y**	89	214065.0	0.8				ug/L		Standard
⌊	**Rh**	103	0.0					ug/L		Standard
⌈	**Mo**	98	5.9	45.3				ug/L		Standard
|	**Ag**	107	32.7	18.5				ug/L		Standard
|	**Cd**	111	437.0	3.5				mg/L		Standard
|	**Cd**	114	1159.9	6.5				ug/L		Standard
| >	**In**	115	646603.9	1.2				ug/L		Standard
|	**Sn**	118	864.4	7.9				ug/L		Standard
|	**Sb**	123	17.7	19.6				ug/L		Standard
⌊	**Ba**	135	38.7	31.3				ug/L		Standard
⌈	**Ce**	140	46.3	19.3				ug/L		Standard
⌊>	**Tb**	159	695671.4	1.6				ug/L		Standard
⌈	**Ho**	165	9.3	52.9				ug/L		Standard
|	**Tl**	203	687.3	6.0				ug/L		Standard
|	**Tl**	205	1624.1	4.1				ug/L		Standard
|	**Pb**	206	304.7	4.1				ug/L		Standard
|	**Pb**	207	231.0	2.6				ug/L		Standard
|	**Pb**	208	1129.3	2.1				ug/L		Standard
|	**U**	238	3.3	17.3				ug/L		Standard
⌊>	**Bi**	209	405108.0	0.4				ug/L		Standard
⌈	**Na**	23	118.3	4.9				mg/L		Standard
|	**Mg**	24	376.7	23.6				mg/L		Standard

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	K	39	583.3	7.1		mg/L	Standard
	Ca	43	73.3	20.8		mg/L	Standard
	Fe	54	784.9	12.4		mg/L	Standard
	Fe	57	6132.9	4.3		mg/L	Standard
>	**Sc-1**	45	254528.8	1.7		mg/L	Standard
	Cl	35	1641777.7	39.8		ug/L	Standard
	Kr	83	59.8	6.1		ug/L	Standard
	Br	81	11553.6	5.8		ug/L	Standard
	P	31	45410.5	2.2		ug/L	Standard
	S	34	568857.2	3.2		ug/L	Standard
	Sr	88	240.0	16.7		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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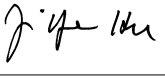

Method 6020 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Thursday, May 10, 2012 09:05:17
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	12466.8	4.0				ug/L	12600	Standard
|	**Be**	9	13.3	43.3				ug/L	5	Standard
|	**Al**	27	14800.6	2.5				ug/L	16102	Standard
⌊>	**Sc**	45	257835.7	1.7				ug/L	254529	Standard
⌈	**Ti**	47	97.3	7.7				ug/L	84	Standard
|	**V**	51	5018.6	3.8				ug/L	5785	Standard
|	**Cr**	52	12014.8	0.3				ug/L	12212	Standard
|	**Cr**	53	3117.0	18.7				ug/L	5042	Standard
|	**Mn**	55	1313.4	2.4				ug/L	1290	Standard
|	**Co**	59	131.7	11.8				ug/L	143	Standard
|	**Ni**	60	79.7	14.0				ug/L	79	Standard
|	**Cu**	65	150.0	8.4				ug/L	154	Standard
|	**Zn**	66	195.0	5.9				ug/L	194	Standard
| >	**Ge**	72	230262.2	0.2				ug/L	232024	Standard
|	**As**	75	-261.1	17.6				ug/L	-297	Standard
|	**Se**	82	23.6	35.1				ug/L	17	Standard
⌊	**Se-1**	77	146.3	9.3				ug/L	180	Standard
	Ga	71	207156.2	0.5				mg/L	210139	Standard
⌈	**Rb**	85	16.7	62.4				ug/L	12	Standard
| >	**Y**	89	206999.8	2.0				ug/L	214065	Standard
⌊	**Rh**	103	1.7	173.2				ug/L	0	Standard
⌈	**Mo**	98	7.1	30.2				ug/L	6	Standard
|	**Ag**	107	30.7	21.0				ug/L	33	Standard
|	**Cd**	111	467.7	3.8				mg/L	437	Standard
|	**Cd**	114	1171.1	1.3				ug/L	1160	Standard
| >	**In**	115	632948.7	1.2				ug/L	646604	Standard
|	**Sn**	118	831.0	4.2				ug/L	864	Standard
|	**Sb**	123	18.9	17.8				ug/L	18	Standard
⌊	**Ba**	135	41.0	8.8				ug/L	39	Standard
⌈	**Ce**	140	49.7	16.1				ug/L	46	Standard
⌊>	**Tb**	159	688008.3	1.2				ug/L	695671	Standard
⌈	**Ho**	165	7.0	49.5				ug/L	9	Standard
|	**Tl**	203	610.3	12.3				ug/L	687	Standard
|	**Tl**	205	1414.1	13.5				ug/L	1624	Standard
|	**Pb**	206	270.0	1.9				ug/L	305	Standard
|	**Pb**	207	246.7	7.8				ug/L	231	Standard
|	**Pb**	208	1084.7	0.6				ug/L	1129	Standard
|	**U**	238	2.7	78.1				ug/L	3	Standard
⌊>	**Bi**	209	401597.5	1.3				ug/L	405108	Standard
⌈	**Na**	23	96.7	19.6				mg/L	118	Standard
|	**Mg**	24	388.3	4.5				mg/L	377	Standard

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	K	39	608.3	5.0	mg/L	583	Standard
	Ca	43	90.0	9.6	mg/L	73	Standard
	Fe	54	767.1	5.8	mg/L	785	Standard
	Fe	57	6306.3	2.7	mg/L	6133	Standard
>	**Sc-1**	45	257835.7	1.7	mg/L	254529	Standard
	Cl	35	1051644.2	30.9	ug/L	1641778	Standard
	Kr	83	55.3	12.0	ug/L	60	Standard
	Br	81	11257.5	1.9	ug/L	11554	Standard
	P	31	47555.4	1.2	ug/L	45410	Standard
	S	34	585100.8	2.6	ug/L	568857	Standard
	Sr	88	243.3	9.7	ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	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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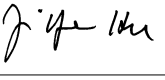

Method 6020 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Thursday, May 10, 2012 09:08:09
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	12258.3	2.8				ug/L	12600	Standard
|	**Be**	9	213.3	22.2				ug/L	5	Standard
|	**Al**	27	13018.9	2.2				ug/L	16102	Standard
⌊>	**Sc**	45	252400.5	2.1				ug/L	254529	Standard
⌈	**Ti**	47	246.3	11.0				ug/L	84	Standard
|	**V**	51	5248.0	1.8				ug/L	5785	Standard
|	**Cr**	52	12437.4	0.9				ug/L	12212	Standard
|	**Cr**	53	2731.1	21.4				ug/L	5042	Standard
|	**Mn**	55	2744.2	1.4				ug/L	1290	Standard
|	**Co**	59	871.4	3.1				ug/L	143	Standard
|	**Ni**	60	224.0	7.2				ug/L	79	Standard
|	**Cu**	65	274.3	6.5				ug/L	154	Standard
|	**Zn**	66	281.0	6.2				ug/L	194	Standard
|>	**Ge**	72	230807.6	2.2				ug/L	232024	Standard
|	**As**	75	-199.7	13.9				ug/L	-297	Standard
|	**Se**	82	26.7	30.6				ug/L	17	Standard
⌊	**Se-1**	77	153.7	12.6				ug/L	180	Standard
	Ga	71	208170.0	2.1				mg/L	210139	Standard
⌈	**Rb**	85	6.7	114.6				ug/L	12	Standard
|>	**Y**	89	205635.1	2.9				ug/L	214065	Standard
⌊	**Rh**	103	3.3	86.6				ug/L	0	Standard
⌈	**Mo**	98	440.3	3.8				ug/L	6	Standard
|	**Ag**	107	472.7	6.7				ug/L	33	Standard
|	**Cd**	111	635.8	8.9				mg/L	437	Standard
|	**Cd**	114	1740.3	2.9				ug/L	1160	Standard
|>	**In**	115	635914.3	1.5				ug/L	646604	Standard
|	**Sn**	118	1644.4	1.9				ug/L	864	Standard
|	**Sb**	123	570.3	0.4				ug/L	18	Standard
⌊	**Ba**	135	263.3	10.3				ug/L	39	Standard
⌈	**Ce**	140	51.0	10.4				ug/L	46	Standard
⌊>	**Tb**	159	690114.9	1.2				ug/L	695671	Standard
⌈	**Ho**	165	8.0	21.7				ug/L	9	Standard
|	**Tl**	203	1408.1	6.0				ug/L	687	Standard
|	**Tl**	205	3292.7	8.2				ug/L	1624	Standard
|	**Pb**	206	947.4	2.5				ug/L	305	Standard
|	**Pb**	207	806.4	1.3				ug/L	231	Standard
|	**Pb**	208	3754.8	1.8				ug/L	1129	Standard
|	**U**	238	1307.4	3.0				ug/L	3	Standard
⌊>	**Bi**	209	399584.7	1.3				ug/L	405108	Standard
⌈	**Na**	23	115.0	13.0				mg/L	118	Standard
|	**Mg**	24	3177.0	1.3				mg/L	377	Standard

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	K	39	648.3	1.9		mg/L	583	Standard
	Ca	43	81.7	7.1		mg/L	73	Standard
	Fe	54	877.5	9.7		mg/L	785	Standard
	Fe	57	6818.2	3.8		mg/L	6133	Standard
>	**Sc-1**	45	252400.5	2.1		mg/L	254529	Standard
	Cl	35	909216.3	31.4		ug/L	1641778	Standard
	Kr	83	58.9	1.7		ug/L	60	Standard
	Br	81	11275.9	2.9		ug/L	11554	Standard
	P	31	47338.9	4.6		ug/L	45410	Standard
	S	34	568672.6	3.1		ug/L	568857	Standard
	Sr	88	261.7	14.3		ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	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: Standard 2
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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
Report Date/Time: Thursday, May 10, 2012 09:10:42
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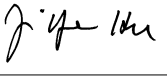

Method 6020 - Summary Report

Sample ID: Standard 3
Sample Date/Time: Thursday, May 10, 2012 09:11:01
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	12697.0	4.1	**50.0000**	53.787	107.6	ug/L	12600	Standard
|	**Be**	9	167064.6	2.1	**50.0000**	0.217	0.4	ug/L	5	Standard
|	**Al**	27	804362.4	3.4	**50.0000**	0.728	1.5	ug/L	16102	Standard
⌊>	**Sc**	45	256559.6	2.2				ug/L	254529	Standard
⌈	**Ti**	47	153410.6	1.7	**100.0000**	2.414	2.4	ug/L	84	Standard
|	**V**	51	779011.4	4.4	**50.0000**	0.491	1.0	ug/L	5785	Standard
|	**Cr**	52	585922.9	3.4	**50.0000**	0.445	0.9	ug/L	12212	Standard
|	**Cr**	53	89888.4	2.2	**50.0000**	0.826	1.7	ug/L	5042	Standard
|	**Mn**	55	1035677.1	1.9	**50.0000**	0.988	2.0	ug/L	1290	Standard
|	**Co**	59	734902.6	1.8	**50.0000**	1.380	2.8	ug/L	143	Standard
|	**Ni**	60	154499.3	2.1	**50.0000**	0.925	1.8	ug/L	79	Standard
|	**Cu**	65	140650.8	2.6	**50.0000**	0.802	1.6	ug/L	154	Standard
|	**Zn**	66	63323.8	2.5	**50.0000**	0.879	1.8	ug/L	194	Standard
| >	**Ge**	72	231627.6	3.6				ug/L	232024	Standard
|	**As**	75	56843.4	2.6	**50.0000**	0.680	1.4	ug/L	-297	Standard
|	**Se**	82	6450.0	2.8	**50.0000**	0.613	1.2	ug/L	17	Standard
⌊	**Se-1**	77	4267.3	4.5	**50.0000**	0.522	1.0	ug/L	180	Standard
	Ga	71	207257.6	3.4				mg/L	210139	Standard
⌈	**Rb**	85	981.7	7.5				ug/L	12	Standard
| >	**Y**	89	209599.2	3.4				ug/L	214065	Standard
⌊	**Rh**	103	35.0	14.3				ug/L	0	Standard
⌈	**Mo**	98	413611.0	2.7	**100.0000**	0.861	0.9	ug/L	6	Standard
|	**Ag**	107	421354.3	2.4	**50.0000**	0.169	0.3	ug/L	33	Standard
|	**Cd**	111	227412.3	1.9	**50.0000**	0.146	0.3	mg/L	437	Standard
|	**Cd**	114	592594.7	1.3	**50.0000**	0.789	1.6	ug/L	1160	Standard
| >	**In**	115	643023.3	2.1				ug/L	646604	Standard
|	**Sn**	118	779470.8	2.3	**50.0000**	0.236	0.5	ug/L	864	Standard
|	**Sb**	123	547466.5	1.7	**50.0000**	0.471	0.9	ug/L	18	Standard
⌊	**Ba**	135	229011.4	1.6	**50.0000**	0.515	1.0	ug/L	39	Standard
⌈	**Ce**	140	869.7	4.8				ug/L	46	Standard
⌊>	**Tb**	159	705659.3	2.5				ug/L	695671	Standard
⌈	**Ho**	165	18.0	38.5				ug/L	9	Standard
|	**Tl**	203	807838.7	1.2	**50.0000**	0.688	1.4	ug/L	687	Standard
|	**Tl**	205	1877593.8	1.7	**50.0000**	0.414	0.8	ug/L	1624	Standard
|	**Pb**	206	644401.0	1.5	**50.0000**	0.499	1.0	ug/L	305	Standard
|	**Pb**	207	551181.8	1.5	**50.0000**	0.519	1.0	ug/L	231	Standard
|	**Pb**	208	2540887.7	1.5	**50.0000**	0.559	1.1	ug/L	1129	Standard
|	**U**	238	1298037.0	2.3	**50.0000**	0.921	1.8	ug/L	3	Standard
⌊>	**Bi**	209	396777.2	2.5				ug/L	405108	Standard
⌈	**Na**	23	18107.5	4.3	**5.0000**	0.147	2.9	mg/L	118	Standard
|	**Mg**	24	2727784.1	1.8	**5.0000**	0.028	0.6	mg/L	377	Standard

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	K	39	59468.2	2.7	**5.0000**	0.029	0.6	mg/L	583	Standard
	Ca	43	2153.5	1.4	**5.0000**	0.041	0.8	mg/L	73	Standard
	Fe	54	28922.1	3.1	**5.0000**	0.057	1.1	mg/L	785	Standard
	Fe	57	891355.0	2.9	**5.0000**	0.060	1.2	mg/L	6133	Standard
>	**Sc-1**	45	256559.6	2.2				mg/L	254529	Standard
	Cl	35	836184.5	33.7				ug/L	1641778	Standard
	Kr	83	54.6	5.9				ug/L	60	Standard
	Br	81	10795.5	5.5				ug/L	11554	Standard
	P	31	57242.1	0.4				ug/L	45410	Standard
	S	34	668932.7	4.6				ug/L	568857	Standard
	Sr	88	676.7	7.2				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	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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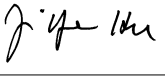

Method 6020 - Summary Report

Sample ID: Standard 4
Sample Date/Time: Thursday, May 10, 2012 09:13:54
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	13414.3	5.3	**153.0915**	45.759	29.9	ug/L	12600	Standard
|	**Be**	9	323973.5	4.6	**100.5774**	3.550	3.5	ug/L	5	Standard
|	**Al**	27	1500939.8	1.8	**99.0570**	2.623	2.6	ug/L	16102	Standard
⌊>	**Sc**	45	245906.8	2.2				ug/L	254529	Standard
⌈	**Ti**	47	295224.8	2.3	**199.2584**	1.113	0.6	ug/L	84	Standard
|	**V**	51	1502349.3	1.9	**99.9041**	0.705	0.7	ug/L	5785	Standard
|	**Cr**	52	1118483.5	2.2	**99.7419**	0.597	0.6	ug/L	12212	Standard
|	**Cr**	53	170014.6	1.8	**99.4952**	0.455	0.5	ug/L	5042	Standard
|	**Mn**	55	1956126.9	1.8	**98.7277**	0.623	0.6	ug/L	1290	Standard
|	**Co**	59	1387793.4	0.9	**98.6826**	1.392	1.4	ug/L	143	Standard
|	**Ni**	60	291147.1	3.9	**98.5792**	2.776	2.8	ug/L	79	Standard
|	**Cu**	65	263049.8	2.6	**98.2220**	1.304	1.3	ug/L	154	Standard
|	**Zn**	66	119805.7	2.6	**98.8582**	1.198	1.2	ug/L	194	Standard
|>	**Ge**	72	224475.8	2.1				ug/L	232024	Standard
|	**As**	75	109567.7	2.2	**99.5962**	0.559	0.6	ug/L	-297	Standard
|	**Se**	82	12342.6	2.0	**99.4265**	0.465	0.5	ug/L	17	Standard
⌊	**Se-1**	77	8119.5	1.4	**99.9770**	0.904	0.9	ug/L	180	Standard
	Ga	71	200013.2	2.9				mg/L	210139	Standard
⌈	**Rb**	85	7170.0	2.6				ug/L	12	Standard
|>	**Y**	89	201687.6	2.9				ug/L	214065	Standard
⌊	**Rh**	103	61.7	32.8				ug/L	0	Standard
⌈	**Mo**	98	796443.3	0.8	**199.0543**	4.043	2.0	ug/L	6	Standard
|	**Ag**	107	800232.8	3.2	**98.8186**	1.525	1.5	ug/L	33	Standard
|	**Cd**	111	433700.0	2.1	**99.0729**	1.150	1.2	mg/L	437	Standard
|	**Cd**	114	1133497.1	2.1	**99.2161**	0.781	0.8	ug/L	1160	Standard
|>	**In**	115	625291.1	2.9				ug/L	646604	Standard
|	**Sn**	118	1539643.1	2.5	**100.8150**	2.091	2.1	ug/L	864	Standard
|	**Sb**	123	1071937.6	2.0	**100.3493**	2.258	2.3	ug/L	18	Standard
⌊	**Ba**	135	445279.4	1.1	**100.0081**	2.403	2.4	ug/L	39	Standard
⌈	**Ce**	140	332.3	5.1				ug/L	46	Standard
⌊>	**Tb**	159	705112.3	0.8				ug/L	695671	Standard
⌈	**Ho**	165	24.7	16.9				ug/L	9	Standard
|	**Tl**	203	1561604.6	1.8	**99.8781**	0.156	0.2	ug/L	687	Standard
|	**Tl**	205	3768842.5	1.3	**101.7694**	0.760	0.7	ug/L	1624	Standard
|	**Pb**	206	1246773.7	1.8	**99.9191**	0.494	0.5	ug/L	305	Standard
|	**Pb**	207	1060271.4	1.3	**99.6327**	0.677	0.7	ug/L	231	Standard
|	**Pb**	208	4982233.2	1.3	**100.5903**	0.722	0.7	ug/L	1129	Standard
|	**U**	238	2768770.5	1.2	**104.7831**	0.797	0.8	ug/L	3	Standard
⌊>	**Bi**	209	384495.3	2.0				ug/L	405108	Standard
⌈	**Na**	23	35174.1	2.4	**10.0821**	0.277	2.7	mg/L	118	Standard
|	**Mg**	24	5327015.3	0.5	**10.0947**	0.249	2.5	mg/L	377	Standard

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	K	39	111065.8	3.0	**9.8949**	0.190	1.9	mg/L	583	Standard
	Ca	43	4150.6	3.8	**10.1239**	0.339	3.3	mg/L	73	Standard
	Fe	54	55014.7	3.1	**10.0380**	0.266	2.7	mg/L	785	Standard
	Fe	57	1685556.5	1.3	**9.9498**	0.107	1.1	mg/L	6133	Standard
>	**Sc-1**	45	245906.8	2.2				mg/L	254529	Standard
	Cl	35	768307.3	35.7				ug/L	1641778	Standard
	Kr	83	57.4	3.9				ug/L	60	Standard
	Br	81	10497.0	3.7				ug/L	11554	Standard
	P	31	54831.6	1.7				ug/L	45410	Standard
	S	34	584650.2	8.1				ug/L	568857	Standard
	Sr	88	15082.5	1.1				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	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 4
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Method 6020 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Thursday, May 10, 2012 09:16:48
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	12079.8	3.0	**-19.4841**	16.170	83.0	ug/L	12600	Standard
|	**Be**	9	170411.6	2.0	**51.5232**	2.351	4.6	ug/L	5	Standard
|	**Al**	27	809934.5	0.4	**51.6527**	1.603	3.1	ug/L	16102	Standard
⌊>	**Sc**	45	252709.5	2.9				ug/L	254529	Standard
⌈	**Ti**	47	153194.2	0.4	**103.3157**	3.756	3.6	ug/L	84	Standard
|	**V**	51	773664.5	0.5	**51.2690**	1.475	2.9	ug/L	5785	Standard
|	**Cr**	52	583968.8	0.9	**51.5389**	1.380	2.7	ug/L	12212	Standard
|	**Cr**	53	89393.0	1.8	**51.5554**	1.953	3.8	ug/L	5042	Standard
|	**Mn**	55	1037347.5	0.6	**52.2900**	2.067	4.0	ug/L	1290	Standard
|	**Co**	59	723345.7	1.3	**51.4012**	2.219	4.3	ug/L	143	Standard
|	**Ni**	60	153594.3	1.3	**51.9536**	1.067	2.1	ug/L	79	Standard
|	**Cu**	65	139249.1	1.6	**51.9243**	0.920	1.8	ug/L	154	Standard
|	**Zn**	66	64771.2	2.1	**53.3102**	0.678	1.3	ug/L	194	Standard
| >	**Ge**	72	224774.2	3.4				ug/L	232024	Standard
|	**As**	75	57416.4	1.2	**52.2550**	1.115	2.1	ug/L	-297	Standard
|	**Se**	82	6583.0	1.8	**52.9030**	0.829	1.6	ug/L	17	Standard
⌊	**Se-1**	77	4268.3	2.2	**51.6315**	0.908	1.8	ug/L	180	Standard
	Ga	71	201837.0	3.1				mg/L	210139	Standard
⌈	**Rb**	85	993.4	13.0				ug/L	12	Standard
| >	**Y**	89	213089.9	1.7				ug/L	214065	Standard
⌊	**Rh**	103	41.7	25.0				ug/L	0	Standard
⌈	**Mo**	98	418379.6	1.6	**103.0254**	1.101	1.1	ug/L	6	Standard
|	**Ag**	107	431477.2	1.7	**52.5147**	0.380	0.7	ug/L	33	Standard
|	**Cd**	111	230008.8	1.2	**51.7381**	0.272	0.5	mg/L	437	Standard
|	**Cd**	114	594374.2	1.1	**51.2280**	0.425	0.8	ug/L	1160	Standard
| >	**In**	115	634387.7	1.6				ug/L	646604	Standard
|	**Sn**	118	807101.5	1.5	**52.0555**	0.491	0.9	ug/L	864	Standard
|	**Sb**	123	554794.0	1.3	**51.1776**	0.279	0.5	ug/L	18	Standard
⌊	**Ba**	135	233205.9	1.5	**51.6018**	0.448	0.9	ug/L	39	Standard
⌈	**Ce**	140	865.7	2.5				ug/L	46	Standard
⌊>	**Tb**	159	712411.3	0.9				ug/L	695671	Standard
⌈	**Ho**	165	16.7	12.5				ug/L	9	Standard
|	**Tl**	203	829493.4	0.6	**51.4990**	0.939	1.8	ug/L	687	Standard
|	**Tl**	205	1922323.3	1.2	**50.3849**	1.172	2.3	ug/L	1624	Standard
|	**Pb**	206	660297.6	1.5	**51.3726**	1.120	2.2	ug/L	305	Standard
|	**Pb**	207	570457.7	1.6	**52.0396**	1.310	2.5	ug/L	231	Standard
|	**Pb**	208	2619182.7	0.9	**51.3327**	0.853	1.7	ug/L	1129	Standard
|	**U**	238	1356897.7	0.5	**49.8585**	0.603	1.2	ug/L	3	Standard
⌊>	**Bi**	209	396026.0	1.6				ug/L	405108	Standard
⌈	**Na**	23	18195.9	1.2	**5.0633**	0.158	3.1	mg/L	118	Standard
|	**Mg**	24	2436500.4	17.9	**4.4878**	0.772	17.2	mg/L	377	Standard

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	K	39	59247.3	0.9	**5.1143**	0.150	2.9	mg/L	583	Standard
	Ca	43	2208.5	2.0	**5.1536**	0.255	4.9	mg/L	73	Standard
	Fe	54	29200.0	2.5	**5.1104**	0.030	0.6	mg/L	785	Standard
	Fe	57	852740.2	1.2	**4.8822**	0.120	2.5	mg/L	6133	Standard
>	**Sc-1**	45	252709.5	2.9				mg/L	254529	Standard
	Cl	35	715893.1	36.7				ug/L	1641778	Standard
	Kr	83	54.0	0.6				ug/L	60	Standard
	Br	81	10597.9	3.6				ug/L	11554	Standard
	P	31	54277.9	1.2				ug/L	45410	Standard
	S	34	570970.4	3.2				ug/L	568857	Standard
	Sr	88	648.3	17.4				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9	103.046		
	Al	27	103.305		
>	Sc	45			
	Ti	47	103.316		
	V	51	102.538		
	Cr	52	103.078		
	Cr	53	103.111		
	Mn	55	104.580		
	Co	59	102.802		
	Ni	60	103.907		
	Cu	65	103.849		
	Zn	66	106.620		
>	Ge	72		96.876	
	As	75	104.510		
	Se	82	105.806		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		99.545	
	Rh	103			
	Mo	98	103.025		
	Ag	107	105.029		
	Cd	111	103.476		
	Cd	114			
>	In	115		98.111	
	Sn	118	104.111		
	Sb	123	102.355		
	Ba	135	103.204		
	Ce	140			
>	Tb	159		102.406	
	Ho	165			
	Tl	203	102.998		
	Tl	205			
	Pb	206	102.745		

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	Pb	207	104.079	
	Pb	208	102.665	
	U	238	99.717	
>	Bi	209		97.758
	Na	23	101.267	
	Mg	24	89.757	
	K	39	102.286	
	Ca	43	103.071	
	Fe	54	102.207	
	Fe	57	97.644	
>	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 1	Mg	24	

Sample ID: QC Std 1
Report Date/Time: Thursday, May 10, 2012 09:19:21
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Method 6020 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Thursday, May 10, 2012 09:19:43
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	11983.1	0.2	**39.0954**	23.424	59.9	ug/L	12600	Standard
|	**Be**	9	16.7	96.4	**-0.0092**	0.005	55.2	ug/L	5	Standard
|	**Al**	27	11037.4	2.1	**-0.0394**	0.024	59.9	ug/L	16102	Standard
⌊>	**Sc**	45	239298.6	1.6				ug/L	254529	Standard
⌈	**Ti**	47	98.3	12.3	**0.0068**	0.008	123.7	ug/L	84	Standard
|	**V**	51	3678.2	1.8	**-0.0382**	0.003	8.0	ug/L	5785	Standard
|	**Cr**	52	10249.8	1.0	**-0.0901**	0.021	23.2	ug/L	12212	Standard
|	**Cr**	53	1468.4	6.4	**-0.6282**	0.058	9.2	ug/L	5042	Standard
|	**Mn**	55	1197.4	4.9	**-0.0227**	0.003	13.6	ug/L	1290	Standard
|	**Co**	59	154.7	7.2	**0.0011**	0.001	70.9	ug/L	143	Standard
|	**Ni**	60	84.0	13.7	**0.0054**	0.004	72.0	ug/L	79	Standard
|	**Cu**	65	122.7	4.5	**-0.0026**	0.002	87.9	ug/L	154	Standard
|	**Zn**	66	170.7	5.6	**-0.0307**	0.010	32.6	ug/L	194	Standard
|>	**Ge**	72	218202.8	1.3				ug/L	232024	Standard
|	**As**	75	-222.3	10.3	**0.0189**	0.024	127.3	ug/L	-297	Standard
|	**Se**	82	25.8	32.4	**0.0551**	0.067	122.4	ug/L	17	Standard
⌊	**Se-1**	77	106.0	6.6	**-0.4538**	0.091	20.1	ug/L	180	Standard
	Ga	71	196847.4	2.6				mg/L	210139	Standard
⌈	**Rb**	85	16.7	34.6				ug/L	12	Standard
|>	**Y**	89	205040.3	2.6				ug/L	214065	Standard
⌊	**Rh**	103	5.0	100.0				ug/L	0	Standard
⌈	**Mo**	98	92.2	35.4	**0.0151**	0.008	55.1	ug/L	6	Standard
|	**Ag**	107	52.7	14.4	**-0.0008**	0.001	119.1	ug/L	33	Standard
|	**Cd**	111	454.8	5.9	**0.0123**	0.007	53.3	mg/L	437	Standard
|	**Cd**	114	1128.4	0.8	**0.0000**	0.001	9531.5	ug/L	1160	Standard
|>	**In**	115	618458.5	0.4				ug/L	646604	Standard
|	**Sn**	118	943.0	4.9	**0.0065**	0.003	48.3	ug/L	864	Standard
|	**Sb**	123	1292.0	43.9	**0.1198**	0.054	45.1	ug/L	18	Standard
⌊	**Ba**	135	46.3	36.4	**0.0023**	0.004	165.6	ug/L	39	Standard
⌈	**Ce**	140	41.7	25.0				ug/L	46	Standard
⌊>	**Tb**	159	676741.5	1.2				ug/L	695671	Standard
⌈	**Ho**	165	6.0	16.7				ug/L	9	Standard
|	**Tl**	203	541.0	29.7	**-0.0025**	0.010	423.3	ug/L	687	Standard
|	**Tl**	205	1214.7	29.3	**-0.0031**	0.010	311.9	ug/L	1624	Standard
|	**Pb**	206	298.3	8.7	**0.0006**	0.002	380.6	ug/L	305	Standard
|	**Pb**	207	275.3	19.6	**0.0027**	0.005	193.5	ug/L	231	Standard
|	**Pb**	208	1238.7	12.1	**0.0018**	0.003	177.0	ug/L	1129	Standard
|	**U**	238	59.0	79.3	**0.0046**	0.002	38.3	ug/L	3	Standard
⌊>	**Bi**	209	388878.3	0.6				ug/L	405108	Standard
⌈	**Na**	23	100.0	26.5	**0.0022**	0.008	336.6	mg/L	118	Standard
|	**Mg**	24	480.0	15.0	**0.0001**	0.000	189.3	mg/L	377	Standard

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	K	39	625.0	10.8	**0.0059**	0.006	103.5	mg/L	583	Standard
	Ca	43	68.3	18.4	**-0.0182**	0.032	175.4	mg/L	73	Standard
	Fe	54	763.3	2.3	**-0.0079**	0.003	33.1	mg/L	785	Standard
	Fe	57	4555.7	5.1	**-0.0066**	0.002	23.7	mg/L	6133	Standard
>	**Sc-1**	45	239298.6	1.6				mg/L	254529	Standard
	Cl	35	687584.2	39.1				ug/L	1641778	Standard
	Kr	83	51.7	7.1				ug/L	60	Standard
	Br	81	10431.9	3.8				ug/L	11554	Standard
	P	31	49847.7	1.4				ug/L	45410	Standard
	S	34	563603.7	1.2				ug/L	568857	Standard
	Sr	88	201.7	14.9				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		94.043	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		95.784	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		95.647	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		97.279	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	95.994
	Na	23	
	Mg	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 3
Sample Date/Time: Thursday, May 10, 2012 09:22:38
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: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	11792.9	3.3	**-5.1185**	65.115	1272.1	ug/L	12600	Standard
|	**Be**	9	16.7	96.4	**-0.0092**	0.005	56.6	ug/L	5	Standard
|	**Al**	27	14975.7	1.5	**0.2101**	0.027	12.7	ug/L	16102	Standard
⌊>	**Sc**	45	244002.8	1.9				ug/L	254529	Standard
⌈	**Ti**	47	104.0	19.3	**0.0110**	0.015	132.4	ug/L	84	Standard
|	**V**	51	9546.3	2.9	**0.3661**	0.025	6.8	ug/L	5785	Standard
|	**Cr**	52	19353.0	0.7	**0.7581**	0.029	3.8	ug/L	12212	Standard
|	**Cr**	53	2730.2	8.6	**0.1480**	0.159	107.6	ug/L	5042	Standard
|	**Mn**	55	10886.2	1.5	**0.4822**	0.005	1.1	ug/L	1290	Standard
|	**Co**	59	5686.4	1.6	**0.4068**	0.010	2.4	ug/L	143	Standard
|	**Ni**	60	4629.7	4.0	**1.5930**	0.052	3.3	ug/L	79	Standard
|	**Cu**	65	2265.8	5.8	**0.8230**	0.044	5.3	ug/L	154	Standard
|	**Zn**	66	8450.7	1.8	**7.0291**	0.172	2.4	ug/L	194	Standard
| >	**Ge**	72	217671.6	1.3				ug/L	232024	Standard
|	**As**	75	198.3	12.6	**0.4121**	0.026	6.3	ug/L	-297	Standard
|	**Se**	82	67.9	12.8	**0.4074**	0.080	19.7	ug/L	17	Standard
⌊	**Se-1**	77	138.0	6.5	**-0.0374**	0.102	272.8	ug/L	180	Standard
	Ga	71	196405.4	1.9				mg/L	210139	Standard
⌈	**Rb**	85	21.7	26.6				ug/L	12	Standard
| >	**Y**	89	203652.3	3.6				ug/L	214065	Standard
⌊	**Rh**	103	0.0					ug/L	0	Standard
⌈	**Mo**	98	37.5	28.8	**0.0013**	0.003	203.4	ug/L	6	Standard
|	**Ag**	107	3221.7	0.5	**0.3973**	0.003	0.8	ug/L	33	Standard
|	**Cd**	111	1467.3	2.6	**0.2483**	0.008	3.2	mg/L	437	Standard
|	**Cd**	114	3814.1	2.1	**0.2399**	0.007	2.8	ug/L	1160	Standard
| >	**In**	115	614777.0	0.2				ug/L	646604	Standard
|	**Sn**	118	773.0	4.5	**-0.0044**	0.002	49.4	ug/L	864	Standard
|	**Sb**	123	4426.1	3.0	**0.4188**	0.012	2.8	ug/L	18	Standard
⌊	**Ba**	135	3269.7	2.9	**0.7384**	0.020	2.7	ug/L	39	Standard
⌈	**Ce**	140	55.0	17.3				ug/L	46	Standard
⌊>	**Tb**	159	678352.6	0.6				ug/L	695671	Standard
⌈	**Ho**	165	7.3	39.4				ug/L	9	Standard
|	**Tl**	203	1720.8	6.7	**0.0724**	0.008	11.6	ug/L	687	Standard
|	**Tl**	205	4090.9	7.7	**0.0739**	0.009	12.6	ug/L	1624	Standard
|	**Pb**	206	2839.9	3.3	**0.2024**	0.008	4.0	ug/L	305	Standard
|	**Pb**	207	2388.5	1.8	**0.1994**	0.006	3.2	ug/L	231	Standard
|	**Pb**	208	11082.6	0.7	**0.1987**	0.002	1.2	ug/L	1129	Standard
|	**U**	238	10155.1	0.5	**0.3830**	0.006	1.5	ug/L	3	Standard
⌊>	**Bi**	209	388232.4	1.1				ug/L	405108	Standard
⌈	**Na**	23	96.7	13.0	**0.0007**	0.003	469.8	mg/L	118	Standard
|	**Mg**	24	498.3	4.7	**0.0001**	0.000	72.4	mg/L	377	Standard

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	K	39	590.0	3.7	**0.0017**	0.001	60.5	mg/L	583	Standard
	Ca	43	81.7	12.7	**0.0119**	0.026	220.2	mg/L	73	Standard
	Fe	54	783.3	9.9	**-0.0068**	0.017	255.6	mg/L	785	Standard
	Fe	57	4742.4	6.0	**-0.0060**	0.002	37.2	mg/L	6133	Standard
>	**Sc-1**	45	244002.8	1.9				mg/L	254529	Standard
	Cl	35	667573.1	38.7				ug/L	1641778	Standard
	Kr	83	55.3	7.3				ug/L	60	Standard
	Br	81	10410.2	4.1				ug/L	11554	Standard
	P	31	50693.8	1.4				ug/L	45410	Standard
	S	34	558767.9	2.4				ug/L	568857	Standard
	Sr	88	213.3	30.6				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51	91.529		
	Cr	52	94.768		
	Cr	53			
	Mn	55	96.438		
	Co	59	101.690		
	Ni	60	99.564		
	Cu	65	102.877		
	Zn	66	112.466		
>	Ge	72		93.814	
	As	75	103.019		
	Se	82	101.847		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		95.136	
	Rh	103			
	Mo	98			
	Ag	107	99.325		
	Cd	111	103.472		
	Cd	114			
>	In	115		95.078	
	Sn	118			
	Sb	123	104.705		
	Ba	135	98.457		
	Ce	140			
>	Tb	159		97.510	
	Ho	165			
	Tl	203	90.470		
	Tl	205			
	Pb	206			

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	Pb	207			
	Pb	208	99.339		
	U	238	95.753		
>	Bi	209		95.834	
	Na	23			
	Mg	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 10, 2012 09:25:30
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	12271.6	2.4	**27.1175**	18.088	66.7	ug/L	12600	Standard
|	**Be**	9	15.0	88.2	**-0.0098**	0.004	41.5	ug/L	5	Standard
|	**Al**	27	69465877.0	1.6	**4593.1854**	55.721	1.2	ug/L	16102	Standard
⌊>	**Sc**	45	247297.0	1.1				ug/L	254529	Standard
⌈	**Ti**	47	164039.6	1.1	**112.7308**	1.845	1.6	ug/L	84	Standard
|	**V**	51	4670.4	4.0	**0.0267**	0.017	62.8	ug/L	5785	Standard
|	**Cr**	52	12324.3	2.2	**0.0908**	0.040	43.6	ug/L	12212	Standard
|	**Cr**	53	3045.3	3.5	**0.3163**	0.040	12.5	ug/L	5042	Standard
|	**Mn**	55	2380.2	3.0	**0.0375**	0.004	10.1	ug/L	1290	Standard
|	**Co**	59	377.0	8.9	**0.0170**	0.002	13.4	ug/L	143	Standard
|	**Ni**	60	1178.7	5.6	**0.3825**	0.017	4.5	ug/L	79	Standard
|	**Cu**	65	533.3	2.7	**0.1532**	0.008	5.1	ug/L	154	Standard
|	**Zn**	66	2017.5	2.0	**1.5222**	0.017	1.1	ug/L	194	Standard
| >	**Ge**	72	220440.2	1.4				ug/L	232024	Standard
|	**As**	75	-227.0	16.7	**0.0167**	0.036	212.5	ug/L	-297	Standard
|	**Se**	82	23.6	37.7	**0.0349**	0.071	203.1	ug/L	17	Standard
⌊	**Se-1**	77	230.7	3.3	**1.1243**	0.117	10.4	ug/L	180	Standard
	Ga	71	195339.0	1.6				mg/L	210139	Standard
⌈	**Rb**	85	3735.5	1.5				ug/L	12	Standard
| >	**Y**	89	198862.0	2.4				ug/L	214065	Standard
⌊	**Rh**	103	3.3	173.2				ug/L	0	Standard
⌈	**Mo**	98	399927.5	0.7	**100.4425**	0.454	0.5	ug/L	6	Standard
|	**Ag**	107	95.3	11.6	**0.0045**	0.001	30.6	ug/L	33	Standard
|	**Cd**	111	634.2	5.8	**0.0529**	0.009	16.2	mg/L	437	Standard
|	**Cd**	114	3239.6	0.8	**0.1854**	0.003	1.6	ug/L	1160	Standard
| >	**In**	115	621977.0	0.2				ug/L	646604	Standard
|	**Sn**	118	1123.4	4.5	**0.0181**	0.003	17.6	ug/L	864	Standard
|	**Sb**	123	637.9	10.8	**0.0575**	0.006	11.2	ug/L	18	Standard
⌊	**Ba**	135	127.7	4.8	**0.0206**	0.001	6.7	ug/L	39	Standard
⌈	**Ce**	140	1809.1	1.2				ug/L	46	Standard
⌊>	**Tb**	159	693943.6	0.6				ug/L	695671	Standard
⌈	**Ho**	165	10.0	40.0				ug/L	9	Standard
|	**Tl**	203	579.0	4.1	**0.0013**	0.002	122.3	ug/L	687	Standard
|	**Tl**	205	1239.7	3.7	**-0.0013**	0.001	102.3	ug/L	1624	Standard
|	**Pb**	206	546.7	6.1	**0.0219**	0.003	13.4	ug/L	305	Standard
|	**Pb**	207	453.0	5.3	**0.0207**	0.002	11.8	ug/L	231	Standard
|	**Pb**	208	2090.7	3.4	**0.0203**	0.002	8.1	ug/L	1129	Standard
|	**U**	238	29.7	21.7	**0.0036**	0.000	7.2	ug/L	3	Standard
⌊>	**Bi**	209	375006.1	0.4				ug/L	405108	Standard
⌈	**Na**	23	43815.0	2.8	**12.4907**	0.233	1.9	mg/L	118	Standard
|	**Mg**	24	2631952.0	1.8	**4.9574**	0.080	1.6	mg/L	377	Standard

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	K	39	58594.8	0.9	**5.1667**	0.054	1.1	mg/L	583	Standard
	Ca	43	6012.9	4.0	**14.6706**	0.665	4.5	mg/L	73	Standard
	Fe	54	67357.1	3.1	**12.2518**	0.275	2.2	mg/L	785	Standard
	Fe	57	1944964.3	2.0	**11.4192**	0.098	0.9	mg/L	6133	Standard
>	**Sc-1**	45	247297.0	1.1				mg/L	254529	Standard
	Cl	35	9736080.2	2.1				ug/L	1641778	Standard
	Kr	83	65.1	11.9				ug/L	60	Standard
	Br	81	10431.9	2.0				ug/L	11554	Standard
	P	31	5807067.1	1.2				ug/L	45410	Standard
	S	34	1254879.0	0.8				ug/L	568857	Standard
	Sr	88	1176.7	0.6				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	91.864		
>	Sc	45			
	Ti	47	112.731		
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		95.008	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		92.898	
	Rh	103			
	Mo	98	100.443		
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		96.191	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		99.752	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207			
	Pb	208			
	U	238			
>	Bi	209			92.569
	Na	23	99.926		
	Mg	24	99.148		
	K	39	103.333		
	Ca	43	97.804		
	Fe	54	98.015		
	Fe	57	91.354		
>	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 5
Sample Date/Time: Thursday, May 10, 2012 09:28:24
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	13129.0	1.0	**51.7920**	25.250	48.8	ug/L	12600	Standard
|	**Be**	9	348533.7	1.5	**102.5183**	2.130	2.1	ug/L	5	Standard
|	**Al**	27	65251266.3	1.5	**4110.4448**	92.802	2.3	ug/L	16102	Standard
⌊>	**Sc**	45	259617.4	1.7				ug/L	254529	Standard
⌈	**Ti**	47	154765.8	1.1	**100.3439**	1.693	1.7	ug/L	84	Standard
|	**V**	51	1561058.9	1.6	**99.7347**	1.234	1.2	ug/L	5785	Standard
|	**Cr**	52	1158266.0	1.7	**99.2328**	1.041	1.0	ug/L	12212	Standard
|	**Cr**	53	176555.4	1.6	**99.2777**	2.295	2.3	ug/L	5042	Standard
|	**Mn**	55	1991879.5	0.7	**96.5924**	1.307	1.4	ug/L	1290	Standard
|	**Co**	59	1450109.7	0.5	**99.0592**	0.921	0.9	ug/L	143	Standard
|	**Ni**	60	306430.1	0.6	**99.7023**	0.930	0.9	ug/L	79	Standard
|	**Cu**	65	276417.3	1.5	**99.1820**	2.124	2.1	ug/L	154	Standard
|	**Zn**	66	128109.0	0.5	**101.5809**	1.162	1.1	ug/L	194	Standard
| >	**Ge**	72	233627.5	0.7				ug/L	232024	Standard
|	**As**	75	117065.0	0.4	**102.2422**	1.105	1.1	ug/L	-297	Standard
|	**Se**	82	13342.3	0.7	**103.2735**	0.080	0.1	ug/L	17	Standard
⌊	**Se-1**	77	8611.4	0.3	**101.9062**	0.622	0.6	ug/L	180	Standard
	Ga	71	209151.4	0.8				mg/L	210139	Standard
⌈	**Rb**	85	3608.8	3.5				ug/L	12	Standard
| >	**Y**	89	216950.2	3.7				ug/L	214065	Standard
⌊	**Rh**	103	75.0	34.6				ug/L	0	Standard
⌈	**Mo**	98	374763.9	1.8	**89.5808**	1.937	2.2	ug/L	6	Standard
|	**Ag**	107	749241.3	0.9	**88.5316**	1.851	2.1	ug/L	33	Standard
|	**Cd**	111	458178.0	1.2	**100.1285**	1.650	1.6	mg/L	437	Standard
|	**Cd**	114	1178649.5	0.9	**98.7036**	1.905	1.9	ug/L	1160	Standard
| >	**In**	115	653711.9	2.8				ug/L	646604	Standard
|	**Sn**	118	1906.1	1.6	**0.0636**	0.003	4.0	ug/L	864	Standard
|	**Sb**	123	1130869.1	1.4	**101.2621**	1.632	1.6	ug/L	18	Standard
⌊	**Ba**	135	458370.0	0.8	**98.4678**	2.016	2.0	ug/L	39	Standard
⌈	**Ce**	140	1739.4	4.9				ug/L	46	Standard
⌊>	**Tb**	159	737121.3	2.5				ug/L	695671	Standard
⌈	**Ho**	165	17.7	8.6				ug/L	9	Standard
|	**Tl**	203	1598903.2	0.9	**99.4927**	1.499	1.5	ug/L	687	Standard
|	**Tl**	205	3854954.5	0.8	**101.2680**	1.557	1.5	ug/L	1624	Standard
|	**Pb**	206	1276648.9	1.5	**99.5315**	0.946	0.9	ug/L	305	Standard
|	**Pb**	207	1111939.3	1.3	**101.6451**	1.254	1.2	ug/L	231	Standard
|	**Pb**	208	5182925.5	1.3	**101.7935**	1.097	1.1	ug/L	1129	Standard
|	**U**	238	2775198.5	0.5	**102.1897**	2.620	2.6	ug/L	3	Standard
⌊>	**Bi**	209	395286.0	2.3				ug/L	405108	Standard
⌈	**Na**	23	41573.7	2.8	**11.2873**	0.214	1.9	mg/L	118	Standard
|	**Mg**	24	2009297.9	18.3	**3.6123**	0.721	20.0	mg/L	377	Standard

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	K	39	53211.6	0.5	**4.4628**	0.058	1.3	mg/L	583	Standard
	Ca	43	5587.7	1.3	**12.9625**	0.086	0.7	mg/L	73	Standard
	Fe	54	62539.1	1.0	**10.8205**	0.151	1.4	mg/L	785	Standard
	Fe	57	1922786.2	0.7	**10.7532**	0.118	1.1	mg/L	6133	Standard
>	**Sc-1**	45	259617.4	1.7				mg/L	254529	Standard
	Cl	35	9001163.6	2.5				ug/L	1641778	Standard
	Kr	83	65.2	5.5				ug/L	60	Standard
	Br	81	11039.9	3.9				ug/L	11554	Standard
	P	31	5381742.0	1.4				ug/L	45410	Standard
	S	34	1225041.1	1.0				ug/L	568857	Standard
	Sr	88	1353.4	15.6				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	82.209		
>	Sc	45			
	Ti	47	100.344		
	V	51	99.735		
	Cr	52	99.233		
	Cr	53			
	Mn	55	96.592		
	Co	59	99.059		
	Ni	60	99.702		
	Cu	65	99.182		
	Zn	66	101.581		
>	Ge	72		100.691	
	As	75	102.242		
	Se	82	103.273		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		101.348	
	Rh	103			
	Mo	98	89.581		
	Ag	107	88.532		
	Cd	111	100.129		
	Cd	114			
>	In	115		101.099	
	Sn	118			
	Sb	123	101.262		
	Ba	135	98.468		
	Ce	140			
>	Tb	159		105.958	
	Ho	165			
	Tl	203	99.493		
	Tl	205			
	Pb	206	99.531		

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	Pb	207	101.645	
	Pb	208	101.794	
	U	238	102.190	
>	Bi	209		97.575
	Na	23	90.299	
	Mg	24	72.246	
	K	39	89.256	
	Ca	43	86.417	
	Fe	54	86.564	
	Fe	57	86.026	
>	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	Mg	24	

Sample ID: QC Std 5
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Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, May 10, 2012 09:31:19
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	12198.2	2.1	**-54.6220**	24.464	44.8	ug/L	12600	Standard
|	**Be**	9	173845.1	1.3	**50.5195**	0.762	1.5	ug/L	5	Standard
|	**Al**	27	789108.2	3.1	**48.3278**	1.361	2.8	ug/L	16102	Standard
⌊>	**Sc**	45	262702.9	0.4				ug/L	254529	Standard
⌈	**Ti**	47	156094.0	1.3	**99.4616**	0.543	0.5	ug/L	84	Standard
|	**V**	51	799159.1	1.7	**50.0397**	0.729	1.5	ug/L	5785	Standard
|	**Cr**	52	600419.4	1.3	**50.0494**	0.102	0.2	ug/L	12212	Standard
|	**Cr**	53	90380.5	1.9	**49.1847**	0.593	1.2	ug/L	5042	Standard
|	**Mn**	55	1037765.0	1.1	**49.4185**	0.420	0.8	ug/L	1290	Standard
|	**Co**	59	746409.2	1.3	**50.1087**	0.593	1.2	ug/L	143	Standard
|	**Ni**	60	157718.7	1.5	**50.4229**	0.443	0.9	ug/L	79	Standard
|	**Cu**	65	142813.4	1.7	**50.3342**	0.495	1.0	ug/L	154	Standard
|	**Zn**	66	63461.3	2.0	**49.3635**	0.698	1.4	ug/L	194	Standard
| >	**Ge**	72	237707.4	1.3				ug/L	232024	Standard
|	**As**	75	58651.5	1.6	**50.4576**	0.352	0.7	ug/L	-297	Standard
|	**Se**	82	6812.0	2.2	**51.7404**	0.566	1.1	ug/L	17	Standard
⌊	**Se-1**	77	4372.6	1.4	**49.9429**	0.095	0.2	ug/L	180	Standard
	Ga	71	211871.4	1.7				mg/L	210139	Standard
⌈	**Rb**	85	1073.4	10.5				ug/L	12	Standard
| >	**Y**	89	215356.7	1.9				ug/L	214065	Standard
⌊	**Rh**	103	40.0	43.3				ug/L	0	Standard
⌈	**Mo**	98	421921.3	1.9	**99.8740**	2.756	2.8	ug/L	6	Standard
|	**Ag**	107	478526.5	5.2	**56.0011**	3.477	6.2	ug/L	33	Standard
|	**Cd**	111	236299.2	1.1	**51.0914**	1.072	2.1	mg/L	437	Standard
|	**Cd**	114	598722.2	0.9	**49.5961**	0.843	1.7	ug/L	1160	Standard
| >	**In**	115	660052.3	1.4				ug/L	646604	Standard
|	**Sn**	118	795517.4	0.7	**49.3158**	0.862	1.7	ug/L	864	Standard
|	**Sb**	123	567976.9	0.7	**50.3635**	0.993	2.0	ug/L	18	Standard
⌊	**Ba**	135	232911.3	1.1	**49.5356**	0.742	1.5	ug/L	39	Standard
⌈	**Ce**	140	885.7	2.6				ug/L	46	Standard
⌊>	**Tb**	159	730136.4	0.8				ug/L	695671	Standard
⌈	**Ho**	165	20.7	31.5				ug/L	9	Standard
|	**Tl**	203	830153.5	0.8	**50.5620**	0.173	0.3	ug/L	687	Standard
|	**Tl**	205	1927839.3	1.5	**49.5678**	0.502	1.0	ug/L	1624	Standard
|	**Pb**	206	665003.5	1.2	**50.7595**	0.675	1.3	ug/L	305	Standard
|	**Pb**	207	561385.1	2.4	**50.2357**	0.937	1.9	ug/L	231	Standard
|	**Pb**	208	2601477.6	1.5	**50.0190**	0.534	1.1	ug/L	1129	Standard
|	**U**	238	1349526.2	2.0	**48.6470**	0.570	1.2	ug/L	3	Standard
⌊>	**Bi**	209	403611.0	0.8				ug/L	405108	Standard
⌈	**Na**	23	18553.0	5.9	**4.9625**	0.278	5.6	mg/L	118	Standard
|	**Mg**	24	2729653.9	2.3	**4.8396**	0.093	1.9	mg/L	377	Standard

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	K	39	61061.2	2.0	**5.0670**	0.084	1.7	mg/L	583	Standard
	Ca	43	2120.1	3.6	**4.7397**	0.172	3.6	mg/L	73	Standard
	Fe	54	28886.7	2.0	**4.8552**	0.080	1.6	mg/L	785	Standard
	Fe	57	881769.3	2.5	**4.8538**	0.106	2.2	mg/L	6133	Standard
>	**Sc-1**	45	262702.9	0.4				mg/L	254529	Standard
	Cl	35	874456.3	30.4				ug/L	1641778	Standard
	Kr	83	59.0	4.4				ug/L	60	Standard
	Br	81	11121.6	1.3				ug/L	11554	Standard
	P	31	56614.8	2.9				ug/L	45410	Standard
	S	34	632710.4	1.0				ug/L	568857	Standard
	Sr	88	648.3	5.7				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	96.656		
>	Sc	45			
	Ti	47	99.462		
	V	51	100.079		
	Cr	52	100.099		
	Cr	53			
	Mn	55	98.837		
	Co	59	100.217		
	Ni	60	100.846		
	Cu	65	100.668		
	Zn	66	98.727		
>	Ge	72		102.450	
	As	75	100.915		
	Se	82	103.481		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		100.603	
	Rh	103			
	Mo	98	99.874		
	Ag	107	112.002		
	Cd	111	102.183		
	Cd	114			
>	In	115		102.080	
	Sn	118	98.632		
	Sb	123	100.727		
	Ba	135	99.071		
	Ce	140			
>	Tb	159		104.954	
	Ho	165			
	Tl	203	101.124		
	Tl	205			
	Pb	206	101.519		

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	Pb	207	100.471	
	Pb	208	100.038	
	U	238	97.294	
>	Bi	209		99.630
	Na	23	99.249	
	Mg	24	96.791	
	K	39	101.339	
	Ca	43	94.795	
	Fe	54	97.103	
	Fe	57	97.075	
>	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	

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Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, May 10, 2012 09:38:47
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	12723.7	2.1	**-1.9515**	25.085	1285.4	ug/L	12600	Standard
|	**Be**	9	176460.9	3.7	**51.3246**	1.458	2.8	ug/L	5	Standard
|	**Al**	27	794354.6	2.0	**48.7066**	0.504	1.0	ug/L	16102	Standard
⌊>	**Sc**	45	262431.8	1.3				ug/L	254529	Standard
⌈	**Ti**	47	156472.3	1.8	**99.0175**	1.773	1.8	ug/L	84	Standard
|	**V**	51	798133.0	1.9	**49.6248**	0.487	1.0	ug/L	5785	Standard
|	**Cr**	52	600356.1	2.2	**49.6887**	0.700	1.4	ug/L	12212	Standard
|	**Cr**	53	93097.0	2.9	**50.3370**	0.193	0.4	ug/L	5042	Standard
|	**Mn**	55	1063095.5	2.0	**50.2719**	0.484	1.0	ug/L	1290	Standard
|	**Co**	59	749580.3	2.4	**49.9657**	0.308	0.6	ug/L	143	Standard
|	**Ni**	60	157121.3	3.0	**49.8722**	0.159	0.3	ug/L	79	Standard
|	**Cu**	65	143224.7	2.6	**50.1228**	0.192	0.4	ug/L	154	Standard
|	**Zn**	66	64147.9	2.2	**49.5500**	0.449	0.9	ug/L	194	Standard
| >	**Ge**	72	239411.3	2.8				ug/L	232024	Standard
|	**As**	75	59483.0	2.8	**50.8085**	0.320	0.6	ug/L	-297	Standard
|	**Se**	82	6971.6	2.8	**52.5813**	0.022	0.0	ug/L	17	Standard
⌊	**Se-1**	77	4437.3	3.7	**50.3271**	0.426	0.8	ug/L	180	Standard
	Ga	71	214156.1	2.4				mg/L	210139	Standard
⌈	**Rb**	85	1150.0	6.1				ug/L	12	Standard
| >	**Y**	89	218587.2	0.9				ug/L	214065	Standard
⌊	**Rh**	103	38.3	37.7				ug/L	0	Standard
⌈	**Mo**	98	426220.9	1.4	**101.4860**	2.238	2.2	ug/L	6	Standard
|	**Ag**	107	456166.6	3.1	**53.6633**	0.114	0.2	ug/L	33	Standard
|	**Cd**	111	235528.1	2.1	**51.2168**	0.701	1.4	mg/L	437	Standard
|	**Cd**	114	597903.4	1.8	**49.8176**	0.755	1.5	ug/L	1160	Standard
| >	**In**	115	656357.8	3.3				ug/L	646604	Standard
|	**Sn**	118	800581.1	2.4	**49.9142**	0.765	1.5	ug/L	864	Standard
|	**Sb**	123	569911.2	2.0	**50.8275**	0.941	1.9	ug/L	18	Standard
⌊	**Ba**	135	234379.9	1.7	**50.1485**	1.300	2.6	ug/L	39	Standard
⌈	**Ce**	140	847.0	2.8				ug/L	46	Standard
⌊>	**Tb**	159	733192.0	2.2				ug/L	695671	Standard
⌈	**Ho**	165	27.7	14.6				ug/L	9	Standard
|	**Tl**	203	824476.1	2.3	**50.1142**	0.878	1.8	ug/L	687	Standard
|	**Tl**	205	1924250.9	2.3	**49.3756**	0.725	1.5	ug/L	1624	Standard
|	**Pb**	206	656414.7	2.1	**50.0003**	0.639	1.3	ug/L	305	Standard
|	**Pb**	207	560474.7	1.9	**50.0560**	0.542	1.1	ug/L	231	Standard
|	**Pb**	208	2593211.8	1.7	**49.7608**	0.518	1.0	ug/L	1129	Standard
|	**U**	238	1357330.9	2.6	**48.8296**	0.797	1.6	ug/L	3	Standard
⌊>	**Bi**	209	404416.7	1.3				ug/L	405108	Standard
⌈	**Na**	23	18556.4	1.8	**4.9697**	0.117	2.3	mg/L	118	Standard
|	**Mg**	24	2749523.6	1.6	**4.8801**	0.043	0.9	mg/L	377	Standard

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	K	39	60413.6	1.3	**5.0185**	0.084	1.7	mg/L	583	Standard
	Ca	43	2090.1	6.4	**4.6730**	0.250	5.4	mg/L	73	Standard
	Fe	54	29143.0	1.7	**4.9057**	0.119	2.4	mg/L	785	Standard
	Fe	57	877360.9	2.1	**4.8346**	0.078	1.6	mg/L	6133	Standard
>	**Sc-1**	45	262431.8	1.3				mg/L	254529	Standard
	Cl	35	1418476.5	48.9				ug/L	1641778	Standard
	Kr	83	61.9	12.7				ug/L	60	Standard
	Br	81	11011.5	4.1				ug/L	11554	Standard
	P	31	56743.6	0.5				ug/L	45410	Standard
	S	34	625424.8	5.2				ug/L	568857	Standard
	Sr	88	618.3	6.0				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	97.413		
>	Sc	45			
	Ti	47	99.018		
	V	51	99.250		
	Cr	52	99.377		
	Cr	53			
	Mn	55	100.544		
	Co	59	99.931		
	Ni	60	99.744		
	Cu	65	100.246		
	Zn	66	99.100		
>	Ge	72		103.184	
	As	75	101.617		
	Se	82	105.163		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		102.113	
	Rh	103			
	Mo	98	101.486		
	Ag	107	107.327		
	Cd	111	102.434		
	Cd	114			
>	In	115		101.508	
	Sn	118	99.828		
	Sb	123	101.655		
	Ba	135	100.297		
	Ce	140			
>	Tb	159		105.393	
	Ho	165			
	Tl	203	100.228		
	Tl	205			
	Pb	206	100.001		

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	Pb	207	100.112	
	Pb	208	99.522	
	U	238	97.659	
>	Bi	209		99.829
	Na	23	99.394	
	Mg	24	97.601	
	K	39	100.371	
	Ca	43	93.460	
	Fe	54	98.115	
	Fe	57	96.691	
>	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 10, 2012 09:42:01
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	12366.7	1.3	**20.2818**	21.675	106.9	ug/L	12600	Standard
|	**Be**	9	20.0	66.1	**-0.0084**	0.004	46.6	ug/L	5	Standard
|	**Al**	27	11064.0	2.0	**-0.0719**	0.016	22.3	ug/L	16102	Standard
⌊>	**Sc**	45	250654.0	2.8				ug/L	254529	Standard
⌈	**Ti**	47	91.3	17.0	**-0.0012**	0.010	801.6	ug/L	84	Standard
|	**V**	51	4270.1	3.7	**-0.0118**	0.006	54.9	ug/L	5785	Standard
|	**Cr**	52	10837.2	1.7	**-0.0839**	0.028	33.1	ug/L	12212	Standard
|	**Cr**	53	1944.3	11.2	**-0.3946**	0.124	31.4	ug/L	5042	Standard
|	**Mn**	55	1253.7	6.7	**-0.0229**	0.004	15.7	ug/L	1290	Standard
|	**Co**	59	186.0	7.1	**0.0027**	0.001	26.9	ug/L	143	Standard
|	**Ni**	60	88.0	3.0	**0.0053**	0.000	6.7	ug/L	79	Standard
|	**Cu**	65	122.7	17.3	**-0.0050**	0.007	143.1	ug/L	154	Standard
|	**Zn**	66	153.3	12.1	**-0.0517**	0.016	31.3	ug/L	194	Standard
| >	**Ge**	72	229231.7	1.8				ug/L	232024	Standard
|	**As**	75	-250.7	11.1	**0.0036**	0.027	755.0	ug/L	-297	Standard
|	**Se**	82	27.0	25.9	**0.0543**	0.053	96.8	ug/L	17	Standard
⌊	**Se-1**	77	118.3	5.5	**-0.3687**	0.062	16.8	ug/L	180	Standard
	Ga	71	209502.0	2.4				mg/L	210139	Standard
⌈	**Rb**	85	11.7	65.5				ug/L	12	Standard
| >	**Y**	89	206685.5	1.9				ug/L	214065	Standard
⌊	**Rh**	103	0.0					ug/L	0	Standard
⌈	**Mo**	98	85.4	49.8	**0.0126**	0.010	78.6	ug/L	6	Standard
|	**Ag**	107	84.7	59.7	**0.0028**	0.006	207.9	ug/L	33	Standard
|	**Cd**	111	446.2	4.6	**0.0073**	0.004	58.0	mg/L	437	Standard
|	**Cd**	114	1155.2	5.5	**-0.0006**	0.004	718.4	ug/L	1160	Standard
| >	**In**	115	636620.6	2.0				ug/L	646604	Standard
|	**Sn**	118	887.7	4.6	**0.0012**	0.002	153.3	ug/L	864	Standard
|	**Sb**	123	292.3	34.7	**0.0243**	0.009	36.1	ug/L	18	Standard
⌊	**Ba**	135	46.0	13.6	**0.0019**	0.001	66.5	ug/L	39	Standard
⌈	**Ce**	140	39.0	24.5				ug/L	46	Standard
⌊>	**Tb**	159	693111.1	2.2				ug/L	695671	Standard
⌈	**Ho**	165	6.7	37.7				ug/L	9	Standard
|	**Tl**	203	599.3	11.0	**0.0008**	0.004	492.8	ug/L	687	Standard
|	**Tl**	205	1380.1	13.9	**0.0009**	0.005	547.0	ug/L	1624	Standard
|	**Pb**	206	333.7	7.4	**0.0031**	0.002	52.5	ug/L	305	Standard
|	**Pb**	207	275.0	9.6	**0.0023**	0.002	90.1	ug/L	231	Standard
|	**Pb**	208	1279.4	10.5	**0.0023**	0.002	100.6	ug/L	1129	Standard
|	**U**	238	54.3	56.9	**0.0044**	0.001	25.5	ug/L	3	Standard
⌊>	**Bi**	209	392872.8	1.6				ug/L	405108	Standard
⌈	**Na**	23	111.7	9.3	**0.0043**	0.004	83.9	mg/L	118	Standard
|	**Mg**	24	495.0	22.2	**0.0001**	0.000	360.9	mg/L	377	Standard

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	K	39	688.3	9.9	**0.0089**	0.005	56.9	mg/L	583	Standard
	Ca	43	76.7	19.9	**-0.0055**	0.038	695.2	mg/L	73	Standard
	Fe	54	837.3	7.9	**-0.0008**	0.015	1811.4	mg/L	785	Standard
	Fe	57	4389.0	2.2	**-0.0088**	0.000	3.6	mg/L	6133	Standard
>	**Sc-1**	45	250654.0	2.8				mg/L	254529	Standard
	Cl	35	1008862.0	27.5				ug/L	1641778	Standard
	Kr	83	58.0	11.5				ug/L	60	Standard
	Br	81	11029.0	3.2				ug/L	11554	Standard
	P	31	50148.8	3.7				ug/L	45410	Standard
	S	34	575121.4	1.3				ug/L	568857	Standard
	Sr	88	231.7	14.0				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		98.797	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		96.553	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		98.456	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		99.632	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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Pb	207	
Pb	208	
U	238	
> Bi	209	96.980
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: PBW 53 WG397206-03
Sample Date/Time: Thursday, May 10, 2012 09:45:14
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	12590.2	0.8	**-18.8209**	13.633	72.4	ug/L	12600	Standard
	Be	9	18.3	110.2	**-0.0091**	0.006	64.8	ug/L	5	Standard
	Al	27	15104.2	10.5	**0.1449**	0.105	72.7	ug/L	16102	Standard
>	Sc	45	263273.2	1.9				ug/L	254529	Standard
	Ti	47	102.7	4.6	**0.0052**	0.003	61.8	ug/L	84	Standard
	V	51	4206.5	2.4	**-0.0204**	0.007	34.1	ug/L	5785	Standard
	Cr	52	11508.4	2.3	**-0.0416**	0.026	61.4	ug/L	12212	Standard
	Cr	53	1859.3	9.8	**-0.4619**	0.103	22.3	ug/L	5042	Standard
	Mn	55	1363.4	3.0	**-0.0186**	0.002	10.4	ug/L	1290	Standard
	Co	59	164.3	17.7	**0.0010**	0.002	200.0	ug/L	143	Standard
	Ni	60	106.7	17.4	**0.0110**	0.006	58.2	ug/L	79	Standard
	Cu	65	124.7	14.8	**-0.0049**	0.007	135.9	ug/L	154	Standard
	Zn	66	1697.4	0.8	**1.1756**	0.023	2.0	ug/L	194	Standard
>	Ge	72	233069.3	0.9				ug/L	232024	Standard
	As	75	-230.2	11.7	**0.0255**	0.022	85.5	ug/L	-297	Standard
	Se	82	28.7	5.6	**0.0648**	0.014	21.4	ug/L	17	Standard
	Se-1	77	119.0	20.2	**-0.3832**	0.295	76.9	ug/L	180	Standard
	Ga	71	211264.5	1.1				mg/L	210139	Standard
	Rb	85	23.3	12.4				ug/L	12	Standard
>	Y	89	209977.2	2.4				ug/L	214065	Standard
	Rh	103	1.7	173.2				ug/L	0	Standard
	Mo	98	100.8	57.6	**0.0165**	0.015	89.4	ug/L	6	Standard
	Ag	107	91.3	88.9	**0.0037**	0.010	270.0	ug/L	33	Standard
	Cd	111	458.5	6.0	**0.0093**	0.008	88.8	mg/L	437	Standard
	Cd	114	1151.0	6.2	**-0.0017**	0.008	460.8	ug/L	1160	Standard
>	In	115	642554.6	2.0				ug/L	646604	Standard
	Sn	118	932.7	6.5	**0.0036**	0.005	139.3	ug/L	864	Standard
	Sb	123	225.9	22.6	**0.0181**	0.005	27.5	ug/L	18	Standard
	Ba	135	63.0	33.0	**0.0056**	0.005	86.5	ug/L	39	Standard
	Ce	140	59.7	33.5				ug/L	46	Standard
>	Tb	159	692386.4	1.0				ug/L	695671	Standard
	Ho	165	6.7	31.2				ug/L	9	Standard
	Tl	203	563.0	35.7	**-0.0018**	0.013	689.8	ug/L	687	Standard
	Tl	205	1358.4	31.6	**-0.0001**	0.011	15962.5	ug/L	1624	Standard
	Pb	206	471.7	14.1	**0.0135**	0.005	40.4	ug/L	305	Standard
	Pb	207	393.7	22.6	**0.0129**	0.008	64.6	ug/L	231	Standard
	Pb	208	1824.7	14.8	**0.0127**	0.006	43.6	ug/L	1129	Standard
	U	238	57.7	149.2	**0.0045**	0.003	70.1	ug/L	3	Standard
>	Bi	209	397771.4	1.1				ug/L	405108	Standard
	Na	23	136.7	22.1	**0.0095**	0.009	90.2	mg/L	118	Standard
	Mg	24	658.3	24.6	**0.0003**	0.000	98.0	mg/L	377	Standard

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	K	39	643.3	3.9	**0.0022**	0.001	49.1	mg/L	583	Standard
	Ca	43	60.0	8.3	**-0.0535**	0.009	16.9	mg/L	73	Standard
	Fe	54	874.2	6.7	**-0.0020**	0.010	523.8	mg/L	785	Standard
	Fe	57	4800.8	4.7	**-0.0078**	0.002	22.0	mg/L	6133	Standard
>	**Sc-1**	45	263273.2	1.9				mg/L	254529	Standard
	Cl	35	954292.2	31.4				ug/L	1641778	Standard
	Kr	83	56.2	9.6				ug/L	60	Standard
	Br	81	11002.3	3.3				ug/L	11554	Standard
	P	31	54236.1	1.3				ug/L	45410	Standard
	S	34	595117.3	1.5				ug/L	568857	Standard
	Sr	88	365.0	14.3				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		100.451	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		98.090	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		99.374	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		99.528	
	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

98.189

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Cr 53 Lower	Cr	53	

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Method 6020 - Summary Report

Sample ID: LCSW 53 WG397206-04

Sample Date/Time: Thursday, May 10, 2012 09:48:07
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	13727.9	2.1	**-11.2400**	30.234	269.0	ug/L	12600	Standard
|	**Be**	9	85698.5	2.6	**22.9252**	0.607	2.6	ug/L	5	Standard
|	**Al**	27	472670.1	2.2	**26.3114**	0.994	3.8	ug/L	16102	Standard
⌊>	**Sc**	45	285308.5	1.9				ug/L	254529	Standard
⌈	**Ti**	47	148.3	9.6	**0.0280**	0.009	33.2	ug/L	84	Standard
|	**V**	51	420357.9	1.5	**24.7477**	0.424	1.7	ug/L	5785	Standard
|	**Cr**	52	323574.5	1.1	**24.9997**	0.260	1.0	ug/L	12212	Standard
|	**Cr**	53	49788.4	3.4	**24.9010**	1.128	4.5	ug/L	5042	Standard
|	**Mn**	55	562853.3	2.2	**25.3087**	0.612	2.4	ug/L	1290	Standard
|	**Co**	59	395893.3	0.7	**25.1317**	0.362	1.4	ug/L	143	Standard
|	**Ni**	60	82922.6	1.2	**25.0620**	0.409	1.6	ug/L	79	Standard
|	**Cu**	65	76216.9	0.5	**25.3828**	0.308	1.2	ug/L	154	Standard
|	**Zn**	66	34217.3	2.3	**25.0835**	0.266	1.1	ug/L	194	Standard
| >	**Ge**	72	251345.8	1.3				ug/L	232024	Standard
|	**As**	75	29396.6	1.7	**24.0359**	0.117	0.5	ug/L	-297	Standard
|	**Se**	82	3459.2	1.9	**24.7720**	0.657	2.7	ug/L	17	Standard
⌊	**Se-1**	77	2195.5	1.3	**22.7616**	0.392	1.7	ug/L	180	Standard
	Ga	71	231806.2	1.1				mg/L	210139	Standard
⌈	**Rb**	85	46.7	27.0				ug/L	12	Standard
| >	**Y**	89	237170.7	2.1				ug/L	214065	Standard
⌊	**Rh**	103	25.0	60.0				ug/L	0	Standard
⌈	**Mo**	98	74.0	7.4	**0.0087**	0.001	14.5	ug/L	6	Standard
|	**Ag**	107	249511.7	1.6	**28.1495**	0.847	3.0	ug/L	33	Standard
|	**Cd**	111	119029.2	0.8	**24.7703**	0.527	2.1	mg/L	437	Standard
|	**Cd**	114	295218.5	0.8	**23.5309**	0.474	2.0	ug/L	1160	Standard
| >	**In**	115	684478.2	1.3				ug/L	646604	Standard
|	**Sn**	118	1478.4	0.8	**0.0326**	0.001	3.6	ug/L	864	Standard
|	**Sb**	123	280447.4	1.2	**23.9784**	0.486	2.0	ug/L	18	Standard
⌊	**Ba**	135	118496.0	1.6	**24.3003**	0.598	2.5	ug/L	39	Standard
⌈	**Ce**	140	179.3	4.0				ug/L	46	Standard
⌊>	**Tb**	159	748547.0	1.5				ug/L	695671	Standard
⌈	**Ho**	165	10.7	43.3				ug/L	9	Standard
|	**Tl**	203	420966.0	0.6	**24.9390**	0.223	0.9	ug/L	687	Standard
|	**Tl**	205	983326.0	1.7	**24.5937**	0.508	2.1	ug/L	1624	Standard
|	**Pb**	206	334674.7	0.9	**24.8535**	0.282	1.1	ug/L	305	Standard
|	**Pb**	207	292762.1	1.5	**25.4907**	0.357	1.4	ug/L	231	Standard
|	**Pb**	208	1332506.9	1.1	**24.9271**	0.244	1.0	ug/L	1129	Standard
|	**U**	238	675260.2	0.1	**23.6965**	0.113	0.5	ug/L	3	Standard
⌊>	**Bi**	209	414649.7	0.6				ug/L	405108	Standard
⌈	**Na**	23	128.3	22.8	**0.0046**	0.008	166.9	mg/L	118	Standard
|	**Mg**	24	815.0	9.2	**0.0005**	0.000	29.8	mg/L	377	Standard

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	K	39	665.0	8.0	**-0.0002**	0.005	2120.5	mg/L	583	Standard
	Ca	43	61.7	33.8	**-0.0611**	0.042	68.4	mg/L	73	Standard
	Fe	54	1199.2	5.4	**0.0382**	0.008	20.7	mg/L	785	Standard
	Fe	57	5024.2	3.8	**-0.0087**	0.001	12.3	mg/L	6133	Standard
>	**Sc-1**	45	285308.5	1.9				mg/L	254529	Standard
	Cl	35	926136.4	25.7				ug/L	1641778	Standard
	Kr	83	59.9	8.1				ug/L	60	Standard
	Br	81	13070.7	7.5				ug/L	11554	Standard
	P	31	80447.3	3.3				ug/L	45410	Standard
	S	34	630581.2	4.5				ug/L	568857	Standard
	Sr	88	1820.1	6.0				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		108.328	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		110.794	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		105.857	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		107.601	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	102.355
	Na	23	
	Mg	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 53 WG397206-04
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Method 6020 - Summary Report

Sample ID: L1205012507 WG397206-02

Sample Date/Time: Thursday, May 10, 2012 09:51:00
Number of Replicates: 3
Autosampler Position: 207
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	29101.3	2.1	**1401.0281**	123.391	8.8	ug/L	12600	Standard
|	**Be**	9	40.0	25.0	**-0.0036**	0.003	75.3	ug/L	5	Standard
|	**Al**	27	789136.1	3.3	**44.9180**	1.009	2.2	ug/L	16102	Standard
⌊>	**Sc**	45	282394.6	3.6				ug/L	254529	Standard
⌈	**Ti**	47	1833.8	15.4	**1.0775**	0.169	15.7	ug/L	84	Standard
|	**V**	51	6396.4	1.5	**0.1021**	0.009	9.1	ug/L	5785	Standard
|	**Cr**	52	13987.5	1.1	**0.1198**	0.023	19.2	ug/L	12212	Standard
|	**Cr**	53	2243.5	10.8	**-0.2980**	0.145	48.7	ug/L	5042	Standard
|	**Mn**	55	141935.1	1.3	**6.5140**	0.079	1.2	ug/L	1290	Standard
|	**Co**	59	1529.4	2.2	**0.0899**	0.003	3.5	ug/L	143	Standard
|	**Ni**	60	1220.0	4.8	**0.3564**	0.017	4.8	ug/L	79	Standard
|	**Cu**	65	635.3	7.6	**0.1686**	0.014	8.6	ug/L	154	Standard
|	**Zn**	66	3732.1	2.2	**2.6635**	0.048	1.8	ug/L	194	Standard
| >	**Ge**	72	243886.7	1.0				ug/L	232024	Standard
|	**As**	75	-163.2	0.9	**0.0902**	0.002	2.5	ug/L	-297	Standard
|	**Se**	82	36.4	9.3	**0.1116**	0.022	20.1	ug/L	17	Standard
⌊	**Se-1**	77	139.0	14.0	**-0.2155**	0.241	111.9	ug/L	180	Standard
	Ga	71	220342.7	0.7				mg/L	210139	Standard
⌈	**Rb**	85	4962.5	6.9				ug/L	12	Standard
| >	**Y**	89	226704.5	3.1				ug/L	214065	Standard
⌊	**Rh**	103	3.3	86.6				ug/L	0	Standard
⌈	**Mo**	98	80.1	9.3	**0.0105**	0.002	14.5	ug/L	6	Standard
|	**Ag**	107	79.7	47.5	**0.0018**	0.004	237.2	ug/L	33	Standard
|	**Cd**	111	529.2	4.7	**0.0202**	0.004	21.0	mg/L	437	Standard
|	**Cd**	114	1355.4	4.5	**0.0110**	0.004	34.2	ug/L	1160	Standard
| >	**In**	115	669337.8	1.4				ug/L	646604	Standard
|	**Sn**	118	1205.4	4.0	**0.0178**	0.002	11.2	ug/L	864	Standard
|	**Sb**	123	332.0	20.8	**0.0265**	0.006	21.3	ug/L	18	Standard
⌊	**Ba**	135	19614.0	1.6	**4.1057**	0.034	0.8	ug/L	39	Standard
⌈	**Ce**	140	17678.6	0.9				ug/L	46	Standard
⌊>	**Tb**	159	727063.0	1.6				ug/L	695671	Standard
⌈	**Ho**	165	220.3	9.4				ug/L	9	Standard
|	**Tl**	203	527.0	25.6	**-0.0052**	0.008	151.2	ug/L	687	Standard
|	**Tl**	205	1277.4	24.8	**-0.0034**	0.008	231.7	ug/L	1624	Standard
|	**Pb**	206	1359.7	2.8	**0.0788**	0.002	3.0	ug/L	305	Standard
|	**Pb**	207	1169.7	3.6	**0.0798**	0.004	4.5	ug/L	231	Standard
|	**Pb**	208	5319.7	2.6	**0.0774**	0.002	3.2	ug/L	1129	Standard
|	**U**	238	200.3	15.9	**0.0095**	0.001	11.4	ug/L	3	Standard
⌊>	**Bi**	209	411480.7	0.7				ug/L	405108	Standard
⌈	**Na**	23	2955.3	1.8	**0.7127**	0.023	3.3	mg/L	118	Standard
|	**Mg**	24	211080.4	1.7	**0.3476**	0.010	2.8	mg/L	377	Standard

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	K	39	2466.9	8.4	**0.1410**	0.017	12.4	mg/L	583	Standard
	Ca	43	390.0	6.7	**0.6529**	0.078	11.9	mg/L	73	Standard
	Fe	54	1586.7	6.8	**0.1033**	0.026	25.2	mg/L	785	Standard
	Fe	57	27508.3	2.9	**0.1076**	0.003	2.4	mg/L	6133	Standard
>	**Sc-1**	45	282394.6	3.6				mg/L	254529	Standard
	Cl	35	969873.6	29.0				ug/L	1641778	Standard
	Kr	83	53.4	1.6				ug/L	60	Standard
	Br	81	13827.1	1.0				ug/L	11554	Standard
	P	31	58931.1	2.6				ug/L	45410	Standard
	S	34	557634.8	1.7				ug/L	568857	Standard
	Sr	88	124795.4	2.9				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		105.113	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		105.905	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		103.516	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		104.512	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	101.573
	Na	23	
	Mg	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: L1205012507 WG397206-02
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Method 6020 - Summary Report

Sample ID: L1205012508S WG397206-07

Sample Date/Time: Thursday, May 10, 2012 09:53:53
Number of Replicates: 3
Autosampler Position: 208
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	30039.8	0.8	**1416.7739**	42.184	3.0	ug/L	12600	Standard
|	**Be**	9	90119.0	2.6	**23.7569**	0.654	2.8	ug/L	5	Standard
|	**Al**	27	1125496.1	4.3	**62.7993**	3.118	5.0	ug/L	16102	Standard
⌊>	**Sc**	45	289508.2	0.8				ug/L	254529	Standard
⌈	**Ti**	47	1495.4	5.2	**0.8509**	0.043	5.1	ug/L	84	Standard
|	**V**	51	415342.8	1.7	**24.7482**	0.592	2.4	ug/L	5785	Standard
|	**Cr**	52	321691.4	1.0	**25.1617**	0.477	1.9	ug/L	12212	Standard
|	**Cr**	53	48729.9	0.7	**24.6463**	0.405	1.6	ug/L	5042	Standard
|	**Mn**	55	693278.7	0.4	**31.5684**	0.248	0.8	ug/L	1290	Standard
|	**Co**	59	393532.9	1.2	**25.2823**	0.425	1.7	ug/L	143	Standard
|	**Ni**	60	84481.9	1.1	**25.8392**	0.087	0.3	ug/L	79	Standard
|	**Cu**	65	76119.4	1.8	**25.6527**	0.250	1.0	ug/L	154	Standard
|	**Zn**	66	37547.8	1.0	**27.8785**	0.057	0.2	ug/L	194	Standard
| >	**Ge**	72	248351.6	0.9				ug/L	232024	Standard
|	**As**	75	30668.4	2.0	**25.3655**	0.359	1.4	ug/L	-297	Standard
|	**Se**	82	3527.0	2.4	**25.5627**	0.601	2.4	ug/L	17	Standard
⌊	**Se-1**	77	2309.5	0.5	**24.3494**	0.313	1.3	ug/L	180	Standard
	Ga	71	225679.4	0.8				mg/L	210139	Standard
⌈	**Rb**	85	5424.3	6.3				ug/L	12	Standard
| >	**Y**	89	226317.7	0.4				ug/L	214065	Standard
⌊	**Rh**	103	35.0	62.3				ug/L	0	Standard
⌈	**Mo**	98	81.4	16.0	**0.0105**	0.003	31.2	ug/L	6	Standard
|	**Ag**	107	240263.4	1.7	**27.1926**	0.072	0.3	ug/L	33	Standard
|	**Cd**	111	121337.5	1.3	**25.3375**	0.254	1.0	mg/L	437	Standard
|	**Cd**	114	306227.3	0.7	**24.4966**	0.354	1.4	ug/L	1160	Standard
| >	**In**	115	682125.9	1.9				ug/L	646604	Standard
|	**Sn**	118	1361.4	4.4	**0.0258**	0.003	12.8	ug/L	864	Standard
|	**Sb**	123	284817.2	0.8	**24.4371**	0.411	1.7	ug/L	18	Standard
⌊	**Ba**	135	137900.4	0.7	**28.3779**	0.358	1.3	ug/L	39	Standard
⌈	**Ce**	140	17979.3	0.7				ug/L	46	Standard
⌊>	**Tb**	159	732500.9	0.6				ug/L	695671	Standard
⌈	**Ho**	165	227.7	10.9				ug/L	9	Standard
|	**Tl**	203	414288.1	0.7	**24.9403**	0.225	0.9	ug/L	687	Standard
|	**Tl**	205	963876.4	0.7	**24.4969**	0.294	1.2	ug/L	1624	Standard
|	**Pb**	206	331274.1	0.5	**24.9999**	0.309	1.2	ug/L	305	Standard
|	**Pb**	207	289403.5	1.5	**25.6047**	0.139	0.5	ug/L	231	Standard
|	**Pb**	208	1323745.3	1.0	**25.1639**	0.163	0.6	ug/L	1129	Standard
|	**U**	238	668840.9	1.2	**23.8522**	0.413	1.7	ug/L	3	Standard
⌊>	**Bi**	209	408078.7	1.6				ug/L	405108	Standard
⌈	**Na**	23	2930.3	2.7	**0.6880**	0.021	3.0	mg/L	118	Standard
|	**Mg**	24	213565.3	2.8	**0.3429**	0.012	3.5	mg/L	377	Standard

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	K	39	2370.2	2.8	**0.1287**	0.004	2.8	mg/L	583	Standard
	Ca	43	403.3	11.5	**0.6591**	0.103	15.6	mg/L	73	Standard
	Fe	54	1595.4	9.9	**0.0977**	0.024	24.2	mg/L	785	Standard
	Fe	57	27727.0	3.1	**0.1052**	0.005	5.1	mg/L	6133	Standard
>	**Sc-1**	45	289508.2	0.8				mg/L	254529	Standard
	Cl	35	731520.8	38.6				ug/L	1641778	Standard
	Kr	83	57.8	0.9				ug/L	60	Standard
	Br	81	12839.6	0.5				ug/L	11554	Standard
	P	31	59468.2	1.7				ug/L	45410	Standard
	S	34	516644.8	2.7				ug/L	568857	Standard
	Sr	88	125368.4	2.1				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		107.037	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		105.724	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		105.494	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		105.294	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	100.733
	Na	23	
	Mg	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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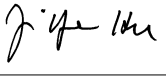

Method 6020 - Summary Report

Sample ID: L1205012509SD WG397206-08

Sample Date/Time: Thursday, May 10, 2012 09:56:46
Number of Replicates: 3
Autosampler Position: 209
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	30049.8	3.2	**1453.3397**	66.702	4.6	ug/L	12600	Standard
|	**Be**	9	88965.6	2.7	**23.7745**	0.821	3.5	ug/L	5	Standard
|	**Al**	27	968575.6	2.0	**54.6664**	1.139	2.1	ug/L	16102	Standard
⌊>	**Sc**	45	285629.0	1.1				ug/L	254529	Standard
⌈	**Ti**	47	1246.1	13.1	**0.7017**	0.100	14.2	ug/L	84	Standard
|	**V**	51	417216.0	2.7	**24.9551**	0.809	3.2	ug/L	5785	Standard
|	**Cr**	52	321923.2	1.9	**25.2787**	0.676	2.7	ug/L	12212	Standard
|	**Cr**	53	48679.8	2.0	**24.7182**	0.716	2.9	ug/L	5042	Standard
|	**Mn**	55	695798.3	1.8	**31.8036**	0.736	2.3	ug/L	1290	Standard
|	**Co**	59	391699.7	0.7	**25.2580**	0.335	1.3	ug/L	143	Standard
|	**Ni**	60	83585.3	1.6	**25.6631**	0.588	2.3	ug/L	79	Standard
|	**Cu**	65	76715.1	0.9	**25.9538**	0.416	1.6	ug/L	154	Standard
|	**Zn**	66	37966.2	1.6	**28.2983**	0.513	1.8	ug/L	194	Standard
| >	**Ge**	72	247429.0	0.8				ug/L	232024	Standard
|	**As**	75	30514.7	0.3	**25.3352**	0.270	1.1	ug/L	-297	Standard
|	**Se**	82	3519.9	0.9	**25.6085**	0.418	1.6	ug/L	17	Standard
⌊	**Se-1**	77	2293.5	2.9	**24.2665**	0.883	3.6	ug/L	180	Standard
	Ga	71	225701.1	1.2				mg/L	210139	Standard
⌈	**Rb**	85	4419.0	0.7				ug/L	12	Standard
| >	**Y**	89	231805.2	2.1				ug/L	214065	Standard
⌊	**Rh**	103	21.7	53.3				ug/L	0	Standard
⌈	**Mo**	98	115.0	15.3	**0.0181**	0.004	19.7	ug/L	6	Standard
|	**Ag**	107	239189.8	1.4	**27.0898**	0.606	2.2	ug/L	33	Standard
|	**Cd**	111	120550.9	1.8	**25.1901**	0.732	2.9	mg/L	437	Standard
|	**Cd**	114	304765.2	1.2	**24.3934**	0.591	2.4	ug/L	1160	Standard
| >	**In**	115	681804.5	2.0				ug/L	646604	Standard
|	**Sn**	118	1445.4	3.6	**0.0309**	0.002	6.4	ug/L	864	Standard
|	**Sb**	123	282607.8	1.3	**24.2612**	0.596	2.5	ug/L	18	Standard
⌊	**Ba**	135	136540.7	2.1	**28.1193**	1.045	3.7	ug/L	39	Standard
⌈	**Ce**	140	16438.9	2.2				ug/L	46	Standard
⌊>	**Tb**	159	727038.1	0.9				ug/L	695671	Standard
⌈	**Ho**	165	214.3	2.2				ug/L	9	Standard
|	**Tl**	203	413045.0	1.3	**24.6487**	0.433	1.8	ug/L	687	Standard
|	**Tl**	205	966735.6	1.3	**24.3551**	0.423	1.7	ug/L	1624	Standard
|	**Pb**	206	330803.0	2.7	**24.7466**	0.764	3.1	ug/L	305	Standard
|	**Pb**	207	290157.5	1.7	**25.4500**	0.545	2.1	ug/L	231	Standard
|	**Pb**	208	1324458.4	2.4	**24.9593**	0.682	2.7	ug/L	1129	Standard
|	**U**	238	658082.0	2.3	**23.2639**	0.633	2.7	ug/L	3	Standard
⌊>	**Bi**	209	411642.6	0.5				ug/L	405108	Standard
⌈	**Na**	23	3020.3	8.9	**0.7197**	0.062	8.6	mg/L	118	Standard
|	**Mg**	24	212766.7	3.9	**0.3462**	0.014	3.9	mg/L	377	Standard

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	K	39	2288.5	6.0	**0.1248**	0.009	7.6	mg/L	583	Standard
	Ca	43	413.3	6.9	**0.6916**	0.056	8.2	mg/L	73	Standard
	Fe	54	1532.5	5.0	**0.0913**	0.015	16.3	mg/L	785	Standard
	Fe	57	25688.4	2.8	**0.0966**	0.003	2.9	mg/L	6133	Standard
>	**Sc-1**	45	285629.0	1.1				mg/L	254529	Standard
	Cl	35	803112.0	27.2				ug/L	1641778	Standard
	Kr	83	59.2	10.1				ug/L	60	Standard
	Br	81	13099.0	4.4				ug/L	11554	Standard
	P	31	58704.5	4.5				ug/L	45410	Standard
	S	34	482012.6	2.5				ug/L	568857	Standard
	Sr	88	126141.4	2.2				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		106.640	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		108.287	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		105.444	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		104.509	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1205012509SD WG397206-08
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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

101.613

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1205012509SD WG397206-08
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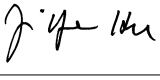

Method 6020 - Summary Report

Sample ID: L1205015028
Sample Date/Time: Thursday, May 10, 2012 09:59:39
Number of Replicates: 3
Autosampler Position: 210
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	24862.1	2.4	**783.6437**	41.219	5.3	ug/L	12600	Standard
|	**Be**	9	23.3	24.7	**-0.0088**	0.001	15.7	ug/L	5	Standard
|	**Al**	27	720039.5	4.8	**36.6679**	1.634	4.5	ug/L	16102	Standard
⌊>	**Sc**	45	314303.2	0.4				ug/L	254529	Standard
⌈	**Ti**	47	4200.6	8.9	**2.5615**	0.171	6.7	ug/L	84	Standard
|	**V**	51	12378.3	4.4	**0.4738**	0.034	7.2	ug/L	5785	Standard
|	**Cr**	52	14154.6	1.3	**0.1406**	0.019	13.6	ug/L	12212	Standard
|	**Cr**	53	3132.8	11.2	**0.1973**	0.186	94.2	ug/L	5042	Standard
|	**Mn**	55	1368137.9	2.5	**63.8982**	1.017	1.6	ug/L	1290	Standard
|	**Co**	59	3928.2	3.5	**0.2483**	0.004	1.7	ug/L	143	Standard
|	**Ni**	60	3360.7	3.8	**1.0298**	0.021	2.0	ug/L	79	Standard
|	**Cu**	65	7380.8	4.4	**2.5037**	0.116	4.6	ug/L	154	Standard
|	**Zn**	66	4867.4	3.3	**3.5497**	0.114	3.2	ug/L	194	Standard
|>	**Ge**	72	242481.5	2.8				ug/L	232024	Standard
|	**As**	75	83.3	52.2	**0.2959**	0.035	11.7	ug/L	-297	Standard
|	**Se**	82	126.0	11.0	**0.7821**	0.094	12.1	ug/L	17	Standard
⌊	**Se-1**	77	186.0	6.6	**0.3411**	0.196	57.5	ug/L	180	Standard
	Ga	71	219699.5	2.8				mg/L	210139	Standard
⌈	**Rb**	85	11202.5	3.5				ug/L	12	Standard
|>	**Y**	89	227939.0	2.3				ug/L	214065	Standard
⌊	**Rh**	103	85.0	10.2				ug/L	0	Standard
⌈	**Mo**	98	473.0	1.9	**0.1009**	0.003	3.5	ug/L	6	Standard
|	**Ag**	107	59.3	17.5	**-0.0006**	0.001	170.8	ug/L	33	Standard
|	**Cd**	111	532.3	4.0	**0.0194**	0.002	12.3	mg/L	437	Standard
|	**Cd**	114	1348.6	1.0	**0.0091**	0.004	41.6	ug/L	1160	Standard
|>	**In**	115	677840.5	2.5				ug/L	646604	Standard
|	**Sn**	118	1669.8	4.5	**0.0450**	0.005	11.9	ug/L	864	Standard
|	**Sb**	123	1319.9	25.5	**0.1110**	0.026	23.6	ug/L	18	Standard
⌊	**Ba**	135	162701.9	2.4	**33.6900**	0.042	0.1	ug/L	39	Standard
⌈	**Ce**	140	11343.2	1.6				ug/L	46	Standard
⌊>	**Tb**	159	738235.7	3.0				ug/L	695671	Standard
⌈	**Ho**	165	186.0	7.5				ug/L	9	Standard
|	**Tl**	203	788.7	6.2	**0.0121**	0.002	19.5	ug/L	687	Standard
|	**Tl**	205	1893.5	2.6	**0.0139**	0.000	2.8	ug/L	1624	Standard
|	**Pb**	206	2042.5	3.5	**0.1354**	0.003	2.1	ug/L	305	Standard
|	**Pb**	207	1715.1	4.6	**0.1331**	0.006	4.3	ug/L	231	Standard
|	**Pb**	208	8042.5	2.4	**0.1343**	0.001	0.8	ug/L	1129	Standard
|	**U**	238	8550.1	3.6	**0.3157**	0.007	2.1	ug/L	3	Standard
⌊>	**Bi**	209	397066.3	2.1				ug/L	405108	Standard
⌈	**Na**	23	31723.2	2.5	**7.1042**	0.152	2.1	mg/L	118	Standard
|	**Mg**	24	3206791.5	2.9	**4.7520**	0.117	2.5	mg/L	377	Standard

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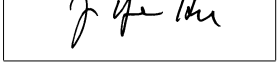

	K	39	12757.0	3.6	**0.8422**	0.029	3.5	mg/L	583	Standard
	Ca	43	8687.5	2.4	**16.7004**	0.371	2.2	mg/L	73	Standard
	Fe	54	2859.3	2.3	**0.2611**	0.008	3.1	mg/L	785	Standard
	Fe	57	77511.1	2.1	**0.3248**	0.006	1.9	mg/L	6133	Standard
>	**Sc-1**	45	314303.2	0.4				mg/L	254529	Standard
	Cl	35	2012203.3	5.6				ug/L	1641778	Standard
	Kr	83	61.0	1.1				ug/L	60	Standard
	Br	81	64916.3	0.5				ug/L	11554	Standard
	P	31	77288.4	2.4				ug/L	45410	Standard
	S	34	745464.5	2.5				ug/L	568857	Standard
	Sr	88	3815523.9	2.0				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		104.507	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		106.481	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		104.831	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		106.118	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	98.015
	Na	23	
	Mg	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: L1205015029
Sample Date/Time: Thursday, May 10, 2012 10:02:32
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	24464.7	2.0	**678.6976**	26.733	3.9	ug/L	12600	Standard
|	**Be**	9	86.7	18.5	**0.0059**	0.004	62.6	ug/L	5	Standard
|	**Al**	27	9554900.8	4.5	**478.2140**	16.376	3.4	ug/L	16102	Standard
⌊>	**Sc**	45	326214.3	2.7				ug/L	254529	Standard
⌈	**Ti**	47	29781.6	2.3	**17.3644**	0.496	2.9	ug/L	84	Standard
|	**V**	51	31187.7	1.4	**1.5123**	0.059	3.9	ug/L	5785	Standard
|	**Cr**	52	23636.8	1.3	**0.8057**	0.058	7.2	ug/L	12212	Standard
|	**Cr**	53	3610.4	6.5	**0.3349**	0.157	47.0	ug/L	5042	Standard
|	**Mn**	55	1611726.4	2.1	**70.4716**	1.979	2.8	ug/L	1290	Standard
|	**Co**	59	7140.3	1.2	**0.4297**	0.010	2.3	ug/L	143	Standard
|	**Ni**	60	2640.6	2.8	**0.7510**	0.009	1.2	ug/L	79	Standard
|	**Cu**	65	4257.9	1.7	**1.3287**	0.020	1.5	ug/L	154	Standard
|	**Zn**	66	10538.3	0.7	**7.3741**	0.160	2.2	ug/L	194	Standard
| >	**Ge**	72	259069.6	1.9				ug/L	232024	Standard
|	**As**	75	36.6	42.6	**0.2551**	0.012	4.6	ug/L	-297	Standard
|	**Se**	82	84.8	4.9	**0.4350**	0.040	9.2	ug/L	17	Standard
⌊	**Se-1**	77	149.7	13.6	**-0.1925**	0.250	130.1	ug/L	180	Standard
	Ga	71	241777.7	2.1				mg/L	210139	Standard
⌈	**Rb**	85	13532.7	2.3				ug/L	12	Standard
| >	**Y**	89	243803.1	2.2				ug/L	214065	Standard
⌊	**Rh**	103	30.0	28.9				ug/L	0	Standard
⌈	**Mo**	98	395.7	7.6	**0.0788**	0.007	9.1	ug/L	6	Standard
|	**Ag**	107	95.3	14.7	**0.0030**	0.001	47.2	ug/L	33	Standard
|	**Cd**	111	749.9	1.2	**0.0579**	0.000	0.4	mg/L	437	Standard
|	**Cd**	114	1892.7	7.1	**0.0458**	0.009	20.0	ug/L	1160	Standard
| >	**In**	115	711256.9	1.2				ug/L	646604	Standard
|	**Sn**	118	6938.6	1.0	**0.3437**	0.003	0.9	ug/L	864	Standard
|	**Sb**	123	1703.3	3.8	**0.1376**	0.004	2.7	ug/L	18	Standard
⌊	**Ba**	135	82104.9	1.8	**16.1972**	0.121	0.7	ug/L	39	Standard
⌈	**Ce**	140	78547.8	1.6				ug/L	46	Standard
⌊>	**Tb**	159	771054.8	1.1				ug/L	695671	Standard
⌈	**Ho**	165	847.4	4.3				ug/L	9	Standard
|	**Tl**	203	501.3	22.4	**-0.0072**	0.007	90.7	ug/L	687	Standard
|	**Tl**	205	1185.4	20.8	**-0.0061**	0.006	98.6	ug/L	1624	Standard
|	**Pb**	206	4811.4	1.3	**0.3318**	0.004	1.2	ug/L	305	Standard
|	**Pb**	207	3994.5	2.3	**0.3225**	0.007	2.1	ug/L	231	Standard
|	**Pb**	208	18717.2	2.4	**0.3248**	0.007	2.2	ug/L	1129	Standard
|	**U**	238	842.4	3.7	**0.0317**	0.001	3.3	ug/L	3	Standard
⌊>	**Bi**	209	417817.5	0.3				ug/L	405108	Standard
⌈	**Na**	23	16455.6	5.8	**3.5359**	0.146	4.1	mg/L	118	Standard
|	**Mg**	24	803549.4	1.2	**1.1470**	0.021	1.9	mg/L	377	Standard

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	K	39	14778.9	2.8	**0.9464**	0.029	3.1	mg/L	583	Standard
	Ca	43	1645.1	8.9	**2.8913**	0.288	10.0	mg/L	73	Standard
	Fe	54	5314.8	5.3	**0.5887**	0.029	4.9	mg/L	785	Standard
	Fe	57	129492.8	1.5	**0.5439**	0.009	1.7	mg/L	6133	Standard
>	**Sc-1**	45	326214.3	2.7				mg/L	254529	Standard
	Cl	35	1076847.9	18.7				ug/L	1641778	Standard
	Kr	83	59.2	4.2				ug/L	60	Standard
	Br	81	30585.0	2.8				ug/L	11554	Standard
	P	31	140553.2	1.7				ug/L	45410	Standard
	S	34	781033.8	4.6				ug/L	568857	Standard
	Sr	88	954115.7	0.9				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		111.657	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		113.892	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		109.999	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		110.836	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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Pb	207	
Pb	208	
U	238	
> Bi	209	103.137
Na	23	
Mg	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: L1205015029PS WG397345-01
Sample Date/Time: Thursday, May 10, 2012 10:05:24
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	24010.7	3.7	**662.1381**	81.290	12.3	ug/L	12600	Standard
|	**Be**	9	188667.7	2.2	**44.5962**	0.752	1.7	ug/L	5	Standard
|	**Al**	27	10235851.1	2.4	**517.5354**	8.452	1.6	ug/L	16102	Standard
⌊>	**Sc**	45	322937.0	0.8				ug/L	254529	Standard
⌈	**Ti**	47	29879.1	2.3	**17.2309**	0.405	2.4	ug/L	84	Standard
|	**V**	51	917629.2	2.3	**52.1670**	1.279	2.5	ug/L	5785	Standard
|	**Cr**	52	686194.1	2.4	**51.9604**	1.290	2.5	ug/L	12212	Standard
|	**Cr**	53	105726.2	3.5	**52.3223**	1.921	3.7	ug/L	5042	Standard
|	**Mn**	55	2718042.1	2.7	**117.6020**	3.203	2.7	ug/L	1290	Standard
|	**Co**	59	857461.2	2.8	**52.2504**	1.500	2.9	ug/L	143	Standard
|	**Ni**	60	181398.1	2.1	**52.6419**	1.083	2.1	ug/L	79	Standard
|	**Cu**	65	165310.0	1.2	**52.8899**	0.700	1.3	ug/L	154	Standard
|	**Zn**	66	77480.0	1.5	**54.7260**	0.865	1.6	ug/L	194	Standard
|>	**Ge**	72	261872.7	0.1				ug/L	232024	Standard
|	**As**	75	63168.0	1.4	**49.3345**	0.737	1.5	ug/L	-297	Standard
|	**Se**	82	7103.7	2.1	**48.9721**	1.088	2.2	ug/L	17	Standard
⌊	**Se-1**	77	4520.0	2.2	**46.7511**	1.146	2.5	ug/L	180	Standard
	Ga	71	240152.2	0.1				mg/L	210139	Standard
⌈	**Rb**	85	13666.2	3.7				ug/L	12	Standard
|>	**Y**	89	249131.7	1.2				ug/L	214065	Standard
⌊	**Rh**	103	48.3	21.5				ug/L	0	Standard
⌈	**Mo**	98	481.4	2.8	**0.0961**	0.002	2.5	ug/L	6	Standard
|	**Ag**	107	507042.7	2.2	**54.2833**	0.773	1.4	ug/L	33	Standard
|	**Cd**	111	250480.2	2.3	**49.5532**	0.599	1.2	mg/L	437	Standard
|	**Cd**	114	630683.9	2.0	**47.8039**	0.410	0.9	ug/L	1160	Standard
|>	**In**	115	721162.9	1.1				ug/L	646604	Standard
|	**Sn**	118	7267.1	2.3	**0.3568**	0.009	2.4	ug/L	864	Standard
|	**Sb**	123	594720.1	1.7	**48.2556**	0.294	0.6	ug/L	18	Standard
⌊	**Ba**	135	333842.0	1.9	**64.9777**	0.507	0.8	ug/L	39	Standard
⌈	**Ce**	140	77911.1	0.7				ug/L	46	Standard
⌊>	**Tb**	159	775773.6	0.3				ug/L	695671	Standard
⌈	**Ho**	165	874.7	1.6				ug/L	9	Standard
|	**Tl**	203	872534.9	0.9	**51.3967**	0.226	0.4	ug/L	687	Standard
|	**Tl**	205	2093650.1	4.2	**52.0590**	1.964	3.8	ug/L	1624	Standard
|	**Pb**	206	695705.2	1.5	**51.3552**	0.545	1.1	ug/L	305	Standard
|	**Pb**	207	605768.2	1.6	**52.4284**	0.610	1.2	ug/L	231	Standard
|	**Pb**	208	2768027.9	1.3	**51.4725**	0.457	0.9	ug/L	1129	Standard
|	**U**	238	1421981.0	2.4	**49.5747**	0.953	1.9	ug/L	3	Standard
⌊>	**Bi**	209	417323.9	0.5				ug/L	405108	Standard
⌈	**Na**	23	15818.3	0.9	**3.4340**	0.042	1.2	mg/L	118	Standard
|	**Mg**	24	797868.0	0.9	**1.1501**	0.008	0.7	mg/L	377	Standard

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	K	39	14887.3	3.2	**0.9636**	0.026	2.7	mg/L	583	Standard
	Ca	43	1651.8	6.5	**2.9325**	0.179	6.1	mg/L	73	Standard
	Fe	54	5058.0	4.2	**0.5604**	0.035	6.3	mg/L	785	Standard
	Fe	57	124914.6	1.8	**0.5290**	0.009	1.6	mg/L	6133	Standard
>	**Sc-1**	45	322937.0	0.8				mg/L	254529	Standard
	Cl	35	1091422.8	19.1				ug/L	1641778	Standard
	Kr	83	64.6	2.1				ug/L	60	Standard
	Br	81	29901.2	2.7				ug/L	11554	Standard
	P	31	138303.5	2.1				ug/L	45410	Standard
	S	34	743442.1	3.4				ug/L	568857	Standard
	Sr	88	929498.2	0.7				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		112.865	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		116.381	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		111.531	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		111.514	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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Pb	207	
Pb	208	
U	238	
> Bi	209	103.015
Na	23	
Mg	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	

Sample ID: L1205015029PS WG397345-01
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Method 6020 - Summary Report

Sample ID: L1205015029SDL WG397345-02
Sample Date/Time: Thursday, May 10, 2012 10:08:18
Number of Replicates: 3
Autosampler Position: 213
Sample Description: 5
Method File: C:\NexION Data\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	15573.0	1.9	**165.5562**	44.386	26.8	ug/L	12600	Standard
|	**Be**	9	26.7	75.8	**-0.0074**	0.005	72.5	ug/L	5	Standard
|	**Al**	27	1900664.6	4.6	**108.9159**	1.031	0.9	ug/L	16102	Standard
⌊>	**Sc**	45	283324.6	4.5				ug/L	254529	Standard
⌈	**Ti**	47	5580.7	5.5	**3.3558**	0.098	2.9	ug/L	84	Standard
|	**V**	51	9112.3	3.8	**0.2608**	0.012	4.6	ug/L	5785	Standard
|	**Cr**	52	14020.2	1.7	**0.1062**	0.017	16.0	ug/L	12212	Standard
|	**Cr**	53	2184.3	9.3	**-0.3493**	0.080	23.0	ug/L	5042	Standard
|	**Mn**	55	302882.6	3.1	**13.7972**	0.082	0.6	ug/L	1290	Standard
|	**Co**	59	1460.7	7.3	**0.0839**	0.005	5.5	ug/L	143	Standard
|	**Ni**	60	582.3	3.5	**0.1551**	0.003	1.8	ug/L	79	Standard
|	**Cu**	65	1071.4	6.6	**0.3132**	0.017	5.4	ug/L	154	Standard
|	**Zn**	66	4249.9	5.5	**3.0106**	0.099	3.3	ug/L	194	Standard
|>	**Ge**	72	247373.4	2.8				ug/L	232024	Standard
|	**As**	75	-165.7	18.7	**0.0897**	0.028	31.5	ug/L	-297	Standard
|	**Se**	82	35.2	22.7	**0.0992**	0.057	58.0	ug/L	17	Standard
⌊	**Se-1**	77	123.3	19.0	**-0.4185**	0.258	61.7	ug/L	180	Standard
	Ga	71	224517.4	3.3				mg/L	210139	Standard
⌈	**Rb**	85	2528.5	6.6				ug/L	12	Standard
|>	**Y**	89	224888.6	1.5				ug/L	214065	Standard
⌊	**Rh**	103	3.3	86.6				ug/L	0	Standard
⌈	**Mo**	98	191.7	5.0	**0.0360**	0.001	3.5	ug/L	6	Standard
|	**Ag**	107	62.0	42.2	**-0.0003**	0.003	825.3	ug/L	33	Standard
|	**Cd**	111	532.6	4.2	**0.0194**	0.003	14.5	mg/L	437	Standard
|	**Cd**	114	1359.9	2.2	**0.0099**	0.002	15.9	ug/L	1160	Standard
|>	**In**	115	678072.2	2.3				ug/L	646604	Standard
|	**Sn**	118	2107.5	5.9	**0.0713**	0.005	7.5	ug/L	864	Standard
|	**Sb**	123	1376.0	33.1	**0.1157**	0.037	31.6	ug/L	18	Standard
⌊	**Ba**	135	15394.5	4.4	**3.1781**	0.069	2.2	ug/L	39	Standard
⌈	**Ce**	140	14645.1	3.6				ug/L	46	Standard
⌊>	**Tb**	159	727832.0	2.3				ug/L	695671	Standard
⌈	**Ho**	165	147.0	13.6				ug/L	9	Standard
|	**Tl**	203	498.3	25.4	**-0.0068**	0.007	104.3	ug/L	687	Standard
|	**Tl**	205	1136.4	25.3	**-0.0068**	0.007	101.1	ug/L	1624	Standard
|	**Pb**	206	1272.7	2.4	**0.0729**	0.000	0.3	ug/L	305	Standard
|	**Pb**	207	1066.4	5.3	**0.0713**	0.003	4.0	ug/L	231	Standard
|	**Pb**	208	5013.3	3.7	**0.0723**	0.001	1.7	ug/L	1129	Standard
|	**U**	238	207.0	24.6	**0.0098**	0.002	17.0	ug/L	3	Standard
⌊>	**Bi**	209	408564.3	2.4				ug/L	405108	Standard
⌈	**Na**	23	3268.7	4.8	**0.7886**	0.041	5.2	mg/L	118	Standard
|	**Mg**	24	173926.4	2.7	**0.2853**	0.006	2.1	mg/L	377	Standard

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	K	39	3337.0	0.9	**0.2081**	0.011	5.1	mg/L	583	Standard
	Ca	43	340.0	16.7	**0.5415**	0.123	22.7	mg/L	73	Standard
	Fe	54	1635.7	5.4	**0.1103**	0.022	19.7	mg/L	785	Standard
	Fe	57	28124.4	3.3	**0.1103**	0.002	1.6	mg/L	6133	Standard
>	**Sc-1**	45	283324.6	4.5				mg/L	254529	Standard
	Cl	35	828907.5	27.8				ug/L	1641778	Standard
	Kr	83	61.3	2.5				ug/L	60	Standard
	Br	81	14978.2	2.8				ug/L	11554	Standard
	P	31	66436.3	3.2				ug/L	45410	Standard
	S	34	570631.6	2.4				ug/L	568857	Standard
	Sr	88	172503.6	2.8				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		106.616	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		105.056	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		104.867	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		104.623	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	100.853
	Na	23	
	Mg	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
Se-1 77 Lower	Se-1	77	

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Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, May 10, 2012 10:11:13
Number of Replicates: 3
Autosampler Position: 101
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	13185.7	1.9	**-3.8196**	32.662	855.1	ug/L	12600	Standard
|	**Be**	9	184849.1	0.6	**51.8132**	1.058	2.0	ug/L	5	Standard
|	**Al**	27	824229.1	2.8	**48.6851**	0.845	1.7	ug/L	16102	Standard
⌊>	**Sc**	45	272407.3	1.5				ug/L	254529	Standard
⌈	**Ti**	47	163144.9	2.1	**100.7475**	2.277	2.3	ug/L	84	Standard
|	**V**	51	839228.7	2.5	**50.9327**	1.432	2.8	ug/L	5785	Standard
|	**Cr**	52	628860.5	3.0	**50.8206**	1.717	3.4	ug/L	12212	Standard
|	**Cr**	53	93421.4	1.9	**49.2756**	1.093	2.2	ug/L	5042	Standard
|	**Mn**	55	1094443.6	1.4	**50.5100**	0.864	1.7	ug/L	1290	Standard
|	**Co**	59	782089.0	1.4	**50.8824**	0.823	1.6	ug/L	143	Standard
|	**Ni**	60	164447.6	2.2	**50.9531**	1.284	2.5	ug/L	79	Standard
|	**Cu**	65	148898.8	1.5	**50.8614**	0.916	1.8	ug/L	154	Standard
|	**Zn**	66	66569.9	1.7	**50.1877**	0.990	2.0	ug/L	194	Standard
| >	**Ge**	72	245279.4	0.3				ug/L	232024	Standard
|	**As**	75	60519.6	1.7	**50.4600**	0.981	1.9	ug/L	-297	Standard
|	**Se**	82	6921.6	1.5	**50.9511**	0.870	1.7	ug/L	17	Standard
⌊	**Se-1**	77	4556.4	1.4	**50.4546**	0.860	1.7	ug/L	180	Standard
	Ga	71	222215.0	0.2				mg/L	210139	Standard
⌈	**Rb**	85	1081.7	2.8				ug/L	12	Standard
| >	**Y**	89	221177.8	1.2				ug/L	214065	Standard
⌊	**Rh**	103	43.3	37.1				ug/L	0	Standard
⌈	**Mo**	98	434333.5	0.7	**98.7775**	1.260	1.3	ug/L	6	Standard
|	**Ag**	107	453371.0	0.2	**50.9648**	0.841	1.7	ug/L	33	Standard
|	**Cd**	111	239092.8	1.7	**49.6628**	0.720	1.5	mg/L	437	Standard
|	**Cd**	114	617219.0	1.8	**49.1203**	0.669	1.4	ug/L	1160	Standard
| >	**In**	115	686983.9	1.9				ug/L	646604	Standard
|	**Sn**	118	823947.0	2.0	**49.0716**	0.754	1.5	ug/L	864	Standard
|	**Sb**	123	574875.4	2.3	**48.9676**	0.545	1.1	ug/L	18	Standard
⌊	**Ba**	135	237579.4	1.3	**48.5557**	1.188	2.4	ug/L	39	Standard
⌈	**Ce**	140	898.0	2.6				ug/L	46	Standard
⌊>	**Tb**	159	742381.4	0.6				ug/L	695671	Standard
⌈	**Ho**	165	26.0	30.0				ug/L	9	Standard
|	**Tl**	203	833732.4	1.2	**50.7765**	0.366	0.7	ug/L	687	Standard
|	**Tl**	205	1949824.4	1.5	**50.1294**	0.270	0.5	ug/L	1624	Standard
|	**Pb**	206	663392.3	1.4	**50.6316**	0.546	1.1	ug/L	305	Standard
|	**Pb**	207	560084.6	1.6	**50.1173**	0.332	0.7	ug/L	231	Standard
|	**Pb**	208	2595703.6	1.7	**49.9028**	0.309	0.6	ug/L	1129	Standard
|	**U**	238	1330487.6	2.0	**47.9569**	0.452	0.9	ug/L	3	Standard
⌊>	**Bi**	209	403653.3	1.5				ug/L	405108	Standard
⌈	**Na**	23	19385.7	1.2	**5.0023**	0.122	2.4	mg/L	118	Standard
|	**Mg**	24	2851885.9	2.5	**4.8760**	0.063	1.3	mg/L	377	Standard

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	K	39	62194.1	1.2	**4.9775**	0.125	2.5	mg/L	583	Standard
	Ca	43	2193.5	1.9	**4.7303**	0.161	3.4	mg/L	73	Standard
	Fe	54	31122.8	2.5	**5.0504**	0.063	1.3	mg/L	785	Standard
	Fe	57	901951.8	2.9	**4.7872**	0.077	1.6	mg/L	6133	Standard
>	**Sc-1**	45	272407.3	1.5				mg/L	254529	Standard
	Cl	35	713961.4	31.9				ug/L	1641778	Standard
	Kr	83	57.1	3.5				ug/L	60	Standard
	Br	81	11555.2	2.2				ug/L	11554	Standard
	P	31	58949.6	3.9				ug/L	45410	Standard
	S	34	669003.8	4.6				ug/L	568857	Standard
	Sr	88	715.0	14.8				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	97.370		
>	Sc	45			
	Ti	47	100.747		
	V	51	101.865		
	Cr	52	101.641		
	Cr	53			
	Mn	55	101.020		
	Co	59	101.765		
	Ni	60	101.906		
	Cu	65	101.723		
	Zn	66	100.375		
>	Ge	72		105.713	
	As	75	100.920		
	Se	82	101.902		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		103.323	
	Rh	103			
	Mo	98	98.778		
	Ag	107	101.930		
	Cd	111	99.326		
	Cd	114			
>	In	115		106.245	
	Sn	118	98.143		
	Sb	123	97.935		
	Ba	135	97.111		
	Ce	140			
>	Tb	159		106.714	
	Ho	165			
	Tl	203	101.553		
	Tl	205			
	Pb	206	101.263		

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	Pb	207	100.235	
	Pb	208	99.806	
	U	238	95.914	
>	Bi	209		99.641
	Na	23	100.046	
	Mg	24	97.520	
	K	39	99.551	
	Ca	43	94.605	
	Fe	54	101.008	
	Fe	57	95.744	
>	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 10, 2012 10:14:05
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	13020.6	2.6	**25.1528**	5.051	20.1	ug/L	12600	Standard
|	**Be**	9	15.0	66.7	**-0.0101**	0.003	27.7	ug/L	5	Standard
|	**Al**	27	12316.8	15.4	**-0.0287**	0.103	359.5	ug/L	16102	Standard
⌊>	**Sc**	45	262812.3	2.4				ug/L	254529	Standard
⌈	**Ti**	47	102.7	8.8	**0.0030**	0.005	169.5	ug/L	84	Standard
|	**V**	51	3923.0	3.1	**-0.0468**	0.008	17.5	ug/L	5785	Standard
|	**Cr**	52	11249.8	2.9	**-0.0956**	0.034	35.3	ug/L	12212	Standard
|	**Cr**	53	1214.2	4.6	**-0.8537**	0.025	3.0	ug/L	5042	Standard
|	**Mn**	55	1349.4	3.3	**-0.0214**	0.002	7.2	ug/L	1290	Standard
|	**Co**	59	177.3	11.9	**0.0015**	0.001	91.4	ug/L	143	Standard
|	**Ni**	60	76.7	19.2	**0.0003**	0.005	1485.8	ug/L	79	Standard
|	**Cu**	65	134.0	6.8	**-0.0031**	0.003	93.5	ug/L	154	Standard
|	**Zn**	66	169.7	14.1	**-0.0453**	0.017	37.9	ug/L	194	Standard
| >	**Ge**	72	240869.3	0.9				ug/L	232024	Standard
|	**As**	75	-242.5	16.8	**0.0216**	0.033	150.7	ug/L	-297	Standard
|	**Se**	82	25.3	18.3	**0.0320**	0.036	112.6	ug/L	17	Standard
⌊	**Se-1**	77	95.0	5.9	**-0.7110**	0.066	9.2	ug/L	180	Standard
	Ga	71	217940.3	0.9				mg/L	210139	Standard
⌈	**Rb**	85	21.7	35.3				ug/L	12	Standard
| >	**Y**	89	217075.9	1.7				ug/L	214065	Standard
⌊	**Rh**	103	1.7	173.2				ug/L	0	Standard
⌈	**Mo**	98	87.1	56.3	**0.0121**	0.011	92.0	ug/L	6	Standard
|	**Ag**	107	65.7	30.9	**0.0002**	0.002	1024.8	ug/L	33	Standard
|	**Cd**	111	480.2	8.7	**0.0101**	0.008	74.3	mg/L	437	Standard
|	**Cd**	114	1181.5	5.4	**-0.0028**	0.004	137.0	ug/L	1160	Standard
| >	**In**	115	666360.8	1.3				ug/L	646604	Standard
|	**Sn**	118	951.0	4.7	**0.0025**	0.002	88.6	ug/L	864	Standard
|	**Sb**	123	329.5	36.7	**0.0264**	0.010	38.5	ug/L	18	Standard
⌊	**Ba**	135	53.7	8.4	**0.0031**	0.001	34.9	ug/L	39	Standard
⌈	**Ce**	140	47.7	4.8				ug/L	46	Standard
⌊>	**Tb**	159	706935.5	1.0				ug/L	695671	Standard
⌈	**Ho**	165	8.3	6.9				ug/L	9	Standard
|	**Tl**	203	459.0	38.1	**-0.0082**	0.011	132.5	ug/L	687	Standard
|	**Tl**	205	1068.0	31.0	**-0.0076**	0.009	114.7	ug/L	1624	Standard
|	**Pb**	206	335.3	16.5	**0.0030**	0.004	143.9	ug/L	305	Standard
|	**Pb**	207	276.3	19.0	**0.0022**	0.005	213.8	ug/L	231	Standard
|	**Pb**	208	1310.0	15.0	**0.0027**	0.004	143.6	ug/L	1129	Standard
|	**U**	238	104.7	77.9	**0.0062**	0.003	47.9	ug/L	3	Standard
⌊>	**Bi**	209	396590.7	0.2				ug/L	405108	Standard
⌈	**Na**	23	111.7	2.6	**0.0028**	0.001	37.5	mg/L	118	Standard
|	**Mg**	24	606.7	25.8	**0.0002**	0.000	122.4	mg/L	377	Standard

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	K	39	646.7	7.0	**0.0027**	0.005	171.0	mg/L	583	Standard
	Ca	43	50.0	17.3	**-0.0761**	0.023	30.2	mg/L	73	Standard
	Fe	54	859.2	5.1	**-0.0042**	0.010	240.4	mg/L	785	Standard
	Fe	57	4824.1	6.7	**-0.0076**	0.001	16.2	mg/L	6133	Standard
>	**Sc-1**	45	262812.3	2.4				mg/L	254529	Standard
	Cl	35	517735.2	40.9				ug/L	1641778	Standard
	Kr	83	56.6	10.4				ug/L	60	Standard
	Br	81	11296.7	1.5				ug/L	11554	Standard
	P	31	54947.8	2.1				ug/L	45410	Standard
	S	34	662756.8	1.7				ug/L	568857	Standard
	Sr	88	246.7	8.4				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		103.812	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		101.407	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		103.055	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		101.619	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	97.898
	Na	23	
	Mg	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 10, 2012 10:17:00
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	12860.5	2.3	**-33.9657**	12.565	37.0	ug/L	12600	Standard
|	**Be**	9	8.3	34.6	**-0.0121**	0.001	7.0	ug/L	5	Standard
|	**Al**	27	16665.8	2.0	**0.2077**	0.038	18.4	ug/L	16102	Standard
⌊>	**Sc**	45	272244.8	2.1				ug/L	254529	Standard
⌈	**Ti**	47	86.7	8.3	**-0.0068**	0.004	62.3	ug/L	84	Standard
|	**V**	51	10598.0	2.4	**0.3705**	0.015	4.1	ug/L	5785	Standard
|	**Cr**	52	21334.0	1.4	**0.7575**	0.019	2.5	ug/L	12212	Standard
|	**Cr**	53	2851.9	4.9	**0.0594**	0.086	144.7	ug/L	5042	Standard
|	**Mn**	55	12025.1	1.0	**0.4833**	0.008	1.7	ug/L	1290	Standard
|	**Co**	59	6185.6	2.1	**0.4011**	0.009	2.2	ug/L	143	Standard
|	**Ni**	60	5169.2	1.1	**1.6138**	0.022	1.3	ug/L	79	Standard
|	**Cu**	65	2490.9	3.5	**0.8206**	0.030	3.6	ug/L	154	Standard
|	**Zn**	66	9359.2	1.0	**7.0607**	0.093	1.3	ug/L	194	Standard
| >	**Ge**	72	239996.5	0.6				ug/L	232024	Standard
|	**As**	75	202.8	22.0	**0.3986**	0.039	9.7	ug/L	-297	Standard
|	**Se**	82	79.4	9.2	**0.4404**	0.054	12.2	ug/L	17	Standard
⌊	**Se-1**	77	156.0	6.5	**0.0086**	0.127	1476.1	ug/L	180	Standard
	Ga	71	219031.8	0.2				mg/L	210139	Standard
⌈	**Rb**	85	20.0	43.3				ug/L	12	Standard
| >	**Y**	89	220672.4	1.9				ug/L	214065	Standard
⌊	**Rh**	103	1.7	173.2				ug/L	0	Standard
⌈	**Mo**	98	28.0	29.8	**-0.0016**	0.002	126.0	ug/L	6	Standard
|	**Ag**	107	3673.4	1.1	**0.4218**	0.005	1.2	ug/L	33	Standard
|	**Cd**	111	1585.0	1.7	**0.2500**	0.005	2.2	mg/L	437	Standard
|	**Cd**	114	4093.7	1.1	**0.2393**	0.003	1.2	ug/L	1160	Standard
| >	**In**	115	660941.0	0.3				ug/L	646604	Standard
|	**Sn**	118	877.7	5.0	**-0.0015**	0.003	180.5	ug/L	864	Standard
|	**Sb**	123	4581.6	1.4	**0.4032**	0.006	1.4	ug/L	18	Standard
⌊	**Ba**	135	3480.1	2.1	**0.7310**	0.013	1.8	ug/L	39	Standard
⌈	**Ce**	140	49.3	3.1				ug/L	46	Standard
⌊>	**Tb**	159	707449.3	0.3				ug/L	695671	Standard
⌈	**Ho**	165	7.3	28.4				ug/L	9	Standard
|	**Tl**	203	1720.4	10.2	**0.0679**	0.011	16.1	ug/L	687	Standard
|	**Tl**	205	4054.9	6.2	**0.0685**	0.007	9.8	ug/L	1624	Standard
|	**Pb**	206	2848.9	1.1	**0.1939**	0.003	1.6	ug/L	305	Standard
|	**Pb**	207	2484.9	3.5	**0.1990**	0.009	4.3	ug/L	231	Standard
|	**Pb**	208	11335.7	1.4	**0.1945**	0.004	2.0	ug/L	1129	Standard
|	**U**	238	10464.6	2.2	**0.3787**	0.010	2.5	ug/L	3	Standard
⌊>	**Bi**	209	404645.9	0.4				ug/L	405108	Standard
⌈	**Na**	23	118.3	27.2	**0.0034**	0.008	230.2	mg/L	118	Standard
|	**Mg**	24	553.3	12.3	**0.0001**	0.000	164.4	mg/L	377	Standard

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	K	39	623.3	5.8	**-0.0011**	0.003	247.8	mg/L	583	Standard
	Ca	43	63.3	12.1	**-0.0503**	0.020	39.6	mg/L	73	Standard
	Fe	54	911.1	11.9	**-0.0006**	0.020	3168.2	mg/L	785	Standard
	Fe	57	4989.2	2.0	**-0.0076**	0.001	7.5	mg/L	6133	Standard
>	**Sc-1**	45	272244.8	2.1				mg/L	254529	Standard
	Cl	35	652552.3	33.0				ug/L	1641778	Standard
	Kr	83	55.9	3.0				ug/L	60	Standard
	Br	81	11411.8	2.5				ug/L	11554	Standard
	P	31	57848.0	6.0				ug/L	45410	Standard
	S	34	666886.6	1.2				ug/L	568857	Standard
	Sr	88	268.3	14.0				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51	92.617		
	Cr	52	94.694		
	Cr	53			
	Mn	55	96.653		
	Co	59	100.278		
	Ni	60	100.860		
	Cu	65	102.577		
	Zn	66	112.971		
>	Ge	72		103.436	
	As	75	99.644		
	Se	82	110.105		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		103.087	
	Rh	103			
	Mo	98			
	Ag	107	105.455		
	Cd	111	104.152		
	Cd	114			
>	In	115		102.217	
	Sn	118			
	Sb	123	100.793		
	Ba	135	97.463		
	Ce	140			
>	Tb	159		101.693	
	Ho	165			
	Tl	203	84.866		
	Tl	205			
	Pb	206			

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	Pb	207			
	Pb	208	97.270		
	U	238	94.672		
>	Bi	209		99.886	
	Na	23			
	Mg	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: L1205015301
Sample Date/Time: Thursday, May 10, 2012 10:19:53
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	120788.1	2.5	**9633.3895**	425.963	4.4	ug/L	12600	Standard
|	**Be**	9	18.3	15.7	**-0.0095**	0.001	6.9	ug/L	5	Standard
|	**Al**	27	299336.6	1.2	**16.3853**	0.413	2.5	ug/L	16102	Standard
⌊>	**Sc**	45	285126.8	3.6				ug/L	254529	Standard
⌈	**Ti**	47	753.0	5.6	**0.4170**	0.022	5.2	ug/L	84	Standard
|	**V**	51	7371.5	4.9	**0.1722**	0.018	10.3	ug/L	5785	Standard
|	**Cr**	52	15701.5	2.5	**0.2917**	0.029	10.0	ug/L	12212	Standard
|	**Cr**	53	2784.4	10.1	**0.0300**	0.129	430.3	ug/L	5042	Standard
|	**Mn**	55	69393.3	2.0	**3.2155**	0.067	2.1	ug/L	1290	Standard
|	**Co**	59	1631.1	2.7	**0.0989**	0.002	1.9	ug/L	143	Standard
|	**Ni**	60	6437.0	4.5	**2.0280**	0.044	2.2	ug/L	79	Standard
|	**Cu**	65	18962.9	2.6	**6.6209**	0.181	2.7	ug/L	154	Standard
|	**Zn**	66	46218.8	2.6	**35.7959**	0.785	2.2	ug/L	194	Standard
| >	**Ge**	72	238532.3	4.0				ug/L	232024	Standard
|	**As**	75	62.8	42.0	**0.2795**	0.021	7.4	ug/L	-297	Standard
|	**Se**	82	136.7	4.9	**0.8798**	0.039	4.5	ug/L	17	Standard
⌊	**Se-1**	77	210.3	4.6	**0.6601**	0.015	2.3	ug/L	180	Standard
	Ga	71	214967.3	4.6				mg/L	210139	Standard
⌈	**Rb**	85	10231.8	4.7				ug/L	12	Standard
| >	**Y**	89	220731.0	3.7				ug/L	214065	Standard
⌊	**Rh**	103	86.7	6.7				ug/L	0	Standard
⌈	**Mo**	98	1342.8	1.3	**0.3062**	0.007	2.3	ug/L	6	Standard
|	**Ag**	107	60.0	14.2	**-0.0004**	0.001	217.9	ug/L	33	Standard
|	**Cd**	111	1041.9	2.3	**0.1304**	0.006	4.8	mg/L	437	Standard
|	**Cd**	114	2649.6	2.2	**0.1175**	0.003	2.8	ug/L	1160	Standard
| >	**In**	115	667375.4	1.2				ug/L	646604	Standard
|	**Sn**	118	1254.1	1.3	**0.0211**	0.000	1.7	ug/L	864	Standard
|	**Sb**	123	2062.9	2.3	**0.1784**	0.005	3.1	ug/L	18	Standard
⌊	**Ba**	135	80922.3	2.4	**17.0131**	0.199	1.2	ug/L	39	Standard
⌈	**Ce**	140	4260.6	2.0				ug/L	46	Standard
⌊>	**Tb**	159	730629.3	1.9				ug/L	695671	Standard
⌈	**Ho**	165	78.3	8.7				ug/L	9	Standard
|	**Tl**	203	824.4	3.2	**0.0159**	0.002	13.6	ug/L	687	Standard
|	**Tl**	205	1943.5	4.0	**0.0167**	0.002	9.4	ug/L	1624	Standard
|	**Pb**	206	11665.8	1.2	**0.9092**	0.020	2.3	ug/L	305	Standard
|	**Pb**	207	9919.6	0.8	**0.9064**	0.015	1.7	ug/L	231	Standard
|	**Pb**	208	45975.7	1.3	**0.9024**	0.010	1.1	ug/L	1129	Standard
|	**U**	238	7350.8	1.7	**0.2797**	0.003	1.0	ug/L	3	Standard
⌊>	**Bi**	209	385767.4	2.0				ug/L	405108	Standard
⌈	**Na**	23	86903.6	2.9	**21.5150**	0.405	1.9	mg/L	118	Standard
|	**Mg**	24	3416246.4	1.4	**5.5848**	0.174	3.1	mg/L	377	Standard

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	K	39	17670.3	1.2	**1.3142**	0.042	3.2	mg/L	583	Standard
	Ca	43	12601.9	2.4	**26.8411**	1.057	3.9	mg/L	73	Standard
	Fe	54	1196.5	6.6	**0.0378**	0.006	15.7	mg/L	785	Standard
	Fe	57	28030.9	3.1	**0.1089**	0.002	1.8	mg/L	6133	Standard
>	**Sc-1**	45	285126.8	3.6				mg/L	254529	Standard
	Cl	35	4187116.6	6.8				ug/L	1641778	Standard
	Kr	83	58.7	13.8				ug/L	60	Standard
	Br	81	49566.9	4.1				ug/L	11554	Standard
	P	31	75187.8	1.5				ug/L	45410	Standard
	S	34	1932472.2	2.4				ug/L	568857	Standard
	Sr	88	2759118.3	1.4				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		102.805	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		103.114	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		103.212	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		105.025	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	95.226
	Na	23	
	Mg	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: L1205015302
Sample Date/Time: Thursday, May 10, 2012 10:22:47
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	119707.8	1.4	**9754.5742**	287.070	2.9	ug/L	12600	Standard
|	**Be**	9	15.0	66.7	**-0.0103**	0.003	26.2	ug/L	5	Standard
|	**Al**	27	97610.2	2.0	**4.9209**	0.047	1.0	ug/L	16102	Standard
⌊>	**Sc**	45	279312.9	1.2				ug/L	254529	Standard
⌈	**Ti**	47	443.0	6.1	**0.2147**	0.014	6.7	ug/L	84	Standard
|	**V**	51	6954.1	3.7	**0.1378**	0.007	5.4	ug/L	5785	Standard
|	**Cr**	52	15870.0	0.5	**0.2810**	0.028	9.9	ug/L	12212	Standard
|	**Cr**	53	3592.1	3.2	**0.4472**	0.101	22.5	ug/L	5042	Standard
|	**Mn**	55	54371.1	1.4	**2.4527**	0.041	1.7	ug/L	1290	Standard
|	**Co**	59	1413.1	3.3	**0.0826**	0.005	5.5	ug/L	143	Standard
|	**Ni**	60	6698.5	2.5	**2.0720**	0.021	1.0	ug/L	79	Standard
|	**Cu**	65	17181.7	2.0	**5.8808**	0.094	1.6	ug/L	154	Standard
|	**Zn**	66	44578.8	2.2	**33.8667**	0.071	0.2	ug/L	194	Standard
| >	**Ge**	72	242984.7	2.0				ug/L	232024	Standard
|	**As**	75	30.4	154.0	**0.2515**	0.039	15.6	ug/L	-297	Standard
|	**Se**	82	135.6	3.2	**0.8525**	0.045	5.2	ug/L	17	Standard
⌊	**Se-1**	77	242.7	3.5	**0.9915**	0.152	15.4	ug/L	180	Standard
	Ga	71	217572.8	1.0				mg/L	210139	Standard
⌈	**Rb**	85	8909.3	1.2				ug/L	12	Standard
| >	**Y**	89	219767.9	2.3				ug/L	214065	Standard
⌊	**Rh**	103	81.7	30.2				ug/L	0	Standard
⌈	**Mo**	98	1888.0	1.4	**0.4295**	0.006	1.5	ug/L	6	Standard
|	**Ag**	107	49.3	1.2	**-0.0017**	0.000	3.4	ug/L	33	Standard
|	**Cd**	111	1030.4	3.2	**0.1257**	0.006	5.1	mg/L	437	Standard
|	**Cd**	114	2603.5	2.4	**0.1117**	0.005	4.2	ug/L	1160	Standard
| >	**In**	115	673838.1	0.3				ug/L	646604	Standard
|	**Sn**	118	1085.0	4.4	**0.0100**	0.003	27.4	ug/L	864	Standard
|	**Sb**	123	1890.1	2.8	**0.1617**	0.004	2.7	ug/L	18	Standard
⌊	**Ba**	135	79777.1	0.8	**16.6127**	0.091	0.5	ug/L	39	Standard
⌈	**Ce**	140	1592.1	2.9				ug/L	46	Standard
⌊>	**Tb**	159	742833.9	0.7				ug/L	695671	Standard
⌈	**Ho**	165	35.3	13.1				ug/L	9	Standard
|	**Tl**	203	787.0	2.4	**0.0134**	0.001	9.2	ug/L	687	Standard
|	**Tl**	205	1884.1	0.7	**0.0151**	0.000	0.7	ug/L	1624	Standard
|	**Pb**	206	3265.7	1.0	**0.2376**	0.002	0.7	ug/L	305	Standard
|	**Pb**	207	2812.9	2.9	**0.2403**	0.007	2.7	ug/L	231	Standard
|	**Pb**	208	12878.5	1.1	**0.2360**	0.001	0.5	ug/L	1129	Standard
|	**U**	238	7053.3	2.4	**0.2682**	0.005	1.9	ug/L	3	Standard
⌊>	**Bi**	209	386088.7	0.6				ug/L	405108	Standard
⌈	**Na**	23	85731.9	0.9	**21.6640**	0.409	1.9	mg/L	118	Standard
|	**Mg**	24	3316563.1	1.2	**5.5319**	0.134	2.4	mg/L	377	Standard

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	K	39	17208.1	1.6	**1.3053**	0.021	1.6	mg/L	583	Standard
	Ca	43	12365.0	1.1	**26.8663**	0.352	1.3	mg/L	73	Standard
	Fe	54	1001.6	6.2	**0.0100**	0.008	80.7	mg/L	785	Standard
	Fe	57	21672.2	1.9	**0.0787**	0.003	3.6	mg/L	6133	Standard
>	**Sc-1**	45	279312.9	1.2				mg/L	254529	Standard
	Cl	35	4144951.0	5.3				ug/L	1641778	Standard
	Kr	83	58.3	9.8				ug/L	60	Standard
	Br	81	49499.9	1.7				ug/L	11554	Standard
	P	31	69848.2	1.9				ug/L	45410	Standard
	S	34	1919869.4	0.2				ug/L	568857	Standard
	Sr	88	2592723.6	1.9				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		104.724	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		102.664	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		104.212	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		106.779	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	95.305
	Na	23	
	Mg	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: L1205015302
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Method 6020 - Summary Report

Sample ID: L1205015303
Sample Date/Time: Thursday, May 10, 2012 10:25:40
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	495440.1	1.9	**42451.3919**	574.460	1.4	ug/L	12600	Standard
|	**Be**	9	6.7	43.3	**-0.0127**	0.001	6.1	ug/L	5	Standard
|	**Al**	27	70405.0	4.0	**3.1658**	0.227	7.2	ug/L	16102	Standard
⌊>	**Sc**	45	290983.3	2.0				ug/L	254529	Standard
⌈	**Ti**	47	962.0	4.7	**0.5754**	0.026	4.5	ug/L	84	Standard
|	**V**	51	5731.3	4.7	**0.0844**	0.021	24.3	ug/L	5785	Standard
|	**Cr**	52	14838.3	0.9	**0.2710**	0.023	8.4	ug/L	12212	Standard
|	**Cr**	53	3182.0	4.4	**0.3284**	0.081	24.6	ug/L	5042	Standard
|	**Mn**	55	5540790.9	2.3	**274.3835**	4.111	1.5	ug/L	1290	Standard
|	**Co**	59	50172.6	1.0	**3.4885**	0.024	0.7	ug/L	143	Standard
|	**Ni**	60	16814.3	1.2	**5.5615**	0.030	0.5	ug/L	79	Standard
|	**Cu**	65	1502.4	1.8	**0.5007**	0.006	1.2	ug/L	154	Standard
|	**Zn**	66	12140.2	0.7	**9.6671**	0.126	1.3	ug/L	194	Standard
| >	**Ge**	72	228879.5	0.8				ug/L	232024	Standard
|	**As**	75	6490.2	1.0	**5.9993**	0.031	0.5	ug/L	-297	Standard
|	**Se**	82	224.3	7.5	**1.6166**	0.139	8.6	ug/L	17	Standard
⌊	**Se-1**	77	221.3	9.3	**0.9000**	0.247	27.5	ug/L	180	Standard
	Ga	71	205612.2	1.2				mg/L	210139	Standard
⌈	**Rb**	85	30639.3	0.7				ug/L	12	Standard
| >	**Y**	89	217865.1	3.9				ug/L	214065	Standard
⌊	**Rh**	103	320.0	12.2				ug/L	0	Standard
⌈	**Mo**	98	783.8	2.7	**0.1771**	0.005	2.5	ug/L	6	Standard
|	**Ag**	107	48.7	16.6	**-0.0017**	0.001	47.9	ug/L	33	Standard
|	**Cd**	111	639.7	5.9	**0.0455**	0.006	14.0	mg/L	437	Standard
|	**Cd**	114	1636.3	3.3	**0.0357**	0.002	6.5	ug/L	1160	Standard
| >	**In**	115	661008.3	2.4				ug/L	646604	Standard
|	**Sn**	118	1009.7	3.8	**0.0067**	0.003	38.4	ug/L	864	Standard
|	**Sb**	123	852.6	5.9	**0.0730**	0.003	4.1	ug/L	18	Standard
⌊	**Ba**	135	272975.2	2.7	**57.9676**	0.589	1.0	ug/L	39	Standard
⌈	**Ce**	140	3418.4	2.7				ug/L	46	Standard
⌊>	**Tb**	159	735834.1	2.6				ug/L	695671	Standard
⌈	**Ho**	165	91.7	7.3				ug/L	9	Standard
|	**Tl**	203	1511.4	2.1	**0.0654**	0.003	3.9	ug/L	687	Standard
|	**Tl**	205	3489.4	0.6	**0.0639**	0.001	2.0	ug/L	1624	Standard
|	**Pb**	206	3400.7	1.6	**0.2648**	0.008	3.1	ug/L	305	Standard
|	**Pb**	207	2654.6	3.4	**0.2404**	0.006	2.6	ug/L	231	Standard
|	**Pb**	208	12766.8	0.3	**0.2492**	0.003	1.4	ug/L	1129	Standard
|	**U**	238	15900.7	0.2	**0.6376**	0.009	1.5	ug/L	3	Standard
⌊>	**Bi**	209	364237.0	1.5				ug/L	405108	Standard
⌈	**Na**	23	107619.3	2.3	**26.1115**	0.718	2.8	mg/L	118	Standard
|	**Mg**	24	9741908.8	1.9	**15.5969**	0.174	1.1	mg/L	377	Standard

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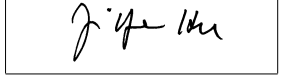

	K	39	34332.2	1.6	**2.5470**	0.032	1.3	mg/L	583	Standard
	Ca	43	43253.3	2.0	**90.6596**	0.523	0.6	mg/L	73	Standard
	Fe	54	15526.8	1.7	**2.2776**	0.037	1.6	mg/L	785	Standard
	Fe	57	534179.9	1.6	**2.6394**	0.021	0.8	mg/L	6133	Standard
>	**Sc-1**	45	290983.3	2.0				mg/L	254529	Standard
	Cl	35	4251055.1	2.9				ug/L	1641778	Standard
	Kr	83	69.0	7.0				ug/L	60	Standard
	Br	81	75695.5	3.9				ug/L	11554	Standard
	P	31	58936.3	5.6				ug/L	45410	Standard
	S	34	5203598.5	1.9				ug/L	568857	Standard
	Sr	88	10890919.5	4.6				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		98.645	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		101.775	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		102.228	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		105.773	
	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

89.911

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1205015303
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Method 6020 - Summary Report

Sample ID: L1205015304
Sample Date/Time: Thursday, May 10, 2012 10:28:32
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	500292.1	2.5	**41969.7833**	2186.063	5.2	ug/L	12600	Standard
|	**Be**	9	21.7	35.3	**-0.0089**	0.002	20.9	ug/L	5	Standard
|	**Al**	27	94688.3	1.7	**4.4167**	0.173	3.9	ug/L	16102	Standard
⌊>	**Sc**	45	297335.3	2.5				ug/L	254529	Standard
⌈	**Ti**	47	876.0	4.0	**0.5130**	0.036	7.1	ug/L	84	Standard
|	**V**	51	5815.6	4.5	**0.0858**	0.014	16.7	ug/L	5785	Standard
|	**Cr**	52	13580.8	1.5	**0.1476**	0.029	19.6	ug/L	12212	Standard
|	**Cr**	53	3142.0	8.3	**0.2842**	0.105	37.0	ug/L	5042	Standard
|	**Mn**	55	5153556.9	2.9	**252.5578**	4.901	1.9	ug/L	1290	Standard
|	**Co**	59	46047.9	2.6	**3.1673**	0.039	1.2	ug/L	143	Standard
|	**Ni**	60	16850.4	5.3	**5.5130**	0.189	3.4	ug/L	79	Standard
|	**Cu**	65	1521.4	2.6	**0.5020**	0.015	3.1	ug/L	154	Standard
|	**Zn**	66	13444.6	2.1	**10.6114**	0.162	1.5	ug/L	194	Standard
| >	**Ge**	72	231299.8	2.4				ug/L	232024	Standard
|	**As**	75	6915.7	3.4	**6.3131**	0.117	1.8	ug/L	-297	Standard
|	**Se**	82	220.5	2.0	**1.5681**	0.015	1.0	ug/L	17	Standard
⌊	**Se-1**	77	249.7	7.3	**1.2190**	0.259	21.3	ug/L	180	Standard
	Ga	71	207437.6	2.6				mg/L	210139	Standard
⌈	**Rb**	85	31723.2	2.3				ug/L	12	Standard
| >	**Y**	89	213519.3	1.8				ug/L	214065	Standard
⌊	**Rh**	103	288.3	23.1				ug/L	0	Standard
⌈	**Mo**	98	749.6	4.7	**0.1675**	0.010	6.1	ug/L	6	Standard
|	**Ag**	107	47.0	16.9	**-0.0019**	0.001	43.4	ug/L	33	Standard
|	**Cd**	111	641.4	4.9	**0.0447**	0.006	13.8	mg/L	437	Standard
|	**Cd**	114	1571.7	2.9	**0.0292**	0.003	11.9	ug/L	1160	Standard
| >	**In**	115	666742.0	1.4				ug/L	646604	Standard
|	**Sn**	118	1033.7	4.2	**0.0076**	0.003	39.9	ug/L	864	Standard
|	**Sb**	123	856.1	5.0	**0.0726**	0.003	4.3	ug/L	18	Standard
⌊	**Ba**	135	284124.3	2.9	**59.8123**	1.189	2.0	ug/L	39	Standard
⌈	**Ce**	140	3140.3	2.1				ug/L	46	Standard
⌊>	**Tb**	159	760222.2	2.4				ug/L	695671	Standard
⌈	**Ho**	165	88.7	10.7				ug/L	9	Standard
|	**Tl**	203	1568.7	0.5	**0.0677**	0.000	0.7	ug/L	687	Standard
|	**Tl**	205	3707.1	3.5	**0.0685**	0.003	5.0	ug/L	1624	Standard
|	**Pb**	206	2474.9	2.0	**0.1832**	0.003	1.5	ug/L	305	Standard
|	**Pb**	207	1971.1	0.8	**0.1697**	0.002	1.5	ug/L	231	Standard
|	**Pb**	208	9274.1	1.7	**0.1718**	0.002	1.0	ug/L	1129	Standard
|	**U**	238	15038.1	2.2	**0.5941**	0.010	1.6	ug/L	3	Standard
⌊>	**Bi**	209	369742.5	0.8				ug/L	405108	Standard
⌈	**Na**	23	106316.9	2.7	**25.2553**	1.164	4.6	mg/L	118	Standard
|	**Mg**	24	9660434.7	3.6	**15.1503**	0.929	6.1	mg/L	377	Standard

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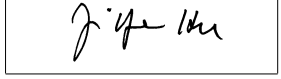

	K	39	33670.7	0.9	**2.4434**	0.070	2.9	mg/L	583	Standard
	Ca	43	41468.4	2.7	**85.0973**	3.666	4.3	mg/L	73	Standard
	Fe	54	15897.5	0.9	**2.2835**	0.085	3.7	mg/L	785	Standard
	Fe	57	542744.9	2.9	**2.6260**	0.129	4.9	mg/L	6133	Standard
>	**Sc-1**	45	297335.3	2.5				mg/L	254529	Standard
	Cl	35	4376781.8	3.3				ug/L	1641778	Standard
	Kr	83	68.7	6.3				ug/L	60	Standard
	Br	81	77842.1	3.3				ug/L	11554	Standard
	P	31	58557.2	3.5				ug/L	45410	Standard
	S	34	4977890.6	1.9				ug/L	568857	Standard
	Sr	88	10489995.6	0.2				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		99.688	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		99.745	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		103.114	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		109.279	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	91.270
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1205015304
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Method 6020 - Summary Report

Sample ID: L1205015305
Sample Date/Time: Thursday, May 10, 2012 10:31:25
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	244263.4	1.3	**20480.7476**	171.122	0.8	ug/L	12600	Standard
|	**Be**	9	120.0	19.1	**0.0173**	0.006	33.5	ug/L	5	Standard
|	**Al**	27	1564353.6	2.4	**87.8762**	1.480	1.7	ug/L	16102	Standard
⌊>	**Sc**	45	288537.2	2.0				ug/L	254529	Standard
⌈	**Ti**	47	5233.9	9.7	**3.3256**	0.313	9.4	ug/L	84	Standard
|	**V**	51	9925.6	1.6	**0.3441**	0.012	3.4	ug/L	5785	Standard
|	**Cr**	52	15855.6	1.7	**0.3294**	0.024	7.2	ug/L	12212	Standard
|	**Cr**	53	3077.0	7.9	**0.2274**	0.146	64.2	ug/L	5042	Standard
|	**Mn**	55	10423242.0	3.0	**504.7321**	16.709	3.3	ug/L	1290	Standard
|	**Co**	59	297942.4	2.5	**20.3008**	0.535	2.6	ug/L	143	Standard
|	**Ni**	60	22478.3	3.3	**7.2759**	0.251	3.5	ug/L	79	Standard
|	**Cu**	65	47039.3	1.7	**16.8003**	0.383	2.3	ug/L	154	Standard
|	**Zn**	66	77914.9	2.6	**61.5792**	1.783	2.9	ug/L	194	Standard
| >	**Ge**	72	234133.5	0.6				ug/L	232024	Standard
|	**As**	75	2053.4	2.5	**2.0121**	0.053	2.6	ug/L	-297	Standard
|	**Se**	82	134.0	2.2	**0.8779**	0.024	2.8	ug/L	17	Standard
⌊	**Se-1**	77	192.0	6.0	**0.4873**	0.152	31.1	ug/L	180	Standard
	Ga	71	211830.9	0.4				mg/L	210139	Standard
⌈	**Rb**	85	26843.8	3.3				ug/L	12	Standard
| >	**Y**	89	219149.3	2.9				ug/L	214065	Standard
⌊	**Rh**	103	120.0	37.0				ug/L	0	Standard
⌈	**Mo**	98	3042.6	3.1	**0.6955**	0.016	2.4	ug/L	6	Standard
|	**Ag**	107	118.7	4.3	**0.0062**	0.000	7.5	ug/L	33	Standard
|	**Cd**	111	1832.1	3.5	**0.2948**	0.010	3.3	mg/L	437	Standard
|	**Cd**	114	4821.8	1.0	**0.2911**	0.006	2.0	ug/L	1160	Standard
| >	**In**	115	675451.9	1.2				ug/L	646604	Standard
|	**Sn**	118	2434.9	1.0	**0.0918**	0.002	2.7	ug/L	864	Standard
|	**Sb**	123	2999.0	3.2	**0.2573**	0.006	2.4	ug/L	18	Standard
⌊	**Ba**	135	208361.3	2.1	**43.2962**	0.428	1.0	ug/L	39	Standard
⌈	**Ce**	140	16762.9	1.5				ug/L	46	Standard
⌊>	**Tb**	159	746584.3	1.1				ug/L	695671	Standard
⌈	**Ho**	165	331.7	3.9				ug/L	9	Standard
|	**Tl**	203	987.0	7.9	**0.0281**	0.005	16.2	ug/L	687	Standard
|	**Tl**	205	2330.2	1.5	**0.0291**	0.001	4.5	ug/L	1624	Standard
|	**Pb**	206	16289.1	2.0	**1.3181**	0.016	1.2	ug/L	305	Standard
|	**Pb**	207	13664.5	1.7	**1.2962**	0.014	1.1	ug/L	231	Standard
|	**Pb**	208	63384.8	1.9	**1.2917**	0.012	0.9	ug/L	1129	Standard
|	**U**	238	11339.2	2.5	**0.4431**	0.008	1.7	ug/L	3	Standard
⌊>	**Bi**	209	374313.6	1.1				ug/L	405108	Standard
⌈	**Na**	23	101822.8	2.8	**24.9060**	0.297	1.2	mg/L	118	Standard
|	**Mg**	24	5512372.7	0.5	**8.9018**	0.191	2.1	mg/L	377	Standard

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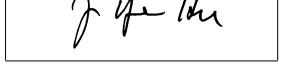

	K	39	17817.1	2.3	**1.3083**	0.019	1.4	mg/L	583	Standard
	Ca	43	23100.9	1.9	**48.7419**	0.321	0.7	mg/L	73	Standard
	Fe	54	21101.5	5.8	**3.1790**	0.210	6.6	mg/L	785	Standard
	Fe	57	672913.7	0.7	**3.3630**	0.066	2.0	mg/L	6133	Standard
>	**Sc-1**	45	288537.2	2.0				mg/L	254529	Standard
	Cl	35	4438702.8	3.4				ug/L	1641778	Standard
	Kr	83	62.7	5.1				ug/L	60	Standard
	Br	81	58056.9	1.6				ug/L	11554	Standard
	P	31	90076.2	2.0				ug/L	45410	Standard
	S	34	2067531.3	2.9				ug/L	568857	Standard
	Sr	88	4080843.6	1.4				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		100.909	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		102.375	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		104.461	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		107.319	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	92.398
	Na	23	
	Mg	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: L1205015306
Sample Date/Time: Thursday, May 10, 2012 10:34:18
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	239349.9	2.6	**20848.0178**	697.103	3.3	ug/L	12600	Standard
|	**Be**	9	21.7	58.1	**-0.0085**	0.003	40.3	ug/L	5	Standard
|	**Al**	27	150048.5	4.1	**8.0332**	0.403	5.0	ug/L	16102	Standard
⌊>	**Sc**	45	278037.9	0.6				ug/L	254529	Standard
⌈	**Ti**	47	1135.0	5.6	**0.7046**	0.043	6.1	ug/L	84	Standard
|	**V**	51	6041.5	2.8	**0.1123**	0.015	13.1	ug/L	5785	Standard
|	**Cr**	52	13682.5	0.7	**0.1921**	0.005	2.6	ug/L	12212	Standard
|	**Cr**	53	2551.0	4.5	**-0.0105**	0.067	634.6	ug/L	5042	Standard
|	**Mn**	55	10233691.8	0.9	**516.6971**	3.589	0.7	ug/L	1290	Standard
|	**Co**	59	289673.3	1.6	**20.5796**	0.210	1.0	ug/L	143	Standard
|	**Ni**	60	20558.3	2.8	**6.9365**	0.132	1.9	ug/L	79	Standard
|	**Cu**	65	15449.5	3.3	**5.7196**	0.136	2.4	ug/L	154	Standard
|	**Zn**	66	71325.2	2.1	**58.7633**	0.738	1.3	ug/L	194	Standard
|>	**Ge**	72	224539.7	0.9				ug/L	232024	Standard
|	**As**	75	1806.6	3.2	**1.8647**	0.064	3.4	ug/L	-297	Standard
|	**Se**	82	114.0	6.0	**0.7619**	0.062	8.2	ug/L	17	Standard
⌊	**Se-1**	77	176.7	14.8	**0.3928**	0.321	81.8	ug/L	180	Standard
	Ga	71	200570.9	2.1				mg/L	210139	Standard
⌈	**Rb**	85	24109.2	2.5				ug/L	12	Standard
|>	**Y**	89	209201.4	2.1				ug/L	214065	Standard
⌊	**Rh**	103	101.7	44.1				ug/L	0	Standard
⌈	**Mo**	98	2983.2	1.0	**0.6965**	0.002	0.2	ug/L	6	Standard
|	**Ag**	107	45.7	5.1	**-0.0020**	0.000	11.4	ug/L	33	Standard
|	**Cd**	111	1653.8	0.8	**0.2647**	0.005	1.9	mg/L	437	Standard
|	**Cd**	114	4288.7	1.7	**0.2553**	0.008	3.1	ug/L	1160	Standard
|>	**In**	115	661308.7	0.8				ug/L	646604	Standard
|	**Sn**	118	1079.0	1.4	**0.0109**	0.000	3.4	ug/L	864	Standard
|	**Sb**	123	2512.9	1.5	**0.2199**	0.005	2.3	ug/L	18	Standard
⌊	**Ba**	135	220827.0	0.9	**46.8749**	0.732	1.6	ug/L	39	Standard
⌈	**Ce**	140	2152.2	0.7				ug/L	46	Standard
⌊>	**Tb**	159	733428.0	1.8				ug/L	695671	Standard
⌈	**Ho**	165	58.7	20.2				ug/L	9	Standard
|	**Tl**	203	700.7	1.3	**0.0101**	0.001	7.4	ug/L	687	Standard
|	**Tl**	205	1646.1	2.0	**0.0108**	0.001	10.4	ug/L	1624	Standard
|	**Pb**	206	1298.7	2.2	**0.0856**	0.002	2.2	ug/L	305	Standard
|	**Pb**	207	1070.4	2.2	**0.0821**	0.003	3.3	ug/L	231	Standard
|	**Pb**	208	5016.7	0.4	**0.0828**	0.000	0.5	ug/L	1129	Standard
|	**U**	238	10683.4	1.8	**0.4244**	0.010	2.4	ug/L	3	Standard
⌊>	**Bi**	209	368406.2	0.7				ug/L	405108	Standard
⌈	**Na**	23	100458.7	1.7	**25.5052**	0.577	2.3	mg/L	118	Standard
|	**Mg**	24	5580270.1	1.5	**9.3498**	0.186	2.0	mg/L	377	Standard

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	K	39	17635.3	3.5	**1.3454**	0.054	4.0	mg/L	583	Standard
	Ca	43	22955.7	3.2	**50.2763**	1.879	3.7	mg/L	73	Standard
	Fe	54	19477.7	0.1	**3.0378**	0.018	0.6	mg/L	785	Standard
	Fe	57	635481.6	1.6	**3.2946**	0.070	2.1	mg/L	6133	Standard
>	**Sc-1**	45	278037.9	0.6				mg/L	254529	Standard
	Cl	35	4461007.3	5.8				ug/L	1641778	Standard
	Kr	83	61.8	3.6				ug/L	60	Standard
	Br	81	57316.5	0.7				ug/L	11554	Standard
	P	31	74874.7	3.0				ug/L	45410	Standard
	S	34	2040121.9	1.6				ug/L	568857	Standard
	Sr	88	3983561.6	1.1				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		96.775	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		97.728	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		102.274	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		105.427	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	90.940
	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
Mn 55 Upper, S, EEE	Mn	55	

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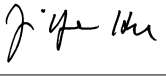

Method 6020 - Summary Report

Sample ID: L1205015307
Sample Date/Time: Thursday, May 10, 2012 10:37:11
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	804762.1	0.9	**68113.3483**	679.300	1.0	ug/L	12600	Standard
|	**Be**	9	16.7	62.4	**-0.0102**	0.003	26.3	ug/L	5	Standard
|	**Al**	27	654963.8	0.6	**35.1794**	0.118	0.3	ug/L	16102	Standard
⌊>	**Sc**	45	297760.7	0.5				ug/L	254529	Standard
⌈	**Ti**	47	2692.9	26.5	**1.7334**	0.463	26.7	ug/L	84	Standard
|	**V**	51	8259.3	3.9	**0.2539**	0.026	10.3	ug/L	5785	Standard
|	**Cr**	52	15432.9	1.6	**0.3340**	0.025	7.6	ug/L	12212	Standard
|	**Cr**	53	4260.6	2.6	**0.9765**	0.084	8.6	ug/L	5042	Standard
|	**Mn**	55	4212528.8	0.4	**210.2204**	1.070	0.5	ug/L	1290	Standard
|	**Co**	59	26970.3	0.8	**1.8851**	0.023	1.2	ug/L	143	Standard
|	**Ni**	60	14225.3	1.7	**4.7379**	0.047	1.0	ug/L	79	Standard
|	**Cu**	65	3488.7	2.0	**1.2384**	0.020	1.6	ug/L	154	Standard
|	**Zn**	66	30642.6	0.6	**24.8594**	0.098	0.4	ug/L	194	Standard
| >	**Ge**	72	227124.4	0.8				ug/L	232024	Standard
|	**As**	75	2922.5	2.0	**2.8459**	0.030	1.1	ug/L	-297	Standard
|	**Se**	82	272.5	5.3	**2.0142**	0.098	4.8	ug/L	17	Standard
⌊	**Se-1**	77	351.0	1.7	**2.5278**	0.041	1.6	ug/L	180	Standard
	Ga	71	205766.9	1.2				mg/L	210139	Standard
⌈	**Rb**	85	28752.3	2.7				ug/L	12	Standard
| >	**Y**	89	216080.3	1.9				ug/L	214065	Standard
⌊	**Rh**	103	343.3	16.0				ug/L	0	Standard
⌈	**Mo**	98	875.9	6.8	**0.1978**	0.015	7.6	ug/L	6	Standard
|	**Ag**	107	85.0	11.9	**0.0025**	0.001	45.7	ug/L	33	Standard
|	**Cd**	111	852.9	1.4	**0.0906**	0.003	3.6	mg/L	437	Standard
|	**Cd**	114	2192.5	0.5	**0.0808**	0.002	2.6	ug/L	1160	Standard
| >	**In**	115	664556.5	0.7				ug/L	646604	Standard
|	**Sn**	118	5145.2	2.4	**0.2612**	0.008	3.2	ug/L	864	Standard
|	**Sb**	123	1596.6	3.4	**0.1381**	0.005	3.3	ug/L	18	Standard
⌊	**Ba**	135	408901.0	0.8	**86.3736**	0.184	0.2	ug/L	39	Standard
⌈	**Ce**	140	17386.0	3.1				ug/L	46	Standard
⌊>	**Tb**	159	745646.1	0.3				ug/L	695671	Standard
⌈	**Ho**	165	330.7	7.1				ug/L	9	Standard
|	**Tl**	203	609.3	3.4	**0.0057**	0.002	34.2	ug/L	687	Standard
|	**Tl**	205	1413.1	2.8	**0.0059**	0.001	15.8	ug/L	1624	Standard
|	**Pb**	206	103312.0	0.6	**8.9893**	0.061	0.7	ug/L	305	Standard
|	**Pb**	207	84808.7	0.6	**8.6516**	0.122	1.4	ug/L	231	Standard
|	**Pb**	208	397741.9	0.5	**8.7175**	0.067	0.8	ug/L	1129	Standard
|	**U**	238	11438.0	0.6	**0.4734**	0.003	0.7	ug/L	3	Standard
⌊>	**Bi**	209	353327.3	1.3				ug/L	405108	Standard
⌈	**Na**	23	192086.7	0.9	**45.5569**	0.532	1.2	mg/L	118	Standard
|	**Mg**	24	14863208.7	1.7	**23.2552**	0.510	2.2	mg/L	377	Standard

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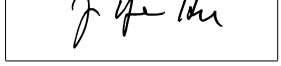

	K	39	28598.6	3.0	**2.0634**	0.056	2.7	mg/L	583	Standard
	Ca	43	47206.8	1.8	**96.7118**	2.185	2.3	mg/L	73	Standard
	Fe	54	26011.6	2.9	**3.8259**	0.113	3.0	mg/L	785	Standard
	Fe	57	891336.4	0.8	**4.3254**	0.056	1.3	mg/L	6133	Standard
>	**Sc-1**	45	297760.7	0.5				mg/L	254529	Standard
	Cl	35	8521486.0	1.3				ug/L	1641778	Standard
	Kr	83	81.6	4.1				ug/L	60	Standard
	Br	81	105401.0	5.1				ug/L	11554	Standard
	P	31	77620.2	4.4				ug/L	45410	Standard
	S	34	5456669.5	2.0				ug/L	568857	Standard
	Sr	88	13157757.4	1.4				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		97.889	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		100.941	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		102.776	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		107.184	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	87.218
	Na	23	
	Mg	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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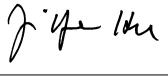

Method 6020 - Summary Report

Sample ID: L1205015308
Sample Date/Time: Thursday, May 10, 2012 10:40:04
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	793359.2	3.2	**67695.0581**	512.185	0.8	ug/L	12600	Standard
|	**Be**	9	13.3	43.3	**-0.0109**	0.002	15.0	ug/L	5	Standard
|	**Al**	27	67247.4	4.6	**2.9329**	0.213	7.3	ug/L	16102	Standard
⌊>	**Sc**	45	295343.0	3.5				ug/L	254529	Standard
⌈	**Ti**	47	989.4	4.3	**0.6035**	0.043	7.2	ug/L	84	Standard
|	**V**	51	6039.1	6.9	**0.1099**	0.023	20.9	ug/L	5785	Standard
|	**Cr**	52	13565.1	0.6	**0.1756**	0.022	12.4	ug/L	12212	Standard
|	**Cr**	53	4368.1	0.9	**1.0562**	0.046	4.4	ug/L	5042	Standard
|	**Mn**	55	3988221.4	0.6	**200.3380**	3.625	1.8	ug/L	1290	Standard
|	**Co**	59	24797.3	1.4	**1.7438**	0.035	2.0	ug/L	143	Standard
|	**Ni**	60	13463.3	2.6	**4.5117**	0.067	1.5	ug/L	79	Standard
|	**Cu**	65	1795.8	2.1	**0.6180**	0.030	4.9	ug/L	154	Standard
|	**Zn**	66	23944.9	0.1	**19.5186**	0.468	2.4	ug/L	194	Standard
| >	**Ge**	72	225690.4	2.3				ug/L	232024	Standard
|	**As**	75	2582.7	3.5	**2.5581**	0.134	5.2	ug/L	-297	Standard
|	**Se**	82	268.8	1.2	**1.9995**	0.074	3.7	ug/L	17	Standard
⌊	**Se-1**	77	341.7	5.4	**2.4379**	0.164	6.7	ug/L	180	Standard
	Ga	71	203453.2	1.9				mg/L	210139	Standard
⌈	**Rb**	85	27363.0	1.8				ug/L	12	Standard
| >	**Y**	89	209579.9	2.0				ug/L	214065	Standard
⌊	**Rh**	103	301.7	22.5				ug/L	0	Standard
⌈	**Mo**	98	857.7	3.2	**0.1957**	0.005	2.3	ug/L	6	Standard
|	**Ag**	107	52.3	16.5	**-0.0012**	0.001	73.9	ug/L	33	Standard
|	**Cd**	111	698.5	7.4	**0.0593**	0.015	25.9	mg/L	437	Standard
|	**Cd**	114	1782.2	2.3	**0.0486**	0.002	3.1	ug/L	1160	Standard
| >	**In**	115	657345.6	3.0				ug/L	646604	Standard
|	**Sn**	118	1027.7	1.3	**0.0082**	0.002	25.0	ug/L	864	Standard
|	**Sb**	123	1250.0	4.3	**0.1088**	0.006	5.1	ug/L	18	Standard
⌊	**Ba**	135	396336.9	1.1	**84.6765**	2.060	2.4	ug/L	39	Standard
⌈	**Ce**	140	1470.1	2.4				ug/L	46	Standard
⌊>	**Tb**	159	735782.6	1.4				ug/L	695671	Standard
⌈	**Ho**	165	54.0	1.9				ug/L	9	Standard
|	**Tl**	203	572.7	5.8	**0.0030**	0.003	96.0	ug/L	687	Standard
|	**Tl**	205	1340.1	4.0	**0.0036**	0.001	26.6	ug/L	1624	Standard
|	**Pb**	206	4300.3	1.8	**0.3507**	0.006	1.6	ug/L	305	Standard
|	**Pb**	207	3532.7	1.8	**0.3372**	0.012	3.5	ug/L	231	Standard
|	**Pb**	208	16401.4	1.2	**0.3361**	0.002	0.6	ug/L	1129	Standard
|	**U**	238	10631.7	1.9	**0.4387**	0.013	2.9	ug/L	3	Standard
⌊>	**Bi**	209	354612.5	1.7				ug/L	405108	Standard
⌈	**Na**	23	189135.5	3.0	**45.2439**	1.448	3.2	mg/L	118	Standard
|	**Mg**	24	13972672.8	0.6	**22.0549**	0.674	3.1	mg/L	377	Standard

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	K	39	28421.7	4.2	**2.0675**	0.038	1.8	mg/L	583	Standard
	Ca	43	44966.6	2.0	**92.9058**	2.184	2.4	mg/L	73	Standard
	Fe	54	24815.9	1.3	**3.6776**	0.160	4.3	mg/L	785	Standard
	Fe	57	870148.3	1.4	**4.2591**	0.122	2.9	mg/L	6133	Standard
>	**Sc-1**	45	295343.0	3.5				mg/L	254529	Standard
	Cl	35	8413730.3	2.5				ug/L	1641778	Standard
	Kr	83	71.9	4.4				ug/L	60	Standard
	Br	81	94870.3	1.4				ug/L	11554	Standard
	P	31	63315.5	3.6				ug/L	45410	Standard
	S	34	5466100.9	0.8				ug/L	568857	Standard
	Sr	88	12622484.6	2.8				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		97.270	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		97.905	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		101.661	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		105.766	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	87.535
	Na	23	
	Mg	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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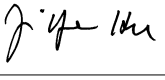

Method 6020 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Thursday, May 10, 2012 10:42:58
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: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	14061.5	3.6	**85.6074**	62.286	72.8	ug/L	12600	Standard
|	**Be**	9	10.0	50.0	**-0.0116**	0.002	13.4	ug/L	5	Standard
|	**Al**	27	78080848.8	1.6	**4712.1655**	160.833	3.4	ug/L	16102	Standard
⌊>	**Sc**	45	271236.5	4.8				ug/L	254529	Standard
⌈	**Ti**	47	185290.8	3.1	**118.4952**	1.290	1.1	ug/L	84	Standard
|	**V**	51	5486.3	1.7	**0.0563**	0.007	13.3	ug/L	5785	Standard
|	**Cr**	52	13831.0	1.4	**0.1410**	0.014	10.1	ug/L	12212	Standard
|	**Cr**	53	4329.8	13.1	**0.9087**	0.266	29.2	ug/L	5042	Standard
|	**Mn**	55	2730.9	5.3	**0.0458**	0.005	10.1	ug/L	1290	Standard
|	**Co**	59	398.3	4.4	**0.0166**	0.001	3.8	ug/L	143	Standard
|	**Ni**	60	1393.7	5.9	**0.4233**	0.018	4.3	ug/L	79	Standard
|	**Cu**	65	664.3	2.8	**0.1856**	0.011	6.0	ug/L	154	Standard
|	**Zn**	66	2335.8	4.1	**1.6537**	0.036	2.2	ug/L	194	Standard
| >	**Ge**	72	236842.4	2.3				ug/L	232024	Standard
|	**As**	75	-243.1	18.7	**0.0169**	0.042	250.9	ug/L	-297	Standard
|	**Se**	82	35.9	22.7	**0.1151**	0.056	48.3	ug/L	17	Standard
⌊	**Se-1**	77	284.7	6.9	**1.5640**	0.274	17.5	ug/L	180	Standard
	Ga	71	210803.4	3.9				mg/L	210139	Standard
⌈	**Rb**	85	3943.8	7.0				ug/L	12	Standard
| >	**Y**	89	212100.9	0.4				ug/L	214065	Standard
⌊	**Rh**	103	6.7	86.6				ug/L	0	Standard
⌈	**Mo**	98	424793.1	2.2	**97.3042**	1.813	1.9	ug/L	6	Standard
|	**Ag**	107	108.0	5.2	**0.0049**	0.001	13.2	ug/L	33	Standard
|	**Cd**	111	783.4	7.7	**0.0713**	0.012	16.3	mg/L	437	Standard
|	**Cd**	114	3612.3	2.6	**0.1902**	0.007	3.8	ug/L	1160	Standard
| >	**In**	115	681942.8	0.7				ug/L	646604	Standard
|	**Sn**	118	1147.0	0.9	**0.0130**	0.001	7.4	ug/L	864	Standard
|	**Sb**	123	520.8	1.1	**0.0422**	0.001	1.8	ug/L	18	Standard
⌊	**Ba**	135	169.0	12.0	**0.0266**	0.004	16.1	ug/L	39	Standard
⌈	**Ce**	140	2003.8	2.5				ug/L	46	Standard
⌊>	**Tb**	159	760277.0	0.6				ug/L	695671	Standard
⌈	**Ho**	165	10.3	5.6				ug/L	9	Standard
|	**Tl**	203	440.3	2.8	**-0.0091**	0.001	11.3	ug/L	687	Standard
|	**Tl**	205	1001.7	1.9	**-0.0091**	0.000	3.5	ug/L	1624	Standard
|	**Pb**	206	577.7	4.0	**0.0223**	0.002	8.6	ug/L	305	Standard
|	**Pb**	207	460.7	3.2	**0.0195**	0.001	7.1	ug/L	231	Standard
|	**Pb**	208	2165.7	2.1	**0.0199**	0.001	4.8	ug/L	1129	Standard
|	**U**	238	18.7	15.5	**0.0031**	0.000	3.3	ug/L	3	Standard
⌊>	**Bi**	209	392129.1	1.0				ug/L	405108	Standard
⌈	**Na**	23	48250.0	1.2	**12.5580**	0.501	4.0	mg/L	118	Standard
|	**Mg**	24	2997099.3	2.5	**5.1509**	0.135	2.6	mg/L	377	Standard

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	K	39	64450.2	2.0	**5.1862**	0.160	3.1	mg/L	583	Standard
	Ca	43	6629.8	3.9	**14.7570**	0.551	3.7	mg/L	73	Standard
	Fe	54	72743.9	4.4	**12.0653**	0.214	1.8	mg/L	785	Standard
	Fe	57	2174613.8	2.4	**11.6533**	0.400	3.4	mg/L	6133	Standard
>	**Sc-1**	45	271236.5	4.8				mg/L	254529	Standard
	Cl	35	10630468.9	1.6				ug/L	1641778	Standard
	Kr	83	67.4	5.7				ug/L	60	Standard
	Br	81	13432.7	14.0				ug/L	11554	Standard
	P	31	6463811.7	3.3				ug/L	45410	Standard
	S	34	1451982.1	2.6				ug/L	568857	Standard
	Sr	88	1848.4	17.5				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	94.243		
>	Sc	45			
	Ti	47	118.495		
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		102.077	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		99.083	
	Rh	103			
	Mo	98	97.304		
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		105.465	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		109.287	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207		
	Pb	208		
	U	238		
>	Bi	209		96.796
	Na	23	100.464	
	Mg	24	103.018	
	K	39	103.724	
	Ca	43	98.380	
	Fe	54	96.522	
	Fe	57	93.227	
>	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

Sample ID: QC Std 4
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Method 6020 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Thursday, May 10, 2012 10:45:51
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	14486.9	2.7	**140.6143**	17.168	12.2	ug/L	12600	Standard
|	**Be**	9	369678.0	2.9	**105.3079**	2.929	2.8	ug/L	5	Standard
|	**Al**	27	69610920.0	2.2	**4246.2511**	39.512	0.9	ug/L	16102	Standard
⌊>	**Sc**	45	268059.5	2.1				ug/L	254529	Standard
⌈	**Ti**	47	161837.3	2.1	**102.4025**	1.303	1.3	ug/L	84	Standard
|	**V**	51	1640158.8	1.3	**102.2878**	0.897	0.9	ug/L	5785	Standard
|	**Cr**	52	1220880.6	2.2	**102.1122**	0.185	0.2	ug/L	12212	Standard
|	**Cr**	53	185293.0	1.6	**101.7181**	0.936	0.9	ug/L	5042	Standard
|	**Mn**	55	2088870.4	2.0	**98.8573**	0.715	0.7	ug/L	1290	Standard
|	**Co**	59	1482760.5	2.5	**98.8420**	0.506	0.5	ug/L	143	Standard
|	**Ni**	60	312086.1	2.3	**99.0949**	0.787	0.8	ug/L	79	Standard
|	**Cu**	65	278107.6	1.7	**97.3823**	0.386	0.4	ug/L	154	Standard
|	**Zn**	66	131644.5	1.6	**101.8769**	0.989	1.0	ug/L	194	Standard
|>	**Ge**	72	239388.5	2.1				ug/L	232024	Standard
|	**As**	75	118183.2	1.5	**100.7406**	0.541	0.5	ug/L	-297	Standard
|	**Se**	82	13404.4	2.6	**101.2500**	1.107	1.1	ug/L	17	Standard
⌊	**Se-1**	77	8951.0	2.1	**103.4003**	0.915	0.9	ug/L	180	Standard
	Ga	71	213637.3	2.7				mg/L	210139	Standard
⌈	**Rb**	85	3343.7	4.2				ug/L	12	Standard
|>	**Y**	89	216222.0	0.9				ug/L	214065	Standard
⌊	**Rh**	103	75.0	20.0				ug/L	0	Standard
⌈	**Mo**	98	374958.3	1.8	**84.7098**	0.083	0.1	ug/L	6	Standard
|	**Ag**	107	762796.8	3.1	**85.1708**	1.271	1.5	ug/L	33	Standard
|	**Cd**	111	484297.5	1.9	**100.0311**	0.610	0.6	mg/L	437	Standard
|	**Cd**	114	1254417.9	1.1	**99.2909**	0.759	0.8	ug/L	1160	Standard
|>	**In**	115	691436.6	1.8				ug/L	646604	Standard
|	**Sn**	118	2006.1	3.2	**0.0629**	0.003	4.1	ug/L	864	Standard
|	**Sb**	123	1178649.9	1.4	**99.7596**	0.733	0.7	ug/L	18	Standard
⌊	**Ba**	135	485033.4	1.4	**98.4790**	0.644	0.7	ug/L	39	Standard
⌈	**Ce**	140	1877.8	4.2				ug/L	46	Standard
⌊>	**Tb**	159	768227.1	2.0				ug/L	695671	Standard
⌈	**Ho**	165	13.0	33.5				ug/L	9	Standard
|	**Tl**	203	1638974.3	1.4	**101.2394**	0.690	0.7	ug/L	687	Standard
|	**Tl**	205	3988110.2	2.2	**103.9897**	0.996	1.0	ug/L	1624	Standard
|	**Pb**	206	1300014.9	1.1	**100.6232**	0.963	1.0	ug/L	305	Standard
|	**Pb**	207	1131353.8	2.2	**102.6581**	0.929	0.9	ug/L	231	Standard
|	**Pb**	208	5315152.0	1.4	**103.6318**	0.669	0.6	ug/L	1129	Standard
|	**U**	238	2793650.2	1.9	**102.0966**	1.275	1.2	ug/L	3	Standard
⌊>	**Bi**	209	398138.6	1.8				ug/L	405108	Standard
⌈	**Na**	23	42810.4	2.3	**11.2578**	0.141	1.3	mg/L	118	Standard
|	**Mg**	24	2365407.9	18.7	**4.1018**	0.706	17.2	mg/L	377	Standard

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	K	39	56828.1	1.8	**4.6176**	0.074	1.6	mg/L	583	Standard
	Ca	43	5912.8	3.9	**13.2904**	0.501	3.8	mg/L	73	Standard
	Fe	54	65446.5	2.0	**10.9697**	0.248	2.3	mg/L	785	Standard
	Fe	57	1957331.7	1.0	**10.6045**	0.330	3.1	mg/L	6133	Standard
>	**Sc-1**	45	268059.5	2.1				mg/L	254529	Standard
	Cl	35	9308870.3	2.7				ug/L	1641778	Standard
	Kr	83	61.1	10.8				ug/L	60	Standard
	Br	81	12088.2	2.2				ug/L	11554	Standard
	P	31	5622369.6	1.6				ug/L	45410	Standard
	S	34	1282358.6	3.8				ug/L	568857	Standard
	Sr	88	1620.1	9.1				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	84.925		
>	Sc	45			
	Ti	47	102.402		
	V	51	102.288		
	Cr	52	102.112		
	Cr	53			
	Mn	55	98.857		
	Co	59	98.842		
	Ni	60	99.095		
	Cu	65	97.382		
	Zn	66	101.877		
>	Ge	72		103.174	
	As	75	100.741		
	Se	82	101.250		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		101.008	
	Rh	103			
	Mo	98	84.710		
	Ag	107	85.171		
	Cd	111	100.031		
	Cd	114			
>	In	115		106.934	
	Sn	118			
	Sb	123	99.760		
	Ba	135	98.479		
	Ce	140			
>	Tb	159		110.430	
	Ho	165			
	Tl	203	101.239		
	Tl	205			
	Pb	206	100.623		

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	Pb	207	102.658	
	Pb	208	103.632	
	U	238	102.097	
>	Bi	209		98.280
	Na	23	90.062	
	Mg	24	82.036	
	K	39	92.353	
	Ca	43	88.602	
	Fe	54	87.757	
	Fe	57	84.836	
>	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 10, 2012 10:48:47
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	13716.2	1.6	**5.1074**	26.245	513.9	ug/L	12600	Standard
|	**Be**	9	187872.7	1.3	**50.9938**	1.420	2.8	ug/L	5	Standard
|	**Al**	27	850010.8	1.0	**48.6335**	1.385	2.8	ug/L	16102	Standard
⌊>	**Sc**	45	281341.9	1.8				ug/L	254529	Standard
⌈	**Ti**	47	167123.3	0.8	**105.2752**	1.305	1.2	ug/L	84	Standard
|	**V**	51	851854.7	1.0	**52.7457**	0.894	1.7	ug/L	5785	Standard
|	**Cr**	52	639431.8	1.3	**52.7453**	0.665	1.3	ug/L	12212	Standard
|	**Cr**	53	95975.5	1.0	**51.7093**	0.673	1.3	ug/L	5042	Standard
|	**Mn**	55	1116432.6	0.6	**52.5588**	0.259	0.5	ug/L	1290	Standard
|	**Co**	59	783994.0	0.7	**52.0265**	0.139	0.3	ug/L	143	Standard
|	**Ni**	60	162611.3	0.1	**51.3927**	0.421	0.8	ug/L	79	Standard
|	**Cu**	65	147066.0	1.1	**51.2388**	0.161	0.3	ug/L	154	Standard
|	**Zn**	66	65507.0	1.7	**50.3714**	0.478	0.9	ug/L	194	Standard
| >	**Ge**	72	240465.9	0.8				ug/L	232024	Standard
|	**As**	75	59414.6	1.9	**50.5259**	0.674	1.3	ug/L	-297	Standard
|	**Se**	82	6973.7	1.7	**52.3636**	0.604	1.2	ug/L	17	Standard
⌊	**Se-1**	77	4502.7	2.0	**50.8695**	0.807	1.6	ug/L	180	Standard
	Ga	71	220428.1	1.4				mg/L	210139	Standard
⌈	**Rb**	85	1103.4	8.8				ug/L	12	Standard
| >	**Y**	89	227106.6	2.3				ug/L	214065	Standard
⌊	**Rh**	103	48.3	15.8				ug/L	0	Standard
⌈	**Mo**	98	435202.1	2.2	**96.5763**	1.175	1.2	ug/L	6	Standard
|	**Ag**	107	485794.4	4.2	**53.2782**	1.772	3.3	ug/L	33	Standard
|	**Cd**	111	245431.7	1.2	**49.7526**	0.557	1.1	mg/L	437	Standard
|	**Cd**	114	632406.8	1.4	**49.1185**	0.644	1.3	ug/L	1160	Standard
| >	**In**	115	703882.3	1.1				ug/L	646604	Standard
|	**Sn**	118	848076.3	1.7	**49.2954**	0.909	1.8	ug/L	864	Standard
|	**Sb**	123	598753.2	2.1	**49.7779**	0.940	1.9	ug/L	18	Standard
⌊	**Ba**	135	246630.9	1.0	**49.1839**	0.423	0.9	ug/L	39	Standard
⌈	**Ce**	140	914.7	0.7				ug/L	46	Standard
⌊>	**Tb**	159	778731.0	1.3				ug/L	695671	Standard
⌈	**Ho**	165	25.0	25.0				ug/L	9	Standard
|	**Tl**	203	855445.7	1.3	**51.1214**	0.884	1.7	ug/L	687	Standard
|	**Tl**	205	1979463.6	1.4	**49.9379**	0.904	1.8	ug/L	1624	Standard
|	**Pb**	206	676592.3	1.6	**50.6693**	0.983	1.9	ug/L	305	Standard
|	**Pb**	207	569617.5	0.8	**50.0140**	0.544	1.1	ug/L	231	Standard
|	**Pb**	208	2649653.8	1.0	**49.9847**	0.560	1.1	ug/L	1129	Standard
|	**U**	238	1368815.2	1.5	**48.4167**	0.965	2.0	ug/L	3	Standard
⌊>	**Bi**	209	411380.4	0.6				ug/L	405108	Standard
⌈	**Na**	23	20260.2	2.2	**5.0610**	0.032	0.6	mg/L	118	Standard
|	**Mg**	24	2934936.8	1.5	**4.8603**	0.124	2.6	mg/L	377	Standard

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	K	39	63963.1	1.6	**4.9561**	0.107	2.2	mg/L	583	Standard
	Ca	43	2303.5	4.4	**4.8099**	0.130	2.7	mg/L	73	Standard
	Fe	54	30385.3	3.0	**4.7671**	0.163	3.4	mg/L	785	Standard
	Fe	57	918196.7	2.2	**4.7199**	0.141	3.0	mg/L	6133	Standard
>	**Sc-1**	45	281341.9	1.8				mg/L	254529	Standard
	Cl	35	717487.3	34.4				ug/L	1641778	Standard
	Kr	83	58.2	3.7				ug/L	60	Standard
	Br	81	11433.5	4.4				ug/L	11554	Standard
	P	31	62236.7	1.3				ug/L	45410	Standard
	S	34	688131.1	1.6				ug/L	568857	Standard
	Sr	88	681.7	14.6				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	97.267		
>	Sc	45			
	Ti	47	105.275		
	V	51	105.491		
	Cr	52	105.491		
	Cr	53			
	Mn	55	105.118		
	Co	59	104.053		
	Ni	60	102.785		
	Cu	65	102.478		
	Zn	66	100.743		
>	Ge	72		103.639	
	As	75	101.052		
	Se	82	104.727		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		106.092	
	Rh	103			
	Mo	98	96.576		
	Ag	107	106.556		
	Cd	111	99.505		
	Cd	114			
>	In	115		108.858	
	Sn	118	98.591		
	Sb	123	99.556		
	Ba	135	98.368		
	Ce	140			
>	Tb	159		111.939	
	Ho	165			
	Tl	203	102.243		
	Tl	205			
	Pb	206	101.339		

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	Pb	207	100.028	
	Pb	208	99.969	
	U	238	96.833	
>	Bi	209		101.548
	Na	23	101.220	
	Mg	24	97.205	
	K	39	99.121	
	Ca	43	96.198	
	Fe	54	95.342	
	Fe	57	94.398	
>	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 10, 2012 10:51:39
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	13269.1	2.7	**69.8225**	16.774	24.0	ug/L	12600	Standard
|	**Be**	9	21.7	74.2	**-0.0080**	0.005	61.0	ug/L	5	Standard
|	**Al**	27	12665.3	8.6	**0.0074**	0.080	1082.1	ug/L	16102	Standard
⌊>	**Sc**	45	258712.0	1.5				ug/L	254529	Standard
⌈	**Ti**	47	98.3	16.5	**0.0049**	0.012	248.8	ug/L	84	Standard
|	**V**	51	3854.5	2.1	**-0.0339**	0.010	29.4	ug/L	5785	Standard
|	**Cr**	52	11372.9	2.6	**-0.0172**	0.043	248.2	ug/L	12212	Standard
|	**Cr**	53	1049.2	15.0	**-0.9045**	0.082	9.1	ug/L	5042	Standard
|	**Mn**	55	1534.4	14.7	**-0.0074**	0.012	167.3	ug/L	1290	Standard
|	**Co**	59	177.7	23.9	**0.0024**	0.003	134.4	ug/L	143	Standard
|	**Ni**	60	86.0	8.1	**0.0052**	0.003	54.1	ug/L	79	Standard
|	**Cu**	65	163.0	8.0	**0.0110**	0.004	36.8	ug/L	154	Standard
|	**Zn**	66	206.3	13.4	**-0.0059**	0.020	338.8	ug/L	194	Standard
| >	**Ge**	72	224922.3	2.0				ug/L	232024	Standard
|	**As**	75	-199.7	6.8	**0.0455**	0.015	32.6	ug/L	-297	Standard
|	**Se**	82	32.5	22.0	**0.1026**	0.052	50.8	ug/L	17	Standard
⌊	**Se-1**	77	96.0	16.8	**-0.6214**	0.183	29.5	ug/L	180	Standard
	Ga	71	204759.4	2.1				mg/L	210139	Standard
⌈	**Rb**	85	31.7	32.9				ug/L	12	Standard
| >	**Y**	89	208874.4	3.6				ug/L	214065	Standard
⌊	**Rh**	103	0.0					ug/L	0	Standard
⌈	**Mo**	98	94.1	44.3	**0.0137**	0.009	68.1	ug/L	6	Standard
|	**Ag**	107	486.7	31.6	**0.0488**	0.017	34.8	ug/L	33	Standard
|	**Cd**	111	455.8	6.7	**0.0048**	0.006	116.0	mg/L	437	Standard
|	**Cd**	114	1208.7	0.7	**-0.0007**	0.001	176.7	ug/L	1160	Standard
| >	**In**	115	667431.5	1.6				ug/L	646604	Standard
|	**Sn**	118	919.7	10.5	**0.0005**	0.005	1077.8	ug/L	864	Standard
|	**Sb**	123	693.6	23.4	**0.0582**	0.013	22.8	ug/L	18	Standard
⌊	**Ba**	135	55.7	8.9	**0.0035**	0.001	27.3	ug/L	39	Standard
⌈	**Ce**	140	38.0	20.9				ug/L	46	Standard
⌊>	**Tb**	159	712447.4	1.3				ug/L	695671	Standard
⌈	**Ho**	165	9.0	11.1				ug/L	9	Standard
|	**Tl**	203	443.7	30.3	**-0.0089**	0.008	89.5	ug/L	687	Standard
|	**Tl**	205	1067.4	31.9	**-0.0074**	0.009	116.5	ug/L	1624	Standard
|	**Pb**	206	324.3	7.6	**0.0024**	0.002	68.9	ug/L	305	Standard
|	**Pb**	207	261.0	11.5	**0.0011**	0.002	217.2	ug/L	231	Standard
|	**Pb**	208	1253.0	10.7	**0.0018**	0.002	123.2	ug/L	1129	Standard
|	**U**	238	90.0	45.2	**0.0057**	0.001	25.9	ug/L	3	Standard
⌊>	**Bi**	209	391790.9	1.5				ug/L	405108	Standard
⌈	**Na**	23	125.0	10.6	**0.0069**	0.003	48.2	mg/L	118	Standard
|	**Mg**	24	758.4	54.9	**0.0005**	0.001	153.1	mg/L	377	Standard

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	K	39	665.0	9.9	**0.0050**	0.005	98.7	mg/L	583	Standard
	Ca	43	73.3	33.6	**-0.0190**	0.060	316.5	mg/L	73	Standard
	Fe	54	843.3	11.6	**-0.0046**	0.019	419.2	mg/L	785	Standard
	Fe	57	4922.5	7.0	**-0.0066**	0.002	28.4	mg/L	6133	Standard
>	**Sc-1**	45	258712.0	1.5				mg/L	254529	Standard
	Cl	35	636666.4	36.2				ug/L	1641778	Standard
	Kr	83	52.3	8.3				ug/L	60	Standard
	Br	81	11024.8	2.1				ug/L	11554	Standard
	P	31	55730.7	2.1				ug/L	45410	Standard
	S	34	688146.0	1.0				ug/L	568857	Standard
	Sr	88	300.0	36.1				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		96.939	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		97.575	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		103.221	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		102.411	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	96.713
	Na	23	
	Mg	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: 100 PPB SE
Sample Date/Time: Thursday, May 10, 2012 10:57:24
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	13586.1	1.9	**56.4998**	18.845	33.4	ug/L	12600	Standard
|	**Be**	9	16.7	45.8	**-0.0096**	0.002	23.6	ug/L	5	Standard
|	**Al**	27	12948.9	4.7	**-0.0022**	0.050	2246.2	ug/L	16102	Standard
⌊>	**Sc**	45	267648.8	1.8				ug/L	254529	Standard
⌈	**Ti**	47	88.7	2.3	**-0.0034**	0.002	58.2	ug/L	84	Standard
|	**V**	51	4454.6	0.9	**-0.0020**	0.003	155.4	ug/L	5785	Standard
|	**Cr**	52	11761.6	1.1	**-0.0106**	0.021	202.2	ug/L	12212	Standard
|	**Cr**	53	2200.2	35.6	**-0.2579**	0.443	171.6	ug/L	5042	Standard
|	**Mn**	55	3376.7	1.8	**0.0808**	0.003	3.2	ug/L	1290	Standard
|	**Co**	59	137.3	23.3	**-0.0008**	0.002	299.1	ug/L	143	Standard
|	**Ni**	60	147.7	9.5	**0.0247**	0.005	20.1	ug/L	79	Standard
|	**Cu**	65	151.3	9.6	**0.0052**	0.006	111.1	ug/L	154	Standard
|	**Zn**	66	2012.1	2.9	**1.4401**	0.047	3.3	ug/L	194	Standard
| >	**Ge**	72	231047.8	1.0				ug/L	232024	Standard
|	**As**	75	436.2	43.7	**0.6116**	0.171	28.0	ug/L	-297	Standard
|	**Se**	82	12707.5	1.8	**99.4677**	2.569	2.6	ug/L	17	Standard
⌊	**Se-1**	77	8231.2	1.3	**98.4391**	1.751	1.8	ug/L	180	Standard
	Ga	71	209217.7	0.9				mg/L	210139	Standard
⌈	**Rb**	85	20.0	43.3				ug/L	12	Standard
| >	**Y**	89	208692.4	0.7				ug/L	214065	Standard
⌊	**Rh**	103	0.0					ug/L	0	Standard
⌈	**Mo**	98	44.2	20.3	**0.0023**	0.002	96.9	ug/L	6	Standard
|	**Ag**	107	104.7	13.9	**0.0049**	0.002	38.6	ug/L	33	Standard
|	**Cd**	111	473.2	2.7	**0.0095**	0.001	14.1	mg/L	437	Standard
|	**Cd**	114	1236.7	3.3	**0.0025**	0.002	77.6	ug/L	1160	Standard
| >	**In**	115	661108.1	1.5				ug/L	646604	Standard
|	**Sn**	118	943.4	0.9	**0.0025**	0.000	15.3	ug/L	864	Standard
|	**Sb**	123	253.8	7.7	**0.0200**	0.002	8.6	ug/L	18	Standard
⌊	**Ba**	135	56.7	20.3	**0.0038**	0.002	60.4	ug/L	39	Standard
⌈	**Ce**	140	44.0	2.3				ug/L	46	Standard
⌊>	**Tb**	159	711979.0	0.7				ug/L	695671	Standard
⌈	**Ho**	165	9.3	22.3				ug/L	9	Standard
|	**Tl**	203	547.7	19.1	**-0.0024**	0.006	269.7	ug/L	687	Standard
|	**Tl**	205	1246.4	24.5	**-0.0026**	0.008	303.8	ug/L	1624	Standard
|	**Pb**	206	316.7	3.8	**0.0018**	0.001	53.6	ug/L	305	Standard
|	**Pb**	207	265.7	7.4	**0.0015**	0.002	104.3	ug/L	231	Standard
|	**Pb**	208	1257.0	5.4	**0.0019**	0.001	62.9	ug/L	1129	Standard
|	**U**	238	41.7	63.6	**0.0040**	0.001	25.2	ug/L	3	Standard
⌊>	**Bi**	209	391997.0	0.8				ug/L	405108	Standard
⌈	**Na**	23	101.7	30.0	**-0.0005**	0.008	1586.1	mg/L	118	Standard
|	**Mg**	24	345.0	27.7	**-0.0003**	0.000	67.7	mg/L	377	Standard

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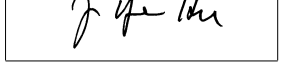

	K	39	605.0	0.8	**-0.0018**	0.001	72.0	mg/L	583	Standard
	Ca	43	51.7	29.6	**-0.0747**	0.035	46.8	mg/L	73	Standard
	Fe	54	799.7	10.7	**-0.0170**	0.017	97.8	mg/L	785	Standard
	Fe	57	4930.8	9.6	**-0.0075**	0.003	37.2	mg/L	6133	Standard
>	**Sc-1**	45	267648.8	1.8				mg/L	254529	Standard
	Cl	35	954586.2	63.0				ug/L	1641778	Standard
	Kr	83	59.0	13.1				ug/L	60	Standard
	Br	81	11390.1	1.3				ug/L	11554	Standard
	P	31	58415.0	3.5				ug/L	45410	Standard
	S	34	711357.1	0.6				ug/L	568857	Standard
	Sr	88	363.3	19.8				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		99.579	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		97.490	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		102.243	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		102.344	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	96.764
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: 100 PPB SE
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Method 6020 - Summary Report

Sample ID: 200 PPB SE
Sample Date/Time: Thursday, May 10, 2012 11:00:17
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	13162.4	2.2	**49.5509**	28.652	57.8	ug/L	12600	Standard
|	**Be**	9	13.3	21.7	**-0.0105**	0.001	8.7	ug/L	5	Standard
|	**Al**	27	11893.0	3.9	**-0.0479**	0.027	55.4	ug/L	16102	Standard
⌊>	**Sc**	45	260711.1	2.0				ug/L	254529	Standard
⌈	**Ti**	47	88.3	6.2	**-0.0035**	0.004	102.4	ug/L	84	Standard
|	**V**	51	4252.6	1.3	**-0.0146**	0.005	37.5	ug/L	5785	Standard
|	**Cr**	52	11855.3	1.3	**-0.0011**	0.012	1141.9	ug/L	12212	Standard
|	**Cr**	53	1618.4	17.9	**-0.5919**	0.151	25.6	ug/L	5042	Standard
|	**Mn**	55	3164.7	2.1	**0.0706**	0.002	2.7	ug/L	1290	Standard
|	**Co**	59	157.3	16.2	**0.0006**	0.002	266.5	ug/L	143	Standard
|	**Ni**	60	140.3	8.5	**0.0223**	0.003	14.7	ug/L	79	Standard
|	**Cu**	65	154.3	7.0	**0.0063**	0.004	57.7	ug/L	154	Standard
|	**Zn**	66	1701.4	5.8	**1.1917**	0.056	4.7	ug/L	194	Standard
| >	**Ge**	72	230739.0	1.8				ug/L	232024	Standard
|	**As**	75	1819.8	27.3	**1.8311**	0.436	23.8	ug/L	-297	Standard
|	**Se**	82	25679.5	2.5	**201.3950**	2.660	1.3	ug/L	17	Standard
⌊	**Se-1**	77	16341.1	1.0	**197.4957**	2.506	1.3	ug/L	180	Standard
	Ga	71	210517.0	1.6				mg/L	210139	Standard
⌈	**Rb**	85	13.3	57.3				ug/L	12	Standard
| >	**Y**	89	209012.1	1.9				ug/L	214065	Standard
⌊	**Rh**	103	3.3	173.2				ug/L	0	Standard
⌈	**Mo**	98	57.9	51.0	**0.0055**	0.007	129.2	ug/L	6	Standard
|	**Ag**	107	72.3	12.4	**0.0011**	0.001	109.2	ug/L	33	Standard
|	**Cd**	111	469.9	8.1	**0.0085**	0.007	76.9	mg/L	437	Standard
|	**Cd**	114	1234.0	1.7	**0.0022**	0.003	151.2	ug/L	1160	Standard
| >	**In**	115	662140.9	1.7				ug/L	646604	Standard
|	**Sn**	118	934.7	3.0	**0.0019**	0.001	40.9	ug/L	864	Standard
|	**Sb**	123	203.3	11.1	**0.0155**	0.002	11.6	ug/L	18	Standard
⌊	**Ba**	135	47.0	22.5	**0.0018**	0.002	132.5	ug/L	39	Standard
⌈	**Ce**	140	50.3	11.6				ug/L	46	Standard
⌊>	**Tb**	159	701181.3	1.6				ug/L	695671	Standard
⌈	**Ho**	165	7.3	34.3				ug/L	9	Standard
|	**Tl**	203	449.0	22.8	**-0.0087**	0.006	67.5	ug/L	687	Standard
|	**Tl**	205	1073.4	26.2	**-0.0073**	0.007	93.4	ug/L	1624	Standard
|	**Pb**	206	287.7	13.5	**-0.0006**	0.003	452.8	ug/L	305	Standard
|	**Pb**	207	245.7	2.2	**-0.0004**	0.000	19.5	ug/L	231	Standard
|	**Pb**	208	1169.0	4.6	**0.0001**	0.001	770.3	ug/L	1129	Standard
|	**U**	238	19.3	31.6	**0.0031**	0.000	7.5	ug/L	3	Standard
⌊>	**Bi**	209	393603.1	1.9				ug/L	405108	Standard
⌈	**Na**	23	91.7	16.7	**-0.0024**	0.004	165.9	mg/L	118	Standard
|	**Mg**	24	311.7	14.5	**-0.0003**	0.000	25.6	mg/L	377	Standard

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	K	39	713.4	6.5	**0.0087**	0.004	44.8	mg/L	583	Standard
	Ca	43	85.0	27.0	**0.0066**	0.054	823.8	mg/L	73	Standard
	Fe	54	852.2	5.4	**-0.0044**	0.005	117.3	mg/L	785	Standard
	Fe	57	4920.8	6.3	**-0.0068**	0.002	32.0	mg/L	6133	Standard
>	**Sc-1**	45	260711.1	2.0				mg/L	254529	Standard
	Cl	35	702883.2	31.2				ug/L	1641778	Standard
	Kr	83	56.0	8.8				ug/L	60	Standard
	Br	81	11365.1	1.4				ug/L	11554	Standard
	P	31	59650.6	2.5				ug/L	45410	Standard
	S	34	720009.9	2.0				ug/L	568857	Standard
	Sr	88	360.0	23.4				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		99.446	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		97.640	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		102.403	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		100.792	
	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

97.160

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Se 82 Upper, S, EEE	Se	82	
Se-1 77 Upper, S, EEE	Se-1	77	

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Method 6020 - Summary Report

Sample ID: KIM BLK
Sample Date/Time: Thursday, May 10, 2012 11:03:09
Number of Replicates: 3
Autosampler Position: 232
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
	Li	7	13722.9	1.0	**93.9955**	15.813	16.8	ug/L	12600	Standard
	Be	9	16.7	62.4	**-0.0096**	0.003	31.5	ug/L	5	Standard
	Al	27	19771.2	1.5	**0.4367**	0.030	6.9	ug/L	16102	Standard
>	**Sc**	45	262786.2	1.4				ug/L	254529	Standard
	Ti	47	545.7	3.2	**0.2922**	0.014	4.6	ug/L	84	Standard
	V	51	4325.9	2.7	**-0.0137**	0.005	34.9	ug/L	5785	Standard
	Cr	52	11809.9	1.4	**-0.0189**	0.012	64.9	ug/L	12212	Standard
	Cr	53	1547.6	15.6	**-0.6442**	0.127	19.8	ug/L	5042	Standard
	Mn	55	1654.1	2.6	**-0.0047**	0.002	48.0	ug/L	1290	Standard
	Co	59	181.0	12.9	**0.0021**	0.002	82.0	ug/L	143	Standard
	Ni	60	125.7	12.9	**0.0169**	0.005	28.5	ug/L	79	Standard
	Cu	65	396.0	2.4	**0.0923**	0.005	5.6	ug/L	154	Standard
	Zn	66	8876.6	2.6	**6.8679**	0.201	2.9	ug/L	194	Standard
>	**Ge**	72	233865.2	1.3				ug/L	232024	Standard
	As	75	-243.4	16.4	**0.0147**	0.033	228.0	ug/L	-297	Standard
	Se	82	28.6	41.5	**0.0625**	0.090	143.9	ug/L	17	Standard
	Se-1	77	102.3	5.6	**-0.5892**	0.077	13.0	ug/L	180	Standard
	Ga	71	210616.9	1.4				mg/L	210139	Standard
	Rb	85	35.0	24.7				ug/L	12	Standard
>	**Y**	89	211161.6	2.0				ug/L	214065	Standard
	Rh	103	1.7	173.2				ug/L	0	Standard
	Mo	98	704.8	0.9	**0.1564**	0.003	2.0	ug/L	6	Standard
	Ag	107	46.0	10.9	**-0.0021**	0.001	26.4	ug/L	33	Standard
	Cd	111	472.2	4.2	**0.0080**	0.005	63.8	mg/L	437	Standard
	Cd	114	1234.6	4.9	**0.0011**	0.005	448.1	ug/L	1160	Standard
>	**In**	115	669248.8	1.0				ug/L	646604	Standard
	Sn	118	2948.0	3.0	**0.1245**	0.007	5.4	ug/L	864	Standard
	Sb	123	347.8	3.2	**0.0279**	0.001	4.4	ug/L	18	Standard
	Ba	135	1326.7	1.1	**0.2701**	0.002	0.9	ug/L	39	Standard
	Ce	140	65.0	19.6				ug/L	46	Standard
>	**Tb**	159	711254.2	0.9				ug/L	695671	Standard
	Ho	165	7.0	49.5				ug/L	9	Standard
	Tl	203	435.7	36.5	**-0.0098**	0.009	92.9	ug/L	687	Standard
	Tl	205	1032.7	33.1	**-0.0087**	0.008	95.0	ug/L	1624	Standard
	Pb	206	332.3	2.2	**0.0028**	0.001	42.3	ug/L	305	Standard
	Pb	207	279.7	11.0	**0.0025**	0.002	88.7	ug/L	231	Standard
	Pb	208	1277.4	2.0	**0.0021**	0.000	19.0	ug/L	1129	Standard
	U	238	8.3	25.0	**0.0027**	0.000	2.7	ug/L	3	Standard
>	**Bi**	209	396316.0	2.5				ug/L	405108	Standard
	Na	23	138.3	15.0	**0.0099**	0.005	52.9	mg/L	118	Standard
	Mg	24	1243.4	5.4	**0.0013**	0.000	10.0	mg/L	377	Standard

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	K	39	743.4	5.9	**0.0108**	0.004	41.7	mg/L	583	Standard
	Ca	43	78.3	36.3	**-0.0101**	0.068	677.0	mg/L	73	Standard
	Fe	54	917.3	3.9	**0.0057**	0.004	71.6	mg/L	785	Standard
	Fe	57	4889.1	3.1	**-0.0072**	0.001	16.7	mg/L	6133	Standard
>	**Sc-1**	45	262786.2	1.4				mg/L	254529	Standard
	Cl	35	661739.1	33.4				ug/L	1641778	Standard
	Kr	83	55.0	7.3				ug/L	60	Standard
	Br	81	11349.3	1.9				ug/L	11554	Standard
	P	31	96452.0	3.0				ug/L	45410	Standard
	S	34	715398.5	2.4				ug/L	568857	Standard
	Sr	88	445.0	10.3				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		100.794	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		98.644	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		103.502	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		102.240	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	97.830
	Na	23	
	Mg	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: BLK LOT8508
Sample Date/Time: Thursday, May 10, 2012 11:06:01
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	11659.5	2.2	**92.2826**	46.635	50.5	ug/L	12600	Standard
|	**Be**	9	23.3	155.0	**-0.0064**	0.013	196.0	ug/L	5	Standard
|	**Al**	27	11330.4	99.4	**0.0408**	0.837	2049.4	ug/L	16102	Standard
⌊>	**Sc**	45	223627.0	2.1				ug/L	254529	Standard
⌈	**Ti**	47	78.0	50.1	**-0.0054**	0.028	528.4	ug/L	84	Standard
|	**V**	51	3828.3	13.8	**-0.0184**	0.039	212.0	ug/L	5785	Standard
|	**Cr**	52	9500.0	1.9	**-0.1281**	0.025	19.5	ug/L	12212	Standard
|	**Cr**	53	1221.7	28.0	**-0.7522**	0.218	29.0	ug/L	5042	Standard
|	**Mn**	55	1610.8	68.3	**0.0019**	0.060	3065.9	ug/L	1290	Standard
|	**Co**	59	191.0	85.4	**0.0042**	0.012	293.4	ug/L	143	Standard
|	**Ni**	60	92.3	39.4	**0.0095**	0.013	140.2	ug/L	79	Standard
|	**Cu**	65	118.7	19.2	**-0.0025**	0.009	371.9	ug/L	154	Standard
|	**Zn**	66	645.3	5.3	**0.3927**	0.034	8.5	ug/L	194	Standard
| >	**Ge**	72	210661.6	1.6				ug/L	232024	Standard
|	**As**	75	-173.9	22.6	**0.0582**	0.039	67.4	ug/L	-297	Standard
|	**Se**	82	26.2	8.7	**0.0664**	0.016	24.7	ug/L	17	Standard
⌊	**Se-1**	77	85.7	4.1	**-0.6769**	0.031	4.5	ug/L	180	Standard
	Ga	71	182844.0	1.0				mg/L	210139	Standard
⌈	**Rb**	85	21.7	74.2				ug/L	12	Standard
| >	**Y**	89	183201.7	3.3				ug/L	214065	Standard
⌊	**Rh**	103	3.3	86.6				ug/L	0	Standard
⌈	**Mo**	98	24.0	126.7	**-0.0019**	0.008	408.3	ug/L	6	Standard
|	**Ag**	107	55.7	32.6	**-0.0002**	0.002	1212.4	ug/L	33	Standard
|	**Cd**	111	93.9	35.4	**-0.0704**	0.008	11.1	mg/L	437	Standard
|	**Cd**	114	260.6	22.8	**-0.0761**	0.005	7.0	ug/L	1160	Standard
| >	**In**	115	597409.8	3.8				ug/L	646604	Standard
|	**Sn**	118	451.7	6.6	**-0.0249**	0.002	7.9	ug/L	864	Standard
|	**Sb**	123	123.4	58.0	**0.0096**	0.007	72.7	ug/L	18	Standard
⌊	**Ba**	135	50.0	100.6	**0.0035**	0.012	335.4	ug/L	39	Standard
⌈	**Ce**	140	42.0	10.9				ug/L	46	Standard
⌊>	**Tb**	159	646732.2	1.9				ug/L	695671	Standard
⌈	**Ho**	165	5.7	27.0				ug/L	9	Standard
|	**Tl**	203	687.4	45.6	**0.0080**	0.020	251.1	ug/L	687	Standard
|	**Tl**	205	1648.8	49.5	**0.0097**	0.022	228.2	ug/L	1624	Standard
|	**Pb**	206	460.0	68.0	**0.0144**	0.025	175.4	ug/L	305	Standard
|	**Pb**	207	396.0	70.6	**0.0148**	0.026	177.9	ug/L	231	Standard
|	**Pb**	208	1808.7	73.9	**0.0141**	0.027	192.2	ug/L	1129	Standard
|	**U**	238	248.0	166.6	**0.0119**	0.016	132.8	ug/L	3	Standard
⌊>	**Bi**	209	377568.0	0.7				ug/L	405108	Standard
⌈	**Na**	23	160.0	37.9	**0.0234**	0.020	84.5	mg/L	118	Standard
|	**Mg**	24	2397.1	133.0	**0.0042**	0.007	161.2	mg/L	377	Standard

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	K	39	698.3	8.2	**0.0173**	0.007	39.8	mg/L	583	Standard
	Ca	43	80.0	27.2	**0.0257**	0.058	227.9	mg/L	73	Standard
	Fe	54	334.5	3.5	**-0.0851**	0.003	3.9	mg/L	785	Standard
	Fe	57	4794.1	12.3	**-0.0031**	0.004	139.8	mg/L	6133	Standard
>	**Sc-1**	45	223627.0	2.1				mg/L	254529	Standard
	Cl	35	425883.3	57.4				ug/L	1641778	Standard
	Kr	83	47.3	10.9				ug/L	60	Standard
	Br	81	8892.6	4.4				ug/L	11554	Standard
	P	31	17108.0	2.8				ug/L	45410	Standard
	S	34	581349.9	3.8				ug/L	568857	Standard
	Sr	88	623.4	105.6				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		90.793	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		85.582	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		92.392	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		92.965	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	93.202
	Na	23	
	Mg	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 10, 2012 11:08:57
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	13863.0	2.2	**97.1526**	51.300	52.8	ug/L	12600	Standard
|	**Be**	9	179763.5	1.0	**51.8052**	0.700	1.4	ug/L	5	Standard
|	**Al**	27	830238.4	3.8	**50.4503**	1.418	2.8	ug/L	16102	Standard
⌊>	**Sc**	45	264933.3	1.7				ug/L	254529	Standard
⌈	**Ti**	47	157454.7	1.4	**102.6115**	1.428	1.4	ug/L	84	Standard
|	**V**	51	805554.6	1.3	**51.5936**	0.488	0.9	ug/L	5785	Standard
|	**Cr**	52	609954.4	2.2	**52.0353**	0.685	1.3	ug/L	12212	Standard
|	**Cr**	53	91436.1	3.5	**50.9341**	1.327	2.6	ug/L	5042	Standard
|	**Mn**	55	1045216.5	1.8	**50.9045**	0.810	1.6	ug/L	1290	Standard
|	**Co**	59	744714.6	2.1	**51.1236**	0.465	0.9	ug/L	143	Standard
|	**Ni**	60	154655.1	1.7	**50.5663**	0.767	1.5	ug/L	79	Standard
|	**Cu**	65	139436.5	2.1	**50.2559**	0.389	0.8	ug/L	154	Standard
|	**Zn**	66	62732.6	1.7	**49.9043**	0.176	0.4	ug/L	194	Standard
| >	**Ge**	72	232434.5	1.4				ug/L	232024	Standard
|	**As**	75	57145.7	1.1	**50.2814**	0.458	0.9	ug/L	-297	Standard
|	**Se**	82	6460.0	0.3	**50.1833**	0.602	1.2	ug/L	17	Standard
⌊	**Se-1**	77	4330.6	0.4	**50.6148**	0.685	1.4	ug/L	180	Standard
	Ga	71	209948.2	2.6				mg/L	210139	Standard
⌈	**Rb**	85	1003.4	8.3				ug/L	12	Standard
| >	**Y**	89	212895.4	0.9				ug/L	214065	Standard
⌊	**Rh**	103	26.7	60.3				ug/L	0	Standard
⌈	**Mo**	98	413925.1	1.0	**96.9170**	1.848	1.9	ug/L	6	Standard
|	**Ag**	107	431829.7	1.7	**49.9680**	0.577	1.2	ug/L	33	Standard
|	**Cd**	111	232358.3	1.3	**49.6873**	0.464	0.9	mg/L	437	Standard
|	**Cd**	114	605875.7	2.1	**49.6376**	0.566	1.1	ug/L	1160	Standard
| >	**In**	115	667282.6	1.6				ug/L	646604	Standard
|	**Sn**	118	805510.5	1.2	**49.3903**	0.450	0.9	ug/L	864	Standard
|	**Sb**	123	560448.1	0.9	**49.1538**	0.532	1.1	ug/L	18	Standard
⌊	**Ba**	135	234883.1	1.1	**49.4122**	0.390	0.8	ug/L	39	Standard
⌈	**Ce**	140	871.4	3.0				ug/L	46	Standard
⌊>	**Tb**	159	729967.5	1.3				ug/L	695671	Standard
⌈	**Ho**	165	18.7	36.5				ug/L	9	Standard
|	**Tl**	203	818088.8	1.4	**50.8597**	0.051	0.1	ug/L	687	Standard
|	**Tl**	205	1911130.2	0.9	**50.1610**	0.463	0.9	ug/L	1624	Standard
|	**Pb**	206	655256.0	1.0	**51.0521**	0.249	0.5	ug/L	305	Standard
|	**Pb**	207	552488.6	1.2	**50.4684**	0.286	0.6	ug/L	231	Standard
|	**Pb**	208	2557112.3	0.7	**50.1894**	0.485	1.0	ug/L	1129	Standard
|	**U**	238	1319386.9	0.7	**48.5526**	0.414	0.9	ug/L	3	Standard
⌊>	**Bi**	209	395420.0	1.5				ug/L	405108	Standard
⌈	**Na**	23	19449.1	1.4	**5.1602**	0.025	0.5	mg/L	118	Standard
|	**Mg**	24	2885095.1	2.0	**5.0729**	0.108	2.1	mg/L	377	Standard

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	K	39	62704.5	1.0	**5.1613**	0.076	1.5	mg/L	583	Standard
	Ca	43	2180.2	0.4	**4.8378**	0.092	1.9	mg/L	73	Standard
	Fe	54	31003.6	1.9	**5.1792**	0.190	3.7	mg/L	785	Standard
	Fe	57	920827.9	3.0	**5.0278**	0.136	2.7	mg/L	6133	Standard
>	**Sc-1**	45	264933.3	1.7				mg/L	254529	Standard
	Cl	35	544475.2	34.0				ug/L	1641778	Standard
	Kr	83	60.8	8.1				ug/L	60	Standard
	Br	81	10963.1	0.8				ug/L	11554	Standard
	P	31	63814.0	9.0				ug/L	45410	Standard
	S	34	708775.4	5.2				ug/L	568857	Standard
	Sr	88	690.0	10.0				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	100.901		
>	Sc	45			
	Ti	47	102.611		
	V	51	103.187		
	Cr	52	104.071		
	Cr	53			
	Mn	55	101.809		
	Co	59	102.247		
	Ni	60	101.133		
	Cu	65	100.512		
	Zn	66	99.809		
>	Ge	72		100.177	
	As	75	100.563		
	Se	82	100.367		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		99.454	
	Rh	103			
	Mo	98	96.917		
	Ag	107	99.936		
	Cd	111	99.375		
	Cd	114			
>	In	115		103.198	
	Sn	118	98.781		
	Sb	123	98.308		
	Ba	135	98.824		
	Ce	140			
>	Tb	159		104.930	
	Ho	165			
	Tl	203	101.719		
	Tl	205			
	Pb	206	102.104		

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	Pb	207	100.937	
	Pb	208	100.379	
	U	238	97.105	
>	Bi	209		97.609
	Na	23	103.203	
	Mg	24	101.458	
	K	39	103.226	
	Ca	43	96.756	
	Fe	54	103.585	
	Fe	57	100.556	
>	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 10, 2012 11:11:50
Number of Replicates: 3
Autosampler Position: 102
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	13851.3	0.3	**76.2279**	40.824	53.6	ug/L	12600	Standard
|	**Be**	9	13.3	43.3	**-0.0107**	0.002	14.5	ug/L	5	Standard
|	**Al**	27	13591.1	8.2	**0.0332**	0.075	225.4	ug/L	16102	Standard
⌊>	**Sc**	45	268943.8	2.8				ug/L	254529	Standard
⌈	**Ti**	47	94.7	2.7	**-0.0009**	0.002	230.5	ug/L	84	Standard
|	**V**	51	3925.0	2.0	**-0.0423**	0.007	15.7	ug/L	5785	Standard
|	**Cr**	52	11352.6	1.7	**-0.0700**	0.016	23.5	ug/L	12212	Standard
|	**Cr**	53	1072.5	10.2	**-0.9211**	0.065	7.0	ug/L	5042	Standard
|	**Mn**	55	1326.4	4.0	**-0.0213**	0.003	13.4	ug/L	1290	Standard
|	**Co**	59	149.7	7.0	**-0.0002**	0.001	495.2	ug/L	143	Standard
|	**Ni**	60	70.0	1.4	**-0.0014**	0.000	12.8	ug/L	79	Standard
|	**Cu**	65	153.3	11.7	**0.0046**	0.007	143.2	ug/L	154	Standard
|	**Zn**	66	197.7	2.9	**-0.0209**	0.005	23.3	ug/L	194	Standard
| >	**Ge**	72	236642.4	0.8				ug/L	232024	Standard
|	**As**	75	-236.4	6.5	**0.0230**	0.013	56.4	ug/L	-297	Standard
|	**Se**	82	25.8	10.6	**0.0387**	0.020	52.0	ug/L	17	Standard
⌊	**Se-1**	77	100.7	8.4	**-0.6233**	0.110	17.7	ug/L	180	Standard
	Ga	71	215155.9	0.7				mg/L	210139	Standard
⌈	**Rb**	85	16.7	62.4				ug/L	12	Standard
| >	**Y**	89	216786.9	1.8				ug/L	214065	Standard
⌊	**Rh**	103	0.0					ug/L	0	Standard
⌈	**Mo**	98	76.2	61.1	**0.0096**	0.011	111.4	ug/L	6	Standard
|	**Ag**	107	103.0	5.4	**0.0046**	0.001	17.6	ug/L	33	Standard
|	**Cd**	111	480.5	8.2	**0.0103**	0.008	76.5	mg/L	437	Standard
|	**Cd**	114	1190.1	2.1	**-0.0020**	0.002	109.1	ug/L	1160	Standard
| >	**In**	115	665810.9	2.8				ug/L	646604	Standard
|	**Sn**	118	917.4	6.9	**0.0005**	0.004	688.3	ug/L	864	Standard
|	**Sb**	123	251.5	28.4	**0.0196**	0.006	30.3	ug/L	18	Standard
⌊	**Ba**	135	51.7	13.2	**0.0027**	0.001	44.1	ug/L	39	Standard
⌈	**Ce**	140	41.0	23.5				ug/L	46	Standard
⌊>	**Tb**	159	713167.5	3.1				ug/L	695671	Standard
⌈	**Ho**	165	9.0	22.2				ug/L	9	Standard
|	**Tl**	203	405.7	42.0	**-0.0118**	0.010	86.8	ug/L	687	Standard
|	**Tl**	205	962.7	39.8	**-0.0106**	0.010	91.2	ug/L	1624	Standard
|	**Pb**	206	303.7	11.7	**0.0003**	0.002	775.7	ug/L	305	Standard
|	**Pb**	207	267.7	10.3	**0.0012**	0.002	165.9	ug/L	231	Standard
|	**Pb**	208	1206.7	8.2	**0.0005**	0.002	370.2	ug/L	1129	Standard
|	**U**	238	53.3	56.5	**0.0043**	0.001	24.7	ug/L	3	Standard
⌊>	**Bi**	209	399879.3	2.3				ug/L	405108	Standard
⌈	**Na**	23	91.7	36.3	**-0.0033**	0.008	252.3	mg/L	118	Standard
|	**Mg**	24	533.3	16.8	**0.0001**	0.000	250.5	mg/L	377	Standard

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	K	39	650.0	5.8	**0.0017**	0.004	258.5	mg/L	583	Standard
	Ca	43	55.0	50.6	**-0.0667**	0.067	100.9	mg/L	73	Standard
	Fe	54	887.7	2.5	**-0.0027**	0.008	287.9	mg/L	785	Standard
	Fe	57	4725.7	2.1	**-0.0087**	0.001	12.2	mg/L	6133	Standard
>	**Sc-1**	45	268943.8	2.8				mg/L	254529	Standard
	Cl	35	585876.2	38.9				ug/L	1641778	Standard
	Kr	83	53.0	1.1				ug/L	60	Standard
	Br	81	11477.7	1.9				ug/L	11554	Standard
	P	31	61945.6	3.3				ug/L	45410	Standard
	S	34	720255.9	1.5				ug/L	568857	Standard
	Sr	88	276.7	13.7				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		101.991	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		101.272	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		102.970	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		102.515	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	98.709
	Na	23	
	Mg	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: PBS 2B WG397298-02

Sample Date/Time: Thursday, May 10, 2012 11:14:46
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	13654.5	2.8	**91.1101**	41.686	45.8	ug/L	12600	Standard
	Be	9	6.7	43.3	**-0.0125**	0.001	6.5	ug/L	5	Standard
	Al	27	33432.0	7.0	**1.2917**	0.125	9.7	ug/L	16102	Standard
>	Sc	45	262043.4	1.0				ug/L	254529	Standard
	Ti	47	90.0	6.8	**-0.0030**	0.003	115.5	ug/L	84	Standard
	V	51	3937.5	3.2	**-0.0374**	0.010	25.9	ug/L	5785	Standard
	Cr	52	11576.4	0.6	**-0.0347**	0.016	47.5	ug/L	12212	Standard
	Cr	53	1048.4	11.3	**-0.9249**	0.074	8.0	ug/L	5042	Standard
	Mn	55	9230.5	2.8	**0.3645**	0.008	2.2	ug/L	1290	Standard
	Co	59	141.7	12.1	**-0.0006**	0.001	193.9	ug/L	143	Standard
	Ni	60	116.0	7.9	**0.0140**	0.003	18.5	ug/L	79	Standard
	Cu	65	270.7	3.9	**0.0477**	0.004	8.9	ug/L	154	Standard
	Zn	66	1630.1	3.7	**1.1230**	0.040	3.6	ug/L	194	Standard
>	Ge	72	232845.7	1.1				ug/L	232024	Standard
	As	75	-234.0	2.9	**0.0219**	0.006	28.6	ug/L	-297	Standard
	Se	82	23.2	20.2	**0.0222**	0.038	173.3	ug/L	17	Standard
	Se-1	77	90.3	7.1	**-0.7292**	0.078	10.6	ug/L	180	Standard
	Ga	71	212748.8	1.4				mg/L	210139	Standard
	Rb	85	18.3	63.0				ug/L	12	Standard
>	Y	89	212082.7	1.9				ug/L	214065	Standard
	Rh	103	1.7	173.2				ug/L	0	Standard
	Mo	98	57.1	6.5	**0.0052**	0.001	14.1	ug/L	6	Standard
	Ag	107	40.7	11.1	**-0.0027**	0.001	21.9	ug/L	33	Standard
	Cd	111	465.6	4.0	**0.0071**	0.003	41.9	mg/L	437	Standard
	Cd	114	1213.6	2.3	**-0.0001**	0.003	4657.6	ug/L	1160	Standard
>	In	115	665750.5	1.4				ug/L	646604	Standard
	Sn	118	1422.4	5.1	**0.0316**	0.005	15.3	ug/L	864	Standard
	Sb	123	134.6	2.9	**0.0093**	0.000	5.3	ug/L	18	Standard
	Ba	135	54.3	3.8	**0.0033**	0.001	15.4	ug/L	39	Standard
	Ce	140	51.0	32.4				ug/L	46	Standard
>	Tb	159	715697.8	1.9				ug/L	695671	Standard
	Ho	165	7.0	37.8				ug/L	9	Standard
	Tl	203	359.3	54.0	**-0.0146**	0.012	82.1	ug/L	687	Standard
	Tl	205	824.7	49.5	**-0.0141**	0.011	75.2	ug/L	1624	Standard
	Pb	206	353.3	1.5	**0.0042**	0.000	10.5	ug/L	305	Standard
	Pb	207	307.7	2.2	**0.0049**	0.001	11.7	ug/L	231	Standard
	Pb	208	1384.4	1.4	**0.0040**	0.000	10.9	ug/L	1129	Standard
	U	238	16.3	25.5	**0.0030**	0.000	5.0	ug/L	3	Standard
>	Bi	209	399004.5	0.4				ug/L	405108	Standard
	Na	23	96.7	10.8	**-0.0012**	0.003	262.4	mg/L	118	Standard
	Mg	24	680.0	11.0	**0.0003**	0.000	40.9	mg/L	377	Standard

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	K	39	681.7	8.1	**0.0057**	0.005	81.7	mg/L	583	Standard
	Ca	43	50.0	30.0	**-0.0759**	0.036	47.1	mg/L	73	Standard
	Fe	54	836.1	14.8	**-0.0077**	0.023	296.7	mg/L	785	Standard
	Fe	57	4669.1	7.2	**-0.0084**	0.002	24.4	mg/L	6133	Standard
>	**Sc-1**	45	262043.4	1.0				mg/L	254529	Standard
	Cl	35	433791.3	50.8				ug/L	1641778	Standard
	Kr	83	52.7	5.5				ug/L	60	Standard
	Br	81	11160.8	2.2				ug/L	11554	Standard
	P	31	59754.3	1.2				ug/L	45410	Standard
	S	34	708844.9	1.3				ug/L	568857	Standard
	Sr	88	380.0	3.5				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		100.354	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		99.074	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		102.961	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		102.879	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	98.493
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: PBS 2B WG397298-02
Report Date/Time: Thursday, May 10, 2012 11:17:18
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Method 6020 - Summary Report

Sample ID: LCSS 2B WG397298-03
Sample Date/Time: Thursday, May 10, 2012 11:17:38
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	15342.8	3.4	**65.8080**	43.592	66.2	ug/L	12600	Standard
|	**Be**	9	92139.3	1.4	**23.4305**	0.106	0.5	ug/L	5	Standard
|	**Al**	27	518484.4	2.0	**27.4589**	0.170	0.6	ug/L	16102	Standard
⌊>	**Sc**	45	300118.8	1.7				ug/L	254529	Standard
⌈	**Ti**	47	152.3	8.3	**0.0281**	0.007	26.2	ug/L	84	Standard
|	**V**	51	443046.5	1.4	**25.4526**	0.053	0.2	ug/L	5785	Standard
|	**Cr**	52	347510.8	1.7	**26.2429**	0.419	1.6	ug/L	12212	Standard
|	**Cr**	53	52726.6	2.4	**25.7688**	0.465	1.8	ug/L	5042	Standard
|	**Mn**	55	610631.8	1.8	**26.7883**	0.189	0.7	ug/L	1290	Standard
|	**Co**	59	427499.5	2.4	**26.4718**	0.389	1.5	ug/L	143	Standard
|	**Ni**	60	89708.1	1.0	**26.4506**	0.171	0.6	ug/L	79	Standard
|	**Cu**	65	81403.5	1.7	**26.4473**	0.208	0.8	ug/L	154	Standard
|	**Zn**	66	34644.6	1.5	**24.7763**	0.143	0.6	ug/L	194	Standard
| >	**Ge**	72	257637.6	1.4				ug/L	232024	Standard
|	**As**	75	29334.1	1.8	**23.4068**	0.352	1.5	ug/L	-297	Standard
|	**Se**	82	3332.2	2.7	**23.2653**	0.486	2.1	ug/L	17	Standard
⌊	**Se-1**	77	2197.8	3.3	**22.1841**	0.708	3.2	ug/L	180	Standard
	Ga	71	242508.7	1.7				mg/L	210139	Standard
⌈	**Rb**	85	125.0	62.4				ug/L	12	Standard
| >	**Y**	89	245889.2	0.7				ug/L	214065	Standard
⌊	**Rh**	103	23.3	32.7				ug/L	0	Standard
⌈	**Mo**	98	79.7	11.2	**0.0090**	0.002	20.4	ug/L	6	Standard
|	**Ag**	107	245861.8	2.3	**26.2054**	0.257	1.0	ug/L	33	Standard
|	**Cd**	111	121447.3	1.0	**23.8793**	0.106	0.4	mg/L	437	Standard
|	**Cd**	114	304505.4	1.2	**22.9328**	0.080	0.3	ug/L	1160	Standard
| >	**In**	115	724228.9	1.3				ug/L	646604	Standard
|	**Sn**	118	3143.0	11.2	**0.1217**	0.018	14.7	ug/L	864	Standard
|	**Sb**	123	284292.5	1.8	**22.9686**	0.128	0.6	ug/L	18	Standard
⌊	**Ba**	135	125086.3	1.7	**24.2390**	0.157	0.6	ug/L	39	Standard
⌈	**Ce**	140	151.7	13.5				ug/L	46	Standard
⌊>	**Tb**	159	779973.6	0.6				ug/L	695671	Standard
⌈	**Ho**	165	8.3	13.9				ug/L	9	Standard
|	**Tl**	203	434113.9	0.5	**25.5261**	0.026	0.1	ug/L	687	Standard
|	**Tl**	205	1014442.8	1.6	**25.1811**	0.286	1.1	ug/L	1624	Standard
|	**Pb**	206	343897.8	1.4	**25.3471**	0.243	1.0	ug/L	305	Standard
|	**Pb**	207	299611.6	1.2	**25.8921**	0.208	0.8	ug/L	231	Standard
|	**Pb**	208	1369922.2	0.7	**25.4360**	0.071	0.3	ug/L	1129	Standard
|	**U**	238	695730.8	1.0	**24.2319**	0.161	0.7	ug/L	3	Standard
⌊>	**Bi**	209	417769.7	0.5				ug/L	405108	Standard
⌈	**Na**	23	120.0	4.2	**0.0010**	0.001	71.6	mg/L	118	Standard
|	**Mg**	24	933.4	2.4	**0.0006**	0.000	4.1	mg/L	377	Standard

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	K	39	655.0	21.4	**-0.0034**	0.011	321.0	mg/L	583	Standard
	Ca	43	73.3	14.2	**-0.0433**	0.021	48.9	mg/L	73	Standard
	Fe	54	1408.9	1.0	**0.0606**	0.004	6.2	mg/L	785	Standard
	Fe	57	5774.4	0.3	**-0.0063**	0.000	7.3	mg/L	6133	Standard
>	**Sc-1**	45	300118.8	1.7				mg/L	254529	Standard
	Cl	35	590889.7	32.4				ug/L	1641778	Standard
	Kr	83	61.9	2.0				ug/L	60	Standard
	Br	81	13425.9	1.7				ug/L	11554	Standard
	P	31	108116.9	1.4				ug/L	45410	Standard
	S	34	769897.7	5.1				ug/L	568857	Standard
	Sr	88	631.7	7.1				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		111.039	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		114.867	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		112.005	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		112.118	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: LCSS 2B WG397298-03
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	103.126
	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

Sample ID: LCSS 2B WG397298-03
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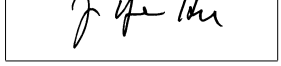

Method 6020 - Summary Report

Sample ID: L1205022301 WG397298-01
Sample Date/Time: Thursday, May 10, 2012 11:20:30
Number of Replicates: 3
Autosampler Position: 236
Sample Description: 5
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	941157.0	1.4	**67403.3366**	127.135	0.2	ug/L	12600	Standard
|	**Be**	9	1950.1	2.6	**0.4090**	0.018	4.3	ug/L	5	Standard
|	**Al**	27	99476584.1	2.4	**4623.5481**	105.549	2.3	ug/L	16102	Standard
⌊>	**Sc**	45	351830.3	1.6				ug/L	254529	Standard
⌈	**Ti**	47	55215.1	2.6	**36.7572**	0.708	1.9	ug/L	84	Standard
|	**V**	51	422751.9	0.3	**27.5572**	0.115	0.4	ug/L	5785	Standard
|	**Cr**	52	187767.6	0.3	**15.6716**	0.145	0.9	ug/L	12212	Standard
|	**Cr**	53	27788.8	2.0	**14.7824**	0.293	2.0	ug/L	5042	Standard
|	**Mn**	55	1807158.1	2.3	**90.0717**	1.440	1.6	ug/L	1290	Standard
|	**Co**	59	80519.1	2.6	**5.6441**	0.108	1.9	ug/L	143	Standard
|	**Ni**	60	24139.2	2.1	**8.0514**	0.116	1.4	ug/L	79	Standard
|	**Cu**	65	25161.5	1.9	**9.2349**	0.141	1.5	ug/L	154	Standard
|	**Zn**	66	16190.6	1.3	**13.0434**	0.092	0.7	ug/L	194	Standard
| >	**Ge**	72	227262.4	0.7				ug/L	232024	Standard
|	**As**	75	3003.7	0.3	**2.9173**	0.026	0.9	ug/L	-297	Standard
|	**Se**	82	51.0	14.9	**0.2480**	0.063	25.4	ug/L	17	Standard
⌊	**Se-1**	77	121.7	13.2	**-0.3137**	0.207	66.0	ug/L	180	Standard
	Ga	71	226986.0	1.0				mg/L	210139	Standard
⌈	**Rb**	85	135347.0	2.0				ug/L	12	Standard
| >	**Y**	89	336115.6	0.3				ug/L	214065	Standard
⌊	**Rh**	103	6.7	86.6				ug/L	0	Standard
⌈	**Mo**	98	613.5	3.8	**0.1406**	0.005	3.7	ug/L	6	Standard
|	**Ag**	107	530.7	15.5	**0.0563**	0.010	17.2	ug/L	33	Standard
|	**Cd**	111	241.7	12.6	**-0.0392**	0.007	17.6	mg/L	437	Standard
|	**Cd**	114	585.9	5.8	**-0.0501**	0.003	5.7	ug/L	1160	Standard
| >	**In**	115	643889.6	0.3				ug/L	646604	Standard
|	**Sn**	118	800.0	6.3	**-0.0050**	0.003	64.6	ug/L	864	Standard
|	**Sb**	123	267.2	21.1	**0.0218**	0.005	23.7	ug/L	18	Standard
⌊	**Ba**	135	69632.7	1.7	**15.1737**	0.212	1.4	ug/L	39	Standard
⌈	**Ce**	140	3092499.2	0.6				ug/L	46	Standard
⌊>	**Tb**	159	722669.2	0.8				ug/L	695671	Standard
⌈	**Ho**	165	19922.1	1.2				ug/L	9	Standard
|	**Tl**	203	2212.8	5.7	**0.1003**	0.007	7.4	ug/L	687	Standard
|	**Tl**	205	5130.9	7.3	**0.0985**	0.010	9.7	ug/L	1624	Standard
|	**Pb**	206	70269.9	0.7	**5.4282**	0.023	0.4	ug/L	305	Standard
|	**Pb**	207	54306.2	1.3	**4.9165**	0.056	1.1	ug/L	231	Standard
|	**Pb**	208	259992.2	0.7	**5.0579**	0.030	0.6	ug/L	1129	Standard
|	**U**	238	15428.5	2.4	**0.5674**	0.014	2.4	ug/L	3	Standard
⌊>	**Bi**	209	397287.3	0.3				ug/L	405108	Standard
⌈	**Na**	23	105.0	14.3	**-0.0062**	0.003	43.5	mg/L	118	Standard
|	**Mg**	24	564956.9	0.5	**0.7474**	0.015	2.0	mg/L	377	Standard

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	K	39	6791.5	0.8	**0.3736**	0.004	1.2	mg/L	583	Standard
	Ca	43	228.3	18.4	**0.2042**	0.075	36.6	mg/L	73	Standard
	Fe	54	98742.2	1.6	**12.6308**	0.141	1.1	mg/L	785	Standard
	Fe	57	2783754.0	0.5	**11.4901**	0.132	1.2	mg/L	6133	Standard
>	**Sc-1**	45	351830.3	1.6				mg/L	254529	Standard
	Cl	35	399395.3	57.7				ug/L	1641778	Standard
	Kr	83	74.3	7.8				ug/L	60	Standard
	Br	81	10160.9	1.0				ug/L	11554	Standard
	P	31	158396.3	1.6				ug/L	45410	Standard
	S	34	544795.9	4.1				ug/L	568857	Standard
	Sr	88	47924.0	1.0				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		97.948	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		157.016	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		99.580	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		103.881	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207		
	Pb	208		
	U	238		
>	Bi	209		98.069
	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
Y 89 Int Std for sample	Y	89	Rerun sample

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Method 6020 - Summary Report

Sample ID: L1205022302
Sample Date/Time: Thursday, May 10, 2012 11:23:23
Number of Replicates: 3
Autosampler Position: 237
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	1718477.2	2.3	**128809.0126**	4449.574	3.5	ug/L	12600	Standard
	Be	9	2163.5	2.7	**0.4728**	0.020	4.2	ug/L	5	Standard
	Al	27	134608223.4	1.2	**6491.0489**	168.187	2.6	ug/L	16102	Standard
>	**Sc**	45	339190.2	1.5				ug/L	254529	Standard
	Ti	47	66350.7	1.8	**43.8210**	0.354	0.8	ug/L	84	Standard
	V	51	449611.8	2.2	**29.0795**	0.148	0.5	ug/L	5785	Standard
	Cr	52	254121.9	2.0	**21.3889**	0.089	0.4	ug/L	12212	Standard
	Cr	53	37802.1	2.9	**20.4739**	0.362	1.8	ug/L	5042	Standard
	Mn	55	2493827.2	3.0	**123.2914**	1.506	1.2	ug/L	1290	Standard
	Co	59	108959.6	3.2	**7.5773**	0.102	1.3	ug/L	143	Standard
	Ni	60	26873.5	2.8	**8.8911**	0.091	1.0	ug/L	79	Standard
	Cu	65	23722.9	2.1	**8.6315**	0.047	0.5	ug/L	154	Standard
	Zn	66	20634.7	2.6	**16.5313**	0.141	0.9	ug/L	194	Standard
>	**Ge**	72	229159.7	1.8				ug/L	232024	Standard
	As	75	3556.8	1.5	**3.3866**	0.046	1.4	ug/L	-297	Standard
	Se	82	48.6	21.6	**0.2249**	0.077	34.4	ug/L	17	Standard
	Se-1	77	125.3	8.6	**-0.2807**	0.148	52.9	ug/L	180	Standard
	Ga	71	227801.6	2.1				mg/L	210139	Standard
	Rb	85	177853.7	3.8				ug/L	12	Standard
>	**Y**	89	334699.5	2.5				ug/L	214065	Standard
	Rh	103	6.7	43.3				ug/L	0	Standard
	Mo	98	831.1	1.8	**0.1971**	0.007	3.4	ug/L	6	Standard
	Ag	107	482.0	13.7	**0.0514**	0.007	14.0	ug/L	33	Standard
	Cd	111	277.6	3.4	**-0.0301**	0.002	5.0	mg/L	437	Standard
	Cd	114	634.7	2.0	**-0.0450**	0.001	1.9	ug/L	1160	Standard
>	**In**	115	632624.5	2.0				ug/L	646604	Standard
	Sn	118	781.4	1.0	**-0.0053**	0.001	10.0	ug/L	864	Standard
	Sb	123	229.4	10.6	**0.0187**	0.002	11.5	ug/L	18	Standard
	Ba	135	78324.3	1.2	**17.3755**	0.193	1.1	ug/L	39	Standard
	Ce	140	2428759.0	1.1				ug/L	46	Standard
>	**Tb**	159	730693.1	0.3				ug/L	695671	Standard
	Ho	165	20474.5	2.0				ug/L	9	Standard
	Tl	203	2217.5	5.9	**0.1045**	0.010	9.6	ug/L	687	Standard
	Tl	205	5162.5	2.4	**0.1032**	0.005	4.6	ug/L	1624	Standard
	Pb	206	101997.6	2.3	**8.1105**	0.087	1.1	ug/L	305	Standard
	Pb	207	79156.3	1.5	**7.3783**	0.020	0.3	ug/L	231	Standard
	Pb	208	377221.8	2.2	**7.5547**	0.071	0.9	ug/L	1129	Standard
	U	238	14796.9	2.1	**0.5594**	0.005	0.9	ug/L	3	Standard
>	**Bi**	209	386462.5	1.3				ug/L	405108	Standard
	Na	23	125.0	4.0	**-0.0012**	0.001	69.6	mg/L	118	Standard
	Mg	24	804227.7	1.8	**1.1039**	0.027	2.4	mg/L	377	Standard

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	K	39	10698.8	4.8	**0.6434**	0.042	6.6	mg/L	583	Standard
	Ca	43	188.3	20.3	**0.1468**	0.069	47.2	mg/L	73	Standard
	Fe	54	129521.8	3.7	**17.2403**	0.604	3.5	mg/L	785	Standard
	Fe	57	3685919.9	1.5	**15.7931**	0.253	1.6	mg/L	6133	Standard
>	**Sc-1**	45	339190.2	1.5				mg/L	254529	Standard
	Cl	35	449164.4	38.6				ug/L	1641778	Standard
	Kr	83	82.9	5.2				ug/L	60	Standard
	Br	81	10320.2	1.0				ug/L	11554	Standard
	P	31	203984.0	1.0				ug/L	45410	Standard
	S	34	572326.0	3.2				ug/L	568857	Standard
	Sr	88	51943.9	0.8				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		98.766	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		156.354	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		97.838	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		105.034	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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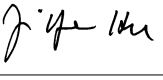

	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	95.397
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

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: L1205022303S WG397298-04
Sample Date/Time: Thursday, May 10, 2012 11:26:16
Number of Replicates: 3
Autosampler Position: 238
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	1885139.8	1.6	**127088.3845**	1886.791	1.5	ug/L	12600	Standard
	Be	9	25222.7	5.0	**5.0942**	0.235	4.6	ug/L	5	Standard
	Al	27	160650156.0	2.4	**6969.0177**	171.503	2.5	ug/L	16102	Standard
>	**Sc**	45	377002.0	1.8				ug/L	254529	Standard
	Ti	47	72095.1	1.5	**48.1378**	1.247	2.6	ug/L	84	Standard
	V	51	611566.6	3.5	**40.0982**	1.772	4.4	ug/L	5785	Standard
	Cr	52	312297.4	2.6	**26.8249**	0.978	3.6	ug/L	12212	Standard
	Cr	53	47039.6	2.9	**26.1521**	1.092	4.2	ug/L	5042	Standard
	Mn	55	2061880.3	3.7	**103.0495**	4.590	4.5	ug/L	1290	Standard
	Co	59	183085.5	3.0	**12.8802**	0.485	3.8	ug/L	143	Standard
	Ni	60	50086.0	2.7	**16.7754**	0.624	3.7	ug/L	79	Standard
	Cu	65	45451.1	2.1	**16.7633**	0.452	2.7	ug/L	154	Standard
	Zn	66	30413.9	3.3	**24.7192**	0.974	3.9	ug/L	194	Standard
>	**Ge**	72	226738.8	1.2				ug/L	232024	Standard
	As	75	10532.5	3.0	**9.6860**	0.381	3.9	ug/L	-297	Standard
	Se	82	867.2	2.2	**6.7706**	0.235	3.5	ug/L	17	Standard
	Se-1	77	698.0	2.7	**6.8425**	0.230	3.4	ug/L	180	Standard
	Ga	71	236683.4	0.9				mg/L	210139	Standard
	Rb	85	227416.2	4.4				ug/L	12	Standard
>	**Y**	89	341489.1	1.3				ug/L	214065	Standard
	Rh	103	10.0	50.0				ug/L	0	Standard
	Mo	98	886.2	3.5	**0.2118**	0.006	2.7	ug/L	6	Standard
	Ag	107	47350.3	4.5	**5.8015**	0.223	3.8	ug/L	33	Standard
	Cd	111	28424.8	4.1	**6.3626**	0.219	3.4	mg/L	437	Standard
	Cd	114	76034.8	3.2	**6.5178**	0.184	2.8	ug/L	1160	Standard
>	**In**	115	629352.5	0.9				ug/L	646604	Standard
	Sn	118	799.7	2.5	**-0.0039**	0.002	41.9	ug/L	864	Standard
	Sb	123	1494.4	3.6	**0.1365**	0.005	4.0	ug/L	18	Standard
	Ba	135	115755.8	3.3	**25.8117**	0.727	2.8	ug/L	39	Standard
	Ce	140	2525160.5	3.4				ug/L	46	Standard
>	**Tb**	159	725898.3	0.3				ug/L	695671	Standard
	Ho	165	21444.9	4.5				ug/L	9	Standard
	Tl	203	97213.2	5.5	**6.0125**	0.296	4.9	ug/L	687	Standard
	Tl	205	225794.5	4.1	**5.8961**	0.210	3.6	ug/L	1624	Standard
	Pb	206	165087.5	4.0	**12.8477**	0.440	3.4	ug/L	305	Standard
	Pb	207	135698.4	3.4	**12.3817**	0.357	2.9	ug/L	231	Standard
	Pb	208	631005.7	3.6	**12.3702**	0.379	3.1	ug/L	1129	Standard
	U	238	166648.7	3.0	**6.1365**	0.175	2.9	ug/L	3	Standard
>	**Bi**	209	395273.9	1.0				ug/L	405108	Standard
	Na	23	130.0	10.2	**-0.0029**	0.003	101.1	mg/L	118	Standard
	Mg	24	1016043.6	2.0	**1.2548**	0.021	1.7	mg/L	377	Standard

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	K	39	13702.9	2.2	**0.7488**	0.005	0.6	mg/L	583	Standard
	Ca	43	206.7	20.3	**0.1428**	0.072	50.1	mg/L	73	Standard
	Fe	54	123270.0	2.8	**14.7400**	0.302	2.0	mg/L	785	Standard
	Fe	57	3560735.4	2.1	**13.7235**	0.360	2.6	mg/L	6133	Standard
>	**Sc-1**	45	377002.0	1.8				mg/L	254529	Standard
	Cl	35	434261.1	40.4				ug/L	1641778	Standard
	Kr	83	85.8	6.3				ug/L	60	Standard
	Br	81	9977.5	2.9				ug/L	11554	Standard
	P	31	202607.5	3.5				ug/L	45410	Standard
	S	34	562269.7	1.3				ug/L	568857	Standard
	Sr	88	63680.4	4.4				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		97.722	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		159.526	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		97.332	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		104.345	
	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

97.572

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: L1205022303S WG397298-04
Report Date/Time: Thursday, May 10, 2012 11:28:48
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Method 6020 - Summary Report

Sample ID: L1205022304SD WG397298-05

Sample Date/Time: Thursday, May 10, 2012 11:29:08
Number of Replicates: 3
Autosampler Position: 239
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	465099.9	2.4	**41097.9585**	1278.268	3.1	ug/L	12600	Standard
|	**Be**	9	21490.2	1.1	**5.8074**	0.122	2.1	ug/L	5	Standard
|	**Al**	27	46197308.8	2.2	**2679.3866**	64.641	2.4	ug/L	16102	Standard
⌊>	**Sc**	45	281912.0	1.0				ug/L	254529	Standard
⌈	**Ti**	47	36366.9	2.4	**24.5298**	0.427	1.7	ug/L	84	Standard
|	**V**	51	247571.9	1.9	**16.2498**	0.502	3.1	ug/L	5785	Standard
|	**Cr**	52	139097.1	2.4	**11.5149**	0.380	3.3	ug/L	12212	Standard
|	**Cr**	53	20789.3	1.6	**10.8460**	0.139	1.3	ug/L	5042	Standard
|	**Mn**	55	2252875.7	1.3	**113.8993**	1.644	1.4	ug/L	1290	Standard
|	**Co**	59	143723.6	1.7	**10.2257**	0.198	1.9	ug/L	143	Standard
|	**Ni**	60	28103.7	2.1	**9.5109**	0.236	2.5	ug/L	79	Standard
|	**Cu**	65	24889.8	1.6	**9.2641**	0.159	1.7	ug/L	154	Standard
|	**Zn**	66	17323.9	2.5	**14.1678**	0.343	2.4	ug/L	194	Standard
|>	**Ge**	72	224125.7	1.5				ug/L	232024	Standard
|	**As**	75	7504.4	2.5	**7.0433**	0.158	2.2	ug/L	-297	Standard
|	**Se**	82	809.4	2.4	**6.3833**	0.178	2.8	ug/L	17	Standard
⌊	**Se-1**	77	614.0	3.8	**5.8915**	0.378	6.4	ug/L	180	Standard
	Ga	71	208742.3	1.5				mg/L	210139	Standard
⌈	**Rb**	85	73708.9	2.1				ug/L	12	Standard
|>	**Y**	89	254471.7	2.6				ug/L	214065	Standard
⌊	**Rh**	103	18.3	56.8				ug/L	0	Standard
⌈	**Mo**	98	340.5	1.8	**0.0764**	0.001	1.9	ug/L	6	Standard
|	**Ag**	107	43661.2	3.1	**5.3514**	0.096	1.8	ug/L	33	Standard
|	**Cd**	111	26117.1	3.2	**5.8412**	0.128	2.2	mg/L	437	Standard
|	**Cd**	114	69757.2	2.5	**5.9742**	0.108	1.8	ug/L	1160	Standard
|>	**In**	115	629161.3	2.5				ug/L	646604	Standard
|	**Sn**	118	653.3	0.7	**-0.0134**	0.001	8.9	ug/L	864	Standard
|	**Sb**	123	6004.9	2.8	**0.5561**	0.009	1.7	ug/L	18	Standard
⌊	**Ba**	135	63646.8	1.6	**14.1959**	0.131	0.9	ug/L	39	Standard
⌈	**Ce**	140	939891.1	1.5				ug/L	46	Standard
⌊>	**Tb**	159	699222.3	1.8				ug/L	695671	Standard
⌈	**Ho**	165	8620.5	1.8				ug/L	9	Standard
|	**Tl**	203	87314.9	1.9	**5.4314**	0.082	1.5	ug/L	687	Standard
|	**Tl**	205	202412.5	2.1	**5.3154**	0.073	1.4	ug/L	1624	Standard
|	**Pb**	206	104496.5	1.9	**8.1755**	0.111	1.4	ug/L	305	Standard
|	**Pb**	207	87899.3	2.2	**8.0625**	0.108	1.3	ug/L	231	Standard
|	**Pb**	208	407233.8	2.2	**8.0253**	0.093	1.2	ug/L	1129	Standard
|	**U**	238	140834.6	1.7	**5.2184**	0.035	0.7	ug/L	3	Standard
⌊>	**Bi**	209	392823.6	1.2				ug/L	405108	Standard
⌈	**Na**	23	130.0	29.0	**0.0054**	0.010	179.4	mg/L	118	Standard
|	**Mg**	24	310059.4	1.8	**0.5116**	0.012	2.3	mg/L	377	Standard

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	K	39	3962.2	0.7	**0.2580**	0.003	1.1	mg/L	583	Standard
	Ca	43	111.7	44.2	**0.0501**	0.109	217.2	mg/L	73	Standard
	Fe	54	39135.2	1.4	**6.1701**	0.082	1.3	mg/L	785	Standard
	Fe	57	1198170.1	1.7	**6.1557**	0.111	1.8	mg/L	6133	Standard
>	**Sc-1**	45	281912.0	1.0				mg/L	254529	Standard
	Cl	35	362533.9	60.9				ug/L	1641778	Standard
	Kr	83	61.6	3.5				ug/L	60	Standard
	Br	81	9963.3	1.6				ug/L	11554	Standard
	P	31	116258.6	1.7				ug/L	45410	Standard
	S	34	557544.3	0.9				ug/L	568857	Standard
	Sr	88	20507.2	3.8				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		96.596	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		118.876	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		97.302	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		100.510	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1205022304SD WG397298-05
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	96.968
	Na	23	
	Mg	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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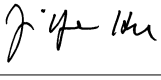

Method 6020 - Summary Report

Sample ID: L1205022306
Sample Date/Time: Thursday, May 10, 2012 11:32:02
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: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	513251.2	2.3	**39016.7942**	1700.130	4.4	ug/L	12600	Standard
|	**Be**	9	2351.8	1.7	**0.5347**	0.025	4.7	ug/L	5	Standard
|	**Al**	27	65900707.5	2.0	**3294.1750**	148.401	4.5	ug/L	16102	Standard
⌊>	**Sc**	45	327390.2	3.4				ug/L	254529	Standard
⌈	**Ti**	47	23899.8	0.1	**14.3802**	0.107	0.7	ug/L	84	Standard
|	**V**	51	236359.6	1.5	**13.8163**	0.180	1.3	ug/L	5785	Standard
|	**Cr**	52	129948.6	0.7	**9.4392**	0.115	1.2	ug/L	12212	Standard
|	**Cr**	53	19167.1	1.2	**8.6673**	0.204	2.4	ug/L	5042	Standard
|	**Mn**	55	7694754.5	1.2	**347.7960**	6.821	2.0	ug/L	1290	Standard
|	**Co**	59	121677.1	2.4	**7.7332**	0.221	2.9	ug/L	143	Standard
|	**Ni**	60	16269.4	1.9	**4.9084**	0.127	2.6	ug/L	79	Standard
|	**Cu**	65	24703.5	2.7	**8.2114**	0.290	3.5	ug/L	154	Standard
|	**Zn**	66	35862.7	0.4	**26.3573**	0.325	1.2	ug/L	194	Standard
|>	**Ge**	72	250822.5	0.8				ug/L	232024	Standard
|	**As**	75	3362.7	0.7	**2.9561**	0.042	1.4	ug/L	-297	Standard
|	**Se**	82	65.5	9.4	**0.3145**	0.046	14.8	ug/L	17	Standard
⌊	**Se-1**	77	147.3	11.9	**-0.1675**	0.200	119.4	ug/L	180	Standard
	Ga	71	241205.5	0.6				mg/L	210139	Standard
⌈	**Rb**	85	117087.5	2.5				ug/L	12	Standard
|>	**Y**	89	392625.0	2.0				ug/L	214065	Standard
⌊	**Rh**	103	11.7	65.5				ug/L	0	Standard
⌈	**Mo**	98	819.6	0.2	**0.1734**	0.002	1.3	ug/L	6	Standard
|	**Ag**	107	690.3	5.9	**0.0682**	0.004	5.3	ug/L	33	Standard
|	**Cd**	111	883.6	2.8	**0.0863**	0.004	5.2	mg/L	437	Standard
|	**Cd**	114	2259.6	1.4	**0.0756**	0.004	5.3	ug/L	1160	Standard
|>	**In**	115	705150.9	1.1				ug/L	646604	Standard
|	**Sn**	118	1424.1	1.2	**0.0268**	0.002	5.8	ug/L	864	Standard
|	**Sb**	123	178.8	19.0	**0.0124**	0.003	24.3	ug/L	18	Standard
⌊	**Ba**	135	114237.5	1.9	**22.7368**	0.446	2.0	ug/L	39	Standard
⌈	**Ce**	140	1769534.0	2.4				ug/L	46	Standard
⌊>	**Tb**	159	783602.9	1.5				ug/L	695671	Standard
⌈	**Ho**	165	21167.8	2.2				ug/L	9	Standard
|	**Tl**	203	1813.4	9.6	**0.0712**	0.011	15.8	ug/L	687	Standard
|	**Tl**	205	4076.9	10.7	**0.0668**	0.012	17.6	ug/L	1624	Standard
|	**Pb**	206	142158.5	1.1	**10.5679**	0.154	1.5	ug/L	305	Standard
|	**Pb**	207	115469.4	1.1	**10.0628**	0.092	0.9	ug/L	231	Standard
|	**Pb**	208	541671.6	1.2	**10.1424**	0.114	1.1	ug/L	1129	Standard
|	**U**	238	9893.6	1.0	**0.3504**	0.006	1.7	ug/L	3	Standard
⌊>	**Bi**	209	413713.7	0.8				ug/L	405108	Standard
⌈	**Na**	23	131.7	7.9	**0.0011**	0.001	123.6	mg/L	118	Standard
|	**Mg**	24	593796.3	1.2	**0.8447**	0.028	3.3	mg/L	377	Standard

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	K	39	7016.6	2.4	**0.4205**	0.006	1.5	mg/L	583	Standard
	Ca	43	510.0	6.0	**0.7591**	0.038	4.9	mg/L	73	Standard
	Fe	54	52709.7	4.0	**7.1848**	0.363	5.1	mg/L	785	Standard
	Fe	57	1597398.5	2.2	**7.0747**	0.182	2.6	mg/L	6133	Standard
>	**Sc-1**	45	327390.2	3.4				mg/L	254529	Standard
	Cl	35	544405.4	40.8				ug/L	1641778	Standard
	Kr	83	78.1	9.4				ug/L	60	Standard
	Br	81	13046.5	2.7				ug/L	11554	Standard
	P	31	429670.3	1.9				ug/L	45410	Standard
	S	34	671788.0	2.3				ug/L	568857	Standard
	Sr	88	78809.5	2.0				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		108.102	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		183.414	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		109.055	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		112.640	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1205022306
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Pb	207	
Pb	208	
U	238	
> Bi	209	102.124
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
Mn 55 Upper, S, EEE	Mn	55	
Y 89 Int Std for sample	Y	89	Rerun sample

Approved: May 11, 2012

Method 6020 - Summary Report

Sample ID: L1205022306PS WG397362-01

Sample Date/Time: Thursday, May 10, 2012 11:34:54
Number of Replicates: 3
Autosampler Position: 241
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	513304.0	2.7	**38551.4847**	913.902	2.4	ug/L	12600	Standard
|	**Be**	9	200509.3	3.8	**46.2321**	1.000	2.2	ug/L	5	Standard
|	**Al**	27	66191254.8	3.0	**3269.4290**	66.448	2.0	ug/L	16102	Standard
⌊>	**Sc**	45	331000.4	1.7				ug/L	254529	Standard
⌈	**Ti**	47	23754.3	2.9	**14.3840**	0.321	2.2	ug/L	84	Standard
|	**V**	51	1102148.0	2.8	**65.9062**	0.671	1.0	ug/L	5785	Standard
|	**Cr**	52	777196.6	2.2	**62.0403**	1.101	1.8	ug/L	12212	Standard
|	**Cr**	53	117176.5	1.9	**61.1993**	1.753	2.9	ug/L	5042	Standard
|	**Mn**	55	8762712.2	2.1	**398.6364**	8.253	2.1	ug/L	1290	Standard
|	**Co**	59	919214.2	2.6	**58.8578**	0.992	1.7	ug/L	143	Standard
|	**Ni**	60	186105.0	3.7	**56.7441**	1.383	2.4	ug/L	79	Standard
|	**Cu**	65	178752.9	3.0	**60.0947**	0.966	1.6	ug/L	154	Standard
|	**Zn**	66	103658.8	2.3	**77.0023**	0.698	0.9	ug/L	194	Standard
|>	**Ge**	72	249219.7	1.9				ug/L	232024	Standard
|	**As**	75	64275.1	1.8	**52.7344**	0.569	1.1	ug/L	-297	Standard
|	**Se**	82	6953.3	1.0	**50.3790**	0.567	1.1	ug/L	17	Standard
⌊	**Se-1**	77	4595.0	1.8	**50.0638**	0.138	0.3	ug/L	180	Standard
	Ga	71	242691.0	0.7				mg/L	210139	Standard
⌈	**Rb**	85	119790.1	1.2				ug/L	12	Standard
|>	**Y**	89	390037.2	1.5				ug/L	214065	Standard
⌊	**Rh**	103	58.3	30.1				ug/L	0	Standard
⌈	**Mo**	98	928.0	3.4	**0.1993**	0.007	3.3	ug/L	6	Standard
|	**Ag**	107	465340.9	2.3	**51.4043**	0.232	0.5	ug/L	33	Standard
|	**Cd**	111	246113.4	2.1	**50.2455**	0.507	1.0	mg/L	437	Standard
|	**Cd**	114	634384.4	2.1	**49.6230**	0.539	1.1	ug/L	1160	Standard
|>	**In**	115	698916.4	2.0				ug/L	646604	Standard
|	**Sn**	118	1939.5	1.6	**0.0578**	0.000	0.7	ug/L	864	Standard
|	**Sb**	123	585512.4	1.2	**49.0277**	0.394	0.8	ug/L	18	Standard
⌊	**Ba**	135	362512.0	2.1	**72.8084**	0.441	0.6	ug/L	39	Standard
⌈	**Ce**	140	1770448.5	1.4				ug/L	46	Standard
⌊>	**Tb**	159	787481.4	2.2				ug/L	695671	Standard
⌈	**Ho**	165	21140.1	2.0				ug/L	9	Standard
|	**Tl**	203	865284.0	2.3	**51.1708**	0.351	0.7	ug/L	687	Standard
|	**Tl**	205	2056255.0	6.4	**51.3071**	2.258	4.4	ug/L	1624	Standard
|	**Pb**	206	828294.5	2.2	**61.3896**	0.231	0.4	ug/L	305	Standard
|	**Pb**	207	711669.7	2.1	**61.8445**	0.371	0.6	ug/L	231	Standard
|	**Pb**	208	3276171.2	2.3	**61.1669**	0.300	0.5	ug/L	1129	Standard
|	**U**	238	1397172.3	2.4	**48.9098**	1.038	2.1	ug/L	3	Standard
⌊>	**Bi**	209	415679.4	2.1				ug/L	405108	Standard
⌈	**Na**	23	91.7	30.0	**-0.0076**	0.006	81.0	mg/L	118	Standard
|	**Mg**	24	589667.9	2.4	**0.8290**	0.012	1.5	mg/L	377	Standard

Sample ID: L1205022306PS WG397362-01
Report Date/Time: Thursday, May 10, 2012 11:37:26

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	K	39	7058.3	0.3	**0.4181**	0.008	2.0	mg/L	583	Standard
	Ca	43	518.3	4.0	**0.7649**	0.052	6.9	mg/L	73	Standard
	Fe	54	53384.1	0.6	**7.1939**	0.078	1.1	mg/L	785	Standard
	Fe	57	1581639.3	1.5	**6.9249**	0.013	0.2	mg/L	6133	Standard
>	**Sc-1**	45	331000.4	1.7				mg/L	254529	Standard
	Cl	35	557096.1	40.3				ug/L	1641778	Standard
	Kr	83	79.8	6.5				ug/L	60	Standard
	Br	81	12655.3	1.9				ug/L	11554	Standard
	P	31	430081.9	1.4				ug/L	45410	Standard
	S	34	651925.3	3.2				ug/L	568857	Standard
	Sr	88	79018.9	2.4				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		107.411	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		182.205	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		108.090	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		113.197	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1205022306PS WG397362-01
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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

102.610

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: L1205022306PS WG397362-01
Report Date/Time: Thursday, May 10, 2012 11:37:26
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Approved: May 11, 2012

Method 6020 - Summary Report

Sample ID: L1205022306SDL WG397362-02
Sample Date/Time: Thursday, May 10, 2012 11:37:46
Number of Replicates: 3
Autosampler Position: 242
Sample Description: 25
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	98517.8	3.0	**8745.3644**	112.178	1.3	ug/L	12600	Standard
|	**Be**	9	451.7	14.7	**0.1220**	0.021	17.2	ug/L	5	Standard
|	**Al**	27	11800171.9	1.5	**762.0679**	10.958	1.4	ug/L	16102	Standard
⌊>	**Sc**	45	253041.6	2.9				ug/L	254529	Standard
⌈	**Ti**	47	4170.6	1.4	**2.8076**	0.014	0.5	ug/L	84	Standard
|	**V**	51	43054.3	1.5	**2.6350**	0.018	0.7	ug/L	5785	Standard
|	**Cr**	52	29572.5	0.8	**1.6748**	0.014	0.8	ug/L	12212	Standard
|	**Cr**	53	3981.4	6.4	**0.8857**	0.179	20.2	ug/L	5042	Standard
|	**Mn**	55	1350455.4	0.9	**69.4234**	0.507	0.7	ug/L	1290	Standard
|	**Co**	59	20576.0	2.1	**1.4803**	0.014	0.9	ug/L	143	Standard
|	**Ni**	60	2809.6	1.5	**0.9457**	0.004	0.4	ug/L	79	Standard
|	**Cu**	65	4499.3	1.7	**1.6634**	0.048	2.9	ug/L	154	Standard
|	**Zn**	66	9564.4	1.3	**7.8806**	0.126	1.6	ug/L	194	Standard
| >	**Ge**	72	220305.3	1.3				ug/L	232024	Standard
|	**As**	75	516.3	10.6	**0.7038**	0.053	7.5	ug/L	-297	Standard
|	**Se**	82	29.1	33.1	**0.0814**	0.082	100.3	ug/L	17	Standard
⌊	**Se-1**	77	99.3	17.7	**-0.5500**	0.242	44.0	ug/L	180	Standard
	Ga	71	198082.4	2.7				mg/L	210139	Standard
⌈	**Rb**	85	18988.6	0.4				ug/L	12	Standard
| >	**Y**	89	226542.2	3.3				ug/L	214065	Standard
⌊	**Rh**	103	3.3	86.6				ug/L	0	Standard
⌈	**Mo**	98	140.9	2.9	**0.0265**	0.001	3.9	ug/L	6	Standard
|	**Ag**	107	128.7	4.4	**0.0083**	0.001	8.1	ug/L	33	Standard
|	**Cd**	111	256.4	1.0	**-0.0352**	0.000	0.9	mg/L	437	Standard
|	**Cd**	114	676.7	3.3	**-0.0416**	0.002	4.0	ug/L	1160	Standard
| >	**In**	115	635307.2	0.5				ug/L	646604	Standard
|	**Sn**	118	608.7	3.2	**-0.0167**	0.001	6.9	ug/L	864	Standard
|	**Sb**	123	974.3	35.8	**0.0872**	0.032	36.4	ug/L	18	Standard
⌊	**Ba**	135	20335.3	0.9	**4.4856**	0.043	1.0	ug/L	39	Standard
⌈	**Ce**	140	317968.0	1.0				ug/L	46	Standard
⌊>	**Tb**	159	685093.7	0.3				ug/L	695671	Standard
⌈	**Ho**	165	3661.8	0.6				ug/L	9	Standard
|	**Tl**	203	703.3	17.5	**0.0077**	0.008	103.9	ug/L	687	Standard
|	**Tl**	205	1651.4	22.3	**0.0084**	0.010	119.1	ug/L	1624	Standard
|	**Pb**	206	25850.0	0.9	**2.0213**	0.008	0.4	ug/L	305	Standard
|	**Pb**	207	21124.1	2.7	**1.9356**	0.035	1.8	ug/L	231	Standard
|	**Pb**	208	98681.5	1.3	**1.9430**	0.011	0.6	ug/L	1129	Standard
|	**U**	238	1749.8	3.8	**0.0677**	0.003	4.4	ug/L	3	Standard
⌊>	**Bi**	209	389707.1	0.9				ug/L	405108	Standard
⌈	**Na**	23	103.3	24.4	**0.0016**	0.007	422.6	mg/L	118	Standard
|	**Mg**	24	120196.6	1.3	**0.2205**	0.005	2.2	mg/L	377	Standard

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	K	39	1778.4	3.0	**0.1032**	0.005	4.4	mg/L	583	Standard
	Ca	43	161.7	6.4	**0.1982**	0.031	15.9	mg/L	73	Standard
	Fe	54	9945.9	3.3	**1.6372**	0.038	2.3	mg/L	785	Standard
	Fe	57	300529.2	2.6	**1.6954**	0.007	0.4	mg/L	6133	Standard
>	**Sc-1**	45	253041.6	2.9				mg/L	254529	Standard
	Cl	35	362596.9	63.3				ug/L	1641778	Standard
	Kr	83	50.6	13.0				ug/L	60	Standard
	Br	81	9397.9	1.5				ug/L	11554	Standard
	P	31	97580.8	2.0				ug/L	45410	Standard
	S	34	523305.1	3.8				ug/L	568857	Standard
	Sr	88	13921.4	3.4				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		94.950	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		105.829	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		98.253	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		98.479	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	96.198
	Na	23	
	Mg	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: L1205022306SDL WG397362-02
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Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, May 10, 2012 11:40:41
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	14418.5	1.7	**76.1381**	6.948	9.1	ug/L	12600	Standard
|	**Be**	9	188631.4	3.8	**51.4552**	1.363	2.6	ug/L	5	Standard
|	**Al**	27	859087.4	1.9	**49.4166**	0.375	0.8	ug/L	16102	Standard
⌊>	**Sc**	45	279801.8	1.2				ug/L	254529	Standard
⌈	**Ti**	47	163930.9	1.6	**104.3696**	2.150	2.1	ug/L	84	Standard
|	**V**	51	837191.6	1.0	**52.3891**	0.855	1.6	ug/L	5785	Standard
|	**Cr**	52	622500.8	2.1	**51.8855**	1.380	2.7	ug/L	12212	Standard
|	**Cr**	53	93963.9	1.9	**51.1531**	1.276	2.5	ug/L	5042	Standard
|	**Mn**	55	1106066.2	1.2	**52.6291**	0.797	1.5	ug/L	1290	Standard
|	**Co**	59	772624.3	1.8	**51.8230**	1.105	2.1	ug/L	143	Standard
|	**Ni**	60	162050.0	2.4	**51.7630**	1.323	2.6	ug/L	79	Standard
|	**Cu**	65	146009.8	2.8	**51.4194**	1.564	3.0	ug/L	154	Standard
|	**Zn**	66	65036.0	1.8	**50.5503**	1.109	2.2	ug/L	194	Standard
| >	**Ge**	72	237921.5	0.6				ug/L	232024	Standard
|	**As**	75	58826.0	1.2	**50.5658**	0.869	1.7	ug/L	-297	Standard
|	**Se**	82	6853.3	0.5	**52.0128**	0.516	1.0	ug/L	17	Standard
⌊	**Se-1**	77	4440.7	1.7	**50.7055**	1.156	2.3	ug/L	180	Standard
	Ga	71	214354.1	1.1				mg/L	210139	Standard
⌈	**Rb**	85	1203.4	4.4				ug/L	12	Standard
| >	**Y**	89	218978.9	3.3				ug/L	214065	Standard
⌊	**Rh**	103	35.0	14.3				ug/L	0	Standard
⌈	**Mo**	98	423829.1	1.5	**97.0831**	2.658	2.7	ug/L	6	Standard
|	**Ag**	107	441037.7	0.6	**49.9338**	1.220	2.4	ug/L	33	Standard
|	**Cd**	111	237397.5	1.7	**49.6568**	0.380	0.8	mg/L	437	Standard
|	**Cd**	114	613107.8	1.6	**49.1369**	0.221	0.4	ug/L	1160	Standard
| >	**In**	115	682163.3	1.9				ug/L	646604	Standard
|	**Sn**	118	823210.1	3.1	**49.3645**	0.668	1.4	ug/L	864	Standard
|	**Sb**	123	576029.8	1.7	**49.4156**	0.319	0.6	ug/L	18	Standard
⌊	**Ba**	135	241835.4	1.8	**49.7633**	0.246	0.5	ug/L	39	Standard
⌈	**Ce**	140	1048.7	14.4				ug/L	46	Standard
⌊>	**Tb**	159	744039.1	0.7				ug/L	695671	Standard
⌈	**Ho**	165	20.7	17.0				ug/L	9	Standard
|	**Tl**	203	829818.7	0.4	**51.0284**	0.480	0.9	ug/L	687	Standard
|	**Tl**	205	1929638.8	0.7	**50.0939**	0.622	1.2	ug/L	1624	Standard
|	**Pb**	206	660074.4	0.5	**50.8670**	0.498	1.0	ug/L	305	Standard
|	**Pb**	207	558424.4	0.7	**50.4556**	0.601	1.2	ug/L	231	Standard
|	**Pb**	208	2585500.7	0.7	**50.1917**	0.590	1.2	ug/L	1129	Standard
|	**U**	238	1319560.5	1.6	**48.0274**	0.818	1.7	ug/L	3	Standard
⌊>	**Bi**	209	399772.7	0.5				ug/L	405108	Standard
⌈	**Na**	23	20363.7	2.8	**5.1146**	0.087	1.7	mg/L	118	Standard
|	**Mg**	24	2943811.2	1.0	**4.9006**	0.016	0.3	mg/L	377	Standard

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	K	39	63450.9	0.8	**4.9429**	0.077	1.5	mg/L	583	Standard
	Ca	43	2343.5	7.8	**4.9237**	0.340	6.9	mg/L	73	Standard
	Fe	54	31410.3	2.9	**4.9596**	0.101	2.0	mg/L	785	Standard
	Fe	57	930155.0	2.1	**4.8068**	0.043	0.9	mg/L	6133	Standard
>	**Sc-1**	45	279801.8	1.2				mg/L	254529	Standard
	Cl	35	517557.6	41.8				ug/L	1641778	Standard
	Kr	83	53.0	10.9				ug/L	60	Standard
	Br	81	11250.0	2.5				ug/L	11554	Standard
	P	31	63496.1	1.8				ug/L	45410	Standard
	S	34	729690.4	1.0				ug/L	568857	Standard
	Sr	88	651.7	6.0				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	98.833		
>	Sc	45			
	Ti	47	104.370		
	V	51	104.778		
	Cr	52	103.771		
	Cr	53			
	Mn	55	105.258		
	Co	59	103.646		
	Ni	60	103.526		
	Cu	65	102.839		
	Zn	66	101.101		
>	Ge	72		102.542	
	As	75	101.132		
	Se	82	104.026		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		102.296	
	Rh	103			
	Mo	98	97.083		
	Ag	107	99.868		
	Cd	111	99.314		
	Cd	114			
>	In	115		105.499	
	Sn	118	98.729		
	Sb	123	98.831		
	Ba	135	99.527		
	Ce	140			
>	Tb	159		106.953	
	Ho	165			
	Tl	203	102.057		
	Tl	205			
	Pb	206	101.734		

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	Pb	207	100.911	
	Pb	208	100.383	
	U	238	96.055	
>	Bi	209		98.683
	Na	23	102.293	
	Mg	24	98.013	
	K	39	98.859	
	Ca	43	98.474	
	Fe	54	99.192	
	Fe	57	96.136	
>	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 10, 2012 11:43:33
Number of Replicates: 3
Autosampler Position: 102
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	13716.2	2.2	**77.3438**	13.719	17.7	ug/L	12600	Standard
|	**Be**	9	10.0	50.0	**-0.0115**	0.001	12.8	ug/L	5	Standard
|	**Al**	27	16294.1	24.7	**0.2106**	0.265	125.6	ug/L	16102	Standard
⌊>	**Sc**	45	265939.1	1.8				ug/L	254529	Standard
⌈	**Ti**	47	99.7	18.2	**0.0036**	0.011	305.3	ug/L	84	Standard
|	**V**	51	3691.2	2.2	**-0.0519**	0.009	17.1	ug/L	5785	Standard
|	**Cr**	52	11114.7	2.6	**-0.0697**	0.013	18.6	ug/L	12212	Standard
|	**Cr**	53	1013.4	9.5	**-0.9425**	0.050	5.3	ug/L	5042	Standard
|	**Mn**	55	1436.7	5.2	**-0.0145**	0.004	24.7	ug/L	1290	Standard
|	**Co**	59	168.0	6.8	**0.0013**	0.001	71.1	ug/L	143	Standard
|	**Ni**	60	73.7	11.0	**0.0003**	0.002	793.0	ug/L	79	Standard
|	**Cu**	65	122.7	6.2	**-0.0053**	0.004	72.5	ug/L	154	Standard
|	**Zn**	66	167.7	7.2	**-0.0414**	0.013	31.3	ug/L	194	Standard
| >	**Ge**	72	231606.9	2.6				ug/L	232024	Standard
|	**As**	75	-235.8	5.1	**0.0189**	0.016	83.2	ug/L	-297	Standard
|	**Se**	82	23.4	5.4	**0.0247**	0.014	58.3	ug/L	17	Standard
⌊	**Se-1**	77	93.7	7.7	**-0.6839**	0.058	8.4	ug/L	180	Standard
	Ga	71	211597.1	3.9				mg/L	210139	Standard
⌈	**Rb**	85	31.7	50.8				ug/L	12	Standard
| >	**Y**	89	211655.1	2.0				ug/L	214065	Standard
⌊	**Rh**	103	8.3	91.7				ug/L	0	Standard
⌈	**Mo**	98	70.2	73.1	**0.0085**	0.012	143.6	ug/L	6	Standard
|	**Ag**	107	114.3	7.9	**0.0061**	0.001	17.3	ug/L	33	Standard
|	**Cd**	111	462.9	2.6	**0.0080**	0.003	33.3	mg/L	437	Standard
|	**Cd**	114	1176.8	1.5	**-0.0017**	0.001	82.3	ug/L	1160	Standard
| >	**In**	115	656263.3	0.3				ug/L	646604	Standard
|	**Sn**	118	941.4	3.6	**0.0028**	0.002	73.6	ug/L	864	Standard
|	**Sb**	123	381.1	22.8	**0.0315**	0.008	24.7	ug/L	18	Standard
⌊	**Ba**	135	47.3	13.6	**0.0019**	0.001	72.9	ug/L	39	Standard
⌈	**Ce**	140	59.0	9.4				ug/L	46	Standard
⌊>	**Tb**	159	715860.3	0.9				ug/L	695671	Standard
⌈	**Ho**	165	6.7	37.7				ug/L	9	Standard
|	**Tl**	203	379.3	45.2	**-0.0130**	0.011	82.0	ug/L	687	Standard
|	**Tl**	205	922.7	40.8	**-0.0112**	0.010	87.8	ug/L	1624	Standard
|	**Pb**	206	309.0	10.7	**0.0011**	0.003	219.8	ug/L	305	Standard
|	**Pb**	207	275.3	7.2	**0.0024**	0.002	74.1	ug/L	231	Standard
|	**Pb**	208	1237.0	8.2	**0.0015**	0.002	133.1	ug/L	1129	Standard
|	**U**	238	67.7	41.0	**0.0049**	0.001	20.9	ug/L	3	Standard
⌊>	**Bi**	209	393139.1	0.3				ug/L	405108	Standard
⌈	**Na**	23	75.0	13.3	**-0.0073**	0.002	33.6	mg/L	118	Standard
|	**Mg**	24	488.3	14.3	**-0.0000**	0.000	1017.4	mg/L	377	Standard

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	K	39	650.0	4.3	**0.0023**	0.002	87.2	mg/L	583	Standard
	Ca	43	48.3	15.8	**-0.0815**	0.019	22.8	mg/L	73	Standard
	Fe	54	888.6	6.2	**-0.0011**	0.007	669.7	mg/L	785	Standard
	Fe	57	4654.0	2.0	**-0.0088**	0.001	8.1	mg/L	6133	Standard
>	**Sc-1**	45	265939.1	1.8				mg/L	254529	Standard
	Cl	35	522433.8	42.9				ug/L	1641778	Standard
	Kr	83	56.2	7.5				ug/L	60	Standard
	Br	81	11034.0	2.8				ug/L	11554	Standard
	P	31	58798.1	3.2				ug/L	45410	Standard
	S	34	703450.8	2.5				ug/L	568857	Standard
	Sr	88	223.3	12.3				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		99.820	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		98.874	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		101.494	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		102.902	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	97.046
	Na	23	
	Mg	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: L1204038406
Sample Date/Time: Thursday, May 10, 2012 11:49:22
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	106976.2	14.0	**13925.5920**	1274.435	9.2	ug/L	12600	Standard
|	**Be**	9	480062.9	7.4	**203.0771**	3.642	1.8	ug/L	5	Standard
|	**Al**	27	58591.5	3.4	**4.5230**	0.151	3.3	ug/L	16102	Standard
⌊>	**Sc**	45	180384.6	5.6				ug/L	254529	Standard
⌈	**Ti**	47	1105.4	6.6	**1.2551**	0.087	6.9	ug/L	84	Standard
|	**V**	51	4937199.6	7.7	**580.3136**	38.758	6.7	ug/L	5785	Standard
|	**Cr**	52	4216511.5	7.2	**668.9542**	42.021	6.3	ug/L	12212	Standard
|	**Cr**	53	683637.7	4.2	**714.9156**	23.736	3.3	ug/L	5042	Standard
|	**Mn**	55	81197.7	8.3	**7.1551**	0.674	9.4	ug/L	1290	Standard
|	**Co**	59	4568724.6	3.6	**572.9523**	14.655	2.6	ug/L	143	Standard
|	**Ni**	60	1646.1	4.0	**0.9595**	0.028	3.0	ug/L	79	Standard
|	**Cu**	65	521599.3	2.0	**343.7008**	4.477	1.3	ug/L	154	Standard
|	**Zn**	66	581085.2	2.0	**847.1949**	12.397	1.5	ug/L	194	Standard
| >	**Ge**	72	127246.1	1.1				ug/L	232024	Standard
|	**As**	75	340.0	99.6	**0.7666**	0.533	69.5	ug/L	-297	Standard
|	**Se**	82	5853.9	4.2	**83.1439**	2.637	3.2	ug/L	17	Standard
⌊	**Se-1**	77	3947.5	1.2	**85.4792**	0.708	0.8	ug/L	180	Standard
	Ga	71	117939.6	1.3				mg/L	210139	Standard
⌈	**Rb**	85	1510123.1	7.1				ug/L	12	Standard
| >	**Y**	89	129025.6	2.5				ug/L	214065	Standard
⌊	**Rh**	103	131.7	9.6				ug/L	0	Standard
⌈	**Mo**	98	794.0	2.8	**0.3568**	0.038	10.7	ug/L	6	Standard
|	**Ag**	107	60.7	13.2	**0.0063**	0.001	10.4	ug/L	33	Standard
|	**Cd**	111	358102.6	11.7	**149.3761**	4.922	3.3	mg/L	437	Standard
|	**Cd**	114	967715.1	9.3	**154.8968**	2.230	1.4	ug/L	1160	Standard
| >	**In**	115	341848.9	8.4				ug/L	646604	Standard
|	**Sn**	118	1079.0	7.5	**0.0734**	0.001	1.8	ug/L	864	Standard
|	**Sb**	123	5975303.5	10.8	**1021.5514**	24.360	2.4	ug/L	18	Standard
⌊	**Ba**	135	863882.1	5.0	**355.4652**	12.741	3.6	ug/L	39	Standard
⌈	**Ce**	140	427.0	19.3				ug/L	46	Standard
⌊>	**Tb**	159	440298.9	5.5				ug/L	695671	Standard
⌈	**Ho**	165	23.3	4.9				ug/L	9	Standard
|	**Tl**	203	3382001.0	2.5	**395.9624**	2.517	0.6	ug/L	687	Standard
|	**Tl**	205	7824206.7	2.7	**386.7080**	3.213	0.8	ug/L	1624	Standard
|	**Pb**	206	2487404.7	2.8	**364.8601**	3.976	1.1	ug/L	305	Standard
|	**Pb**	207	2009306.3	7.4	**345.3557**	18.603	5.4	ug/L	231	Standard
|	**Pb**	208	9562336.9	3.6	**353.2917**	5.580	1.6	ug/L	1129	Standard
|	**U**	238	1296397.3	5.3	**89.7453**	2.963	3.3	ug/L	3	Standard
⌊>	**Bi**	209	210083.8	2.0				ug/L	405108	Standard
⌈	**Na**	23	24156.0	7.2	**9.4297**	0.203	2.2	mg/L	118	Standard
|	**Mg**	24	2715979.5	5.9	**7.0128**	0.048	0.7	mg/L	377	Standard

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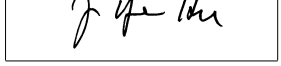

	K	39	14706655.2	6.1	**1795.1122**	27.164	1.5	mg/L	583	Standard
	Ca	43	8319.0	1.2	**28.0400**	1.235	4.4	mg/L	73	Standard
	Fe	54	709.2	10.9	**0.0269**	0.029	107.6	mg/L	785	Standard
	Fe	57	19115.4	6.0	**0.1200**	0.002	1.6	mg/L	6133	Standard
>	**Sc-1**	45	180384.6	5.6				mg/L	254529	Standard
	Cl	35	805026.0	40.6				ug/L	1641778	Standard
	Kr	83	62.0	11.2				ug/L	60	Standard
	Br	81	13662.0	1.3				ug/L	11554	Standard
	P	31	59259.3	6.0				ug/L	45410	Standard
	S	34	790019.9	9.0				ug/L	568857	Standard
	Sr	88	1532369.4	4.3				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		54.842	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		60.274	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		52.868	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		63.291	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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Report Date/Time: Thursday, May 10, 2012 11:51:55
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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

51.859

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
V 51 Upper, S, EEE	V	51	
Cr 52 Upper, S, EEE	Cr	52	
Cr 53 Upper, S, EEE	Cr	53	
Co 59 Upper, S, EEE	Co	59	
Cu 65 Upper, S, EEE	Cu	65	
Zn 66 Upper, S, EEE	Zn	66	
Cd 111 Upper, S, EEE	Cd	111	
Cd 114 Upper, S, EEE	Cd	114	
Sb 123 Upper, S, EEE	Sb	123	
Ba 135 Upper, S, EEE	Ba	135	
Tl 203 Upper, S, EEE	Tl	203	
Tl 205 Upper, S, EEE	Tl	205	
Pb 206 Upper, S, EEE	Pb	206	
Pb 207 Upper, S, EEE	Pb	207	
Pb 208 Upper, S, EEE	Pb	208	

Approved: May 11, 2012

Method 6020 - Summary Report

Sample ID: L1205022301 WG397298-01
Sample Date/Time: Thursday, May 10, 2012 12:21:57
Number of Replicates: 3
Autosampler Position: 236
Sample Description: 50
Method File: C:\NexION Data\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
	Li	7	59881.4	0.7	**6106.8219**	154.719	2.5	ug/L	12600	Standard
	Be	9	228.3	28.2	**0.0691**	0.024	34.5	ug/L	5	Standard
	Al	27	6578386.9	1.1	**513.9484**	8.576	1.7	ug/L	16102	Standard
>	Sc	45	209040.8	1.8				ug/L	254529	Standard
	Ti	47	3484.1	2.7	**2.7625**	0.123	4.4	ug/L	84	Standard
	V	51	28800.4	2.0	**2.0143**	0.031	1.6	ug/L	5785	Standard
	Cr	52	18655.5	0.5	**0.9770**	0.024	2.4	ug/L	12212	Standard
	Cr	53	6518.1	23.7	**3.1342**	1.186	37.8	ug/L	5042	Standard
	Mn	55	113792.8	2.1	**6.8124**	0.071	1.0	ug/L	1290	Standard
	Co	59	5575.4	10.1	**0.4650**	0.041	8.9	ug/L	143	Standard
	Ni	60	1657.4	5.0	**0.6496**	0.025	3.8	ug/L	79	Standard
	Cu	65	1817.4	6.6	**0.7646**	0.042	5.4	ug/L	154	Standard
	Zn	66	2578.6	0.9	**2.3825**	0.056	2.4	ug/L	194	Standard
>	Ge	72	187062.5	1.6				ug/L	232024	Standard
	As	75	43.6	103.3	**0.2734**	0.049	17.8	ug/L	-297	Standard
	Se	82	20.7	51.0	**0.0413**	0.100	242.4	ug/L	17	Standard
	Se-1	77	199.7	34.9	**1.1947**	1.108	92.7	ug/L	180	Standard
	Ga	71	164047.7	2.5				mg/L	210139	Standard
	Rb	85	8810.9	6.1				ug/L	12	Standard
>	Y	89	186330.4	0.7				ug/L	214065	Standard
	Rh	103	3.3	86.6				ug/L	0	Standard
	Mo	98	219.4	63.4	**0.0568**	0.041	72.0	ug/L	6	Standard
	Ag	107	263.0	76.2	**0.0311**	0.029	94.1	ug/L	33	Standard
	Cd	111	348.5	32.5	**0.0019**	0.030	1596.6	mg/L	437	Standard
	Cd	114	920.1	35.2	**-0.0041**	0.033	792.0	ug/L	1160	Standard
>	In	115	524713.8	1.2				ug/L	646604	Standard
	Sn	118	942.7	20.9	**0.0176**	0.015	83.0	ug/L	864	Standard
	Sb	123	683.5	62.4	**0.0734**	0.047	64.0	ug/L	18	Standard
	Ba	135	4813.8	5.6	**1.2793**	0.057	4.4	ug/L	39	Standard
	Ce	140	201218.4	0.8				ug/L	46	Standard
>	Tb	159	599786.3	1.4				ug/L	695671	Standard
	Ho	165	1264.7	3.1				ug/L	9	Standard
	Tl	203	1276.1	41.4	**0.0503**	0.035	70.4	ug/L	687	Standard
	Tl	205	2951.3	40.0	**0.0493**	0.033	67.8	ug/L	1624	Standard
	Pb	206	5444.6	7.0	**0.4431**	0.029	6.6	ug/L	305	Standard
	Pb	207	4856.1	14.0	**0.4654**	0.075	16.2	ug/L	231	Standard
	Pb	208	21084.6	3.3	**0.4319**	0.014	3.3	ug/L	1129	Standard
	U	238	1693.1	33.3	**0.0707**	0.022	31.6	ug/L	3	Standard
>	Bi	209	359891.1	1.6				ug/L	405108	Standard
	Na	23	150.0	60.8	**0.0236**	0.031	131.4	mg/L	118	Standard
	Mg	24	44739.4	5.2	**0.0989**	0.006	5.9	mg/L	377	Standard

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	K	39	1728.4	24.4	**0.1307**	0.045	34.5	mg/L	583	Standard
	Ca	43	95.0	5.3	**0.0850**	0.011	12.8	mg/L	73	Standard
	Fe	54	6986.6	2.5	**1.3690**	0.015	1.1	mg/L	785	Standard
	Fe	57	194490.5	1.6	**1.3208**	0.022	1.7	mg/L	6133	Standard
>	**Sc-1**	45	209040.8	1.8				mg/L	254529	Standard
	Cl	35	1379158.4	16.3				ug/L	1641778	Standard
	Kr	83	49.3	8.9				ug/L	60	Standard
	Br	81	8133.9	2.9				ug/L	11554	Standard
	P	31	35234.3	2.7				ug/L	45410	Standard
	S	34	545469.6	1.8				ug/L	568857	Standard
	Sr	88	5676.1	33.7				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		80.622	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		87.044	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		81.149	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		86.217	
	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

88.838

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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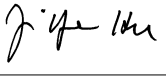

Method 6020 - Summary Report

Sample ID: L1205022302
Sample Date/Time: Thursday, May 10, 2012 12:24:50
Number of Replicates: 3
Autosampler Position: 237
Sample Description: 50
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	107582.3	0.5	**11916.4316**	363.602	3.1	ug/L	12600	Standard
|	**Be**	9	136.7	18.4	**0.0354**	0.010	27.4	ug/L	5	Standard
|	**Al**	27	9473218.3	0.6	**737.8715**	22.077	3.0	ug/L	16102	Standard
⌊>	**Sc**	45	209842.0	2.4				ug/L	254529	Standard
⌈	**Ti**	47	4244.6	1.7	**3.3391**	0.043	1.3	ug/L	84	Standard
|	**V**	51	31765.1	0.7	**2.2234**	0.042	1.9	ug/L	5785	Standard
|	**Cr**	52	23296.6	0.1	**1.4509**	0.050	3.5	ug/L	12212	Standard
|	**Cr**	53	5049.2	9.6	**2.0310**	0.286	14.1	ug/L	5042	Standard
|	**Mn**	55	175677.3	1.0	**10.4471**	0.258	2.5	ug/L	1290	Standard
|	**Co**	59	7167.4	0.7	**0.5946**	0.012	2.0	ug/L	143	Standard
|	**Ni**	60	1802.4	2.1	**0.7005**	0.013	1.9	ug/L	79	Standard
|	**Cu**	65	1660.4	2.9	**0.6863**	0.020	3.0	ug/L	154	Standard
|	**Zn**	66	2802.3	1.0	**2.5730**	0.033	1.3	ug/L	194	Standard
| >	**Ge**	72	189187.8	2.0				ug/L	232024	Standard
|	**As**	75	61.3	72.4	**0.2923**	0.048	16.3	ug/L	-297	Standard
|	**Se**	82	22.8	29.1	**0.0602**	0.068	112.1	ug/L	17	Standard
⌊	**Se-1**	77	114.0	15.6	**-0.1282**	0.230	179.7	ug/L	180	Standard
	Ga	71	166808.1	1.8				mg/L	210139	Standard
⌈	**Rb**	85	12361.7	4.0				ug/L	12	Standard
| >	**Y**	89	196249.8	2.1				ug/L	214065	Standard
⌊	**Rh**	103	3.3	173.2				ug/L	0	Standard
⌈	**Mo**	98	69.4	7.2	**0.0122**	0.001	11.5	ug/L	6	Standard
|	**Ag**	107	58.0	13.5	**0.0010**	0.001	113.2	ug/L	33	Standard
|	**Cd**	111	203.5	16.3	**-0.0382**	0.009	24.7	mg/L	437	Standard
|	**Cd**	114	576.4	5.0	**-0.0406**	0.004	8.8	ug/L	1160	Standard
| >	**In**	115	532727.0	1.2				ug/L	646604	Standard
|	**Sn**	118	520.0	5.5	**-0.0159**	0.002	11.7	ug/L	864	Standard
|	**Sb**	123	93.3	3.4	**0.0078**	0.000	5.9	ug/L	18	Standard
⌊	**Ba**	135	5471.3	1.8	**1.4338**	0.033	2.3	ug/L	39	Standard
⌈	**Ce**	140	166616.2	1.1				ug/L	46	Standard
⌊>	**Tb**	159	611375.8	0.9				ug/L	695671	Standard
⌈	**Ho**	165	1373.7	3.3				ug/L	9	Standard
|	**Tl**	203	694.0	7.5	**0.0100**	0.003	34.0	ug/L	687	Standard
|	**Tl**	205	1583.4	6.9	**0.0094**	0.003	30.3	ug/L	1624	Standard
|	**Pb**	206	7625.6	1.2	**0.6205**	0.012	2.0	ug/L	305	Standard
|	**Pb**	207	6097.9	1.6	**0.5804**	0.014	2.4	ug/L	231	Standard
|	**Pb**	208	28694.9	1.2	**0.5871**	0.010	1.8	ug/L	1129	Standard
|	**U**	238	1070.0	1.1	**0.0450**	0.001	1.5	ug/L	3	Standard
⌊>	**Bi**	209	365231.4	0.7				ug/L	405108	Standard
⌈	**Na**	23	70.0	7.1	**-0.0037**	0.001	38.1	mg/L	118	Standard
|	**Mg**	24	67118.4	1.9	**0.1482**	0.003	1.7	mg/L	377	Standard

Sample ID: L1205022302
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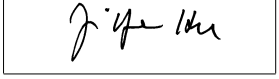

	K	39	1445.1	4.3	**0.1001**	0.006	5.9	mg/L	583	Standard
	Ca	43	80.0	16.5	**0.0399**	0.033	84.0	mg/L	73	Standard
	Fe	54	10147.1	1.9	**2.0495**	0.016	0.8	mg/L	785	Standard
	Fe	57	278296.1	1.2	**1.8979**	0.054	2.8	mg/L	6133	Standard
>	**Sc-1**	45	209842.0	2.4				mg/L	254529	Standard
	Cl	35	632837.9	34.1				ug/L	1641778	Standard
	Kr	83	48.6	15.1				ug/L	60	Standard
	Br	81	8098.0	1.1				ug/L	11554	Standard
	P	31	38802.1	0.9				ug/L	45410	Standard
	S	34	550645.6	2.3				ug/L	568857	Standard
	Sr	88	3903.8	5.8				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		81.538	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		91.678	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		82.388	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		87.883	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1205022302
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	90.157
	Na	23	
	Mg	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: L1205022302
Report Date/Time: Thursday, May 10, 2012 12:27:22
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Method 6020 - Summary Report

Sample ID: L1205022303S WG397298-04

Sample Date/Time: Thursday, May 10, 2012 12:27:42
Number of Replicates: 3
Autosampler Position: 238
Sample Description: 50
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	127358.3	2.6	**13963.2227**	439.099	3.1	ug/L	12600	Standard
|	**Be**	9	1438.4	4.6	**0.4967**	0.023	4.7	ug/L	5	Standard
|	**Al**	27	11139389.2	0.5	**846.9347**	4.245	0.5	ug/L	16102	Standard
⌊>	**Sc**	45	214901.6	0.4				ug/L	254529	Standard
⌈	**Ti**	47	4538.0	0.9	**3.5062**	0.064	1.8	ug/L	84	Standard
|	**V**	51	41344.8	2.6	**2.9205**	0.112	3.8	ug/L	5785	Standard
|	**Cr**	52	26806.0	2.0	**1.7724**	0.081	4.6	ug/L	12212	Standard
|	**Cr**	53	5165.9	6.5	**2.0467**	0.198	9.7	ug/L	5042	Standard
|	**Mn**	55	134585.9	2.0	**7.8318**	0.228	2.9	ug/L	1290	Standard
|	**Co**	59	11789.6	2.4	**0.9659**	0.032	3.3	ug/L	143	Standard
|	**Ni**	60	3304.7	1.4	**1.2795**	0.026	2.0	ug/L	79	Standard
|	**Cu**	65	3120.7	4.0	**1.3081**	0.066	5.1	ug/L	154	Standard
|	**Zn**	66	3131.3	1.7	**2.8384**	0.080	2.8	ug/L	194	Standard
| >	**Ge**	72	192794.2	0.9				ug/L	232024	Standard
|	**As**	75	499.8	9.1	**0.7545**	0.052	6.9	ug/L	-297	Standard
|	**Se**	82	74.0	11.3	**0.5370**	0.083	15.5	ug/L	17	Standard
⌊	**Se-1**	77	141.7	19.8	**0.2449**	0.392	160.2	ug/L	180	Standard
	Ga	71	170601.1	0.7				mg/L	210139	Standard
⌈	**Rb**	85	15045.8	5.7				ug/L	12	Standard
| >	**Y**	89	192358.4	0.8				ug/L	214065	Standard
⌊	**Rh**	103	5.0	100.0				ug/L	0	Standard
⌈	**Mo**	98	70.6	9.1	**0.0121**	0.002	14.2	ug/L	6	Standard
|	**Ag**	107	3022.3	0.2	**0.4221**	0.005	1.1	ug/L	33	Standard
|	**Cd**	111	1929.6	1.8	**0.4147**	0.004	0.9	mg/L	437	Standard
|	**Cd**	114	5310.1	1.0	**0.4353**	0.009	2.1	ug/L	1160	Standard
| >	**In**	115	543481.1	1.1				ug/L	646604	Standard
|	**Sn**	118	576.7	2.1	**-0.0124**	0.001	10.9	ug/L	864	Standard
|	**Sb**	123	155.6	4.2	**0.0143**	0.001	3.7	ug/L	18	Standard
⌊	**Ba**	135	7847.0	0.5	**2.0189**	0.015	0.8	ug/L	39	Standard
⌈	**Ce**	140	167842.5	0.6				ug/L	46	Standard
⌊>	**Tb**	159	617977.6	0.8				ug/L	695671	Standard
⌈	**Ho**	165	1411.1	2.8				ug/L	9	Standard
|	**Tl**	203	7089.3	0.6	**0.4309**	0.003	0.8	ug/L	687	Standard
|	**Tl**	205	16722.6	0.7	**0.4300**	0.003	0.6	ug/L	1624	Standard
|	**Pb**	206	11707.2	3.3	**0.9443**	0.029	3.1	ug/L	305	Standard
|	**Pb**	207	9747.5	1.3	**0.9215**	0.013	1.5	ug/L	231	Standard
|	**Pb**	208	45209.6	2.2	**0.9181**	0.017	1.9	ug/L	1129	Standard
|	**U**	238	11201.5	3.6	**0.4393**	0.014	3.2	ug/L	3	Standard
⌊>	**Bi**	209	372965.7	0.5				ug/L	405108	Standard
⌈	**Na**	23	73.3	17.2	**-0.0031**	0.004	134.0	mg/L	118	Standard
|	**Mg**	24	83018.5	1.1	**0.1791**	0.001	0.7	mg/L	377	Standard

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	K	39	1585.1	7.0	**0.1109**	0.012	10.4	mg/L	583	Standard
	Ca	43	73.3	3.9	**0.0159**	0.008	53.2	mg/L	73	Standard
	Fe	54	9313.1	1.9	**1.8209**	0.046	2.5	mg/L	785	Standard
	Fe	57	257793.3	1.6	**1.7128**	0.035	2.0	mg/L	6133	Standard
>	**Sc-1**	45	214901.6	0.4				mg/L	254529	Standard
	Cl	35	597647.5	25.4				ug/L	1641778	Standard
	Kr	83	49.1	4.0				ug/L	60	Standard
	Br	81	8371.5	1.2				ug/L	11554	Standard
	P	31	39399.5	2.2				ug/L	45410	Standard
	S	34	534576.2	0.3				ug/L	568857	Standard
	Sr	88	4525.7	3.1				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		83.093	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		89.860	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		84.052	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		88.832	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	92.066
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1205022303S WG397298-04
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Method 6020 - Summary Report

Sample ID: L1205022304SD WG397298-05

Sample Date/Time: Thursday, May 10, 2012 12:30:34
Number of Replicates: 3
Autosampler Position: 239
Sample Description: 50
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	38229.8	0.7	**3469.7208**	69.733	2.0	ug/L	12600	Standard
|	**Be**	9	1360.1	3.2	**0.4847**	0.013	2.7	ug/L	5	Standard
|	**Al**	27	3428119.2	2.1	**268.6638**	3.406	1.3	ug/L	16102	Standard
⌊>	**Sc**	45	208050.4	0.8				ug/L	254529	Standard
⌈	**Ti**	47	2513.9	2.0	**1.9561**	0.032	1.7	ug/L	84	Standard
|	**V**	51	19634.3	1.6	**1.2660**	0.018	1.4	ug/L	5785	Standard
|	**Cr**	52	16816.0	1.8	**0.7609**	0.030	3.9	ug/L	12212	Standard
|	**Cr**	53	3331.2	8.2	**0.8279**	0.205	24.7	ug/L	5042	Standard
|	**Mn**	55	156426.7	1.2	**9.3084**	0.081	0.9	ug/L	1290	Standard
|	**Co**	59	10116.7	1.5	**0.8449**	0.008	0.9	ug/L	143	Standard
|	**Ni**	60	1971.8	2.1	**0.7701**	0.019	2.5	ug/L	79	Standard
|	**Cu**	65	1813.8	1.6	**0.7558**	0.010	1.4	ug/L	154	Standard
|	**Zn**	66	2384.2	2.2	**2.1672**	0.056	2.6	ug/L	194	Standard
| >	**Ge**	72	188821.6	0.6				ug/L	232024	Standard
|	**As**	75	350.4	3.5	**0.6042**	0.012	2.0	ug/L	-297	Standard
|	**Se**	82	75.2	8.6	**0.5629**	0.061	10.8	ug/L	17	Standard
⌊	**Se-1**	77	132.3	8.7	**0.1517**	0.178	117.6	ug/L	180	Standard
	Ga	71	165642.6	1.2				mg/L	210139	Standard
⌈	**Rb**	85	5274.3	6.3				ug/L	12	Standard
| >	**Y**	89	182671.4	1.7				ug/L	214065	Standard
⌊	**Rh**	103	1.7	173.2				ug/L	0	Standard
⌈	**Mo**	98	48.4	4.1	**0.0062**	0.001	11.5	ug/L	6	Standard
|	**Ag**	107	2976.6	3.5	**0.4284**	0.018	4.3	ug/L	33	Standard
|	**Cd**	111	1843.7	0.8	**0.4068**	0.006	1.4	mg/L	437	Standard
|	**Cd**	114	5167.0	1.2	**0.4366**	0.010	2.3	ug/L	1160	Standard
| >	**In**	115	527571.2	1.5				ug/L	646604	Standard
|	**Sn**	118	829.0	9.9	**0.0084**	0.005	63.8	ug/L	864	Standard
|	**Sb**	123	485.8	4.4	**0.0514**	0.002	3.1	ug/L	18	Standard
⌊	**Ba**	135	4667.4	0.8	**1.2339**	0.013	1.0	ug/L	39	Standard
⌈	**Ce**	140	68478.1	1.6				ug/L	46	Standard
⌊>	**Tb**	159	600818.0	1.6				ug/L	695671	Standard
⌈	**Ho**	165	624.7	2.3				ug/L	9	Standard
|	**Tl**	203	7039.3	1.8	**0.4422**	0.011	2.5	ug/L	687	Standard
|	**Tl**	205	16274.1	0.5	**0.4318**	0.005	1.1	ug/L	1624	Standard
|	**Pb**	206	8104.8	1.4	**0.6677**	0.012	1.7	ug/L	305	Standard
|	**Pb**	207	6839.2	1.1	**0.6605**	0.010	1.5	ug/L	231	Standard
|	**Pb**	208	31569.2	1.2	**0.6548**	0.008	1.2	ug/L	1129	Standard
|	**U**	238	10305.8	0.5	**0.4171**	0.004	1.0	ug/L	3	Standard
⌊>	**Bi**	209	361610.1	0.7				ug/L	405108	Standard
⌈	**Na**	23	68.3	48.7	**-0.0041**	0.011	273.3	mg/L	118	Standard
|	**Mg**	24	24736.8	0.5	**0.0545**	0.000	0.4	mg/L	377	Standard

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	K	39	891.7	11.5	**0.0428**	0.011	26.5	mg/L	583	Standard
	Ca	43	65.0	13.3	**-0.0016**	0.027	1652.2	mg/L	73	Standard
	Fe	54	3742.3	3.5	**0.6660**	0.022	3.2	mg/L	785	Standard
	Fe	57	90697.3	0.6	**0.6006**	0.005	0.9	mg/L	6133	Standard
>	**Sc-1**	45	208050.4	0.8				mg/L	254529	Standard
	Cl	35	485134.5	41.2				ug/L	1641778	Standard
	Kr	83	46.9	16.4				ug/L	60	Standard
	Br	81	8456.5	3.9				ug/L	11554	Standard
	P	31	32489.8	1.2				ug/L	45410	Standard
	S	34	511735.0	3.0				ug/L	568857	Standard
	Sr	88	1725.1	3.6				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		81.380	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		85.335	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		81.591	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		86.365	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	89.263
	Na	23	
	Mg	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: L1205022304SD WG397298-05
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Method 6020 - Summary Report

Sample ID: L1205022306
Sample Date/Time: Thursday, May 10, 2012 12:33:27
Number of Replicates: 3
Autosampler Position: 240
Sample Description: 50
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	44072.3	0.2	**4047.9583**	36.389	0.9	ug/L	12600	Standard
|	**Be**	9	191.7	1.5	**0.0541**	0.001	1.3	ug/L	5	Standard
|	**Al**	27	5678376.4	1.5	**433.8904**	5.501	1.3	ug/L	16102	Standard
⌊>	**Sc**	45	213640.7	0.8				ug/L	254529	Standard
⌈	**Ti**	47	1858.4	0.9	**1.3605**	0.026	1.9	ug/L	84	Standard
|	**V**	51	21227.3	1.4	**1.3138**	0.034	2.6	ug/L	5785	Standard
|	**Cr**	52	17331.2	2.5	**0.7293**	0.043	5.8	ug/L	12212	Standard
|	**Cr**	53	3234.5	8.3	**0.6530**	0.196	30.1	ug/L	5042	Standard
|	**Mn**	55	608780.3	1.1	**34.7665**	0.702	2.0	ug/L	1290	Standard
|	**Co**	59	9496.0	0.5	**0.7549**	0.011	1.5	ug/L	143	Standard
|	**Ni**	60	1560.1	2.5	**0.5749**	0.015	2.6	ug/L	79	Standard
|	**Cu**	65	2248.2	0.4	**0.9021**	0.012	1.4	ug/L	154	Standard
|	**Zn**	66	4982.8	2.2	**4.4923**	0.127	2.8	ug/L	194	Standard
| >	**Ge**	72	198086.5	1.0				ug/L	232024	Standard
|	**As**	75	127.4	21.6	**0.3576**	0.029	8.2	ug/L	-297	Standard
|	**Se**	82	22.6	9.6	**0.0480**	0.019	40.2	ug/L	17	Standard
⌊	**Se-1**	77	109.0	18.0	**-0.2712**	0.289	106.5	ug/L	180	Standard
	Ga	71	172053.8	1.3				mg/L	210139	Standard
⌈	**Rb**	85	9001.0	2.4				ug/L	12	Standard
| >	**Y**	89	198603.5	2.1				ug/L	214065	Standard
⌊	**Rh**	103	5.0	100.0				ug/L	0	Standard
⌈	**Mo**	98	107.0	17.5	**0.0223**	0.005	23.8	ug/L	6	Standard
|	**Ag**	107	52.0	14.5	**-0.0001**	0.001	1936.6	ug/L	33	Standard
|	**Cd**	111	257.4	4.3	**-0.0257**	0.004	15.0	mg/L	437	Standard
|	**Cd**	114	740.6	3.7	**-0.0259**	0.004	15.3	ug/L	1160	Standard
| >	**In**	115	548114.9	1.7				ug/L	646604	Standard
|	**Sn**	118	587.3	3.1	**-0.0120**	0.002	17.1	ug/L	864	Standard
|	**Sb**	123	73.5	18.0	**0.0054**	0.001	26.1	ug/L	18	Standard
⌊	**Ba**	135	9745.8	1.4	**2.4882**	0.034	1.4	ug/L	39	Standard
⌈	**Ce**	140	152631.7	1.2				ug/L	46	Standard
⌊>	**Tb**	159	621561.8	0.8				ug/L	695671	Standard
⌈	**Ho**	165	1769.8	3.4				ug/L	9	Standard
|	**Tl**	203	568.0	20.5	**0.0009**	0.008	843.1	ug/L	687	Standard
|	**Tl**	205	1340.1	18.9	**0.0019**	0.007	372.2	ug/L	1624	Standard
|	**Pb**	206	12890.1	1.3	**1.0470**	0.019	1.9	ug/L	305	Standard
|	**Pb**	207	10711.1	1.8	**1.0194**	0.011	1.1	ug/L	231	Standard
|	**Pb**	208	49529.1	1.1	**1.0127**	0.010	1.0	ug/L	1129	Standard
|	**U**	238	827.0	4.6	**0.0348**	0.002	4.8	ug/L	3	Standard
⌊>	**Bi**	209	371307.1	0.8				ug/L	405108	Standard
⌈	**Na**	23	76.7	24.7	**-0.0019**	0.006	315.2	mg/L	118	Standard
|	**Mg**	24	56910.0	1.4	**0.1232**	0.002	1.8	mg/L	377	Standard

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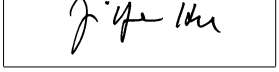

	K	39	1166.7	5.1	**0.0687**	0.005	7.8	mg/L	583	Standard
	Ca	43	116.7	27.9	**0.1414**	0.095	67.4	mg/L	73	Standard
	Fe	54	5466.5	2.4	**1.0123**	0.031	3.1	mg/L	785	Standard
	Fe	57	143328.1	1.4	**0.9427**	0.013	1.4	mg/L	6133	Standard
>	**Sc-1**	45	213640.7	0.8				mg/L	254529	Standard
	Cl	35	450186.0	40.4				ug/L	1641778	Standard
	Kr	83	45.9	1.1				ug/L	60	Standard
	Br	81	8957.6	3.8				ug/L	11554	Standard
	P	31	62654.3	1.8				ug/L	45410	Standard
	S	34	532343.3	1.5				ug/L	568857	Standard
	Sr	88	6776.5	2.3				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		85.373	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		92.777	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		84.768	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		89.347	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	91.656
	Na	23	
	Mg	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 11, 2012

Method 6020 - Summary Report

Sample ID: L1205022306PS WG397362-01
Sample Date/Time: Thursday, May 10, 2012 12:36:20
Number of Replicates: 3
Autosampler Position: 241
Sample Description: 50
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	55638.7	3.8	**4780.2631**	62.145	1.3	ug/L	12600	Standard
|	**Be**	9	184559.3	2.3	**59.4994**	1.569	2.6	ug/L	5	Standard
|	**Al**	27	8067231.8	2.1	**556.4115**	17.299	3.1	ug/L	16102	Standard
⌊>	**Sc**	45	237003.7	4.8				ug/L	254529	Standard
⌈	**Ti**	47	2441.9	1.6	**1.7097**	0.025	1.5	ug/L	84	Standard
|	**V**	51	847518.1	2.5	**60.4278**	1.129	1.9	ug/L	5785	Standard
|	**Cr**	52	637091.7	2.7	**60.6274**	1.247	2.1	ug/L	12212	Standard
|	**Cr**	53	99632.4	1.4	**62.0740**	0.849	1.4	ug/L	5042	Standard
|	**Mn**	55	1898221.9	1.8	**102.9258**	1.642	1.6	ug/L	1290	Standard
|	**Co**	59	815879.7	2.5	**62.3085**	1.130	1.8	ug/L	143	Standard
|	**Ni**	60	173455.3	2.6	**63.0904**	1.336	2.1	ug/L	79	Standard
|	**Cu**	65	161132.2	2.1	**64.6197**	0.860	1.3	ug/L	154	Standard
|	**Zn**	66	78536.4	2.1	**69.5680**	1.003	1.4	ug/L	194	Standard
| >	**Ge**	72	208942.6	1.0				ug/L	232024	Standard
|	**As**	75	67583.8	2.3	**66.0712**	0.926	1.4	ug/L	-297	Standard
|	**Se**	82	8049.6	2.5	**69.6093**	1.100	1.6	ug/L	17	Standard
⌊	**Se-1**	77	5233.6	3.1	**68.6555**	1.520	2.2	ug/L	180	Standard
	Ga	71	186742.1	2.1				mg/L	210139	Standard
⌈	**Rb**	85	12340.0	1.2				ug/L	12	Standard
| >	**Y**	89	213163.5	3.4				ug/L	214065	Standard
⌊	**Rh**	103	36.7	64.4				ug/L	0	Standard
⌈	**Mo**	98	295.8	3.4	**0.0721**	0.005	6.2	ug/L	6	Standard
|	**Ag**	107	477359.7	2.8	**64.0145**	0.774	1.2	ug/L	33	Standard
|	**Cd**	111	250176.7	2.0	**62.0315**	1.131	1.8	mg/L	437	Standard
|	**Cd**	114	666981.8	1.7	**63.3773**	1.551	2.4	ug/L	1160	Standard
| >	**In**	115	575915.6	3.7				ug/L	646604	Standard
|	**Sn**	118	1221.0	7.8	**0.0309**	0.006	20.0	ug/L	864	Standard
|	**Sb**	123	604036.3	1.8	**61.4050**	1.194	1.9	ug/L	18	Standard
⌊	**Ba**	135	271672.1	2.3	**66.2404**	0.956	1.4	ug/L	39	Standard
⌈	**Ce**	140	190008.9	1.9				ug/L	46	Standard
⌊>	**Tb**	159	647898.4	4.4				ug/L	695671	Standard
⌈	**Ho**	165	2173.5	2.6				ug/L	9	Standard
|	**Tl**	203	939578.1	2.1	**59.7169**	0.646	1.1	ug/L	687	Standard
|	**Tl**	205	2365016.3	2.6	**63.4530**	0.542	0.9	ug/L	1624	Standard
|	**Pb**	206	766408.3	2.1	**61.0437**	0.937	1.5	ug/L	305	Standard
|	**Pb**	207	674122.6	2.3	**62.9510**	0.730	1.2	ug/L	231	Standard
|	**Pb**	208	3065271.3	2.3	**61.4982**	0.603	1.0	ug/L	1129	Standard
|	**U**	238	1486905.9	1.3	**55.9434**	1.383	2.5	ug/L	3	Standard
⌊>	**Bi**	209	386906.5	3.1				ug/L	405108	Standard
⌈	**Na**	23	96.7	29.4	**0.0013**	0.007	544.0	mg/L	118	Standard
|	**Mg**	24	71866.8	3.5	**0.1405**	0.002	1.7	mg/L	377	Standard

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	K	39	1261.7	3.8	**0.0657**	0.001	2.1	mg/L	583	Standard
	Ca	43	140.0	18.9	**0.1701**	0.078	45.6	mg/L	73	Standard
	Fe	54	6730.6	2.6	**1.1416**	0.049	4.3	mg/L	785	Standard
	Fe	57	181614.2	2.9	**1.0824**	0.022	2.0	mg/L	6133	Standard
>	**Sc-1**	45	237003.7	4.8				mg/L	254529	Standard
	Cl	35	448391.9	40.8				ug/L	1641778	Standard
	Kr	83	49.3	6.4				ug/L	60	Standard
	Br	81	10008.3	2.1				ug/L	11554	Standard
	P	31	77955.3	4.7				ug/L	45410	Standard
	S	34	557743.2	1.5				ug/L	568857	Standard
	Sr	88	8749.2	3.1				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		90.052	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		99.579	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		89.068	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		93.133	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	95.507
	Na	23	
	Mg	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: L1205022306SDL WG397362-02
Sample Date/Time: Thursday, May 10, 2012 12:48:44
Number of Replicates: 3
Autosampler Position: 242
Sample Description: 250
Method File: C:\NexION Data\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	16647.5	4.5	**779.2677**	47.238	6.1	ug/L	12600	Standard
|	**Be**	9	41.7	38.6	**0.0006**	0.006	902.0	ug/L	5	Standard
|	**Al**	27	1127241.0	2.3	**86.6495**	1.633	1.9	ug/L	16102	Standard
⌊>	**Sc**	45	210922.8	3.9				ug/L	254529	Standard
⌈	**Ti**	47	405.7	6.9	**0.2475**	0.015	6.1	ug/L	84	Standard
|	**V**	51	7333.6	5.6	**0.2613**	0.022	8.4	ug/L	5785	Standard
|	**Cr**	52	9761.1	2.8	**-0.0476**	0.004	7.9	ug/L	12212	Standard
|	**Cr**	53	3999.7	28.8	**1.1527**	0.748	64.9	ug/L	5042	Standard
|	**Mn**	55	117373.0	1.8	**6.6085**	0.075	1.1	ug/L	1290	Standard
|	**Co**	59	1905.1	4.6	**0.1426**	0.004	2.6	ug/L	143	Standard
|	**Ni**	60	422.0	7.4	**0.1375**	0.011	8.1	ug/L	79	Standard
|	**Cu**	65	626.3	4.6	**0.2143**	0.006	2.7	ug/L	154	Standard
|	**Zn**	66	3123.3	4.6	**2.7377**	0.069	2.5	ug/L	194	Standard
| >	**Ge**	72	198857.0	2.5				ug/L	232024	Standard
|	**As**	75	-174.3	21.4	**0.0479**	0.038	79.6	ug/L	-297	Standard
|	**Se**	82	14.3	34.8	**-0.0289**	0.043	150.3	ug/L	17	Standard
⌊	**Se-1**	77	159.3	21.4	**0.4314**	0.461	106.8	ug/L	180	Standard
	Ga	71	173958.0	2.6				mg/L	210139	Standard
⌈	**Rb**	85	1726.8	13.2				ug/L	12	Standard
| >	**Y**	89	183847.7	3.0				ug/L	214065	Standard
⌊	**Rh**	103	1.7	173.2				ug/L	0	Standard
⌈	**Mo**	98	24.1	23.9	**-0.0013**	0.002	124.3	ug/L	6	Standard
|	**Ag**	107	33.3	14.2	**-0.0026**	0.001	25.0	ug/L	33	Standard
|	**Cd**	111	106.3	12.0	**-0.0648**	0.003	5.4	mg/L	437	Standard
|	**Cd**	114	297.1	4.6	**-0.0700**	0.002	2.3	ug/L	1160	Standard
| >	**In**	115	542911.5	1.1				ug/L	646604	Standard
|	**Sn**	118	457.3	8.2	**-0.0214**	0.003	12.9	ug/L	864	Standard
|	**Sb**	123	147.4	12.2	**0.0134**	0.002	14.4	ug/L	18	Standard
⌊	**Ba**	135	1872.4	1.0	**0.4760**	0.009	1.9	ug/L	39	Standard
⌈	**Ce**	140	28939.3	0.9				ug/L	46	Standard
⌊>	**Tb**	159	605259.7	1.7				ug/L	695671	Standard
⌈	**Ho**	165	327.7	3.7				ug/L	9	Standard
|	**Tl**	203	540.7	15.7	**-0.0007**	0.006	775.2	ug/L	687	Standard
|	**Tl**	205	1311.1	9.0	**0.0013**	0.004	272.7	ug/L	1624	Standard
|	**Pb**	206	2724.6	2.9	**0.2043**	0.003	1.5	ug/L	305	Standard
|	**Pb**	207	2229.5	4.1	**0.1952**	0.006	2.9	ug/L	231	Standard
|	**Pb**	208	10418.1	1.8	**0.1961**	0.001	0.4	ug/L	1129	Standard
|	**U**	238	154.3	8.0	**0.0085**	0.000	4.9	ug/L	3	Standard
⌊>	**Bi**	209	369304.6	1.6				ug/L	405108	Standard
⌈	**Na**	23	68.3	11.2	**-0.0043**	0.003	65.9	mg/L	118	Standard
|	**Mg**	24	11404.3	1.9	**0.0243**	0.001	2.2	mg/L	377	Standard

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	K	39	786.7	4.7	**0.0307**	0.006	18.9	mg/L	583	Standard
	Ca	43	95.0	19.0	**0.0818**	0.045	54.6	mg/L	73	Standard
	Fe	54	1337.0	3.6	**0.1357**	0.010	7.5	mg/L	785	Standard
	Fe	57	30592.5	2.5	**0.1770**	0.005	2.9	mg/L	6133	Standard
>	**Sc-1**	45	210922.8	3.9				mg/L	254529	Standard
	Cl	35	979153.5	45.7				ug/L	1641778	Standard
	Kr	83	50.7	14.9				ug/L	60	Standard
	Br	81	8739.2	3.4				ug/L	11554	Standard
	P	31	25160.1	6.3				ug/L	45410	Standard
	S	34	533441.3	3.1				ug/L	568857	Standard
	Sr	88	1361.7	5.1				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		85.706	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		85.884	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		83.964	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		87.004	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	91.162
	Na	23	
	Mg	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 10, 2012 12:51:40
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	11881.3	1.2	**-33.9569**	14.857	43.8	ug/L	12600	Standard
|	**Be**	9	155298.7	1.9	**47.1435**	1.415	3.0	ug/L	5	Standard
|	**Al**	27	810913.8	3.3	**51.9208**	0.910	1.8	ug/L	16102	Standard
⌊>	**Sc**	45	251560.2	2.3				ug/L	254529	Standard
⌈	**Ti**	47	146813.4	3.3	**101.1016**	1.647	1.6	ug/L	84	Standard
|	**V**	51	733575.6	3.8	**49.6331**	0.885	1.8	ug/L	5785	Standard
|	**Cr**	52	544003.2	2.7	**48.9893**	0.476	1.0	ug/L	12212	Standard
|	**Cr**	53	85702.6	2.7	**50.4540**	1.174	2.3	ug/L	5042	Standard
|	**Mn**	55	984264.6	1.7	**50.6640**	0.144	0.3	ug/L	1290	Standard
|	**Co**	59	712219.0	2.7	**51.6776**	0.772	1.5	ug/L	143	Standard
|	**Ni**	60	149622.0	2.0	**51.7054**	0.496	1.0	ug/L	79	Standard
|	**Cu**	65	134891.8	2.9	**51.3839**	0.540	1.1	ug/L	154	Standard
|	**Zn**	66	59707.8	1.6	**50.2079**	0.538	1.1	ug/L	194	Standard
| >	**Ge**	72	219917.9	2.0				ug/L	232024	Standard
|	**As**	75	55212.5	1.9	**51.3406**	0.534	1.0	ug/L	-297	Standard
|	**Se**	82	6369.8	2.5	**52.3029**	1.072	2.0	ug/L	17	Standard
⌊	**Se-1**	77	4149.6	3.5	**51.2803**	1.741	3.4	ug/L	180	Standard
	Ga	71	196507.3	3.2				mg/L	210139	Standard
⌈	**Rb**	85	960.0	5.6				ug/L	12	Standard
| >	**Y**	89	209900.7	1.0				ug/L	214065	Standard
⌊	**Rh**	103	36.7	47.9				ug/L	0	Standard
⌈	**Mo**	98	402596.1	1.4	**104.8362**	0.656	0.6	ug/L	6	Standard
|	**Ag**	107	397061.6	1.6	**51.1040**	0.476	0.9	ug/L	33	Standard
|	**Cd**	111	207169.1	0.7	**49.2761**	0.317	0.6	mg/L	437	Standard
|	**Cd**	114	544990.4	0.4	**49.6693**	0.280	0.6	ug/L	1160	Standard
| >	**In**	115	599877.4	0.9				ug/L	646604	Standard
|	**Sn**	118	730032.8	0.9	**49.7895**	0.170	0.3	ug/L	864	Standard
|	**Sb**	123	508405.0	1.2	**49.5944**	0.339	0.7	ug/L	18	Standard
⌊	**Ba**	135	221696.6	1.0	**51.8756**	0.144	0.3	ug/L	39	Standard
⌈	**Ce**	140	867.7	1.2				ug/L	46	Standard
⌊>	**Tb**	159	689428.8	1.9				ug/L	695671	Standard
⌈	**Ho**	165	18.7	6.2				ug/L	9	Standard
|	**Tl**	203	795534.2	2.2	**50.8295**	0.260	0.5	ug/L	687	Standard
|	**Tl**	205	1856659.5	2.3	**50.0798**	0.395	0.8	ug/L	1624	Standard
|	**Pb**	206	634860.8	2.4	**50.8316**	0.071	0.1	ug/L	305	Standard
|	**Pb**	207	538176.9	2.0	**50.5251**	0.219	0.4	ug/L	231	Standard
|	**Pb**	208	2487273.8	2.2	**50.1692**	0.127	0.3	ug/L	1129	Standard
|	**U**	238	1253718.7	2.4	**47.4135**	0.568	1.2	ug/L	3	Standard
⌊>	**Bi**	209	384758.2	2.4				ug/L	405108	Standard
⌈	**Na**	23	18050.7	1.7	**5.0435**	0.035	0.7	mg/L	118	Standard
|	**Mg**	24	2724951.6	0.8	**5.0479**	0.154	3.0	mg/L	377	Standard

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	K	39	59369.5	2.4	**5.1465**	0.111	2.2	mg/L	583	Standard
	Ca	43	2201.8	4.8	**5.1550**	0.141	2.7	mg/L	73	Standard
	Fe	54	32370.1	2.6	**5.7077**	0.028	0.5	mg/L	785	Standard
	Fe	57	884957.4	2.9	**5.0885**	0.032	0.6	mg/L	6133	Standard
>	**Sc-1**	45	251560.2	2.3				mg/L	254529	Standard
	Cl	35	776460.9	21.6				ug/L	1641778	Standard
	Kr	83	56.6	11.9				ug/L	60	Standard
	Br	81	10905.6	1.5				ug/L	11554	Standard
	P	31	60253.8	2.9				ug/L	45410	Standard
	S	34	690987.1	1.7				ug/L	568857	Standard
	Sr	88	638.3	10.7				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	103.842		
>	Sc	45			
	Ti	47	101.102		
	V	51	99.266		
	Cr	52	97.979		
	Cr	53			
	Mn	55	101.328		
	Co	59	103.355		
	Ni	60	103.411		
	Cu	65	102.768		
	Zn	66	100.416		
>	Ge	72		94.783	
	As	75	102.681		
	Se	82	104.606		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		98.055	
	Rh	103			
	Mo	98	104.836		
	Ag	107	102.208		
	Cd	111	98.552		
	Cd	114			
>	In	115		92.774	
	Sn	118	99.579		
	Sb	123	99.189		
	Ba	135	103.751		
	Ce	140			
>	Tb	159		99.103	
	Ho	165			
	Tl	203	101.659		
	Tl	205			
	Pb	206	101.663		

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	Pb	207	101.050	
	Pb	208	100.338	
	U	238	94.827	
>	Bi	209		94.977
	Na	23	100.869	
	Mg	24	100.957	
	K	39	102.929	
	Ca	43	103.100	
	Fe	54	114.153	
	Fe	57	101.771	
>	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	54	

Sample ID: QC Std 6
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Method 6020 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, May 10, 2012 12:54:33
Number of Replicates: 3
Autosampler Position: 102
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	11322.6	2.8	**2.2464**	29.511	1313.7	ug/L	12600	Standard
|	**Be**	9	13.3	142.0	**-0.0101**	0.006	59.8	ug/L	5	Standard
|	**Al**	27	13064.0	2.3	**0.1243**	0.034	27.1	ug/L	16102	Standard
⌊>	**Sc**	45	232758.1	2.2				ug/L	254529	Standard
⌈	**Ti**	47	79.0	12.1	**-0.0058**	0.007	117.7	ug/L	84	Standard
|	**V**	51	3860.8	1.6	**-0.0216**	0.001	2.4	ug/L	5785	Standard
|	**Cr**	52	9971.3	1.7	**-0.1017**	0.003	2.6	ug/L	12212	Standard
|	**Cr**	53	1827.6	11.3	**-0.3904**	0.139	35.7	ug/L	5042	Standard
|	**Mn**	55	1213.7	6.4	**-0.0208**	0.005	21.7	ug/L	1290	Standard
|	**Co**	59	144.3	11.8	**0.0005**	0.001	288.4	ug/L	143	Standard
|	**Ni**	60	67.3	14.7	**-0.0001**	0.003	5486.3	ug/L	79	Standard
|	**Cu**	65	141.3	10.3	**0.0054**	0.006	113.6	ug/L	154	Standard
|	**Zn**	66	180.0	4.3	**-0.0205**	0.006	30.7	ug/L	194	Standard
|>	**Ge**	72	214857.6	1.6				ug/L	232024	Standard
|	**As**	75	-198.2	11.4	**0.0383**	0.024	63.1	ug/L	-297	Standard
|	**Se**	82	23.0	19.0	**0.0349**	0.035	99.8	ug/L	17	Standard
⌊	**Se-1**	77	102.3	16.1	**-0.4788**	0.231	48.3	ug/L	180	Standard
	Ga	71	193379.5	1.8				mg/L	210139	Standard
⌈	**Rb**	85	11.7	49.5				ug/L	12	Standard
|>	**Y**	89	208374.9	1.2				ug/L	214065	Standard
⌊	**Rh**	103	3.3	173.2				ug/L	0	Standard
⌈	**Mo**	98	74.2	67.1	**0.0114**	0.013	114.0	ug/L	6	Standard
|	**Ag**	107	71.3	29.1	**0.0020**	0.003	135.3	ug/L	33	Standard
|	**Cd**	111	433.2	1.8	**0.0122**	0.003	20.8	mg/L	437	Standard
|	**Cd**	114	1057.5	4.1	**-0.0017**	0.003	195.0	ug/L	1160	Standard
|>	**In**	115	589647.1	0.7				ug/L	646604	Standard
|	**Sn**	118	851.7	4.9	**0.0032**	0.003	77.2	ug/L	864	Standard
|	**Sb**	123	250.0	31.3	**0.0223**	0.008	33.9	ug/L	18	Standard
⌊	**Ba**	135	50.3	14.9	**0.0038**	0.002	45.2	ug/L	39	Standard
⌈	**Ce**	140	49.0	14.3				ug/L	46	Standard
⌊>	**Tb**	159	657030.0	1.2				ug/L	695671	Standard
⌈	**Ho**	165	5.7	56.7				ug/L	9	Standard
|	**Tl**	203	535.7	32.9	**-0.0021**	0.011	534.8	ug/L	687	Standard
|	**Tl**	205	1168.0	26.7	**-0.0038**	0.009	226.7	ug/L	1624	Standard
|	**Pb**	206	306.3	7.7	**0.0017**	0.002	114.6	ug/L	305	Standard
|	**Pb**	207	271.3	14.2	**0.0028**	0.004	129.8	ug/L	231	Standard
|	**Pb**	208	1216.0	14.7	**0.0018**	0.004	201.3	ug/L	1129	Standard
|	**U**	238	63.3	58.9	**0.0048**	0.001	29.5	ug/L	3	Standard
⌊>	**Bi**	209	381226.6	0.8				ug/L	405108	Standard
⌈	**Na**	23	86.7	17.6	**-0.0009**	0.005	558.8	mg/L	118	Standard
|	**Mg**	24	511.7	17.2	**0.0002**	0.000	98.6	mg/L	377	Standard

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	K	39	658.3	9.0	**0.0107**	0.006	54.5	mg/L	583	Standard
	Ca	43	80.0	6.3	**0.0173**	0.012	67.1	mg/L	73	Standard
	Fe	54	880.3	9.5	**0.0189**	0.015	76.9	mg/L	785	Standard
	Fe	57	4352.3	3.4	**-0.0071**	0.001	20.7	mg/L	6133	Standard
>	**Sc-1**	45	232758.1	2.2				mg/L	254529	Standard
	Cl	35	628898.4	33.6				ug/L	1641778	Standard
	Kr	83	53.2	7.3				ug/L	60	Standard
	Br	81	10710.5	4.5				ug/L	11554	Standard
	P	31	55473.9	1.7				ug/L	45410	Standard
	S	34	661906.0	3.1				ug/L	568857	Standard
	Sr	88	241.7	6.0				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		92.602	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		97.342	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		91.191	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		94.445	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	94.105
	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

Sample ID: QC Std 7
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Approved: May 11, 2012

Method 6020 - Summary Report

Sample ID: PBW 15 WG397022-03
Sample Date/Time: Thursday, May 10, 2012 12:57:28
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	11609.4	3.6	**-0.4264**	49.331	11570.6	ug/L	12600	Standard
	Be	9	8.3	34.6	**-0.0118**	0.001	7.1	ug/L	5	Standard
	Al	27	8867.6	1.8	**-0.1874**	0.021	11.1	ug/L	16102	Standard
>	Sc	45	239384.6	5.2				ug/L	254529	Standard
	Ti	47	80.0	15.6	**-0.0049**	0.008	165.4	ug/L	84	Standard
	V	51	3662.3	3.7	**-0.0345**	0.006	18.8	ug/L	5785	Standard
	Cr	52	10034.0	0.4	**-0.0920**	0.017	18.7	ug/L	12212	Standard
	Cr	53	1758.4	8.2	**-0.4297**	0.094	21.9	ug/L	5042	Standard
	Mn	55	1333.7	3.6	**-0.0142**	0.001	9.1	ug/L	1290	Standard
	Co	59	125.7	12.6	**-0.0009**	0.001	129.3	ug/L	143	Standard
	Ni	60	83.7	11.1	**0.0058**	0.003	54.4	ug/L	79	Standard
	Cu	65	118.7	10.2	**-0.0033**	0.004	121.0	ug/L	154	Standard
	Zn	66	1515.1	2.2	**1.1376**	0.015	1.3	ug/L	194	Standard
>	Ge	72	214032.1	1.7				ug/L	232024	Standard
	As	75	-230.1	5.1	**0.0076**	0.009	120.9	ug/L	-297	Standard
	Se	82	25.4	7.6	**0.0568**	0.020	35.4	ug/L	17	Standard
	Se-1	77	104.0	12.7	**-0.4539**	0.166	36.7	ug/L	180	Standard
	Ga	71	191622.4	2.8				mg/L	210139	Standard
	Rb	85	16.7	45.8				ug/L	12	Standard
>	Y	89	205992.7	1.5				ug/L	214065	Standard
	Rh	103	1.7	173.2				ug/L	0	Standard
	Mo	98	43.5	9.5	**0.0033**	0.001	34.0	ug/L	6	Standard
	Ag	107	43.0	33.8	**-0.0018**	0.002	107.5	ug/L	33	Standard
	Cd	111	400.2	2.7	**0.0040**	0.003	73.2	mg/L	437	Standard
	Cd	114	1058.3	3.0	**-0.0018**	0.003	158.7	ug/L	1160	Standard
>	In	115	590820.9	0.4				ug/L	646604	Standard
	Sn	118	734.0	1.5	**-0.0050**	0.001	17.2	ug/L	864	Standard
	Sb	123	139.2	14.1	**0.0113**	0.002	16.7	ug/L	18	Standard
	Ba	135	43.3	21.4	**0.0021**	0.002	103.9	ug/L	39	Standard
	Ce	140	45.7	17.0				ug/L	46	Standard
>	Tb	159	665627.3	1.4				ug/L	695671	Standard
	Ho	165	4.7	32.7				ug/L	9	Standard
	Tl	203	522.7	20.1	**-0.0033**	0.006	189.4	ug/L	687	Standard
	Tl	205	1164.7	19.1	**-0.0042**	0.006	134.0	ug/L	1624	Standard
	Pb	206	308.0	5.3	**0.0016**	0.001	70.5	ug/L	305	Standard
	Pb	207	251.7	5.4	**0.0007**	0.001	136.5	ug/L	231	Standard
	Pb	208	1195.4	2.7	**0.0011**	0.000	20.6	ug/L	1129	Standard
	U	238	21.7	67.3	**0.0032**	0.001	16.9	ug/L	3	Standard
>	Bi	209	384887.9	1.8				ug/L	405108	Standard
	Na	23	70.0	28.6	**-0.0064**	0.007	110.0	mg/L	118	Standard
	Mg	24	283.3	6.2	**-0.0003**	0.000	9.7	mg/L	377	Standard

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	K	39	638.3	18.1	**0.0069**	0.008	122.1	mg/L	583	Standard
	Ca	43	60.0	58.3	**-0.0364**	0.099	271.2	mg/L	73	Standard
	Fe	54	878.8	13.8	**0.0135**	0.016	114.7	mg/L	785	Standard
	Fe	57	4424.0	8.8	**-0.0075**	0.001	13.1	mg/L	6133	Standard
>	**Sc-1**	45	239384.6	5.2				mg/L	254529	Standard
	Cl	35	701668.0	27.3				ug/L	1641778	Standard
	Kr	83	52.7	8.6				ug/L	60	Standard
	Br	81	10792.2	5.6				ug/L	11554	Standard
	P	31	56844.1	4.2				ug/L	45410	Standard
	S	34	651759.9	0.6				ug/L	568857	Standard
	Sr	88	261.7	28.7				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		92.246	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		96.229	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		91.373	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		95.681	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	95.009
	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

Sample ID: PBW 15 WG397022-03
Report Date/Time: Thursday, May 10, 2012 13:00:00
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Method 6020 - Summary Report

Sample ID: LCSW 15 WG397022-04
Sample Date/Time: Thursday, May 10, 2012 13:00:20
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	12520.2	3.7	**-11.5748**	40.655	351.2	ug/L	12600	Standard
|	**Be**	9	79779.5	1.6	**23.3959**	0.119	0.5	ug/L	5	Standard
|	**Al**	27	479142.8	1.7	**29.3187**	0.362	1.2	ug/L	16102	Standard
⌊>	**Sc**	45	260248.3	2.0				ug/L	254529	Standard
⌈	**Ti**	47	119.0	7.3	**0.0162**	0.008	46.5	ug/L	84	Standard
|	**V**	51	397879.8	1.9	**25.3542**	0.505	2.0	ug/L	5785	Standard
|	**Cr**	52	305128.2	2.3	**25.5286**	0.387	1.5	ug/L	12212	Standard
|	**Cr**	53	47357.2	1.1	**25.6779**	0.928	3.6	ug/L	5042	Standard
|	**Mn**	55	536917.7	2.4	**26.1237**	0.422	1.6	ug/L	1290	Standard
|	**Co**	59	386507.1	2.8	**26.5437**	0.275	1.0	ug/L	143	Standard
|	**Ni**	60	81812.7	1.9	**26.7583**	0.594	2.2	ug/L	79	Standard
|	**Cu**	65	73930.4	2.7	**26.6397**	0.434	1.6	ug/L	154	Standard
|	**Zn**	66	30989.3	0.5	**24.5914**	0.844	3.4	ug/L	194	Standard
| >	**Ge**	72	232372.6	3.7				ug/L	232024	Standard
|	**As**	75	28057.2	1.6	**24.8219**	0.603	2.4	ug/L	-297	Standard
|	**Se**	82	3225.6	2.5	**24.9939**	0.622	2.5	ug/L	17	Standard
⌊	**Se-1**	77	2080.8	1.8	**23.3908**	0.548	2.3	ug/L	180	Standard
	Ga	71	214008.8	4.1				mg/L	210139	Standard
⌈	**Rb**	85	31.7	18.2				ug/L	12	Standard
| >	**Y**	89	232055.2	0.5				ug/L	214065	Standard
⌊	**Rh**	103	18.3	56.8				ug/L	0	Standard
⌈	**Mo**	98	52.9	20.8	**0.0047**	0.002	50.3	ug/L	6	Standard
|	**Ag**	107	217431.9	3.5	**26.2376**	0.428	1.6	ug/L	33	Standard
|	**Cd**	111	108710.2	1.9	**24.2051**	0.450	1.9	mg/L	437	Standard
|	**Cd**	114	277492.4	1.5	**23.6670**	0.246	1.0	ug/L	1160	Standard
| >	**In**	115	639685.9	2.5				ug/L	646604	Standard
|	**Sn**	118	1758.8	3.7	**0.0567**	0.003	5.3	ug/L	864	Standard
|	**Sb**	123	261671.5	1.8	**23.9390**	0.199	0.8	ug/L	18	Standard
⌊	**Ba**	135	118383.3	2.9	**25.9725**	0.341	1.3	ug/L	39	Standard
⌈	**Ce**	140	168.7	6.0				ug/L	46	Standard
⌊>	**Tb**	159	713344.5	1.6				ug/L	695671	Standard
⌈	**Ho**	165	12.0	38.2				ug/L	9	Standard
|	**Tl**	203	424409.8	1.4	**26.0512**	0.228	0.9	ug/L	687	Standard
|	**Tl**	205	983926.0	1.8	**25.4952**	0.134	0.5	ug/L	1624	Standard
|	**Pb**	206	335917.6	2.0	**25.8439**	0.102	0.4	ug/L	305	Standard
|	**Pb**	207	292340.2	1.2	**26.3744**	0.315	1.2	ug/L	231	Standard
|	**Pb**	208	1338488.3	1.7	**25.9430**	0.283	1.1	ug/L	1129	Standard
|	**U**	238	665108.9	1.4	**24.1829**	0.338	1.4	ug/L	3	Standard
⌊>	**Bi**	209	400262.1	2.3				ug/L	405108	Standard
⌈	**Na**	23	91.7	20.7	**-0.0024**	0.005	193.3	mg/L	118	Standard
|	**Mg**	24	553.3	11.3	**0.0001**	0.000	81.7	mg/L	377	Standard

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	K	39	625.0	5.5	**0.0013**	0.004	264.8	mg/L	583	Standard
	Ca	43	60.0	30.0	**-0.0514**	0.044	86.6	mg/L	73	Standard
	Fe	54	1288.5	8.3	**0.0724**	0.019	26.8	mg/L	785	Standard
	Fe	57	4864.1	4.0	**-0.0071**	0.001	12.3	mg/L	6133	Standard
>	**Sc-1**	45	260248.3	2.0				mg/L	254529	Standard
	Cl	35	626228.2	30.0				ug/L	1641778	Standard
	Kr	83	63.1	11.5				ug/L	60	Standard
	Br	81	12238.3	2.6				ug/L	11554	Standard
	P	31	83725.5	6.6				ug/L	45410	Standard
	S	34	684043.2	5.3				ug/L	568857	Standard
	Sr	88	758.4	14.3				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		100.150	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		108.404	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		98.930	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		102.540	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: LCSW 15 WG397022-04
Report Date/Time: Thursday, May 10, 2012 13:02:52
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	98.804
	Na	23	
	Mg	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 15 WG397022-04
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Method 6020 - Summary Report

Sample ID: L1205010501 WG397022-01
Sample Date/Time: Thursday, May 10, 2012 13:03:12
Number of Replicates: 3
Autosampler Position: 245
Sample Description: 10
Method File: C:\NexION Data\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
	Li	7	13582.8	3.7	**344.1587**	32.000	9.3	ug/L	12600	Standard
	Be	9	11.7	65.5	**-0.0104**	0.003	24.5	ug/L	5	Standard
	Al	27	53037.7	1.5	**3.1663**	0.142	4.5	ug/L	16102	Standard
>	Sc	45	219138.9	2.3				ug/L	254529	Standard
	Ti	47	137.0	5.1	**0.0402**	0.006	13.7	ug/L	84	Standard
	V	51	3817.1	6.1	**-0.0106**	0.016	149.1	ug/L	5785	Standard
	Cr	52	9375.9	8.3	**-0.1112**	0.073	65.4	ug/L	12212	Standard
	Cr	53	1490.9	9.3	**-0.5510**	0.094	17.1	ug/L	5042	Standard
	Mn	55	86584.2	2.9	**4.7262**	0.107	2.3	ug/L	1290	Standard
	Co	59	386.0	2.7	**0.0199**	0.001	4.2	ug/L	143	Standard
	Ni	60	1372.1	5.7	**0.4873**	0.026	5.3	ug/L	79	Standard
	Cu	65	408.0	2.7	**0.1179**	0.004	3.6	ug/L	154	Standard
	Zn	66	93186.9	3.1	**84.5633**	2.143	2.5	ug/L	194	Standard
>	Ge	72	204040.4	0.6				ug/L	232024	Standard
	As	75	-172.1	8.8	**0.0548**	0.014	25.4	ug/L	-297	Standard
	Se	82	18.4	28.3	**0.0051**	0.047	920.6	ug/L	17	Standard
	Se-1	77	93.7	3.4	**-0.5292**	0.039	7.5	ug/L	180	Standard
	Ga	71	176698.7	0.4				mg/L	210139	Standard
	Rb	85	808.4	12.7				ug/L	12	Standard
>	Y	89	187999.6	2.4				ug/L	214065	Standard
	Rh	103	6.7	86.6				ug/L	0	Standard
	Mo	98	52.1	19.8	**0.0061**	0.003	47.3	ug/L	6	Standard
	Ag	107	42.7	17.3	**-0.0016**	0.001	61.5	ug/L	33	Standard
	Cd	111	166.6	4.6	**-0.0511**	0.002	3.8	mg/L	437	Standard
	Cd	114	447.6	3.5	**-0.0570**	0.002	2.7	ug/L	1160	Standard
>	In	115	571034.9	0.5				ug/L	646604	Standard
	Sn	118	487.7	2.7	**-0.0209**	0.001	4.9	ug/L	864	Standard
	Sb	123	241.2	16.0	**0.0222**	0.004	17.5	ug/L	18	Standard
	Ba	135	2620.9	0.9	**0.6362**	0.008	1.3	ug/L	39	Standard
	Ce	140	854.4	3.1				ug/L	46	Standard
>	Tb	159	633487.2	2.3				ug/L	695671	Standard
	Ho	165	15.7	7.4				ug/L	9	Standard
	Tl	203	545.3	3.9	**-0.0015**	0.001	85.1	ug/L	687	Standard
	Tl	205	1336.7	5.9	**0.0008**	0.002	257.5	ug/L	1624	Standard
	Pb	206	364.3	5.1	**0.0064**	0.001	22.7	ug/L	305	Standard
	Pb	207	335.3	7.5	**0.0088**	0.002	26.1	ug/L	231	Standard
	Pb	208	1479.0	3.1	**0.0071**	0.001	12.3	ug/L	1129	Standard
	U	238	268.0	3.9	**0.0126**	0.000	3.4	ug/L	3	Standard
>	Bi	209	381378.9	0.2				ug/L	405108	Standard
	Na	23	1828.4	4.6	**0.5621**	0.014	2.4	mg/L	118	Standard
	Mg	24	243193.1	1.4	**0.5163**	0.012	2.4	mg/L	377	Standard

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	K	39	2221.8	3.9	**0.1718**	0.010	5.7	mg/L	583	Standard
	Ca	43	1238.4	5.7	**3.2632**	0.232	7.1	mg/L	73	Standard
	Fe	54	352.4	16.3	**-0.0801**	0.010	12.9	mg/L	785	Standard
	Fe	57	6571.4	12.3	**0.0093**	0.005	52.9	mg/L	6133	Standard
>	**Sc-1**	45	219138.9	2.3				mg/L	254529	Standard
	Cl	35	498493.8	43.3				ug/L	1641778	Standard
	Kr	83	45.4	5.9				ug/L	60	Standard
	Br	81	9183.6	8.8				ug/L	11554	Standard
	P	31	21628.8	2.2				ug/L	45410	Standard
	S	34	763161.3	6.7				ug/L	568857	Standard
	Sr	88	130159.0	4.3				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		87.940	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		87.824	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		88.313	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		91.061	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	94.143
⌈	Na	23	
	Mg	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: L1205010502
Sample Date/Time: Thursday, May 10, 2012 13:06:05
Number of Replicates: 3
Autosampler Position: 246
Sample Description: 10
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	13993.1	2.1	**385.9266**	19.895	5.2	ug/L	12600	Standard
|	**Be**	9	6.7	43.3	**-0.0121**	0.001	7.8	ug/L	5	Standard
|	**Al**	27	12743.7	4.0	**0.1531**	0.026	16.8	ug/L	16102	Standard
⌊>	**Sc**	45	220023.1	2.0				ug/L	254529	Standard
⌈	**Ti**	47	94.7	8.2	**0.0073**	0.006	88.2	ug/L	84	Standard
|	**V**	51	4134.0	3.1	**0.0062**	0.012	189.1	ug/L	5785	Standard
|	**Cr**	52	10926.3	2.1	**0.0192**	0.025	131.5	ug/L	12212	Standard
|	**Cr**	53	1600.9	17.9	**-0.5017**	0.189	37.6	ug/L	5042	Standard
|	**Mn**	55	73783.2	0.9	**3.9264**	0.065	1.6	ug/L	1290	Standard
|	**Co**	59	341.0	2.8	**0.0158**	0.001	4.1	ug/L	143	Standard
|	**Ni**	60	1276.1	1.7	**0.4414**	0.014	3.1	ug/L	79	Standard
|	**Cu**	65	382.7	6.4	**0.1040**	0.008	7.7	ug/L	154	Standard
|	**Zn**	66	91200.3	1.1	**80.9587**	0.157	0.2	ug/L	194	Standard
| >	**Ge**	72	208584.7	1.2				ug/L	232024	Standard
|	**As**	75	-180.8	8.8	**0.0500**	0.013	26.6	ug/L	-297	Standard
|	**Se**	82	23.8	10.2	**0.0484**	0.022	46.5	ug/L	17	Standard
⌊	**Se-1**	77	94.0	12.3	**-0.5518**	0.167	30.2	ug/L	180	Standard
	Ga	71	181013.9	0.9				mg/L	210139	Standard
⌈	**Rb**	85	681.7	12.3				ug/L	12	Standard
| >	**Y**	89	187678.8	1.9				ug/L	214065	Standard
⌊	**Rh**	103	0.0					ug/L	0	Standard
⌈	**Mo**	98	43.9	14.0	**0.0039**	0.002	48.0	ug/L	6	Standard
|	**Ag**	107	37.7	19.2	**-0.0023**	0.001	41.5	ug/L	33	Standard
|	**Cd**	111	163.2	2.5	**-0.0518**	0.002	3.0	mg/L	437	Standard
|	**Cd**	114	421.4	3.8	**-0.0593**	0.002	3.5	ug/L	1160	Standard
| >	**In**	115	568610.1	1.3				ug/L	646604	Standard
|	**Sn**	118	766.7	2.5	**-0.0007**	0.001	138.0	ug/L	864	Standard
|	**Sb**	123	131.2	8.4	**0.0110**	0.001	8.7	ug/L	18	Standard
⌊	**Ba**	135	2460.9	2.6	**0.5995**	0.020	3.4	ug/L	39	Standard
⌈	**Ce**	140	65.7	5.3				ug/L	46	Standard
⌊>	**Tb**	159	627827.5	2.0				ug/L	695671	Standard
⌈	**Ho**	165	8.3	18.3				ug/L	9	Standard
|	**Tl**	203	535.7	11.5	**-0.0017**	0.005	289.6	ug/L	687	Standard
|	**Tl**	205	1228.0	7.2	**-0.0017**	0.003	177.2	ug/L	1624	Standard
|	**Pb**	206	331.0	15.1	**0.0041**	0.004	108.7	ug/L	305	Standard
|	**Pb**	207	285.0	9.8	**0.0044**	0.003	64.3	ug/L	231	Standard
|	**Pb**	208	1295.4	7.4	**0.0038**	0.002	62.6	ug/L	1129	Standard
|	**U**	238	255.0	8.2	**0.0123**	0.001	8.2	ug/L	3	Standard
⌊>	**Bi**	209	376669.8	2.3				ug/L	405108	Standard
⌈	**Na**	23	1881.8	8.2	**0.5776**	0.058	10.0	mg/L	118	Standard
|	**Mg**	24	251204.0	1.7	**0.5313**	0.019	3.6	mg/L	377	Standard

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	K	39	2220.2	7.0	**0.1707**	0.016	9.3	mg/L	583	Standard
	Ca	43	1203.4	6.8	**3.1496**	0.204	6.5	mg/L	73	Standard
	Fe	54	437.6	4.1	**-0.0626**	0.005	8.7	mg/L	785	Standard
	Fe	57	6818.2	2.2	**0.0108**	0.001	4.9	mg/L	6133	Standard
>	**Sc-1**	45	220023.1	2.0				mg/L	254529	Standard
	Cl	35	445375.9	44.1				ug/L	1641778	Standard
	Kr	83	46.4	7.4				ug/L	60	Standard
	Br	81	9359.6	2.8				ug/L	11554	Standard
	P	31	19859.7	4.4				ug/L	45410	Standard
	S	34	842565.4	2.3				ug/L	568857	Standard
	Sr	88	127895.9	1.6				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		89.898	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		87.674	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		87.938	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		90.248	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	92.980
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1205010502
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Method 6020 - Summary Report

Sample ID: L1205010503S WG397022-05

Sample Date/Time: Thursday, May 10, 2012 13:08:57
Number of Replicates: 3
Autosampler Position: 247
Sample Description: 10
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	13833.0	3.7	**390.8431**	22.102	5.7	ug/L	12600	Standard
|	**Be**	9	9119.4	0.9	**3.1984**	0.047	1.5	ug/L	5	Standard
|	**Al**	27	62363.2	3.8	**3.9121**	0.209	5.3	ug/L	16102	Standard
⌊>	**Sc**	45	216799.0	2.4				ug/L	254529	Standard
⌈	**Ti**	47	105.7	20.1	**0.0171**	0.015	87.4	ug/L	84	Standard
|	**V**	51	41732.4	0.4	**2.7842**	0.053	1.9	ug/L	5785	Standard
|	**Cr**	52	39016.2	0.6	**2.8436**	0.072	2.5	ug/L	12212	Standard
|	**Cr**	53	5977.0	4.9	**2.3969**	0.179	7.5	ug/L	5042	Standard
|	**Mn**	55	147754.5	2.3	**8.1592**	0.139	1.7	ug/L	1290	Standard
|	**Co**	59	37464.3	2.6	**2.9323**	0.070	2.4	ug/L	143	Standard
|	**Ni**	60	9185.1	2.1	**3.4128**	0.065	1.9	ug/L	79	Standard
|	**Cu**	65	7702.3	2.8	**3.1288**	0.076	2.4	ug/L	154	Standard
|	**Zn**	66	101314.6	1.3	**92.3477**	1.602	1.7	ug/L	194	Standard
| >	**Ge**	72	203218.7	1.6				ug/L	232024	Standard
|	**As**	75	3242.4	3.3	**3.4748**	0.104	3.0	ug/L	-297	Standard
|	**Se**	82	457.7	6.3	**3.9234**	0.300	7.6	ug/L	17	Standard
⌊	**Se-1**	77	373.3	9.7	**3.3493**	0.501	15.0	ug/L	180	Standard
	Ga	71	177843.9	2.9				mg/L	210139	Standard
⌈	**Rb**	85	726.7	11.2				ug/L	12	Standard
| >	**Y**	89	187214.8	1.7				ug/L	214065	Standard
⌊	**Rh**	103	3.3	173.2				ug/L	0	Standard
⌈	**Mo**	98	36.6	8.1	**0.0020**	0.001	50.3	ug/L	6	Standard
|	**Ag**	107	20331.0	4.8	**2.7923**	0.137	4.9	ug/L	33	Standard
|	**Cd**	111	12437.0	4.5	**3.0775**	0.143	4.7	mg/L	437	Standard
|	**Cd**	114	33655.5	3.4	**3.1887**	0.150	4.7	ug/L	1160	Standard
| >	**In**	115	560841.0	1.8				ug/L	646604	Standard
|	**Sn**	118	466.7	3.2	**-0.0218**	0.001	6.7	ug/L	864	Standard
|	**Sb**	123	29145.1	3.0	**3.0394**	0.112	3.7	ug/L	18	Standard
⌊	**Ba**	135	14560.7	2.7	**3.6377**	0.131	3.6	ug/L	39	Standard
⌈	**Ce**	140	207.3	51.6				ug/L	46	Standard
⌊>	**Tb**	159	622424.2	1.3				ug/L	695671	Standard
⌈	**Ho**	165	12.0	22.0				ug/L	9	Standard
|	**Tl**	203	44204.1	3.0	**2.8159**	0.075	2.7	ug/L	687	Standard
|	**Tl**	205	103709.3	3.2	**2.7903**	0.107	3.8	ug/L	1624	Standard
|	**Pb**	206	34979.0	1.7	**2.8053**	0.060	2.1	ug/L	305	Standard
|	**Pb**	207	30539.4	2.5	**2.8721**	0.068	2.4	ug/L	231	Standard
|	**Pb**	208	139768.3	2.1	**2.8240**	0.071	2.5	ug/L	1129	Standard
|	**U**	238	67256.3	2.7	**2.5694**	0.063	2.5	ug/L	3	Standard
⌊>	**Bi**	209	381209.6	1.4				ug/L	405108	Standard
⌈	**Na**	23	1835.1	6.4	**0.5706**	0.029	5.1	mg/L	118	Standard
|	**Mg**	24	247692.5	2.8	**0.5314**	0.007	1.2	mg/L	377	Standard

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	K	39	2325.2	3.9	**0.1847**	0.011	5.9	mg/L	583	Standard
	Ca	43	1275.1	8.7	**3.3986**	0.231	6.8	mg/L	73	Standard
	Fe	54	397.3	9.0	**-0.0696**	0.009	13.5	mg/L	785	Standard
	Fe	57	6916.6	3.0	**0.0122**	0.002	15.8	mg/L	6133	Standard
>	**Sc-1**	45	216799.0	2.4				mg/L	254529	Standard
	Cl	35	422537.2	45.1				ug/L	1641778	Standard
	Kr	83	46.0	8.8				ug/L	60	Standard
	Br	81	9232.0	2.8				ug/L	11554	Standard
	P	31	21214.0	3.4				ug/L	45410	Standard
	S	34	858256.5	1.6				ug/L	568857	Standard
	Sr	88	126998.7	3.3				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		87.585	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		87.457	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		86.736	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		89.471	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1205010503S WG397022-05
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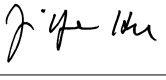
	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	94.101
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: May 11, 2012



Method 6020 - Summary Report

Sample ID: L1205010504SD WG397022-06

Sample Date/Time: Thursday, May 10, 2012 13:11:49
Number of Replicates: 3
Autosampler Position: 248
Sample Description: 10
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	14376.8	1.5	**419.5986**	56.968	13.6	ug/L	12600	Standard
|	**Be**	9	8834.2	1.4	**3.0314**	0.102	3.4	ug/L	5	Standard
|	**Al**	27	54068.0	2.0	**3.1977**	0.113	3.5	ug/L	16102	Standard
⌊>	**Sc**	45	221584.0	2.1				ug/L	254529	Standard
⌈	**Ti**	47	90.7	5.4	**0.0055**	0.004	74.4	ug/L	84	Standard
|	**V**	51	40568.9	1.0	**2.6721**	0.008	0.3	ug/L	5785	Standard
|	**Cr**	52	38061.8	1.1	**2.7153**	0.047	1.7	ug/L	12212	Standard
|	**Cr**	53	5689.4	6.3	**2.1774**	0.262	12.0	ug/L	5042	Standard
|	**Mn**	55	129951.6	1.2	**7.1033**	0.076	1.1	ug/L	1290	Standard
|	**Co**	59	35451.1	1.3	**2.7502**	0.048	1.7	ug/L	143	Standard
|	**Ni**	60	8852.9	1.7	**3.2596**	0.039	1.2	ug/L	79	Standard
|	**Cu**	65	7396.1	0.5	**2.9763**	0.037	1.2	ug/L	154	Standard
|	**Zn**	66	96007.2	0.8	**86.7343**	0.662	0.8	ug/L	194	Standard
| >	**Ge**	72	204987.1	0.8				ug/L	232024	Standard
|	**As**	75	3105.9	4.1	**3.3105**	0.101	3.1	ug/L	-297	Standard
|	**Se**	82	432.4	5.3	**3.6610**	0.170	4.7	ug/L	17	Standard
⌊	**Se-1**	77	359.7	6.9	**3.1174**	0.357	11.4	ug/L	180	Standard
	Ga	71	178499.3	0.7				mg/L	210139	Standard
⌈	**Rb**	85	705.0	14.2				ug/L	12	Standard
| >	**Y**	89	186702.8	4.0				ug/L	214065	Standard
⌊	**Rh**	103	6.7	43.3				ug/L	0	Standard
⌈	**Mo**	98	43.7	12.7	**0.0038**	0.001	36.3	ug/L	6	Standard
|	**Ag**	107	19657.7	1.4	**2.6696**	0.028	1.1	ug/L	33	Standard
|	**Cd**	111	11789.2	3.1	**2.8786**	0.060	2.1	mg/L	437	Standard
|	**Cd**	114	32135.0	1.0	**3.0045**	0.011	0.4	ug/L	1160	Standard
| >	**In**	115	567066.6	1.3				ug/L	646604	Standard
|	**Sn**	118	514.0	3.2	**-0.0188**	0.001	6.7	ug/L	864	Standard
|	**Sb**	123	28307.5	1.2	**2.9189**	0.011	0.4	ug/L	18	Standard
⌊	**Ba**	135	14165.3	1.6	**3.4989**	0.046	1.3	ug/L	39	Standard
⌈	**Ce**	140	109.0	3.3				ug/L	46	Standard
⌊>	**Tb**	159	631737.3	0.5				ug/L	695671	Standard
⌈	**Ho**	165	11.7	13.1				ug/L	9	Standard
|	**Tl**	203	42535.0	1.2	**2.6919**	0.026	1.0	ug/L	687	Standard
|	**Tl**	205	98710.8	0.6	**2.6376**	0.015	0.6	ug/L	1624	Standard
|	**Pb**	206	33660.4	0.9	**2.6822**	0.018	0.7	ug/L	305	Standard
|	**Pb**	207	29359.8	0.2	**2.7437**	0.010	0.4	ug/L	231	Standard
|	**Pb**	208	134210.6	0.5	**2.6942**	0.005	0.2	ug/L	1129	Standard
|	**U**	238	64710.6	1.2	**2.4575**	0.021	0.9	ug/L	3	Standard
⌊>	**Bi**	209	383481.6	0.3				ug/L	405108	Standard
⌈	**Na**	23	1728.4	8.4	**0.5244**	0.052	9.9	mg/L	118	Standard
|	**Mg**	24	236264.6	1.0	**0.4961**	0.015	2.9	mg/L	377	Standard

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	K	39	2186.8	4.9	**0.1658**	0.012	7.2	mg/L	583	Standard
	Ca	43	1291.7	3.7	**3.3710**	0.142	4.2	mg/L	73	Standard
	Fe	54	423.9	12.1	**-0.0662**	0.009	13.7	mg/L	785	Standard
	Fe	57	6771.5	6.3	**0.0102**	0.003	32.2	mg/L	6133	Standard
>	**Sc-1**	45	221584.0	2.1				mg/L	254529	Standard
	Cl	35	405957.1	46.1				ug/L	1641778	Standard
	Kr	83	45.1	12.3				ug/L	60	Standard
	Br	81	9232.8	2.6				ug/L	11554	Standard
	P	31	21728.9	2.5				ug/L	45410	Standard
	S	34	876603.2	2.0				ug/L	568857	Standard
	Sr	88	123459.4	1.8				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		88.348	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		87.218	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		87.699	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		90.810	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	94.662
	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

Sample ID: L1205010504SD WG397022-06
Report Date/Time: Thursday, May 10, 2012 13:14:22
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Method 6020 - Summary Report

Sample ID: L1205010505
Sample Date/Time: Thursday, May 10, 2012 13:14:42
Number of Replicates: 3
Autosampler Position: 249
Sample Description: 10
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	14311.8	2.4	**385.7430**	52.088	13.5	ug/L	12600	Standard
|	**Be**	9	6.7	86.6	**-0.0122**	0.002	16.2	ug/L	5	Standard
|	**Al**	27	62922.1	2.6	**3.7786**	0.156	4.1	ug/L	16102	Standard
⌊>	**Sc**	45	225093.2	1.3				ug/L	254529	Standard
⌈	**Ti**	47	155.3	2.4	**0.0529**	0.003	5.1	ug/L	84	Standard
|	**V**	51	4261.6	5.7	**0.0197**	0.019	98.1	ug/L	5785	Standard
|	**Cr**	52	11068.4	2.3	**0.0483**	0.029	59.3	ug/L	12212	Standard
|	**Cr**	53	1471.7	22.4	**-0.5709**	0.217	38.0	ug/L	5042	Standard
|	**Mn**	55	98226.1	1.0	**5.3311**	0.026	0.5	ug/L	1290	Standard
|	**Co**	59	480.7	5.2	**0.0270**	0.002	6.4	ug/L	143	Standard
|	**Ni**	60	1252.4	2.0	**0.4392**	0.009	2.1	ug/L	79	Standard
|	**Cu**	65	377.3	7.4	**0.1042**	0.012	11.7	ug/L	154	Standard
|	**Zn**	66	97032.5	2.0	**87.3800**	1.412	1.6	ug/L	194	Standard
| >	**Ge**	72	205636.4	0.6				ug/L	232024	Standard
|	**As**	75	-194.1	7.4	**0.0343**	0.015	42.7	ug/L	-297	Standard
|	**Se**	82	18.2	29.5	**0.0015**	0.047	3218.7	ug/L	17	Standard
⌊	**Se-1**	77	95.0	1.1	**-0.5209**	0.011	2.1	ug/L	180	Standard
	Ga	71	179721.3	0.5				mg/L	210139	Standard
⌈	**Rb**	85	880.0	9.9				ug/L	12	Standard
| >	**Y**	89	188916.0	2.6				ug/L	214065	Standard
⌊	**Rh**	103	3.3	86.6				ug/L	0	Standard
⌈	**Mo**	98	52.9	21.2	**0.0065**	0.003	46.3	ug/L	6	Standard
|	**Ag**	107	40.3	20.8	**-0.0018**	0.001	60.6	ug/L	33	Standard
|	**Cd**	111	168.6	4.8	**-0.0499**	0.002	4.7	mg/L	437	Standard
|	**Cd**	114	448.2	1.1	**-0.0562**	0.001	1.4	ug/L	1160	Standard
| >	**In**	115	561305.6	0.8				ug/L	646604	Standard
|	**Sn**	118	625.3	6.5	**-0.0103**	0.003	26.0	ug/L	864	Standard
|	**Sb**	123	359.0	25.3	**0.0349**	0.009	26.9	ug/L	18	Standard
⌊	**Ba**	135	2754.3	1.4	**0.6807**	0.014	2.0	ug/L	39	Standard
⌈	**Ce**	140	477.0	4.7				ug/L	46	Standard
⌊>	**Tb**	159	631004.8	1.8				ug/L	695671	Standard
⌈	**Ho**	165	18.3	22.7				ug/L	9	Standard
|	**Tl**	203	512.3	8.7	**-0.0038**	0.003	75.4	ug/L	687	Standard
|	**Tl**	205	1167.0	12.4	**-0.0039**	0.004	97.4	ug/L	1624	Standard
|	**Pb**	206	376.0	13.8	**0.0072**	0.004	56.3	ug/L	305	Standard
|	**Pb**	207	324.7	10.9	**0.0077**	0.004	45.6	ug/L	231	Standard
|	**Pb**	208	1485.0	11.4	**0.0072**	0.004	49.1	ug/L	1129	Standard
|	**U**	238	258.3	2.9	**0.0122**	0.000	3.1	ug/L	3	Standard
⌊>	**Bi**	209	382549.5	1.1				ug/L	405108	Standard
⌈	**Na**	23	1915.1	8.9	**0.5736**	0.047	8.2	mg/L	118	Standard
|	**Mg**	24	251208.8	3.6	**0.5191**	0.019	3.6	mg/L	377	Standard

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	K	39	2251.8	10.0	**0.1689**	0.025	14.6	mg/L	583	Standard
	Ca	43	1255.1	9.3	**3.2169**	0.344	10.7	mg/L	73	Standard
	Fe	54	447.1	10.7	**-0.0627**	0.011	17.1	mg/L	785	Standard
	Fe	57	7728.6	2.3	**0.0157**	0.001	3.6	mg/L	6133	Standard
>	**Sc-1**	45	225093.2	1.3				mg/L	254529	Standard
	Cl	35	401511.4	46.1				ug/L	1641778	Standard
	Kr	83	46.8	11.1				ug/L	60	Standard
	Br	81	9642.2	0.2				ug/L	11554	Standard
	P	31	22273.9	1.5				ug/L	45410	Standard
	S	34	913040.8	1.1				ug/L	568857	Standard
	Sr	88	132097.3	3.9				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		88.627	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		88.252	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		86.808	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		90.704	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	94.431
	Na	23	
	Mg	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: L1205010505
Report Date/Time: Thursday, May 10, 2012 13:17:14
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Method 6020 - Summary Report

Sample ID: L1205010506

Sample Date/Time: Thursday, May 10, 2012 13:17:34
Number of Replicates: 3
Autosampler Position: 250
Sample Description: 10
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	52646.3	1.1	**3975.7233**	96.528	2.4	ug/L	12600	Standard
|	**Be**	9	11.7	89.2	**-0.0110**	0.003	27.6	ug/L	5	Standard
|	**Al**	27	30859.7	2.4	**1.1566**	0.046	3.9	ug/L	16102	Standard
⌊>	**Sc**	45	258762.9	1.6				ug/L	254529	Standard
⌈	**Ti**	47	162.0	5.5	**0.0469**	0.006	13.3	ug/L	84	Standard
|	**V**	51	4735.6	0.3	**0.0224**	0.002	9.0	ug/L	5785	Standard
|	**Cr**	52	13667.2	0.9	**0.1800**	0.004	2.4	ug/L	12212	Standard
|	**Cr**	53	1589.3	18.2	**-0.5910**	0.163	27.5	ug/L	5042	Standard
|	**Mn**	55	373464.8	1.2	**18.6102**	0.177	1.0	ug/L	1290	Standard
|	**Co**	59	2796.3	4.1	**0.1867**	0.006	3.3	ug/L	143	Standard
|	**Ni**	60	5015.2	1.6	**1.6595**	0.013	0.8	ug/L	79	Standard
|	**Cu**	65	1210.0	7.4	**0.3982**	0.031	7.8	ug/L	154	Standard
|	**Zn**	66	192365.1	2.0	**157.4170**	3.005	1.9	ug/L	194	Standard
| >	**Ge**	72	226509.0	1.0				ug/L	232024	Standard
|	**As**	75	-208.1	17.6	**0.0396**	0.031	79.1	ug/L	-297	Standard
|	**Se**	82	29.7	2.5	**0.0792**	0.006	7.7	ug/L	17	Standard
⌊	**Se-1**	77	108.7	5.3	**-0.4706**	0.078	16.6	ug/L	180	Standard
	Ga	71	203944.0	1.7				mg/L	210139	Standard
⌈	**Rb**	85	2486.9	4.3				ug/L	12	Standard
| >	**Y**	89	212356.3	1.3				ug/L	214065	Standard
⌊	**Rh**	103	40.0	33.1				ug/L	0	Standard
⌈	**Mo**	98	90.4	0.8	**0.0146**	0.000	2.1	ug/L	6	Standard
|	**Ag**	107	46.3	5.0	**-0.0016**	0.000	21.1	ug/L	33	Standard
|	**Cd**	111	579.8	0.9	**0.0408**	0.000	0.8	mg/L	437	Standard
|	**Cd**	114	1485.6	2.3	**0.0313**	0.002	7.2	ug/L	1160	Standard
| >	**In**	115	620210.0	1.0				ug/L	646604	Standard
|	**Sn**	118	863.7	1.5	**0.0011**	0.001	62.6	ug/L	864	Standard
|	**Sb**	123	289.8	23.6	**0.0249**	0.007	27.1	ug/L	18	Standard
⌊	**Ba**	135	2885.9	3.0	**0.6452**	0.026	4.1	ug/L	39	Standard
⌈	**Ce**	140	374.7	2.6				ug/L	46	Standard
⌊>	**Tb**	159	696590.1	0.9				ug/L	695671	Standard
⌈	**Ho**	165	11.7	21.6				ug/L	9	Standard
|	**Tl**	203	425.3	38.0	**-0.0102**	0.010	98.3	ug/L	687	Standard
|	**Tl**	205	1020.0	35.3	**-0.0088**	0.009	107.7	ug/L	1624	Standard
|	**Pb**	206	401.0	7.0	**0.0082**	0.002	26.6	ug/L	305	Standard
|	**Pb**	207	349.0	6.5	**0.0090**	0.002	22.8	ug/L	231	Standard
|	**Pb**	208	1566.0	5.9	**0.0078**	0.002	23.2	ug/L	1129	Standard
|	**U**	238	197.0	3.1	**0.0097**	0.000	2.4	ug/L	3	Standard
⌊>	**Bi**	209	394972.2	0.1				ug/L	405108	Standard
⌈	**Na**	23	2095.1	5.2	**0.5448**	0.025	4.5	mg/L	118	Standard
|	**Mg**	24	813347.2	0.7	**1.4637**	0.027	1.8	mg/L	377	Standard

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	K	39	2421.9	2.4	**0.1545**	0.004	2.6	mg/L	583	Standard
	Ca	43	3373.7	2.8	**7.7794**	0.346	4.4	mg/L	73	Standard
	Fe	54	989.4	16.2	**0.0207**	0.026	123.5	mg/L	785	Standard
	Fe	57	11908.0	3.9	**0.0327**	0.003	8.8	mg/L	6133	Standard
>	**Sc-1**	45	258762.9	1.6				mg/L	254529	Standard
	Cl	35	538421.3	37.4				ug/L	1641778	Standard
	Kr	83	59.0	4.3				ug/L	60	Standard
	Br	81	11683.7	4.5				ug/L	11554	Standard
	P	31	60943.2	3.2				ug/L	45410	Standard
	S	34	2048166.4	0.3				ug/L	568857	Standard
	Sr	88	878057.4	3.1				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		97.623	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		99.202	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		95.918	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		100.132	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	97.498
	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
Zn 66 Upper, S, EEE	Zn	66	

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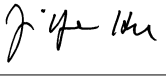

Method 6020 - Summary Report

Sample ID: L1205010506PS WG397649-01

Sample Date/Time: Thursday, May 10, 2012 13:20:27
Number of Replicates: 3
Autosampler Position: 251
Sample Description: 10
Method File: C:\NexION Data\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	54962.9	3.1	**4149.1502**	34.165	0.8	ug/L	12600	Standard
|	**Be**	9	168778.4	1.8	**49.2978**	0.660	1.3	ug/L	5	Standard
|	**Al**	27	870622.8	3.1	**53.6702**	0.350	0.7	ug/L	16102	Standard
⌊>	**Sc**	45	261403.3	2.5				ug/L	254529	Standard
⌈	**Ti**	47	156.7	5.2	**0.0409**	0.004	9.9	ug/L	84	Standard
|	**V**	51	779567.1	2.2	**50.0904**	0.751	1.5	ug/L	5785	Standard
|	**Cr**	52	585785.7	4.0	**50.1026**	1.556	3.1	ug/L	12212	Standard
|	**Cr**	53	91470.4	3.0	**51.1370**	1.066	2.1	ug/L	5042	Standard
|	**Mn**	55	1444639.5	1.6	**70.6314**	0.594	0.8	ug/L	1290	Standard
|	**Co**	59	757214.3	2.2	**52.1616**	0.511	1.0	ug/L	143	Standard
|	**Ni**	60	165552.0	1.5	**54.3158**	0.146	0.3	ug/L	79	Standard
|	**Cu**	65	146963.5	2.2	**53.1556**	0.703	1.3	ug/L	154	Standard
|	**Zn**	66	262681.4	2.0	**210.2473**	1.887	0.9	ug/L	194	Standard
| >	**Ge**	72	231630.6	1.2				ug/L	232024	Standard
|	**As**	75	59162.5	1.7	**52.2235**	0.384	0.7	ug/L	-297	Standard
|	**Se**	82	6888.6	1.8	**53.7017**	0.387	0.7	ug/L	17	Standard
⌊	**Se-1**	77	4375.0	3.3	**51.3215**	1.161	2.3	ug/L	180	Standard
	Ga	71	208888.0	1.7				mg/L	210139	Standard
⌈	**Rb**	85	2698.6	3.1				ug/L	12	Standard
| >	**Y**	89	220754.6	3.7				ug/L	214065	Standard
⌊	**Rh**	103	73.3	37.6				ug/L	0	Standard
⌈	**Mo**	98	194.9	9.1	**0.0394**	0.004	10.1	ug/L	6	Standard
|	**Ag**	107	449243.2	2.1	**54.1911**	0.519	1.0	ug/L	33	Standard
|	**Cd**	111	228900.1	3.2	**51.0257**	1.184	2.3	mg/L	437	Standard
|	**Cd**	114	586149.3	1.9	**50.0660**	0.532	1.1	ug/L	1160	Standard
| >	**In**	115	640034.1	1.2				ug/L	646604	Standard
|	**Sn**	118	1150.7	1.8	**0.0177**	0.002	10.3	ug/L	864	Standard
|	**Sb**	123	549564.3	1.5	**50.2450**	0.157	0.3	ug/L	18	Standard
⌊	**Ba**	135	238782.9	1.8	**52.3660**	0.279	0.5	ug/L	39	Standard
⌈	**Ce**	140	400.3	5.0				ug/L	46	Standard
⌊>	**Tb**	159	716933.4	0.8				ug/L	695671	Standard
⌈	**Ho**	165	15.3	3.8				ug/L	9	Standard
|	**Tl**	203	849312.2	1.7	**52.0300**	0.907	1.7	ug/L	687	Standard
|	**Tl**	205	1977987.7	1.3	**51.1527**	0.439	0.9	ug/L	1624	Standard
|	**Pb**	206	671887.3	1.7	**51.5820**	0.971	1.9	ug/L	305	Standard
|	**Pb**	207	584524.9	1.6	**52.6124**	0.661	1.3	ug/L	231	Standard
|	**Pb**	208	2683590.9	1.5	**51.8969**	0.597	1.2	ug/L	1129	Standard
|	**U**	238	1360553.3	2.8	**49.3267**	1.070	2.2	ug/L	3	Standard
⌊>	**Bi**	209	401293.0	0.9				ug/L	405108	Standard
⌈	**Na**	23	2100.1	4.2	**0.5405**	0.022	4.0	mg/L	118	Standard
|	**Mg**	24	851470.8	1.8	**1.5168**	0.015	1.0	mg/L	377	Standard

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	K	39	2488.5	3.4	**0.1583**	0.012	7.6	mg/L	583	Standard
	Ca	43	3432.1	1.2	**7.8343**	0.166	2.1	mg/L	73	Standard
	Fe	54	996.7	3.0	**0.0206**	0.009	45.0	mg/L	785	Standard
	Fe	57	11896.3	2.4	**0.0320**	0.001	3.7	mg/L	6133	Standard
>	**Sc-1**	45	261403.3	2.5				mg/L	254529	Standard
	Cl	35	555693.3	35.7				ug/L	1641778	Standard
	Kr	83	58.2	7.5				ug/L	60	Standard
	Br	81	11456.0	3.2				ug/L	11554	Standard
	P	31	61662.8	3.5				ug/L	45410	Standard
	S	34	2115639.7	1.4				ug/L	568857	Standard
	Sr	88	913308.3	3.2				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		99.831	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		103.125	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		98.984	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		103.056	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	99.058
	Na	23	
	Mg	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
Zn 66 Upper, S, EEE	Zn	66	

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Method 6020 - Summary Report

Sample ID: L1205010506SDL WG397649-02
Sample Date/Time: Thursday, May 10, 2012 13:23:19
Number of Replicates: 3
Autosampler Position: 252
Sample Description: 50
Method File: C:\NexION\Data\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	18214.3	2.4	**828.4643**	46.611	5.6	ug/L	12600	Standard
|	**Be**	9	38.3	49.4	**-0.0014**	0.006	453.7	ug/L	5	Standard
|	**Al**	27	19562.6	1.0	**0.6261**	0.010	1.6	ug/L	16102	Standard
⌊>	**Sc**	45	225294.3	0.4				ug/L	254529	Standard
⌈	**Ti**	47	78.3	7.0	**-0.0049**	0.004	73.7	ug/L	84	Standard
|	**V**	51	4420.8	2.0	**0.0249**	0.004	15.5	ug/L	5785	Standard
|	**Cr**	52	12154.9	1.5	**0.1320**	0.027	20.8	ug/L	12212	Standard
|	**Cr**	53	1537.6	20.6	**-0.5501**	0.184	33.5	ug/L	5042	Standard
|	**Mn**	55	64560.6	0.5	**3.4059**	0.071	2.1	ug/L	1290	Standard
|	**Co**	59	647.7	16.2	**0.0390**	0.007	18.3	ug/L	143	Standard
|	**Ni**	60	942.7	3.0	**0.3178**	0.006	1.9	ug/L	79	Standard
|	**Cu**	65	390.0	5.3	**0.1061**	0.006	5.4	ug/L	154	Standard
|	**Zn**	66	42210.7	0.5	**37.1722**	0.441	1.2	ug/L	194	Standard
| >	**Ge**	72	209745.7	1.6				ug/L	232024	Standard
|	**As**	75	-175.8	18.3	**0.0556**	0.033	59.2	ug/L	-297	Standard
|	**Se**	82	26.6	6.9	**0.0717**	0.015	21.1	ug/L	17	Standard
⌊	**Se-1**	77	102.7	0.6	**-0.4433**	0.019	4.2	ug/L	180	Standard
	Ga	71	184264.9	1.7				mg/L	210139	Standard
⌈	**Rb**	85	478.3	13.2				ug/L	12	Standard
| >	**Y**	89	190937.7	2.4				ug/L	214065	Standard
⌊	**Rh**	103	8.3	69.3				ug/L	0	Standard
⌈	**Mo**	98	21.6	19.0	**-0.0024**	0.001	47.3	ug/L	6	Standard
|	**Ag**	107	86.3	49.3	**0.0039**	0.005	138.1	ug/L	33	Standard
|	**Cd**	111	197.0	12.8	**-0.0450**	0.005	12.0	mg/L	437	Standard
|	**Cd**	114	537.6	23.8	**-0.0500**	0.011	22.3	ug/L	1160	Standard
| >	**In**	115	588326.3	1.5				ug/L	646604	Standard
|	**Sn**	118	511.7	6.7	**-0.0203**	0.002	12.3	ug/L	864	Standard
|	**Sb**	123	1038.1	29.4	**0.1005**	0.029	28.6	ug/L	18	Standard
⌊	**Ba**	135	602.7	6.3	**0.1355**	0.007	5.1	ug/L	39	Standard
⌈	**Ce**	140	118.3	8.1				ug/L	46	Standard
⌊>	**Tb**	159	648300.9	1.2				ug/L	695671	Standard
⌈	**Ho**	165	9.7	39.2				ug/L	9	Standard
|	**Tl**	203	585.0	34.8	**0.0004**	0.013	3643.0	ug/L	687	Standard
|	**Tl**	205	1348.7	30.1	**0.0005**	0.011	2220.4	ug/L	1624	Standard
|	**Pb**	206	436.7	23.6	**0.0116**	0.008	70.5	ug/L	305	Standard
|	**Pb**	207	351.7	23.7	**0.0098**	0.008	79.3	ug/L	231	Standard
|	**Pb**	208	1639.0	23.9	**0.0098**	0.008	79.7	ug/L	1129	Standard
|	**U**	238	193.7	86.2	**0.0097**	0.006	64.8	ug/L	3	Standard
⌊>	**Bi**	209	388203.3	0.1				ug/L	405108	Standard
⌈	**Na**	23	431.7	15.4	**0.1081**	0.021	19.0	mg/L	118	Standard
|	**Mg**	24	168469.8	0.6	**0.3475**	0.001	0.3	mg/L	377	Standard

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	K	39	946.7	5.3	**0.0410**	0.005	11.6	mg/L	583	Standard
	Ca	43	690.0	11.3	**1.6787**	0.205	12.2	mg/L	73	Standard
	Fe	54	482.2	8.5	**-0.0557**	0.009	15.5	mg/L	785	Standard
	Fe	57	7266.7	1.7	**0.0126**	0.001	6.8	mg/L	6133	Standard
>	**Sc-1**	45	225294.3	0.4				mg/L	254529	Standard
	Cl	35	424973.3	41.2				ug/L	1641778	Standard
	Kr	83	48.6	7.1				ug/L	60	Standard
	Br	81	9281.2	3.2				ug/L	11554	Standard
	P	31	24533.2	4.4				ug/L	45410	Standard
	S	34	1013390.8	2.1				ug/L	568857	Standard
	Sr	88	148661.1	2.7				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		90.398	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		89.196	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		90.987	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		93.191	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	95.827
	Na	23	
	Mg	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 10, 2012 13:26:14
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	12001.4	3.9	**-39.3709**	36.024	91.5	ug/L	12600	Standard
|	**Be**	9	161454.2	1.9	**48.3039**	0.648	1.3	ug/L	5	Standard
|	**Al**	27	808529.1	1.7	**51.0274**	0.399	0.8	ug/L	16102	Standard
⌊>	**Sc**	45	255152.2	0.9				ug/L	254529	Standard
⌈	**Ti**	47	150669.0	2.3	**100.1568**	3.255	3.2	ug/L	84	Standard
|	**V**	51	752025.5	2.0	**49.1179**	1.464	3.0	ug/L	5785	Standard
|	**Cr**	52	554061.5	2.0	**48.1435**	1.465	3.0	ug/L	12212	Standard
|	**Cr**	53	86936.3	2.7	**49.3648**	1.878	3.8	ug/L	5042	Standard
|	**Mn**	55	1015649.1	1.7	**50.4551**	1.318	2.6	ug/L	1290	Standard
|	**Co**	59	721299.2	2.4	**50.5157**	1.673	3.3	ug/L	143	Standard
|	**Ni**	60	153034.5	2.2	**51.0389**	1.500	2.9	ug/L	79	Standard
|	**Cu**	65	136871.3	2.3	**50.3254**	1.543	3.1	ug/L	154	Standard
|	**Zn**	66	61167.3	2.0	**49.6366**	1.405	2.8	ug/L	194	Standard
| >	**Ge**	72	227897.9	1.0				ug/L	232024	Standard
|	**As**	75	56408.5	1.1	**50.6220**	0.930	1.8	ug/L	-297	Standard
|	**Se**	82	6687.0	0.9	**52.9899**	1.000	1.9	ug/L	17	Standard
⌊	**Se-1**	77	4190.9	1.5	**49.9323**	1.020	2.0	ug/L	180	Standard
	Ga	71	204401.3	1.0				mg/L	210139	Standard
⌈	**Rb**	85	971.7	7.7				ug/L	12	Standard
| >	**Y**	89	220751.0	3.3				ug/L	214065	Standard
⌊	**Rh**	103	40.0	12.5				ug/L	0	Standard
⌈	**Mo**	98	410062.0	2.1	**102.6384**	1.706	1.7	ug/L	6	Standard
|	**Ag**	107	425824.0	2.7	**52.6801**	1.245	2.4	ug/L	33	Standard
|	**Cd**	111	216374.0	1.4	**49.4682**	0.512	1.0	mg/L	437	Standard
|	**Cd**	114	559585.7	1.2	**49.0182**	0.420	0.9	ug/L	1160	Standard
| >	**In**	115	624072.4	0.4				ug/L	646604	Standard
|	**Sn**	118	749779.3	2.5	**49.1507**	1.102	2.2	ug/L	864	Standard
|	**Sb**	123	525793.0	1.8	**49.3010**	0.754	1.5	ug/L	18	Standard
⌊	**Ba**	135	226807.2	2.2	**51.0128**	1.021	2.0	ug/L	39	Standard
⌈	**Ce**	140	865.4	4.6				ug/L	46	Standard
⌊>	**Tb**	159	703258.3	1.0				ug/L	695671	Standard
⌈	**Ho**	165	19.7	26.1				ug/L	9	Standard
|	**Tl**	203	808413.7	1.4	**50.6427**	0.586	1.2	ug/L	687	Standard
|	**Tl**	205	1879448.1	1.5	**49.7037**	0.643	1.3	ug/L	1624	Standard
|	**Pb**	206	643864.4	1.6	**50.5464**	0.698	1.4	ug/L	305	Standard
|	**Pb**	207	546619.6	1.3	**50.3133**	0.557	1.1	ug/L	231	Standard
|	**Pb**	208	2531597.6	1.5	**50.0650**	0.626	1.3	ug/L	1129	Standard
|	**U**	238	1298521.7	2.0	**48.1467**	0.863	1.8	ug/L	3	Standard
⌊>	**Bi**	209	392406.5	0.2				ug/L	405108	Standard
⌈	**Na**	23	18493.0	4.3	**5.0932**	0.185	3.6	mg/L	118	Standard
|	**Mg**	24	2741681.8	3.9	**5.0043**	0.162	3.2	mg/L	377	Standard

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	K	39	60149.2	0.5	**5.1403**	0.069	1.3	mg/L	583	Standard
	Ca	43	2128.5	4.3	**4.9052**	0.189	3.9	mg/L	73	Standard
	Fe	54	31595.5	3.2	**5.4864**	0.130	2.4	mg/L	785	Standard
	Fe	57	872275.8	1.4	**4.9446**	0.065	1.3	mg/L	6133	Standard
>	**Sc-1**	45	255152.2	0.9				mg/L	254529	Standard
	Cl	35	508600.6	38.0				ug/L	1641778	Standard
	Kr	83	59.8	1.8				ug/L	60	Standard
	Br	81	11658.7	2.3				ug/L	11554	Standard
	P	31	67734.4	0.7				ug/L	45410	Standard
	S	34	765527.5	3.6				ug/L	568857	Standard
	Sr	88	641.7	15.2				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	102.055		
>	Sc	45			
	Ti	47	100.157		
	V	51	98.236		
	Cr	52	96.287		
	Cr	53			
	Mn	55	100.910		
	Co	59	101.031		
	Ni	60	102.078		
	Cu	65	100.651		
	Zn	66	99.273		
>	Ge	72		98.222	
	As	75	101.244		
	Se	82	105.980		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		103.123	
	Rh	103			
	Mo	98	102.638		
	Ag	107	105.360		
	Cd	111	98.936		
	Cd	114			
>	In	115		96.515	
	Sn	118	98.301		
	Sb	123	98.602		
	Ba	135	102.026		
	Ce	140			
>	Tb	159		101.091	
	Ho	165			
	Tl	203	101.285		
	Tl	205			
	Pb	206	101.093		

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	Pb	207	100.627	
	Pb	208	100.130	
	U	238	96.293	
>	Bi	209		96.865
	Na	23	101.864	
	Mg	24	100.086	
	K	39	102.806	
	Ca	43	98.104	
	Fe	54	109.728	
	Fe	57	98.891	
>	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
Report Date/Time: Thursday, May 10, 2012 13:28:48
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Method 6020 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, May 10, 2012 13:29:08
Number of Replicates: 3
Autosampler Position: 102
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	12103.2	3.3	**16.0849**	46.489	289.0	ug/L	12600	Standard
|	**Be**	9	18.3	15.7	**-0.0087**	0.001	13.8	ug/L	5	Standard
|	**Al**	27	14577.1	10.3	**0.1790**	0.151	84.3	ug/L	16102	Standard
⌊>	**Sc**	45	246388.9	6.2				ug/L	254529	Standard
⌈	**Ti**	47	97.7	9.5	**0.0058**	0.006	99.2	ug/L	84	Standard
|	**V**	51	3720.5	3.6	**-0.0370**	0.015	39.7	ug/L	5785	Standard
|	**Cr**	52	10594.7	0.7	**-0.0654**	0.017	25.3	ug/L	12212	Standard
|	**Cr**	53	1120.9	8.4	**-0.8451**	0.067	8.0	ug/L	5042	Standard
|	**Mn**	55	1364.4	8.5	**-0.0145**	0.007	47.0	ug/L	1290	Standard
|	**Co**	59	188.7	38.2	**0.0035**	0.005	155.7	ug/L	143	Standard
|	**Ni**	60	77.3	20.0	**0.0029**	0.006	199.5	ug/L	79	Standard
|	**Cu**	65	152.3	16.3	**0.0085**	0.011	124.3	ug/L	154	Standard
|	**Zn**	66	213.0	19.1	**0.0044**	0.038	865.3	ug/L	194	Standard
|>	**Ge**	72	219852.8	2.3				ug/L	232024	Standard
|	**As**	75	-236.3	7.3	**0.0077**	0.014	178.6	ug/L	-297	Standard
|	**Se**	82	23.6	9.7	**0.0364**	0.023	62.8	ug/L	17	Standard
⌊	**Se-1**	77	93.0	11.3	**-0.6302**	0.138	21.9	ug/L	180	Standard
	Ga	71	199973.9	2.5				mg/L	210139	Standard
⌈	**Rb**	85	25.0	52.9				ug/L	12	Standard
|>	**Y**	89	213453.2	1.1				ug/L	214065	Standard
⌊	**Rh**	103	0.0					ug/L	0	Standard
⌈	**Mo**	98	77.5	70.6	**0.0115**	0.014	121.4	ug/L	6	Standard
|	**Ag**	107	107.7	35.7	**0.0061**	0.005	79.1	ug/L	33	Standard
|	**Cd**	111	453.2	7.2	**0.0124**	0.008	63.0	mg/L	437	Standard
|	**Cd**	114	1111.5	8.9	**-0.0010**	0.008	832.0	ug/L	1160	Standard
|>	**In**	115	615353.5	0.7				ug/L	646604	Standard
|	**Sn**	118	914.4	2.0	**0.0050**	0.001	28.2	ug/L	864	Standard
|	**Sb**	123	394.5	38.4	**0.0350**	0.014	41.3	ug/L	18	Standard
⌊	**Ba**	135	57.7	41.6	**0.0050**	0.005	111.0	ug/L	39	Standard
⌈	**Ce**	140	45.0	34.9				ug/L	46	Standard
⌊>	**Tb**	159	681769.6	1.9				ug/L	695671	Standard
⌈	**Ho**	165	5.3	10.8				ug/L	9	Standard
|	**Tl**	203	451.7	52.3	**-0.0082**	0.015	181.9	ug/L	687	Standard
|	**Tl**	205	1024.0	53.8	**-0.0083**	0.015	178.2	ug/L	1624	Standard
|	**Pb**	206	323.3	15.3	**0.0025**	0.004	162.9	ug/L	305	Standard
|	**Pb**	207	283.0	21.0	**0.0033**	0.006	167.1	ug/L	231	Standard
|	**Pb**	208	1295.4	19.2	**0.0028**	0.005	176.2	ug/L	1129	Standard
|	**U**	238	106.0	117.1	**0.0064**	0.005	73.0	ug/L	3	Standard
⌊>	**Bi**	209	389978.2	2.8				ug/L	405108	Standard
⌈	**Na**	23	83.3	24.2	**-0.0032**	0.007	209.8	mg/L	118	Standard
|	**Mg**	24	520.0	26.9	**0.0001**	0.000	249.7	mg/L	377	Standard

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	K	39	680.0	4.6	**0.0095**	0.006	66.3	mg/L	583	Standard
	Ca	43	56.7	31.0	**-0.0531**	0.037	68.9	mg/L	73	Standard
	Fe	54	908.3	6.7	**0.0155**	0.021	133.2	mg/L	785	Standard
	Fe	57	4770.8	6.2	**-0.0061**	0.002	38.8	mg/L	6133	Standard
>	**Sc-1**	45	246388.9	6.2				mg/L	254529	Standard
	Cl	35	467051.0	35.0				ug/L	1641778	Standard
	Kr	83	52.3	4.5				ug/L	60	Standard
	Br	81	11375.9	3.0				ug/L	11554	Standard
	P	31	63007.6	4.5				ug/L	45410	Standard
	S	34	745520.1	1.9				ug/L	568857	Standard
	Sr	88	246.7	7.1				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		94.755	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		99.714	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		95.167	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		98.002	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	96.265
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

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: L1205010507
Sample Date/Time: Thursday, May 10, 2012 13:32:03
Number of Replicates: 3
Autosampler Position: 253
Sample Description: 10
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	59347.7	2.4	**5447.4290**	174.755	3.2	ug/L	12600	Standard
|	**Be**	9	11.7	49.5	**-0.0105**	0.002	19.2	ug/L	5	Standard
|	**Al**	27	16455.6	3.3	**0.3883**	0.007	1.9	ug/L	16102	Standard
⌊>	**Sc**	45	227635.3	3.5				ug/L	254529	Standard
⌈	**Ti**	47	125.0	4.9	**0.0279**	0.004	13.0	ug/L	84	Standard
|	**V**	51	4254.8	5.7	**0.0100**	0.012	119.0	ug/L	5785	Standard
|	**Cr**	52	11352.9	9.8	**0.0425**	0.082	192.1	ug/L	12212	Standard
|	**Cr**	53	1174.2	6.8	**-0.7849**	0.075	9.5	ug/L	5042	Standard
|	**Mn**	55	449105.6	4.5	**23.9577**	0.993	4.1	ug/L	1290	Standard
|	**Co**	59	3177.0	4.6	**0.2292**	0.011	4.7	ug/L	143	Standard
|	**Ni**	60	5821.5	7.7	**2.0653**	0.146	7.1	ug/L	79	Standard
|	**Cu**	65	1217.4	7.8	**0.4316**	0.019	4.3	ug/L	154	Standard
|	**Zn**	66	283294.5	3.6	**247.9874**	5.750	2.3	ug/L	194	Standard
| >	**Ge**	72	211880.7	3.9				ug/L	232024	Standard
|	**As**	75	-184.9	11.3	**0.0484**	0.024	49.4	ug/L	-297	Standard
|	**Se**	82	21.9	26.3	**0.0282**	0.047	167.4	ug/L	17	Standard
⌊	**Se-1**	77	86.0	4.2	**-0.6772**	0.074	11.0	ug/L	180	Standard
	Ga	71	184540.3	3.6				mg/L	210139	Standard
⌈	**Rb**	85	2796.9	2.4				ug/L	12	Standard
| >	**Y**	89	193777.0	3.0				ug/L	214065	Standard
⌊	**Rh**	103	43.3	13.3				ug/L	0	Standard
⌈	**Mo**	98	66.2	20.3	**0.0092**	0.003	34.3	ug/L	6	Standard
|	**Ag**	107	41.7	24.6	**-0.0020**	0.001	64.0	ug/L	33	Standard
|	**Cd**	111	303.9	7.8	**-0.0198**	0.004	20.9	mg/L	437	Standard
|	**Cd**	114	859.1	2.6	**-0.0207**	0.001	6.1	ug/L	1160	Standard
| >	**In**	115	594050.0	2.4				ug/L	646604	Standard
|	**Sn**	118	517.7	5.4	**-0.0202**	0.001	5.3	ug/L	864	Standard
|	**Sb**	123	160.0	6.6	**0.0133**	0.001	10.2	ug/L	18	Standard
⌊	**Ba**	135	3523.1	4.7	**0.8241**	0.020	2.5	ug/L	39	Standard
⌈	**Ce**	140	192.0	1.9				ug/L	46	Standard
⌊>	**Tb**	159	662544.1	1.4				ug/L	695671	Standard
⌈	**Ho**	165	14.7	32.2				ug/L	9	Standard
|	**Tl**	203	541.7	23.0	**-0.0021**	0.008	402.6	ug/L	687	Standard
|	**Tl**	205	1252.4	18.2	**-0.0018**	0.007	364.5	ug/L	1624	Standard
|	**Pb**	206	320.7	11.2	**0.0026**	0.003	120.7	ug/L	305	Standard
|	**Pb**	207	270.3	11.0	**0.0024**	0.003	127.4	ug/L	231	Standard
|	**Pb**	208	1235.4	8.1	**0.0019**	0.002	117.5	ug/L	1129	Standard
|	**U**	238	233.3	4.3	**0.0112**	0.000	2.5	ug/L	3	Standard
⌊>	**Bi**	209	385489.0	1.2				ug/L	405108	Standard
⌈	**Na**	23	2433.5	9.5	**0.7286**	0.073	10.0	mg/L	118	Standard
|	**Mg**	24	999729.4	2.5	**2.0456**	0.021	1.0	mg/L	377	Standard

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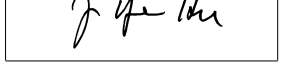

	K	39	2843.6	2.4	**0.2239**	0.016	7.3	mg/L	583	Standard
	Ca	43	4502.3	4.4	**11.9045**	0.644	5.4	mg/L	73	Standard
	Fe	54	345.2	18.0	**-0.0843**	0.011	12.6	mg/L	785	Standard
	Fe	57	12193.3	11.8	**0.0436**	0.007	16.4	mg/L	6133	Standard
>	**Sc-1**	45	227635.3	3.5				mg/L	254529	Standard
	Cl	35	377043.5	53.0				ug/L	1641778	Standard
	Kr	83	51.9	2.1				ug/L	60	Standard
	Br	81	9939.1	2.2				ug/L	11554	Standard
	P	31	22024.4	6.0				ug/L	45410	Standard
	S	34	2252693.1	4.9				ug/L	568857	Standard
	Sr	88	985601.2	2.6				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		91.319	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		90.523	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		91.872	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		95.238	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	95.157
	Na	23	
	Mg	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
Zn 66 Upper, S, EEE	Zn	66	

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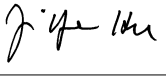

Method 6020 - Summary Report

Sample ID: L1205010508
Sample Date/Time: Thursday, May 10, 2012 13:34:56
Number of Replicates: 3
Autosampler Position: 254
Sample Description: 10
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	12148.2	3.6	**119.0529**	53.265	44.7	ug/L	12600	Standard
|	**Be**	9	11.7	99.0	**-0.0105**	0.004	36.9	ug/L	5	Standard
|	**Al**	27	108935.2	0.5	**7.0079**	0.096	1.4	ug/L	16102	Standard
⌊>	**Sc**	45	228363.1	0.7				ug/L	254529	Standard
⌈	**Ti**	47	106.3	16.2	**0.0139**	0.013	90.4	ug/L	84	Standard
|	**V**	51	4584.9	2.0	**0.0303**	0.005	17.0	ug/L	5785	Standard
|	**Cr**	52	12375.4	1.3	**0.1300**	0.012	9.4	ug/L	12212	Standard
|	**Cr**	53	1233.4	22.7	**-0.7567**	0.173	22.9	ug/L	5042	Standard
|	**Mn**	55	141414.1	2.3	**7.4133**	0.199	2.7	ug/L	1290	Standard
|	**Co**	59	1610.1	4.3	**0.1099**	0.005	4.9	ug/L	143	Standard
|	**Ni**	60	746.7	0.1	**0.2416**	0.001	0.5	ug/L	79	Standard
|	**Cu**	65	781.0	0.6	**0.2565**	0.001	0.5	ug/L	154	Standard
|	**Zn**	66	19644.1	0.9	**16.8694**	0.203	1.2	ug/L	194	Standard
| >	**Ge**	72	213855.7	0.4				ug/L	232024	Standard
|	**As**	75	-128.8	10.2	**0.1038**	0.013	12.2	ug/L	-297	Standard
|	**Se**	82	25.4	30.0	**0.0562**	0.064	113.5	ug/L	17	Standard
⌊	**Se-1**	77	86.7	14.7	**-0.6803**	0.169	24.9	ug/L	180	Standard
	Ga	71	186863.6	0.9				mg/L	210139	Standard
⌈	**Rb**	85	980.0	7.6				ug/L	12	Standard
| >	**Y**	89	194556.2	0.8				ug/L	214065	Standard
⌊	**Rh**	103	6.7	43.3				ug/L	0	Standard
⌈	**Mo**	98	173.2	4.8	**0.0373**	0.002	4.3	ug/L	6	Standard
|	**Ag**	107	40.3	23.8	**-0.0021**	0.001	61.1	ug/L	33	Standard
|	**Cd**	111	162.0	12.1	**-0.0539**	0.005	8.5	mg/L	437	Standard
|	**Cd**	114	398.4	6.9	**-0.0632**	0.002	3.7	ug/L	1160	Standard
| >	**In**	115	594659.8	1.4				ug/L	646604	Standard
|	**Sn**	118	530.3	11.5	**-0.0194**	0.004	22.2	ug/L	864	Standard
|	**Sb**	123	165.2	13.0	**0.0138**	0.002	15.0	ug/L	18	Standard
⌊	**Ba**	135	5300.6	1.7	**1.2434**	0.031	2.5	ug/L	39	Standard
⌈	**Ce**	140	1125.0	3.6				ug/L	46	Standard
⌊>	**Tb**	159	653480.8	2.0				ug/L	695671	Standard
⌈	**Ho**	165	50.0	12.5				ug/L	9	Standard
|	**Tl**	203	481.3	25.5	**-0.0063**	0.008	127.0	ug/L	687	Standard
|	**Tl**	205	1154.7	18.8	**-0.0048**	0.006	126.6	ug/L	1624	Standard
|	**Pb**	206	421.7	7.4	**0.0103**	0.003	26.2	ug/L	305	Standard
|	**Pb**	207	346.7	5.7	**0.0093**	0.002	22.3	ug/L	231	Standard
|	**Pb**	208	1589.7	6.9	**0.0087**	0.002	27.5	ug/L	1129	Standard
|	**U**	238	188.3	8.0	**0.0094**	0.001	6.5	ug/L	3	Standard
⌊>	**Bi**	209	389275.7	0.7				ug/L	405108	Standard
⌈	**Na**	23	683.3	12.9	**0.1843**	0.028	15.3	mg/L	118	Standard
|	**Mg**	24	125270.9	2.1	**0.2547**	0.006	2.2	mg/L	377	Standard

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	K	39	2288.5	2.5	**0.1691**	0.004	2.4	mg/L	583	Standard
	Ca	43	733.4	9.6	**1.7695**	0.178	10.1	mg/L	73	Standard
	Fe	54	635.2	4.5	**-0.0265**	0.005	18.6	mg/L	785	Standard
	Fe	57	13380.9	1.2	**0.0510**	0.002	3.0	mg/L	6133	Standard
>	**Sc-1**	45	228363.1	0.7				mg/L	254529	Standard
	Cl	35	359537.1	55.2				ug/L	1641778	Standard
	Kr	83	46.4	4.6				ug/L	60	Standard
	Br	81	9638.1	1.4				ug/L	11554	Standard
	P	31	24524.0	2.1				ug/L	45410	Standard
	S	34	865196.1	0.1				ug/L	568857	Standard
	Sr	88	96551.8	2.4				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		92.170	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		90.887	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		91.967	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		93.935	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	96.092
	Na	23	
	Mg	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: L1205010508
Report Date/Time: Thursday, May 10, 2012 13:37:29
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Method 6020 - Summary Report

Sample ID: L1205010509 WG397022-02
Sample Date/Time: Thursday, May 10, 2012 13:37:49
Number of Replicates: 3
Autosampler Position: 255
Sample Description: 10
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	12179.9	1.1	**134.6997**	28.634	21.3	ug/L	12600	Standard
|	**Be**	9	13.3	21.7	**-0.0099**	0.001	9.3	ug/L	5	Standard
|	**Al**	27	63538.0	1.2	**3.7962**	0.014	0.4	ug/L	16102	Standard
⌊>	**Sc**	45	226385.6	1.5				ug/L	254529	Standard
⌈	**Ti**	47	73.0	2.4	**-0.0090**	0.001	16.6	ug/L	84	Standard
|	**V**	51	4213.3	3.6	**0.0088**	0.009	103.2	ug/L	5785	Standard
|	**Cr**	52	11876.3	2.1	**0.0998**	0.015	15.3	ug/L	12212	Standard
|	**Cr**	53	1182.5	22.9	**-0.7775**	0.169	21.7	ug/L	5042	Standard
|	**Mn**	55	144535.9	1.3	**7.6944**	0.067	0.9	ug/L	1290	Standard
|	**Co**	59	1576.4	2.3	**0.1092**	0.002	1.7	ug/L	143	Standard
|	**Ni**	60	871.7	2.8	**0.2907**	0.008	2.8	ug/L	79	Standard
|	**Cu**	65	751.7	4.7	**0.2495**	0.015	6.2	ug/L	154	Standard
|	**Zn**	66	17303.9	1.6	**15.0664**	0.263	1.7	ug/L	194	Standard
|>	**Ge**	72	210664.5	0.7				ug/L	232024	Standard
|	**As**	75	-117.2	14.1	**0.1130**	0.017	14.9	ug/L	-297	Standard
|	**Se**	82	23.0	12.2	**0.0394**	0.024	61.2	ug/L	17	Standard
⌊	**Se-1**	77	108.3	2.7	**-0.3737**	0.045	12.2	ug/L	180	Standard
	Ga	71	184287.4	1.1				mg/L	210139	Standard
⌈	**Rb**	85	1005.0	9.5				ug/L	12	Standard
|>	**Y**	89	194625.4	0.8				ug/L	214065	Standard
⌊	**Rh**	103	3.3	86.6				ug/L	0	Standard
⌈	**Mo**	98	140.1	5.2	**0.0286**	0.002	5.8	ug/L	6	Standard
|	**Ag**	107	38.0	13.7	**-0.0024**	0.001	27.9	ug/L	33	Standard
|	**Cd**	111	149.4	8.0	**-0.0570**	0.003	4.7	mg/L	437	Standard
|	**Cd**	114	413.7	2.8	**-0.0619**	0.001	1.2	ug/L	1160	Standard
|>	**In**	115	595188.1	1.0				ug/L	646604	Standard
|	**Sn**	118	495.0	3.9	**-0.0218**	0.002	7.7	ug/L	864	Standard
|	**Sb**	123	135.2	12.7	**0.0108**	0.002	14.5	ug/L	18	Standard
⌊	**Ba**	135	5441.6	2.1	**1.2753**	0.014	1.1	ug/L	39	Standard
⌈	**Ce**	140	513.7	7.5				ug/L	46	Standard
⌊>	**Tb**	159	655369.9	0.7				ug/L	695671	Standard
⌈	**Ho**	165	25.3	25.7				ug/L	9	Standard
|	**Tl**	203	490.7	21.9	**-0.0058**	0.007	118.3	ug/L	687	Standard
|	**Tl**	205	1094.7	25.8	**-0.0065**	0.008	116.6	ug/L	1624	Standard
|	**Pb**	206	336.3	10.2	**0.0035**	0.003	77.9	ug/L	305	Standard
|	**Pb**	207	293.3	9.6	**0.0042**	0.003	65.0	ug/L	231	Standard
|	**Pb**	208	1353.4	6.6	**0.0039**	0.002	47.0	ug/L	1129	Standard
|	**U**	238	187.7	3.0	**0.0094**	0.000	2.7	ug/L	3	Standard
⌊>	**Bi**	209	390430.9	0.8				ug/L	405108	Standard
⌈	**Na**	23	680.0	1.9	**0.1850**	0.003	1.7	mg/L	118	Standard
|	**Mg**	24	127783.3	0.8	**0.2621**	0.005	1.8	mg/L	377	Standard

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	K	39	2275.2	0.2	**0.1698**	0.003	1.7	mg/L	583	Standard
	Ca	43	770.0	8.1	**1.8874**	0.188	9.9	mg/L	73	Standard
	Fe	54	480.3	14.3	**-0.0565**	0.015	26.6	mg/L	785	Standard
	Fe	57	8884.3	0.6	**0.0228**	0.001	2.3	mg/L	6133	Standard
>	**Sc-1**	45	226385.6	1.5				mg/L	254529	Standard
	Cl	35	347917.9	56.0				ug/L	1641778	Standard
	Kr	83	45.6	1.5				ug/L	60	Standard
	Br	81	9648.1	1.6				ug/L	11554	Standard
	P	31	23590.0	0.9				ug/L	45410	Standard
	S	34	870683.1	0.7				ug/L	568857	Standard
	Sr	88	101027.5	2.1				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		90.794	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		90.919	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		92.048	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		94.207	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	96.377
	Na	23	
	Mg	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: L1205010509 WG397022-02
Report Date/Time: Thursday, May 10, 2012 13:40:22
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Method 6020 - Summary Report

Sample ID: L1205010509DP WG397022-07
Sample Date/Time: Thursday, May 10, 2012 13:40:42
Number of Replicates: 3
Autosampler Position: 256
Sample Description: 10
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	12243.3	4.7	**130.8175**	84.583	64.7	ug/L	12600	Standard
|	**Be**	9	6.7	114.6	**-0.0122**	0.003	20.6	ug/L	5	Standard
|	**Al**	27	73343.8	1.9	**4.4597**	0.032	0.7	ug/L	16102	Standard
⌊>	**Sc**	45	228307.5	1.6				ug/L	254529	Standard
⌈	**Ti**	47	77.0	9.4	**-0.0057**	0.005	92.8	ug/L	84	Standard
|	**V**	51	4279.7	1.9	**0.0158**	0.007	47.1	ug/L	5785	Standard
|	**Cr**	52	11621.8	0.6	**0.0836**	0.005	6.5	ug/L	12212	Standard
|	**Cr**	53	1236.7	22.2	**-0.7366**	0.178	24.2	ug/L	5042	Standard
|	**Mn**	55	136144.1	1.8	**7.2966**	0.119	1.6	ug/L	1290	Standard
|	**Co**	59	1534.7	1.9	**0.1069**	0.002	2.1	ug/L	143	Standard
|	**Ni**	60	813.0	4.4	**0.2717**	0.014	5.2	ug/L	79	Standard
|	**Cu**	65	721.0	6.3	**0.2394**	0.019	7.8	ug/L	154	Standard
|	**Zn**	66	16087.5	1.6	**14.0983**	0.174	1.2	ug/L	194	Standard
| >	**Ge**	72	209127.7	0.5				ug/L	232024	Standard
|	**As**	75	-143.8	6.5	**0.0864**	0.010	11.1	ug/L	-297	Standard
|	**Se**	82	21.0	14.8	**0.0235**	0.026	112.8	ug/L	17	Standard
⌊	**Se-1**	77	90.7	11.0	**-0.6010**	0.134	22.3	ug/L	180	Standard
	Ga	71	183034.3	0.8				mg/L	210139	Standard
⌈	**Rb**	85	903.4	8.3				ug/L	12	Standard
| >	**Y**	89	187290.6	1.2				ug/L	214065	Standard
⌊	**Rh**	103	5.0	0.0				ug/L	0	Standard
⌈	**Mo**	98	144.1	7.7	**0.0303**	0.003	9.5	ug/L	6	Standard
|	**Ag**	107	37.7	5.5	**-0.0024**	0.000	8.9	ug/L	33	Standard
|	**Cd**	111	148.7	1.2	**-0.0565**	0.001	1.4	mg/L	437	Standard
|	**Cd**	114	411.1	5.1	**-0.0614**	0.003	4.2	ug/L	1160	Standard
| >	**In**	115	584536.6	1.5				ug/L	646604	Standard
|	**Sn**	118	529.7	1.4	**-0.0188**	0.001	5.2	ug/L	864	Standard
|	**Sb**	123	138.5	5.5	**0.0114**	0.001	7.3	ug/L	18	Standard
⌊	**Ba**	135	5223.9	1.2	**1.2468**	0.034	2.7	ug/L	39	Standard
⌈	**Ce**	140	514.7	4.1				ug/L	46	Standard
⌊>	**Tb**	159	644847.1	1.3				ug/L	695671	Standard
⌈	**Ho**	165	27.3	38.8				ug/L	9	Standard
|	**Tl**	203	482.7	20.7	**-0.0059**	0.006	107.7	ug/L	687	Standard
|	**Tl**	205	1145.4	22.6	**-0.0047**	0.007	145.6	ug/L	1624	Standard
|	**Pb**	206	362.3	10.2	**0.0059**	0.003	46.2	ug/L	305	Standard
|	**Pb**	207	321.7	12.5	**0.0073**	0.004	52.0	ug/L	231	Standard
|	**Pb**	208	1426.0	9.5	**0.0058**	0.003	47.7	ug/L	1129	Standard
|	**U**	238	192.0	12.2	**0.0097**	0.001	9.2	ug/L	3	Standard
⌊>	**Bi**	209	384773.4	1.5				ug/L	405108	Standard
⌈	**Na**	23	703.3	4.0	**0.1906**	0.012	6.5	mg/L	118	Standard
|	**Mg**	24	123770.2	0.6	**0.2517**	0.005	1.9	mg/L	377	Standard

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	K	39	2106.8	4.7	**0.1516**	0.007	4.8	mg/L	583	Standard
	Ca	43	768.4	4.9	**1.8647**	0.110	5.9	mg/L	73	Standard
	Fe	54	413.4	9.7	**-0.0708**	0.007	10.6	mg/L	785	Standard
	Fe	57	8540.7	3.3	**0.0202**	0.002	12.0	mg/L	6133	Standard
>	**Sc-1**	45	228307.5	1.6				mg/L	254529	Standard
	Cl	35	395057.0	40.3				ug/L	1641778	Standard
	Kr	83	49.4	10.1				ug/L	60	Standard
	Br	81	9588.0	3.2				ug/L	11554	Standard
	P	31	23126.8	2.9				ug/L	45410	Standard
	S	34	843764.9	1.5				ug/L	568857	Standard
	Sr	88	94695.1	2.7				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		90.132	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		87.492	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		90.401	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		92.694	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1205010509DP WG397022-07
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	94.980
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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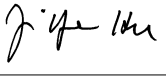

Method 6020 - Summary Report

Sample ID: L1205010510
Sample Date/Time: Thursday, May 10, 2012 13:43:34
Number of Replicates: 3
Autosampler Position: 257
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	12870.5	1.1	**29.6464**	39.872	134.5	ug/L	12600	Standard
|	**Be**	9	5.0	100.0	**-0.0129**	0.002	11.7	ug/L	5	Standard
|	**Al**	27	47832.1	3.8	**2.2257**	0.041	1.8	ug/L	16102	Standard
⌊>	**Sc**	45	259009.4	2.7				ug/L	254529	Standard
⌈	**Ti**	47	164.3	0.9	**0.0491**	0.003	6.8	ug/L	84	Standard
|	**V**	51	4920.6	2.0	**0.0367**	0.010	27.9	ug/L	5785	Standard
|	**Cr**	52	14031.8	1.6	**0.2203**	0.012	5.7	ug/L	12212	Standard
|	**Cr**	53	1540.9	17.9	**-0.6141**	0.151	24.6	ug/L	5042	Standard
|	**Mn**	55	2219.2	2.0	**0.0269**	0.001	3.4	ug/L	1290	Standard
|	**Co**	59	158.0	10.4	**0.0009**	0.001	102.7	ug/L	143	Standard
|	**Ni**	60	134.7	11.1	**0.0217**	0.006	28.4	ug/L	79	Standard
|	**Cu**	65	409.0	8.9	**0.1024**	0.010	9.7	ug/L	154	Standard
|	**Zn**	66	1972.1	3.4	**1.4492**	0.032	2.2	ug/L	194	Standard
| >	**Ge**	72	225168.8	2.5				ug/L	232024	Standard
|	**As**	75	-236.6	14.1	**0.0122**	0.033	268.0	ug/L	-297	Standard
|	**Se**	82	28.1	22.6	**0.0673**	0.047	70.4	ug/L	17	Standard
⌊	**Se-1**	77	111.0	15.4	**-0.4358**	0.185	42.4	ug/L	180	Standard
	Ga	71	205550.6	2.9				mg/L	210139	Standard
⌈	**Rb**	85	43.3	56.9				ug/L	12	Standard
| >	**Y**	89	216012.5	1.6				ug/L	214065	Standard
⌊	**Rh**	103	5.0	173.2				ug/L	0	Standard
⌈	**Mo**	98	15.6	25.7	**-0.0043**	0.001	22.5	ug/L	6	Standard
|	**Ag**	107	56.0	18.1	**-0.0004**	0.001	277.1	ug/L	33	Standard
|	**Cd**	111	479.3	5.6	**0.0174**	0.007	40.1	mg/L	437	Standard
|	**Cd**	114	1228.9	5.3	**0.0083**	0.005	54.7	ug/L	1160	Standard
| >	**In**	115	621649.5	1.2				ug/L	646604	Standard
|	**Sn**	118	939.0	2.7	**0.0059**	0.001	16.4	ug/L	864	Standard
|	**Sb**	123	147.9	4.2	**0.0114**	0.001	6.3	ug/L	18	Standard
⌊	**Ba**	135	279.7	6.9	**0.0550**	0.005	9.1	ug/L	39	Standard
⌈	**Ce**	140	98.3	7.4				ug/L	46	Standard
⌊>	**Tb**	159	692415.2	0.4				ug/L	695671	Standard
⌈	**Ho**	165	7.3	20.8				ug/L	9	Standard
|	**Tl**	203	321.3	44.7	**-0.0165**	0.009	53.1	ug/L	687	Standard
|	**Tl**	205	744.7	54.9	**-0.0158**	0.011	67.0	ug/L	1624	Standard
|	**Pb**	206	372.7	1.9	**0.0064**	0.000	3.4	ug/L	305	Standard
|	**Pb**	207	317.0	10.3	**0.0065**	0.003	41.1	ug/L	231	Standard
|	**Pb**	208	1420.4	3.3	**0.0054**	0.001	12.4	ug/L	1129	Standard
|	**U**	238	23.7	60.1	**0.0033**	0.001	16.3	ug/L	3	Standard
⌊>	**Bi**	209	389367.5	1.3				ug/L	405108	Standard
⌈	**Na**	23	91.7	13.7	**-0.0023**	0.003	138.2	mg/L	118	Standard
|	**Mg**	24	3125.3	3.6	**0.0048**	0.000	1.9	mg/L	377	Standard

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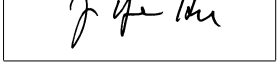

	K	39	745.0	4.6	**0.0118**	0.004	31.1	mg/L	583	Standard
	Ca	43	70.0	32.7	**-0.0279**	0.052	187.6	mg/L	73	Standard
	Fe	54	989.6	2.1	**0.0208**	0.003	12.9	mg/L	785	Standard
	Fe	57	6309.6	5.3	**0.0011**	0.001	88.7	mg/L	6133	Standard
>	**Sc-1**	45	259009.4	2.7				mg/L	254529	Standard
	Cl	35	518695.5	39.1				ug/L	1641778	Standard
	Kr	83	55.9	10.2				ug/L	60	Standard
	Br	81	11835.5	3.1				ug/L	11554	Standard
	P	31	69351.0	3.8				ug/L	45410	Standard
	S	34	863926.5	2.2				ug/L	568857	Standard
	Sr	88	1346.7	5.6				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		97.046	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		100.910	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		96.141	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		99.532	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1205010510
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	96.114
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1205010510
Report Date/Time: Thursday, May 10, 2012 13:46:08
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Method 6020 - Summary Report

Sample ID: L1205009901
Sample Date/Time: Thursday, May 10, 2012 13:46:28
Number of Replicates: 3
Autosampler Position: 258
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	140904.1	2.7	**11528.5872**	428.565	3.7	ug/L	12600	Standard
|	**Be**	9	40.0	25.0	**-0.0037**	0.003	70.8	ug/L	5	Standard
|	**Al**	27	488288.5	2.7	**27.4083**	0.212	0.8	ug/L	16102	Standard
⌊>	**Sc**	45	283195.6	3.3				ug/L	254529	Standard
⌈	**Ti**	47	2697.6	27.1	**1.7710**	0.459	25.9	ug/L	84	Standard
|	**V**	51	9599.1	2.5	**0.3555**	0.016	4.4	ug/L	5785	Standard
|	**Cr**	52	19095.4	3.1	**0.6957**	0.027	3.9	ug/L	12212	Standard
|	**Cr**	53	2800.3	9.4	**0.1515**	0.121	79.9	ug/L	5042	Standard
|	**Mn**	55	1812597.7	2.4	**92.3020**	0.264	0.3	ug/L	1290	Standard
|	**Co**	59	5463.7	2.5	**0.3818**	0.008	2.1	ug/L	143	Standard
|	**Ni**	60	5061.2	7.9	**1.7044**	0.095	5.6	ug/L	79	Standard
|	**Cu**	65	1486.7	2.6	**0.5107**	0.001	0.2	ug/L	154	Standard
|	**Zn**	66	4674.7	2.7	**3.7239**	0.091	2.4	ug/L	194	Standard
| >	**Ge**	72	222458.8	2.4				ug/L	232024	Standard
|	**As**	75	1802.8	5.4	**1.8755**	0.050	2.6	ug/L	-297	Standard
|	**Se**	82	86.0	7.5	**0.5413**	0.038	6.9	ug/L	17	Standard
⌊	**Se-1**	77	165.7	15.4	**0.2753**	0.324	117.8	ug/L	180	Standard
	Ga	71	200561.4	2.1				mg/L	210139	Standard
⌈	**Rb**	85	23813.7	4.4				ug/L	12	Standard
| >	**Y**	89	221412.4	3.6				ug/L	214065	Standard
⌊	**Rh**	103	130.0	17.6				ug/L	0	Standard
⌈	**Mo**	98	5953.5	4.5	**1.4866**	0.047	3.2	ug/L	6	Standard
|	**Ag**	107	107.3	6.9	**0.0060**	0.001	18.4	ug/L	33	Standard
|	**Cd**	111	1068.5	3.6	**0.1527**	0.005	3.2	mg/L	437	Standard
|	**Cd**	114	2800.1	2.8	**0.1466**	0.004	2.9	ug/L	1160	Standard
| >	**In**	115	622054.3	1.6				ug/L	646604	Standard
|	**Sn**	118	1287.1	1.4	**0.0288**	0.000	0.7	ug/L	864	Standard
|	**Sb**	123	889.9	3.6	**0.0812**	0.002	2.0	ug/L	18	Standard
⌊	**Ba**	135	305014.1	1.2	**68.8329**	0.368	0.5	ug/L	39	Standard
⌈	**Ce**	140	14474.6	9.3				ug/L	46	Standard
⌊>	**Tb**	159	712064.4	1.6				ug/L	695671	Standard
⌈	**Ho**	165	251.7	4.6				ug/L	9	Standard
|	**Tl**	203	693.7	5.3	**0.0090**	0.003	34.7	ug/L	687	Standard
|	**Tl**	205	1665.1	3.4	**0.0107**	0.001	7.6	ug/L	1624	Standard
|	**Pb**	206	3961.2	4.2	**0.3035**	0.008	2.7	ug/L	305	Standard
|	**Pb**	207	3315.7	2.1	**0.2977**	0.003	0.9	ug/L	231	Standard
|	**Pb**	208	15456.1	1.8	**0.2981**	0.001	0.4	ug/L	1129	Standard
|	**U**	238	6685.8	0.8	**0.2627**	0.002	0.9	ug/L	3	Standard
⌊>	**Bi**	209	373698.9	1.7				ug/L	405108	Standard
⌈	**Na**	23	88301.7	2.7	**22.0109**	0.477	2.2	mg/L	118	Standard
|	**Mg**	24	3348572.3	2.5	**5.5108**	0.194	3.5	mg/L	377	Standard

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	K	39	21685.5	2.9	**1.6351**	0.037	2.3	mg/L	583	Standard
	Ca	43	18579.7	3.4	**39.9056**	0.244	0.6	mg/L	73	Standard
	Fe	54	17795.9	1.2	**2.7112**	0.104	3.8	mg/L	785	Standard
	Fe	57	526806.9	2.4	**2.6757**	0.059	2.2	mg/L	6133	Standard
>	**Sc-1**	45	283195.6	3.3				mg/L	254529	Standard
	Cl	35	3136924.6	6.1				ug/L	1641778	Standard
	Kr	83	53.3	4.4				ug/L	60	Standard
	Br	81	39801.4	1.3				ug/L	11554	Standard
	P	31	207279.4	2.0				ug/L	45410	Standard
	S	34	1721635.3	2.7				ug/L	568857	Standard
	Sr	88	5560232.3	4.3				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		95.878	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		103.432	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		96.203	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		102.356	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	92.247
	Na	23	
	Mg	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 11, 2012

Method 6020 - Summary Report

Sample ID: L1205009902
Sample Date/Time: Thursday, May 10, 2012 13:49:21
Number of Replicates: 3
Autosampler Position: 259
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	146760.7	0.8	**11886.1940**	111.139	0.9	ug/L	12600	Standard
|	**Be**	9	26.7	43.3	**-0.0073**	0.003	43.4	ug/L	5	Standard
|	**Al**	27	169609.4	2.5	**8.8787**	0.285	3.2	ug/L	16102	Standard
⌊>	**Sc**	45	286818.1	1.7				ug/L	254529	Standard
⌈	**Ti**	47	1153.4	4.3	**0.6929**	0.022	3.1	ug/L	84	Standard
|	**V**	51	8968.2	3.1	**0.2889**	0.013	4.4	ug/L	5785	Standard
|	**Cr**	52	20273.6	2.6	**0.7297**	0.025	3.4	ug/L	12212	Standard
|	**Cr**	53	2736.1	2.2	**0.0501**	0.055	109.4	ug/L	5042	Standard
|	**Mn**	55	1882688.5	2.3	**92.0834**	2.305	2.5	ug/L	1290	Standard
|	**Co**	59	5795.8	2.3	**0.3891**	0.008	1.9	ug/L	143	Standard
|	**Ni**	60	5117.2	2.0	**1.6557**	0.020	1.2	ug/L	79	Standard
|	**Cu**	65	1152.7	4.0	**0.3676**	0.019	5.1	ug/L	154	Standard
|	**Zn**	66	2197.8	3.2	**1.5844**	0.031	2.0	ug/L	194	Standard
| >	**Ge**	72	231634.4	1.5				ug/L	232024	Standard
|	**As**	75	1847.4	2.9	**1.8503**	0.051	2.8	ug/L	-297	Standard
|	**Se**	82	89.4	12.2	**0.5413**	0.089	16.4	ug/L	17	Standard
⌊	**Se-1**	77	169.0	3.6	**0.2326**	0.082	35.5	ug/L	180	Standard
	Ga	71	205507.5	2.3				mg/L	210139	Standard
⌈	**Rb**	85	22937.4	2.7				ug/L	12	Standard
| >	**Y**	89	220516.5	0.8				ug/L	214065	Standard
⌊	**Rh**	103	140.0	18.6				ug/L	0	Standard
⌈	**Mo**	98	6131.2	1.5	**1.4972**	0.007	0.5	ug/L	6	Standard
|	**Ag**	107	43.7	19.5	**-0.0021**	0.001	48.9	ug/L	33	Standard
|	**Cd**	111	521.5	2.6	**0.0243**	0.004	15.0	mg/L	437	Standard
|	**Cd**	114	1293.9	5.4	**0.0114**	0.005	40.0	ug/L	1160	Standard
| >	**In**	115	636286.6	1.3				ug/L	646604	Standard
|	**Sn**	118	1423.1	4.8	**0.0357**	0.003	9.1	ug/L	864	Standard
|	**Sb**	123	546.5	4.5	**0.0478**	0.002	3.5	ug/L	18	Standard
⌊	**Ba**	135	302427.3	2.1	**66.7148**	0.512	0.8	ug/L	39	Standard
⌈	**Ce**	140	5678.1	1.8				ug/L	46	Standard
⌊>	**Tb**	159	732055.3	1.2				ug/L	695671	Standard
⌈	**Ho**	165	135.0	11.6				ug/L	9	Standard
|	**Tl**	203	625.7	5.0	**0.0038**	0.002	51.0	ug/L	687	Standard
|	**Tl**	205	1450.7	5.2	**0.0040**	0.002	41.0	ug/L	1624	Standard
|	**Pb**	206	712.7	3.7	**0.0347**	0.003	7.6	ug/L	305	Standard
|	**Pb**	207	572.3	2.6	**0.0315**	0.001	2.8	ug/L	231	Standard
|	**Pb**	208	2691.1	1.4	**0.0320**	0.001	3.7	ug/L	1129	Standard
|	**U**	238	5991.5	4.1	**0.2317**	0.007	3.0	ug/L	3	Standard
⌊>	**Bi**	209	380031.6	1.1				ug/L	405108	Standard
⌈	**Na**	23	88925.2	1.0	**21.8823**	0.251	1.1	mg/L	118	Standard
|	**Mg**	24	3372655.9	1.8	**5.4777**	0.093	1.7	mg/L	377	Standard

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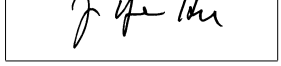

	K	39	22022.7	2.4	**1.6400**	0.063	3.9	mg/L	583	Standard
	Ca	43	18564.7	3.1	**39.3702**	1.177	3.0	mg/L	73	Standard
	Fe	54	14260.3	3.0	**2.1112**	0.036	1.7	mg/L	785	Standard
	Fe	57	423861.1	2.6	**2.1181**	0.057	2.7	mg/L	6133	Standard
>	**Sc-1**	45	286818.1	1.7				mg/L	254529	Standard
	Cl	35	3373707.2	4.1				ug/L	1641778	Standard
	Kr	83	59.4	10.0				ug/L	60	Standard
	Br	81	37509.7	2.9				ug/L	11554	Standard
	P	31	157762.2	1.3				ug/L	45410	Standard
	S	34	1800017.2	1.8				ug/L	568857	Standard
	Sr	88	5510391.4	1.4				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		99.832	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		103.014	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		98.404	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		105.230	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	93.810
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: May 11, 2012

Method 6020 - Summary Report

Sample ID: L1205009903
Sample Date/Time: Thursday, May 10, 2012 13:52:13
Number of Replicates: 3
Autosampler Position: 260
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	194683.5	3.0	**16430.5692**	543.637	3.3	ug/L	12600	Standard
|	**Be**	9	20.0	25.0	**-0.0090**	0.001	15.7	ug/L	5	Standard
|	**Al**	27	134097.5	1.1	**6.9662**	0.172	2.5	ug/L	16102	Standard
⌊>	**Sc**	45	282740.5	3.2				ug/L	254529	Standard
⌈	**Ti**	47	666.7	7.5	**0.3809**	0.026	6.8	ug/L	84	Standard
|	**V**	51	6734.7	3.9	**0.1512**	0.015	9.6	ug/L	5785	Standard
|	**Cr**	52	16972.2	1.3	**0.4640**	0.012	2.7	ug/L	12212	Standard
|	**Cr**	53	3667.1	7.9	**0.6198**	0.203	32.8	ug/L	5042	Standard
|	**Mn**	55	1971275.7	0.4	**97.8812**	1.661	1.7	ug/L	1290	Standard
|	**Co**	59	6445.7	1.5	**0.4406**	0.004	0.9	ug/L	143	Standard
|	**Ni**	60	8580.1	4.0	**2.8342**	0.075	2.6	ug/L	79	Standard
|	**Cu**	65	4157.9	2.9	**1.4781**	0.023	1.6	ug/L	154	Standard
|	**Zn**	66	64042.8	2.6	**51.8970**	0.668	1.3	ug/L	194	Standard
| >	**Ge**	72	228206.2	2.0				ug/L	232024	Standard
|	**As**	75	141.6	20.4	**0.3528**	0.026	7.4	ug/L	-297	Standard
|	**Se**	82	108.0	4.1	**0.6996**	0.051	7.3	ug/L	17	Standard
⌊	**Se-1**	77	241.7	3.3	**1.1586**	0.040	3.4	ug/L	180	Standard
	Ga	71	205540.3	2.5				mg/L	210139	Standard
⌈	**Rb**	85	23499.9	3.4				ug/L	12	Standard
| >	**Y**	89	220995.7	2.6				ug/L	214065	Standard
⌊	**Rh**	103	93.3	27.5				ug/L	0	Standard
⌈	**Mo**	98	1107.2	3.4	**0.2573**	0.006	2.3	ug/L	6	Standard
|	**Ag**	107	70.3	14.0	**0.0010**	0.001	113.7	ug/L	33	Standard
|	**Cd**	111	1299.4	2.6	**0.1923**	0.005	2.6	mg/L	437	Standard
|	**Cd**	114	3391.9	2.2	**0.1853**	0.006	3.3	ug/L	1160	Standard
| >	**In**	115	651374.9	1.4				ug/L	646604	Standard
|	**Sn**	118	1099.7	4.1	**0.0132**	0.003	19.4	ug/L	864	Standard
|	**Sb**	123	971.7	2.1	**0.0848**	0.001	0.9	ug/L	18	Standard
⌊	**Ba**	135	307699.6	1.8	**66.3101**	0.719	1.1	ug/L	39	Standard
⌈	**Ce**	140	2632.6	3.4				ug/L	46	Standard
⌊>	**Tb**	159	741487.0	3.2				ug/L	695671	Standard
⌈	**Ho**	165	47.0	9.8				ug/L	9	Standard
|	**Tl**	203	857.7	3.3	**0.0182**	0.002	11.6	ug/L	687	Standard
|	**Tl**	205	1986.5	1.6	**0.0181**	0.000	1.4	ug/L	1624	Standard
|	**Pb**	206	3290.7	1.4	**0.2407**	0.003	1.2	ug/L	305	Standard
|	**Pb**	207	2839.3	2.7	**0.2439**	0.008	3.5	ug/L	231	Standard
|	**Pb**	208	12930.8	1.6	**0.2381**	0.004	1.6	ug/L	1129	Standard
|	**U**	238	4296.9	0.6	**0.1650**	0.002	1.2	ug/L	3	Standard
⌊>	**Bi**	209	384543.9	1.3				ug/L	405108	Standard
⌈	**Na**	23	93983.9	1.1	**23.4754**	0.737	3.1	mg/L	118	Standard
|	**Mg**	24	4300531.2	1.8	**7.0873**	0.107	1.5	mg/L	377	Standard

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	K	39	19379.1	2.1	**1.4592**	0.071	4.9	mg/L	583	Standard
	Ca	43	17413.3	1.4	**37.4847**	1.684	4.5	mg/L	73	Standard
	Fe	54	2531.2	4.4	**0.2551**	0.030	11.6	mg/L	785	Standard
	Fe	57	76027.0	2.4	**0.3573**	0.004	1.1	mg/L	6133	Standard
>	**Sc-1**	45	282740.5	3.2				mg/L	254529	Standard
	Cl	35	3922597.8	4.7				ug/L	1641778	Standard
	Kr	83	59.2	13.6				ug/L	60	Standard
	Br	81	51390.3	0.8				ug/L	11554	Standard
	P	31	66145.0	3.3				ug/L	45410	Standard
	S	34	1900575.1	1.0				ug/L	568857	Standard
	Sr	88	3512048.2	4.2				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		98.355	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		103.238	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		100.738	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		106.586	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1205009903
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	94.924
	Na	23	
	Mg	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 11, 2012

Method 6020 - Summary Report

Sample ID: L1205009904
Sample Date/Time: Thursday, May 10, 2012 13:55:06
Number of Replicates: 3
Autosampler Position: 301
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	186558.4	1.7	**16282.7575**	309.508	1.9	ug/L	12600	Standard
|	**Be**	9	6.7	86.6	**-0.0126**	0.002	12.9	ug/L	5	Standard
|	**Al**	27	51472.3	1.8	**2.2882**	0.063	2.7	ug/L	16102	Standard
⌊>	**Sc**	45	273126.4	0.3				ug/L	254529	Standard
⌈	**Ti**	47	530.0	1.9	**0.2999**	0.007	2.2	ug/L	84	Standard
|	**V**	51	7119.7	4.4	**0.1889**	0.018	9.3	ug/L	5785	Standard
|	**Cr**	52	17718.7	2.4	**0.5724**	0.041	7.2	ug/L	12212	Standard
|	**Cr**	53	4311.4	1.7	**1.0621**	0.064	6.0	ug/L	5042	Standard
|	**Mn**	55	1952668.8	1.5	**99.5471**	1.236	1.2	ug/L	1290	Standard
|	**Co**	59	5991.2	3.8	**0.4200**	0.013	3.2	ug/L	143	Standard
|	**Ni**	60	8853.3	16.4	**3.0026**	0.470	15.7	ug/L	79	Standard
|	**Cu**	65	2075.5	6.5	**0.7332**	0.044	6.1	ug/L	154	Standard
|	**Zn**	66	57542.1	2.2	**47.8699**	0.723	1.5	ug/L	194	Standard
| >	**Ge**	72	222223.5	0.8				ug/L	232024	Standard
|	**As**	75	122.8	47.1	**0.3391**	0.054	15.8	ug/L	-297	Standard
|	**Se**	82	100.0	3.8	**0.6567**	0.024	3.7	ug/L	17	Standard
⌊	**Se-1**	77	258.3	7.8	**1.4492**	0.230	15.9	ug/L	180	Standard
	Ga	71	199465.2	1.4				mg/L	210139	Standard
⌈	**Rb**	85	21542.0	2.7				ug/L	12	Standard
| >	**Y**	89	212597.0	3.0				ug/L	214065	Standard
⌊	**Rh**	103	110.0	9.1				ug/L	0	Standard
⌈	**Mo**	98	998.4	2.3	**0.2375**	0.007	2.8	ug/L	6	Standard
|	**Ag**	107	45.3	1.3	**-0.0019**	0.000	5.3	ug/L	33	Standard
|	**Cd**	111	1059.6	2.0	**0.1457**	0.003	2.4	mg/L	437	Standard
|	**Cd**	114	2766.6	1.4	**0.1387**	0.004	2.7	ug/L	1160	Standard
| >	**In**	115	634964.2	0.5				ug/L	646604	Standard
|	**Sn**	118	881.0	2.9	**0.0009**	0.001	147.6	ug/L	864	Standard
|	**Sb**	123	929.5	2.5	**0.0832**	0.002	2.9	ug/L	18	Standard
⌊	**Ba**	135	283704.4	1.9	**62.7176**	1.039	1.7	ug/L	39	Standard
⌈	**Ce**	140	1167.4	0.7				ug/L	46	Standard
⌊>	**Tb**	159	716502.6	0.9				ug/L	695671	Standard
⌈	**Ho**	165	25.3	16.0				ug/L	9	Standard
|	**Tl**	203	782.7	6.2	**0.0145**	0.003	20.1	ug/L	687	Standard
|	**Tl**	205	1827.4	0.2	**0.0149**	0.000	2.2	ug/L	1624	Standard
|	**Pb**	206	1041.0	1.2	**0.0624**	0.001	1.9	ug/L	305	Standard
|	**Pb**	207	868.0	1.5	**0.0606**	0.001	2.2	ug/L	231	Standard
|	**Pb**	208	3976.5	1.0	**0.0592**	0.000	0.7	ug/L	1129	Standard
|	**U**	238	3829.8	1.2	**0.1508**	0.001	0.9	ug/L	3	Standard
⌊>	**Bi**	209	375539.8	0.5				ug/L	405108	Standard
⌈	**Na**	23	89401.3	0.6	**23.1019**	0.205	0.9	mg/L	118	Standard
|	**Mg**	24	4086150.6	1.6	**6.9688**	0.106	1.5	mg/L	377	Standard

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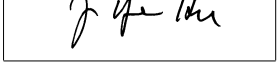

	K	39	18875.1	2.4	**1.4704**	0.040	2.7	mg/L	583	Standard
	Ca	43	16250.4	0.8	**36.1723**	0.372	1.0	mg/L	73	Standard
	Fe	54	2321.7	7.7	**0.2339**	0.029	12.3	mg/L	785	Standard
	Fe	57	68233.3	0.5	**0.3295**	0.001	0.3	mg/L	6133	Standard
>	**Sc-1**	45	273126.4	0.3				mg/L	254529	Standard
	Cl	35	3822923.3	4.3				ug/L	1641778	Standard
	Kr	83	54.2	3.4				ug/L	60	Standard
	Br	81	47094.0	3.1				ug/L	11554	Standard
	P	31	61293.0	3.7				ug/L	45410	Standard
	S	34	1813447.9	0.9				ug/L	568857	Standard
	Sr	88	3185110.4	3.8				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		95.776	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		99.314	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		98.200	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		102.994	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	92.701
	Na	23	
	Mg	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 11, 2012

Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, May 10, 2012 13:58:00
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: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	12922.2	0.8	**34.0670**	39.602	116.2	ug/L	12600	Standard
|	**Be**	9	168106.0	5.6	**49.5642**	3.561	7.2	ug/L	5	Standard
|	**Al**	27	852373.1	5.2	**53.0563**	3.956	7.5	ug/L	16102	Standard
⌊>	**Sc**	45	259138.0	2.3				ug/L	254529	Standard
⌈	**Ti**	47	152604.0	3.8	**101.1939**	3.025	3.0	ug/L	84	Standard
|	**V**	51	785889.7	5.2	**51.2242**	2.648	5.2	ug/L	5785	Standard
|	**Cr**	52	584149.7	4.9	**50.6956**	2.539	5.0	ug/L	12212	Standard
|	**Cr**	53	87700.7	3.0	**49.6919**	1.454	2.9	ug/L	5042	Standard
|	**Mn**	55	1037319.3	2.8	**51.4160**	1.312	2.6	ug/L	1290	Standard
|	**Co**	59	737147.4	2.7	**51.5112**	1.543	3.0	ug/L	143	Standard
|	**Ni**	60	155092.0	2.5	**51.6077**	1.132	2.2	ug/L	79	Standard
|	**Cu**	65	139146.0	2.8	**51.0448**	1.294	2.5	ug/L	154	Standard
|	**Zn**	66	62167.7	2.2	**50.3346**	0.868	1.7	ug/L	194	Standard
| >	**Ge**	72	228397.3	1.9				ug/L	232024	Standard
|	**As**	75	56660.2	2.4	**50.7294**	0.594	1.2	ug/L	-297	Standard
|	**Se**	82	6583.0	3.6	**52.0338**	1.034	2.0	ug/L	17	Standard
⌊	**Se-1**	77	4336.3	3.6	**51.6068**	1.704	3.3	ug/L	180	Standard
	Ga	71	205532.3	1.9				mg/L	210139	Standard
⌈	**Rb**	85	1051.7	7.6				ug/L	12	Standard
| >	**Y**	89	218643.3	1.8				ug/L	214065	Standard
⌊	**Rh**	103	40.0					ug/L	0	Standard
⌈	**Mo**	98	416401.8	4.1	**100.9006**	2.360	2.3	ug/L	6	Standard
|	**Ag**	107	426435.2	2.0	**51.0861**	0.042	0.1	ug/L	33	Standard
|	**Cd**	111	226667.1	3.5	**50.1717**	0.789	1.6	mg/L	437	Standard
|	**Cd**	114	585472.5	2.9	**49.6572**	0.554	1.1	ug/L	1160	Standard
| >	**In**	115	644497.0	1.9				ug/L	646604	Standard
|	**Sn**	118	786964.5	3.3	**49.9478**	0.722	1.4	ug/L	864	Standard
|	**Sb**	123	539178.2	3.6	**48.9445**	0.861	1.8	ug/L	18	Standard
⌊	**Ba**	135	234549.8	3.7	**51.0724**	0.953	1.9	ug/L	39	Standard
⌈	**Ce**	140	898.7	3.4				ug/L	46	Standard
⌊>	**Tb**	159	717817.0	1.3				ug/L	695671	Standard
⌈	**Ho**	165	22.7	15.5				ug/L	9	Standard
|	**Tl**	203	820606.5	3.0	**51.2125**	1.081	2.1	ug/L	687	Standard
|	**Tl**	205	1909386.0	2.6	**50.3086**	1.069	2.1	ug/L	1624	Standard
|	**Pb**	206	654859.9	3.3	**51.2164**	1.314	2.6	ug/L	305	Standard
|	**Pb**	207	556729.6	3.0	**51.0489**	0.955	1.9	ug/L	231	Standard
|	**Pb**	208	2584261.8	3.2	**50.9096**	0.911	1.8	ug/L	1129	Standard
|	**U**	238	1308232.2	3.5	**48.3266**	1.488	3.1	ug/L	3	Standard
⌊>	**Bi**	209	393903.8	2.2				ug/L	405108	Standard
⌈	**Na**	23	19037.0	4.0	**5.1682**	0.317	6.1	mg/L	118	Standard
|	**Mg**	24	2850379.0	2.6	**5.1268**	0.236	4.6	mg/L	377	Standard

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	K	39	62252.7	2.4	**5.2414**	0.205	3.9	mg/L	583	Standard
	Ca	43	2255.2	1.8	**5.1295**	0.215	4.2	mg/L	73	Standard
	Fe	54	32622.7	4.1	**5.5835**	0.284	5.1	mg/L	785	Standard
	Fe	57	913969.9	2.3	**5.1051**	0.212	4.1	mg/L	6133	Standard
>	**Sc-1**	45	259138.0	2.3				mg/L	254529	Standard
	Cl	35	544345.6	38.4				ug/L	1641778	Standard
	Kr	83	52.9	3.5				ug/L	60	Standard
	Br	81	12506.9	11.2				ug/L	11554	Standard
	P	31	64403.3	1.1				ug/L	45410	Standard
	S	34	741873.4	1.7				ug/L	568857	Standard
	Sr	88	830.0	20.9				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	106.113		
>	Sc	45			
	Ti	47	101.194		
	V	51	102.448		
	Cr	52	101.391		
	Cr	53			
	Mn	55	102.832		
	Co	59	103.022		
	Ni	60	103.215		
	Cu	65	102.090		
	Zn	66	100.669		
>	Ge	72		98.437	
	As	75	101.459		
	Se	82	104.068		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		102.139	
	Rh	103			
	Mo	98	100.901		
	Ag	107	102.172		
	Cd	111	100.343		
	Cd	114			
>	In	115		99.674	
	Sn	118	99.896		
	Sb	123	97.889		
	Ba	135	102.145		
	Ce	140			
>	Tb	159		103.183	
	Ho	165			
	Tl	203	102.425		
	Tl	205			
	Pb	206	102.433		

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	Pb	207	102.098	
	Pb	208	101.819	
	U	238	96.653	
>	Bi	209		97.234
	Na	23	103.365	
	Mg	24	102.536	
	K	39	104.827	
	Ca	43	102.590	
	Fe	54	111.670	
	Fe	57	102.103	
>	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	54	

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Method 6020 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, May 10, 2012 14:00:53
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	12903.8	4.6	**40.7581**	47.405	116.3	ug/L	12600	Standard
|	**Be**	9	13.3	43.3	**-0.0105**	0.002	17.1	ug/L	5	Standard
|	**Al**	27	13844.7	3.0	**0.0860**	0.013	15.6	ug/L	16102	Standard
⌊>	**Sc**	45	257257.6	1.5				ug/L	254529	Standard
⌈	**Ti**	47	107.0	10.4	**0.0108**	0.006	54.4	ug/L	84	Standard
|	**V**	51	3637.8	3.6	**-0.0473**	0.006	13.6	ug/L	5785	Standard
|	**Cr**	52	10828.5	1.8	**-0.0617**	0.007	11.7	ug/L	12212	Standard
|	**Cr**	53	1000.9	10.9	**-0.9297**	0.059	6.4	ug/L	5042	Standard
|	**Mn**	55	1392.4	5.2	**-0.0144**	0.002	14.1	ug/L	1290	Standard
|	**Co**	59	134.7	8.9	**-0.0007**	0.001	100.5	ug/L	143	Standard
|	**Ni**	60	77.7	4.1	**0.0025**	0.001	23.0	ug/L	79	Standard
|	**Cu**	65	169.3	5.0	**0.0137**	0.002	15.6	ug/L	154	Standard
|	**Zn**	66	209.7	12.2	**-0.0023**	0.018	755.4	ug/L	194	Standard
|>	**Ge**	72	223814.9	2.4				ug/L	232024	Standard
|	**As**	75	-213.1	5.0	**0.0325**	0.011	33.6	ug/L	-297	Standard
|	**Se**	82	29.1	17.4	**0.0775**	0.043	55.6	ug/L	17	Standard
⌊	**Se-1**	77	92.7	20.5	**-0.6583**	0.221	33.6	ug/L	180	Standard
	Ga	71	204523.8	1.8				mg/L	210139	Standard
⌈	**Rb**	85	31.7	79.5				ug/L	12	Standard
|>	**Y**	89	212429.6	2.8				ug/L	214065	Standard
⌊	**Rh**	103	6.7	43.3				ug/L	0	Standard
⌈	**Mo**	98	90.0	73.8	**0.0140**	0.016	115.2	ug/L	6	Standard
|	**Ag**	107	103.0	31.5	**0.0052**	0.004	72.2	ug/L	33	Standard
|	**Cd**	111	452.8	10.4	**0.0099**	0.008	83.1	mg/L	437	Standard
|	**Cd**	114	1143.5	7.7	**-0.0005**	0.005	1105.1	ug/L	1160	Standard
|>	**In**	115	629459.4	2.7				ug/L	646604	Standard
|	**Sn**	118	965.0	9.6	**0.0068**	0.005	74.4	ug/L	864	Standard
|	**Sb**	123	226.2	41.3	**0.0184**	0.008	45.2	ug/L	18	Standard
⌊	**Ba**	135	50.7	36.7	**0.0031**	0.004	130.6	ug/L	39	Standard
⌈	**Ce**	140	47.0	12.9				ug/L	46	Standard
⌊>	**Tb**	159	699557.3	2.5				ug/L	695671	Standard
⌈	**Ho**	165	11.3	35.7				ug/L	9	Standard
|	**Tl**	203	368.3	45.5	**-0.0138**	0.010	74.5	ug/L	687	Standard
|	**Tl**	205	823.4	42.7	**-0.0139**	0.009	65.1	ug/L	1624	Standard
|	**Pb**	206	311.3	14.8	**0.0012**	0.003	281.3	ug/L	305	Standard
|	**Pb**	207	262.0	11.5	**0.0010**	0.002	223.6	ug/L	231	Standard
|	**Pb**	208	1222.7	11.7	**0.0011**	0.003	236.9	ug/L	1129	Standard
|	**U**	238	75.0	79.7	**0.0052**	0.002	42.1	ug/L	3	Standard
⌊>	**Bi**	209	394765.9	2.5				ug/L	405108	Standard
⌈	**Na**	23	98.3	11.7	**-0.0003**	0.003	1024.1	mg/L	118	Standard
|	**Mg**	24	580.0	23.7	**0.0002**	0.000	131.1	mg/L	377	Standard

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	K	39	650.0	1.5	**0.0041**	0.002	39.0	mg/L	583	Standard
	Ca	43	55.0	9.1	**-0.0619**	0.014	22.3	mg/L	73	Standard
	Fe	54	982.6	10.2	**0.0206**	0.015	74.0	mg/L	785	Standard
	Fe	57	4585.7	2.6	**-0.0084**	0.000	3.8	mg/L	6133	Standard
>	**Sc-1**	45	257257.6	1.5				mg/L	254529	Standard
	Cl	35	509795.0	38.5				ug/L	1641778	Standard
	Kr	83	52.8	12.0				ug/L	60	Standard
	Br	81	11586.9	1.4				ug/L	11554	Standard
	P	31	65651.4	5.5				ug/L	45410	Standard
	S	34	740218.7	0.2				ug/L	568857	Standard
	Sr	88	416.7	48.5				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		96.462	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		99.236	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		97.349	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		100.559	
	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	97.447
	Na	23	
	Mg	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 10, 2012 14:03:26
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Method 6020 - Summary Report

Sample ID: L1205009905
Sample Date/Time: Thursday, May 10, 2012 14:03:47
Number of Replicates: 3
Autosampler Position: 302
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	131590.9	2.4	**11124.6384**	191.496	1.7	ug/L	12600	Standard
|	**Be**	9	6.7	43.3	**-0.0126**	0.001	6.5	ug/L	5	Standard
|	**Al**	27	189356.5	2.8	**10.5501**	0.209	2.0	ug/L	16102	Standard
⌊>	**Sc**	45	272955.2	1.0				ug/L	254529	Standard
⌈	**Ti**	47	817.7	18.6	**0.4778**	0.100	21.0	ug/L	84	Standard
|	**V**	51	7652.7	2.1	**0.2081**	0.013	6.3	ug/L	5785	Standard
|	**Cr**	52	18267.7	1.1	**0.5677**	0.008	1.4	ug/L	12212	Standard
|	**Cr**	53	3823.0	18.3	**0.6949**	0.419	60.4	ug/L	5042	Standard
|	**Mn**	55	238386.9	2.2	**11.6789**	0.209	1.8	ug/L	1290	Standard
|	**Co**	59	1431.1	3.6	**0.0891**	0.003	3.5	ug/L	143	Standard
|	**Ni**	60	7001.6	1.7	**2.2930**	0.037	1.6	ug/L	79	Standard
|	**Cu**	65	22848.6	1.6	**8.2899**	0.123	1.5	ug/L	154	Standard
|	**Zn**	66	147346.7	0.9	**118.8272**	1.309	1.1	ug/L	194	Standard
| >	**Ge**	72	229763.0	0.6				ug/L	232024	Standard
|	**As**	75	32.8	66.0	**0.2555**	0.019	7.5	ug/L	-297	Standard
|	**Se**	82	138.8	2.7	**0.9361**	0.036	3.8	ug/L	17	Standard
⌊	**Se-1**	77	224.0	2.9	**0.9223**	0.065	7.1	ug/L	180	Standard
	Ga	71	206199.3	0.4				mg/L	210139	Standard
⌈	**Rb**	85	15189.3	5.7				ug/L	12	Standard
| >	**Y**	89	219111.4	1.0				ug/L	214065	Standard
⌊	**Rh**	103	98.3	22.9				ug/L	0	Standard
⌈	**Mo**	98	1025.1	2.1	**0.2390**	0.004	1.8	ug/L	6	Standard
|	**Ag**	107	66.7	8.5	**0.0006**	0.001	122.3	ug/L	33	Standard
|	**Cd**	111	1721.6	4.4	**0.2869**	0.010	3.3	mg/L	437	Standard
|	**Cd**	114	4564.6	2.0	**0.2860**	0.001	0.4	ug/L	1160	Standard
| >	**In**	115	647841.6	1.9				ug/L	646604	Standard
|	**Sn**	118	5076.2	2.5	**0.2650**	0.003	1.1	ug/L	864	Standard
|	**Sb**	123	3184.8	5.0	**0.2851**	0.009	3.2	ug/L	18	Standard
⌊	**Ba**	135	187394.7	1.8	**40.6024**	0.386	0.9	ug/L	39	Standard
⌈	**Ce**	140	2843.3	1.9				ug/L	46	Standard
⌊>	**Tb**	159	728409.1	0.7				ug/L	695671	Standard
⌈	**Ho**	165	47.7	18.1				ug/L	9	Standard
|	**Tl**	203	808.0	4.6	**0.0150**	0.003	18.3	ug/L	687	Standard
|	**Tl**	205	1950.5	0.4	**0.0171**	0.000	1.8	ug/L	1624	Standard
|	**Pb**	206	42435.0	1.4	**3.3776**	0.024	0.7	ug/L	305	Standard
|	**Pb**	207	36108.6	1.0	**3.3698**	0.016	0.5	ug/L	231	Standard
|	**Pb**	208	166116.0	1.4	**3.3305**	0.027	0.8	ug/L	1129	Standard
|	**U**	238	2368.5	4.5	**0.0920**	0.004	3.8	ug/L	3	Standard
⌊>	**Bi**	209	384583.9	0.7				ug/L	405108	Standard
⌈	**Na**	23	77873.1	3.4	**20.1304**	0.585	2.9	mg/L	118	Standard
|	**Mg**	24	2899620.6	2.3	**4.9477**	0.070	1.4	mg/L	377	Standard

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	K	39	15476.2	3.1	**1.1969**	0.027	2.3	mg/L	583	Standard
	Ca	43	11953.0	2.6	**26.5756**	0.823	3.1	mg/L	73	Standard
	Fe	54	2315.5	2.1	**0.2332**	0.009	3.9	mg/L	785	Standard
	Fe	57	60965.8	2.4	**0.2910**	0.007	2.4	mg/L	6133	Standard
>	**Sc-1**	45	272955.2	1.0				mg/L	254529	Standard
	Cl	35	3507113.7	4.2				ug/L	1641778	Standard
	Kr	83	51.8	3.7				ug/L	60	Standard
	Br	81	43913.6	3.6				ug/L	11554	Standard
	P	31	71238.0	2.4				ug/L	45410	Standard
	S	34	1598188.4	0.3				ug/L	568857	Standard
	Sr	88	2331501.9	6.2				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		99.026	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		102.357	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		100.191	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		104.706	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	94.934
	Na	23	
	Mg	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
Zn 66 Upper, S, EEE	Zn	66	

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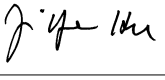

Method 6020 - Summary Report

Sample ID: L1205009906
Sample Date/Time: Thursday, May 10, 2012 14:06:40
Number of Replicates: 3
Autosampler Position: 303
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	130545.6	4.3	**10783.4770**	163.643	1.5	ug/L	12600	Standard
|	**Be**	9	10.0		**-0.0117**	0.000	0.7	ug/L	5	Standard
|	**Al**	27	48286.9	3.7	**2.0420**	0.024	1.2	ug/L	16102	Standard
⌊>	**Sc**	45	278417.9	2.9				ug/L	254529	Standard
⌈	**Ti**	47	440.0	9.9	**0.2316**	0.018	7.7	ug/L	84	Standard
|	**V**	51	7083.0	6.5	**0.1760**	0.018	10.1	ug/L	5785	Standard
|	**Cr**	52	17844.2	4.5	**0.5483**	0.015	2.8	ug/L	12212	Standard
|	**Cr**	53	4582.4	4.5	**1.1659**	0.116	10.0	ug/L	5042	Standard
|	**Mn**	55	228971.9	5.2	**11.3403**	0.138	1.2	ug/L	1290	Standard
|	**Co**	59	1344.4	5.0	**0.0842**	0.002	3.0	ug/L	143	Standard
|	**Ni**	60	7444.5	5.0	**2.4671**	0.029	1.2	ug/L	79	Standard
|	**Cu**	65	16532.0	5.0	**6.0518**	0.072	1.2	ug/L	154	Standard
|	**Zn**	66	137379.0	4.0	**112.0422**	0.069	0.1	ug/L	194	Standard
| >	**Ge**	72	227167.1	4.1				ug/L	232024	Standard
|	**As**	75	-19.0	352.5	**0.2080**	0.062	29.8	ug/L	-297	Standard
|	**Se**	82	119.4	4.6	**0.7938**	0.024	3.1	ug/L	17	Standard
⌊	**Se-1**	77	244.7	3.0	**1.2121**	0.111	9.2	ug/L	180	Standard
	Ga	71	201854.0	3.8				mg/L	210139	Standard
⌈	**Rb**	85	14753.9	6.1				ug/L	12	Standard
| >	**Y**	89	216487.7	4.5				ug/L	214065	Standard
⌊	**Rh**	103	78.3	25.8				ug/L	0	Standard
⌈	**Mo**	98	969.8	7.9	**0.2279**	0.013	5.9	ug/L	6	Standard
|	**Ag**	107	38.0	22.5	**-0.0028**	0.001	33.2	ug/L	33	Standard
|	**Cd**	111	1677.4	3.8	**0.2810**	0.007	2.6	mg/L	437	Standard
|	**Cd**	114	4335.1	4.1	**0.2703**	0.007	2.4	ug/L	1160	Standard
| >	**In**	115	641264.2	2.4				ug/L	646604	Standard
|	**Sn**	118	1115.0	4.6	**0.0153**	0.002	13.7	ug/L	864	Standard
|	**Sb**	123	3044.4	3.7	**0.2753**	0.006	2.3	ug/L	18	Standard
⌊	**Ba**	135	183071.8	3.4	**40.0654**	0.461	1.1	ug/L	39	Standard
⌈	**Ce**	140	877.7	4.1				ug/L	46	Standard
⌊>	**Tb**	159	723892.9	2.8				ug/L	695671	Standard
⌈	**Ho**	165	25.0	17.4				ug/L	9	Standard
|	**Tl**	203	794.7	1.0	**0.0149**	0.001	8.0	ug/L	687	Standard
|	**Tl**	205	1799.4	3.2	**0.0138**	0.001	7.0	ug/L	1624	Standard
|	**Pb**	206	13083.3	2.2	**1.0422**	0.016	1.6	ug/L	305	Standard
|	**Pb**	207	11017.7	4.4	**1.0283**	0.013	1.3	ug/L	231	Standard
|	**Pb**	208	50891.7	3.0	**1.0207**	0.005	0.5	ug/L	1129	Standard
|	**U**	238	2321.8	3.4	**0.0916**	0.002	1.7	ug/L	3	Standard
⌊>	**Bi**	209	378617.0	3.2				ug/L	405108	Standard
⌈	**Na**	23	78131.1	3.4	**19.8014**	0.321	1.6	mg/L	118	Standard
|	**Mg**	24	2864988.2	3.3	**4.7927**	0.024	0.5	mg/L	377	Standard

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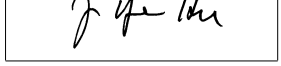

	K	39	15389.5	4.0	**1.1654**	0.014	1.2	mg/L	583	Standard
	Ca	43	11858.0	4.8	**25.8301**	0.609	2.4	mg/L	73	Standard
	Fe	54	1933.8	4.8	**0.1634**	0.019	11.7	mg/L	785	Standard
	Fe	57	48335.4	4.9	**0.2184**	0.005	2.3	mg/L	6133	Standard
>	**Sc-1**	45	278417.9	2.9				mg/L	254529	Standard
	Cl	35	3523387.2	4.8				ug/L	1641778	Standard
	Kr	83	56.9	2.2				ug/L	60	Standard
	Br	81	41329.7	3.5				ug/L	11554	Standard
	P	31	67126.4	7.0				ug/L	45410	Standard
	S	34	1609008.6	3.8				ug/L	568857	Standard
	Sr	88	2303277.2	6.6				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		97.907	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		101.132	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		99.174	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		104.057	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	93.461
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Zn 66 Upper, S, EEE	Zn	66	

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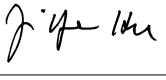

Method 6020 - Summary Report

Sample ID: L1205009907
Sample Date/Time: Thursday, May 10, 2012 14:09:32
Number of Replicates: 3
Autosampler Position: 304
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	540934.1	1.1	**45948.8071**	945.552	2.1	ug/L	12600	Standard
|	**Be**	9	15.0	120.2	**-0.0105**	0.005	46.1	ug/L	5	Standard
|	**Al**	27	92067.7	5.3	**4.3208**	0.118	2.7	ug/L	16102	Standard
⌊>	**Sc**	45	294258.3	3.1				ug/L	254529	Standard
⌈	**Ti**	47	2098.5	3.0	**1.4726**	0.063	4.3	ug/L	84	Standard
|	**V**	51	12838.5	4.9	**0.6371**	0.066	10.4	ug/L	5785	Standard
|	**Cr**	52	20884.4	0.8	**0.9969**	0.033	3.3	ug/L	12212	Standard
|	**Cr**	53	24206.8	1.0	**14.0449**	0.226	1.6	ug/L	5042	Standard
|	**Mn**	55	2389185.5	2.0	**130.5450**	0.905	0.7	ug/L	1290	Standard
|	**Co**	59	3805.8	2.2	**0.2827**	0.006	2.1	ug/L	143	Standard
|	**Ni**	60	11284.2	3.8	**4.1122**	0.080	1.9	ug/L	79	Standard
|	**Cu**	65	1187.0	3.6	**0.4302**	0.010	2.3	ug/L	154	Standard
|	**Zn**	66	2749.6	4.3	**2.2836**	0.058	2.6	ug/L	194	Standard
| >	**Ge**	72	207398.4	2.5				ug/L	232024	Standard
|	**As**	75	8691.4	0.3	**8.7610**	0.182	2.1	ug/L	-297	Standard
|	**Se**	82	108.8	13.7	**0.7925**	0.136	17.2	ug/L	17	Standard
⌊	**Se-1**	77	1255.7	0.2	**15.2232**	0.381	2.5	ug/L	180	Standard
	Ga	71	185293.2	2.4				mg/L	210139	Standard
⌈	**Rb**	85	26985.7	2.2				ug/L	12	Standard
| >	**Y**	89	200020.2	1.7				ug/L	214065	Standard
⌊	**Rh**	103	931.7	19.1				ug/L	0	Standard
⌈	**Mo**	98	2356.0	3.2	**0.5943**	0.010	1.7	ug/L	6	Standard
|	**Ag**	107	51.7	5.6	**-0.0008**	0.000	49.9	ug/L	33	Standard
|	**Cd**	111	452.7	5.7	**0.0131**	0.006	42.3	mg/L	437	Standard
|	**Cd**	114	1272.9	3.7	**0.0142**	0.003	18.0	ug/L	1160	Standard
| >	**In**	115	610750.3	1.5				ug/L	646604	Standard
|	**Sn**	118	1324.1	0.9	**0.0329**	0.001	2.8	ug/L	864	Standard
|	**Sb**	123	532.8	1.8	**0.0486**	0.001	1.6	ug/L	18	Standard
⌊	**Ba**	135	58154.1	0.8	**13.3604**	0.106	0.8	ug/L	39	Standard
⌈	**Ce**	140	946.7	3.9				ug/L	46	Standard
⌊>	**Tb**	159	723756.4	2.0				ug/L	695671	Standard
⌈	**Ho**	165	116.0	2.3				ug/L	9	Standard
|	**Tl**	203	253.3	7.8	**-0.0179**	0.002	8.9	ug/L	687	Standard
|	**Tl**	205	597.7	6.5	**-0.0169**	0.001	8.5	ug/L	1624	Standard
|	**Pb**	206	498.0	3.8	**0.0232**	0.001	5.4	ug/L	305	Standard
|	**Pb**	207	419.3	1.6	**0.0227**	0.000	1.8	ug/L	231	Standard
|	**Pb**	208	1969.1	2.6	**0.0231**	0.001	3.4	ug/L	1129	Standard
|	**U**	238	2635.9	1.6	**0.1180**	0.003	2.6	ug/L	3	Standard
⌊>	**Bi**	209	331752.7	1.3				ug/L	405108	Standard
⌈	**Na**	23	479658.4	1.5	**115.2076**	3.045	2.6	mg/L	118	Standard
|	**Mg**	24	21651469.1	1.4	**34.2943**	0.934	2.7	mg/L	377	Standard

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	K	39	35880.8	1.5	**2.6347**	0.052	2.0	mg/L	583	Standard
	Ca	43	33031.0	1.0	**68.4709**	2.749	4.0	mg/L	73	Standard
	Fe	54	8788.9	2.6	**1.2074**	0.012	1.0	mg/L	785	Standard
	Fe	57	322516.9	1.4	**1.5624**	0.026	1.7	mg/L	6133	Standard
>	**Sc-1**	45	294258.3	3.1				mg/L	254529	Standard
	Cl	35	25968430.5	1.6				ug/L	1641778	Standard
	Kr	83	77.0	13.2				ug/L	60	Standard
	Br	81	45067.8	1.4				ug/L	11554	Standard
	P	31	240731.9	3.2				ug/L	45410	Standard
	S	34	6383964.6	1.0				ug/L	568857	Standard
	Sr	88	30551917.4	1.0				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		89.387	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		93.439	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		94.455	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		104.037	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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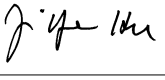
	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	81.892
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: May 11, 2012



Method 6020 - Summary Report

Sample ID: L1205009908
Sample Date/Time: Thursday, May 10, 2012 14:12:25
Number of Replicates: 3
Autosampler Position: 305
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	574629.9	2.5	**47940.9425**	1113.576	2.3	ug/L	12600	Standard
|	**Be**	9	60.0	60.1	**0.0008**	0.009	1091.1	ug/L	5	Standard
|	**Al**	27	498611.2	3.0	**26.4044**	0.722	2.7	ug/L	16102	Standard
⌊>	**Sc**	45	299793.6	0.4				ug/L	254529	Standard
⌈	**Ti**	47	2110.5	4.7	**1.4407**	0.069	4.8	ug/L	84	Standard
|	**V**	51	13899.5	3.7	**0.6868**	0.040	5.9	ug/L	5785	Standard
|	**Cr**	52	21495.2	2.2	**1.0015**	0.036	3.6	ug/L	12212	Standard
|	**Cr**	53	22808.8	2.0	**12.7633**	0.341	2.7	ug/L	5042	Standard
|	**Mn**	55	2248153.0	2.0	**119.6385**	2.252	1.9	ug/L	1290	Standard
|	**Co**	59	3676.4	1.0	**0.2653**	0.002	0.9	ug/L	143	Standard
|	**Ni**	60	10390.6	1.9	**3.6863**	0.045	1.2	ug/L	79	Standard
|	**Cu**	65	1583.4	1.7	**0.5739**	0.007	1.3	ug/L	154	Standard
|	**Zn**	66	3523.7	2.7	**2.8950**	0.072	2.5	ug/L	194	Standard
| >	**Ge**	72	212914.9	0.8				ug/L	232024	Standard
|	**As**	75	8951.5	3.5	**8.7851**	0.269	3.1	ug/L	-297	Standard
|	**Se**	82	98.0	2.5	**0.6751**	0.018	2.7	ug/L	17	Standard
⌊	**Se-1**	77	1143.0	3.8	**13.2895**	0.675	5.1	ug/L	180	Standard
	Ga	71	193434.0	1.2				mg/L	210139	Standard
⌈	**Rb**	85	25693.5	5.0				ug/L	12	Standard
| >	**Y**	89	204578.6	0.7				ug/L	214065	Standard
⌊	**Rh**	103	1006.7	5.5				ug/L	0	Standard
⌈	**Mo**	98	2551.7	0.8	**0.6252**	0.009	1.4	ug/L	6	Standard
|	**Ag**	107	91.0	5.8	**0.0038**	0.001	19.0	ug/L	33	Standard
|	**Cd**	111	524.3	3.0	**0.0262**	0.003	10.0	mg/L	437	Standard
|	**Cd**	114	1392.7	5.9	**0.0213**	0.008	36.3	ug/L	1160	Standard
| >	**In**	115	629382.3	1.0				ug/L	646604	Standard
|	**Sn**	118	1393.7	1.5	**0.0348**	0.001	1.5	ug/L	864	Standard
|	**Sb**	123	774.8	5.8	**0.0696**	0.005	6.9	ug/L	18	Standard
⌊	**Ba**	135	61336.9	1.7	**13.6740**	0.234	1.7	ug/L	39	Standard
⌈	**Ce**	140	5359.9	1.5				ug/L	46	Standard
⌊>	**Tb**	159	747926.5	0.3				ug/L	695671	Standard
⌈	**Ho**	165	161.3	1.3				ug/L	9	Standard
|	**Tl**	203	417.0	4.2	**-0.0062**	0.001	12.2	ug/L	687	Standard
|	**Tl**	205	977.4	1.5	**-0.0054**	0.001	9.6	ug/L	1624	Standard
|	**Pb**	206	1138.4	1.8	**0.0812**	0.001	1.5	ug/L	305	Standard
|	**Pb**	207	928.7	3.7	**0.0768**	0.004	5.6	ug/L	231	Standard
|	**Pb**	208	4348.9	0.8	**0.0774**	0.002	2.0	ug/L	1129	Standard
|	**U**	238	3404.4	3.0	**0.1496**	0.002	1.6	ug/L	3	Standard
⌊>	**Bi**	209	336407.0	1.7				ug/L	405108	Standard
⌈	**Na**	23	424430.8	2.0	**100.0059**	1.779	1.8	mg/L	118	Standard
|	**Mg**	24	22397252.1	1.5	**34.8027**	0.394	1.1	mg/L	377	Standard

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Report Date/Time: Thursday, May 10, 2012 14:14:57
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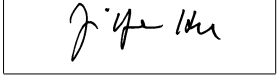

	K	39	33188.0	1.4	**2.3863**	0.031	1.3	mg/L	583	Standard
	Ca	43	32149.1	1.8	**65.3475**	0.944	1.4	mg/L	73	Standard
	Fe	54	7757.6	3.6	**1.0254**	0.042	4.1	mg/L	785	Standard
	Fe	57	285681.3	2.9	**1.3534**	0.037	2.7	mg/L	6133	Standard
>	**Sc-1**	45	299793.6	0.4				mg/L	254529	Standard
	Cl	35	24096639.7	0.6				ug/L	1641778	Standard
	Kr	83	95.2	8.7				ug/L	60	Standard
	Br	81	46642.5	1.3				ug/L	11554	Standard
	P	31	225733.1	2.4				ug/L	45410	Standard
	S	34	6131706.0	2.0				ug/L	568857	Standard
	Sr	88	33948076.3	2.6				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		91.764	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		95.568	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		97.337	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		107.511	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1205009908
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	83.041
	Na	23	
	Mg	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	

Sample ID: L1205009908
Report Date/Time: Thursday, May 10, 2012 14:14:57
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Method 6020 - Summary Report

Sample ID: L1205009909

Sample Date/Time: Thursday, May 10, 2012 14:15:17
Number of Replicates: 3
Autosampler Position: 306
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	211391.1	0.6	**17707.9894**	500.980	2.8	ug/L	12600	Standard
|	**Be**	9	8.3	69.3	**-0.0122**	0.002	12.3	ug/L	5	Standard
|	**Al**	27	124149.6	6.3	**6.2981**	0.434	6.9	ug/L	16102	Standard
⌊>	**Sc**	45	286312.3	2.1				ug/L	254529	Standard
⌈	**Ti**	47	803.4	6.0	**0.4708**	0.026	5.5	ug/L	84	Standard
|	**V**	51	7544.3	3.0	**0.2033**	0.008	3.9	ug/L	5785	Standard
|	**Cr**	52	19450.5	3.4	**0.6800**	0.045	6.6	ug/L	12212	Standard
|	**Cr**	53	5602.7	4.6	**1.7428**	0.160	9.2	ug/L	5042	Standard
|	**Mn**	55	2081031.2	1.7	**103.1092**	0.867	0.8	ug/L	1290	Standard
|	**Co**	59	6495.1	1.0	**0.4431**	0.003	0.6	ug/L	143	Standard
|	**Ni**	60	8820.2	3.1	**2.9085**	0.045	1.6	ug/L	79	Standard
|	**Cu**	65	3870.5	2.0	**1.3698**	0.017	1.2	ug/L	154	Standard
|	**Zn**	66	62744.0	1.4	**50.7450**	0.596	1.2	ug/L	194	Standard
| >	**Ge**	72	228657.0	1.5				ug/L	232024	Standard
|	**As**	75	144.1	31.3	**0.3546**	0.039	11.1	ug/L	-297	Standard
|	**Se**	82	100.5	3.9	**0.6383**	0.043	6.7	ug/L	17	Standard
⌊	**Se-1**	77	275.7	3.1	**1.5725**	0.127	8.1	ug/L	180	Standard
	Ga	71	205935.2	1.2				mg/L	210139	Standard
⌈	**Rb**	85	23476.5	4.1				ug/L	12	Standard
| >	**Y**	89	218947.5	1.6				ug/L	214065	Standard
⌊	**Rh**	103	150.0	33.3				ug/L	0	Standard
⌈	**Mo**	98	1119.4	1.8	**0.2552**	0.001	0.4	ug/L	6	Standard
|	**Ag**	107	45.7	19.9	**-0.0021**	0.001	45.3	ug/L	33	Standard
|	**Cd**	111	1240.4	1.7	**0.1744**	0.010	5.5	mg/L	437	Standard
|	**Cd**	114	3194.4	3.5	**0.1636**	0.004	2.4	ug/L	1160	Standard
| >	**In**	115	663904.8	2.1				ug/L	646604	Standard
|	**Sn**	118	1239.1	3.6	**0.0205**	0.001	6.8	ug/L	864	Standard
|	**Sb**	123	948.9	7.0	**0.0811**	0.004	5.2	ug/L	18	Standard
⌊	**Ba**	135	311451.3	3.0	**65.8527**	1.521	2.3	ug/L	39	Standard
⌈	**Ce**	140	2291.5	3.9				ug/L	46	Standard
⌊>	**Tb**	159	750970.7	2.3				ug/L	695671	Standard
⌈	**Ho**	165	38.7	12.8				ug/L	9	Standard
|	**Tl**	203	802.0	2.1	**0.0146**	0.002	11.4	ug/L	687	Standard
|	**Tl**	205	1775.1	4.9	**0.0123**	0.002	14.9	ug/L	1624	Standard
|	**Pb**	206	2888.6	0.8	**0.2085**	0.001	0.6	ug/L	305	Standard
|	**Pb**	207	2359.2	3.9	**0.1987**	0.006	3.1	ug/L	231	Standard
|	**Pb**	208	11104.3	2.5	**0.2012**	0.003	1.6	ug/L	1129	Standard
|	**U**	238	4273.9	3.2	**0.1641**	0.003	2.1	ug/L	3	Standard
⌊>	**Bi**	209	384512.7	1.2				ug/L	405108	Standard
⌈	**Na**	23	98984.0	2.2	**24.4094**	0.788	3.2	mg/L	118	Standard
|	**Mg**	24	4446916.6	2.4	**7.2374**	0.251	3.5	mg/L	377	Standard

Sample ID: L1205009909
Report Date/Time: Thursday, May 10, 2012 14:17:50
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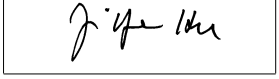

	K	39	20190.1	3.8	**1.5021**	0.077	5.1	mg/L	583	Standard
	Ca	43	17657.0	3.2	**37.5072**	1.285	3.4	mg/L	73	Standard
	Fe	54	2763.4	7.1	**0.2867**	0.035	12.2	mg/L	785	Standard
	Fe	57	80233.6	2.2	**0.3740**	0.015	4.0	mg/L	6133	Standard
>	**Sc-1**	45	286312.3	2.1				mg/L	254529	Standard
	Cl	35	4346428.8	6.3				ug/L	1641778	Standard
	Kr	83	61.9	7.4				ug/L	60	Standard
	Br	81	45870.2	1.4				ug/L	11554	Standard
	P	31	69755.2	1.1				ug/L	45410	Standard
	S	34	1977011.3	1.5				ug/L	568857	Standard
	Sr	88	3461007.4	3.2				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		98.549	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		102.281	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		102.676	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		107.949	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1205009909
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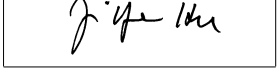
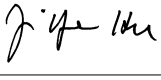


	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	94.916
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: May 11, 2012



Method 6020 - Summary Report

Sample ID: L1205009910
Sample Date/Time: Thursday, May 10, 2012 14:18:10
Number of Replicates: 3
Autosampler Position: 307
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	193367.1	5.8	**16629.3391**	208.751	1.3	ug/L	12600	Standard
|	**Be**	9	6.7	43.3	**-0.0126**	0.001	7.3	ug/L	5	Standard
|	**Al**	27	67954.0	5.7	**3.2103**	0.107	3.3	ug/L	16102	Standard
⌊>	**Sc**	45	277600.3	5.7				ug/L	254529	Standard
⌈	**Ti**	47	694.3	3.8	**0.4138**	0.006	1.5	ug/L	84	Standard
|	**V**	51	7064.8	4.6	**0.1871**	0.015	7.9	ug/L	5785	Standard
|	**Cr**	52	17524.5	4.7	**0.5601**	0.011	2.0	ug/L	12212	Standard
|	**Cr**	53	5436.8	5.8	**1.7503**	0.176	10.1	ug/L	5042	Standard
|	**Mn**	55	1963392.7	3.4	**100.4737**	1.085	1.1	ug/L	1290	Standard
|	**Co**	59	6033.2	4.7	**0.4245**	0.005	1.1	ug/L	143	Standard
|	**Ni**	60	8071.5	4.7	**2.7473**	0.049	1.8	ug/L	79	Standard
|	**Cu**	65	2369.2	4.7	**0.8474**	0.011	1.3	ug/L	154	Standard
|	**Zn**	66	67049.5	3.6	**56.0190**	0.346	0.6	ug/L	194	Standard
|>	**Ge**	72	221441.3	4.2				ug/L	232024	Standard
|	**As**	75	126.1	28.3	**0.3418**	0.029	8.6	ug/L	-297	Standard
|	**Se**	82	94.6	4.4	**0.6168**	0.066	10.8	ug/L	17	Standard
⌊	**Se-1**	77	264.7	5.5	**1.5512**	0.323	20.8	ug/L	180	Standard
	Ga	71	198593.8	5.0				mg/L	210139	Standard
⌈	**Rb**	85	22293.1	5.5				ug/L	12	Standard
|>	**Y**	89	211039.5	4.0				ug/L	214065	Standard
⌊	**Rh**	103	98.3	5.9				ug/L	0	Standard
⌈	**Mo**	98	1059.2	5.9	**0.2501**	0.005	2.0	ug/L	6	Standard
|	**Ag**	107	43.0	10.1	**-0.0022**	0.001	28.9	ug/L	33	Standard
|	**Cd**	111	1055.8	6.6	**0.1428**	0.010	7.3	mg/L	437	Standard
|	**Cd**	114	2832.5	3.0	**0.1425**	0.004	2.8	ug/L	1160	Standard
|>	**In**	115	640346.9	4.1				ug/L	646604	Standard
|	**Sn**	118	1084.4	5.2	**0.0134**	0.001	7.4	ug/L	864	Standard
|	**Sb**	123	1026.7	6.7	**0.0913**	0.003	2.8	ug/L	18	Standard
⌊	**Ba**	135	294202.9	4.9	**64.4786**	0.529	0.8	ug/L	39	Standard
⌈	**Ce**	140	1231.1	0.7				ug/L	46	Standard
⌊>	**Tb**	159	727441.4	4.2				ug/L	695671	Standard
⌈	**Ho**	165	24.0	15.0				ug/L	9	Standard
|	**Tl**	203	749.7	2.5	**0.0125**	0.001	6.1	ug/L	687	Standard
|	**Tl**	205	1693.1	1.5	**0.0114**	0.001	10.4	ug/L	1624	Standard
|	**Pb**	206	1190.4	7.5	**0.0748**	0.004	5.3	ug/L	305	Standard
|	**Pb**	207	972.7	7.8	**0.0708**	0.004	6.0	ug/L	231	Standard
|	**Pb**	208	4623.6	5.9	**0.0728**	0.002	3.0	ug/L	1129	Standard
|	**U**	238	3956.5	6.1	**0.1560**	0.004	2.8	ug/L	3	Standard
⌊>	**Bi**	209	374591.9	3.9				ug/L	405108	Standard
⌈	**Na**	23	93159.2	4.4	**23.6976**	0.329	1.4	mg/L	118	Standard
|	**Mg**	24	4201238.5	5.6	**7.0500**	0.033	0.5	mg/L	377	Standard

Sample ID: L1205009910
Report Date/Time: Thursday, May 10, 2012 14:20:44
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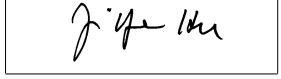
Approved: May 11, 2012



	K	39	19591.0	5.0	**1.5031**	0.017	1.1	mg/L	583	Standard
	Ca	43	16632.5	3.2	**36.4649**	1.072	2.9	mg/L	73	Standard
	Fe	54	2373.5	5.6	**0.2362**	0.003	1.1	mg/L	785	Standard
	Fe	57	70040.2	6.1	**0.3331**	0.002	0.5	mg/L	6133	Standard
>	**Sc-1**	45	277600.3	5.7				mg/L	254529	Standard
	Cl	35	3969541.6	5.4				ug/L	1641778	Standard
	Kr	83	56.7	7.2				ug/L	60	Standard
	Br	81	45382.1	3.7				ug/L	11554	Standard
	P	31	66183.5	3.3				ug/L	45410	Standard
	S	34	1876133.8	3.7				ug/L	568857	Standard
	Sr	88	3210196.9	4.6				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		95.439	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		98.587	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		99.032	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		104.567	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	92.467
	Na	23	
	Mg	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 4
Sample Date/Time: Thursday, May 10, 2012 14:21:05
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	14855.6	2.4	**149.8930**	6.680	4.5	ug/L	12600	Standard
|	**Be**	9	10.0	173.2	**-0.0117**	0.005	41.0	ug/L	5	Standard
|	**Al**	27	82003170.8	4.7	**4908.8398**	126.113	2.6	ug/L	16102	Standard
⌊>	**Sc**	45	273061.1	2.2				ug/L	254529	Standard
⌈	**Ti**	47	187314.6	3.3	**121.4525**	2.417	2.0	ug/L	84	Standard
|	**V**	51	5628.3	6.5	**0.0699**	0.018	25.9	ug/L	5785	Standard
|	**Cr**	52	13705.5	1.5	**0.1464**	0.002	1.3	ug/L	12212	Standard
|	**Cr**	53	5959.5	13.7	**1.8750**	0.442	23.5	ug/L	5042	Standard
|	**Mn**	55	2571.6	3.8	**0.0400**	0.006	15.6	ug/L	1290	Standard
|	**Co**	59	403.7	2.3	**0.0173**	0.000	1.8	ug/L	143	Standard
|	**Ni**	60	1381.1	9.5	**0.4255**	0.039	9.2	ug/L	79	Standard
|	**Cu**	65	698.7	6.0	**0.2010**	0.013	6.7	ug/L	154	Standard
|	**Zn**	66	2377.2	2.9	**1.7122**	0.026	1.5	ug/L	194	Standard
| >	**Ge**	72	233586.7	1.5				ug/L	232024	Standard
|	**As**	75	-327.5	11.1	**-0.0594**	0.036	60.7	ug/L	-297	Standard
|	**Se**	82	29.2	16.1	**0.0675**	0.034	50.4	ug/L	17	Standard
⌊	**Se-1**	77	351.7	7.0	**2.4166**	0.307	12.7	ug/L	180	Standard
	Ga	71	208344.1	2.2				mg/L	210139	Standard
⌈	**Rb**	85	4025.5	2.0				ug/L	12	Standard
| >	**Y**	89	218156.1	1.0				ug/L	214065	Standard
⌊	**Rh**	103	20.0	43.3				ug/L	0	Standard
⌈	**Mo**	98	423686.3	1.6	**98.3748**	1.249	1.3	ug/L	6	Standard
|	**Ag**	107	86.0	10.3	**0.0025**	0.001	42.0	ug/L	33	Standard
|	**Cd**	111	905.4	2.1	**0.0995**	0.003	3.5	mg/L	437	Standard
|	**Cd**	114	3887.0	5.1	**0.2165**	0.015	6.9	ug/L	1160	Standard
| >	**In**	115	672762.7	0.3				ug/L	646604	Standard
|	**Sn**	118	1098.7	2.3	**0.0110**	0.001	13.0	ug/L	864	Standard
|	**Sb**	123	508.3	6.6	**0.0417**	0.003	6.9	ug/L	18	Standard
⌊	**Ba**	135	188.0	18.2	**0.0310**	0.007	22.6	ug/L	39	Standard
⌈	**Ce**	140	2001.8	3.4				ug/L	46	Standard
⌊>	**Tb**	159	767530.3	1.0				ug/L	695671	Standard
⌈	**Ho**	165	17.7	26.7				ug/L	9	Standard
|	**Tl**	203	433.7	6.9	**-0.0098**	0.002	19.3	ug/L	687	Standard
|	**Tl**	205	949.4	2.8	**-0.0107**	0.000	4.1	ug/L	1624	Standard
|	**Pb**	206	551.0	6.7	**0.0197**	0.002	11.7	ug/L	305	Standard
|	**Pb**	207	465.0	7.3	**0.0194**	0.003	13.2	ug/L	231	Standard
|	**Pb**	208	2136.4	5.6	**0.0188**	0.002	9.5	ug/L	1129	Standard
|	**U**	238	18.3	3.1	**0.0031**	0.000	0.8	ug/L	3	Standard
⌊>	**Bi**	209	396843.3	1.2				ug/L	405108	Standard
⌈	**Na**	23	50072.7	3.2	**12.9282**	0.125	1.0	mg/L	118	Standard
|	**Mg**	24	3055536.3	3.1	**5.2115**	0.058	1.1	mg/L	377	Standard

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	K	39	64719.7	3.2	**5.1677**	0.096	1.9	mg/L	583	Standard
	Ca	43	6813.2	3.3	**15.0550**	0.176	1.2	mg/L	73	Standard
	Fe	54	78017.3	2.8	**12.8597**	0.094	0.7	mg/L	785	Standard
	Fe	57	2257892.2	3.1	**12.0066**	0.117	1.0	mg/L	6133	Standard
>	**Sc-1**	45	273061.1	2.2				mg/L	254529	Standard
	Cl	35	10598008.8	1.2				ug/L	1641778	Standard
	Kr	83	64.0	2.9				ug/L	60	Standard
	Br	81	13061.5	8.8				ug/L	11554	Standard
	P	31	6553629.8	2.9				ug/L	45410	Standard
	S	34	1543540.4	3.3				ug/L	568857	Standard
	Sr	88	1945.1	24.1				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	98.177		
>	Sc	45			
	Ti	47	121.452		
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		100.674	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		101.911	
	Rh	103			
	Mo	98	98.375		
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		104.046	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		110.329	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207		
	Pb	208		
	U	238		
>	Bi	209		97.960
	Na	23	103.426	
	Mg	24	104.230	
	K	39	103.355	
	Ca	43	100.367	
	Fe	54	102.878	
	Fe	57	96.052	
>	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	Ti	47	

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Method 6020 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Thursday, May 10, 2012 14:23:58
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	13819.6	3.7	**81.7223**	28.189	34.5	ug/L	12600	Standard
|	**Be**	9	358571.3	2.2	**102.5292**	0.686	0.7	ug/L	5	Standard
|	**Al**	27	71579143.4	2.9	**4382.9194**	60.698	1.4	ug/L	16102	Standard
⌊>	**Sc**	45	267004.1	1.6				ug/L	254529	Standard
⌈	**Ti**	47	161192.3	3.5	**105.5054**	5.286	5.0	ug/L	84	Standard
|	**V**	51	1592709.6	2.8	**102.7235**	4.046	3.9	ug/L	5785	Standard
|	**Cr**	52	1190191.5	3.2	**102.9577**	3.927	3.8	ug/L	12212	Standard
|	**Cr**	53	180443.5	2.4	**102.4600**	4.011	3.9	ug/L	5042	Standard
|	**Mn**	55	2040821.9	2.4	**99.9118**	4.368	4.4	ug/L	1290	Standard
|	**Co**	59	1443936.9	2.6	**99.5665**	4.027	4.0	ug/L	143	Standard
|	**Ni**	60	305325.5	2.7	**100.2847**	4.311	4.3	ug/L	79	Standard
|	**Cu**	65	272079.9	2.2	**98.5629**	4.562	4.6	ug/L	154	Standard
|	**Zn**	66	125572.4	2.1	**100.5031**	3.727	3.7	ug/L	194	Standard
| >	**Ge**	72	231562.9	2.6				ug/L	232024	Standard
|	**As**	75	115827.0	2.0	**102.0968**	3.027	3.0	ug/L	-297	Standard
|	**Se**	82	13292.4	3.0	**103.8579**	4.344	4.2	ug/L	17	Standard
⌊	**Se-1**	77	8714.2	2.8	**104.1454**	4.833	4.6	ug/L	180	Standard
	Ga	71	205514.0	1.7				mg/L	210139	Standard
⌈	**Rb**	85	3392.0	7.3				ug/L	12	Standard
| >	**Y**	89	220638.9	2.6				ug/L	214065	Standard
⌊	**Rh**	103	86.7	6.7				ug/L	0	Standard
⌈	**Mo**	98	372953.0	2.1	**87.9689**	2.184	2.5	ug/L	6	Standard
|	**Ag**	107	630346.0	6.5	**73.4838**	4.726	6.4	ug/L	33	Standard
|	**Cd**	111	456587.0	1.2	**98.4587**	1.606	1.6	mg/L	437	Standard
|	**Cd**	114	1192548.2	1.5	**98.5413**	1.933	2.0	ug/L	1160	Standard
| >	**In**	115	662318.3	0.8				ug/L	646604	Standard
|	**Sn**	118	1928.8	4.3	**0.0634**	0.005	8.5	ug/L	864	Standard
|	**Sb**	123	1116774.1	1.0	**98.6761**	1.241	1.3	ug/L	18	Standard
⌊	**Ba**	135	479641.3	1.5	**101.6660**	1.890	1.9	ug/L	39	Standard
⌈	**Ce**	140	1824.1	2.7				ug/L	46	Standard
⌊>	**Tb**	159	762693.7	1.7				ug/L	695671	Standard
⌈	**Ho**	165	13.7	8.4				ug/L	9	Standard
|	**Tl**	203	1636732.3	2.2	**101.1045**	1.522	1.5	ug/L	687	Standard
|	**Tl**	205	4085046.9	1.9	**106.5311**	1.195	1.1	ug/L	1624	Standard
|	**Pb**	206	1299296.6	2.0	**100.5655**	0.948	0.9	ug/L	305	Standard
|	**Pb**	207	1131100.5	1.9	**102.6526**	1.557	1.5	ug/L	231	Standard
|	**Pb**	208	5341352.2	2.0	**104.1505**	1.598	1.5	ug/L	1129	Standard
|	**U**	238	2847053.9	2.8	**104.0463**	1.933	1.9	ug/L	3	Standard
⌊>	**Bi**	209	398088.8	1.4				ug/L	405108	Standard
⌈	**Na**	23	43863.4	3.2	**11.5788**	0.187	1.6	mg/L	118	Standard
|	**Mg**	24	2161276.0	17.5	**3.7771**	0.720	19.1	mg/L	377	Standard

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	K	39	56923.4	1.4	**4.6435**	0.010	0.2	mg/L	583	Standard
	Ca	43	6052.9	6.9	**13.6558**	0.767	5.6	mg/L	73	Standard
	Fe	54	68098.2	3.6	**11.4619**	0.262	2.3	mg/L	785	Standard
	Fe	57	1991705.9	0.3	**10.8316**	0.202	1.9	mg/L	6133	Standard
>	**Sc-1**	45	267004.1	1.6				mg/L	254529	Standard
	Cl	35	9400767.4	2.0				ug/L	1641778	Standard
	Kr	83	73.0	5.8				ug/L	60	Standard
	Br	81	12065.6	1.7				ug/L	11554	Standard
	P	31	5680281.2	1.8				ug/L	45410	Standard
	S	34	1377491.8	3.2				ug/L	568857	Standard
	Sr	88	1453.4	6.5				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	87.658		
>	Sc	45			
	Ti	47	105.505		
	V	51	102.724		
	Cr	52	102.958		
	Cr	53			
	Mn	55	99.912		
	Co	59	99.566		
	Ni	60	100.285		
	Cu	65	98.563		
	Zn	66	100.503		
>	Ge	72		99.801	
	As	75	102.097		
	Se	82	103.858		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		103.071	
	Rh	103			
	Mo	98	87.969		
	Ag	107	73.484		
	Cd	111	98.459		
	Cd	114			
>	In	115		102.430	
	Sn	118			
	Sb	123	98.676		
	Ba	135	101.666		
	Ce	140			
>	Tb	159		109.634	
	Ho	165			
	Tl	203	101.104		
	Tl	205			
	Pb	206	100.566		

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	Pb	207	102.653	
	Pb	208	104.151	
	U	238	104.046	
>	Bi	209		98.267
	Na	23	92.630	
	Mg	24	75.542	
	K	39	92.870	
	Ca	43	91.039	
	Fe	54	91.695	
	Fe	57	86.653	
>	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	Ag	107	
QC Std 5	Mg	24	

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Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, May 10, 2012 14:26:53
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	13345.9	4.9	**3.7367**	26.757	716.1	ug/L	12600	Standard
|	**Be**	9	174199.0	0.2	**48.5986**	2.169	4.5	ug/L	5	Standard
|	**Al**	27	862778.9	2.2	**50.7539**	1.983	3.9	ug/L	16102	Standard
⌊>	**Sc**	45	273996.8	4.5				ug/L	254529	Standard
⌈	**Ti**	47	157381.9	2.6	**103.5359**	1.605	1.6	ug/L	84	Standard
|	**V**	51	802896.3	2.0	**51.9196**	0.889	1.7	ug/L	5785	Standard
|	**Cr**	52	601201.3	2.5	**51.7746**	0.648	1.3	ug/L	12212	Standard
|	**Cr**	53	91182.9	2.9	**51.2966**	1.149	2.2	ug/L	5042	Standard
|	**Mn**	55	1070527.9	1.9	**52.6384**	0.470	0.9	ug/L	1290	Standard
|	**Co**	59	749754.2	2.4	**51.9616**	0.148	0.3	ug/L	143	Standard
|	**Ni**	60	156427.6	2.3	**51.6315**	0.304	0.6	ug/L	79	Standard
|	**Cu**	65	141656.5	2.8	**51.5449**	0.695	1.3	ug/L	154	Standard
|	**Zn**	66	63462.7	1.7	**50.9765**	0.581	1.1	ug/L	194	Standard
| >	**Ge**	72	230253.8	2.5				ug/L	232024	Standard
|	**As**	75	57601.7	2.7	**51.1551**	0.210	0.4	ug/L	-297	Standard
|	**Se**	82	6743.7	2.9	**52.8834**	0.225	0.4	ug/L	17	Standard
⌊	**Se-1**	77	4336.0	0.2	**51.1958**	1.486	2.9	ug/L	180	Standard
	Ga	71	210492.3	3.1				mg/L	210139	Standard
⌈	**Rb**	85	1055.0	10.2				ug/L	12	Standard
| >	**Y**	89	216695.6	1.9				ug/L	214065	Standard
⌊	**Rh**	103	33.3	45.8				ug/L	0	Standard
⌈	**Mo**	98	419080.0	1.9	**98.7671**	0.244	0.2	ug/L	6	Standard
|	**Ag**	107	446083.6	3.6	**51.9680**	1.845	3.5	ug/L	33	Standard
|	**Cd**	111	230062.1	1.0	**49.5288**	0.364	0.7	mg/L	437	Standard
|	**Cd**	114	594300.0	1.3	**49.0199**	0.233	0.5	ug/L	1160	Standard
| >	**In**	115	662814.0	1.8				ug/L	646604	Standard
|	**Sn**	118	801732.7	1.6	**49.4902**	0.572	1.2	ug/L	864	Standard
|	**Sb**	123	557045.0	2.0	**49.1797**	0.501	1.0	ug/L	18	Standard
⌊	**Ba**	135	239133.4	0.9	**50.6490**	0.640	1.3	ug/L	39	Standard
⌈	**Ce**	140	903.7	1.6				ug/L	46	Standard
⌊>	**Tb**	159	746881.6	1.5				ug/L	695671	Standard
⌈	**Ho**	165	17.7	3.3				ug/L	9	Standard
|	**Tl**	203	827329.3	1.1	**50.7875**	0.530	1.0	ug/L	687	Standard
|	**Tl**	205	1923240.5	1.8	**49.8360**	0.128	0.3	ug/L	1624	Standard
|	**Pb**	206	660316.4	1.2	**50.7966**	0.415	0.8	ug/L	305	Standard
|	**Pb**	207	556423.8	2.1	**50.1803**	0.063	0.1	ug/L	231	Standard
|	**Pb**	208	2581408.8	1.8	**50.0207**	0.182	0.4	ug/L	1129	Standard
|	**U**	238	1334659.3	2.5	**48.4842**	0.281	0.6	ug/L	3	Standard
⌊>	**Bi**	209	400504.3	2.0				ug/L	405108	Standard
⌈	**Na**	23	20128.4	3.4	**5.1660**	0.126	2.4	mg/L	118	Standard
|	**Mg**	24	2850155.7	1.8	**4.8489**	0.125	2.6	mg/L	377	Standard

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	K	39	63379.0	2.5	**5.0459**	0.134	2.6	mg/L	583	Standard
	Ca	43	2231.8	5.0	**4.7850**	0.041	0.9	mg/L	73	Standard
	Fe	54	32172.0	1.1	**5.2007**	0.194	3.7	mg/L	785	Standard
	Fe	57	928442.9	2.5	**4.9038**	0.120	2.4	mg/L	6133	Standard
>	**Sc-1**	45	273996.8	4.5				mg/L	254529	Standard
	Cl	35	492355.4	56.3				ug/L	1641778	Standard
	Kr	83	58.9	7.5				ug/L	60	Standard
	Br	81	11883.8	1.1				ug/L	11554	Standard
	P	31	66874.1	4.5				ug/L	45410	Standard
	S	34	729326.8	1.6				ug/L	568857	Standard
	Sr	88	740.0	13.6				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	101.508		
>	Sc	45			
	Ti	47	103.536		
	V	51	103.839		
	Cr	52	103.549		
	Cr	53			
	Mn	55	105.277		
	Co	59	103.923		
	Ni	60	103.263		
	Cu	65	103.090		
	Zn	66	101.953		
>	Ge	72		99.237	
	As	75	102.310		
	Se	82	105.767		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		101.229	
	Rh	103			
	Mo	98	98.767		
	Ag	107	103.936		
	Cd	111	99.058		
	Cd	114			
>	In	115		102.507	
	Sn	118	98.980		
	Sb	123	98.359		
	Ba	135	101.298		
	Ce	140			
>	Tb	159		107.361	
	Ho	165			
	Tl	203	101.575		
	Tl	205			
	Pb	206	101.593		

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	Pb	207	100.361	
	Pb	208	100.041	
	U	238	96.968	
>	Bi	209		98.864
	Na	23	103.320	
	Mg	24	96.977	
	K	39	100.918	
	Ca	43	95.699	
	Fe	54	104.014	
	Fe	57	98.076	
>	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 10, 2012 14:29:45
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	12752.0	4.0	**81.8773**	12.143	14.8	ug/L	12600	Standard
|	**Be**	9	8.3	34.6	**-0.0118**	0.001	8.1	ug/L	5	Standard
|	**Al**	27	14036.5	1.9	**0.1384**	0.032	23.3	ug/L	16102	Standard
⌊>	**Sc**	45	246364.8	3.2				ug/L	254529	Standard
⌈	**Ti**	47	111.3	17.1	**0.0151**	0.012	82.3	ug/L	84	Standard
|	**V**	51	3690.2	2.3	**-0.0393**	0.007	17.2	ug/L	5785	Standard
|	**Cr**	52	10849.2	1.8	**-0.0422**	0.032	74.8	ug/L	12212	Standard
|	**Cr**	53	1036.7	12.9	**-0.8974**	0.075	8.4	ug/L	5042	Standard
|	**Mn**	55	1382.4	3.0	**-0.0136**	0.003	18.5	ug/L	1290	Standard
|	**Co**	59	182.7	19.4	**0.0030**	0.003	83.5	ug/L	143	Standard
|	**Ni**	60	84.0	25.9	**0.0051**	0.007	143.9	ug/L	79	Standard
|	**Cu**	65	189.0	5.8	**0.0223**	0.004	16.1	ug/L	154	Standard
|	**Zn**	66	214.7	8.7	**0.0052**	0.016	309.8	ug/L	194	Standard
| >	**Ge**	72	219906.6	1.4				ug/L	232024	Standard
|	**As**	75	-242.7	9.8	**0.0017**	0.023	1321.7	ug/L	-297	Standard
|	**Se**	82	22.4	10.8	**0.0265**	0.022	84.0	ug/L	17	Standard
⌊	**Se-1**	77	93.0	15.2	**-0.6324**	0.166	26.2	ug/L	180	Standard
	Ga	71	202104.0	1.9				mg/L	210139	Standard
⌈	**Rb**	85	23.3	24.7				ug/L	12	Standard
| >	**Y**	89	207727.7	0.9				ug/L	214065	Standard
⌊	**Rh**	103	10.0	86.6				ug/L	0	Standard
⌈	**Mo**	98	102.1	40.7	**0.0170**	0.011	61.9	ug/L	6	Standard
|	**Ag**	107	1212.7	13.1	**0.1404**	0.020	13.9	ug/L	33	Standard
|	**Cd**	111	451.8	10.1	**0.0091**	0.011	123.8	mg/L	437	Standard
|	**Cd**	114	1147.4	0.6	**-0.0007**	0.003	461.5	ug/L	1160	Standard
| >	**In**	115	633940.2	3.0				ug/L	646604	Standard
|	**Sn**	118	942.7	7.4	**0.0050**	0.004	72.1	ug/L	864	Standard
|	**Sb**	123	627.9	27.5	**0.0556**	0.017	30.1	ug/L	18	Standard
⌊	**Ba**	135	51.0	14.8	**0.0031**	0.001	46.8	ug/L	39	Standard
⌈	**Ce**	140	41.3	34.0				ug/L	46	Standard
⌊>	**Tb**	159	698884.3	2.8				ug/L	695671	Standard
⌈	**Ho**	165	8.0	12.5				ug/L	9	Standard
|	**Tl**	203	393.0	35.6	**-0.0120**	0.009	71.9	ug/L	687	Standard
|	**Tl**	205	917.0	35.6	**-0.0112**	0.008	75.4	ug/L	1624	Standard
|	**Pb**	206	319.0	10.0	**0.0021**	0.002	106.4	ug/L	305	Standard
|	**Pb**	207	285.0	11.6	**0.0034**	0.003	77.5	ug/L	231	Standard
|	**Pb**	208	1274.4	8.6	**0.0024**	0.002	78.0	ug/L	1129	Standard
|	**U**	238	65.0	33.3	**0.0048**	0.001	16.1	ug/L	3	Standard
⌊>	**Bi**	209	390334.5	1.9				ug/L	405108	Standard
⌈	**Na**	23	121.7	19.4	**0.0076**	0.006	84.0	mg/L	118	Standard
|	**Mg**	24	486.7	3.1	**0.0001**	0.000	50.9	mg/L	377	Standard

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	K	39	683.3	14.7	**0.0097**	0.011	110.6	mg/L	583	Standard
	Ca	43	51.7	36.6	**-0.0646**	0.047	73.0	mg/L	73	Standard
	Fe	54	977.1	12.8	**0.0278**	0.027	95.4	mg/L	785	Standard
	Fe	57	4782.4	7.6	**-0.0060**	0.003	42.2	mg/L	6133	Standard
>	**Sc-1**	45	246364.8	3.2				mg/L	254529	Standard
	Cl	35	532469.9	36.3				ug/L	1641778	Standard
	Kr	83	57.4	3.4				ug/L	60	Standard
	Br	81	11225.0	2.7				ug/L	11554	Standard
	P	31	64559.3	6.3				ug/L	45410	Standard
	S	34	718870.8	1.7				ug/L	568857	Standard
	Sr	88	250.0	4.0				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		94.778	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		97.040	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		98.042	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		100.462	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	96.353
	Na	23	
	Mg	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 8
Sample Date/Time: Thursday, May 10, 2012 14:32:41
Number of Replicates: 3
Autosampler Position: 202
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	12760.4	2.2	**49.4821**	31.876	64.4	ug/L	12600	Standard
|	**Be**	9	21.7	48.0	**-0.0079**	0.003	39.2	ug/L	5	Standard
|	**Al**	27	17400.0	1.0	**0.3321**	0.022	6.5	ug/L	16102	Standard
⌊>	**Sc**	45	252744.0	0.9				ug/L	254529	Standard
⌈	**Ti**	47	128.3	9.0	**0.0285**	0.007	25.1	ug/L	84	Standard
|	**V**	51	9496.6	0.5	**0.3683**	0.007	2.0	ug/L	5785	Standard
|	**Cr**	52	19346.7	0.6	**0.7731**	0.011	1.4	ug/L	12212	Standard
|	**Cr**	53	2314.3	4.2	**-0.0957**	0.046	48.6	ug/L	5042	Standard
|	**Mn**	55	11229.2	2.4	**0.5051**	0.009	1.9	ug/L	1290	Standard
|	**Co**	59	5527.3	2.0	**0.3986**	0.011	2.6	ug/L	143	Standard
|	**Ni**	60	4605.4	2.1	**1.5987**	0.028	1.7	ug/L	79	Standard
|	**Cu**	65	2297.2	0.2	**0.8431**	0.011	1.3	ug/L	154	Standard
|	**Zn**	66	8417.3	1.9	**7.0621**	0.106	1.5	ug/L	194	Standard
| >	**Ge**	72	215789.6	1.0				ug/L	232024	Standard
|	**As**	75	173.6	6.4	**0.3901**	0.009	2.3	ug/L	-297	Standard
|	**Se**	82	73.5	0.9	**0.4584**	0.001	0.3	ug/L	17	Standard
⌊	**Se-1**	77	130.0	13.1	**-0.1264**	0.213	168.2	ug/L	180	Standard
	Ga	71	198116.2	0.6				mg/L	210139	Standard
⌈	**Rb**	85	10.0	50.0				ug/L	12	Standard
| >	**Y**	89	202139.5	0.8				ug/L	214065	Standard
⌊	**Rh**	103	3.3	173.2				ug/L	0	Standard
⌈	**Mo**	98	58.6	59.9	**0.0065**	0.009	132.0	ug/L	6	Standard
|	**Ag**	107	3907.5	1.3	**0.4781**	0.007	1.5	ug/L	33	Standard
|	**Cd**	111	1474.3	4.6	**0.2461**	0.009	3.7	mg/L	437	Standard
|	**Cd**	114	3851.5	3.1	**0.2394**	0.004	1.6	ug/L	1160	Standard
| >	**In**	115	621597.5	2.0				ug/L	646604	Standard
|	**Sn**	118	769.4	5.8	**-0.0052**	0.002	44.2	ug/L	864	Standard
|	**Sb**	123	4381.1	2.5	**0.4099**	0.002	0.6	ug/L	18	Standard
⌊	**Ba**	135	3396.7	2.4	**0.7589**	0.007	0.9	ug/L	39	Standard
⌈	**Ce**	140	48.7	8.3				ug/L	46	Standard
⌊>	**Tb**	159	688685.1	2.5				ug/L	695671	Standard
⌈	**Ho**	165	6.7	8.7				ug/L	9	Standard
|	**Tl**	203	1626.8	9.3	**0.0667**	0.008	11.5	ug/L	687	Standard
|	**Tl**	205	3871.2	9.5	**0.0683**	0.008	11.9	ug/L	1624	Standard
|	**Pb**	206	2784.3	4.3	**0.1988**	0.007	3.7	ug/L	305	Standard
|	**Pb**	207	2414.2	1.7	**0.2027**	0.004	2.1	ug/L	231	Standard
|	**Pb**	208	11034.9	2.3	**0.1985**	0.001	0.5	ug/L	1129	Standard
|	**U**	238	10070.7	2.1	**0.3814**	0.011	3.0	ug/L	3	Standard
⌊>	**Bi**	209	386755.4	1.9				ug/L	405108	Standard
⌈	**Na**	23	116.7	34.4	**0.0054**	0.011	211.7	mg/L	118	Standard
|	**Mg**	24	1265.1	7.3	**0.0015**	0.000	12.6	mg/L	377	Standard

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	K	39	701.7	2.1	**0.0096**	0.002	18.0	mg/L	583	Standard
	Ca	43	61.7	18.7	**-0.0436**	0.028	63.9	mg/L	73	Standard
	Fe	54	954.0	6.2	**0.0188**	0.012	62.8	mg/L	785	Standard
	Fe	57	4984.2	1.9	**-0.0056**	0.000	7.8	mg/L	6133	Standard
>	**Sc-1**	45	252744.0	0.9				mg/L	254529	Standard
	Cl	35	527046.4	37.5				ug/L	1641778	Standard
	Kr	83	55.7	8.3				ug/L	60	Standard
	Br	81	11222.5	1.2				ug/L	11554	Standard
	P	31	64163.9	2.0				ug/L	45410	Standard
	S	34	715733.7	0.6				ug/L	568857	Standard
	Sr	88	1701.8	61.4				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51	92.067		
	Cr	52	96.634		
	Cr	53			
	Mn	55	101.021		
	Co	59	99.654		
	Ni	60	99.921		
	Cu	65	105.382		
	Zn	66	112.994		
>	Ge	72		93.003	
	As	75	97.528		
	Se	82	114.612		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		94.429	
	Rh	103			
	Mo	98			
	Ag	107	119.532		
	Cd	111	102.534		
	Cd	114			
>	In	115		96.133	
	Sn	118			
	Sb	123	102.487		
	Ba	135	101.191		
	Ce	140			
>	Tb	159		98.996	
	Ho	165			
	Tl	203	83.332		
	Tl	205			
	Pb	206			

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	Pb	207			
	Pb	208	99.272		
	U	238	95.339		
>	Bi	209		95.470	
	Na	23			
	Mg	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
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Method 6020 - Summary Report

Sample ID: PBS A2 WG397174-02
Sample Date/Time: Thursday, May 10, 2012 15:02:36
Number of Replicates: 3
Autosampler Position: 401
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	12533.5	3.8	**38.0073**	24.260	63.8	ug/L	12600	Standard
|	**Be**	9	13.3	114.6	**-0.0103**	0.005	44.9	ug/L	5	Standard
|	**Al**	27	13432.6	5.7	**0.0839**	0.061	72.6	ug/L	16102	Standard
⌊>	**Sc**	45	250470.0	3.6				ug/L	254529	Standard
⌈	**Ti**	47	95.3	19.7	**0.0024**	0.012	505.4	ug/L	84	Standard
|	**V**	51	5529.8	10.4	**0.0765**	0.045	58.2	ug/L	5785	Standard
|	**Cr**	52	11641.8	1.9	**0.0023**	0.007	295.2	ug/L	12212	Standard
|	**Cr**	53	5206.8	30.7	**1.5601**	1.001	64.1	ug/L	5042	Standard
|	**Mn**	55	2317.8	3.2	**0.0315**	0.004	13.7	ug/L	1290	Standard
|	**Co**	59	139.7	4.6	**-0.0004**	0.000	98.5	ug/L	143	Standard
|	**Ni**	60	187.7	5.8	**0.0393**	0.004	9.0	ug/L	79	Standard
|	**Cu**	65	199.0	6.4	**0.0241**	0.005	18.9	ug/L	154	Standard
|	**Zn**	66	1857.1	2.5	**1.3504**	0.048	3.6	ug/L	194	Standard
| >	**Ge**	72	225818.0	1.6				ug/L	232024	Standard
|	**As**	75	-285.3	3.1	**-0.0307**	0.004	13.3	ug/L	-297	Standard
|	**Se**	82	21.0	13.3	**0.0100**	0.025	251.4	ug/L	17	Standard
⌊	**Se-1**	77	199.0	32.6	**0.6681**	0.856	128.1	ug/L	180	Standard
	Ga	71	203302.6	2.2				mg/L	210139	Standard
⌈	**Rb**	85	33.3	43.3				ug/L	12	Standard
| >	**Y**	89	216947.8	2.5				ug/L	214065	Standard
⌊	**Rh**	103	0.0					ug/L	0	Standard
⌈	**Mo**	98	78.9	7.5	**0.0114**	0.002	14.0	ug/L	6	Standard
|	**Ag**	107	396.7	6.7	**0.0413**	0.004	10.9	ug/L	33	Standard
|	**Cd**	111	448.5	6.3	**0.0088**	0.002	26.5	mg/L	437	Standard
|	**Cd**	114	1168.9	5.2	**0.0016**	0.001	79.0	ug/L	1160	Standard
| >	**In**	115	630207.2	3.9				ug/L	646604	Standard
|	**Sn**	118	899.4	3.2	**0.0026**	0.001	44.4	ug/L	864	Standard
|	**Sb**	123	104.9	7.3	**0.0073**	0.001	14.6	ug/L	18	Standard
⌊	**Ba**	135	72.7	11.7	**0.0080**	0.002	26.1	ug/L	39	Standard
⌈	**Ce**	140	89.7	4.2				ug/L	46	Standard
⌊>	**Tb**	159	691218.5	3.9				ug/L	695671	Standard
⌈	**Ho**	165	8.3	68.2				ug/L	9	Standard
|	**Tl**	203	699.3	4.6	**0.0077**	0.004	47.9	ug/L	687	Standard
|	**Tl**	205	1610.4	2.8	**0.0076**	0.002	22.0	ug/L	1624	Standard
|	**Pb**	206	601.3	1.9	**0.0248**	0.003	11.0	ug/L	305	Standard
|	**Pb**	207	509.3	6.9	**0.0246**	0.004	15.8	ug/L	231	Standard
|	**Pb**	208	2327.1	2.4	**0.0237**	0.002	8.0	ug/L	1129	Standard
|	**U**	238	11.7	99.3	**0.0029**	0.000	16.2	ug/L	3	Standard
⌊>	**Bi**	209	387920.7	4.8				ug/L	405108	Standard
⌈	**Na**	23	86.7	26.0	**-0.0027**	0.007	244.9	mg/L	118	Standard
|	**Mg**	24	368.3	29.3	**-0.0002**	0.000	126.6	mg/L	377	Standard

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	K	39	663.3	9.8	**0.0068**	0.007	97.9	mg/L	583	Standard
	Ca	43	58.3	35.7	**-0.0499**	0.053	106.2	mg/L	73	Standard
	Fe	54	985.8	5.1	**0.0262**	0.011	43.3	mg/L	785	Standard
	Fe	57	4782.4	2.7	**-0.0065**	0.002	25.3	mg/L	6133	Standard
>	**Sc-1**	45	250470.0	3.6				mg/L	254529	Standard
	Cl	35	1513991.8	26.4				ug/L	1641778	Standard
	Kr	83	59.9	11.6				ug/L	60	Standard
	Br	81	11888.0	1.3				ug/L	11554	Standard
	P	31	61155.0	3.8				ug/L	45410	Standard
	S	34	705030.9	2.7				ug/L	568857	Standard
	Sr	88	415.0	15.9				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		97.325	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		101.347	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		97.464	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		99.360	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	95.757
	Na	23	
	Mg	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: PBS A2 WG397174-02
Report Date/Time: Thursday, May 10, 2012 15:05:09
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Method 6020 - Summary Report

Sample ID: LCSS A2 WG397174-03
Sample Date/Time: Thursday, May 10, 2012 15:05:29
Number of Replicates: 3
Autosampler Position: 402
Sample Description: 1
Method File: C:\NexION Data\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	14964.1	1.9	**68.3159**	25.828	37.8	ug/L	12600	Standard
|	**Be**	9	81674.6	1.7	**21.3366**	0.490	2.3	ug/L	5	Standard
|	**Al**	27	994452.8	1.8	**54.8792**	1.081	2.0	ug/L	16102	Standard
⌊>	**Sc**	45	292139.7	1.0				ug/L	254529	Standard
⌈	**Ti**	47	284.0	6.7	**0.1143**	0.013	11.6	ug/L	84	Standard
|	**V**	51	412367.4	3.3	**24.9091**	0.611	2.5	ug/L	5785	Standard
|	**Cr**	52	315354.3	3.0	**25.0010**	0.748	3.0	ug/L	12212	Standard
|	**Cr**	53	50656.2	2.4	**26.0560**	0.452	1.7	ug/L	5042	Standard
|	**Mn**	55	653491.8	3.7	**30.1565**	0.498	1.7	ug/L	1290	Standard
|	**Co**	59	393502.6	2.8	**25.6274**	0.425	1.7	ug/L	143	Standard
|	**Ni**	60	82685.9	4.0	**25.6350**	0.659	2.6	ug/L	79	Standard
|	**Cu**	65	74955.1	3.0	**25.6127**	0.669	2.6	ug/L	154	Standard
|	**Zn**	66	31757.3	3.4	**23.8762**	0.391	1.6	ug/L	194	Standard
| >	**Ge**	72	244999.4	2.9				ug/L	232024	Standard
|	**As**	75	28683.2	4.0	**24.0611**	0.678	2.8	ug/L	-297	Standard
|	**Se**	82	3367.1	4.6	**24.7285**	0.737	3.0	ug/L	17	Standard
⌊	**Se-1**	77	2158.2	3.8	**22.9633**	0.285	1.2	ug/L	180	Standard
	Ga	71	227341.8	3.4				mg/L	210139	Standard
⌈	**Rb**	85	1228.4	7.3				ug/L	12	Standard
| >	**Y**	89	243736.3	3.4				ug/L	214065	Standard
⌊	**Rh**	103	31.7	18.2				ug/L	0	Standard
⌈	**Mo**	98	100.2	9.9	**0.0150**	0.002	11.7	ug/L	6	Standard
|	**Ag**	107	222859.2	3.3	**25.5320**	0.791	3.1	ug/L	33	Standard
|	**Cd**	111	112899.7	2.6	**23.8567**	0.496	2.1	mg/L	437	Standard
|	**Cd**	114	282973.3	3.2	**22.9043**	0.698	3.0	ug/L	1160	Standard
| >	**In**	115	673947.0	2.5				ug/L	646604	Standard
|	**Sn**	118	1574.7	2.8	**0.0398**	0.001	1.8	ug/L	864	Standard
|	**Sb**	123	264955.4	2.3	**23.0088**	0.525	2.3	ug/L	18	Standard
⌊	**Ba**	135	120073.0	1.8	**25.0117**	0.623	2.5	ug/L	39	Standard
⌈	**Ce**	140	9573.7	1.5				ug/L	46	Standard
⌊>	**Tb**	159	746138.5	1.7				ug/L	695671	Standard
⌈	**Ho**	165	101.3	4.1				ug/L	9	Standard
|	**Tl**	203	418843.5	3.2	**25.5394**	0.567	2.2	ug/L	687	Standard
|	**Tl**	205	980780.2	3.0	**25.2485**	0.547	2.2	ug/L	1624	Standard
|	**Pb**	206	331004.7	3.3	**25.2997**	0.558	2.2	ug/L	305	Standard
|	**Pb**	207	289266.8	3.6	**25.9236**	0.687	2.6	ug/L	231	Standard
|	**Pb**	208	1320739.4	3.2	**25.4302**	0.553	2.2	ug/L	1129	Standard
|	**U**	238	664017.0	2.6	**23.9843**	0.372	1.5	ug/L	3	Standard
⌊>	**Bi**	209	402803.8	1.1				ug/L	405108	Standard
⌈	**Na**	23	140.0	9.4	**0.0066**	0.003	49.6	mg/L	118	Standard
|	**Mg**	24	7788.7	0.7	**0.0116**	0.000	1.6	mg/L	377	Standard

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	K	39	688.3	5.1	**0.0003**	0.002	736.7	mg/L	583	Standard
	Ca	43	61.7	44.7	**-0.0633**	0.059	92.4	mg/L	73	Standard
	Fe	54	1925.3	5.1	**0.1469**	0.014	9.7	mg/L	785	Standard
	Fe	57	18316.1	2.4	**0.0570**	0.002	3.8	mg/L	6133	Standard
>	**Sc-1**	45	292139.7	1.0				mg/L	254529	Standard
	Cl	35	1308614.8	13.2				ug/L	1641778	Standard
	Kr	83	62.3	2.5				ug/L	60	Standard
	Br	81	14294.3	7.2				ug/L	11554	Standard
	P	31	102671.8	1.8				ug/L	45410	Standard
	S	34	781896.2	2.8				ug/L	568857	Standard
	Sr	88	2206.8	1.5				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		105.592	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		113.861	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		104.229	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		107.254	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	99.431
	Na	23	
	Mg	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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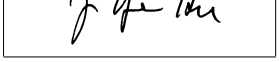

Method 6020 - Summary Report

Sample ID: L1205013426 WG397174-01
Sample Date/Time: Thursday, May 10, 2012 15:08:21
Number of Replicates: 3
Autosampler Position: 403
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	144899.7	2.0	**11624.3781**	307.120	2.6	ug/L	12600	Standard
|	**Be**	9	708.4	13.6	**0.1727**	0.025	14.5	ug/L	5	Standard
|	**Al**	27	64589248.2	1.1	**3655.0253**	26.913	0.7	ug/L	16102	Standard
⌊>	**Sc**	45	288935.7	0.5				ug/L	254529	Standard
⌈	**Ti**	47	15853.3	0.9	**10.8164**	0.210	1.9	ug/L	84	Standard
|	**V**	51	182556.3	1.5	**12.0810**	0.163	1.3	ug/L	5785	Standard
|	**Cr**	52	113914.4	2.0	**9.3894**	0.139	1.5	ug/L	12212	Standard
|	**Cr**	53	18374.5	0.6	**9.5686**	0.093	1.0	ug/L	5042	Standard
|	**Mn**	55	3409981.7	0.4	**174.9562**	2.075	1.2	ug/L	1290	Standard
|	**Co**	59	62312.2	1.4	**4.4926**	0.111	2.5	ug/L	143	Standard
|	**Ni**	60	35862.1	1.1	**12.3209**	0.271	2.2	ug/L	79	Standard
|	**Cu**	65	26243.7	0.6	**9.9144**	0.171	1.7	ug/L	154	Standard
|	**Zn**	66	31891.9	2.6	**26.6203**	0.991	3.7	ug/L	194	Standard
| >	**Ge**	72	220905.9	1.1				ug/L	232024	Standard
|	**As**	75	2374.9	0.3	**2.4153**	0.030	1.2	ug/L	-297	Standard
|	**Se**	82	38.6	10.1	**0.1583**	0.035	21.8	ug/L	17	Standard
⌊	**Se-1**	77	116.0	1.5	**-0.3432**	0.020	5.8	ug/L	180	Standard
	Ga	71	202733.7	0.8				mg/L	210139	Standard
⌈	**Rb**	85	103483.9	1.3				ug/L	12	Standard
| >	**Y**	89	268091.8	2.2				ug/L	214065	Standard
⌊	**Rh**	103	18.3	41.7				ug/L	0	Standard
⌈	**Mo**	98	229.5	5.5	**0.0505**	0.004	8.0	ug/L	6	Standard
|	**Ag**	107	468.7	10.7	**0.0517**	0.006	10.7	ug/L	33	Standard
|	**Cd**	111	327.5	1.7	**-0.0163**	0.001	5.9	mg/L	437	Standard
|	**Cd**	114	925.5	1.4	**-0.0170**	0.002	12.5	ug/L	1160	Standard
| >	**In**	115	611633.2	1.4				ug/L	646604	Standard
|	**Sn**	118	491.3	3.4	**-0.0230**	0.002	6.5	ug/L	864	Standard
|	**Sb**	123	138.0	3.1	**0.0107**	0.001	4.9	ug/L	18	Standard
⌊	**Ba**	135	340905.6	0.7	**78.2464**	0.583	0.7	ug/L	39	Standard
⌈	**Ce**	140	587223.0	0.9				ug/L	46	Standard
⌊>	**Tb**	159	688604.0	1.5				ug/L	695671	Standard
⌈	**Ho**	165	9201.8	1.5				ug/L	9	Standard
|	**Tl**	203	1425.1	5.3	**0.0515**	0.004	7.1	ug/L	687	Standard
|	**Tl**	205	3269.0	3.0	**0.0499**	0.002	4.1	ug/L	1624	Standard
|	**Pb**	206	48516.9	0.6	**3.7415**	0.044	1.2	ug/L	305	Standard
|	**Pb**	207	40596.6	0.7	**3.6703**	0.040	1.1	ug/L	231	Standard
|	**Pb**	208	188676.3	0.5	**3.6649**	0.028	0.8	ug/L	1129	Standard
|	**U**	238	6501.4	2.0	**0.2405**	0.003	1.3	ug/L	3	Standard
⌊>	**Bi**	209	397237.4	1.2				ug/L	405108	Standard
⌈	**Na**	23	310.0	8.1	**0.0486**	0.006	13.3	mg/L	118	Standard
|	**Mg**	24	1029787.6	1.9	**1.6596**	0.035	2.1	mg/L	377	Standard

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	K	39	8624.1	2.2	**0.6058**	0.018	2.9	mg/L	583	Standard
	Ca	43	850.0	4.1	**1.6052**	0.066	4.1	mg/L	73	Standard
	Fe	54	50678.0	1.4	**7.8361**	0.119	1.5	mg/L	785	Standard
	Fe	57	1443546.8	1.6	**7.2423**	0.151	2.1	mg/L	6133	Standard
>	**Sc-1**	45	288935.7	0.5				mg/L	254529	Standard
	Cl	35	711932.7	32.4				ug/L	1641778	Standard
	Kr	83	60.1	11.8				ug/L	60	Standard
	Br	81	11261.7	2.4				ug/L	11554	Standard
	P	31	312072.9	0.8				ug/L	45410	Standard
	S	34	582898.5	1.2				ug/L	568857	Standard
	Sr	88	426420.8	0.8				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		95.208	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		125.239	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		94.592	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		98.984	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	98.057
	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
Mn 55 Upper, S, EEE	Mn	55	
Y 89 Int Std for sample	Y	89	Rerun sample

Sample ID: L1205013426 WG397174-01
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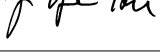

Method 6020 - Summary Report

Sample ID: L1205013426S WG397174-04

Sample Date/Time: Thursday, May 10, 2012 15:11:14
Number of Replicates: 3
Autosampler Position: 404
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	138523.8	1.5	**11751.4061**	395.728	3.4	ug/L	12600	Standard
|	**Be**	9	17690.3	1.1	**4.9251**	0.161	3.3	ug/L	5	Standard
|	**Al**	27	62619581.1	1.6	**3742.9629**	80.264	2.1	ug/L	16102	Standard
⌊>	**Sc**	45	273640.2	2.8				ug/L	254529	Standard
⌈	**Ti**	47	17824.5	2.7	**12.5906**	0.035	0.3	ug/L	84	Standard
|	**V**	51	252310.2	2.7	**17.4006**	0.222	1.3	ug/L	5785	Standard
|	**Cr**	52	160901.6	2.8	**14.2022**	0.141	1.0	ug/L	12212	Standard
|	**Cr**	53	25222.7	3.5	**14.2278**	0.130	0.9	ug/L	5042	Standard
|	**Mn**	55	3252284.7	2.3	**172.6409**	0.748	0.4	ug/L	1290	Standard
|	**Co**	59	119880.8	1.5	**8.9533**	0.148	1.6	ug/L	143	Standard
|	**Ni**	60	47625.8	2.3	**16.9365**	0.091	0.5	ug/L	79	Standard
|	**Cu**	65	35909.2	2.0	**14.0565**	0.160	1.1	ug/L	154	Standard
|	**Zn**	66	36895.9	1.6	**31.8963**	0.392	1.2	ug/L	194	Standard
|>	**Ge**	72	213513.3	2.7				ug/L	232024	Standard
|	**As**	75	7502.6	3.4	**7.3792**	0.050	0.7	ug/L	-297	Standard
|	**Se**	82	671.5	3.7	**5.5397**	0.231	4.2	ug/L	17	Standard
⌊	**Se-1**	77	538.3	7.0	**5.2689**	0.301	5.7	ug/L	180	Standard
	Ga	71	196174.0	3.7				mg/L	210139	Standard
⌈	**Rb**	85	91641.5	2.9				ug/L	12	Standard
|>	**Y**	89	261622.8	0.8				ug/L	214065	Standard
⌊	**Rh**	103	8.3	124.9				ug/L	0	Standard
⌈	**Mo**	98	240.4	6.9	**0.0553**	0.005	9.1	ug/L	6	Standard
|	**Ag**	107	35145.4	1.3	**4.5780**	0.079	1.7	ug/L	33	Standard
|	**Cd**	111	21570.8	2.0	**5.1165**	0.088	1.7	mg/L	437	Standard
|	**Cd**	114	57831.1	1.4	**5.2520**	0.041	0.8	ug/L	1160	Standard
|>	**In**	115	591914.7	1.0				ug/L	646604	Standard
|	**Sn**	118	500.7	3.1	**-0.0213**	0.001	6.5	ug/L	864	Standard
|	**Sb**	123	3861.3	0.2	**0.3793**	0.004	0.9	ug/L	18	Standard
⌊	**Ba**	135	348844.9	2.1	**82.7248**	0.931	1.1	ug/L	39	Standard
⌈	**Ce**	140	569815.0	1.2				ug/L	46	Standard
⌊>	**Tb**	159	670313.7	1.6				ug/L	695671	Standard
⌈	**Ho**	165	8610.4	2.1				ug/L	9	Standard
|	**Tl**	203	74299.8	1.4	**4.6979**	0.090	1.9	ug/L	687	Standard
|	**Tl**	205	173509.0	1.4	**4.6322**	0.106	2.3	ug/L	1624	Standard
|	**Pb**	206	106905.2	1.3	**8.5114**	0.115	1.4	ug/L	305	Standard
|	**Pb**	207	90984.7	1.4	**8.4932**	0.119	1.4	ug/L	231	Standard
|	**Pb**	208	421002.8	1.8	**8.4431**	0.116	1.4	ug/L	1129	Standard
|	**U**	238	117509.2	2.8	**4.4299**	0.055	1.2	ug/L	3	Standard
⌊>	**Bi**	209	386117.5	2.0				ug/L	405108	Standard
⌈	**Na**	23	305.0	7.5	**0.0515**	0.006	11.6	mg/L	118	Standard
|	**Mg**	24	1006034.1	1.8	**1.7126**	0.048	2.8	mg/L	377	Standard

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	K	39	7688.6	3.3	**0.5673**	0.016	2.8	mg/L	583	Standard
	Ca	43	730.0	4.7	**1.4372**	0.032	2.2	mg/L	73	Standard
	Fe	54	49903.4	2.7	**8.1550**	0.167	2.0	mg/L	785	Standard
	Fe	57	1422057.8	2.5	**7.5351**	0.104	1.4	mg/L	6133	Standard
>	**Sc-1**	45	273640.2	2.8				mg/L	254529	Standard
	Cl	35	581773.2	32.6				ug/L	1641778	Standard
	Kr	83	62.7	6.3				ug/L	60	Standard
	Br	81	11048.2	3.0				ug/L	11554	Standard
	P	31	284748.5	2.5				ug/L	45410	Standard
	S	34	558981.9	1.9				ug/L	568857	Standard
	Sr	88	397398.7	1.9				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		92.022	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		122.217	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		91.542	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		96.355	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1205013426S WG397174-04
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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

95.312

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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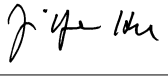

Method 6020 - Summary Report

Sample ID: L1205013426SD WG397174-05

Sample Date/Time: Thursday, May 10, 2012 15:14:06
Number of Replicates: 3
Autosampler Position: 405
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	169004.0	0.3	**13230.6174**	207.512	1.6	ug/L	12600	Standard
|	**Be**	9	18876.8	3.0	**4.7971**	0.162	3.4	ug/L	5	Standard
|	**Al**	27	80322175.7	0.3	**4384.2595**	90.791	2.1	ug/L	16102	Standard
⌊>	**Sc**	45	299637.7	1.7				ug/L	254529	Standard
⌈	**Ti**	47	35873.4	1.2	**23.9759**	0.532	2.2	ug/L	84	Standard
|	**V**	51	299845.7	1.5	**19.5537**	0.379	1.9	ug/L	5785	Standard
|	**Cr**	52	189012.5	1.4	**15.8604**	0.264	1.7	ug/L	12212	Standard
|	**Cr**	53	28775.6	1.8	**15.4390**	0.110	0.7	ug/L	5042	Standard
|	**Mn**	55	4096904.2	0.5	**205.2746**	1.775	0.9	ug/L	1290	Standard
|	**Co**	59	136645.2	1.5	**9.6304**	0.067	0.7	ug/L	143	Standard
|	**Ni**	60	54321.6	1.5	**18.2338**	0.258	1.4	ug/L	79	Standard
|	**Cu**	65	40264.8	2.4	**14.8758**	0.220	1.5	ug/L	154	Standard
|	**Zn**	66	40997.4	2.3	**33.4503**	0.406	1.2	ug/L	194	Standard
| >	**Ge**	72	226218.7	1.2				ug/L	232024	Standard
|	**As**	75	8152.6	2.3	**7.5631**	0.128	1.7	ug/L	-297	Standard
|	**Se**	82	729.2	0.3	**5.6807**	0.082	1.4	ug/L	17	Standard
⌊	**Se-1**	77	594.7	5.2	**5.5796**	0.457	8.2	ug/L	180	Standard
	Ga	71	208321.4	2.0				mg/L	210139	Standard
⌈	**Rb**	85	112900.9	2.6				ug/L	12	Standard
| >	**Y**	89	288140.0	2.4				ug/L	214065	Standard
⌊	**Rh**	103	31.7	24.1				ug/L	0	Standard
⌈	**Mo**	98	292.7	5.6	**0.0654**	0.005	7.8	ug/L	6	Standard
|	**Ag**	107	37620.7	2.5	**4.6667**	0.053	1.1	ug/L	33	Standard
|	**Cd**	111	22683.7	1.5	**5.1248**	0.025	0.5	mg/L	437	Standard
|	**Cd**	114	61092.1	1.2	**5.2851**	0.011	0.2	ug/L	1160	Standard
| >	**In**	115	621472.5	1.4				ug/L	646604	Standard
|	**Sn**	118	603.3	2.9	**-0.0161**	0.002	9.5	ug/L	864	Standard
|	**Sb**	123	1056.7	3.7	**0.0970**	0.004	3.7	ug/L	18	Standard
⌊	**Ba**	135	375510.0	0.4	**84.8273**	0.899	1.1	ug/L	39	Standard
⌈	**Ce**	140	671883.5	0.5				ug/L	46	Standard
⌊>	**Tb**	159	702915.7	2.3				ug/L	695671	Standard
⌈	**Ho**	165	9852.2	1.5				ug/L	9	Standard
|	**Tl**	203	77536.9	0.5	**4.7172**	0.061	1.3	ug/L	687	Standard
|	**Tl**	205	181169.1	1.2	**4.6536**	0.076	1.6	ug/L	1624	Standard
|	**Pb**	206	113925.7	0.9	**8.7278**	0.108	1.2	ug/L	305	Standard
|	**Pb**	207	97212.9	0.4	**8.7319**	0.072	0.8	ug/L	231	Standard
|	**Pb**	208	448908.8	0.4	**8.6632**	0.069	0.8	ug/L	1129	Standard
|	**U**	238	125524.9	1.4	**4.5536**	0.030	0.7	ug/L	3	Standard
⌊>	**Bi**	209	401263.2	0.8				ug/L	405108	Standard
⌈	**Na**	23	348.3	9.6	**0.0550**	0.009	15.9	mg/L	118	Standard
|	**Mg**	24	1116733.2	0.9	**1.7359**	0.044	2.6	mg/L	377	Standard

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	K	39	9369.6	1.1	**0.6373**	0.020	3.1	mg/L	583	Standard
	Ca	43	836.7	1.2	**1.5143**	0.041	2.7	mg/L	73	Standard
	Fe	54	60711.8	1.3	**9.0789**	0.271	3.0	mg/L	785	Standard
	Fe	57	1697718.2	1.3	**8.2199**	0.232	2.8	mg/L	6133	Standard
>	**Sc-1**	45	299637.7	1.7				mg/L	254529	Standard
	Cl	35	545542.3	32.3				ug/L	1641778	Standard
	Kr	83	63.3	3.7				ug/L	60	Standard
	Br	81	11604.4	1.0				ug/L	11554	Standard
	P	31	302349.2	1.7				ug/L	45410	Standard
	S	34	594015.7	0.7				ug/L	568857	Standard
	Sr	88	452016.2	2.5				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		97.498	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		134.604	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		96.113	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		101.041	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1205013426SD WG397174-05
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	99.051
	Na	23	
	Mg	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: L1205013426SD WG397174-05
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Method 6020 - Summary Report

Sample ID: L1205013410
Sample Date/Time: Thursday, May 10, 2012 15:17:00
Number of Replicates: 3
Autosampler Position: 406
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	101460.3	1.0	**7932.6009**	161.213	2.0	ug/L	12600	Standard
|	**Be**	9	830.0	12.2	**0.2090**	0.027	13.1	ug/L	5	Standard
|	**Al**	27	68361630.5	1.7	**3939.9146**	33.161	0.8	ug/L	16102	Standard
⌊>	**Sc**	45	283694.8	0.9				ug/L	254529	Standard
⌈	**Ti**	47	8819.6	2.0	**5.9490**	0.131	2.2	ug/L	84	Standard
|	**V**	51	101675.7	1.9	**6.5532**	0.089	1.4	ug/L	5785	Standard
|	**Cr**	52	107998.9	0.7	**8.7820**	0.058	0.7	ug/L	12212	Standard
|	**Cr**	53	16622.4	1.3	**8.4434**	0.162	1.9	ug/L	5042	Standard
|	**Mn**	55	3792321.8	0.5	**193.2637**	0.053	0.0	ug/L	1290	Standard
|	**Co**	59	52272.7	0.4	**3.7412**	0.012	0.3	ug/L	143	Standard
|	**Ni**	60	37015.8	1.4	**12.6304**	0.106	0.8	ug/L	79	Standard
|	**Cu**	65	29724.1	1.6	**11.1589**	0.173	1.6	ug/L	154	Standard
|	**Zn**	66	44493.6	1.2	**36.9480**	0.303	0.8	ug/L	194	Standard
| >	**Ge**	72	222394.6	0.6				ug/L	232024	Standard
|	**As**	75	942.3	6.7	**1.0889**	0.056	5.1	ug/L	-297	Standard
|	**Se**	82	45.4	14.3	**0.2115**	0.052	24.6	ug/L	17	Standard
⌊	**Se-1**	77	133.0	11.1	**-0.1373**	0.197	143.2	ug/L	180	Standard
	Ga	71	201729.1	0.8				mg/L	210139	Standard
⌈	**Rb**	85	75822.6	1.8				ug/L	12	Standard
| >	**Y**	89	283684.7	1.3				ug/L	214065	Standard
⌊	**Rh**	103	25.0	72.1				ug/L	0	Standard
⌈	**Mo**	98	120.4	11.6	**0.0222**	0.004	17.0	ug/L	6	Standard
|	**Ag**	107	438.3	2.3	**0.0472**	0.002	3.8	ug/L	33	Standard
|	**Cd**	111	553.4	2.2	**0.0347**	0.004	11.2	mg/L	437	Standard
|	**Cd**	114	1516.6	0.6	**0.0340**	0.002	6.1	ug/L	1160	Standard
| >	**In**	115	620172.7	1.1				ug/L	646604	Standard
|	**Sn**	118	626.7	1.9	**-0.0145**	0.001	4.5	ug/L	864	Standard
|	**Sb**	123	210.3	8.7	**0.0174**	0.002	10.7	ug/L	18	Standard
⌊	**Ba**	135	473754.1	1.4	**107.2552**	2.556	2.4	ug/L	39	Standard
⌈	**Ce**	140	632130.3	1.5				ug/L	46	Standard
⌊>	**Tb**	159	689336.0	0.1				ug/L	695671	Standard
⌈	**Ho**	165	9861.2	1.9				ug/L	9	Standard
|	**Tl**	203	1072.0	10.3	**0.0303**	0.006	21.0	ug/L	687	Standard
|	**Tl**	205	2477.9	10.2	**0.0298**	0.006	20.6	ug/L	1624	Standard
|	**Pb**	206	207502.2	0.2	**16.2283**	0.161	1.0	ug/L	305	Standard
|	**Pb**	207	176951.4	1.1	**16.2267**	0.307	1.9	ug/L	231	Standard
|	**Pb**	208	812069.6	0.7	**15.9988**	0.210	1.3	ug/L	1129	Standard
|	**U**	238	3586.8	1.2	**0.1350**	0.003	2.0	ug/L	3	Standard
⌊>	**Bi**	209	393545.7	0.8				ug/L	405108	Standard
⌈	**Na**	23	323.3	6.4	**0.0533**	0.006	11.0	mg/L	118	Standard
|	**Mg**	24	906996.9	1.1	**1.4887**	0.029	1.9	mg/L	377	Standard

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	K	39	9626.4	4.3	**0.6959**	0.038	5.5	mg/L	583	Standard
	Ca	43	1445.1	7.3	**2.9214**	0.241	8.2	mg/L	73	Standard
	Fe	54	29646.6	0.9	**4.6073**	0.085	1.8	mg/L	785	Standard
	Fe	57	840183.9	0.7	**4.2789**	0.007	0.2	mg/L	6133	Standard
>	**Sc-1**	45	283694.8	0.9				mg/L	254529	Standard
	Cl	35	540991.4	34.4				ug/L	1641778	Standard
	Kr	83	63.0	3.2				ug/L	60	Standard
	Br	81	13421.8	0.5				ug/L	11554	Standard
	P	31	370821.4	0.8				ug/L	45410	Standard
	S	34	642669.3	1.0				ug/L	568857	Standard
	Sr	88	523762.8	1.9				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		95.850	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		132.523	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		95.912	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		99.089	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1205013410
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	97.146
	Na	23	
	Mg	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	

Approved: May 11, 2012

Method 6020 - Summary Report

Sample ID: L1205013411
Sample Date/Time: Thursday, May 10, 2012 15:19:53
Number of Replicates: 3
Autosampler Position: 407
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	55616.9	0.4	**4362.7392**	47.572	1.1	ug/L	12600	Standard
|	**Be**	9	688.3	4.0	**0.1921**	0.007	3.5	ug/L	5	Standard
|	**Al**	27	36586712.7	2.1	**2350.3604**	28.881	1.2	ug/L	16102	Standard
⌊>	**Sc**	45	254474.3	0.9				ug/L	254529	Standard
⌈	**Ti**	47	2047.5	3.3	**1.3651**	0.066	4.8	ug/L	84	Standard
|	**V**	51	47691.4	1.4	**2.9905**	0.040	1.3	ug/L	5785	Standard
|	**Cr**	52	46845.6	0.7	**3.3146**	0.073	2.2	ug/L	12212	Standard
|	**Cr**	53	7238.4	5.8	**2.9108**	0.253	8.7	ug/L	5042	Standard
|	**Mn**	55	4624222.0	1.1	**240.8908**	3.561	1.5	ug/L	1290	Standard
|	**Co**	59	41723.4	0.7	**3.0504**	0.044	1.5	ug/L	143	Standard
|	**Ni**	60	23306.9	1.3	**8.1207**	0.165	2.0	ug/L	79	Standard
|	**Cu**	65	10159.1	1.7	**3.8659**	0.082	2.1	ug/L	154	Standard
|	**Zn**	66	130077.1	1.4	**110.7572**	1.939	1.8	ug/L	194	Standard
| >	**Ge**	72	217606.7	1.5				ug/L	232024	Standard
|	**As**	75	328.1	17.1	**0.5330**	0.048	9.0	ug/L	-297	Standard
|	**Se**	82	34.9	10.8	**0.1320**	0.028	21.3	ug/L	17	Standard
⌊	**Se-1**	77	102.0	7.7	**-0.5013**	0.110	22.0	ug/L	180	Standard
	Ga	71	197028.7	1.8				mg/L	210139	Standard
⌈	**Rb**	85	32232.6	0.6				ug/L	12	Standard
| >	**Y**	89	257500.4	2.3				ug/L	214065	Standard
⌊	**Rh**	103	13.3	57.3				ug/L	0	Standard
⌈	**Mo**	98	80.2	2.0	**0.0122**	0.000	3.5	ug/L	6	Standard
|	**Ag**	107	187.7	2.7	**0.0162**	0.001	4.7	ug/L	33	Standard
|	**Cd**	111	529.8	6.5	**0.0305**	0.008	24.8	mg/L	437	Standard
|	**Cd**	114	1404.0	2.1	**0.0253**	0.002	9.3	ug/L	1160	Standard
| >	**In**	115	614185.8	0.6				ug/L	646604	Standard
|	**Sn**	118	736.4	1.1	**-0.0068**	0.001	12.3	ug/L	864	Standard
|	**Sb**	123	100.3	9.6	**0.0071**	0.001	12.6	ug/L	18	Standard
⌊	**Ba**	135	415912.3	0.5	**95.0629**	0.768	0.8	ug/L	39	Standard
⌈	**Ce**	140	432211.9	0.9				ug/L	46	Standard
⌊>	**Tb**	159	685273.0	0.5				ug/L	695671	Standard
⌈	**Ho**	165	7143.4	1.7				ug/L	9	Standard
|	**Tl**	203	793.4	5.2	**0.0127**	0.003	21.8	ug/L	687	Standard
|	**Tl**	205	1859.4	9.6	**0.0133**	0.005	37.0	ug/L	1624	Standard
|	**Pb**	206	38538.6	1.2	**2.9850**	0.042	1.4	ug/L	305	Standard
|	**Pb**	207	32065.2	1.7	**2.9115**	0.051	1.7	ug/L	231	Standard
|	**Pb**	208	149567.4	1.2	**2.9178**	0.035	1.2	ug/L	1129	Standard
|	**U**	238	1258.4	5.6	**0.0488**	0.003	5.8	ug/L	3	Standard
⌊>	**Bi**	209	394872.4	0.5				ug/L	405108	Standard
⌈	**Na**	23	316.7	10.0	**0.0606**	0.008	13.6	mg/L	118	Standard
|	**Mg**	24	555237.4	0.7	**1.0156**	0.009	0.9	mg/L	377	Standard

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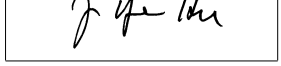

	K	39	3757.1	2.8	**0.2736**	0.012	4.3	mg/L	583	Standard
	Ca	43	1406.7	4.9	**3.1852**	0.135	4.2	mg/L	73	Standard
	Fe	54	11701.3	2.2	**1.9413**	0.049	2.5	mg/L	785	Standard
	Fe	57	331942.1	1.2	**1.8654**	0.009	0.5	mg/L	6133	Standard
>	**Sc-1**	45	254474.3	0.9				mg/L	254529	Standard
	Cl	35	475815.8	36.8				ug/L	1641778	Standard
	Kr	83	58.1	7.8				ug/L	60	Standard
	Br	81	11373.4	2.4				ug/L	11554	Standard
	P	31	140475.8	1.3				ug/L	45410	Standard
	S	34	640515.4	2.3				ug/L	568857	Standard
	Sr	88	462384.3	1.9				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		93.786	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		120.291	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		94.986	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		98.505	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	97.473
	Na	23	
	Mg	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	
Zn 66 Upper, S, EEE	Zn	66	
Y 89 Int Std for sample	Y	89	Rerun sample

Approved: May 11, 2012

Method 6020 - Summary Report

Sample ID: L1205013411PS WG397650-01

Sample Date/Time: Thursday, May 10, 2012 15:24:24
Number of Replicates: 3
Autosampler Position: 408
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	64858.6	3.1	**4430.3622**	52.208	1.2	ug/L	12600	Standard
|	**Be**	9	181698.6	3.0	**47.3067**	0.446	0.9	ug/L	5	Standard
|	**Al**	27	41420431.4	2.2	**2310.2262**	55.860	2.4	ug/L	16102	Standard
⌊>	**Sc**	45	293277.3	3.9				ug/L	254529	Standard
⌈	**Ti**	47	2427.5	4.7	**1.5207**	0.048	3.1	ug/L	84	Standard
|	**V**	51	885436.8	2.7	**56.7297**	0.486	0.9	ug/L	5785	Standard
|	**Cr**	52	675864.5	2.8	**57.7643**	0.191	0.3	ug/L	12212	Standard
|	**Cr**	53	104498.5	3.2	**58.4247**	0.495	0.8	ug/L	5042	Standard
|	**Mn**	55	6426756.8	2.6	**313.3908**	1.216	0.4	ug/L	1290	Standard
|	**Co**	59	844843.8	2.8	**57.9934**	0.183	0.3	ug/L	143	Standard
|	**Ni**	60	247482.6	5.8	**80.8713**	2.574	3.2	ug/L	79	Standard
|	**Cu**	65	165447.8	2.6	**59.6380**	0.448	0.8	ug/L	154	Standard
|	**Zn**	66	185904.3	3.3	**148.2022**	0.641	0.4	ug/L	194	Standard
| >	**Ge**	72	232472.5	2.9				ug/L	232024	Standard
|	**As**	75	61247.0	2.9	**53.8649**	0.627	1.2	ug/L	-297	Standard
|	**Se**	82	7138.1	2.7	**55.4543**	0.220	0.4	ug/L	17	Standard
⌊	**Se-1**	77	4531.3	1.6	**53.0446**	0.846	1.6	ug/L	180	Standard
	Ga	71	216226.2	3.0				mg/L	210139	Standard
⌈	**Rb**	85	38356.9	3.9				ug/L	12	Standard
| >	**Y**	89	291463.2	2.9				ug/L	214065	Standard
⌊	**Rh**	103	76.7	3.8				ug/L	0	Standard
⌈	**Mo**	98	228.1	9.3	**0.0468**	0.004	9.2	ug/L	6	Standard
|	**Ag**	107	471308.6	3.1	**56.2337**	1.675	3.0	ug/L	33	Standard
|	**Cd**	111	236933.0	2.3	**52.2473**	1.242	2.4	mg/L	437	Standard
|	**Cd**	114	604739.5	1.9	**51.0907**	0.794	1.6	ug/L	1160	Standard
| >	**In**	115	647186.2	1.9				ug/L	646604	Standard
|	**Sn**	118	1602.4	3.9	**0.0455**	0.005	10.8	ug/L	864	Standard
|	**Sb**	123	565231.5	1.4	**51.1138**	0.712	1.4	ug/L	18	Standard
⌊	**Ba**	135	700359.1	2.1	**151.9254**	2.471	1.6	ug/L	39	Standard
⌈	**Ce**	140	478582.9	2.9				ug/L	46	Standard
⌊>	**Tb**	159	730173.7	2.5				ug/L	695671	Standard
⌈	**Ho**	165	8048.5	2.4				ug/L	9	Standard
|	**Tl**	203	868751.0	2.3	**53.7321**	0.593	1.1	ug/L	687	Standard
|	**Tl**	205	2135814.6	6.8	**55.7466**	3.116	5.6	ug/L	1624	Standard
|	**Pb**	206	731191.2	3.8	**56.6669**	1.438	2.5	ug/L	305	Standard
|	**Pb**	207	634931.5	2.7	**57.6999**	0.879	1.5	ug/L	231	Standard
|	**Pb**	208	2898347.3	2.6	**56.5901**	0.835	1.5	ug/L	1129	Standard
|	**U**	238	1394703.8	2.7	**51.0529**	0.733	1.4	ug/L	3	Standard
⌊>	**Bi**	209	397440.1	1.3				ug/L	405108	Standard
⌈	**Na**	23	315.0	8.4	**0.0487**	0.006	12.8	mg/L	118	Standard
|	**Mg**	24	607016.7	4.6	**0.9632**	0.012	1.2	mg/L	377	Standard

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	K	39	4032.2	2.7	**0.2517**	0.019	7.7	mg/L	583	Standard
	Ca	43	1503.4	2.1	**2.9426**	0.101	3.4	mg/L	73	Standard
	Fe	54	13480.1	7.1	**1.9388**	0.078	4.0	mg/L	785	Standard
	Fe	57	374524.2	4.2	**1.8254**	0.017	0.9	mg/L	6133	Standard
>	**Sc-1**	45	293277.3	3.9				mg/L	254529	Standard
	Cl	35	945373.7	43.2				ug/L	1641778	Standard
	Kr	83	74.1	8.5				ug/L	60	Standard
	Br	81	13380.1	2.7				ug/L	11554	Standard
	P	31	179419.2	3.1				ug/L	45410	Standard
	S	34	704366.8	5.2				ug/L	568857	Standard
	Sr	88	560956.0	1.8				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		100.193	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		136.156	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		100.090	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		104.960	
	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

98.107

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Zn 66 Upper, S, EEE	Zn	66	
Y 89 Int Std for sample	Y	89	Rerun sample
Ba 135 Upper, S, EEE	Ba	135	

Approved: May 11, 2012

Method 6020 - Summary Report

Sample ID: L1205013411SDL WG397650-02

Sample Date/Time: Thursday, May 10, 2012 15:27:18
Number of Replicates: 3
Autosampler Position: 409
Sample Description: 25
Method File: C:\NexION Data\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	19248.9	2.8	**922.9908**	119.861	13.0	ug/L	12600	Standard
|	**Be**	9	158.3	15.6	**0.0385**	0.008	19.6	ug/L	5	Standard
|	**Al**	27	6842857.8	1.4	**490.3671**	14.322	2.9	ug/L	16102	Standard
⌊>	**Sc**	45	227995.7	3.6				ug/L	254529	Standard
⌈	**Ti**	47	426.0	6.4	**0.2499**	0.021	8.6	ug/L	84	Standard
|	**V**	51	11594.4	1.3	**0.5465**	0.006	1.1	ug/L	5785	Standard
|	**Cr**	52	15495.9	1.5	**0.4712**	0.007	1.6	ug/L	12212	Standard
|	**Cr**	53	2561.9	12.7	**0.1222**	0.211	172.7	ug/L	5042	Standard
|	**Mn**	55	869793.5	1.2	**47.4806**	0.345	0.7	ug/L	1290	Standard
|	**Co**	59	7722.0	0.8	**0.5842**	0.010	1.7	ug/L	143	Standard
|	**Ni**	60	4362.3	3.3	**1.5756**	0.042	2.7	ug/L	79	Standard
|	**Cu**	65	1955.1	3.0	**0.7411**	0.026	3.5	ug/L	154	Standard
|	**Zn**	66	27121.3	2.0	**24.0946**	0.237	1.0	ug/L	194	Standard
| >	**Ge**	72	207342.5	1.1				ug/L	232024	Standard
|	**As**	75	-95.5	7.5	**0.1326**	0.007	5.1	ug/L	-297	Standard
|	**Se**	82	23.3	3.0	**0.0449**	0.008	17.7	ug/L	17	Standard
⌊	**Se-1**	77	94.7	10.4	**-0.5358**	0.138	25.8	ug/L	180	Standard
	Ga	71	181785.0	0.7				mg/L	210139	Standard
⌈	**Rb**	85	5766.1	2.9				ug/L	12	Standard
| >	**Y**	89	202029.8	1.1				ug/L	214065	Standard
⌊	**Rh**	103	3.3	86.6				ug/L	0	Standard
⌈	**Mo**	98	19.5	31.2	**-0.0030**	0.002	56.1	ug/L	6	Standard
|	**Ag**	107	68.0	18.4	**0.0016**	0.002	100.0	ug/L	33	Standard
|	**Cd**	111	172.0	3.8	**-0.0507**	0.001	2.9	mg/L	437	Standard
|	**Cd**	114	448.6	3.2	**-0.0578**	0.002	2.7	ug/L	1160	Standard
| >	**In**	115	583689.6	0.8				ug/L	646604	Standard
|	**Sn**	118	488.3	5.2	**-0.0216**	0.002	7.9	ug/L	864	Standard
|	**Sb**	123	762.1	16.8	**0.0739**	0.012	16.8	ug/L	18	Standard
⌊	**Ba**	135	77383.5	1.9	**18.6036**	0.257	1.4	ug/L	39	Standard
⌈	**Ce**	140	80208.7	0.2				ug/L	46	Standard
⌊>	**Tb**	159	648731.9	1.0				ug/L	695671	Standard
⌈	**Ho**	165	1319.4	1.6				ug/L	9	Standard
|	**Tl**	203	667.0	12.8	**0.0057**	0.005	94.7	ug/L	687	Standard
|	**Tl**	205	1502.7	7.5	**0.0048**	0.003	70.3	ug/L	1624	Standard
|	**Pb**	206	7335.8	1.2	**0.5616**	0.017	3.0	ug/L	305	Standard
|	**Pb**	207	6117.9	1.1	**0.5486**	0.007	1.3	ug/L	231	Standard
|	**Pb**	208	28645.6	1.1	**0.5521**	0.014	2.6	ug/L	1129	Standard
|	**U**	238	298.0	5.9	**0.0136**	0.001	4.8	ug/L	3	Standard
⌊>	**Bi**	209	386854.7	1.7				ug/L	405108	Standard
⌈	**Na**	23	101.7	22.2	**0.0043**	0.007	172.8	mg/L	118	Standard
|	**Mg**	24	114091.6	3.1	**0.2323**	0.001	0.5	mg/L	377	Standard

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	K	39	1211.7	7.2	**0.0657**	0.012	18.2	mg/L	583	Standard
	Ca	43	300.0	7.3	**0.6125**	0.071	11.6	mg/L	73	Standard
	Fe	54	2385.8	3.6	**0.3235**	0.010	3.1	mg/L	785	Standard
	Fe	57	65851.1	0.3	**0.3867**	0.016	4.2	mg/L	6133	Standard
>	**Sc-1**	45	227995.7	3.6				mg/L	254529	Standard
	Cl	35	433017.8	54.4				ug/L	1641778	Standard
	Kr	83	46.2	6.2				ug/L	60	Standard
	Br	81	9426.3	2.4				ug/L	11554	Standard
	P	31	40902.7	2.3				ug/L	45410	Standard
	S	34	562688.5	2.2				ug/L	568857	Standard
	Sr	88	85356.4	0.7				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		89.363	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		94.378	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		90.270	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		93.253	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	95.494
	Na	23	
	Mg	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: L1205013411SDL WG397650-02
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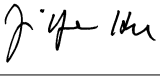

Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, May 10, 2012 15:30:13
Number of Replicates: 3
Autosampler Position: 101
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	12873.8	2.4	**35.1321**	42.539	121.1	ug/L	12600	Standard
|	**Be**	9	169182.8	1.6	**50.0806**	0.498	1.0	ug/L	5	Standard
|	**Al**	27	820031.4	2.9	**51.1967**	0.236	0.5	ug/L	16102	Standard
⌊>	**Sc**	45	257936.3	2.6				ug/L	254529	Standard
⌈	**Ti**	47	151829.9	2.4	**101.2833**	1.041	1.0	ug/L	84	Standard
|	**V**	51	768943.0	3.6	**50.3973**	0.688	1.4	ug/L	5785	Standard
|	**Cr**	52	573683.4	3.9	**50.0511**	0.834	1.7	ug/L	12212	Standard
|	**Cr**	53	87371.3	3.0	**49.7914**	0.452	0.9	ug/L	5042	Standard
|	**Mn**	55	1013073.9	2.6	**50.5034**	0.377	0.7	ug/L	1290	Standard
|	**Co**	59	718302.3	2.6	**50.4813**	0.580	1.1	ug/L	143	Standard
|	**Ni**	60	151188.0	3.9	**50.5890**	0.868	1.7	ug/L	79	Standard
|	**Cu**	65	137886.3	3.2	**50.8711**	0.446	0.9	ug/L	154	Standard
|	**Zn**	66	61095.3	2.6	**49.7521**	0.306	0.6	ug/L	194	Standard
| >	**Ge**	72	227057.6	2.3				ug/L	232024	Standard
|	**As**	75	56763.6	2.3	**51.1223**	0.396	0.8	ug/L	-297	Standard
|	**Se**	82	6762.9	1.1	**53.7962**	0.670	1.2	ug/L	17	Standard
⌊	**Se-1**	77	4187.6	3.2	**50.0797**	1.304	2.6	ug/L	180	Standard
	Ga	71	205542.8	1.9				mg/L	210139	Standard
⌈	**Rb**	85	1021.7	2.8				ug/L	12	Standard
| >	**Y**	89	216232.2	1.5				ug/L	214065	Standard
⌊	**Rh**	103	33.3	34.6				ug/L	0	Standard
⌈	**Mo**	98	416382.5	3.1	**102.2751**	1.899	1.9	ug/L	6	Standard
|	**Ag**	107	428518.7	3.0	**52.0240**	0.823	1.6	ug/L	33	Standard
|	**Cd**	111	220858.5	3.9	**49.5453**	1.198	2.4	mg/L	437	Standard
|	**Cd**	114	570521.2	3.6	**49.0396**	1.141	2.3	ug/L	1160	Standard
| >	**In**	115	635886.4	1.5				ug/L	646604	Standard
|	**Sn**	118	765972.0	3.4	**49.2722**	0.979	2.0	ug/L	864	Standard
|	**Sb**	123	528425.3	2.6	**48.6243**	0.639	1.3	ug/L	18	Standard
⌊	**Ba**	135	227523.2	2.3	**50.2207**	0.562	1.1	ug/L	39	Standard
⌈	**Ce**	140	868.0	3.6				ug/L	46	Standard
⌊>	**Tb**	159	708024.6	1.8				ug/L	695671	Standard
⌈	**Ho**	165	22.0	25.3				ug/L	9	Standard
|	**Tl**	203	799343.5	2.0	**50.6344**	0.574	1.1	ug/L	687	Standard
|	**Tl**	205	1860801.1	1.4	**49.7631**	0.371	0.7	ug/L	1624	Standard
|	**Pb**	206	639070.7	1.7	**50.7330**	0.571	1.1	ug/L	305	Standard
|	**Pb**	207	542542.2	1.9	**50.4978**	0.647	1.3	ug/L	231	Standard
|	**Pb**	208	2503278.4	1.7	**50.0602**	0.561	1.1	ug/L	1129	Standard
|	**U**	238	1264663.8	2.5	**47.4154**	0.853	1.8	ug/L	3	Standard
⌊>	**Bi**	209	388048.9	0.9				ug/L	405108	Standard
⌈	**Na**	23	19005.3	3.2	**5.1796**	0.129	2.5	mg/L	118	Standard
|	**Mg**	24	2810053.6	1.4	**5.0767**	0.144	2.8	mg/L	377	Standard

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	K	39	60942.3	1.8	**5.1528**	0.094	1.8	mg/L	583	Standard
	Ca	43	2181.8	2.5	**4.9782**	0.116	2.3	mg/L	73	Standard
	Fe	54	31458.1	1.6	**5.4032**	0.082	1.5	mg/L	785	Standard
	Fe	57	905960.2	2.6	**5.0810**	0.030	0.6	mg/L	6133	Standard
>	**Sc-1**	45	257936.3	2.6				mg/L	254529	Standard
	Cl	35	591747.5	33.7				ug/L	1641778	Standard
	Kr	83	56.9	9.4				ug/L	60	Standard
	Br	81	11786.3	2.9				ug/L	11554	Standard
	P	31	65039.4	2.5				ug/L	45410	Standard
	S	34	717753.6	3.0				ug/L	568857	Standard
	Sr	88	636.7	13.1				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	102.393		
>	Sc	45			
	Ti	47	101.283		
	V	51	100.795		
	Cr	52	100.102		
	Cr	53			
	Mn	55	101.007		
	Co	59	100.963		
	Ni	60	101.178		
	Cu	65	101.742		
	Zn	66	99.504		
>	Ge	72		97.860	
	As	75	102.245		
	Se	82	107.592		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		101.012	
	Rh	103			
	Mo	98	102.275		
	Ag	107	104.048		
	Cd	111	99.091		
	Cd	114			
>	In	115		98.342	
	Sn	118	98.544		
	Sb	123	97.249		
	Ba	135	100.441		
	Ce	140			
>	Tb	159		101.776	
	Ho	165			
	Tl	203	101.269		
	Tl	205			
	Pb	206	101.466		

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	Pb	207	100.996	
	Pb	208	100.120	
	U	238	94.831	
>	Bi	209		95.789
	Na	23	103.592	
	Mg	24	101.533	
	K	39	103.056	
	Ca	43	99.563	
	Fe	54	108.064	
	Fe	57	101.620	
>	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 10, 2012 15:33:06
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	12246.6	2.4	**41.1395**	25.690	62.4	ug/L	12600	Standard
|	**Be**	9	28.3	53.9	**-0.0057**	0.004	79.4	ug/L	5	Standard
|	**Al**	27	14507.0	9.7	**0.1790**	0.111	61.8	ug/L	16102	Standard
⌊>	**Sc**	45	244177.9	2.9				ug/L	254529	Standard
⌈	**Ti**	47	91.0	15.3	**0.0029**	0.008	284.1	ug/L	84	Standard
|	**V**	51	3633.2	1.4	**-0.0359**	0.003	8.4	ug/L	5785	Standard
|	**Cr**	52	10558.3	1.3	**-0.0401**	0.023	57.6	ug/L	12212	Standard
|	**Cr**	53	1295.1	12.2	**-0.7181**	0.080	11.2	ug/L	5042	Standard
|	**Mn**	55	1282.1	3.0	**-0.0168**	0.001	6.6	ug/L	1290	Standard
|	**Co**	59	139.3	7.2	**0.0002**	0.001	503.0	ug/L	143	Standard
|	**Ni**	60	76.7	9.3	**0.0034**	0.003	81.6	ug/L	79	Standard
|	**Cu**	65	146.3	13.3	**0.0076**	0.007	88.0	ug/L	154	Standard
|	**Zn**	66	194.0	6.4	**-0.0074**	0.009	120.8	ug/L	194	Standard
| >	**Ge**	72	213559.5	2.5				ug/L	232024	Standard
|	**As**	75	-245.2	9.1	**-0.0071**	0.016	221.1	ug/L	-297	Standard
|	**Se**	82	25.7	26.1	**0.0595**	0.058	97.7	ug/L	17	Standard
⌊	**Se-1**	77	101.7	17.3	**-0.4843**	0.199	41.0	ug/L	180	Standard
	Ga	71	192421.1	2.8				mg/L	210139	Standard
⌈	**Rb**	85	26.7	10.8				ug/L	12	Standard
| >	**Y**	89	203433.7	6.5				ug/L	214065	Standard
⌊	**Rh**	103	6.7	86.6				ug/L	0	Standard
⌈	**Mo**	98	76.6	60.8	**0.0114**	0.011	98.4	ug/L	6	Standard
|	**Ag**	107	92.7	22.7	**0.0044**	0.002	52.8	ug/L	33	Standard
|	**Cd**	111	423.5	7.9	**0.0073**	0.005	62.5	mg/L	437	Standard
|	**Cd**	114	1101.4	4.3	**-0.0000**	0.001	1914.8	ug/L	1160	Standard
| >	**In**	115	603836.3	3.5				ug/L	646604	Standard
|	**Sn**	118	907.0	4.5	**0.0056**	0.001	14.0	ug/L	864	Standard
|	**Sb**	123	351.4	28.1	**0.0314**	0.008	26.4	ug/L	18	Standard
⌊	**Ba**	135	60.0	23.6	**0.0057**	0.003	50.1	ug/L	39	Standard
⌈	**Ce**	140	47.7	10.6				ug/L	46	Standard
⌊>	**Tb**	159	663986.3	4.1				ug/L	695671	Standard
⌈	**Ho**	165	9.3	52.9				ug/L	9	Standard
|	**Tl**	203	507.3	34.9	**-0.0031**	0.011	363.0	ug/L	687	Standard
|	**Tl**	205	1164.7	37.9	**-0.0031**	0.012	392.1	ug/L	1624	Standard
|	**Pb**	206	309.0	13.7	**0.0026**	0.003	126.6	ug/L	305	Standard
|	**Pb**	207	263.7	10.1	**0.0027**	0.002	81.2	ug/L	231	Standard
|	**Pb**	208	1216.7	11.9	**0.0025**	0.003	110.1	ug/L	1129	Standard
|	**U**	238	62.0	46.2	**0.0048**	0.001	22.8	ug/L	3	Standard
⌊>	**Bi**	209	371167.7	1.6				ug/L	405108	Standard
⌈	**Na**	23	103.3	32.2	**0.0025**	0.009	350.8	mg/L	118	Standard
|	**Mg**	24	508.3	2.0	**0.0001**	0.000	16.7	mg/L	377	Standard

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	K	39	606.7	7.5	**0.0032**	0.006	173.6	mg/L	583	Standard
	Ca	43	55.0	48.1	**-0.0537**	0.069	129.1	mg/L	73	Standard
	Fe	54	903.0	14.1	**0.0151**	0.022	146.0	mg/L	785	Standard
	Fe	57	4362.3	2.4	**-0.0083**	0.001	12.0	mg/L	6133	Standard
>	**Sc-1**	45	244177.9	2.9				mg/L	254529	Standard
	Cl	35	584898.7	33.7				ug/L	1641778	Standard
	Kr	83	54.4	4.3				ug/L	60	Standard
	Br	81	11180.0	6.8				ug/L	11554	Standard
	P	31	61289.0	5.5				ug/L	45410	Standard
	S	34	689730.6	3.8				ug/L	568857	Standard
	Sr	88	248.3	23.3				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		92.042	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		95.034	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		93.386	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		95.445	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	91.622
	Na	23	
	Mg	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: L1205013413
Sample Date/Time: Thursday, May 10, 2012 15:36:01
Number of Replicates: 3
Autosampler Position: 410
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	62881.9	2.0	**5442.6730**	164.623	3.0	ug/L	12600	Standard
|	**Be**	9	496.7	5.9	**0.1428**	0.009	6.4	ug/L	5	Standard
|	**Al**	27	39339969.0	2.2	**2665.8083**	54.560	2.0	ug/L	16102	Standard
⌊>	**Sc**	45	241281.2	1.3				ug/L	254529	Standard
⌈	**Ti**	47	11151.8	2.0	**8.2442**	0.194	2.3	ug/L	84	Standard
|	**V**	51	76611.5	0.5	**5.3452**	0.008	0.2	ug/L	5785	Standard
|	**Cr**	52	67204.7	0.9	**5.6395**	0.079	1.4	ug/L	12212	Standard
|	**Cr**	53	10150.1	2.2	**5.1263**	0.129	2.5	ug/L	5042	Standard
|	**Mn**	55	5148954.2	2.1	**286.8205**	7.025	2.4	ug/L	1290	Standard
|	**Co**	59	43352.6	2.6	**3.3901**	0.099	2.9	ug/L	143	Standard
|	**Ni**	60	30539.1	2.3	**11.3867**	0.302	2.7	ug/L	79	Standard
|	**Cu**	65	10692.1	2.7	**4.3568**	0.136	3.1	ug/L	154	Standard
|	**Zn**	66	26287.8	2.0	**23.7955**	0.554	2.3	ug/L	194	Standard
| >	**Ge**	72	203499.8	0.4				ug/L	232024	Standard
|	**As**	75	1298.1	2.9	**1.5251**	0.042	2.8	ug/L	-297	Standard
|	**Se**	82	31.0	22.9	**0.1180**	0.064	54.0	ug/L	17	Standard
⌊	**Se-1**	77	107.3	3.9	**-0.3366**	0.061	18.0	ug/L	180	Standard
	Ga	71	183859.6	1.0				mg/L	210139	Standard
⌈	**Rb**	85	37446.2	1.7				ug/L	12	Standard
| >	**Y**	89	242734.1	1.3				ug/L	214065	Standard
⌊	**Rh**	103	15.0	66.7				ug/L	0	Standard
⌈	**Mo**	98	104.5	31.8	**0.0201**	0.009	44.4	ug/L	6	Standard
|	**Ag**	107	300.3	14.6	**0.0329**	0.006	17.8	ug/L	33	Standard
|	**Cd**	111	466.1	11.0	**0.0228**	0.013	55.0	mg/L	437	Standard
|	**Cd**	114	1194.7	4.9	**0.0137**	0.006	42.3	ug/L	1160	Standard
| >	**In**	115	576131.2	0.6				ug/L	646604	Standard
|	**Sn**	118	634.3	10.7	**-0.0108**	0.005	44.6	ug/L	864	Standard
|	**Sb**	123	194.2	17.0	**0.0172**	0.003	19.3	ug/L	18	Standard
⌊	**Ba**	135	377862.3	1.4	**92.0743**	1.782	1.9	ug/L	39	Standard
⌈	**Ce**	140	440524.8	1.2				ug/L	46	Standard
⌊>	**Tb**	159	645488.7	1.3				ug/L	695671	Standard
⌈	**Ho**	165	7489.5	1.2				ug/L	9	Standard
|	**Tl**	203	959.7	15.4	**0.0265**	0.009	33.6	ug/L	687	Standard
|	**Tl**	205	2196.2	11.1	**0.0255**	0.006	23.4	ug/L	1624	Standard
|	**Pb**	206	74869.9	1.3	**6.1613**	0.045	0.7	ug/L	305	Standard
|	**Pb**	207	64219.8	2.0	**6.1966**	0.103	1.7	ug/L	231	Standard
|	**Pb**	208	295407.3	0.9	**6.1242**	0.066	1.1	ug/L	1129	Standard
|	**U**	238	1765.8	1.2	**0.0713**	0.000	0.5	ug/L	3	Standard
⌊>	**Bi**	209	373140.2	1.6				ug/L	405108	Standard
⌈	**Na**	23	371.7	9.0	**0.0817**	0.011	13.5	mg/L	118	Standard
|	**Mg**	24	620287.3	0.2	**1.1969**	0.016	1.3	mg/L	377	Standard

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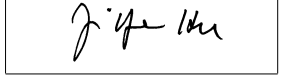

	K	39	4173.9	4.0	**0.3294**	0.016	4.8	mg/L	583	Standard
	Ca	43	1086.7	9.0	**2.5582**	0.213	8.3	mg/L	73	Standard
	Fe	54	20235.8	0.6	**3.6672**	0.031	0.8	mg/L	785	Standard
	Fe	57	589719.9	1.1	**3.5255**	0.055	1.6	mg/L	6133	Standard
>	**Sc-1**	45	241281.2	1.3				mg/L	254529	Standard
	Cl	35	472298.6	38.9				ug/L	1641778	Standard
	Kr	83	57.3	2.7				ug/L	60	Standard
	Br	81	10725.5	0.5				ug/L	11554	Standard
	P	31	215312.8	2.0				ug/L	45410	Standard
	S	34	554716.5	2.4				ug/L	568857	Standard
	Sr	88	371941.2	2.1				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		87.707	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		113.393	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		89.101	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		92.786	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1205013413
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	92.109
	Na	23	
	Mg	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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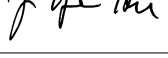

Method 6020 - Summary Report

Sample ID: L1205013414
Sample Date/Time: Thursday, May 10, 2012 15:38:54
Number of Replicates: 3
Autosampler Position: 411
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	125902.9	3.0	**10392.9257**	13.634	0.1	ug/L	12600	Standard
|	**Be**	9	883.4	7.1	**0.2290**	0.023	10.2	ug/L	5	Standard
|	**Al**	27	81479765.9	1.0	**4801.8448**	123.576	2.6	ug/L	16102	Standard
⌊>	**Sc**	45	277596.3	3.0				ug/L	254529	Standard
⌈	**Ti**	47	18365.8	2.6	**13.1643**	0.148	1.1	ug/L	84	Standard
|	**V**	51	148190.6	0.8	**10.2525**	0.097	0.9	ug/L	5785	Standard
|	**Cr**	52	312224.5	1.2	**28.9711**	0.136	0.5	ug/L	12212	Standard
|	**Cr**	53	47655.7	2.3	**28.6762**	0.240	0.8	ug/L	5042	Standard
|	**Mn**	55	6304755.4	3.0	**339.5764**	4.957	1.5	ug/L	1290	Standard
|	**Co**	59	85752.4	2.5	**6.4930**	0.063	1.0	ug/L	143	Standard
|	**Ni**	60	89225.7	2.2	**32.2122**	0.356	1.1	ug/L	79	Standard
|	**Cu**	65	49133.9	2.8	**19.5288**	0.254	1.3	ug/L	154	Standard
|	**Zn**	66	97766.2	2.7	**86.0242**	0.999	1.2	ug/L	194	Standard
| >	**Ge**	72	210434.1	1.6				ug/L	232024	Standard
|	**As**	75	5343.3	1.8	**5.3958**	0.047	0.9	ug/L	-297	Standard
|	**Se**	82	42.7	29.5	**0.2104**	0.115	54.5	ug/L	17	Standard
⌊	**Se-1**	77	119.7	6.0	**-0.2194**	0.122	55.8	ug/L	180	Standard
	Ga	71	192707.8	2.3				mg/L	210139	Standard
⌈	**Rb**	85	79003.9	2.8				ug/L	12	Standard
| >	**Y**	89	276226.9	0.5				ug/L	214065	Standard
⌊	**Rh**	103	28.3	44.4				ug/L	0	Standard
⌈	**Mo**	98	718.3	0.7	**0.1825**	0.001	0.5	ug/L	6	Standard
|	**Ag**	107	857.4	1.7	**0.1052**	0.001	1.3	ug/L	33	Standard
|	**Cd**	111	1003.9	7.4	**0.1510**	0.017	11.2	mg/L	437	Standard
|	**Cd**	114	2813.1	1.5	**0.1620**	0.003	2.0	ug/L	1160	Standard
| >	**In**	115	588357.8	0.5				ug/L	646604	Standard
|	**Sn**	118	2949.6	2.2	**0.1494**	0.004	2.5	ug/L	864	Standard
|	**Sb**	123	290.2	7.9	**0.0264**	0.002	8.2	ug/L	18	Standard
⌊	**Ba**	135	495951.7	2.0	**118.3292**	2.105	1.8	ug/L	39	Standard
⌈	**Ce**	140	651557.1	1.7				ug/L	46	Standard
⌊>	**Tb**	159	674974.9	1.0				ug/L	695671	Standard
⌈	**Ho**	165	10914.9	1.4				ug/L	9	Standard
|	**Tl**	203	1160.4	7.9	**0.0390**	0.007	16.7	ug/L	687	Standard
|	**Tl**	205	2722.6	6.3	**0.0394**	0.005	13.4	ug/L	1624	Standard
|	**Pb**	206	278422.3	2.2	**22.7158**	0.378	1.7	ug/L	305	Standard
|	**Pb**	207	238809.6	1.5	**22.8447**	0.203	0.9	ug/L	231	Standard
|	**Pb**	208	1094428.1	1.8	**22.4932**	0.267	1.2	ug/L	1129	Standard
|	**U**	238	3663.1	3.1	**0.1436**	0.003	2.4	ug/L	3	Standard
⌊>	**Bi**	209	377358.2	0.7				ug/L	405108	Standard
⌈	**Na**	23	475.0	5.6	**0.0936**	0.003	3.5	mg/L	118	Standard
|	**Mg**	24	1378645.7	1.9	**2.3134**	0.033	1.4	mg/L	377	Standard

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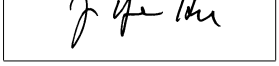

	K	39	6636.5	7.3	**0.4747**	0.030	6.3	mg/L	583	Standard
	Ca	43	2353.5	2.5	**4.9924**	0.209	4.2	mg/L	73	Standard
	Fe	54	73969.7	1.3	**11.9886**	0.246	2.1	mg/L	785	Standard
	Fe	57	2053283.0	2.0	**10.7402**	0.138	1.3	mg/L	6133	Standard
>	**Sc-1**	45	277596.3	3.0				mg/L	254529	Standard
	Cl	35	467811.8	36.4				ug/L	1641778	Standard
	Kr	83	57.9	2.7				ug/L	60	Standard
	Br	81	12682.0	2.2				ug/L	11554	Standard
	P	31	334629.5	2.3				ug/L	45410	Standard
	S	34	609683.1	3.6				ug/L	568857	Standard
	Sr	88	710393.4	3.0				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		90.695	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		129.039	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		90.992	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		97.025	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1205013414
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	93.150
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

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	

Approved: May 11, 2012

Method 6020 - Summary Report

Sample ID: L1205013415

Sample Date/Time: Thursday, May 10, 2012 15:41:46
Number of Replicates: 3
Autosampler Position: 412
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	98938.8	2.3	**8603.6515**	255.232	3.0	ug/L	12600	Standard
|	**Be**	9	878.4	4.3	**0.2457**	0.008	3.3	ug/L	5	Standard
|	**Al**	27	66387379.1	2.3	**4210.2901**	27.703	0.7	ug/L	16102	Standard
⌊>	**Sc**	45	257848.3	2.7				ug/L	254529	Standard
⌈	**Ti**	47	5766.4	2.1	**4.2049**	0.012	0.3	ug/L	84	Standard
|	**V**	51	67851.1	1.9	**4.6692**	0.124	2.7	ug/L	5785	Standard
|	**Cr**	52	80517.4	2.3	**6.9110**	0.171	2.5	ug/L	12212	Standard
|	**Cr**	53	12229.1	4.5	**6.4339**	0.178	2.8	ug/L	5042	Standard
|	**Mn**	55	4648578.4	2.9	**257.2099**	3.422	1.3	ug/L	1290	Standard
|	**Co**	59	53423.4	2.4	**4.1522**	0.040	1.0	ug/L	143	Standard
|	**Ni**	60	34318.5	1.9	**12.7156**	0.226	1.8	ug/L	79	Standard
|	**Cu**	65	14552.0	3.0	**5.9081**	0.147	2.5	ug/L	154	Standard
|	**Zn**	66	16433.2	0.9	**14.7135**	0.244	1.7	ug/L	194	Standard
|>	**Ge**	72	204845.9	2.2				ug/L	232024	Standard
|	**As**	75	665.0	5.0	**0.8878**	0.041	4.7	ug/L	-297	Standard
|	**Se**	82	39.2	35.0	**0.1866**	0.115	61.7	ug/L	17	Standard
⌊	**Se-1**	77	110.0	17.0	**-0.3114**	0.239	76.7	ug/L	180	Standard
	Ga	71	184792.0	2.8				mg/L	210139	Standard
⌈	**Rb**	85	59620.5	3.8				ug/L	12	Standard
|>	**Y**	89	253070.5	5.7				ug/L	214065	Standard
⌊	**Rh**	103	10.0	86.6				ug/L	0	Standard
⌈	**Mo**	98	69.9	18.2	**0.0107**	0.003	32.4	ug/L	6	Standard
|	**Ag**	107	221.7	7.2	**0.0222**	0.001	4.8	ug/L	33	Standard
|	**Cd**	111	370.9	4.2	**-0.0013**	0.003	204.4	mg/L	437	Standard
|	**Cd**	114	994.0	6.6	**-0.0060**	0.004	70.3	ug/L	1160	Standard
|>	**In**	115	579431.7	5.0				ug/L	646604	Standard
|	**Sn**	118	524.7	5.6	**-0.0188**	0.002	9.7	ug/L	864	Standard
|	**Sb**	123	93.4	9.7	**0.0069**	0.000	6.4	ug/L	18	Standard
⌊	**Ba**	135	253368.8	2.6	**61.4289**	1.453	2.4	ug/L	39	Standard
⌈	**Ce**	140	599560.1	2.2				ug/L	46	Standard
⌊>	**Tb**	159	651742.2	3.3				ug/L	695671	Standard
⌈	**Ho**	165	9249.8	4.0				ug/L	9	Standard
|	**Tl**	203	1002.0	7.6	**0.0297**	0.003	11.1	ug/L	687	Standard
|	**Tl**	205	2333.8	11.3	**0.0297**	0.006	19.2	ug/L	1624	Standard
|	**Pb**	206	39649.5	2.6	**3.2745**	0.044	1.3	ug/L	305	Standard
|	**Pb**	207	32588.4	2.4	**3.1550**	0.050	1.6	ug/L	231	Standard
|	**Pb**	208	152638.3	2.3	**3.1751**	0.047	1.5	ug/L	1129	Standard
|	**U**	238	3801.5	4.1	**0.1516**	0.004	2.8	ug/L	3	Standard
⌊>	**Bi**	209	370604.0	2.6				ug/L	405108	Standard
⌈	**Na**	23	2083.5	3.7	**0.5444**	0.037	6.8	mg/L	118	Standard
|	**Mg**	24	818025.2	1.5	**1.4774**	0.020	1.3	mg/L	377	Standard

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	K	39	4128.9	1.7	**0.3011**	0.004	1.4	mg/L	583	Standard
	Ca	43	1998.5	12.1	**4.5494**	0.620	13.6	mg/L	73	Standard
	Fe	54	20021.8	3.7	**3.3835**	0.077	2.3	mg/L	785	Standard
	Fe	57	580483.8	2.1	**3.2449**	0.048	1.5	mg/L	6133	Standard
>	**Sc-1**	45	257848.3	2.7				mg/L	254529	Standard
	Cl	35	459378.0	37.5				ug/L	1641778	Standard
	Kr	83	60.4	5.2				ug/L	60	Standard
	Br	81	12290.8	1.8				ug/L	11554	Standard
	P	31	177927.2	1.8				ug/L	45410	Standard
	S	34	588754.3	3.6				ug/L	568857	Standard
	Sr	88	950152.8	3.9				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		88.287	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		118.221	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		89.612	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		93.685	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	91.483
	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
Mn 55 Upper, S, EEE	Mn	55	

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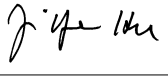

Method 6020 - Summary Report

Sample ID: L1205013417
Sample Date/Time: Thursday, May 10, 2012 15:44:40
Number of Replicates: 3
Autosampler Position: 413
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	88004.8	0.3	**7788.5179**	34.017	0.4	ug/L	12600	Standard
|	**Be**	9	365.0	14.3	**0.0971**	0.017	17.0	ug/L	5	Standard
|	**Al**	27	38125983.9	0.5	**2493.5980**	18.860	0.8	ug/L	16102	Standard
⌊>	**Sc**	45	249975.3	0.6				ug/L	254529	Standard
⌈	**Ti**	47	58714.2	1.2	**44.0945**	0.664	1.5	ug/L	84	Standard
|	**V**	51	135897.8	1.8	**9.8037**	0.126	1.3	ug/L	5785	Standard
|	**Cr**	52	82232.2	1.1	**7.2132**	0.127	1.8	ug/L	12212	Standard
|	**Cr**	53	12463.5	1.8	**6.7219**	0.077	1.1	ug/L	5042	Standard
|	**Mn**	55	3086443.7	0.4	**173.5694**	1.289	0.7	ug/L	1290	Standard
|	**Co**	59	47549.2	0.4	**3.7558**	0.056	1.5	ug/L	143	Standard
|	**Ni**	60	28235.3	1.6	**10.6276**	0.063	0.6	ug/L	79	Standard
|	**Cu**	65	12268.3	0.6	**5.0554**	0.024	0.5	ug/L	154	Standard
|	**Zn**	66	19357.4	0.7	**17.6474**	0.071	0.4	ug/L	194	Standard
| >	**Ge**	72	201537.3	1.1				ug/L	232024	Standard
|	**As**	75	2243.4	2.5	**2.4928**	0.063	2.5	ug/L	-297	Standard
|	**Se**	82	45.4	10.6	**0.2497**	0.045	17.9	ug/L	17	Standard
⌊	**Se-1**	77	110.0	13.8	**-0.2864**	0.193	67.5	ug/L	180	Standard
	Ga	71	182748.8	2.2				mg/L	210139	Standard
⌈	**Rb**	85	41010.4	0.8				ug/L	12	Standard
| >	**Y**	89	269793.1	1.9				ug/L	214065	Standard
⌊	**Rh**	103	6.7	114.6				ug/L	0	Standard
⌈	**Mo**	98	259.7	5.4	**0.0629**	0.004	6.9	ug/L	6	Standard
|	**Ag**	107	161.0	7.2	**0.0144**	0.002	13.2	ug/L	33	Standard
|	**Cd**	111	461.1	7.6	**0.0227**	0.009	40.2	mg/L	437	Standard
|	**Cd**	114	1190.0	3.2	**0.0143**	0.002	11.8	ug/L	1160	Standard
| >	**In**	115	570781.2	1.7				ug/L	646604	Standard
|	**Sn**	118	535.0	5.2	**-0.0175**	0.001	7.9	ug/L	864	Standard
|	**Sb**	123	104.2	13.6	**0.0082**	0.001	15.4	ug/L	18	Standard
⌊	**Ba**	135	184969.6	1.1	**45.5014**	1.239	2.7	ug/L	39	Standard
⌈	**Ce**	140	511305.7	0.6				ug/L	46	Standard
⌊>	**Tb**	159	643235.2	0.8				ug/L	695671	Standard
⌈	**Ho**	165	10169.4	1.3				ug/L	9	Standard
|	**Tl**	203	959.7	11.7	**0.0272**	0.007	25.6	ug/L	687	Standard
|	**Tl**	205	2157.2	10.2	**0.0250**	0.006	22.5	ug/L	1624	Standard
|	**Pb**	206	34498.2	1.3	**2.8557**	0.058	2.0	ug/L	305	Standard
|	**Pb**	207	28749.6	1.5	**2.7899**	0.059	2.1	ug/L	231	Standard
|	**Pb**	208	134368.4	1.1	**2.8016**	0.053	1.9	ug/L	1129	Standard
|	**U**	238	6370.7	1.1	**0.2533**	0.001	0.3	ug/L	3	Standard
⌊>	**Bi**	209	369375.1	0.9				ug/L	405108	Standard
⌈	**Na**	23	435.0	13.6	**0.0958**	0.017	18.1	mg/L	118	Standard
|	**Mg**	24	817189.9	1.0	**1.5221**	0.008	0.5	mg/L	377	Standard

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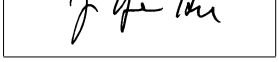

	K	39	5045.8	5.2	**0.3930**	0.023	6.0	mg/L	583	Standard
	Ca	43	2645.2	1.3	**6.2753**	0.116	1.8	mg/L	73	Standard
	Fe	54	32746.5	0.7	**5.8139**	0.067	1.2	mg/L	785	Standard
	Fe	57	963090.6	0.8	**5.5770**	0.073	1.3	mg/L	6133	Standard
>	**Sc-1**	45	249975.3	0.6				mg/L	254529	Standard
	Cl	35	443047.1	38.7				ug/L	1641778	Standard
	Kr	83	56.0	4.6				ug/L	60	Standard
	Br	81	9512.2	1.0				ug/L	11554	Standard
	P	31	420322.3	0.8				ug/L	45410	Standard
	S	34	640633.6	1.6				ug/L	568857	Standard
	Sr	88	604370.5	1.8				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		86.861	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		126.033	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		88.274	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		92.463	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	91.179
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

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: L1205013417
Report Date/Time: Thursday, May 10, 2012 15:47:13
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Method 6020 - Summary Report

Sample ID: L1205013418
Sample Date/Time: Thursday, May 10, 2012 15:47:33
Number of Replicates: 3
Autosampler Position: 414
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	75243.1	2.7	**6461.4376**	64.047	1.0	ug/L	12600	Standard
|	**Be**	9	350.0	15.9	**0.0919**	0.013	14.6	ug/L	5	Standard
|	**Al**	27	30017434.6	2.6	**1958.9082**	30.579	1.6	ug/L	16102	Standard
⌊>	**Sc**	45	250569.9	3.5				ug/L	254529	Standard
⌈	**Ti**	47	48446.0	0.7	**35.1825**	0.571	1.6	ug/L	84	Standard
|	**V**	51	119104.4	2.3	**8.2666**	0.127	1.5	ug/L	5785	Standard
|	**Cr**	52	73898.2	3.0	**6.1320**	0.086	1.4	ug/L	12212	Standard
|	**Cr**	53	10992.3	2.6	**5.5096**	0.037	0.7	ug/L	5042	Standard
|	**Mn**	55	2121288.5	1.8	**115.3514**	0.724	0.6	ug/L	1290	Standard
|	**Co**	59	42875.6	1.9	**3.2741**	0.043	1.3	ug/L	143	Standard
|	**Ni**	60	25536.2	1.4	**9.2949**	0.113	1.2	ug/L	79	Standard
|	**Cu**	65	10765.2	1.6	**4.2831**	0.027	0.6	ug/L	154	Standard
|	**Zn**	66	16834.7	2.2	**14.8160**	0.163	1.1	ug/L	194	Standard
|>	**Ge**	72	208374.2	2.1				ug/L	232024	Standard
|	**As**	75	2463.6	1.1	**2.6340**	0.051	1.9	ug/L	-297	Standard
|	**Se**	82	37.6	17.1	**0.1691**	0.062	36.6	ug/L	17	Standard
⌊	**Se-1**	77	109.3	15.3	**-0.3415**	0.250	73.2	ug/L	180	Standard
	Ga	71	188105.5	2.2				mg/L	210139	Standard
⌈	**Rb**	85	36360.2	0.6				ug/L	12	Standard
|>	**Y**	89	240704.5	2.7				ug/L	214065	Standard
⌊	**Rh**	103	21.7	26.6				ug/L	0	Standard
⌈	**Mo**	98	233.1	12.8	**0.0537**	0.008	14.4	ug/L	6	Standard
|	**Ag**	107	161.3	5.2	**0.0138**	0.001	5.5	ug/L	33	Standard
|	**Cd**	111	378.8	5.3	**-0.0008**	0.004	523.2	mg/L	437	Standard
|	**Cd**	114	1016.0	5.3	**-0.0054**	0.003	48.1	ug/L	1160	Standard
|>	**In**	115	588198.7	3.0				ug/L	646604	Standard
|	**Sn**	118	659.7	2.4	**-0.0100**	0.000	3.3	ug/L	864	Standard
|	**Sb**	123	86.9	13.3	**0.0061**	0.001	14.9	ug/L	18	Standard
⌊	**Ba**	135	158800.3	1.4	**37.9062**	0.617	1.6	ug/L	39	Standard
⌈	**Ce**	140	387068.2	1.1				ug/L	46	Standard
⌊>	**Tb**	159	657605.2	3.8				ug/L	695671	Standard
⌈	**Ho**	165	6767.8	2.9				ug/L	9	Standard
|	**Tl**	203	860.4	9.8	**0.0188**	0.003	17.8	ug/L	687	Standard
|	**Tl**	205	2092.8	12.8	**0.0214**	0.005	23.9	ug/L	1624	Standard
|	**Pb**	206	27623.8	1.9	**2.2154**	0.051	2.3	ug/L	305	Standard
|	**Pb**	207	22884.6	0.9	**2.1518**	0.065	3.0	ug/L	231	Standard
|	**Pb**	208	106769.4	1.7	**2.1567**	0.055	2.5	ug/L	1129	Standard
|	**U**	238	5213.9	1.2	**0.2019**	0.006	3.1	ug/L	3	Standard
⌊>	**Bi**	209	380533.9	3.7				ug/L	405108	Standard
⌈	**Na**	23	391.7	9.0	**0.0835**	0.014	16.4	mg/L	118	Standard
|	**Mg**	24	698371.7	3.1	**1.2977**	0.007	0.5	mg/L	377	Standard

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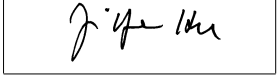

	K	39	3962.2	4.2	**0.2971**	0.024	8.1	mg/L	583	Standard
	Ca	43	2025.1	1.3	**4.7503**	0.153	3.2	mg/L	73	Standard
	Fe	54	29034.0	4.5	**5.1235**	0.065	1.3	mg/L	785	Standard
	Fe	57	861498.4	3.2	**4.9733**	0.026	0.5	mg/L	6133	Standard
>	**Sc-1**	45	250569.9	3.5				mg/L	254529	Standard
	Cl	35	434162.4	39.4				ug/L	1641778	Standard
	Kr	83	56.2	8.4				ug/L	60	Standard
	Br	81	9739.0	2.0				ug/L	11554	Standard
	P	31	309357.4	2.3				ug/L	45410	Standard
	S	34	658954.5	1.7				ug/L	568857	Standard
	Sr	88	445524.5	3.1				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		89.807	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		112.445	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		90.967	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		94.528	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	93.934
	Na	23	
	Mg	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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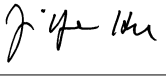

Method 6020 - Summary Report

Sample ID: L1205013419
Sample Date/Time: Thursday, May 10, 2012 15:50:25
Number of Replicates: 3
Autosampler Position: 415
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	91046.1	2.1	**7843.0601**	374.466	4.8	ug/L	12600	Standard
|	**Be**	9	428.3	6.0	**0.1127**	0.005	4.5	ug/L	5	Standard
|	**Al**	27	36377252.5	0.7	**2313.1605**	64.465	2.8	ug/L	16102	Standard
⌊>	**Sc**	45	257231.3	2.8				ug/L	254529	Standard
⌈	**Ti**	47	58362.2	0.6	**41.7356**	0.435	1.0	ug/L	84	Standard
|	**V**	51	137290.9	1.5	**9.4215**	0.178	1.9	ug/L	5785	Standard
|	**Cr**	52	80667.5	1.3	**6.6698**	0.133	2.0	ug/L	12212	Standard
|	**Cr**	53	12173.2	1.3	**6.1465**	0.135	2.2	ug/L	5042	Standard
|	**Mn**	55	3718810.7	1.5	**199.1625**	2.966	1.5	ug/L	1290	Standard
|	**Co**	59	49187.8	3.3	**3.6995**	0.124	3.4	ug/L	143	Standard
|	**Ni**	60	29415.2	1.7	**10.5440**	0.178	1.7	ug/L	79	Standard
|	**Cu**	65	13504.7	2.8	**5.3017**	0.141	2.7	ug/L	154	Standard
|	**Zn**	66	21037.3	1.5	**18.2703**	0.281	1.5	ug/L	194	Standard
| >	**Ge**	72	211627.4	0.4				ug/L	232024	Standard
|	**As**	75	1981.3	2.5	**2.1325**	0.051	2.4	ug/L	-297	Standard
|	**Se**	82	40.3	12.8	**0.1869**	0.046	24.4	ug/L	17	Standard
⌊	**Se-1**	77	120.0	10.9	**-0.2247**	0.181	80.6	ug/L	180	Standard
	Ga	71	190725.9	1.9				mg/L	210139	Standard
⌈	**Rb**	85	44816.2	1.3				ug/L	12	Standard
| >	**Y**	89	301014.2	0.9				ug/L	214065	Standard
⌊	**Rh**	103	21.7	81.0				ug/L	0	Standard
⌈	**Mo**	98	358.8	4.4	**0.0857**	0.005	6.1	ug/L	6	Standard
|	**Ag**	107	179.7	5.2	**0.0159**	0.001	5.7	ug/L	33	Standard
|	**Cd**	111	494.9	4.7	**0.0256**	0.004	16.2	mg/L	437	Standard
|	**Cd**	114	1302.1	1.2	**0.0195**	0.003	13.7	ug/L	1160	Standard
| >	**In**	115	597181.8	1.2				ug/L	646604	Standard
|	**Sn**	118	533.3	2.3	**-0.0193**	0.001	3.0	ug/L	864	Standard
|	**Sb**	123	73.6	19.4	**0.0047**	0.001	27.8	ug/L	18	Standard
⌊	**Ba**	135	242067.0	1.4	**56.9001**	0.651	1.1	ug/L	39	Standard
⌈	**Ce**	140	577475.4	1.0				ug/L	46	Standard
⌊>	**Tb**	159	670208.7	1.1				ug/L	695671	Standard
⌈	**Ho**	165	13194.1	1.6				ug/L	9	Standard
|	**Tl**	203	889.7	12.0	**0.0204**	0.007	35.5	ug/L	687	Standard
|	**Tl**	205	2111.8	10.2	**0.0216**	0.006	28.8	ug/L	1624	Standard
|	**Pb**	206	28598.0	1.3	**2.2758**	0.024	1.1	ug/L	305	Standard
|	**Pb**	207	23607.7	1.4	**2.2022**	0.032	1.5	ug/L	231	Standard
|	**Pb**	208	110318.3	1.2	**2.2110**	0.026	1.2	ug/L	1129	Standard
|	**U**	238	8298.9	2.4	**0.3173**	0.008	2.5	ug/L	3	Standard
⌊>	**Bi**	209	383399.4	0.7				ug/L	405108	Standard
⌈	**Na**	23	536.7	9.4	**0.1205**	0.018	15.1	mg/L	118	Standard
|	**Mg**	24	772448.8	1.0	**1.3986**	0.025	1.8	mg/L	377	Standard

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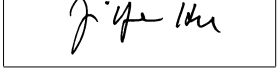

	K	39	4562.4	6.4	**0.3388**	0.014	4.2	mg/L	583	Standard
	Ca	43	3103.7	0.3	**7.1860**	0.232	3.2	mg/L	73	Standard
	Fe	54	33719.2	1.7	**5.8189**	0.076	1.3	mg/L	785	Standard
	Fe	57	985652.0	0.5	**5.5486**	0.131	2.4	mg/L	6133	Standard
>	**Sc-1**	45	257231.3	2.8				mg/L	254529	Standard
	Cl	35	424453.1	39.7				ug/L	1641778	Standard
	Kr	83	61.1	11.5				ug/L	60	Standard
	Br	81	10099.2	1.4				ug/L	11554	Standard
	P	31	582921.0	1.2				ug/L	45410	Standard
	S	34	675343.1	1.1				ug/L	568857	Standard
	Sr	88	602328.0	0.9				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		91.209	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		140.618	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		92.357	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		96.340	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	94.641
	Na	23	
	Mg	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: L1205013420
Sample Date/Time: Thursday, May 10, 2012 15:53:18
Number of Replicates: 3
Autosampler Position: 416
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	100487.3	2.4	**8840.6888**	388.956	4.4	ug/L	12600	Standard
|	**Be**	9	375.0	19.6	**0.0972**	0.020	20.4	ug/L	5	Standard
|	**Al**	27	41775857.4	1.5	**2670.6588**	19.157	0.7	ug/L	16102	Standard
⌊>	**Sc**	45	255773.1	2.2				ug/L	254529	Standard
⌈	**Ti**	47	74968.3	0.6	**52.4906**	1.760	3.4	ug/L	84	Standard
|	**V**	51	154295.0	0.6	**10.3930**	0.363	3.5	ug/L	5785	Standard
|	**Cr**	52	108030.5	1.7	**9.0646**	0.299	3.3	ug/L	12212	Standard
|	**Cr**	53	16006.8	1.3	**8.3502**	0.414	5.0	ug/L	5042	Standard
|	**Mn**	55	3000754.3	1.3	**157.3102**	6.472	4.1	ug/L	1290	Standard
|	**Co**	59	38361.8	1.8	**2.8224**	0.132	4.7	ug/L	143	Standard
|	**Ni**	60	30923.5	1.7	**10.8514**	0.429	4.0	ug/L	79	Standard
|	**Cu**	65	12964.5	1.6	**4.9798**	0.215	4.3	ug/L	154	Standard
|	**Zn**	66	18792.3	0.6	**15.9535**	0.569	3.6	ug/L	194	Standard
| >	**Ge**	72	216339.4	2.8				ug/L	232024	Standard
|	**As**	75	1280.0	2.6	**1.4319**	0.059	4.1	ug/L	-297	Standard
|	**Se**	82	38.3	12.4	**0.1621**	0.039	24.0	ug/L	17	Standard
⌊	**Se-1**	77	106.0	6.2	**-0.4416**	0.088	19.9	ug/L	180	Standard
	Ga	71	193276.6	3.0				mg/L	210139	Standard
⌈	**Rb**	85	50570.9	2.2				ug/L	12	Standard
| >	**Y**	89	247860.4	2.9				ug/L	214065	Standard
⌊	**Rh**	103	5.0	173.2				ug/L	0	Standard
⌈	**Mo**	98	432.2	4.3	**0.1051**	0.003	3.2	ug/L	6	Standard
|	**Ag**	107	183.3	4.6	**0.0164**	0.001	5.6	ug/L	33	Standard
|	**Cd**	111	358.1	7.3	**-0.0070**	0.006	79.8	mg/L	437	Standard
|	**Cd**	114	938.9	3.3	**-0.0136**	0.005	33.8	ug/L	1160	Standard
| >	**In**	115	596073.3	2.0				ug/L	646604	Standard
|	**Sn**	118	553.0	1.9	**-0.0179**	0.001	8.0	ug/L	864	Standard
|	**Sb**	123	77.9	11.6	**0.0051**	0.001	14.4	ug/L	18	Standard
⌊	**Ba**	135	248585.0	0.8	**58.5555**	1.276	2.2	ug/L	39	Standard
⌈	**Ce**	140	374155.4	0.4				ug/L	46	Standard
⌊>	**Tb**	159	673091.7	1.4				ug/L	695671	Standard
⌈	**Ho**	165	5872.1	1.9				ug/L	9	Standard
|	**Tl**	203	914.0	17.5	**0.0215**	0.009	40.8	ug/L	687	Standard
|	**Tl**	205	2116.5	18.9	**0.0213**	0.009	43.9	ug/L	1624	Standard
|	**Pb**	206	27338.3	1.6	**2.1665**	0.089	4.1	ug/L	305	Standard
|	**Pb**	207	22849.2	0.7	**2.1223**	0.063	3.0	ug/L	231	Standard
|	**Pb**	208	106639.2	0.5	**2.1282**	0.065	3.1	ug/L	1129	Standard
|	**U**	238	6387.3	1.0	**0.2438**	0.006	2.6	ug/L	3	Standard
⌊>	**Bi**	209	385076.2	2.5				ug/L	405108	Standard
⌈	**Na**	23	578.3	16.1	**0.1326**	0.026	19.8	mg/L	118	Standard
|	**Mg**	24	842203.1	0.7	**1.5335**	0.027	1.8	mg/L	377	Standard

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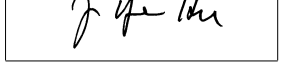

	K	39	5596.0	1.5	**0.4305**	0.018	4.1	mg/L	583	Standard
	Ca	43	1638.4	6.3	**3.7261**	0.311	8.3	mg/L	73	Standard
	Fe	54	29911.3	1.3	**5.1748**	0.104	2.0	mg/L	785	Standard
	Fe	57	876528.2	1.1	**4.9591**	0.168	3.4	mg/L	6133	Standard
>	**Sc-1**	45	255773.1	2.2				mg/L	254529	Standard
	Cl	35	380190.6	55.5				ug/L	1641778	Standard
	Kr	83	56.8	10.5				ug/L	60	Standard
	Br	81	10863.9	2.9				ug/L	11554	Standard
	P	31	260970.9	0.8				ug/L	45410	Standard
	S	34	688256.4	1.6				ug/L	568857	Standard
	Sr	88	455213.8	3.4				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		93.240	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		115.787	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		92.185	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		96.754	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	95.055
	Na	23	
	Mg	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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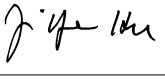

Method 6020 - Summary Report

Sample ID: L1205013422
Sample Date/Time: Thursday, May 10, 2012 15:56:11
Number of Replicates: 3
Autosampler Position: 417
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	100442.0	2.6	**8464.0497**	230.572	2.7	ug/L	12600	Standard
|	**Be**	9	350.0	7.1	**0.0862**	0.007	8.0	ug/L	5	Standard
|	**Al**	27	38739406.3	2.5	**2386.2495**	72.751	3.0	ug/L	16102	Standard
⌊>	**Sc**	45	265446.8	0.6				ug/L	254529	Standard
⌈	**Ti**	47	57789.0	2.0	**40.8645**	0.312	0.8	ug/L	84	Standard
|	**V**	51	133429.9	1.5	**9.0439**	0.110	1.2	ug/L	5785	Standard
|	**Cr**	52	103301.0	0.4	**8.7249**	0.158	1.8	ug/L	12212	Standard
|	**Cr**	53	15696.5	0.7	**8.2579**	0.084	1.0	ug/L	5042	Standard
|	**Mn**	55	2176624.8	0.9	**115.2505**	0.522	0.5	ug/L	1290	Standard
|	**Co**	59	44237.2	2.0	**3.2891**	0.037	1.1	ug/L	143	Standard
|	**Ni**	60	30978.0	1.8	**10.9820**	0.054	0.5	ug/L	79	Standard
|	**Cu**	65	13237.4	2.6	**5.1374**	0.080	1.5	ug/L	154	Standard
|	**Zn**	66	24240.4	3.6	**20.8401**	0.518	2.5	ug/L	194	Standard
| >	**Ge**	72	213992.1	1.3				ug/L	232024	Standard
|	**As**	75	1483.7	2.1	**1.6382**	0.040	2.4	ug/L	-297	Standard
|	**Se**	82	40.9	5.5	**0.1879**	0.023	12.4	ug/L	17	Standard
⌊	**Se-1**	77	118.0	18.4	**-0.2703**	0.277	102.7	ug/L	180	Standard
	Ga	71	192927.4	1.7				mg/L	210139	Standard
⌈	**Rb**	85	45944.6	1.9				ug/L	12	Standard
| >	**Y**	89	269559.8	3.0				ug/L	214065	Standard
⌊	**Rh**	103	15.0	66.7				ug/L	0	Standard
⌈	**Mo**	98	380.1	3.8	**0.0907**	0.003	3.5	ug/L	6	Standard
|	**Ag**	107	201.3	5.9	**0.0185**	0.001	6.3	ug/L	33	Standard
|	**Cd**	111	350.2	2.2	**-0.0094**	0.003	28.9	mg/L	437	Standard
|	**Cd**	114	927.2	3.6	**-0.0154**	0.002	12.6	ug/L	1160	Standard
| >	**In**	115	600435.3	1.5				ug/L	646604	Standard
|	**Sn**	118	577.7	0.9	**-0.0165**	0.001	5.7	ug/L	864	Standard
|	**Sb**	123	96.7	16.1	**0.0069**	0.001	20.1	ug/L	18	Standard
⌊	**Ba**	135	200393.2	0.8	**46.8534**	0.786	1.7	ug/L	39	Standard
⌈	**Ce**	140	630740.6	0.7				ug/L	46	Standard
⌊>	**Tb**	159	673667.2	0.5				ug/L	695671	Standard
⌈	**Ho**	165	9889.9	1.4				ug/L	9	Standard
|	**Tl**	203	926.7	12.0	**0.0222**	0.007	32.6	ug/L	687	Standard
|	**Tl**	205	2095.1	11.3	**0.0206**	0.006	31.5	ug/L	1624	Standard
|	**Pb**	206	31769.9	1.3	**2.5049**	0.010	0.4	ug/L	305	Standard
|	**Pb**	207	26432.0	0.4	**2.4433**	0.031	1.3	ug/L	231	Standard
|	**Pb**	208	123043.4	0.7	**2.4435**	0.009	0.4	ug/L	1129	Standard
|	**U**	238	8746.2	2.1	**0.3309**	0.005	1.6	ug/L	3	Standard
⌊>	**Bi**	209	387320.3	0.9				ug/L	405108	Standard
⌈	**Na**	23	495.0	9.9	**0.1045**	0.012	11.8	mg/L	118	Standard
|	**Mg**	24	829918.5	2.2	**1.4556**	0.024	1.7	mg/L	377	Standard

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	K	39	5155.9	5.9	**0.3761**	0.023	6.2	mg/L	583	Standard
	Ca	43	1878.5	7.7	**4.1315**	0.312	7.6	mg/L	73	Standard
	Fe	54	30141.2	2.2	**5.0187**	0.097	1.9	mg/L	785	Standard
	Fe	57	877932.6	1.1	**4.7824**	0.027	0.6	mg/L	6133	Standard
>	**Sc-1**	45	265446.8	0.6				mg/L	254529	Standard
	Cl	35	439576.4	36.9				ug/L	1641778	Standard
	Kr	83	58.9	2.9				ug/L	60	Standard
	Br	81	10822.2	2.1				ug/L	11554	Standard
	P	31	315437.5	2.3				ug/L	45410	Standard
	S	34	674306.5	2.1				ug/L	568857	Standard
	Sr	88	490857.5	1.8				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		92.229	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		125.924	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		92.860	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		96.837	
	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

95.609

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 11, 2012

Method 6020 - Summary Report

Sample ID: L1205013423
Sample Date/Time: Thursday, May 10, 2012 15:59:04
Number of Replicates: 3
Autosampler Position: 418
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	97257.8	0.8	**8340.5040**	102.842	1.2	ug/L	12600	Standard
|	**Be**	9	363.3	10.5	**0.0921**	0.011	12.1	ug/L	5	Standard
|	**Al**	27	35138560.2	2.6	**2206.3348**	49.774	2.3	ug/L	16102	Standard
⌊>	**Sc**	45	260354.5	0.5				ug/L	254529	Standard
⌈	**Ti**	47	56722.7	1.9	**40.2612**	1.688	4.2	ug/L	84	Standard
|	**V**	51	151736.7	0.7	**10.3607**	0.251	2.4	ug/L	5785	Standard
|	**Cr**	52	92966.4	1.3	**7.7772**	0.245	3.2	ug/L	12212	Standard
|	**Cr**	53	13618.6	0.9	**6.9927**	0.278	4.0	ug/L	5042	Standard
|	**Mn**	55	3630600.7	1.1	**192.9692**	6.085	3.2	ug/L	1290	Standard
|	**Co**	59	47019.5	0.7	**3.5091**	0.104	3.0	ug/L	143	Standard
|	**Ni**	60	31036.4	1.1	**11.0430**	0.374	3.4	ug/L	79	Standard
|	**Cu**	65	13180.4	0.4	**5.1335**	0.135	2.6	ug/L	154	Standard
|	**Zn**	66	18498.6	1.3	**15.9179**	0.288	1.8	ug/L	194	Standard
| >	**Ge**	72	213336.3	2.4				ug/L	232024	Standard
|	**As**	75	1345.6	1.1	**1.5110**	0.036	2.4	ug/L	-297	Standard
|	**Se**	82	53.2	3.7	**0.2939**	0.026	8.8	ug/L	17	Standard
⌊	**Se-1**	77	118.0	12.0	**-0.2666**	0.152	57.0	ug/L	180	Standard
	Ga	71	191001.8	1.2				mg/L	210139	Standard
⌈	**Rb**	85	39900.9	6.5				ug/L	12	Standard
| >	**Y**	89	388813.0	1.5				ug/L	214065	Standard
⌊	**Rh**	103	43.3	46.6				ug/L	0	Standard
⌈	**Mo**	98	597.8	0.8	**0.1486**	0.001	0.9	ug/L	6	Standard
|	**Ag**	107	171.0	7.3	**0.0148**	0.002	10.4	ug/L	33	Standard
|	**Cd**	111	535.4	2.1	**0.0356**	0.003	7.4	mg/L	437	Standard
|	**Cd**	114	1417.2	2.1	**0.0304**	0.003	11.5	ug/L	1160	Standard
| >	**In**	115	595810.6	1.0				ug/L	646604	Standard
|	**Sn**	118	777.7	15.6	**-0.0025**	0.008	341.7	ug/L	864	Standard
|	**Sb**	123	79.4	11.8	**0.0053**	0.001	16.4	ug/L	18	Standard
⌊	**Ba**	135	351746.7	1.5	**82.8708**	0.462	0.6	ug/L	39	Standard
⌈	**Ce**	140	613117.7	1.4				ug/L	46	Standard
⌊>	**Tb**	159	685669.6	1.3				ug/L	695671	Standard
⌈	**Ho**	165	19614.4	0.7				ug/L	9	Standard
|	**Tl**	203	852.0	10.8	**0.0181**	0.005	30.1	ug/L	687	Standard
|	**Tl**	205	1976.5	12.5	**0.0181**	0.006	35.7	ug/L	1624	Standard
|	**Pb**	206	37326.3	1.0	**2.9852**	0.051	1.7	ug/L	305	Standard
|	**Pb**	207	31067.8	1.2	**2.9129**	0.064	2.2	ug/L	231	Standard
|	**Pb**	208	145353.0	0.6	**2.9281**	0.048	1.6	ug/L	1129	Standard
|	**U**	238	12861.1	1.5	**0.4917**	0.011	2.2	ug/L	3	Standard
⌊>	**Bi**	209	382468.3	1.6				ug/L	405108	Standard
⌈	**Na**	23	565.0	7.7	**0.1261**	0.011	8.8	mg/L	118	Standard
|	**Mg**	24	880586.9	1.5	**1.5748**	0.022	1.4	mg/L	377	Standard

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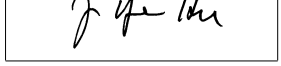

	K	39	4205.6	3.6	**0.3041**	0.011	3.7	mg/L	583	Standard
	Ca	43	6486.4	5.1	**15.0345**	0.781	5.2	mg/L	73	Standard
	Fe	54	35746.1	1.3	**6.1004**	0.054	0.9	mg/L	785	Standard
	Fe	57	1034764.3	1.5	**5.7537**	0.062	1.1	mg/L	6133	Standard
>	**Sc-1**	45	260354.5	0.5				mg/L	254529	Standard
	Cl	35	368921.2	55.0				ug/L	1641778	Standard
	Kr	83	70.6	2.9				ug/L	60	Standard
	Br	81	10952.3	3.7				ug/L	11554	Standard
	P	31	1128287.0	1.2				ug/L	45410	Standard
	S	34	709993.4	0.9				ug/L	568857	Standard
	Sr	88	1335635.8	4.1				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		91.946	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		181.633	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		92.145	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		98.562	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1205013423
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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

94.411

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 11, 2012

Method 6020 - Summary Report

Sample ID: L1205013424
Sample Date/Time: Thursday, May 10, 2012 16:01:56
Number of Replicates: 3
Autosampler Position: 419
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	138903.9	1.6	**11591.3308**	88.898	0.8	ug/L	12600	Standard
|	**Be**	9	601.7	11.1	**0.1508**	0.015	9.7	ug/L	5	Standard
|	**Al**	27	56837181.6	0.2	**3347.5620**	73.793	2.2	ug/L	16102	Standard
⌊>	**Sc**	45	277702.7	2.3				ug/L	254529	Standard
⌈	**Ti**	47	67959.1	0.3	**49.0347**	0.704	1.4	ug/L	84	Standard
|	**V**	51	204250.7	1.0	**14.2835**	0.125	0.9	ug/L	5785	Standard
|	**Cr**	52	117757.2	1.5	**10.3132**	0.231	2.2	ug/L	12212	Standard
|	**Cr**	53	17390.0	2.4	**9.5275**	0.086	0.9	ug/L	5042	Standard
|	**Mn**	55	7255472.0	0.9	**392.0434**	4.259	1.1	ug/L	1290	Standard
|	**Co**	59	69494.7	2.0	**5.2760**	0.041	0.8	ug/L	143	Standard
|	**Ni**	60	38762.9	1.0	**14.0245**	0.233	1.7	ug/L	79	Standard
|	**Cu**	65	21473.5	1.5	**8.5334**	0.080	0.9	ug/L	154	Standard
|	**Zn**	66	27344.7	0.7	**24.0106**	0.321	1.3	ug/L	194	Standard
|>	**Ge**	72	209817.7	1.7				ug/L	232024	Standard
|	**As**	75	4452.0	1.8	**4.5461**	0.021	0.5	ug/L	-297	Standard
|	**Se**	82	60.8	13.9	**0.3665**	0.073	20.0	ug/L	17	Standard
⌊	**Se-1**	77	132.0	9.9	**-0.0517**	0.154	297.8	ug/L	180	Standard
	Ga	71	191198.5	2.2				mg/L	210139	Standard
⌈	**Rb**	85	61195.0	1.6				ug/L	12	Standard
|>	**Y**	89	353513.6	2.8				ug/L	214065	Standard
⌊	**Rh**	103	46.7	62.8				ug/L	0	Standard
⌈	**Mo**	98	408.2	4.7	**0.1009**	0.004	3.9	ug/L	6	Standard
|	**Ag**	107	241.0	4.2	**0.0245**	0.002	6.3	ug/L	33	Standard
|	**Cd**	111	915.8	2.6	**0.1312**	0.009	6.7	mg/L	437	Standard
|	**Cd**	114	2447.4	1.8	**0.1294**	0.005	3.5	ug/L	1160	Standard
|>	**In**	115	584521.2	1.7				ug/L	646604	Standard
|	**Sn**	118	603.0	2.2	**-0.0136**	0.001	8.7	ug/L	864	Standard
|	**Sb**	123	77.9	11.5	**0.0053**	0.001	18.5	ug/L	18	Standard
⌊	**Ba**	135	562901.0	1.4	**135.2084**	2.474	1.8	ug/L	39	Standard
⌈	**Ce**	140	849923.7	1.0				ug/L	46	Standard
⌊>	**Tb**	159	675620.8	0.6				ug/L	695671	Standard
⌈	**Ho**	165	18505.3	1.7				ug/L	9	Standard
|	**Tl**	203	1016.4	16.6	**0.0300**	0.010	34.2	ug/L	687	Standard
|	**Tl**	205	2399.2	12.3	**0.0309**	0.007	23.8	ug/L	1624	Standard
|	**Pb**	206	47686.9	0.9	**3.9056**	0.078	2.0	ug/L	305	Standard
|	**Pb**	207	39881.4	0.5	**3.8292**	0.056	1.5	ug/L	231	Standard
|	**Pb**	208	184704.4	0.8	**3.8103**	0.072	1.9	ug/L	1129	Standard
|	**U**	238	17818.5	1.7	**0.6953**	0.013	1.8	ug/L	3	Standard
⌊>	**Bi**	209	374159.3	1.2				ug/L	405108	Standard
⌈	**Na**	23	650.0	3.1	**0.1383**	0.009	6.2	mg/L	118	Standard
|	**Mg**	24	1153710.5	0.9	**1.9355**	0.060	3.1	mg/L	377	Standard

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	K	39	6323.0	2.5	**0.4502**	0.023	5.1	mg/L	583	Standard
	Ca	43	7485.2	1.4	**16.2869**	0.437	2.7	mg/L	73	Standard
	Fe	54	57546.0	1.2	**9.2903**	0.314	3.4	mg/L	785	Standard
	Fe	57	1626764.8	1.4	**8.4990**	0.161	1.9	mg/L	6133	Standard
>	**Sc-1**	45	277702.7	2.3				mg/L	254529	Standard
	Cl	35	422269.4	39.2				ug/L	1641778	Standard
	Kr	83	69.2	1.9				ug/L	60	Standard
	Br	81	10968.1	2.2				ug/L	11554	Standard
	P	31	538212.7	0.7				ug/L	45410	Standard
	S	34	694165.5	0.2				ug/L	568857	Standard
	Sr	88	1344292.2	0.3				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		90.429	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		165.143	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		90.399	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		97.118	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Approved: May 11, 2012

	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

92.360

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	

Approved: May 11, 2012

Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, May 10, 2012 16:04:52
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	12692.0	1.2	**27.6463**	40.640	147.0	ug/L	12600	Standard
|	**Be**	9	168527.4	2.4	**50.2999**	0.978	1.9	ug/L	5	Standard
|	**Al**	27	836352.5	2.8	**52.6774**	0.916	1.7	ug/L	16102	Standard
⌊>	**Sc**	45	255912.3	4.2				ug/L	254529	Standard
⌈	**Ti**	47	152140.9	4.1	**103.0644**	3.137	3.0	ug/L	84	Standard
|	**V**	51	766715.8	3.9	**51.0475**	1.607	3.1	ug/L	5785	Standard
|	**Cr**	52	566818.5	2.9	**50.2409**	0.987	2.0	ug/L	12212	Standard
|	**Cr**	53	86421.7	2.1	**50.0336**	0.527	1.1	ug/L	5042	Standard
|	**Mn**	55	1009998.7	3.6	**51.1361**	1.304	2.6	ug/L	1290	Standard
|	**Co**	59	718586.7	3.0	**51.2901**	1.056	2.1	ug/L	143	Standard
|	**Ni**	60	152117.1	2.5	**51.7100**	0.875	1.7	ug/L	79	Standard
|	**Cu**	65	135831.3	2.2	**50.9045**	0.605	1.2	ug/L	154	Standard
|	**Zn**	66	60227.5	2.4	**49.8146**	0.736	1.5	ug/L	194	Standard
|>	**Ge**	72	223542.5	1.2				ug/L	232024	Standard
|	**As**	75	55728.8	2.4	**50.9755**	0.707	1.4	ug/L	-297	Standard
|	**Se**	82	6546.7	3.8	**52.8747**	1.547	2.9	ug/L	17	Standard
⌊	**Se-1**	77	4177.6	2.4	**50.7640**	0.788	1.6	ug/L	180	Standard
	Ga	71	200953.1	1.7				mg/L	210139	Standard
⌈	**Rb**	85	1031.7	3.6				ug/L	12	Standard
|>	**Y**	89	212913.1	3.1				ug/L	214065	Standard
⌊	**Rh**	103	23.3	32.7				ug/L	0	Standard
⌈	**Mo**	98	404000.6	5.0	**101.1268**	2.650	2.6	ug/L	6	Standard
|	**Ag**	107	410566.7	3.5	**50.8134**	1.070	2.1	ug/L	33	Standard
|	**Cd**	111	215264.5	3.5	**49.2288**	0.618	1.3	mg/L	437	Standard
|	**Cd**	114	561133.6	3.3	**49.1695**	0.509	1.0	ug/L	1160	Standard
|>	**In**	115	623818.1	2.5				ug/L	646604	Standard
|	**Sn**	118	752808.7	3.0	**49.3680**	0.352	0.7	ug/L	864	Standard
|	**Sb**	123	520160.6	2.6	**48.7935**	0.199	0.4	ug/L	18	Standard
⌊	**Ba**	135	225273.9	2.2	**50.6921**	0.160	0.3	ug/L	39	Standard
⌈	**Ce**	140	973.0	8.3				ug/L	46	Standard
⌊>	**Tb**	159	699276.5	1.8				ug/L	695671	Standard
⌈	**Ho**	165	25.3	34.0				ug/L	9	Standard
|	**Tl**	203	783473.6	1.9	**50.8209**	0.639	1.3	ug/L	687	Standard
|	**Tl**	205	1820380.8	1.7	**49.8490**	0.414	0.8	ug/L	1624	Standard
|	**Pb**	206	626547.3	2.4	**50.9282**	0.696	1.4	ug/L	305	Standard
|	**Pb**	207	528143.3	2.3	**50.3347**	0.732	1.5	ug/L	231	Standard
|	**Pb**	208	2460475.5	2.3	**50.3813**	0.611	1.2	ug/L	1129	Standard
|	**U**	238	1257267.8	3.1	**48.2657**	0.999	2.1	ug/L	3	Standard
⌊>	**Bi**	209	378964.5	1.2				ug/L	405108	Standard
⌈	**Na**	23	19295.6	4.9	**5.3030**	0.236	4.5	mg/L	118	Standard
|	**Mg**	24	2841309.2	3.1	**5.1731**	0.058	1.1	mg/L	377	Standard

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	K	39	61462.8	3.5	**5.2392**	0.096	1.8	mg/L	583	Standard
	Ca	43	2148.5	3.0	**4.9469**	0.325	6.6	mg/L	73	Standard
	Fe	54	31734.2	4.5	**5.4951**	0.076	1.4	mg/L	785	Standard
	Fe	57	905360.1	3.4	**5.1193**	0.054	1.1	mg/L	6133	Standard
>	**Sc-1**	45	255912.3	4.2				mg/L	254529	Standard
	Cl	35	502163.2	38.0				ug/L	1641778	Standard
	Kr	83	52.3	5.1				ug/L	60	Standard
	Br	81	12100.7	3.5				ug/L	11554	Standard
	P	31	67169.0	6.8				ug/L	45410	Standard
	S	34	756698.0	3.6				ug/L	568857	Standard
	Sr	88	751.7	7.7				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	105.355		
>	Sc	45			
	Ti	47	103.064		
	V	51	102.095		
	Cr	52	100.482		
	Cr	53			
	Mn	55	102.272		
	Co	59	102.580		
	Ni	60	103.420		
	Cu	65	101.809		
	Zn	66	99.629		
>	Ge	72		96.345	
	As	75	101.951		
	Se	82	105.749		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		99.462	
	Rh	103			
	Mo	98	101.127		
	Ag	107	101.627		
	Cd	111	98.458		
	Cd	114			
>	In	115		96.476	
	Sn	118	98.736		
	Sb	123	97.587		
	Ba	135	101.384		
	Ce	140			
>	Tb	159		100.518	
	Ho	165			
	Tl	203	101.642		
	Tl	205			
	Pb	206	101.856		

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	Pb	207	100.669	
	Pb	208	100.763	
	U	238	96.531	
>	Bi	209		93.547
	Na	23	106.061	
	Mg	24	103.463	
	K	39	104.783	
	Ca	43	98.938	
	Fe	54	109.901	
	Fe	57	102.387	
>	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 10, 2012 16:07:44
Number of Replicates: 3
Autosampler Position: 102
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	12386.7	4.6	**47.8185**	15.607	32.6	ug/L	12600	Standard
|	**Be**	9	10.0	86.6	**-0.0114**	0.002	21.6	ug/L	5	Standard
|	**Al**	27	15352.8	2.7	**0.2297**	0.058	25.3	ug/L	16102	Standard
⌊>	**Sc**	45	245720.3	5.5				ug/L	254529	Standard
⌈	**Ti**	47	85.3	11.1	**-0.0010**	0.004	414.2	ug/L	84	Standard
|	**V**	51	3722.4	1.8	**-0.0288**	0.008	26.1	ug/L	5785	Standard
|	**Cr**	52	10885.6	1.8	**-0.0062**	0.030	481.6	ug/L	12212	Standard
|	**Cr**	53	881.7	15.1	**-0.9755**	0.059	6.1	ug/L	5042	Standard
|	**Mn**	55	1377.1	5.1	**-0.0116**	0.001	12.3	ug/L	1290	Standard
|	**Co**	59	143.3	13.5	**0.0005**	0.001	208.8	ug/L	143	Standard
|	**Ni**	60	74.3	18.9	**0.0025**	0.004	148.7	ug/L	79	Standard
|	**Cu**	65	154.3	11.8	**0.0110**	0.007	63.3	ug/L	154	Standard
|	**Zn**	66	188.3	4.4	**-0.0118**	0.009	78.4	ug/L	194	Standard
| >	**Ge**	72	213079.7	4.7				ug/L	232024	Standard
|	**As**	75	-233.5	10.5	**0.0025**	0.032	1282.6	ug/L	-297	Standard
|	**Se**	82	28.8	28.7	**0.0853**	0.067	78.0	ug/L	17	Standard
⌊	**Se-1**	77	84.7	8.7	**-0.7040**	0.048	6.8	ug/L	180	Standard
	Ga	71	194813.2	5.4				mg/L	210139	Standard
⌈	**Rb**	85	30.0	33.3				ug/L	12	Standard
| >	**Y**	89	200809.8	3.7				ug/L	214065	Standard
⌊	**Rh**	103	0.0					ug/L	0	Standard
⌈	**Mo**	98	73.5	58.3	**0.0107**	0.010	96.7	ug/L	6	Standard
|	**Ag**	107	100.3	19.8	**0.0055**	0.002	39.6	ug/L	33	Standard
|	**Cd**	111	419.9	11.5	**0.0071**	0.008	113.6	mg/L	437	Standard
|	**Cd**	114	1068.4	2.0	**-0.0023**	0.002	77.7	ug/L	1160	Standard
| >	**In**	115	599594.8	3.7				ug/L	646604	Standard
|	**Sn**	118	917.4	7.2	**0.0067**	0.002	34.2	ug/L	864	Standard
|	**Sb**	123	221.3	38.5	**0.0189**	0.007	39.2	ug/L	18	Standard
⌊	**Ba**	135	55.7	6.3	**0.0049**	0.001	26.6	ug/L	39	Standard
⌈	**Ce**	140	54.3	13.8				ug/L	46	Standard
⌊>	**Tb**	159	659972.7	4.1				ug/L	695671	Standard
⌈	**Ho**	165	7.0					ug/L	9	Standard
|	**Tl**	203	411.3	48.6	**-0.0098**	0.012	120.0	ug/L	687	Standard
|	**Tl**	205	1012.0	47.9	**-0.0077**	0.012	158.1	ug/L	1624	Standard
|	**Pb**	206	302.0	19.3	**0.0018**	0.004	197.2	ug/L	305	Standard
|	**Pb**	207	258.3	10.3	**0.0021**	0.002	78.2	ug/L	231	Standard
|	**Pb**	208	1162.4	14.8	**0.0012**	0.003	205.7	ug/L	1129	Standard
|	**U**	238	54.0	60.0	**0.0045**	0.001	25.9	ug/L	3	Standard
⌊>	**Bi**	209	372033.2	4.7				ug/L	405108	Standard
⌈	**Na**	23	56.7	44.4	**-0.0112**	0.006	57.6	mg/L	118	Standard
|	**Mg**	24	550.0	22.1	**0.0002**	0.000	102.7	mg/L	377	Standard

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	K	39	651.7	17.9	**0.0066**	0.008	116.4	mg/L	583	Standard
	Ca	43	50.0	36.1	**-0.0696**	0.039	56.6	mg/L	73	Standard
	Fe	54	872.7	3.0	**0.0089**	0.010	117.7	mg/L	785	Standard
	Fe	57	4760.7	2.2	**-0.0060**	0.002	31.7	mg/L	6133	Standard
>	**Sc-1**	45	245720.3	5.5				mg/L	254529	Standard
	Cl	35	506977.1	38.2				ug/L	1641778	Standard
	Kr	83	51.9	8.4				ug/L	60	Standard
	Br	81	11390.9	0.9				ug/L	11554	Standard
	P	31	63292.2	6.1				ug/L	45410	Standard
	S	34	740744.9	3.9				ug/L	568857	Standard
	Sr	88	243.3	16.5				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		91.835	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		93.808	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		92.730	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		94.868	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: QC Std 7
Report Date/Time: Thursday, May 10, 2012 16:10:16

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	91.836
	Na	23	
	Mg	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 10, 2012 16:10:16
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Method 6020 - Summary Report

Sample ID: L1205013425
Sample Date/Time: Thursday, May 10, 2012 16:10:39
Number of Replicates: 3
Autosampler Position: 420
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	131489.8	0.5	**11053.9484**	145.823	1.3	ug/L	12600	Standard
|	**Be**	9	605.0	18.1	**0.1539**	0.030	19.6	ug/L	5	Standard
|	**Al**	27	60991036.5	2.6	**3635.8819**	135.603	3.7	ug/L	16102	Standard
⌊>	**Sc**	45	274358.6	1.2				ug/L	254529	Standard
⌈	**Ti**	47	23619.4	3.0	**16.8273**	0.524	3.1	ug/L	84	Standard
|	**V**	51	188990.4	0.9	**13.0574**	0.140	1.1	ug/L	5785	Standard
|	**Cr**	52	106462.4	1.1	**9.1190**	0.123	1.3	ug/L	12212	Standard
|	**Cr**	53	15707.3	1.3	**8.3580**	0.127	1.5	ug/L	5042	Standard
|	**Mn**	55	7068538.3	2.6	**378.0444**	9.916	2.6	ug/L	1290	Standard
|	**Co**	59	81965.8	1.8	**6.1618**	0.109	1.8	ug/L	143	Standard
|	**Ni**	60	41757.2	3.3	**14.9551**	0.522	3.5	ug/L	79	Standard
|	**Cu**	65	25697.4	2.6	**10.1176**	0.265	2.6	ug/L	154	Standard
|	**Zn**	66	33560.5	3.0	**29.2054**	0.910	3.1	ug/L	194	Standard
| >	**Ge**	72	211958.9	0.2				ug/L	232024	Standard
|	**As**	75	2142.1	3.0	**2.2838**	0.061	2.7	ug/L	-297	Standard
|	**Se**	82	51.7	7.1	**0.2832**	0.032	11.2	ug/L	17	Standard
⌊	**Se-1**	77	114.3	7.4	**-0.3031**	0.110	36.4	ug/L	180	Standard
	Ga	71	194172.1	1.2				mg/L	210139	Standard
⌈	**Rb**	85	121977.0	6.5				ug/L	12	Standard
| >	**Y**	89	250249.1	2.9				ug/L	214065	Standard
⌊	**Rh**	103	28.3	40.8				ug/L	0	Standard
⌈	**Mo**	98	397.1	6.6	**0.0963**	0.007	6.9	ug/L	6	Standard
|	**Ag**	107	346.3	5.0	**0.0377**	0.002	5.9	ug/L	33	Standard
|	**Cd**	111	468.5	3.8	**0.0200**	0.005	23.8	mg/L	437	Standard
|	**Cd**	114	1280.7	6.2	**0.0183**	0.007	39.1	ug/L	1160	Standard
| >	**In**	115	593463.4	0.6				ug/L	646604	Standard
|	**Sn**	118	635.3	0.9	**-0.0121**	0.000	3.1	ug/L	864	Standard
|	**Sb**	123	163.0	10.7	**0.0136**	0.002	12.7	ug/L	18	Standard
⌊	**Ba**	135	423538.4	2.8	**100.1979**	3.403	3.4	ug/L	39	Standard
⌈	**Ce**	140	691676.5	2.4				ug/L	46	Standard
⌊>	**Tb**	159	673742.0	0.7				ug/L	695671	Standard
⌈	**Ho**	165	7672.6	1.7				ug/L	9	Standard
|	**Tl**	203	1049.4	13.1	**0.0308**	0.008	26.2	ug/L	687	Standard
|	**Tl**	205	2555.9	12.2	**0.0338**	0.008	22.9	ug/L	1624	Standard
|	**Pb**	206	65228.5	2.3	**5.2388**	0.168	3.2	ug/L	305	Standard
|	**Pb**	207	54446.0	2.1	**5.1266**	0.160	3.1	ug/L	231	Standard
|	**Pb**	208	253846.1	2.0	**5.1354**	0.152	3.0	ug/L	1129	Standard
|	**U**	238	5432.3	0.5	**0.2093**	0.003	1.6	ug/L	3	Standard
⌊>	**Bi**	209	382142.4	1.1				ug/L	405108	Standard
⌈	**Na**	23	260.0	17.6	**0.0398**	0.012	30.9	mg/L	118	Standard
|	**Mg**	24	984682.2	1.1	**1.6714**	0.035	2.1	mg/L	377	Standard

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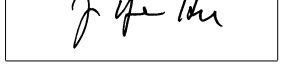

	K	39	16944.5	1.8	**1.3088**	0.038	2.9	mg/L	583	Standard
	Ca	43	1696.8	8.6	**3.5899**	0.365	10.2	mg/L	73	Standard
	Fe	54	43942.9	1.5	**7.1437**	0.190	2.7	mg/L	785	Standard
	Fe	57	1252438.3	1.9	**6.6150**	0.175	2.6	mg/L	6133	Standard
>	**Sc-1**	45	274358.6	1.2				mg/L	254529	Standard
	Cl	35	496367.0	37.0				ug/L	1641778	Standard
	Kr	83	56.1	2.8				ug/L	60	Standard
	Br	81	14232.5	3.6				ug/L	11554	Standard
	P	31	517663.2	1.4				ug/L	45410	Standard
	S	34	628613.6	1.1				ug/L	568857	Standard
	Sr	88	786011.9	3.2				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		91.352	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		116.903	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		91.782	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		96.848	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	94.331
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Ba 135 Upper, S, EEE	Ba	135	

Approved: May 11, 2012

Method 6020 - Summary Report

Sample ID: PBW 50 WG397503-02
Sample Date/Time: Thursday, May 10, 2012 16:13:31
Number of Replicates: 3
Autosampler Position: 421
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	12740.4	5.7	**35.8652**	49.966	139.3	ug/L	12600	Standard
|	**Be**	9	11.7	49.5	**-0.0109**	0.002	16.0	ug/L	5	Standard
|	**Al**	27	13157.4	12.6	**0.0499**	0.101	201.4	ug/L	16102	Standard
⌊>	**Sc**	45	254912.1	2.2				ug/L	254529	Standard
⌈	**Ti**	47	85.3	22.5	**-0.0013**	0.014	1053.9	ug/L	84	Standard
|	**V**	51	3617.8	3.9	**-0.0388**	0.010	25.0	ug/L	5785	Standard
|	**Cr**	52	10749.5	2.7	**-0.0297**	0.009	32.0	ug/L	12212	Standard
|	**Cr**	53	1058.4	15.5	**-0.8701**	0.095	10.9	ug/L	5042	Standard
|	**Mn**	55	2049.8	6.6	**0.0232**	0.007	28.3	ug/L	1290	Standard
|	**Co**	59	140.0	7.5	**0.0001**	0.001	461.1	ug/L	143	Standard
|	**Ni**	60	83.7	20.4	**0.0056**	0.005	97.2	ug/L	79	Standard
|	**Cu**	65	139.7	8.5	**0.0046**	0.003	74.3	ug/L	154	Standard
|	**Zn**	66	2064.8	5.2	**1.6044**	0.050	3.1	ug/L	194	Standard
| >	**Ge**	72	215114.9	2.5				ug/L	232024	Standard
|	**As**	75	-236.4	18.1	**0.0032**	0.035	1074.0	ug/L	-297	Standard
|	**Se**	82	26.4	20.1	**0.0649**	0.048	74.2	ug/L	17	Standard
⌊	**Se-1**	77	106.0	13.1	**-0.4308**	0.217	50.3	ug/L	180	Standard
	Ga	71	195568.7	3.4				mg/L	210139	Standard
⌈	**Rb**	85	45.0	29.4				ug/L	12	Standard
| >	**Y**	89	200308.1	3.6				ug/L	214065	Standard
⌊	**Rh**	103	1.7	173.2				ug/L	0	Standard
⌈	**Mo**	98	40.5	23.9	**0.0024**	0.002	103.0	ug/L	6	Standard
|	**Ag**	107	37.0	22.1	**-0.0026**	0.001	34.8	ug/L	33	Standard
|	**Cd**	111	430.3	6.3	**0.0102**	0.003	29.5	mg/L	437	Standard
|	**Cd**	114	1100.1	6.5	**0.0010**	0.005	526.8	ug/L	1160	Standard
| >	**In**	115	596766.2	3.5				ug/L	646604	Standard
|	**Sn**	118	943.7	3.9	**0.0089**	0.001	9.5	ug/L	864	Standard
|	**Sb**	123	100.5	2.0	**0.0074**	0.000	4.2	ug/L	18	Standard
⌊	**Ba**	135	107.7	37.3	**0.0170**	0.009	51.1	ug/L	39	Standard
⌈	**Ce**	140	91.7	16.4				ug/L	46	Standard
⌊>	**Tb**	159	661281.2	3.1				ug/L	695671	Standard
⌈	**Ho**	165	6.7	60.6				ug/L	9	Standard
|	**Tl**	203	381.3	45.9	**-0.0117**	0.011	93.0	ug/L	687	Standard
|	**Tl**	205	844.0	42.7	**-0.0122**	0.009	77.5	ug/L	1624	Standard
|	**Pb**	206	289.0	4.0	**0.0008**	0.001	96.8	ug/L	305	Standard
|	**Pb**	207	262.0	8.0	**0.0024**	0.001	60.1	ug/L	231	Standard
|	**Pb**	208	1202.4	4.0	**0.0021**	0.000	22.2	ug/L	1129	Standard
|	**U**	238	9.7	15.8	**0.0028**	0.000	2.3	ug/L	3	Standard
⌊>	**Bi**	209	372740.8	2.4				ug/L	405108	Standard
⌈	**Na**	23	68.3	15.2	**-0.0083**	0.003	39.7	mg/L	118	Standard
|	**Mg**	24	466.7	20.8	**-0.0000**	0.000	1469.4	mg/L	377	Standard

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	K	39	643.3	7.1	**0.0041**	0.005	117.4	mg/L	583	Standard
	Ca	43	65.0	40.0	**-0.0360**	0.066	184.4	mg/L	73	Standard
	Fe	54	863.6	5.2	**0.0012**	0.011	871.1	mg/L	785	Standard
	Fe	57	5806.1	0.2	**-0.0012**	0.001	65.6	mg/L	6133	Standard
>	**Sc-1**	45	254912.1	2.2				mg/L	254529	Standard
	Cl	35	497062.0	39.7				ug/L	1641778	Standard
	Kr	83	57.8	11.7				ug/L	60	Standard
	Br	81	11466.0	4.5				ug/L	11554	Standard
	P	31	58045.2	2.7				ug/L	45410	Standard
	S	34	627294.1	6.3				ug/L	568857	Standard
	Sr	88	390.0	9.0				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		92.713	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		93.574	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		92.292	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		95.057	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	92.010
	Na	23	
	Mg	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 50 WG397503-02
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Method 6020 - Summary Report

Sample ID: LCSW 50 WG397503-03
Sample Date/Time: Thursday, May 10, 2012 16:16:23
Number of Replicates: 3
Autosampler Position: 422
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	13904.7	7.2	**61.9325**	76.735	123.9	ug/L	12600	Standard
|	**Be**	9	83424.3	4.1	**23.3421**	0.490	2.1	ug/L	5	Standard
|	**Al**	27	497235.3	6.2	**28.9977**	0.505	1.7	ug/L	16102	Standard
⌊>	**Sc**	45	272959.1	6.0				ug/L	254529	Standard
⌈	**Ti**	47	110.7	6.2	**0.0110**	0.003	28.5	ug/L	84	Standard
|	**V**	51	402816.5	5.5	**25.8086**	1.070	4.1	ug/L	5785	Standard
|	**Cr**	52	311133.3	5.0	**26.1984**	1.018	3.9	ug/L	12212	Standard
|	**Cr**	53	47381.6	5.7	**25.8229**	1.128	4.4	ug/L	5042	Standard
|	**Mn**	55	539353.9	4.0	**26.3881**	0.740	2.8	ug/L	1290	Standard
|	**Co**	59	383042.7	4.6	**26.4511**	0.836	3.2	ug/L	143	Standard
|	**Ni**	60	80304.7	3.4	**26.4066**	0.534	2.0	ug/L	79	Standard
|	**Cu**	65	72508.3	4.1	**26.2702**	0.663	2.5	ug/L	154	Standard
|	**Zn**	66	31029.4	3.1	**24.7504**	0.473	1.9	ug/L	194	Standard
| >	**Ge**	72	230972.6	1.9				ug/L	232024	Standard
|	**As**	75	27230.6	3.5	**24.2253**	0.558	2.3	ug/L	-297	Standard
|	**Se**	82	3169.3	3.6	**24.6879**	0.478	1.9	ug/L	17	Standard
⌊	**Se-1**	77	2009.1	2.3	**22.6566**	0.292	1.3	ug/L	180	Standard
	Ga	71	212732.3	3.1				mg/L	210139	Standard
⌈	**Rb**	85	60.0	16.7				ug/L	12	Standard
| >	**Y**	89	220886.4	3.5				ug/L	214065	Standard
⌊	**Rh**	103	20.0	90.1				ug/L	0	Standard
⌈	**Mo**	98	45.4	12.3	**0.0028**	0.001	37.2	ug/L	6	Standard
|	**Ag**	107	215466.0	4.9	**25.8364**	0.654	2.5	ug/L	33	Standard
|	**Cd**	111	108495.9	3.1	**24.0042**	0.171	0.7	mg/L	437	Standard
|	**Cd**	114	274694.7	3.7	**23.2772**	0.258	1.1	ug/L	1160	Standard
| >	**In**	115	643589.8	2.8				ug/L	646604	Standard
|	**Sn**	118	1222.7	4.7	**0.0219**	0.002	7.0	ug/L	864	Standard
|	**Sb**	123	258994.9	4.0	**23.5424**	0.285	1.2	ug/L	18	Standard
⌊	**Ba**	135	115253.4	3.6	**25.1293**	0.305	1.2	ug/L	39	Standard
⌈	**Ce**	140	197.0	19.4				ug/L	46	Standard
⌊>	**Tb**	159	718276.8	3.5				ug/L	695671	Standard
⌈	**Ho**	165	9.7	6.0				ug/L	9	Standard
|	**Tl**	203	402136.0	3.7	**25.3577**	0.157	0.6	ug/L	687	Standard
|	**Tl**	205	938793.3	4.4	**24.9869**	0.191	0.8	ug/L	1624	Standard
|	**Pb**	206	319542.1	5.1	**25.2484**	0.364	1.4	ug/L	305	Standard
|	**Pb**	207	278668.2	5.3	**25.8159**	0.374	1.4	ug/L	231	Standard
|	**Pb**	208	1272497.1	4.9	**25.3296**	0.282	1.1	ug/L	1129	Standard
|	**U**	238	632887.4	5.1	**23.6308**	0.296	1.3	ug/L	3	Standard
⌊>	**Bi**	209	389580.1	3.9				ug/L	405108	Standard
⌈	**Na**	23	113.3	35.9	**0.0025**	0.013	495.4	mg/L	118	Standard
|	**Mg**	24	716.7	2.9	**0.0004**	0.000	23.4	mg/L	377	Standard

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	K	39	636.7	11.8	**-0.0003**	0.004	1247.0	mg/L	583	Standard
	Ca	43	58.3	13.1	**-0.0619**	0.017	27.8	mg/L	73	Standard
	Fe	54	1332.8	14.2	**0.0690**	0.025	36.6	mg/L	785	Standard
	Fe	57	5881.1	8.4	**-0.0030**	0.001	35.1	mg/L	6133	Standard
>	**Sc-1**	45	272959.1	6.0				mg/L	254529	Standard
	Cl	35	526473.5	35.2				ug/L	1641778	Standard
	Kr	83	56.8	10.1				ug/L	60	Standard
	Br	81	13209.9	2.7				ug/L	11554	Standard
	P	31	86997.6	8.1				ug/L	45410	Standard
	S	34	641382.8	6.4				ug/L	568857	Standard
	Sr	88	995.0	5.3				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		99.547	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		103.187	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		99.534	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		103.249	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: LCSW 50 WG397503-03
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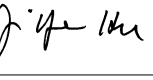

	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	96.167
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: LCSW 50 WG397503-03
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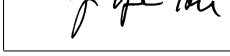

Method 6020 - Summary Report

Sample ID: L1205025903 WG397503-01
Sample Date/Time: Thursday, May 10, 2012 16:19:17
Number of Replicates: 3
Autosampler Position: 423
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	207797.2	1.8	**19502.8265**	516.057	2.6	ug/L	12600	Standard
|	**Be**	9	15.0	33.3	**-0.0100**	0.002	15.8	ug/L	5	Standard
|	**Al**	27	101833.2	4.4	**5.6904**	0.416	7.3	ug/L	16102	Standard
⌊>	**Sc**	45	257154.3	3.8				ug/L	254529	Standard
⌈	**Ti**	47	516.0	19.4	**0.3256**	0.087	26.6	ug/L	84	Standard
|	**V**	51	7912.8	4.1	**0.2941**	0.043	14.5	ug/L	5785	Standard
|	**Cr**	52	19309.3	1.3	**0.8855**	0.048	5.5	ug/L	12212	Standard
|	**Cr**	53	10770.5	12.0	**5.5777**	1.093	19.6	ug/L	5042	Standard
|	**Mn**	55	46185.0	2.0	**2.4969**	0.039	1.6	ug/L	1290	Standard
|	**Co**	59	2124.1	3.0	**0.1568**	0.001	0.5	ug/L	143	Standard
|	**Ni**	60	106491.8	2.8	**39.8878**	0.511	1.3	ug/L	79	Standard
|	**Cu**	65	1005.7	6.6	**0.3662**	0.030	8.2	ug/L	154	Standard
|	**Zn**	66	16667.5	1.7	**15.0834**	0.741	4.9	ug/L	194	Standard
| >	**Ge**	72	202902.6	3.4				ug/L	232024	Standard
|	**As**	75	1599.1	5.2	**1.8302**	0.030	1.6	ug/L	-297	Standard
|	**Se**	82	590.6	6.3	**5.1101**	0.168	3.3	ug/L	17	Standard
⌊	**Se-1**	77	758.4	13.5	**8.7310**	1.731	19.8	ug/L	180	Standard
	Ga	71	183519.2	3.4				mg/L	210139	Standard
⌈	**Rb**	85	29408.6	7.4				ug/L	12	Standard
| >	**Y**	89	193862.1	4.2				ug/L	214065	Standard
⌊	**Rh**	103	116.7	30.1				ug/L	0	Standard
⌈	**Mo**	98	81288.7	3.9	**21.7894**	0.328	1.5	ug/L	6	Standard
|	**Ag**	107	54.0	20.4	**-0.0002**	0.001	589.6	ug/L	33	Standard
|	**Cd**	111	422.6	1.4	**0.0109**	0.004	36.4	mg/L	437	Standard
|	**Cd**	114	1403.8	4.6	**0.0321**	0.004	13.6	ug/L	1160	Standard
| >	**In**	115	582465.5	2.4				ug/L	646604	Standard
|	**Sn**	118	1104.7	2.6	**0.0218**	0.002	10.2	ug/L	864	Standard
|	**Sb**	123	512.0	2.6	**0.0490**	0.002	4.0	ug/L	18	Standard
⌊	**Ba**	135	59867.4	2.5	**14.4213**	0.042	0.3	ug/L	39	Standard
⌈	**Ce**	140	249.7	7.5				ug/L	46	Standard
⌊>	**Tb**	159	669405.8	2.9				ug/L	695671	Standard
⌈	**Ho**	165	11.0	31.5				ug/L	9	Standard
|	**Tl**	203	367.0	6.7	**-0.0088**	0.002	18.8	ug/L	687	Standard
|	**Tl**	205	847.7	6.9	**-0.0084**	0.002	18.2	ug/L	1624	Standard
|	**Pb**	206	676.3	5.9	**0.0414**	0.003	7.7	ug/L	305	Standard
|	**Pb**	207	562.3	3.3	**0.0400**	0.003	7.4	ug/L	231	Standard
|	**Pb**	208	2642.1	1.0	**0.0405**	0.001	3.2	ug/L	1129	Standard
|	**U**	238	784.0	3.7	**0.0377**	0.001	2.3	ug/L	3	Standard
⌊>	**Bi**	209	323234.2	1.4				ug/L	405108	Standard
⌈	**Na**	23	671135.6	0.7	**184.5528**	6.732	3.6	mg/L	118	Standard
|	**Mg**	24	264695.6	1.1	**0.4790**	0.013	2.7	mg/L	377	Standard

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	K	39	11622.8	4.4	**0.9437**	0.015	1.6	mg/L	583	Standard
	Ca	43	930.0	4.3	**2.0222**	0.176	8.7	mg/L	73	Standard
	Fe	54	985.0	6.9	**0.0211**	0.005	25.8	mg/L	785	Standard
	Fe	57	8704.2	1.6	**0.0150**	0.001	8.6	mg/L	6133	Standard
>	**Sc-1**	45	257154.3	3.8				mg/L	254529	Standard
	Cl	35	24502090.1	0.6				ug/L	1641778	Standard
	Kr	83	82.6	21.2				ug/L	60	Standard
	Br	81	369654.0	1.6				ug/L	11554	Standard
	P	31	64243.5	3.7				ug/L	45410	Standard
	S	34	1125265.0	3.2				ug/L	568857	Standard
	Sr	88	2436813.9	3.1				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		87.449	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		90.562	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		90.081	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		96.224	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	79.790
	Na	23	
	Mg	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: L1205025903 WG397503-01
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Method 6020 - Summary Report

Sample ID: L1205025905S WG397503-04

Sample Date/Time: Thursday, May 10, 2012 16:22:09
Number of Replicates: 3
Autosampler Position: 424
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	210884.7	2.5	**20211.0585**	397.060	2.0	ug/L	12600	Standard
|	**Be**	9	83672.4	4.3	**25.3069**	0.406	1.6	ug/L	5	Standard
|	**Al**	27	535311.0	3.0	**33.9122**	0.510	1.5	ug/L	16102	Standard
⌊>	**Sc**	45	252269.0	3.0				ug/L	254529	Standard
⌈	**Ti**	47	722.4	5.4	**0.4748**	0.041	8.6	ug/L	84	Standard
|	**V**	51	388638.0	3.0	**28.1797**	0.368	1.3	ug/L	5785	Standard
|	**Cr**	52	291806.5	3.3	**27.8398**	0.290	1.0	ug/L	12212	Standard
|	**Cr**	53	54167.6	3.3	**33.8244**	0.362	1.1	ug/L	5042	Standard
|	**Mn**	55	511590.9	3.3	**28.2992**	0.370	1.3	ug/L	1290	Standard
|	**Co**	59	329509.5	3.8	**25.7221**	0.469	1.8	ug/L	143	Standard
|	**Ni**	60	174638.2	3.6	**64.9425**	0.841	1.3	ug/L	79	Standard
|	**Cu**	65	59985.9	3.5	**24.5645**	0.312	1.3	ug/L	154	Standard
|	**Zn**	66	29628.3	3.2	**26.7258**	0.240	0.9	ug/L	194	Standard
| >	**Ge**	72	204339.2	2.3				ug/L	232024	Standard
|	**As**	75	27837.3	3.2	**27.9570**	0.265	0.9	ug/L	-297	Standard
|	**Se**	82	3473.9	3.7	**30.6260**	0.475	1.6	ug/L	17	Standard
⌊	**Se-1**	77	2858.6	3.2	**37.5408**	0.335	0.9	ug/L	180	Standard
	Ga	71	184218.0	3.5				mg/L	210139	Standard
⌈	**Rb**	85	29298.3	2.8				ug/L	12	Standard
| >	**Y**	89	196931.1	3.8				ug/L	214065	Standard
⌊	**Rh**	103	221.7	23.7				ug/L	0	Standard
⌈	**Mo**	98	82233.2	3.5	**21.3145**	0.508	2.4	ug/L	6	Standard
|	**Ag**	107	162628.2	3.6	**20.8355**	0.449	2.2	ug/L	33	Standard
|	**Cd**	111	99002.7	3.0	**23.3962**	0.328	1.4	mg/L	437	Standard
|	**Cd**	114	263823.7	2.1	**23.8903**	0.292	1.2	ug/L	1160	Standard
| >	**In**	115	602430.7	1.9				ug/L	646604	Standard
|	**Sn**	118	1036.0	1.6	**0.0145**	0.002	13.4	ug/L	864	Standard
|	**Sb**	123	248198.8	3.4	**24.1045**	0.483	2.0	ug/L	18	Standard
⌊	**Ba**	135	168931.4	3.0	**39.3558**	0.632	1.6	ug/L	39	Standard
⌈	**Ce**	140	615.0	1.7				ug/L	46	Standard
⌊>	**Tb**	159	680846.9	2.7				ug/L	695671	Standard
⌈	**Ho**	165	14.7	34.3				ug/L	9	Standard
|	**Tl**	203	356944.4	2.4	**26.6004**	0.125	0.5	ug/L	687	Standard
|	**Tl**	205	829534.5	2.0	**26.0993**	0.158	0.6	ug/L	1624	Standard
|	**Pb**	206	283770.4	2.1	**26.5097**	0.275	1.0	ug/L	305	Standard
|	**Pb**	207	245733.4	1.7	**26.9173**	0.260	1.0	ug/L	231	Standard
|	**Pb**	208	1127291.5	2.0	**26.5285**	0.166	0.6	ug/L	1129	Standard
|	**U**	238	588290.4	3.2	**25.9632**	0.210	0.8	ug/L	3	Standard
⌊>	**Bi**	209	329656.7	2.4				ug/L	405108	Standard
⌈	**Na**	23	691329.4	1.6	**193.6699**	3.079	1.6	mg/L	118	Standard
|	**Mg**	24	274355.7	3.8	**0.5057**	0.008	1.5	mg/L	377	Standard

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	K	39	11641.1	5.5	**0.9642**	0.028	2.9	mg/L	583	Standard
	Ca	43	911.7	8.5	**2.0189**	0.220	10.9	mg/L	73	Standard
	Fe	54	1046.4	9.8	**0.0355**	0.014	38.6	mg/L	785	Standard
	Fe	57	11252.5	1.5	**0.0307**	0.002	6.9	mg/L	6133	Standard
>	**Sc-1**	45	252269.0	3.0				mg/L	254529	Standard
	Cl	35	24615245.0	1.4				ug/L	1641778	Standard
	Kr	83	127.3	3.2				ug/L	60	Standard
	Br	81	407506.4	2.1				ug/L	11554	Standard
	P	31	67984.8	3.8				ug/L	45410	Standard
	S	34	1148961.8	2.7				ug/L	568857	Standard
	Sr	88	2537714.0	4.5				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		88.068	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		91.996	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		93.168	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		97.869	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	81.375
	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: L1205025907SD WG397503-05

Sample Date/Time: Thursday, May 10, 2012 16:25:01
Number of Replicates: 3
Autosampler Position: 425
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	212028.3	0.5	**20174.7091**	484.494	2.4	ug/L	12600	Standard
|	**Be**	9	82135.4	1.7	**24.6718**	0.267	1.1	ug/L	5	Standard
|	**Al**	27	512880.1	1.2	**32.2236**	0.586	1.8	ug/L	16102	Standard
⌊>	**Sc**	45	254083.2	1.8				ug/L	254529	Standard
⌈	**Ti**	47	852.0	4.8	**0.5727**	0.047	8.3	ug/L	84	Standard
|	**V**	51	390608.6	1.7	**28.3948**	0.375	1.3	ug/L	5785	Standard
|	**Cr**	52	294166.6	2.0	**28.1456**	0.246	0.9	ug/L	12212	Standard
|	**Cr**	53	54528.0	2.1	**34.1495**	0.477	1.4	ug/L	5042	Standard
|	**Mn**	55	509976.7	2.4	**28.2786**	0.377	1.3	ug/L	1290	Standard
|	**Co**	59	332045.2	1.6	**25.9884**	0.393	1.5	ug/L	143	Standard
|	**Ni**	60	173345.9	3.1	**64.6144**	0.639	1.0	ug/L	79	Standard
|	**Cu**	65	60519.6	1.3	**24.8521**	0.582	2.3	ug/L	154	Standard
|	**Zn**	66	29331.7	1.6	**26.5269**	0.556	2.1	ug/L	194	Standard
| >	**Ge**	72	203895.8	2.9				ug/L	232024	Standard
|	**As**	75	27915.2	1.0	**28.1093**	0.561	2.0	ug/L	-297	Standard
|	**Se**	82	3405.4	1.5	**30.0996**	0.506	1.7	ug/L	17	Standard
⌊	**Se-1**	77	2877.3	2.0	**37.9043**	1.073	2.8	ug/L	180	Standard
	Ga	71	182092.8	1.5				mg/L	210139	Standard
⌈	**Rb**	85	30268.6	2.7				ug/L	12	Standard
| >	**Y**	89	193761.5	2.3				ug/L	214065	Standard
⌊	**Rh**	103	308.3	7.7				ug/L	0	Standard
⌈	**Mo**	98	85152.7	1.1	**22.5107**	0.129	0.6	ug/L	6	Standard
|	**Ag**	107	161726.0	1.6	**21.1330**	0.264	1.3	ug/L	33	Standard
|	**Cd**	111	98039.5	1.5	**23.6301**	0.161	0.7	mg/L	437	Standard
|	**Cd**	114	263518.9	1.3	**24.3369**	0.326	1.3	ug/L	1160	Standard
| >	**In**	115	590776.9	1.6				ug/L	646604	Standard
|	**Sn**	118	2738.6	3.0	**0.1340**	0.008	6.3	ug/L	864	Standard
|	**Sb**	123	246750.9	0.9	**24.4418**	0.178	0.7	ug/L	18	Standard
⌊	**Ba**	135	171989.4	1.0	**40.8698**	0.765	1.9	ug/L	39	Standard
⌈	**Ce**	140	166.3	10.6				ug/L	46	Standard
⌊>	**Tb**	159	676701.8	0.1				ug/L	695671	Standard
⌈	**Ho**	165	12.7	31.9				ug/L	9	Standard
|	**Tl**	203	357534.7	0.7	**26.8028**	0.238	0.9	ug/L	687	Standard
|	**Tl**	205	834080.4	0.5	**26.3971**	0.250	0.9	ug/L	1624	Standard
|	**Pb**	206	282462.3	0.4	**26.5422**	0.179	0.7	ug/L	305	Standard
|	**Pb**	207	246886.9	0.2	**27.2010**	0.155	0.6	ug/L	231	Standard
|	**Pb**	208	1125732.4	0.3	**26.6474**	0.081	0.3	ug/L	1129	Standard
|	**U**	238	597202.6	0.6	**26.5164**	0.163	0.6	ug/L	3	Standard
⌊>	**Bi**	209	327712.9	0.5				ug/L	405108	Standard
⌈	**Na**	23	726150.6	0.6	**201.9416**	2.353	1.2	mg/L	118	Standard
|	**Mg**	24	290610.5	0.3	**0.5321**	0.009	1.6	mg/L	377	Standard

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	K	39	11949.7	1.3	**0.9842**	0.009	0.9	mg/L	583	Standard
	Ca	43	963.4	1.8	**2.1256**	0.083	3.9	mg/L	73	Standard
	Fe	54	1019.5	8.4	**0.0296**	0.016	52.9	mg/L	785	Standard
	Fe	57	9032.7	2.2	**0.0175**	0.002	9.1	mg/L	6133	Standard
>	**Sc-1**	45	254083.2	1.8				mg/L	254529	Standard
	Cl	35	25096132.0	1.3				ug/L	1641778	Standard
	Kr	83	151.2	2.0				ug/L	60	Standard
	Br	81	408145.4	1.1				ug/L	11554	Standard
	P	31	69483.2	3.0				ug/L	45410	Standard
	S	34	1174865.3	1.3				ug/L	568857	Standard
	Sr	88	2606512.9	0.6				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		87.877	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		90.515	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		91.366	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		97.273	
	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

80.895

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1205025907SD WG397503-05
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Method 6020 - Summary Report

Sample ID: L1205025908

Sample Date/Time: Thursday, May 10, 2012 16:27:55
Number of Replicates: 3
Autosampler Position: 426
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	274792.5	2.9	**22987.4707**	565.500	2.5	ug/L	12600	Standard
|	**Be**	9	33.3	31.2	**-0.0057**	0.003	46.4	ug/L	5	Standard
|	**Al**	27	175314.1	9.3	**9.0549**	0.823	9.1	ug/L	16102	Standard
⌊>	**Sc**	45	290972.5	0.9				ug/L	254529	Standard
⌈	**Ti**	47	1183.0	6.7	**0.7741**	0.048	6.2	ug/L	84	Standard
|	**V**	51	7509.0	27.5	**0.2351**	0.151	64.4	ug/L	5785	Standard
|	**Cr**	52	41020.8	1.5	**2.8287**	0.090	3.2	ug/L	12212	Standard
|	**Cr**	53	7249.2	4.3	**2.9812**	0.149	5.0	ug/L	5042	Standard
|	**Mn**	55	547530.8	1.6	**28.8636**	0.554	1.9	ug/L	1290	Standard
|	**Co**	59	2420.2	4.0	**0.1698**	0.004	2.5	ug/L	143	Standard
|	**Ni**	60	15471.6	4.5	**5.4594**	0.186	3.4	ug/L	79	Standard
|	**Cu**	65	3127.7	3.6	**1.1729**	0.028	2.4	ug/L	154	Standard
|	**Zn**	66	4927.5	1.4	**4.0877**	0.087	2.1	ug/L	194	Standard
| >	**Ge**	72	214485.7	1.7				ug/L	232024	Standard
|	**As**	75	-9.0	621.5	**0.2179**	0.053	24.4	ug/L	-297	Standard
|	**Se**	82	174.3	6.6	**1.3136**	0.092	7.0	ug/L	17	Standard
⌊	**Se-1**	77	339.3	3.2	**2.6334**	0.214	8.1	ug/L	180	Standard
	Ga	71	195940.6	1.3				mg/L	210139	Standard
⌈	**Rb**	85	7593.6	1.8				ug/L	12	Standard
| >	**Y**	89	215744.5	3.2				ug/L	214065	Standard
⌊	**Rh**	103	236.7	6.8				ug/L	0	Standard
⌈	**Mo**	98	905.8	11.9	**0.2134**	0.020	9.6	ug/L	6	Standard
|	**Ag**	107	642.7	18.3	**0.0703**	0.012	17.5	ug/L	33	Standard
|	**Cd**	111	703.8	12.5	**0.0647**	0.016	24.0	mg/L	437	Standard
|	**Cd**	114	1840.3	9.0	**0.0580**	0.010	17.4	ug/L	1160	Standard
| >	**In**	115	637518.8	2.6				ug/L	646604	Standard
|	**Sn**	118	1333.7	9.4	**0.0298**	0.008	25.4	ug/L	864	Standard
|	**Sb**	123	373.6	34.2	**0.0316**	0.011	33.9	ug/L	18	Standard
⌊	**Ba**	135	23294.6	2.6	**5.1218**	0.063	1.2	ug/L	39	Standard
⌈	**Ce**	140	1667.1	17.2				ug/L	46	Standard
⌊>	**Tb**	159	740298.4	2.5				ug/L	695671	Standard
⌈	**Ho**	165	69.3	5.8				ug/L	9	Standard
|	**Tl**	203	983.7	12.6	**0.0338**	0.008	23.4	ug/L	687	Standard
|	**Tl**	205	2229.8	11.2	**0.0319**	0.006	20.1	ug/L	1624	Standard
|	**Pb**	206	848.7	14.0	**0.0531**	0.009	17.2	ug/L	305	Standard
|	**Pb**	207	707.3	10.9	**0.0516**	0.008	15.0	ug/L	231	Standard
|	**Pb**	208	3312.8	11.9	**0.0520**	0.008	14.8	ug/L	1129	Standard
|	**U**	238	68283.5	1.6	**2.9001**	0.015	0.5	ug/L	3	Standard
⌊>	**Bi**	209	342880.8	2.1				ug/L	405108	Standard
⌈	**Na**	23	280387.4	0.8	**68.0651**	0.770	1.1	mg/L	118	Standard
|	**Mg**	24	44529933.2	2.5	**71.2879**	1.133	1.6	mg/L	377	Standard

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	K	39	21874.1	1.5	**1.6040**	0.019	1.2	mg/L	583	Standard
	Ca	43	39180.6	1.1	**82.1059**	0.390	0.5	mg/L	73	Standard
	Fe	54	1236.1	3.6	**0.0403**	0.007	17.4	mg/L	785	Standard
	Fe	57	62835.1	3.1	**0.2801**	0.007	2.6	mg/L	6133	Standard
>	**Sc-1**	45	290972.5	0.9				mg/L	254529	Standard
	Cl	35	7103651.4	0.9				ug/L	1641778	Standard
	Kr	83	93.9	6.1				ug/L	60	Standard
	Br	81	74019.2	6.8				ug/L	11554	Standard
	P	31	89704.0	2.3				ug/L	45410	Standard
	S	34	20733869.9	3.1				ug/L	568857	Standard
	Sr	88	4681666.4	2.0				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		92.441	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		100.785	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		98.595	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		106.415	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	84.639
	Na	23	
	Mg	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 11, 2012

Method 6020 - Summary Report

Sample ID: L1205025908PS WG397653-01

Sample Date/Time: Thursday, May 10, 2012 16:30:47
Number of Replicates: 3
Autosampler Position: 427
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	310558.0	2.1	**23634.5076**	1542.761	6.5	ug/L	12600	Standard
|	**Be**	9	171707.7	2.0	**40.9016**	2.046	5.0	ug/L	5	Standard
|	**Al**	27	1042478.1	2.3	**52.3985**	2.444	4.7	ug/L	16102	Standard
⌊>	**Sc**	45	320985.7	5.3				ug/L	254529	Standard
⌈	**Ti**	47	1125.7	7.4	**0.6734**	0.077	11.5	ug/L	84	Standard
|	**V**	51	838734.1	3.4	**53.7309**	2.939	5.5	ug/L	5785	Standard
|	**Cr**	52	639645.9	3.2	**54.6374**	3.331	6.1	ug/L	12212	Standard
|	**Cr**	53	96253.1	0.9	**53.7386**	3.247	6.0	ug/L	5042	Standard
|	**Mn**	55	1615880.8	1.3	**78.7931**	4.825	6.1	ug/L	1290	Standard
|	**Co**	59	704518.6	1.8	**48.3732**	2.351	4.9	ug/L	143	Standard
|	**Ni**	60	156811.9	2.2	**51.2644**	2.183	4.3	ug/L	79	Standard
|	**Cu**	65	125343.9	2.7	**45.1614**	1.755	3.9	ug/L	154	Standard
|	**Zn**	66	58328.8	2.7	**46.3751**	1.760	3.8	ug/L	194	Standard
| >	**Ge**	72	232856.2	6.2				ug/L	232024	Standard
|	**As**	75	53630.1	1.5	**47.2147**	2.494	5.3	ug/L	-297	Standard
|	**Se**	82	6587.1	2.6	**51.1550**	2.011	3.9	ug/L	17	Standard
⌊	**Se-1**	77	4381.6	1.4	**51.2364**	2.578	5.0	ug/L	180	Standard
	Ga	71	216488.2	6.2				mg/L	210139	Standard
⌈	**Rb**	85	8070.5	1.3				ug/L	12	Standard
| >	**Y**	89	237916.2	4.8				ug/L	214065	Standard
⌊	**Rh**	103	255.0	18.9				ug/L	0	Standard
⌈	**Mo**	98	1043.5	5.3	**0.2228**	0.000	0.0	ug/L	6	Standard
|	**Ag**	107	366936.6	2.0	**40.1939**	1.536	3.8	ug/L	33	Standard
|	**Cd**	111	211939.2	2.6	**42.8858**	1.594	3.7	mg/L	437	Standard
|	**Cd**	114	545186.5	2.1	**42.2785**	1.882	4.5	ug/L	1160	Standard
| >	**In**	115	705748.8	5.4				ug/L	646604	Standard
|	**Sn**	118	1706.8	1.5	**0.0433**	0.006	13.3	ug/L	864	Standard
|	**Sb**	123	526781.5	2.5	**43.7272**	1.488	3.4	ug/L	18	Standard
⌊	**Ba**	135	256323.3	3.1	**51.0286**	1.573	3.1	ug/L	39	Standard
⌈	**Ce**	140	1900.5	23.8				ug/L	46	Standard
⌊>	**Tb**	159	811720.2	7.0				ug/L	695671	Standard
⌈	**Ho**	165	71.3	0.8				ug/L	9	Standard
|	**Tl**	203	743030.5	1.4	**50.0305**	2.237	4.5	ug/L	687	Standard
|	**Tl**	205	1731477.5	2.2	**49.2145**	2.270	4.6	ug/L	1624	Standard
|	**Pb**	206	579663.6	2.1	**48.9157**	2.441	5.0	ug/L	305	Standard
|	**Pb**	207	504300.6	2.0	**49.8877**	2.201	4.4	ug/L	231	Standard
|	**Pb**	208	2303902.4	2.1	**48.9732**	2.359	4.8	ug/L	1129	Standard
|	**U**	238	1364455.4	2.3	**54.3880**	2.907	5.3	ug/L	3	Standard
⌊>	**Bi**	209	365691.6	5.7				ug/L	405108	Standard
⌈	**Na**	23	304473.1	2.3	**67.0701**	2.069	3.1	mg/L	118	Standard
|	**Mg**	24	47583320.6	2.5	**69.2062**	4.446	6.4	mg/L	377	Standard

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	K	39	23423.1	3.2	**1.5567**	0.041	2.6	mg/L	583	Standard
	Ca	43	40609.4	1.3	**77.2455**	3.250	4.2	mg/L	73	Standard
	Fe	54	1253.7	4.7	**0.0249**	0.010	40.7	mg/L	785	Standard
	Fe	57	68045.9	3.6	**0.2748**	0.016	5.7	mg/L	6133	Standard
>	**Sc-1**	45	320985.7	5.3				mg/L	254529	Standard
	Cl	35	7636027.1	1.0				ug/L	1641778	Standard
	Kr	83	83.3	5.0				ug/L	60	Standard
	Br	81	73165.5	2.9				ug/L	11554	Standard
	P	31	95016.4	3.4				ug/L	45410	Standard
	S	34	22633391.7	1.7				ug/L	568857	Standard
	Sr	88	5249649.6	1.0				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		100.359	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		111.142	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		109.147	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		116.682	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	90.270
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1205025908PS WG397653-01
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Method 6020 - Summary Report

Sample ID: L1205025908SDL WG397653-02

Sample Date/Time: Thursday, May 10, 2012 16:33:39
Number of Replicates: 3
Autosampler Position: 428
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	66370.1	3.1	**5619.9407**	245.765	4.4	ug/L	12600	Standard
|	**Be**	9	1503.5	149.6	**0.4591**	0.709	154.5	ug/L	5	Standard
|	**Al**	27	51879.5	20.5	**2.6334**	0.766	29.1	ug/L	16102	Standard
⌊>	**Sc**	45	248196.4	3.6				ug/L	254529	Standard
⌈	**Ti**	47	305.7	5.5	**0.1636**	0.020	12.2	ug/L	84	Standard
|	**V**	51	11347.8	79.2	**0.5479**	0.691	126.1	ug/L	5785	Standard
|	**Cr**	52	23493.5	28.2	**1.2803**	0.737	57.5	ug/L	12212	Standard
|	**Cr**	53	3217.0	41.0	**0.5752**	0.935	162.5	ug/L	5042	Standard
|	**Mn**	55	119327.1	16.8	**6.5064**	1.332	20.5	ug/L	1290	Standard
|	**Co**	59	5771.5	137.1	**0.4500**	0.638	141.7	ug/L	143	Standard
|	**Ni**	60	4671.8	39.8	**1.7148**	0.753	43.9	ug/L	79	Standard
|	**Cu**	65	1911.2	81.3	**0.7418**	0.668	90.1	ug/L	154	Standard
|	**Zn**	66	3588.1	23.0	**3.0722**	0.860	28.0	ug/L	194	Standard
|>	**Ge**	72	206151.3	3.3				ug/L	232024	Standard
|	**As**	75	330.2	217.7	**0.5681**	0.732	128.9	ug/L	-297	Standard
|	**Se**	82	115.6	73.4	**0.8740**	0.791	90.5	ug/L	17	Standard
⌊	**Se-1**	77	186.3	42.2	**0.7466**	1.172	156.9	ug/L	180	Standard
	Ga	71	179718.9	3.0				mg/L	210139	Standard
⌈	**Rb**	85	1370.1	4.7				ug/L	12	Standard
|>	**Y**	89	193772.9	6.5				ug/L	214065	Standard
⌊	**Rh**	103	63.3	29.9				ug/L	0	Standard
⌈	**Mo**	98	170.4	15.9	**0.0338**	0.009	25.4	ug/L	6	Standard
|	**Ag**	107	2516.5	152.4	**0.3103**	0.488	157.2	ug/L	33	Standard
|	**Cd**	111	2034.9	132.6	**0.3806**	0.637	167.3	mg/L	437	Standard
|	**Cd**	114	5408.5	135.6	**0.3826**	0.663	173.3	ug/L	1160	Standard
|>	**In**	115	638003.7	4.6				ug/L	646604	Standard
|	**Sn**	118	645.0	2.6	**-0.0145**	0.002	13.5	ug/L	864	Standard
|	**Sb**	123	5208.0	133.8	**0.4936**	0.673	136.4	ug/L	18	Standard
⌊	**Ba**	135	6687.7	47.1	**1.4852**	0.771	51.9	ug/L	39	Standard
⌈	**Ce**	140	363.7	3.3				ug/L	46	Standard
⌊>	**Tb**	159	708109.9	2.9				ug/L	695671	Standard
⌈	**Ho**	165	19.3	31.6				ug/L	9	Standard
|	**Tl**	203	5677.2	144.1	**0.3485**	0.560	160.7	ug/L	687	Standard
|	**Tl**	205	13221.8	144.4	**0.3432**	0.551	160.7	ug/L	1624	Standard
|	**Pb**	206	5037.7	143.6	**0.4054**	0.620	153.0	ug/L	305	Standard
|	**Pb**	207	4441.6	144.1	**0.4200**	0.643	153.2	ug/L	231	Standard
|	**Pb**	208	20010.2	143.8	**0.4057**	0.621	153.2	ug/L	1129	Standard
|	**U**	238	24236.0	67.9	**0.9602**	0.682	71.0	ug/L	3	Standard
⌊>	**Bi**	209	373912.8	3.7				ug/L	405108	Standard
⌈	**Na**	23	67875.4	6.3	**19.3341**	1.774	9.2	mg/L	118	Standard
|	**Mg**	24	9690281.1	7.7	**18.2248**	1.893	10.4	mg/L	377	Standard

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	K	39	5597.7	7.2	**0.4456**	0.043	9.6	mg/L	583	Standard
	Ca	43	8837.6	11.0	**21.6355**	3.053	14.1	mg/L	73	Standard
	Fe	54	537.7	7.9	**-0.0545**	0.008	14.8	mg/L	785	Standard
	Fe	57	20049.9	4.6	**0.0834**	0.007	8.0	mg/L	6133	Standard
>	**Sc-1**	45	248196.4	3.6				mg/L	254529	Standard
	Cl	35	1935108.9	8.7				ug/L	1641778	Standard
	Kr	83	54.6	6.8				ug/L	60	Standard
	Br	81	23071.7	4.7				ug/L	11554	Standard
	P	31	31592.9	0.8				ug/L	45410	Standard
	S	34	5145966.2	5.6				ug/L	568857	Standard
	Sr	88	926185.8	6.6				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		88.849	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		90.521	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		98.670	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		101.788	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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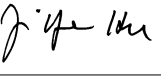

	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	92.300
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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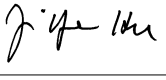

Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, May 10, 2012 16:36:34
Number of Replicates: 3
Autosampler Position: 101
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	14238.4	4.6	**58.7998**	42.406	72.1	ug/L	12600	Standard
|	**Be**	9	184761.8	2.3	**50.3880**	0.784	1.6	ug/L	5	Standard
|	**Al**	27	893037.0	4.3	**51.3718**	1.621	3.2	ug/L	16102	Standard
⌊>	**Sc**	45	279908.8	1.3				ug/L	254529	Standard
⌈	**Ti**	47	160605.4	2.6	**106.4904**	3.113	2.9	ug/L	84	Standard
|	**V**	51	824056.2	3.3	**53.7043**	1.600	3.0	ug/L	5785	Standard
|	**Cr**	52	615726.1	3.5	**53.4740**	1.915	3.6	ug/L	12212	Standard
|	**Cr**	53	91791.6	3.6	**52.0655**	2.002	3.8	ug/L	5042	Standard
|	**Mn**	55	1076514.8	2.4	**53.3570**	1.890	3.5	ug/L	1290	Standard
|	**Co**	59	740767.2	2.0	**51.7539**	1.687	3.3	ug/L	143	Standard
|	**Ni**	60	153467.7	2.9	**51.0606**	1.910	3.7	ug/L	79	Standard
|	**Cu**	65	138538.7	2.4	**50.8062**	1.174	2.3	ug/L	154	Standard
|	**Zn**	66	61215.1	2.5	**49.5519**	1.560	3.1	ug/L	194	Standard
| >	**Ge**	72	228482.0	2.0				ug/L	232024	Standard
|	**As**	75	57258.1	1.9	**51.2513**	0.952	1.9	ug/L	-297	Standard
|	**Se**	82	6799.2	1.0	**53.7548**	1.391	2.6	ug/L	17	Standard
⌊	**Se-1**	77	4330.6	3.9	**51.5229**	2.088	4.1	ug/L	180	Standard
	Ga	71	205495.5	0.5				mg/L	210139	Standard
⌈	**Rb**	85	1053.4	8.8				ug/L	12	Standard
| >	**Y**	89	218842.6	1.4				ug/L	214065	Standard
⌊	**Rh**	103	43.3	40.5				ug/L	0	Standard
⌈	**Mo**	98	418207.1	3.6	**95.0722**	1.898	2.0	ug/L	6	Standard
|	**Ag**	107	436080.7	3.7	**49.0007**	1.161	2.4	ug/L	33	Standard
|	**Cd**	111	234536.2	3.8	**48.6974**	1.048	2.2	mg/L	437	Standard
|	**Cd**	114	605681.5	3.1	**48.1883**	0.699	1.4	ug/L	1160	Standard
| >	**In**	115	686997.4	1.6				ug/L	646604	Standard
|	**Sn**	118	818576.9	3.3	**48.7385**	0.850	1.7	ug/L	864	Standard
|	**Sb**	123	572399.0	3.3	**48.7474**	0.865	1.8	ug/L	18	Standard
⌊	**Ba**	135	245282.4	3.1	**50.1081**	0.768	1.5	ug/L	39	Standard
⌈	**Ce**	140	911.0	4.8				ug/L	46	Standard
⌊>	**Tb**	159	788434.8	1.9				ug/L	695671	Standard
⌈	**Ho**	165	24.0	39.7				ug/L	9	Standard
|	**Tl**	203	853246.1	1.5	**51.2237**	0.520	1.0	ug/L	687	Standard
|	**Tl**	205	2040149.7	7.5	**51.6676**	2.936	5.7	ug/L	1624	Standard
|	**Pb**	206	679382.3	3.0	**51.1038**	0.864	1.7	ug/L	305	Standard
|	**Pb**	207	573495.4	3.7	**50.5737**	1.098	2.2	ug/L	231	Standard
|	**Pb**	208	2659879.4	3.5	**50.3986**	1.073	2.1	ug/L	1129	Standard
|	**U**	238	1400515.9	2.9	**49.7548**	0.548	1.1	ug/L	3	Standard
⌊>	**Bi**	209	409509.5	1.9				ug/L	405108	Standard
⌈	**Na**	23	21290.0	4.5	**5.3459**	0.180	3.4	mg/L	118	Standard
|	**Mg**	24	3056680.5	2.0	**5.0863**	0.056	1.1	mg/L	377	Standard

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	K	39	65616.8	0.8	**5.1112**	0.031	0.6	mg/L	583	Standard
	Ca	43	2283.5	2.0	**4.7940**	0.121	2.5	mg/L	73	Standard
	Fe	54	30011.6	5.4	**4.7289**	0.203	4.3	mg/L	785	Standard
	Fe	57	941437.8	3.6	**4.8630**	0.111	2.3	mg/L	6133	Standard
>	**Sc-1**	45	279908.8	1.3				mg/L	254529	Standard
	Cl	35	503339.2	31.2				ug/L	1641778	Standard
	Kr	83	60.8	8.3				ug/L	60	Standard
	Br	81	13790.4	0.4				ug/L	11554	Standard
	P	31	64788.6	6.2				ug/L	45410	Standard
	S	34	767707.3	4.7				ug/L	568857	Standard
	Sr	88	728.4	1.4				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	102.744		
>	Sc	45			
	Ti	47	106.490		
	V	51	107.409		
	Cr	52	106.948		
	Cr	53			
	Mn	55	106.714		
	Co	59	103.508		
	Ni	60	102.121		
	Cu	65	101.612		
	Zn	66	99.104		
>	Ge	72		98.474	
	As	75	102.503		
	Se	82	107.510		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		102.232	
	Rh	103			
	Mo	98	95.072		
	Ag	107	98.001		
	Cd	111	97.395		
	Cd	114			
>	In	115		106.247	
	Sn	118	97.477		
	Sb	123	97.495		
	Ba	135	100.216		
	Ce	140			
>	Tb	159		113.334	
	Ho	165			
	Tl	203	102.447		
	Tl	205			
	Pb	206	102.208		

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	Pb	207	101.147	
	Pb	208	100.797	
	U	238	99.510	
>	Bi	209		101.086
	Na	23	106.917	
	Mg	24	101.726	
	K	39	102.223	
	Ca	43	95.880	
	Fe	54	94.577	
	Fe	57	97.260	
>	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 10, 2012 16:39:26
Number of Replicates: 3
Autosampler Position: 102
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	13539.4	4.8	**105.1960**	46.889	44.6	ug/L	12600	Standard
|	**Be**	9	16.7	17.3	**-0.0095**	0.001	11.6	ug/L	5	Standard
|	**Al**	27	14592.0	5.9	**0.1336**	0.016	11.7	ug/L	16102	Standard
⌊>	**Sc**	45	257168.4	4.3				ug/L	254529	Standard
⌈	**Ti**	47	180.3	13.1	**0.0640**	0.016	24.5	ug/L	84	Standard
|	**V**	51	3968.2	2.5	**-0.0175**	0.012	71.0	ug/L	5785	Standard
|	**Cr**	52	11556.4	0.7	**0.0338**	0.027	81.0	ug/L	12212	Standard
|	**Cr**	53	875.9	1.9	**-0.9891**	0.012	1.2	ug/L	5042	Standard
|	**Mn**	55	1520.7	5.7	**-0.0057**	0.004	72.0	ug/L	1290	Standard
|	**Co**	59	181.3	12.8	**0.0031**	0.002	59.0	ug/L	143	Standard
|	**Ni**	60	72.7	13.4	**0.0015**	0.003	209.8	ug/L	79	Standard
|	**Cu**	65	305.7	5.2	**0.0680**	0.007	10.0	ug/L	154	Standard
|	**Zn**	66	304.0	0.6	**0.0833**	0.007	8.6	ug/L	194	Standard
|>	**Ge**	72	217683.1	2.3				ug/L	232024	Standard
|	**As**	75	-226.4	9.7	**0.0146**	0.022	153.2	ug/L	-297	Standard
|	**Se**	82	35.0	4.6	**0.1328**	0.019	14.6	ug/L	17	Standard
⌊	**Se-1**	77	91.0	9.4	**-0.6451**	0.099	15.4	ug/L	180	Standard
	Ga	71	198322.8	2.7				mg/L	210139	Standard
⌈	**Rb**	85	35.0	62.3				ug/L	12	Standard
|>	**Y**	89	207439.7	5.4				ug/L	214065	Standard
⌊	**Rh**	103	23.3	81.1				ug/L	0	Standard
⌈	**Mo**	98	79.6	57.9	**0.0109**	0.011	97.7	ug/L	6	Standard
|	**Ag**	107	298.0	25.5	**0.0280**	0.008	28.7	ug/L	33	Standard
|	**Cd**	111	440.8	4.7	**0.0044**	0.002	36.7	mg/L	437	Standard
|	**Cd**	114	1168.1	6.3	**-0.0012**	0.004	311.8	ug/L	1160	Standard
|>	**In**	115	647777.7	3.3				ug/L	646604	Standard
|	**Sn**	118	1040.4	3.0	**0.0099**	0.001	5.8	ug/L	864	Standard
|	**Sb**	123	321.1	38.4	**0.0263**	0.010	39.3	ug/L	18	Standard
⌊	**Ba**	135	57.7	12.5	**0.0043**	0.001	31.8	ug/L	39	Standard
⌈	**Ce**	140	40.7	37.6				ug/L	46	Standard
⌊>	**Tb**	159	716460.2	4.2				ug/L	695671	Standard
⌈	**Ho**	165	13.3	17.3				ug/L	9	Standard
|	**Tl**	203	410.7	37.1	**-0.0110**	0.009	85.3	ug/L	687	Standard
|	**Tl**	205	984.0	45.8	**-0.0097**	0.012	121.3	ug/L	1624	Standard
|	**Pb**	206	339.7	10.1	**0.0035**	0.002	70.7	ug/L	305	Standard
|	**Pb**	207	289.3	11.9	**0.0036**	0.003	80.0	ug/L	231	Standard
|	**Pb**	208	1312.0	12.6	**0.0029**	0.003	104.9	ug/L	1129	Standard
|	**U**	238	97.3	57.9	**0.0060**	0.002	34.3	ug/L	3	Standard
⌊>	**Bi**	209	393550.5	2.4				ug/L	405108	Standard
⌈	**Na**	23	200.0	22.9	**0.0274**	0.010	38.0	mg/L	118	Standard
|	**Mg**	24	1026.7	15.6	**0.0010**	0.000	24.8	mg/L	377	Standard

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	K	39	636.7	3.5	**0.0030**	0.003	107.3	mg/L	583	Standard
	Ca	43	61.7	28.5	**-0.0471**	0.036	76.5	mg/L	73	Standard
	Fe	54	965.8	7.9	**0.0177**	0.008	46.7	mg/L	785	Standard
	Fe	57	5489.3	3.4	**-0.0032**	0.001	32.8	mg/L	6133	Standard
>	**Sc-1**	45	257168.4	4.3				mg/L	254529	Standard
	Cl	35	469323.0	32.6				ug/L	1641778	Standard
	Kr	83	60.4	4.2				ug/L	60	Standard
	Br	81	12596.9	2.0				ug/L	11554	Standard
	P	31	63373.2	3.6				ug/L	45410	Standard
	S	34	718234.0	4.6				ug/L	568857	Standard
	Sr	88	325.0	1.5				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		93.819	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		96.905	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		100.182	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		102.988	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	97.147
	Na	23	
	Mg	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: L1205025909
Sample Date/Time: Thursday, May 10, 2012 16:42:21
Number of Replicates: 3
Autosampler Position: 429
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	75961.7	2.4	**5323.7144**	91.751	1.7	ug/L	12600	Standard
|	**Be**	9	125.0	18.3	**0.0177**	0.006	32.1	ug/L	5	Standard
|	**Al**	27	6729428.1	1.9	**370.1902**	8.840	2.4	ug/L	16102	Standard
⌊>	**Sc**	45	296688.5	1.1				ug/L	254529	Standard
⌈	**Ti**	47	13083.6	2.9	**9.0318**	0.093	1.0	ug/L	84	Standard
|	**V**	51	20127.0	3.4	**1.0910**	0.011	1.0	ug/L	5785	Standard
|	**Cr**	52	49702.2	4.8	**3.5682**	0.107	3.0	ug/L	12212	Standard
|	**Cr**	53	7327.6	0.3	**2.9584**	0.133	4.5	ug/L	5042	Standard
|	**Mn**	55	3484701.8	1.2	**181.1690**	3.462	1.9	ug/L	1290	Standard
|	**Co**	59	15760.2	2.0	**1.1434**	0.008	0.7	ug/L	143	Standard
|	**Ni**	60	14048.8	3.7	**4.8737**	0.063	1.3	ug/L	79	Standard
|	**Cu**	65	5144.2	2.0	**1.9289**	0.016	0.8	ug/L	154	Standard
|	**Zn**	66	11453.3	3.2	**9.5699**	0.110	1.1	ug/L	194	Standard
| >	**Ge**	72	218062.4	2.7				ug/L	232024	Standard
|	**As**	75	333.0	3.4	**0.5373**	0.007	1.3	ug/L	-297	Standard
|	**Se**	82	205.7	7.3	**1.5499**	0.110	7.1	ug/L	17	Standard
⌊	**Se-1**	77	151.7	3.3	**0.1380**	0.105	76.1	ug/L	180	Standard
	Ga	71	199023.6	1.9				mg/L	210139	Standard
⌈	**Rb**	85	22451.7	6.4				ug/L	12	Standard
| >	**Y**	89	224616.4	4.4				ug/L	214065	Standard
⌊	**Rh**	103	136.7	21.4				ug/L	0	Standard
⌈	**Mo**	98	1631.0	7.9	**0.3922**	0.025	6.3	ug/L	6	Standard
|	**Ag**	107	718.4	6.4	**0.0798**	0.004	5.1	ug/L	33	Standard
|	**Cd**	111	1017.6	2.3	**0.1359**	0.007	5.0	mg/L	437	Standard
|	**Cd**	114	2596.0	3.0	**0.1236**	0.004	2.9	ug/L	1160	Standard
| >	**In**	115	635992.0	1.9				ug/L	646604	Standard
|	**Sn**	118	1748.8	1.8	**0.0567**	0.000	0.6	ug/L	864	Standard
|	**Sb**	123	466.1	8.4	**0.0404**	0.003	8.1	ug/L	18	Standard
⌊	**Ba**	135	125827.5	2.2	**27.7658**	0.112	0.4	ug/L	39	Standard
⌈	**Ce**	140	60620.4	2.2				ug/L	46	Standard
⌊>	**Tb**	159	731403.4	1.9				ug/L	695671	Standard
⌈	**Ho**	165	1671.4	4.5				ug/L	9	Standard
|	**Tl**	203	888.0	1.7	**0.0240**	0.002	7.1	ug/L	687	Standard
|	**Tl**	205	2090.1	2.3	**0.0247**	0.000	1.6	ug/L	1624	Standard
|	**Pb**	206	5636.4	3.7	**0.4597**	0.012	2.5	ug/L	305	Standard
|	**Pb**	207	4587.4	2.4	**0.4378**	0.005	1.1	ug/L	231	Standard
|	**Pb**	208	21553.0	2.9	**0.4421**	0.006	1.3	ug/L	1129	Standard
|	**U**	238	150486.9	2.3	**6.0878**	0.047	0.8	ug/L	3	Standard
⌊>	**Bi**	209	359763.1	1.6				ug/L	405108	Standard
⌈	**Na**	23	319715.6	2.1	**76.1177**	1.451	1.9	mg/L	118	Standard
|	**Mg**	24	9855057.2	2.8	**15.4745**	0.442	2.9	mg/L	377	Standard

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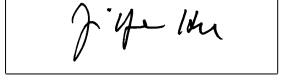

	K	39	8465.7	0.4	**0.5769**	0.007	1.2	mg/L	583	Standard
	Ca	43	16015.1	4.8	**32.7970**	1.480	4.5	mg/L	73	Standard
	Fe	54	3808.5	5.9	**0.4313**	0.030	7.0	mg/L	785	Standard
	Fe	57	118699.9	1.5	**0.5483**	0.006	1.1	mg/L	6133	Standard
>	**Sc-1**	45	296688.5	1.1				mg/L	254529	Standard
	Cl	35	2232914.4	6.0				ug/L	1641778	Standard
	Kr	83	65.1	7.9				ug/L	60	Standard
	Br	81	93814.6	1.6				ug/L	11554	Standard
	P	31	92177.1	1.9				ug/L	45410	Standard
	S	34	3857224.1	2.1				ug/L	568857	Standard
	Sr	88	3228176.6	3.0				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		93.983	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		104.929	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		98.359	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		105.136	
	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

88.807

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: L1205025911
Sample Date/Time: Thursday, May 10, 2012 16:45:13
Number of Replicates: 3
Autosampler Position: 430
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	47442.6	3.6	**2790.8684**	116.036	4.2	ug/L	12600	Standard
|	**Be**	9	13.3	43.3	**-0.0110**	0.001	13.5	ug/L	5	Standard
|	**Al**	27	93592.9	8.5	**4.2816**	0.426	9.9	ug/L	16102	Standard
⌊>	**Sc**	45	301872.5	5.8				ug/L	254529	Standard
⌈	**Ti**	47	2780.6	5.5	**1.8264**	0.052	2.8	ug/L	84	Standard
|	**V**	51	8895.6	6.8	**0.3059**	0.025	8.2	ug/L	5785	Standard
|	**Cr**	52	24664.1	5.8	**1.1946**	0.075	6.3	ug/L	12212	Standard
|	**Cr**	53	2536.9	16.0	**-0.0128**	0.204	1599.1	ug/L	5042	Standard
|	**Mn**	55	5849359.6	4.3	**297.1270**	5.265	1.8	ug/L	1290	Standard
|	**Co**	59	3277.4	3.5	**0.2242**	0.003	1.6	ug/L	143	Standard
|	**Ni**	60	6989.9	5.0	**2.3574**	0.063	2.7	ug/L	79	Standard
|	**Cu**	65	973.7	1.7	**0.3166**	0.017	5.4	ug/L	154	Standard
|	**Zn**	66	2352.5	4.8	**1.7800**	0.039	2.2	ug/L	194	Standard
|>	**Ge**	72	223101.4	2.9				ug/L	232024	Standard
|	**As**	75	6354.1	5.0	**6.0224**	0.135	2.2	ug/L	-297	Standard
|	**Se**	82	118.2	6.6	**0.8006**	0.038	4.8	ug/L	17	Standard
⌊	**Se-1**	77	194.3	9.2	**0.6301**	0.207	32.9	ug/L	180	Standard
	Ga	71	203113.7	2.8				mg/L	210139	Standard
⌈	**Rb**	85	5844.5	5.1				ug/L	12	Standard
|>	**Y**	89	216742.9	1.6				ug/L	214065	Standard
⌊	**Rh**	103	161.7	18.1				ug/L	0	Standard
⌈	**Mo**	98	1852.5	2.4	**0.4317**	0.005	1.1	ug/L	6	Standard
|	**Ag**	107	49.7	20.4	**-0.0015**	0.001	79.5	ug/L	33	Standard
|	**Cd**	111	472.4	4.7	**0.0098**	0.004	40.9	mg/L	437	Standard
|	**Cd**	114	1276.8	5.1	**0.0063**	0.002	39.4	ug/L	1160	Standard
|>	**In**	115	657971.9	2.9				ug/L	646604	Standard
|	**Sn**	118	892.7	2.5	**-0.0003**	0.001	154.8	ug/L	864	Standard
|	**Sb**	123	273.9	6.4	**0.0219**	0.001	6.4	ug/L	18	Standard
⌊	**Ba**	135	997402.5	3.4	**212.7863**	1.664	0.8	ug/L	39	Standard
⌈	**Ce**	140	696.7	3.8				ug/L	46	Standard
⌊>	**Tb**	159	761429.6	2.7				ug/L	695671	Standard
⌈	**Ho**	165	40.3	21.4				ug/L	9	Standard
|	**Tl**	203	711.7	2.5	**0.0094**	0.001	13.4	ug/L	687	Standard
|	**Tl**	205	1647.4	2.8	**0.0094**	0.001	6.4	ug/L	1624	Standard
|	**Pb**	206	513.3	3.9	**0.0186**	0.002	10.5	ug/L	305	Standard
|	**Pb**	207	411.3	5.3	**0.0162**	0.001	8.8	ug/L	231	Standard
|	**Pb**	208	1965.4	2.8	**0.0172**	0.001	4.8	ug/L	1129	Standard
|	**U**	238	1364.7	1.8	**0.0547**	0.001	1.9	ug/L	3	Standard
⌊>	**Bi**	209	380102.4	2.1				ug/L	405108	Standard
⌈	**Na**	23	70197.4	3.3	**16.4206**	0.447	2.7	mg/L	118	Standard
|	**Mg**	24	14510172.9	3.9	**22.4127**	0.697	3.1	mg/L	377	Standard

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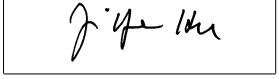

	K	39	6453.0	2.0	**0.4204**	0.032	7.7	mg/L	583	Standard
	Ca	43	25583.3	3.8	**51.6544**	1.570	3.0	mg/L	73	Standard
	Fe	54	25266.9	4.1	**3.6621**	0.087	2.4	mg/L	785	Standard
	Fe	57	811567.5	5.3	**3.8819**	0.038	1.0	mg/L	6133	Standard
>	**Sc-1**	45	301872.5	5.8				mg/L	254529	Standard
	Cl	35	4726738.2	3.8				ug/L	1641778	Standard
	Kr	83	66.9	10.0				ug/L	60	Standard
	Br	81	57502.3	1.8				ug/L	11554	Standard
	P	31	677735.8	4.1				ug/L	45410	Standard
	S	34	1191220.2	4.3				ug/L	568857	Standard
	Sr	88	4688514.9	1.8				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		96.155	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		101.251	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		101.758	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		109.452	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	93.827
	Na	23	
	Mg	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	
Ba 135 Upper, S, EEE	Ba	135	

Approved: May 11, 2012

Method 6020 - Summary Report

Sample ID: L1205025913
Sample Date/Time: Thursday, May 10, 2012 16:48:05
Number of Replicates: 3
Autosampler Position: 431
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	50935.6	4.9	**3206.1236**	88.654	2.8	ug/L	12600	Standard
|	**Be**	9	35.0	14.3	**-0.0053**	0.001	20.8	ug/L	5	Standard
|	**Al**	27	438209.8	4.5	**23.6202**	0.498	2.1	ug/L	16102	Standard
⌊>	**Sc**	45	293507.8	3.5				ug/L	254529	Standard
⌈	**Ti**	47	3609.1	28.3	**2.4355**	0.719	29.5	ug/L	84	Standard
|	**V**	51	7469.3	4.5	**0.2189**	0.017	7.8	ug/L	5785	Standard
|	**Cr**	52	19976.8	3.1	**0.8008**	0.008	1.0	ug/L	12212	Standard
|	**Cr**	53	2379.4	7.9	**-0.0811**	0.072	88.4	ug/L	5042	Standard
|	**Mn**	55	2281807.6	4.6	**117.7905**	3.311	2.8	ug/L	1290	Standard
|	**Co**	59	2309.8	5.0	**0.1577**	0.003	2.1	ug/L	143	Standard
|	**Ni**	60	5449.6	6.5	**1.8628**	0.067	3.6	ug/L	79	Standard
|	**Cu**	65	1061.0	5.6	**0.3555**	0.011	3.1	ug/L	154	Standard
|	**Zn**	66	2816.6	3.6	**2.2055**	0.042	1.9	ug/L	194	Standard
| >	**Ge**	72	219455.1	3.0				ug/L	232024	Standard
|	**As**	75	10719.9	3.6	**10.1703**	0.146	1.4	ug/L	-297	Standard
|	**Se**	82	92.8	12.6	**0.6069**	0.088	14.5	ug/L	17	Standard
⌊	**Se-1**	77	192.3	2.4	**0.6458**	0.036	5.6	ug/L	180	Standard
	Ga	71	196405.3	2.6				mg/L	210139	Standard
⌈	**Rb**	85	6636.5	4.6				ug/L	12	Standard
| >	**Y**	89	211255.1	3.0				ug/L	214065	Standard
⌊	**Rh**	103	131.7	21.6				ug/L	0	Standard
⌈	**Mo**	98	1903.2	4.0	**0.4563**	0.007	1.5	ug/L	6	Standard
|	**Ag**	107	52.3	23.9	**-0.0011**	0.002	145.0	ug/L	33	Standard
|	**Cd**	111	485.0	5.0	**0.0154**	0.003	18.2	mg/L	437	Standard
|	**Cd**	114	1249.5	6.1	**0.0069**	0.004	57.4	ug/L	1160	Standard
| >	**In**	115	640009.5	2.5				ug/L	646604	Standard
|	**Sn**	118	864.4	2.9	**-0.0006**	0.002	395.5	ug/L	864	Standard
|	**Sb**	123	179.7	5.7	**0.0139**	0.001	3.9	ug/L	18	Standard
⌊	**Ba**	135	1190564.2	3.5	**261.1047**	2.712	1.0	ug/L	39	Standard
⌈	**Ce**	140	3335.1	54.2				ug/L	46	Standard
⌊>	**Tb**	159	741253.9	3.4				ug/L	695671	Standard
⌈	**Ho**	165	69.7	20.8				ug/L	9	Standard
|	**Tl**	203	663.0	3.1	**0.0072**	0.001	8.8	ug/L	687	Standard
|	**Tl**	205	1565.1	0.6	**0.0081**	0.001	11.0	ug/L	1624	Standard
|	**Pb**	206	719.4	8.5	**0.0365**	0.004	11.3	ug/L	305	Standard
|	**Pb**	207	617.3	0.8	**0.0371**	0.002	4.6	ug/L	231	Standard
|	**Pb**	208	2886.4	1.9	**0.0373**	0.000	1.2	ug/L	1129	Standard
|	**U**	238	481.7	2.8	**0.0213**	0.001	2.8	ug/L	3	Standard
⌊>	**Bi**	209	371779.6	2.6				ug/L	405108	Standard
⌈	**Na**	23	67970.6	3.8	**16.3352**	0.142	0.9	mg/L	118	Standard
|	**Mg**	24	13273689.6	3.5	**21.0675**	0.006	0.0	mg/L	377	Standard

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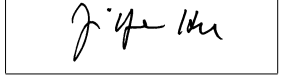

	K	39	5265.9	3.3	**0.3440**	0.022	6.4	mg/L	583	Standard
	Ca	43	26997.4	4.0	**56.0231**	0.837	1.5	mg/L	73	Standard
	Fe	54	31471.3	3.1	**4.7318**	0.094	2.0	mg/L	785	Standard
	Fe	57	1006253.1	4.0	**4.9582**	0.063	1.3	mg/L	6133	Standard
>	**Sc-1**	45	293507.8	3.5				mg/L	254529	Standard
	Cl	35	5396032.2	2.7				ug/L	1641778	Standard
	Kr	83	67.2	4.8				ug/L	60	Standard
	Br	81	42840.5	4.1				ug/L	11554	Standard
	P	31	594094.8	4.1				ug/L	45410	Standard
	S	34	1230503.5	4.5				ug/L	568857	Standard
	Sr	88	4687278.1	4.4				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		94.583	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		98.687	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		98.980	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		106.552	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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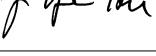

	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	91.773
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Ba 135 Upper, S, EEE	Ba	135	

Approved: May 11, 2012

Method 6020 - Summary Report

Sample ID: L1205024208
Sample Date/Time: Thursday, May 10, 2012 16:50:58
Number of Replicates: 3
Autosampler Position: 432
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	16437.2	2.8	**237.4606**	5.408	2.3	ug/L	12600	Standard
|	**Be**	9	21.7	26.6	**-0.0086**	0.001	16.4	ug/L	5	Standard
|	**Al**	27	435680.5	5.8	**24.2552**	0.861	3.5	ug/L	16102	Standard
⌊>	**Sc**	45	284307.3	2.8				ug/L	254529	Standard
⌈	**Ti**	47	2524.5	2.4	**1.6410**	0.033	2.0	ug/L	84	Standard
|	**V**	51	8995.6	3.1	**0.3085**	0.005	1.7	ug/L	5785	Standard
|	**Cr**	52	18516.7	3.7	**0.6255**	0.003	0.5	ug/L	12212	Standard
|	**Cr**	53	1257.6	1.8	**-0.7794**	0.017	2.2	ug/L	5042	Standard
|	**Mn**	55	4230429.7	3.3	**213.2938**	0.947	0.4	ug/L	1290	Standard
|	**Co**	59	38345.2	4.0	**2.7118**	0.009	0.3	ug/L	143	Standard
|	**Ni**	60	1191.4	6.1	**0.3788**	0.011	2.8	ug/L	79	Standard
|	**Cu**	65	902.4	5.8	**0.2868**	0.016	5.5	ug/L	154	Standard
|	**Zn**	66	2452.5	5.0	**1.8477**	0.032	1.7	ug/L	194	Standard
|>	**Ge**	72	224823.2	3.7				ug/L	232024	Standard
|	**As**	75	284.2	12.4	**0.4833**	0.023	4.8	ug/L	-297	Standard
|	**Se**	82	108.4	7.0	**0.7144**	0.030	4.2	ug/L	17	Standard
⌊	**Se-1**	77	114.7	7.9	**-0.3843**	0.124	32.3	ug/L	180	Standard
	Ga	71	202146.3	3.5				mg/L	210139	Standard
⌈	**Rb**	85	11010.7	5.1				ug/L	12	Standard
|>	**Y**	89	222656.8	3.1				ug/L	214065	Standard
⌊	**Rh**	103	28.3	27.0				ug/L	0	Standard
⌈	**Mo**	98	775.6	5.7	**0.1780**	0.005	3.1	ug/L	6	Standard
|	**Ag**	107	47.3	9.5	**-0.0018**	0.000	24.5	ug/L	33	Standard
|	**Cd**	111	481.0	7.8	**0.0129**	0.007	53.1	mg/L	437	Standard
|	**Cd**	114	1334.8	1.6	**0.0125**	0.002	15.5	ug/L	1160	Standard
|>	**In**	115	650359.4	2.8				ug/L	646604	Standard
|	**Sn**	118	2530.5	2.8	**0.1035**	0.001	0.5	ug/L	864	Standard
|	**Sb**	123	227.9	7.2	**0.0180**	0.001	8.0	ug/L	18	Standard
⌊	**Ba**	135	95337.2	3.2	**20.5711**	0.249	1.2	ug/L	39	Standard
⌈	**Ce**	140	16891.4	3.2				ug/L	46	Standard
⌊>	**Tb**	159	743521.7	2.2				ug/L	695671	Standard
⌈	**Ho**	165	470.3	6.4				ug/L	9	Standard
|	**Tl**	203	363.3	35.7	**-0.0131**	0.008	61.9	ug/L	687	Standard
|	**Tl**	205	784.7	38.7	**-0.0141**	0.008	57.4	ug/L	1624	Standard
|	**Pb**	206	1009.4	1.4	**0.0593**	0.001	2.0	ug/L	305	Standard
|	**Pb**	207	811.7	3.2	**0.0547**	0.001	1.0	ug/L	231	Standard
|	**Pb**	208	3780.5	3.5	**0.0547**	0.001	2.0	ug/L	1129	Standard
|	**U**	238	380.0	2.2	**0.0170**	0.000	2.4	ug/L	3	Standard
⌊>	**Bi**	209	377655.5	2.5				ug/L	405108	Standard
⌈	**Na**	23	123893.0	2.7	**30.7646**	0.044	0.1	mg/L	118	Standard
|	**Mg**	24	671033.7	2.9	**1.0987**	0.005	0.4	mg/L	377	Standard

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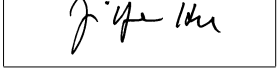

	K	39	8527.4	0.7	**0.6093**	0.021	3.5	mg/L	583	Standard
	Ca	43	1126.7	14.3	**2.2255**	0.297	13.4	mg/L	73	Standard
	Fe	54	29706.5	3.1	**4.6059**	0.032	0.7	mg/L	785	Standard
	Fe	57	895957.8	4.6	**4.5536**	0.088	1.9	mg/L	6133	Standard
>	**Sc-1**	45	284307.3	2.8				mg/L	254529	Standard
	Cl	35	750583.7	20.3				ug/L	1641778	Standard
	Kr	83	54.1	6.3				ug/L	60	Standard
	Br	81	52329.4	2.5				ug/L	11554	Standard
	P	31	122235.3	5.3				ug/L	45410	Standard
	S	34	718496.4	3.6				ug/L	568857	Standard
	Sr	88	245827.1	6.6				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		96.897	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		104.014	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		100.581	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		106.878	
	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

93.223

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1205024208
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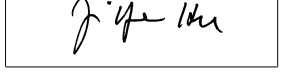
Method 6020 - Summary Report

Sample ID: L1205024210
Sample Date/Time: Thursday, May 10, 2012 16:53:50
Number of Replicates: 3
Autosampler Position: 433
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	20941.1	4.4	**418.8928**	66.646	15.9	ug/L	12600	Standard
|	**Be**	9	38.3	39.8	**-0.0053**	0.004	68.0	ug/L	5	Standard
|	**Al**	27	5016164.8	3.5	**253.3419**	4.548	1.8	ug/L	16102	Standard
⌊>	**Sc**	45	322748.9	2.0				ug/L	254529	Standard
⌈	**Ti**	47	20791.6	3.5	**13.6439**	0.445	3.3	ug/L	84	Standard
|	**V**	51	89126.0	2.1	**5.5122**	0.065	1.2	ug/L	5785	Standard
|	**Cr**	52	31540.1	2.4	**1.7339**	0.008	0.4	ug/L	12212	Standard
|	**Cr**	53	3998.0	7.6	**0.7914**	0.129	16.3	ug/L	5042	Standard
|	**Mn**	55	138979.4	2.5	**6.7682**	0.062	0.9	ug/L	1290	Standard
|	**Co**	59	2691.2	2.7	**0.1765**	0.001	0.6	ug/L	143	Standard
|	**Ni**	60	1492.4	4.4	**0.4694**	0.011	2.3	ug/L	79	Standard
|	**Cu**	65	2239.5	4.2	**0.7668**	0.017	2.3	ug/L	154	Standard
|	**Zn**	66	9532.0	2.6	**7.5159**	0.029	0.4	ug/L	194	Standard
| >	**Ge**	72	229941.9	2.3				ug/L	232024	Standard
|	**As**	75	90.7	26.8	**0.3069**	0.022	7.2	ug/L	-297	Standard
|	**Se**	82	42.0	15.9	**0.1722**	0.049	28.7	ug/L	17	Standard
⌊	**Se-1**	77	95.7	24.2	**-0.6537**	0.259	39.6	ug/L	180	Standard
	Ga	71	210597.0	3.0				mg/L	210139	Standard
⌈	**Rb**	85	5481.0	5.2				ug/L	12	Standard
| >	**Y**	89	223180.4	4.3				ug/L	214065	Standard
⌊	**Rh**	103	18.3	15.7				ug/L	0	Standard
⌈	**Mo**	98	269.1	5.9	**0.0549**	0.003	5.6	ug/L	6	Standard
|	**Ag**	107	85.7	15.9	**0.0026**	0.002	65.8	ug/L	33	Standard
|	**Cd**	111	517.1	0.5	**0.0182**	0.001	5.6	mg/L	437	Standard
|	**Cd**	114	1364.1	2.9	**0.0123**	0.005	38.5	ug/L	1160	Standard
| >	**In**	115	666052.0	1.3				ug/L	646604	Standard
|	**Sn**	118	2384.2	3.9	**0.0907**	0.004	4.3	ug/L	864	Standard
|	**Sb**	123	577.8	5.1	**0.0483**	0.003	6.8	ug/L	18	Standard
⌊	**Ba**	135	49219.2	2.3	**10.3653**	0.106	1.0	ug/L	39	Standard
⌈	**Ce**	140	21384.4	3.6				ug/L	46	Standard
⌊>	**Tb**	159	745235.7	2.1				ug/L	695671	Standard
⌈	**Ho**	165	355.7	3.9				ug/L	9	Standard
|	**Tl**	203	364.7	30.4	**-0.0142**	0.007	48.6	ug/L	687	Standard
|	**Tl**	205	853.4	33.2	**-0.0134**	0.008	56.1	ug/L	1624	Standard
|	**Pb**	206	4134.6	1.4	**0.2958**	0.004	1.2	ug/L	305	Standard
|	**Pb**	207	3480.7	2.3	**0.2918**	0.008	2.8	ug/L	231	Standard
|	**Pb**	208	15999.3	1.3	**0.2879**	0.005	1.7	ug/L	1129	Standard
|	**U**	238	1303.7	2.6	**0.0499**	0.002	4.2	ug/L	3	Standard
⌊>	**Bi**	209	399638.2	1.7				ug/L	405108	Standard
⌈	**Na**	23	17094.6	3.4	**3.7151**	0.088	2.4	mg/L	118	Standard
|	**Mg**	24	1059394.0	1.3	**1.5286**	0.029	1.9	mg/L	377	Standard

Approved: May 11, 2012



	K	39	12313.3	2.0	**0.7887**	0.015	1.9	mg/L	583	Standard
	Ca	43	4485.7	5.3	**8.2987**	0.298	3.6	mg/L	73	Standard
	Fe	54	2498.9	4.9	**0.1998**	0.025	12.3	mg/L	785	Standard
	Fe	57	58285.2	1.6	**0.2287**	0.003	1.4	mg/L	6133	Standard
>	**Sc-1**	45	322748.9	2.0				mg/L	254529	Standard
	Cl	35	551078.4	26.5				ug/L	1641778	Standard
	Kr	83	56.1	8.7				ug/L	60	Standard
	Br	81	17310.7	5.4				ug/L	11554	Standard
	P	31	106865.1	3.8				ug/L	45410	Standard
	S	34	766269.9	1.8				ug/L	568857	Standard
	Sr	88	651540.4	2.7				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		99.103	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		104.258	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		103.008	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		107.125	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1205024210
Report Date/Time: Thursday, May 10, 2012 16:56:22
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	98.650
	Na	23	
	Mg	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: L1205024210
Report Date/Time: Thursday, May 10, 2012 16:56:22
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Method 6020 - Summary Report

Sample ID: L1205025701
Sample Date/Time: Thursday, May 10, 2012 16:56:42
Number of Replicates: 3
Autosampler Position: 434
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	110431.3	3.3	**8899.1898**	70.719	0.8	ug/L	12600	Standard
|	**Be**	9	20.0	75.0	**-0.0090**	0.004	45.1	ug/L	5	Standard
|	**Al**	27	162863.8	17.8	**8.7193**	1.496	17.2	ug/L	16102	Standard
⌊>	**Sc**	45	279310.6	2.8				ug/L	254529	Standard
⌈	**Ti**	47	693.0	9.5	**0.4067**	0.046	11.4	ug/L	84	Standard
|	**V**	51	6480.7	6.8	**0.1416**	0.025	17.3	ug/L	5785	Standard
|	**Cr**	52	18286.7	5.0	**0.6076**	0.062	10.3	ug/L	12212	Standard
|	**Cr**	53	3413.7	2.1	**0.5046**	0.087	17.3	ug/L	5042	Standard
|	**Mn**	55	100462.5	2.9	**4.9921**	0.128	2.6	ug/L	1290	Standard
|	**Co**	59	300.3	6.7	**0.0111**	0.001	13.3	ug/L	143	Standard
|	**Ni**	60	957.0	5.1	**0.3003**	0.012	4.0	ug/L	79	Standard
|	**Cu**	65	2087.5	2.0	**0.7307**	0.025	3.4	ug/L	154	Standard
|	**Zn**	66	4085.6	2.3	**3.2029**	0.058	1.8	ug/L	194	Standard
| >	**Ge**	72	224390.6	2.3				ug/L	232024	Standard
|	**As**	75	282.1	9.3	**0.4825**	0.026	5.3	ug/L	-297	Standard
|	**Se**	82	150.1	7.8	**1.0531**	0.088	8.3	ug/L	17	Standard
⌊	**Se-1**	77	240.3	4.4	**1.1960**	0.198	16.5	ug/L	180	Standard
	Ga	71	202944.6	2.4				mg/L	210139	Standard
⌈	**Rb**	85	3760.5	7.9				ug/L	12	Standard
| >	**Y**	89	212417.2	4.4				ug/L	214065	Standard
⌊	**Rh**	103	35.0	42.9				ug/L	0	Standard
⌈	**Mo**	98	24118.2	4.6	**5.8779**	0.237	4.0	ug/L	6	Standard
|	**Ag**	107	30.3	11.6	**-0.0037**	0.000	9.5	ug/L	33	Standard
|	**Cd**	111	485.7	3.3	**0.0156**	0.002	11.3	mg/L	437	Standard
|	**Cd**	114	1313.1	5.0	**0.0124**	0.005	41.0	ug/L	1160	Standard
| >	**In**	115	640152.5	2.4				ug/L	646604	Standard
|	**Sn**	118	1217.7	4.7	**0.0220**	0.004	16.5	ug/L	864	Standard
|	**Sb**	123	122.2	2.7	**0.0087**	0.000	1.4	ug/L	18	Standard
⌊	**Ba**	135	144249.3	2.1	**31.6365**	0.888	2.8	ug/L	39	Standard
⌈	**Ce**	140	782.0	20.3				ug/L	46	Standard
⌊>	**Tb**	159	730453.2	2.1				ug/L	695671	Standard
⌈	**Ho**	165	42.0	22.7				ug/L	9	Standard
|	**Tl**	203	552.3	3.0	**0.0003**	0.001	436.3	ug/L	687	Standard
|	**Tl**	205	1334.7	3.6	**0.0022**	0.001	52.4	ug/L	1624	Standard
|	**Pb**	206	698.7	2.2	**0.0356**	0.001	1.7	ug/L	305	Standard
|	**Pb**	207	544.0	3.8	**0.0306**	0.002	6.0	ug/L	231	Standard
|	**Pb**	208	2638.4	1.9	**0.0329**	0.000	1.2	ug/L	1129	Standard
|	**U**	238	307.7	5.9	**0.0146**	0.001	4.9	ug/L	3	Standard
⌊>	**Bi**	209	366926.7	1.4				ug/L	405108	Standard
⌈	**Na**	23	259708.9	1.5	**65.6895**	0.852	1.3	mg/L	118	Standard
|	**Mg**	24	145541.7	4.7	**0.2419**	0.010	3.9	mg/L	377	Standard

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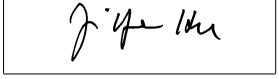

	K	39	2720.2	2.6	**0.1631**	0.010	6.1	mg/L	583	Standard
	Ca	43	650.0	1.5	**1.2306**	0.057	4.6	mg/L	73	Standard
	Fe	54	1013.3	5.4	**0.0123**	0.013	108.4	mg/L	785	Standard
	Fe	57	8302.3	4.9	**0.0089**	0.001	10.5	mg/L	6133	Standard
>	**Sc-1**	45	279310.6	2.8				mg/L	254529	Standard
	Cl	35	4543418.6	2.9				ug/L	1641778	Standard
	Kr	83	61.7	10.8				ug/L	60	Standard
	Br	81	87436.9	4.2				ug/L	11554	Standard
	P	31	75294.4	4.4				ug/L	45410	Standard
	S	34	737080.7	1.8				ug/L	568857	Standard
	Sr	88	838425.9	3.9				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		96.710	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		99.230	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		99.002	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		105.000	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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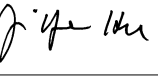

	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	90.575
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1205025703
Sample Date/Time: Thursday, May 10, 2012 16:59:36
Number of Replicates: 3
Autosampler Position: 435
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	121030.2	3.6	**9236.7089**	65.787	0.7	ug/L	12600	Standard
|	**Be**	9	10.0	132.3	**-0.0119**	0.003	28.3	ug/L	5	Standard
|	**Al**	27	114917.9	3.6	**5.5491**	0.022	0.4	ug/L	16102	Standard
⌊>	**Sc**	45	296314.0	3.9				ug/L	254529	Standard
⌈	**Ti**	47	810.7	9.0	**0.4705**	0.028	6.0	ug/L	84	Standard
|	**V**	51	6347.4	4.9	**0.1214**	0.008	6.7	ug/L	5785	Standard
|	**Cr**	52	17758.1	3.1	**0.5177**	0.041	7.8	ug/L	12212	Standard
|	**Cr**	53	1216.7	16.6	**-0.8237**	0.095	11.6	ug/L	5042	Standard
|	**Mn**	55	1773048.7	4.0	**87.0928**	1.479	1.7	ug/L	1290	Standard
|	**Co**	59	853.7	6.9	**0.0488**	0.002	4.0	ug/L	143	Standard
|	**Ni**	60	2680.2	7.1	**0.8587**	0.014	1.6	ug/L	79	Standard
|	**Cu**	65	3470.1	4.7	**1.2118**	0.014	1.2	ug/L	154	Standard
|	**Zn**	66	5271.6	4.3	**4.0657**	0.090	2.2	ug/L	194	Standard
| >	**Ge**	72	230752.8	5.6				ug/L	232024	Standard
|	**As**	75	-73.5	19.3	**0.1613**	0.014	8.7	ug/L	-297	Standard
|	**Se**	82	33.6	13.3	**0.1074**	0.049	45.4	ug/L	17	Standard
⌊	**Se-1**	77	125.7	15.5	**-0.2931**	0.163	55.7	ug/L	180	Standard
	Ga	71	207905.8	4.8				mg/L	210139	Standard
⌈	**Rb**	85	19479.2	6.5				ug/L	12	Standard
| >	**Y**	89	222473.1	0.7				ug/L	214065	Standard
⌊	**Rh**	103	250.0	8.7				ug/L	0	Standard
⌈	**Mo**	98	1347.1	2.7	**0.3081**	0.000	0.2	ug/L	6	Standard
|	**Ag**	107	88.0	16.8	**0.0028**	0.001	52.0	ug/L	33	Standard
|	**Cd**	111	533.2	1.0	**0.0218**	0.003	16.0	mg/L	437	Standard
|	**Cd**	114	1359.0	4.4	**0.0119**	0.003	28.2	ug/L	1160	Standard
| >	**In**	115	665342.7	2.7				ug/L	646604	Standard
|	**Sn**	118	1094.7	3.1	**0.0115**	0.001	7.7	ug/L	864	Standard
|	**Sb**	123	141.9	6.4	**0.0100**	0.001	5.1	ug/L	18	Standard
⌊	**Ba**	135	529366.4	3.6	**111.6779**	1.737	1.6	ug/L	39	Standard
⌈	**Ce**	140	657.0	6.5				ug/L	46	Standard
⌊>	**Tb**	159	752374.2	2.4				ug/L	695671	Standard
⌈	**Ho**	165	33.0	29.2				ug/L	9	Standard
|	**Tl**	203	373.0	40.7	**-0.0131**	0.009	69.2	ug/L	687	Standard
|	**Tl**	205	907.4	39.0	**-0.0113**	0.009	78.4	ug/L	1624	Standard
|	**Pb**	206	3065.0	3.6	**0.2211**	0.005	2.2	ug/L	305	Standard
|	**Pb**	207	2609.9	3.2	**0.2209**	0.002	1.1	ug/L	231	Standard
|	**Pb**	208	11922.2	3.4	**0.2163**	0.004	1.8	ug/L	1129	Standard
|	**U**	238	3927.2	5.6	**0.1501**	0.005	3.3	ug/L	3	Standard
⌊>	**Bi**	209	386789.8	2.3				ug/L	405108	Standard
⌈	**Na**	23	52042.6	3.2	**12.3859**	0.151	1.2	mg/L	118	Standard
|	**Mg**	24	2922895.0	4.1	**4.5943**	0.011	0.2	mg/L	377	Standard

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	K	39	8248.9	2.8	**0.5617**	0.008	1.5	mg/L	583	Standard
	Ca	43	11996.4	4.9	**24.5456**	0.242	1.0	mg/L	73	Standard
	Fe	54	1219.1	7.0	**0.0340**	0.006	17.7	mg/L	785	Standard
	Fe	57	22329.8	3.3	**0.0754**	0.002	2.6	mg/L	6133	Standard
>	**Sc-1**	45	296314.0	3.9				mg/L	254529	Standard
	Cl	35	529081.0	31.2				ug/L	1641778	Standard
	Kr	83	63.0	5.1				ug/L	60	Standard
	Br	81	16828.5	2.5				ug/L	11554	Standard
	P	31	66875.9	5.3				ug/L	45410	Standard
	S	34	1238313.9	2.8				ug/L	568857	Standard
	Sr	88	10309368.5	2.2				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		99.452	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		103.928	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		102.898	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		108.151	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1205025703
Report Date/Time: Thursday, May 10, 2012 17:02:09
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	95.478
	Na	23	
	Mg	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
Ba 135 Upper, S, EEE	Ba	135	

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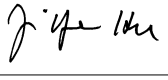

Method 6020 - Summary Report

Sample ID: L1205025705
Sample Date/Time: Thursday, May 10, 2012 17:02:29
Number of Replicates: 3
Autosampler Position: 436
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	130024.0	2.2	**10092.5239**	91.171	0.9	ug/L	12600	Standard
|	**Be**	9	18.3	31.5	**-0.0097**	0.001	14.9	ug/L	5	Standard
|	**Al**	27	100214.1	4.4	**4.7729**	0.087	1.8	ug/L	16102	Standard
⌊>	**Sc**	45	294319.3	2.8				ug/L	254529	Standard
⌈	**Ti**	47	1014.0	4.2	**0.6191**	0.036	5.8	ug/L	84	Standard
|	**V**	51	6069.4	3.5	**0.1116**	0.010	8.9	ug/L	5785	Standard
|	**Cr**	52	18382.5	1.9	**0.6058**	0.030	5.0	ug/L	12212	Standard
|	**Cr**	53	2066.0	25.1	**-0.3040**	0.317	104.3	ug/L	5042	Standard
|	**Mn**	55	114618.2	3.5	**5.6675**	0.124	2.2	ug/L	1290	Standard
|	**Co**	59	464.3	6.3	**0.0225**	0.002	7.3	ug/L	143	Standard
|	**Ni**	60	2484.5	6.1	**0.8118**	0.034	4.2	ug/L	79	Standard
|	**Cu**	65	13602.4	4.0	**4.9985**	0.075	1.5	ug/L	154	Standard
|	**Zn**	66	17888.9	4.0	**14.5139**	0.209	1.4	ug/L	194	Standard
| >	**Ge**	72	225915.9	2.6				ug/L	232024	Standard
|	**As**	75	446.6	4.2	**0.6292**	0.024	3.8	ug/L	-297	Standard
|	**Se**	82	44.7	10.4	**0.2007**	0.046	23.0	ug/L	17	Standard
⌊	**Se-1**	77	128.3	13.7	**-0.2181**	0.256	117.4	ug/L	180	Standard
	Ga	71	203006.2	3.2				mg/L	210139	Standard
⌈	**Rb**	85	11484.4	7.2				ug/L	12	Standard
| >	**Y**	89	220163.2	1.2				ug/L	214065	Standard
⌊	**Rh**	103	253.3	8.9				ug/L	0	Standard
⌈	**Mo**	98	530.6	4.3	**0.1172**	0.007	5.7	ug/L	6	Standard
|	**Ag**	107	65.3	4.4	**0.0003**	0.000	160.7	ug/L	33	Standard
|	**Cd**	111	522.9	3.3	**0.0202**	0.005	23.4	mg/L	437	Standard
|	**Cd**	114	1297.5	1.9	**0.0075**	0.003	38.2	ug/L	1160	Standard
| >	**In**	115	661640.3	2.2				ug/L	646604	Standard
|	**Sn**	118	1189.0	4.9	**0.0177**	0.002	12.1	ug/L	864	Standard
|	**Sb**	123	163.1	7.8	**0.0119**	0.001	6.9	ug/L	18	Standard
⌊	**Ba**	135	271961.4	3.5	**57.6882**	0.959	1.7	ug/L	39	Standard
⌈	**Ce**	140	493.3	12.7				ug/L	46	Standard
⌊>	**Tb**	159	755160.1	0.9				ug/L	695671	Standard
⌈	**Ho**	165	27.3	28.4				ug/L	9	Standard
|	**Tl**	203	478.7	17.8	**-0.0060**	0.005	82.4	ug/L	687	Standard
|	**Tl**	205	1081.4	22.7	**-0.0063**	0.006	97.0	ug/L	1624	Standard
|	**Pb**	206	2820.9	3.8	**0.2040**	0.007	3.2	ug/L	305	Standard
|	**Pb**	207	2343.2	3.1	**0.1982**	0.006	2.9	ug/L	231	Standard
|	**Pb**	208	10868.2	4.0	**0.1974**	0.007	3.6	ug/L	1129	Standard
|	**U**	238	348.3	3.9	**0.0156**	0.001	3.2	ug/L	3	Standard
⌊>	**Bi**	209	382827.9	1.6				ug/L	405108	Standard
⌈	**Na**	23	78618.6	2.9	**18.8512**	0.457	2.4	mg/L	118	Standard
|	**Mg**	24	1348484.4	1.8	**2.1340**	0.023	1.1	mg/L	377	Standard

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	K	39	7218.4	2.0	**0.4887**	0.008	1.6	mg/L	583	Standard
	Ca	43	8347.3	4.2	**17.1374**	0.269	1.6	mg/L	73	Standard
	Fe	54	1441.7	5.7	**0.0698**	0.007	9.4	mg/L	785	Standard
	Fe	57	28228.0	5.2	**0.1053**	0.004	3.8	mg/L	6133	Standard
>	**Sc-1**	45	294319.3	2.8				mg/L	254529	Standard
	Cl	35	748371.6	19.1				ug/L	1641778	Standard
	Kr	83	54.8	10.3				ug/L	60	Standard
	Br	81	18304.4	3.3				ug/L	11554	Standard
	P	31	67661.7	4.1				ug/L	45410	Standard
	S	34	1309354.3	3.2				ug/L	568857	Standard
	Sr	88	10513162.4	3.5				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		97.368	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		102.849	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		102.325	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		108.551	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	94.500
	Na	23	
	Mg	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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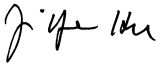

Method 6020 - Summary Report

Sample ID: L1205025707
Sample Date/Time: Thursday, May 10, 2012 17:05:21
Number of Replicates: 3
Autosampler Position: 437
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	30507.4	4.1	**1508.4814**	91.368	6.1	ug/L	12600	Standard
|	**Be**	9	316.7	15.2	**0.0704**	0.010	14.6	ug/L	5	Standard
|	**Al**	27	11687292.9	4.1	**671.6335**	16.429	2.4	ug/L	16102	Standard
⌊>	**Sc**	45	284246.7	3.3				ug/L	254529	Standard
⌈	**Ti**	47	21153.8	4.1	**13.9165**	0.275	2.0	ug/L	84	Standard
|	**V**	51	22076.0	5.6	**1.1500**	0.049	4.3	ug/L	5785	Standard
|	**Cr**	52	22225.6	4.0	**0.9196**	0.034	3.7	ug/L	12212	Standard
|	**Cr**	53	2962.8	20.8	**0.1943**	0.330	170.0	ug/L	5042	Standard
|	**Mn**	55	904862.9	3.8	**44.6502**	0.743	1.7	ug/L	1290	Standard
|	**Co**	59	7923.4	2.8	**0.5413**	0.009	1.7	ug/L	143	Standard
|	**Ni**	60	4625.7	4.2	**1.5095**	0.032	2.1	ug/L	79	Standard
|	**Cu**	65	5348.3	3.5	**1.9059**	0.026	1.4	ug/L	154	Standard
|	**Zn**	66	15855.6	3.3	**12.6535**	0.148	1.2	ug/L	194	Standard
|>	**Ge**	72	229294.9	2.3				ug/L	232024	Standard
|	**As**	75	208.6	18.7	**0.4112**	0.031	7.5	ug/L	-297	Standard
|	**Se**	82	53.5	10.7	**0.2642**	0.042	15.7	ug/L	17	Standard
⌊	**Se-1**	77	125.3	23.7	**-0.2848**	0.345	121.3	ug/L	180	Standard
	Ga	71	208749.5	2.6				mg/L	210139	Standard
⌈	**Rb**	85	40659.5	2.8				ug/L	12	Standard
|>	**Y**	89	248808.1	5.1				ug/L	214065	Standard
⌊	**Rh**	103	15.0	33.3				ug/L	0	Standard
⌈	**Mo**	98	1310.1	4.1	**0.2980**	0.008	2.5	ug/L	6	Standard
|	**Ag**	107	103.3	14.4	**0.0045**	0.001	30.9	ug/L	33	Standard
|	**Cd**	111	634.3	4.6	**0.0428**	0.005	12.8	mg/L	437	Standard
|	**Cd**	114	1595.9	3.8	**0.0308**	0.002	7.0	ug/L	1160	Standard
|>	**In**	115	668383.1	2.9				ug/L	646604	Standard
|	**Sn**	118	1648.4	4.8	**0.0451**	0.004	8.4	ug/L	864	Standard
|	**Sb**	123	342.9	8.0	**0.0275**	0.002	5.7	ug/L	18	Standard
⌊	**Ba**	135	125784.5	3.9	**26.4071**	0.257	1.0	ug/L	39	Standard
⌈	**Ce**	140	102997.2	3.7				ug/L	46	Standard
⌊>	**Tb**	159	747686.5	2.6				ug/L	695671	Standard
⌈	**Ho**	165	3459.1	2.5				ug/L	9	Standard
|	**Tl**	203	640.3	16.3	**0.0027**	0.006	224.3	ug/L	687	Standard
|	**Tl**	205	1480.4	21.5	**0.0029**	0.008	280.4	ug/L	1624	Standard
|	**Pb**	206	15538.0	4.1	**1.1759**	0.015	1.3	ug/L	305	Standard
|	**Pb**	207	12863.1	3.3	**1.1410**	0.009	0.7	ug/L	231	Standard
|	**Pb**	208	60279.0	3.9	**1.1488**	0.013	1.2	ug/L	1129	Standard
|	**U**	238	7573.2	5.2	**0.2782**	0.007	2.5	ug/L	3	Standard
⌊>	**Bi**	209	399310.1	2.9				ug/L	405108	Standard
⌈	**Na**	23	4350.6	3.3	**1.0543**	0.013	1.3	mg/L	118	Standard
|	**Mg**	24	739962.4	3.8	**1.2119**	0.025	2.0	mg/L	377	Standard

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	K	39	29204.8	1.7	**2.2122**	0.061	2.7	mg/L	583	Standard
	Ca	43	2973.6	3.6	**6.2026**	0.191	3.1	mg/L	73	Standard
	Fe	54	5908.5	6.2	**0.7936**	0.051	6.5	mg/L	785	Standard
	Fe	57	153312.6	4.1	**0.7512**	0.023	3.1	mg/L	6133	Standard
>	**Sc-1**	45	284246.7	3.3				mg/L	254529	Standard
	Cl	35	596142.2	25.1				ug/L	1641778	Standard
	Kr	83	61.0	2.4				ug/L	60	Standard
	Br	81	18640.6	3.0				ug/L	11554	Standard
	P	31	225794.7	4.5				ug/L	45410	Standard
	S	34	944104.6	3.8				ug/L	568857	Standard
	Sr	88	538320.5	5.7				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		98.824	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		116.230	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		103.368	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		107.477	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	98.569
	Na	23	
	Mg	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: L1205025707
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Method 6020 - Summary Report

Sample ID: L1205025709
Sample Date/Time: Thursday, May 10, 2012 17:08:14
Number of Replicates: 3
Autosampler Position: 438
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	31410.9	3.2	**1522.9351**	47.395	3.1	ug/L	12600	Standard
|	**Be**	9	280.0	17.6	**0.0589**	0.012	20.2	ug/L	5	Standard
|	**Al**	27	3168232.5	1.9	**177.2377**	2.326	1.3	ug/L	16102	Standard
⌊>	**Sc**	45	291044.2	1.6				ug/L	254529	Standard
⌈	**Ti**	47	6107.9	3.4	**3.9530**	0.058	1.5	ug/L	84	Standard
|	**V**	51	10057.4	3.2	**0.3625**	0.019	5.4	ug/L	5785	Standard
|	**Cr**	52	17345.3	3.8	**0.4813**	0.046	9.6	ug/L	12212	Standard
|	**Cr**	53	1954.3	23.1	**-0.4009**	0.217	54.1	ug/L	5042	Standard
|	**Mn**	55	208162.9	2.7	**10.1530**	0.170	1.7	ug/L	1290	Standard
|	**Co**	59	3856.2	2.7	**0.2567**	0.006	2.3	ug/L	143	Standard
|	**Ni**	60	6214.6	3.1	**2.0254**	0.026	1.3	ug/L	79	Standard
|	**Cu**	65	3076.3	1.4	**1.0698**	0.037	3.5	ug/L	154	Standard
|	**Zn**	66	13241.5	4.0	**10.4781**	0.102	1.0	ug/L	194	Standard
| >	**Ge**	72	230653.1	4.3				ug/L	232024	Standard
|	**As**	75	-55.6	35.4	**0.1771**	0.018	10.0	ug/L	-297	Standard
|	**Se**	82	44.3	4.2	**0.1894**	0.005	2.6	ug/L	17	Standard
⌊	**Se-1**	77	126.0	19.4	**-0.2873**	0.253	88.1	ug/L	180	Standard
	Ga	71	211802.9	3.4				mg/L	210139	Standard
⌈	**Rb**	85	15184.3	5.6				ug/L	12	Standard
| >	**Y**	89	244719.7	5.7				ug/L	214065	Standard
⌊	**Rh**	103	15.0	88.2				ug/L	0	Standard
⌈	**Mo**	98	342.5	7.1	**0.0720**	0.003	4.1	ug/L	6	Standard
|	**Ag**	107	79.7	16.7	**0.0018**	0.001	71.3	ug/L	33	Standard
|	**Cd**	111	553.0	5.0	**0.0257**	0.002	7.0	mg/L	437	Standard
|	**Cd**	114	1449.2	3.4	**0.0191**	0.001	5.8	ug/L	1160	Standard
| >	**In**	115	666821.6	3.6				ug/L	646604	Standard
|	**Sn**	118	1038.0	6.3	**0.0079**	0.004	50.9	ug/L	864	Standard
|	**Sb**	123	244.9	6.1	**0.0190**	0.001	3.5	ug/L	18	Standard
⌊	**Ba**	135	140256.7	3.3	**29.5235**	0.295	1.0	ug/L	39	Standard
⌈	**Ce**	140	59052.9	2.6				ug/L	46	Standard
⌊>	**Tb**	159	754671.2	3.7				ug/L	695671	Standard
⌈	**Ho**	165	3382.0	3.2				ug/L	9	Standard
|	**Tl**	203	490.7	20.4	**-0.0065**	0.006	90.7	ug/L	687	Standard
|	**Tl**	205	1128.7	25.5	**-0.0063**	0.007	113.9	ug/L	1624	Standard
|	**Pb**	206	4053.9	3.9	**0.2902**	0.006	2.2	ug/L	305	Standard
|	**Pb**	207	3444.7	1.1	**0.2893**	0.007	2.3	ug/L	231	Standard
|	**Pb**	208	15934.3	2.3	**0.2873**	0.001	0.4	ug/L	1129	Standard
|	**U**	238	1173.4	3.1	**0.0452**	0.001	1.5	ug/L	3	Standard
⌊>	**Bi**	209	398754.0	2.0				ug/L	405108	Standard
⌈	**Na**	23	5601.0	1.2	**1.3327**	0.023	1.7	mg/L	118	Standard
|	**Mg**	24	1087714.6	2.5	**1.7401**	0.018	1.0	mg/L	377	Standard

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	K	39	10030.0	4.1	**0.7072**	0.020	2.8	mg/L	583	Standard
	Ca	43	2206.8	1.1	**4.4419**	0.038	0.9	mg/L	73	Standard
	Fe	54	2507.4	2.6	**0.2391**	0.005	2.0	mg/L	785	Standard
	Fe	57	54268.7	2.2	**0.2372**	0.003	1.2	mg/L	6133	Standard
>	**Sc-1**	45	291044.2	1.6				mg/L	254529	Standard
	Cl	35	657340.6	26.4				ug/L	1641778	Standard
	Kr	83	60.4	10.4				ug/L	60	Standard
	Br	81	16739.2	3.6				ug/L	11554	Standard
	P	31	93905.3	3.2				ug/L	45410	Standard
	S	34	991290.6	1.2				ug/L	568857	Standard
	Sr	88	504356.2	4.2				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		99.409	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		114.320	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		103.127	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		108.481	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	98.432
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1205025709
Report Date/Time: Thursday, May 10, 2012 17:10:46
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Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, May 10, 2012 17:11:08
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	13552.7	2.0	**82.5924**	51.080	61.8	ug/L	12600	Standard
|	**Be**	9	172687.5	3.2	**50.3443**	1.366	2.7	ug/L	5	Standard
|	**Al**	27	864370.3	3.4	**53.1833**	1.109	2.1	ug/L	16102	Standard
⌊>	**Sc**	45	262047.0	5.0				ug/L	254529	Standard
⌈	**Ti**	47	155466.8	4.2	**102.4438**	1.894	1.8	ug/L	84	Standard
|	**V**	51	804796.8	3.4	**52.1290**	0.466	0.9	ug/L	5785	Standard
|	**Cr**	52	596544.2	4.0	**51.4523**	0.792	1.5	ug/L	12212	Standard
|	**Cr**	53	89838.3	4.1	**50.6038**	0.990	2.0	ug/L	5042	Standard
|	**Mn**	55	1055875.1	3.2	**52.0080**	0.449	0.9	ug/L	1290	Standard
|	**Co**	59	740446.2	4.1	**51.4037**	0.960	1.9	ug/L	143	Standard
|	**Ni**	60	154553.7	3.8	**51.1021**	0.948	1.9	ug/L	79	Standard
|	**Cu**	65	140085.1	3.5	**51.0645**	0.491	1.0	ug/L	154	Standard
|	**Zn**	66	61408.7	4.9	**49.3904**	1.194	2.4	ug/L	194	Standard
| >	**Ge**	72	229802.7	2.6				ug/L	232024	Standard
|	**As**	75	56204.0	2.8	**50.0166**	0.314	0.6	ug/L	-297	Standard
|	**Se**	82	6604.7	3.3	**51.8886**	0.573	1.1	ug/L	17	Standard
⌊	**Se-1**	77	4233.9	5.7	**49.9971**	1.643	3.3	ug/L	180	Standard
	Ga	71	205564.4	3.8				mg/L	210139	Standard
⌈	**Rb**	85	1108.4	5.6				ug/L	12	Standard
| >	**Y**	89	213855.7	4.6				ug/L	214065	Standard
⌊	**Rh**	103	26.7	39.0				ug/L	0	Standard
⌈	**Mo**	98	413359.5	3.7	**99.4211**	2.512	2.5	ug/L	6	Standard
|	**Ag**	107	425069.1	3.2	**50.5387**	1.298	2.6	ug/L	33	Standard
|	**Cd**	111	224702.4	3.2	**49.3676**	1.078	2.2	mg/L	437	Standard
|	**Cd**	114	580830.7	3.6	**48.8909**	1.220	2.5	ug/L	1160	Standard
| >	**In**	115	649362.6	1.6				ug/L	646604	Standard
|	**Sn**	118	793638.7	4.6	**49.9908**	1.681	3.4	ug/L	864	Standard
|	**Sb**	123	542719.2	3.9	**48.9006**	1.461	3.0	ug/L	18	Standard
⌊	**Ba**	135	236420.8	3.6	**51.0989**	1.359	2.7	ug/L	39	Standard
⌈	**Ce**	140	905.4	4.5				ug/L	46	Standard
⌊>	**Tb**	159	732354.0	2.8				ug/L	695671	Standard
⌈	**Ho**	165	18.0	9.6				ug/L	9	Standard
|	**Tl**	203	824011.9	3.1	**51.8952**	0.586	1.1	ug/L	687	Standard
|	**Tl**	205	1906709.5	2.3	**50.6992**	0.140	0.3	ug/L	1624	Standard
|	**Pb**	206	650887.9	2.9	**51.3719**	0.523	1.0	ug/L	305	Standard
|	**Pb**	207	550659.2	3.3	**50.9533**	0.709	1.4	ug/L	231	Standard
|	**Pb**	208	2547826.6	3.0	**50.6550**	0.508	1.0	ug/L	1129	Standard
|	**U**	238	1311693.6	3.5	**48.8915**	0.789	1.6	ug/L	3	Standard
⌊>	**Bi**	209	390279.5	2.0				ug/L	405108	Standard
⌈	**Na**	23	19833.0	3.8	**5.3231**	0.104	2.0	mg/L	118	Standard
|	**Mg**	24	2917662.4	3.9	**5.1883**	0.085	1.6	mg/L	377	Standard

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	K	39	63358.9	2.1	**5.2782**	0.155	2.9	mg/L	583	Standard
	Ca	43	2341.8	2.4	**5.2774**	0.272	5.2	mg/L	73	Standard
	Fe	54	31378.0	2.6	**5.3061**	0.174	3.3	mg/L	785	Standard
	Fe	57	921655.1	5.0	**5.0893**	0.149	2.9	mg/L	6133	Standard
>	**Sc-1**	45	262047.0	5.0				mg/L	254529	Standard
	Cl	35	404491.4	36.2				ug/L	1641778	Standard
	Kr	83	55.3	8.1				ug/L	60	Standard
	Br	81	12287.5	4.6				ug/L	11554	Standard
	P	31	70689.9	5.8				ug/L	45410	Standard
	S	34	740580.5	3.1				ug/L	568857	Standard
	Sr	88	720.0	5.2				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	106.367		
>	Sc	45			
	Ti	47	102.444		
	V	51	104.258		
	Cr	52	102.905		
	Cr	53			
	Mn	55	104.016		
	Co	59	102.807		
	Ni	60	102.204		
	Cu	65	102.129		
	Zn	66	98.781		
>	Ge	72		99.043	
	As	75	100.033		
	Se	82	103.777		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		99.902	
	Rh	103			
	Mo	98	99.421		
	Ag	107	101.077		
	Cd	111	98.735		
	Cd	114			
>	In	115		100.427	
	Sn	118	99.982		
	Sb	123	97.801		
	Ba	135	102.198		
	Ce	140			
>	Tb	159		105.273	
	Ho	165			
	Tl	203	103.790		
	Tl	205			
	Pb	206	102.744		

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	Pb	207	101.907	
	Pb	208	101.310	
	U	238	97.783	
>	Bi	209		96.340
	Na	23	106.463	
	Mg	24	103.766	
	K	39	105.564	
	Ca	43	105.549	
	Fe	54	106.123	
	Fe	57	101.786	
>	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 10, 2012 17:14:00
Number of Replicates: 3
Autosampler Position: 102
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	12840.5	6.6	**76.5902**	38.645	50.5	ug/L	12600	Standard
|	**Be**	9	15.0	33.3	**-0.0098**	0.002	15.3	ug/L	5	Standard
|	**Al**	27	15786.6	8.0	**0.2428**	0.063	25.9	ug/L	16102	Standard
⌊>	**Sc**	45	248937.1	3.9				ug/L	254529	Standard
⌈	**Ti**	47	112.3	8.0	**0.0172**	0.003	17.9	ug/L	84	Standard
|	**V**	51	3619.4	3.4	**-0.0395**	0.013	33.4	ug/L	5785	Standard
|	**Cr**	52	11176.8	2.1	**0.0069**	0.024	345.3	ug/L	12212	Standard
|	**Cr**	53	694.2	11.3	**-1.0976**	0.039	3.5	ug/L	5042	Standard
|	**Mn**	55	1370.1	7.2	**-0.0130**	0.003	22.1	ug/L	1290	Standard
|	**Co**	59	150.0	23.7	**0.0008**	0.002	288.5	ug/L	143	Standard
|	**Ni**	60	79.3	13.1	**0.0040**	0.003	68.1	ug/L	79	Standard
|	**Cu**	65	182.7	15.1	**0.0209**	0.008	38.4	ug/L	154	Standard
|	**Zn**	66	214.3	7.7	**0.0086**	0.020	232.6	ug/L	194	Standard
| >	**Ge**	72	216001.3	4.3				ug/L	232024	Standard
|	**As**	75	-241.2	3.1	**-0.0014**	0.017	1189.7	ug/L	-297	Standard
|	**Se**	82	26.1	22.0	**0.0604**	0.046	76.2	ug/L	17	Standard
⌊	**Se-1**	77	87.3	26.5	**-0.6878**	0.265	38.5	ug/L	180	Standard
	Ga	71	196336.2	4.9				mg/L	210139	Standard
⌈	**Rb**	85	23.3	32.7				ug/L	12	Standard
| >	**Y**	89	209255.7	6.4				ug/L	214065	Standard
⌊	**Rh**	103	3.3	86.6				ug/L	0	Standard
⌈	**Mo**	98	80.7	73.4	**0.0115**	0.014	121.9	ug/L	6	Standard
|	**Ag**	107	134.7	35.5	**0.0089**	0.005	59.2	ug/L	33	Standard
|	**Cd**	111	426.5	7.8	**0.0033**	0.004	116.3	mg/L	437	Standard
|	**Cd**	114	1175.8	7.8	**0.0017**	0.004	250.7	ug/L	1160	Standard
| >	**In**	115	633188.6	3.8				ug/L	646604	Standard
|	**Sn**	118	1016.0	8.4	**0.0097**	0.003	32.7	ug/L	864	Standard
|	**Sb**	123	233.6	63.9	**0.0188**	0.013	69.6	ug/L	18	Standard
⌊	**Ba**	135	67.0	36.3	**0.0066**	0.005	76.1	ug/L	39	Standard
⌈	**Ce**	140	51.7	28.0				ug/L	46	Standard
⌊>	**Tb**	159	699065.0	5.4				ug/L	695671	Standard
⌈	**Ho**	165	6.3	48.2				ug/L	9	Standard
|	**Tl**	203	323.3	63.3	**-0.0161**	0.012	76.3	ug/L	687	Standard
|	**Tl**	205	764.4	62.2	**-0.0150**	0.012	80.4	ug/L	1624	Standard
|	**Pb**	206	341.7	18.3	**0.0045**	0.004	91.2	ug/L	305	Standard
|	**Pb**	207	273.3	20.0	**0.0029**	0.004	143.8	ug/L	231	Standard
|	**Pb**	208	1273.0	18.1	**0.0029**	0.004	126.3	ug/L	1129	Standard
|	**U**	238	80.3	70.4	**0.0054**	0.002	37.3	ug/L	3	Standard
⌊>	**Bi**	209	380522.5	4.1				ug/L	405108	Standard
⌈	**Na**	23	105.0	20.8	**0.0025**	0.006	226.2	mg/L	118	Standard
|	**Mg**	24	571.7	18.5	**0.0002**	0.000	80.1	mg/L	377	Standard

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	K	39	611.7	4.5	**0.0027**	0.005	170.4	mg/L	583	Standard
	Ca	43	38.3	32.8	**-0.0993**	0.028	28.1	mg/L	73	Standard
	Fe	54	897.5	10.0	**0.0115**	0.022	189.7	mg/L	785	Standard
	Fe	57	4499.0	4.0	**-0.0080**	0.001	15.3	mg/L	6133	Standard
>	**Sc-1**	45	248937.1	3.9				mg/L	254529	Standard
	Cl	35	395440.7	36.2				ug/L	1641778	Standard
	Kr	83	54.7	8.5				ug/L	60	Standard
	Br	81	11868.0	4.0				ug/L	11554	Standard
	P	31	66141.8	5.2				ug/L	45410	Standard
	S	34	737525.0	2.8				ug/L	568857	Standard
	Sr	88	306.7	34.0				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		93.095	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		97.753	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		97.925	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		100.488	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	93.931
	Na	23	
	Mg	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: L1205025711
Sample Date/Time: Thursday, May 10, 2012 17:16:55
Number of Replicates: 3
Autosampler Position: 439
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	148277.5	3.3	**12295.6382**	92.621	0.8	ug/L	12600	Standard
|	**Be**	9	48.3	26.0	**-0.0013**	0.003	249.8	ug/L	5	Standard
|	**Al**	27	115128.1	4.9	**5.9041**	0.098	1.7	ug/L	16102	Standard
⌊>	**Sc**	45	281010.7	3.5				ug/L	254529	Standard
⌈	**Ti**	47	1662.4	10.4	**1.0708**	0.103	9.6	ug/L	84	Standard
|	**V**	51	5430.7	3.1	**0.0750**	0.005	6.5	ug/L	5785	Standard
|	**Cr**	52	15960.7	3.0	**0.4114**	0.016	4.0	ug/L	12212	Standard
|	**Cr**	53	1198.4	5.8	**-0.8064**	0.052	6.5	ug/L	5042	Standard
|	**Mn**	55	1382540.8	3.2	**70.4101**	0.985	1.4	ug/L	1290	Standard
|	**Co**	59	564.3	8.3	**0.0302**	0.003	9.2	ug/L	143	Standard
|	**Ni**	60	1554.1	6.8	**0.5072**	0.027	5.3	ug/L	79	Standard
|	**Cu**	65	1482.1	3.9	**0.5093**	0.022	4.3	ug/L	154	Standard
|	**Zn**	66	2698.9	1.8	**2.0766**	0.017	0.8	ug/L	194	Standard
|>	**Ge**	72	222340.2	2.0				ug/L	232024	Standard
|	**As**	75	4524.0	4.1	**4.3677**	0.087	2.0	ug/L	-297	Standard
|	**Se**	82	89.7	8.3	**0.5728**	0.062	10.8	ug/L	17	Standard
⌊	**Se-1**	77	112.0	11.2	**-0.4049**	0.134	33.0	ug/L	180	Standard
	Ga	71	200744.5	2.2				mg/L	210139	Standard
⌈	**Rb**	85	23131.0	5.7				ug/L	12	Standard
|>	**Y**	89	211115.2	3.6				ug/L	214065	Standard
⌊	**Rh**	103	113.3	9.2				ug/L	0	Standard
⌈	**Mo**	98	4845.6	3.4	**1.1762**	0.012	1.1	ug/L	6	Standard
|	**Ag**	107	50.7	15.3	**-0.0012**	0.001	88.8	ug/L	33	Standard
|	**Cd**	111	507.8	4.3	**0.0208**	0.006	27.9	mg/L	437	Standard
|	**Cd**	114	1287.7	2.5	**0.0104**	0.000	2.3	ug/L	1160	Standard
|>	**In**	115	639092.8	2.8				ug/L	646604	Standard
|	**Sn**	118	921.7	2.2	**0.0032**	0.002	67.8	ug/L	864	Standard
|	**Sb**	123	167.7	2.5	**0.0129**	0.000	0.5	ug/L	18	Standard
⌊	**Ba**	135	1707409.3	3.1	**375.0334**	1.481	0.4	ug/L	39	Standard
⌈	**Ce**	140	511.3	1.4				ug/L	46	Standard
⌊>	**Tb**	159	722705.0	2.6				ug/L	695671	Standard
⌈	**Ho**	165	31.0	34.1				ug/L	9	Standard
|	**Tl**	203	594.0	10.9	**0.0028**	0.004	135.9	ug/L	687	Standard
|	**Tl**	205	1343.1	11.6	**0.0022**	0.004	190.2	ug/L	1624	Standard
|	**Pb**	206	404.0	3.8	**0.0107**	0.001	8.2	ug/L	305	Standard
|	**Pb**	207	339.3	8.5	**0.0103**	0.002	23.0	ug/L	231	Standard
|	**Pb**	208	1596.7	6.0	**0.0106**	0.001	14.0	ug/L	1129	Standard
|	**U**	238	257.3	2.5	**0.0125**	0.000	0.8	ug/L	3	Standard
⌊>	**Bi**	209	369105.9	1.6				ug/L	405108	Standard
⌈	**Na**	23	111129.4	1.4	**27.9305**	0.642	2.3	mg/L	118	Standard
|	**Mg**	24	1145030.3	2.5	**1.8980**	0.038	2.0	mg/L	377	Standard

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	K	39	7833.7	3.4	**0.5625**	0.014	2.6	mg/L	583	Standard
	Ca	43	6599.8	2.1	**14.1703**	0.462	3.3	mg/L	73	Standard
	Fe	54	4638.6	3.1	**0.5987**	0.005	0.9	mg/L	785	Standard
	Fe	57	125237.6	3.6	**0.6147**	0.002	0.4	mg/L	6133	Standard
>	**Sc-1**	45	281010.7	3.5				mg/L	254529	Standard
	Cl	35	978150.7	13.0				ug/L	1641778	Standard
	Kr	83	58.2	7.6				ug/L	60	Standard
	Br	81	48405.6	4.3				ug/L	11554	Standard
	P	31	331545.1	2.9				ug/L	45410	Standard
	S	34	782783.5	3.2				ug/L	568857	Standard
	Sr	88	4074419.7	4.9				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		95.827	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		98.622	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		98.838	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		103.886	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	91.113
	Na	23	
	Mg	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
Ba 135 Upper, S, EEE	Ba	135	

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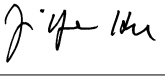

Method 6020 - Summary Report

Sample ID: L1205025713
Sample Date/Time: Thursday, May 10, 2012 17:19:48
Number of Replicates: 3
Autosampler Position: 440
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	105786.6	3.4	**8271.3900**	401.942	4.9	ug/L	12600	Standard
|	**Be**	9	23.3	24.7	**-0.0081**	0.002	22.1	ug/L	5	Standard
|	**Al**	27	59490.1	4.9	**2.6146**	0.109	4.2	ug/L	16102	Standard
⌊>	**Sc**	45	285434.3	3.7				ug/L	254529	Standard
⌈	**Ti**	47	1368.4	4.0	**0.8693**	0.017	1.9	ug/L	84	Standard
|	**V**	51	4839.7	5.3	**0.0345**	0.010	28.7	ug/L	5785	Standard
|	**Cr**	52	14170.3	3.4	**0.2461**	0.013	5.1	ug/L	12212	Standard
|	**Cr**	53	1102.5	7.3	**-0.8657**	0.044	5.1	ug/L	5042	Standard
|	**Mn**	55	413778.9	3.0	**20.9769**	0.272	1.3	ug/L	1290	Standard
|	**Co**	59	490.0	7.2	**0.0248**	0.002	7.9	ug/L	143	Standard
|	**Ni**	60	1456.1	3.4	**0.4731**	0.008	1.7	ug/L	79	Standard
|	**Cu**	65	1014.4	5.2	**0.3320**	0.011	3.3	ug/L	154	Standard
|	**Zn**	66	12118.8	2.9	**9.9191**	0.079	0.8	ug/L	194	Standard
| >	**Ge**	72	222756.0	2.7				ug/L	232024	Standard
|	**As**	75	16406.9	3.1	**15.2206**	0.176	1.2	ug/L	-297	Standard
|	**Se**	82	62.7	11.1	**0.3516**	0.058	16.5	ug/L	17	Standard
⌊	**Se-1**	77	97.3	4.9	**-0.5917**	0.034	5.7	ug/L	180	Standard
	Ga	71	200909.7	2.2				mg/L	210139	Standard
⌈	**Rb**	85	29216.5	3.9				ug/L	12	Standard
| >	**Y**	89	220132.5	3.8				ug/L	214065	Standard
⌊	**Rh**	103	106.7	36.4				ug/L	0	Standard
⌈	**Mo**	98	4924.2	3.8	**1.1808**	0.023	2.0	ug/L	6	Standard
|	**Ag**	107	43.3	9.3	**-0.0022**	0.000	18.1	ug/L	33	Standard
|	**Cd**	111	484.0	6.0	**0.0141**	0.005	36.3	mg/L	437	Standard
|	**Cd**	114	1254.0	3.8	**0.0062**	0.002	38.2	ug/L	1160	Standard
| >	**In**	115	646848.5	2.1				ug/L	646604	Standard
|	**Sn**	118	20182.8	4.3	**1.2217**	0.029	2.4	ug/L	864	Standard
|	**Sb**	123	143.7	7.6	**0.0105**	0.001	9.4	ug/L	18	Standard
⌊	**Ba**	135	858738.5	2.6	**186.3576**	1.208	0.6	ug/L	39	Standard
⌈	**Ce**	140	238.7	4.9				ug/L	46	Standard
⌊>	**Tb**	159	728927.3	3.6				ug/L	695671	Standard
⌈	**Ho**	165	31.0	48.8				ug/L	9	Standard
|	**Tl**	203	476.3	14.1	**-0.0057**	0.004	67.8	ug/L	687	Standard
|	**Tl**	205	1111.7	21.6	**-0.0050**	0.006	117.4	ug/L	1624	Standard
|	**Pb**	206	552.7	2.7	**0.0221**	0.000	0.1	ug/L	305	Standard
|	**Pb**	207	475.7	1.6	**0.0227**	0.001	4.4	ug/L	231	Standard
|	**Pb**	208	2205.7	3.2	**0.0225**	0.001	3.8	ug/L	1129	Standard
|	**U**	238	24.3	16.6	**0.0033**	0.000	5.4	ug/L	3	Standard
⌊>	**Bi**	209	376980.3	2.7				ug/L	405108	Standard
⌈	**Na**	23	74928.3	3.0	**18.5249**	0.178	1.0	mg/L	118	Standard
|	**Mg**	24	1216232.6	3.3	**1.9847**	0.042	2.1	mg/L	377	Standard

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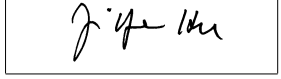

	K	39	6781.5	4.3	**0.4720**	0.026	5.6	mg/L	583	Standard
	Ca	43	6099.6	1.7	**12.8763**	0.359	2.8	mg/L	73	Standard
	Fe	54	8274.2	5.2	**1.1673**	0.052	4.4	mg/L	785	Standard
	Fe	57	231855.9	4.3	**1.1486**	0.018	1.6	mg/L	6133	Standard
>	**Sc-1**	45	285434.3	3.7				mg/L	254529	Standard
	Cl	35	761450.3	17.7				ug/L	1641778	Standard
	Kr	83	56.4	7.1				ug/L	60	Standard
	Br	81	33380.1	3.3				ug/L	11554	Standard
	P	31	306307.6	1.8				ug/L	45410	Standard
	S	34	738469.0	3.4				ug/L	568857	Standard
	Sr	88	3496394.5	2.3				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		96.006	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		102.834	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		100.038	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		104.780	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	93.057
	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
Ba 135 Upper, S, EEE	Ba	135	

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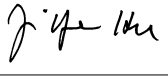

Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, May 10, 2012 17:22:44
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	13234.1	2.7	**44.8075**	36.154	80.7	ug/L	12600	Standard
|	**Be**	9	165786.6	4.4	**48.0865**	1.027	2.1	ug/L	5	Standard
|	**Al**	27	831671.9	4.5	**50.8806**	0.878	1.7	ug/L	16102	Standard
⌊>	**Sc**	45	263319.3	5.4				ug/L	254529	Standard
⌈	**Ti**	47	153629.3	4.5	**105.2936**	1.700	1.6	ug/L	84	Standard
|	**V**	51	774047.5	4.4	**52.1472**	1.182	2.3	ug/L	5785	Standard
|	**Cr**	52	581707.4	5.0	**52.1993**	1.506	2.9	ug/L	12212	Standard
|	**Cr**	53	88427.5	3.2	**51.8568**	0.651	1.3	ug/L	5042	Standard
|	**Mn**	55	1030891.2	3.5	**52.8165**	0.441	0.8	ug/L	1290	Standard
|	**Co**	59	725856.5	3.1	**52.4295**	0.836	1.6	ug/L	143	Standard
|	**Ni**	60	150111.0	4.6	**51.6227**	1.285	2.5	ug/L	79	Standard
|	**Cu**	65	135808.2	3.9	**51.4959**	0.992	1.9	ug/L	154	Standard
|	**Zn**	66	59447.6	5.2	**49.7328**	1.255	2.5	ug/L	194	Standard
| >	**Ge**	72	220960.5	3.5				ug/L	232024	Standard
|	**As**	75	55699.9	3.5	**51.5489**	0.675	1.3	ug/L	-297	Standard
|	**Se**	82	6486.8	5.4	**52.9900**	1.184	2.2	ug/L	17	Standard
⌊	**Se-1**	77	4101.9	5.0	**50.4055**	1.221	2.4	ug/L	180	Standard
	Ga	71	203274.7	4.5				mg/L	210139	Standard
⌈	**Rb**	85	1018.4	7.2				ug/L	12	Standard
| >	**Y**	89	208556.0	2.1				ug/L	214065	Standard
⌊	**Rh**	103	25.0	34.6				ug/L	0	Standard
⌈	**Mo**	98	403880.3	5.3	**98.9688**	2.322	2.3	ug/L	6	Standard
|	**Ag**	107	405815.0	4.7	**49.1568**	0.848	1.7	ug/L	33	Standard
|	**Cd**	111	216941.0	3.7	**48.5685**	0.356	0.7	mg/L	437	Standard
|	**Cd**	114	569498.4	3.8	**48.8536**	0.612	1.3	ug/L	1160	Standard
| >	**In**	115	637334.0	3.9				ug/L	646604	Standard
|	**Sn**	118	774205.8	4.7	**49.6934**	0.956	1.9	ug/L	864	Standard
|	**Sb**	123	531907.1	4.6	**48.8295**	0.526	1.1	ug/L	18	Standard
⌊	**Ba**	135	232862.2	4.3	**51.2821**	0.353	0.7	ug/L	39	Standard
⌈	**Ce**	140	839.7	3.2				ug/L	46	Standard
⌊>	**Tb**	159	719196.1	2.5				ug/L	695671	Standard
⌈	**Ho**	165	20.7	5.6				ug/L	9	Standard
|	**Tl**	203	799496.0	2.7	**51.2352**	0.149	0.3	ug/L	687	Standard
|	**Tl**	205	1859053.7	2.6	**50.2954**	0.278	0.6	ug/L	1624	Standard
|	**Pb**	206	634674.6	3.5	**50.9631**	0.627	1.2	ug/L	305	Standard
|	**Pb**	207	541110.5	4.5	**50.9350**	1.096	2.2	ug/L	231	Standard
|	**Pb**	208	2496949.3	3.9	**50.5050**	0.779	1.5	ug/L	1129	Standard
|	**U**	238	1293714.4	4.9	**49.0531**	1.219	2.5	ug/L	3	Standard
⌊>	**Bi**	209	383585.3	2.4				ug/L	405108	Standard
⌈	**Na**	23	19399.1	4.5	**5.1803**	0.088	1.7	mg/L	118	Standard
|	**Mg**	24	2854397.6	5.4	**5.0492**	0.049	1.0	mg/L	377	Standard

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	K	39	61238.7	4.7	**5.0713**	0.036	0.7	mg/L	583	Standard
	Ca	43	2195.2	6.2	**4.9013**	0.086	1.8	mg/L	73	Standard
	Fe	54	30854.3	3.2	**5.1884**	0.133	2.6	mg/L	785	Standard
	Fe	57	910055.3	5.6	**4.9985**	0.025	0.5	mg/L	6133	Standard
>	**Sc-1**	45	263319.3	5.4				mg/L	254529	Standard
	Cl	35	391279.0	37.4				ug/L	1641778	Standard
	Kr	83	57.1	7.4				ug/L	60	Standard
	Br	81	12556.1	9.7				ug/L	11554	Standard
	P	31	70049.1	2.3				ug/L	45410	Standard
	S	34	708606.3	4.0				ug/L	568857	Standard
	Sr	88	755.0	24.7				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	101.761		
>	Sc	45			
	Ti	47	105.294		
	V	51	104.294		
	Cr	52	104.399		
	Cr	53			
	Mn	55	105.633		
	Co	59	104.859		
	Ni	60	103.245		
	Cu	65	102.992		
	Zn	66	99.466		
>	Ge	72		95.232	
	As	75	103.098		
	Se	82	105.980		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		97.426	
	Rh	103			
	Mo	98	98.969		
	Ag	107	98.314		
	Cd	111	97.137		
	Cd	114			
>	In	115		98.566	
	Sn	118	99.387		
	Sb	123	97.659		
	Ba	135	102.564		
	Ce	140			
>	Tb	159		103.382	
	Ho	165			
	Tl	203	102.470		
	Tl	205			
	Pb	206	101.926		

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	Pb	207	101.870	
	Pb	208	101.010	
	U	238	98.106	
>	Bi	209		94.687
	Na	23	103.607	
	Mg	24	100.984	
	K	39	101.426	
	Ca	43	98.026	
	Fe	54	103.769	
	Fe	57	99.970	
>	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 10, 2012 17:25:36
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	12747.1	8.8	**65.7475**	49.452	75.2	ug/L	12600	Standard
|	**Be**	9	10.0	132.3	**-0.0115**	0.004	34.0	ug/L	5	Standard
|	**Al**	27	14176.6	6.5	**0.1370**	0.037	26.6	ug/L	16102	Standard
⌊>	**Sc**	45	249154.0	6.4				ug/L	254529	Standard
⌈	**Ti**	47	123.3	6.1	**0.0263**	0.001	3.9	ug/L	84	Standard
|	**V**	51	3573.2	1.4	**-0.0388**	0.011	29.4	ug/L	5785	Standard
|	**Cr**	52	10736.8	1.2	**-0.0182**	0.040	218.6	ug/L	12212	Standard
|	**Cr**	53	643.3	12.3	**-1.1232**	0.033	2.9	ug/L	5042	Standard
|	**Mn**	55	1340.1	5.6	**-0.0135**	0.002	11.4	ug/L	1290	Standard
|	**Co**	59	137.3	19.0	**0.0000**	0.001	55117.9	ug/L	143	Standard
|	**Ni**	60	76.3	20.0	**0.0033**	0.005	136.3	ug/L	79	Standard
|	**Cu**	65	180.3	3.1	**0.0215**	0.005	25.1	ug/L	154	Standard
|	**Zn**	66	204.3	5.2	**0.0028**	0.016	576.3	ug/L	194	Standard
|>	**Ge**	72	212718.8	4.9				ug/L	232024	Standard
|	**As**	75	-222.1	6.0	**0.0138**	0.008	58.1	ug/L	-297	Standard
|	**Se**	82	25.1	6.8	**0.0564**	0.024	43.4	ug/L	17	Standard
⌊	**Se-1**	77	88.7	14.7	**-0.6475**	0.168	25.9	ug/L	180	Standard
	Ga	71	195239.9	5.0				mg/L	210139	Standard
⌈	**Rb**	85	28.3	56.7				ug/L	12	Standard
|>	**Y**	89	200439.1	4.8				ug/L	214065	Standard
⌊	**Rh**	103	3.3	173.2				ug/L	0	Standard
⌈	**Mo**	98	71.5	59.0	**0.0096**	0.010	100.7	ug/L	6	Standard
|	**Ag**	107	97.7	18.0	**0.0048**	0.002	31.8	ug/L	33	Standard
|	**Cd**	111	434.9	1.8	**0.0086**	0.006	66.9	mg/L	437	Standard
|	**Cd**	114	1095.7	6.6	**-0.0023**	0.002	79.9	ug/L	1160	Standard
|>	**In**	115	614350.7	5.8				ug/L	646604	Standard
|	**Sn**	118	945.4	7.7	**0.0071**	0.002	30.9	ug/L	864	Standard
|	**Sb**	123	207.4	33.6	**0.0171**	0.006	32.7	ug/L	18	Standard
⌊	**Ba**	135	67.0	18.1	**0.0070**	0.002	28.6	ug/L	39	Standard
⌈	**Ce**	140	47.7	6.7				ug/L	46	Standard
⌊>	**Tb**	159	685012.4	4.3				ug/L	695671	Standard
⌈	**Ho**	165	8.0	12.5				ug/L	9	Standard
|	**Tl**	203	278.3	66.2	**-0.0188**	0.011	58.1	ug/L	687	Standard
|	**Tl**	205	682.0	67.8	**-0.0171**	0.012	68.0	ug/L	1624	Standard
|	**Pb**	206	292.3	19.7	**0.0008**	0.003	414.4	ug/L	305	Standard
|	**Pb**	207	261.7	9.6	**0.0023**	0.001	47.0	ug/L	231	Standard
|	**Pb**	208	1209.4	14.5	**0.0020**	0.002	112.9	ug/L	1129	Standard
|	**U**	238	72.0	57.8	**0.0052**	0.001	28.0	ug/L	3	Standard
⌊>	**Bi**	209	374816.6	5.4				ug/L	405108	Standard
⌈	**Na**	23	128.3	20.0	**0.0093**	0.008	85.6	mg/L	118	Standard
|	**Mg**	24	568.3	16.0	**0.0002**	0.000	85.1	mg/L	377	Standard

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	K	39	595.0	8.3	**0.0012**	0.006	508.0	mg/L	583	Standard
	Ca	43	43.3	24.0	**-0.0864**	0.024	27.5	mg/L	73	Standard
	Fe	54	899.0	7.0	**0.0113**	0.009	83.9	mg/L	785	Standard
	Fe	57	4502.3	4.0	**-0.0080**	0.001	12.4	mg/L	6133	Standard
>	**Sc-1**	45	249154.0	6.4				mg/L	254529	Standard
	Cl	35	298596.1	55.1				ug/L	1641778	Standard
	Kr	83	50.9	9.5				ug/L	60	Standard
	Br	81	11724.5	2.8				ug/L	11554	Standard
	P	31	66821.1	8.9				ug/L	45410	Standard
	S	34	719039.5	5.2				ug/L	568857	Standard
	Sr	88	271.7	3.8				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		91.680	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		93.635	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		95.012	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		98.468	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	92.523
	Na	23	
	Mg	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 10, 2012 17:28:30
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	12873.8	3.2	**108.1629**	13.812	12.8	ug/L	12600	Standard
|	**Be**	9	8.3	34.6	**-0.0118**	0.001	8.3	ug/L	5	Standard
|	**Al**	27	15536.4	10.5	**0.2459**	0.072	29.4	ug/L	16102	Standard
⌊>	**Sc**	45	243951.4	3.5				ug/L	254529	Standard
⌈	**Ti**	47	99.0	17.0	**0.0091**	0.010	111.7	ug/L	84	Standard
|	**V**	51	9263.6	1.8	**0.3642**	0.005	1.4	ug/L	5785	Standard
|	**Cr**	52	19251.6	2.0	**0.7982**	0.012	1.5	ug/L	12212	Standard
|	**Cr**	53	1953.5	3.1	**-0.2958**	0.022	7.3	ug/L	5042	Standard
|	**Mn**	55	10819.2	3.2	**0.4943**	0.010	2.0	ug/L	1290	Standard
|	**Co**	59	5353.3	2.7	**0.3932**	0.009	2.4	ug/L	143	Standard
|	**Ni**	60	4517.7	5.0	**1.5975**	0.062	3.9	ug/L	79	Standard
|	**Cu**	65	2244.5	3.8	**0.8388**	0.016	2.0	ug/L	154	Standard
|	**Zn**	66	7170.0	2.8	**6.1055**	0.067	1.1	ug/L	194	Standard
|>	**Ge**	72	211806.1	2.5				ug/L	232024	Standard
|	**As**	75	183.5	32.2	**0.4020**	0.054	13.3	ug/L	-297	Standard
|	**Se**	82	75.8	15.5	**0.4888**	0.093	19.0	ug/L	17	Standard
⌊	**Se-1**	77	117.3	11.9	**-0.2644**	0.146	55.4	ug/L	180	Standard
	Ga	71	193118.5	2.7				mg/L	210139	Standard
⌈	**Rb**	85	18.3	68.6				ug/L	12	Standard
|>	**Y**	89	204795.3	2.5				ug/L	214065	Standard
⌊	**Rh**	103	5.0	173.2				ug/L	0	Standard
⌈	**Mo**	98	35.7	38.6	**0.0010**	0.003	358.6	ug/L	6	Standard
|	**Ag**	107	3150.0	6.4	**0.3929**	0.018	4.6	ug/L	33	Standard
|	**Cd**	111	1427.7	3.3	**0.2431**	0.005	1.9	mg/L	437	Standard
|	**Cd**	114	3580.4	3.2	**0.2230**	0.006	2.6	ug/L	1160	Standard
|>	**In**	115	607307.7	1.9				ug/L	646604	Standard
|	**Sn**	118	710.7	1.2	**-0.0080**	0.001	16.3	ug/L	864	Standard
|	**Sb**	123	4021.7	1.3	**0.3851**	0.003	0.9	ug/L	18	Standard
⌊	**Ba**	135	3329.4	5.2	**0.7611**	0.025	3.3	ug/L	39	Standard
⌈	**Ce**	140	43.7	30.8				ug/L	46	Standard
⌊>	**Tb**	159	669143.2	2.6				ug/L	695671	Standard
⌈	**Ho**	165	9.7	23.9				ug/L	9	Standard
|	**Tl**	203	1489.1	13.5	**0.0622**	0.010	16.8	ug/L	687	Standard
|	**Tl**	205	3509.1	12.4	**0.0628**	0.009	14.9	ug/L	1624	Standard
|	**Pb**	206	2690.2	3.8	**0.2012**	0.002	1.2	ug/L	305	Standard
|	**Pb**	207	2328.2	5.7	**0.2046**	0.009	4.6	ug/L	231	Standard
|	**Pb**	208	10624.8	4.0	**0.2002**	0.004	2.2	ug/L	1129	Standard
|	**U**	238	9784.8	3.9	**0.3875**	0.011	2.7	ug/L	3	Standard
⌊>	**Bi**	209	369644.7	2.8				ug/L	405108	Standard
⌈	**Na**	23	108.3	19.2	**0.0043**	0.007	161.0	mg/L	118	Standard
|	**Mg**	24	578.3	27.9	**0.0002**	0.000	119.2	mg/L	377	Standard

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	K	39	605.0	12.2	**0.0030**	0.006	209.1	mg/L	583	Standard
	Ca	43	70.0	51.5	**-0.0193**	0.083	431.8	mg/L	73	Standard
	Fe	54	912.2	7.5	**0.0175**	0.019	105.9	mg/L	785	Standard
	Fe	57	4449.0	1.5	**-0.0078**	0.001	12.3	mg/L	6133	Standard
>	**Sc-1**	45	243951.4	3.5				mg/L	254529	Standard
	Cl	35	330644.9	39.3				ug/L	1641778	Standard
	Kr	83	56.7	14.7				ug/L	60	Standard
	Br	81	11385.1	5.0				ug/L	11554	Standard
	P	31	63231.1	5.1				ug/L	45410	Standard
	S	34	699532.3	2.4				ug/L	568857	Standard
	Sr	88	493.3	53.9				ug/L	240	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51	91.056		
	Cr	52	99.774		
	Cr	53			
	Mn	55	98.854		
	Co	59	98.298		
	Ni	60	99.846		
	Cu	65	104.846		
	Zn	66	97.688		
>	Ge	72		91.286	
	As	75	100.501		
	Se	82	122.208		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		95.670	
	Rh	103			
	Mo	98			
	Ag	107	98.232		
	Cd	111	101.310		
	Cd	114			
>	In	115		93.923	
	Sn	118			
	Sb	123	96.270		
	Ba	135	101.482		
	Ce	140			
>	Tb	159		96.187	
	Ho	165			
	Tl	203	77.737		
	Tl	205			
	Pb	206			

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	Pb	207			
	Pb	208	100.082		
	U	238	96.884		
>	Bi	209		91.246	
	Na	23			
	Mg	24			
	K	39			
	Ca	43			
	Fe	54			
	Fe	57			
>	Sc-1	45			
	Cl	35			
	Kr	83			
	Br	81			
	P	31			
	S	34			
	Sr	88			

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 8
Report Date/Time: Thursday, May 10, 2012 17:31:03
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2.3.3 Metals CVAA Data (Mercury)

2.3.3.1 Summary Data

Login Number: L12050153
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: WG397594 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

Narrative ID: 46140
Approved By: Sheri Pfalzgraf

Certificate of Analysis

Sample #: L12050153-01 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-15-050312 **Prep Method:** 7470A **Prep Date:** 05/08/2012 12:35
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 05/10/2012 09:40
Workgroup #: WG397594 **Analyst:** PDM **Run Date:** 05/10/2012 11:35
Collect Date: 05/03/2012 10:45 **Dilution:** 1 **File ID:** HY.051012.113521
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 #: L12050153-02 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-15-050312 **Prep Method:** 7470A **Prep Date:** 05/08/2012 12:35
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 05/10/2012 09:40
Workgroup #: WG397594 **Analyst:** PDM **Run Date:** 05/10/2012 11:38
Collect Date: 05/03/2012 10:45 **Dilution:** 1 **File ID:** HY.051012.113851
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 #: L12050153-03 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-17-050312 **Prep Method:** 7470A **Prep Date:** 05/08/2012 12:35
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 05/10/2012 09:40
Workgroup #: WG397594 **Analyst:** PDM **Run Date:** 05/10/2012 11:40
Collect Date: 05/03/2012 11:30 **Dilution:** 1 **File ID:** HY.051012.114045
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 #: L12050153-04 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-17-050312 **Prep Method:** 7470A **Prep Date:** 05/08/2012 12:35
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 05/10/2012 09:40
Workgroup #: WG397594 **Analyst:** PDM **Run Date:** 05/10/2012 11:42
Collect Date: 05/03/2012 11:30 **Dilution:** 1 **File ID:** HY.051012.114238
Sample Tag: 01 **Units:** mg/L

Certificate of Analysis

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 #: L12050153-05 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-28050312 **Prep Method:** 7470A **Prep Date:** 05/08/2012 12:35
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 05/10/2012 09:40
Workgroup #: WG397594 **Analyst:** PDM **Run Date:** 05/10/2012 11:44
Collect Date: 05/03/2012 15:00 **Dilution:** 1 **File ID:** HY.051012.114426
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 #: L12050153-06 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-28050312 **Prep Method:** 7470A **Prep Date:** 05/08/2012 12:35
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 05/10/2012 09:40
Workgroup #: WG397594 **Analyst:** PDM **Run Date:** 05/10/2012 11:46
Collect Date: 05/03/2012 15:00 **Dilution:** 1 **File ID:** HY.051012.114611
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 #: L12050153-07 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: TW-02-050312 **Prep Method:** 7470A **Prep Date:** 05/08/2012 12:35
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 05/10/2012 09:40
Workgroup #: WG397594 **Analyst:** PDM **Run Date:** 05/10/2012 11:47
Collect Date: 05/03/2012 13:30 **Dilution:** 1 **File ID:** HY.051012.114754
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 #:	L12050153-08	**PrePrep Method:**	N/A	**Instrument:**	HYDRA
Client ID:	TW-02-050312	**Prep Method:**	7470A	**Prep Date:**	05/08/2012 12:35
Matrix:	Water	**Analytical Method:**	7470A	**Cal Date:**	05/10/2012 09:40
Workgroup #:	WG397594	**Analyst:**	PDM	**Run Date:**	05/10/2012 11:53
Collect Date:	05/03/2012 13:30	**Dilution:**	1	**File ID:**	HY.051012.115351
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.

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: WG397348
Analyst: BRG
Spike Analyst: BRG
Method: 7470A
Run Date: 05/08/2012 12:35
Hotblock Start Temp: 95 @ 13:00
Hotblock End Temp: 94.7 @ 15:00

SOP: ME404 Revison 13
Spike Solution: STD51569
Spike Witness: VC
HNO3 Lot #: COA16033
KMnO4 1:1 Lot #: RGT17201
H2SO4 Lot #: COA16022
K2S2O8 1:1 Lot #: RGT16987
Digestion Tubes Lot #: COA16074
Mercury Water ICV Lot #: STD51571
HG H2O STDS 10PPM Lot #: STD51577

	SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Spike Amount	Due Date
1	WG397348-03	BLANK	1	40 mL	40 mL		
2	WG397348-04	LCS	1	40 mL	40 mL	4 mL	
3	L12050153-01	SAMP	1	40 mL	40 mL		05/18/12
4	L12050153-02	SAMP	1	40 mL	40 mL		05/18/12
5	L12050153-03	SAMP	1	40 mL	40 mL		05/18/12
6	L12050153-04	SAMP	1	40 mL	40 mL		05/18/12
7	L12050153-05	SAMP	1	40 mL	40 mL		05/18/12
8	L12050153-06	SAMP	1	40 mL	40 mL		05/18/12
9	L12050153-07	SAMP	1	40 mL	40 mL		05/18/12
10	L12050153-08	SAMP	1	40 mL	40 mL		05/18/12
11	WG397348-01	REF	1	40 mL	40 mL		
12	L12050171-01	RS01	1	40 mL	40 mL		05/21/12
13	WG397348-02	REF	1	40 mL	40 mL		
14	L12050171-02	RS02	1	40 mL	40 mL		05/21/12
15	WG397348-05	MS	1	36 mL	40 mL	4 mL	
16	L12050171-03	MS01	1	36 mL	40 mL	4 mL	05/21/12
17	WG397348-07	MS	1	36 mL	40 mL	4 mL	
18	L12050171-04	MS02	1	36 mL	40 mL	4 mL	05/21/12
19	WG397348-06	MSD	1	36 mL	40 mL	4 mL	
20	L12050171-05	SD01	1	36 mL	40 mL	4 mL	05/21/12
21	WG397348-08	MSD	1	36 mL	40 mL	4 mL	
22	L12050171-06	SD02	1	36 mL	40 mL	4 mL	05/21/12
23	L12050171-07	SAMP	1	40 mL	40 mL		05/21/12
24	L12050171-08	SAMP	1	40 mL	40 mL		05/21/12
25	L12050230-01	SAMP	1	40 mL	40 mL		05/15/12

Analyst: Brenda Gregory

Reviewer: Vicki Collins

HB_DIG - Modified 09/30/2009
PDF ID: 2406249
Report generated: 05/08/2012 15:33

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HYDRA Dataset: 051012B.PRN
Analyst1: PDM Analyst2: N/A
Method: 7470 SOP: ME404 Rev: 13
Maintenance Log ID: 41666

Calibration Std: STD51577 ICV Std: STD51571 Post Spike: STD51577
ICSA: N/A ICSAB: N/A Int. Std:
CCV: LLCCV:

Workgroups:

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	HY.051012.093025	WG397668-01	Calibration Point		1		05/10/12 09:30
2	HY.051012.093209	WG397668-02	Calibration Point		1		05/10/12 09:32
3	HY.051012.093411	WG397668-03	Calibration Point		1		05/10/12 09:34
4	HY.051012.093555	WG397668-04	Calibration Point		1		05/10/12 09:35
5	HY.051012.093823	WG397668-05	Calibration Point		1		05/10/12 09:38
6	HY.051012.094017	WG397668-06	Calibration Point		1		05/10/12 09:40
7	HY.051012.094923	WG397668-07	Initial Calibration Verification		1		05/10/12 09:49
8	HY.051012.095110	WG397668-08	Initial Calib Blank		1		05/10/12 09:51
9	HY.051012.095304	WG397668-09	CCV		1		05/10/12 09:53
10	HY.051012.095449	WG397668-10	CCB		1		05/10/12 09:54
11	HY.051012.104119	WG397323-02	Method/Prep Blank	40/40	1		05/10/12 10:41
12	HY.051012.104303	WG397323-03	Laboratory Control S	40/40	1		05/10/12 10:43
13	HY.051012.104444	WG397260-01	Fluid Blank		1		05/10/12 10:44
14	HY.051012.104626	L12050099-01	MW-13-050212	40/40	1		05/10/12 10:46
15	HY.051012.104823	WG397593-01	Post Digestion Spike		1	L12050099-01	05/10/12 10:48
16	HY.051012.105016	L12050099-02	MW-13-050212	40/40	1		05/10/12 10:50
17	HY.051012.105200	L12050099-03	MW-26-050212	40/40	1		05/10/12 10:52
18	HY.051012.105352	L12050099-04	MW-26-050212	40/40	1		05/10/12 10:53
19	HY.051012.105546	L12050099-05	MW-25-050212	40/40	1		05/10/12 10:55
20	HY.051012.105740	L12050099-06	MW-25-050212	40/40	1		05/10/12 10:57
21	HY.051012.105924	WG397668-11	CCV		1		05/10/12 10:59
22	HY.051012.110118	WG397668-12	CCB		1		05/10/12 11:01
23	HY.051012.110303	L12050099-07	PZ-03-050212	40/40	1		05/10/12 11:03
24	HY.051012.110449	L12050099-08	PZ-03-050212	40/40	1		05/10/12 11:04
25	HY.051012.110635	L12050099-09	DUP-GW-050212	40/40	1		05/10/12 11:06
26	HY.051012.110816	L12050099-10	DUP-GW-050212	40/40	1		05/10/12 11:08
27	HY.051012.110959	L12050109-02	ARC-145686-SOILCHAR-001	4/40	1		05/10/12 11:09
28	HY.051012.111141	WG397593-02	Post Digestion Spike		1	L12050109-02	05/10/12 11:11
29	HY.051012.111333	L12050109-04	ARC-145686-SOILCHAR-002	4/40	1		05/10/12 11:13
30	HY.051012.111518	L12050109-06	ARC-145686-SOILCHAR-003	4/40	1		05/10/12 11:15
31	HY.051012.111700	L12050169-01	WWTP FILTER CAKE	4/40	1	WG397323-01	05/10/12 11:17
32	HY.051012.111843	WG397323-04	Matrix Spike	4/40	1	L12050169-01	05/10/12 11:18
33	HY.051012.112036	WG397668-13	CCV		1		05/10/12 11:20
34	HY.051012.112218	WG397668-14	CCB		1		05/10/12 11:22

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Maren Berry

Microbac

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HYDRA Dataset: 051012B.PRN
Analyst1: PDM Analyst2: N/A
Method: 7470 SOP: ME404 Rev: 13
Maintenance Log ID: 41666

Calibration Std: STD51577 ICV Std: STD51571 Post Spike: STD51577
ICSA: N/A ICSAB: N/A Int. Std:
CCV: LLCCV:

Workgroups:

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
35	HY.051012.112412	WG397323-05	Matrix Spike Duplica	4/40	1	L12050169-01	05/10/12 11:24
36	HY.051012.112610	L12050223-05	40BF05312FB		1		05/10/12 11:26
37	HY.051012.112803	WG397668-15	CCV		1		05/10/12 11:28
38	HY.051012.113009	WG397668-16	CCB		1		05/10/12 11:30
39	HY.051012.113153	WG397348-03	Method/Prep Blank	40/40	1		05/10/12 11:31
40	HY.051012.113336	WG397348-04	Laboratory Control S	40/40	1		05/10/12 11:33
41	HY.051012.113521	L12050153-01	MW-15-050312	40/40	1		05/10/12 11:35
42	HY.051012.113705	WG397594-01	Post Digestion Spike		1	L12050153-01	05/10/12 11:37
43	HY.051012.113851	L12050153-02	MW-15-050312	40/40	1		05/10/12 11:38
44	HY.051012.114045	L12050153-03	MW-17-050312	40/40	1		05/10/12 11:40
45	HY.051012.114238	L12050153-04	MW-17-050312	40/40	1		05/10/12 11:42
46	HY.051012.114426	L12050153-05	MW-28050312	40/40	1		05/10/12 11:44
47	HY.051012.114611	L12050153-06	MW-28050312	40/40	1		05/10/12 11:46
48	HY.051012.114754	L12050153-07	TW-02-050312	40/40	1		05/10/12 11:47
49	HY.051012.114937	WG397668-17	CCV		1		05/10/12 11:49
50	HY.051012.115143	WG397668-18	CCB		1		05/10/12 11:51
51	HY.051012.115351	L12050153-08	TW-02-050312	40/40	1		05/10/12 11:53
52	HY.051012.115538	WG397348-01	Reference Sample	40/40	1	L12050171-01	05/10/12 11:55
53	HY.051012.115750	WG397348-02	Reference Sample	40/40	1	L12050171-02	05/10/12 11:57
54	HY.051012.115945	L12050171-03	MW-12-050412	36/40	1	WG397348-05	05/10/12 11:59
55	HY.051012.120129	L12050171-04	MW-12-050412	36/40	1	WG397348-07	05/10/12 12:01
56	HY.051012.120313	L12050171-05	MW-12-050412	36/40	1	WG397348-06	05/10/12 12:03
57	HY.051012.120458	L12050171-06	MW-12-050412	36/40	1	WG397348-08	05/10/12 12:04
58	HY.051012.120723	L12050171-07	PZ-01-050412	40/40	1		05/10/12 12:07
59	HY.051012.120907	L12050171-08	PZ-01-050412	40/40	1		05/10/12 12:09
60	HY.051012.121050	L12050230-01	USDA/4-1-12	40/40	1		05/10/12 12:10
61	HY.051012.121235	WG397668-19	CCV		1		05/10/12 12:12
62	HY.051012.121418	WG397668-20	CCB		1		05/10/12 12:14

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Maren Berry

Microbac

Microbac Laboratories Inc.

Data Checklist

Date: 10-MAY-2012
Analyst: PDM
Analyst: NA
Method: 7470
Instrument: HYDRA
Curve Workgroup: 397688
Runlog ID: 46670
Analytical Workgroups: 397593,397594

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	0153,0171,0099,0109,0169,0230
Client Forms	X
Level X	
Level 3	
Level 4	0153,0171,0099,0109
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	PDM
Secondary Reviewer	MMB
Comments	

Primary Reviewer:
10-MAY-2012
Pierce Morris

Secondary Reviewer:
10-MAY-2012
Maren Berry

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-10-2012 15:54:54

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 7470A AAB#: WG397594

Login Number: L12050153

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-15-050312	01	05/03/12					05/08/12	5.1	28		05/10/12	7	28	
MW-17-050312	03	05/03/12					05/08/12	5	28		05/10/12	7	28	
MW-28050312	05	05/03/12					05/08/12	4.9	28		05/10/12	6.9	28	
TW-02-050312	07	05/03/12					05/08/12	5	28		05/10/12	6.9	28	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2409694
Report generated 05/10/2012 13:23

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 7470A AAB#: WG397594

Login Number: L12050153

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-15-050312	02	05/03/12					05/08/12	5.1	28		05/10/12	7	28	
MW-17-050312	04	05/03/12					05/08/12	5	28		05/10/12	7	28	
MW-28050312	06	05/03/12					05/08/12	4.9	28		05/10/12	6.9	28	
TW-02-050312	08	05/03/12					05/08/12	5	28		05/10/12	6.9	28	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2409705
Report generated 05/10/2012 13:23

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12050153
Work Group: WG397594
Blank File ID: HY.051012.113153
Blank Sample ID: WG397348-03
Prep Date: 05/08/12 12:35
Instrument ID: HYDRA
Analyzed Date: 05/10/12 11:31
Method: 7470A
Analyst: PDM

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG397348-04	HY.051012.113336	05/10/12 11:33	01
MW-15-050312	L12050153-01	HY.051012.113521	05/10/12 11:35	01
MW-15-050312	L12050153-02	HY.051012.113851	05/10/12 11:38	01
MW-17-050312	L12050153-03	HY.051012.114045	05/10/12 11:40	01
MW-17-050312	L12050153-04	HY.051012.114238	05/10/12 11:42	01
MW-28050312	L12050153-05	HY.051012.114426	05/10/12 11:44	01
MW-28050312	L12050153-06	HY.051012.114611	05/10/12 11:46	01
TW-02-050312	L12050153-07	HY.051012.114754	05/10/12 11:47	01
TW-02-050312	L12050153-08	HY.051012.115351	05/10/12 11:53	01

Report Name: BLANK_SUMMARY
PDF File ID: 2409695
Report generated 05/10/2012 13:23

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12050153
Work Group: WG397594
Blank File ID: HY.051012.113153
Blank Sample ID: WG397348-03
Prep Date: 05/08/12 12:35
Instrument ID: HYDRA
Analyzed Date: 05/10/12 11:31
Method: 7470A
Analyst: PDM

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG397348-04	HY.051012.113336	05/10/12 11:33	01
MW-15-050312	L12050153-01	HY.051012.113521	05/10/12 11:35	01
MW-15-050312	L12050153-02	HY.051012.113851	05/10/12 11:38	01
MW-17-050312	L12050153-03	HY.051012.114045	05/10/12 11:40	01
MW-17-050312	L12050153-04	HY.051012.114238	05/10/12 11:42	01
MW-28050312	L12050153-05	HY.051012.114426	05/10/12 11:44	01
MW-28050312	L12050153-06	HY.051012.114611	05/10/12 11:46	01
TW-02-050312	L12050153-07	HY.051012.114754	05/10/12 11:47	01
TW-02-050312	L12050153-08	HY.051012.115351	05/10/12 11:53	01

Report Name: BLANK_SUMMARY
PDF File ID: 2409706
Report generated 05/10/2012 13:23

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050153 Prep Date: 05/08/12 12:35 Sample ID: WG397348-03
Instrument ID: HYDRA Run Date: 05/10/12 11:31 Prep Method: 7470A
File ID: HY.051012.113153 Analyst: PDM Method: 7470A
Workgroup (AAB#): WG397594 Matrix: Water Units: mg/L
Contract #: Cal ID: HYDRA-10-MAY-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Mercury	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: 2409696
10-MAY-2012 13:23

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050153 Prep Date: 05/08/12 12:35 Sample ID: WG397348-03
Instrument ID: HYDRA Run Date: 05/10/12 11:31 Prep Method: 7470A
File ID: HY.051012.113153 Analyst: PDM Method: 7470A
Workgroup (AAB#): WG397594 Matrix: Water Units: mg/L
Contract #: Cal ID: HYDRA-10-MAY-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Mercury, Dissolved	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: 2409707
10-MAY-2012 13:23

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050153 **Run Date:** 05/10/2012 **Sample ID:** WG397348-04
Instrument ID: HYDRA **Run Time:** 11:33 **Prep Method:** 7470A
File ID: HY.051012.113336 **Analyst:** PDM **Method:** 7470A
Workgroup (AAB#): WG397594 **Matrix:** Water **Units:** mg/L
QC Key: WATERLOO **Lot#:** STD51569 **Cal ID:** HYDRA-10-MAY-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Mercury	0.00400	0.00389	97.3	85 - 115	

LCS - Modified 03/06/2008
PDF File ID: 2409697
Report generated: 05/10/2012 13:23

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050153 **Run Date:** 05/10/2012 **Sample ID:** WG397348-04
Instrument ID: HYDRA **Run Time:** 11:33 **Prep Method:** 7470A
File ID: HY.051012.113336 **Analyst:** PDM **Method:** 7470A
Workgroup (AAB#): WG397594 **Matrix:** Water **Units:** mg/L
QC Key: WATERLOO **Lot#:** STD51569 **Cal ID:** HYDRA-10-MAY-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Mercury, Dissolved	0.00400	0.00389	97.3	85 - 115	

LCS - Modified 03/06/2008
PDF File ID: 2409708
Report generated: 05/10/2012 13:23

Microbac Laboratories Inc.

MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

Loginnum: L12050153 Cal ID: HYDRA- Worknum: WG397594

Instrument ID: HYDRA Contract #: Method: 7470A

Parent ID: WG397348-01 File ID: HY.051012.115538 Dil: 1 Matrix: WATER

Sample ID: WG397348-05 MS File ID: HY.051012.115945 Dil: 1 Units: mg/L

Sample ID: WG397348-06 MSD File ID: HY.051012.120313 Dil: 1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Mercury	ND	0.00444	0.00436	98.0	0.00444	0.00476	107	8.78	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: 2412562

Report generated 05/14/2012 09:36

Microbac Laboratories Inc.

MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

Loginnum: L12050153 Cal ID: HYDRA- Worknum: WG397594

Instrument ID: HYDRA Contract #: Method: 7470A

Parent ID: WG397348-02 File ID: HY.051012.115750 Dil: 1 Matrix: WATER

Sample ID: WG397348-07 MS File ID: HY.051012.120129 Dil: 1 Units: mg/L

Sample ID: WG397348-08 MSD File ID: HY.051012.120458 Dil: 1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Mercury	ND	0.00444	0.00416	93.5	0.00444	0.00474	107	13.2	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: 2412562

Report generated 05/14/2012 09:36

Microbac Laboratories Inc.

MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

Loginnum: L12050153 Cal ID: HYDRA- Worknum: WG397594

Instrument ID: HYDRA Contract #: Method: 7470A

Parent ID: WG397348-01 File ID: HY.051012.115538 Dil: 1 Matrix: WATER

Sample ID: WG397348-05 MS File ID: HY.051012.115945 Dil: 1 Units: mg/L

Sample ID: WG397348-06 MSD File ID: HY.051012.120313 Dil: 1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Mercury, Dissolved	ND	0.00444	0.00436	98.0	0.00444	0.00476	107	8.78	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: 2412563

Report generated 05/14/2012 09:36

Microbac Laboratories Inc.
MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

Loginnum: L12050153 Cal ID: HYDRA- Worknum: WG397594
Instrument ID: HYDRA Contract #: Method: 7470A
Parent ID: WG397348-02 File ID: HY.051012.115750 Dil: 1 Matrix: WATER
Sample ID: WG397348-07 MS File ID: HY.051012.120129 Dil: 1 Units: mg/L
Sample ID: WG397348-08 MSD File ID: HY.051012.120458 Dil: 1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Mercury, Dissolved	ND	0.00444	0.00416	93.5	0.00444	0.00474	107	13.2	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: 2412563
Report generated 05/14/2012 09:36

Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L12050153 **Worknum:** WG397594
Instrument ID: HYDRA **Method:** 7470A
Post Spike ID: WG397594-01 **File ID:** HY.051012.113705 **Dil:** 1 **Units:** ug/L
Sample ID: L12050153-01 **File ID:** HY.051012.113521 **Dil:** 1 **Matrix:** Water

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
MERCURY	1.10		0	U	1	110.0	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: 2409693
Report generated: 05/10/2012 13:23

Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L12050153 **Worknum:** WG397594
Instrument ID: HYDRA **Method:** 7470A
Post Spike ID: WG397594-01 **File ID:** HY.051012.113705 **Dil:** 1 **Units:** ug/L
Sample ID: L12050153-01 **File ID:** HY.051012.113521 **Dil:** 1 **Matrix:** Water

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
MERCURY	1.10		0	U	1	110.0	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: 2409704
Report generated: 05/10/2012 13:23

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L12050153
Analytical Method: 7470A
ICAL Worknum: WG397668

Workgroup (AAB#): WG397594
Instrument ID: HYDRA
Initial Calibration Date: 05/10/2012 09:40

Analyte	WG397668-01		WG397668-02		WG397668-03		WG397668-04		WG397668-05		WG397668-06	
	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT
Mercury	0	234	0.200	841	1.00	3432	2.00	6909	5.00	16640	10.0	32345

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: 2409698
Report generated 05/10/2012 13:23

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L12050153
Analytical Method: 7470A
ICAL Worknum: WG397668

Workgroup (AAB#): WG397594
Instrument ID: HYDRA
Initial Calibration Date: 05/10/2012 09:40

Analyte	R	Q
Mercury	1.000	

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: 2409698
Report generated 05/10/2012 13:23

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L12050153
Analytical Method: 7470A
ICAL Worknum: WG397668

Workgroup (AAB#): WG397594
Instrument ID: HYDRA
Initial Calibration Date: 05/10/2012 09:40

Analyte	WG397668-01		WG397668-02		WG397668-03		WG397668-04		WG397668-05		WG397668-06	
	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT
Mercury	0	234	0.200	841	1.00	3432	2.00	6909	5.00	16640	10.0	32345

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: 2409709
Report generated 05/10/2012 13:23

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L12050153
Analytical Method: 7470A
ICAL Worknum: WG397668

Workgroup (AAB#): WG397594
Instrument ID: HYDRA
Initial Calibration Date: 05/10/2012 09:40

Analyte	R	Q
Mercury	1.000	

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: 2409709
Report generated 05/10/2012 13:23

Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L12050153 Run Date: 05/10/2012 Sample ID: WG397668-08
Instrument ID: HYDRA Run Time: 09:51 Method: 7470A
File ID: HY.051012.095110 Analyst: PDM Units: ug/L
Workgroup (AAB#): WG397594 Cal ID: HYDRA - 10-MAY-12
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
MERCURY	.1	.2	.1	U

ICB - Modified 07/14/2009
PDF File ID: 2409700
Report generated 05/10/2012 13:23

Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L12050153 Run Date: 05/10/2012 Sample ID: WG397668-08
Instrument ID: HYDRA Run Time: 09:51 Method: 7470A
File ID: HY.051012.095110 Analyst: PDM Units: ug/L
Workgroup (AAB#): WG397594 Cal ID: HYDRA - 10-MAY-12
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
MERCURY	.1	.2	.1	U

ICB - Modified 07/14/2009
PDF File ID: 2409711
Report generated 05/10/2012 13:23

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050153 Run Date: 05/10/2012 Sample ID: WG397668-10

Instrument ID: HYDRA Run Time: 09:54 Method: 7470A

File ID: HY.051012.095449 Analyst: PDM Units: ug/L

Workgroup (AAB#): WG397594 Cal ID: HYDRA - 10-MAY-12

Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	-0.127	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: 2409702
Report generated 05/10/2012 13:23

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L12050153	Run Date:	05/10/2012	Sample ID:	WG397668-16
Instrument ID:	HYDRA	Run Time:	11:30	Method:	7470A
File ID:	HY.051012.113009	Analyst:	PDM	Units:	ug/L
Workgroup (AAB#):	WG397594	Cal ID:	HYDRA - 10-MAY-12		
Matrix:	WATER	QAPP:	WATERLOO		

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	0.100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2409702
Report generated 05/10/2012 13:23

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L12050153	Run Date:	05/10/2012	Sample ID:	WG397668-18
Instrument ID:	HYDRA	Run Time:	11:51	Method:	7470A
File ID:	HY.051012.115143	Analyst:	PDM	Units:	ug/L
Workgroup (AAB#):	WG397594	Cal ID:	HYDRA - 10-MAY-12		
Matrix:	WATER	QAPP:	WATERLOO		

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	-0.101	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: 2409702
Report generated 05/10/2012 13:23

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050153 Run Date: 05/10/2012 Sample ID: WG397668-10

Instrument ID: HYDRA Run Time: 09:54 Method: 7470A

File ID: HY.051012.095449 Analyst: PDM Units: ug/L

Workgroup (AAB#): WG397594 Cal ID: HYDRA - 10-MAY-12

Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	-0.127	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: 2409713
Report generated 05/10/2012 13:23

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050153 Run Date: 05/10/2012 Sample ID: WG397668-16

Instrument ID: HYDRA Run Time: 11:30 Method: 7470A

File ID: HY.051012.113009 Analyst: PDM Units: ug/L

Workgroup (AAB#): WG397594 Cal ID: HYDRA - 10-MAY-12

Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	0.100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2409713
Report generated 05/10/2012 13:23

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L12050153	Run Date:	05/10/2012	Sample ID:	WG397668-18
Instrument ID:	HYDRA	Run Time:	11:51	Method:	7470A
File ID:	HY.051012.115143	Analyst:	PDM	Units:	ug/L
Workgroup (AAB#):	WG397594	Cal ID:	HYDRA - 10-MAY-12		
Matrix:	WATER	QAPP:	WATERLOO		

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	-0.101	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: 2409713
Report generated 05/10/2012 13:23

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050153 Run Date: 05/10/2012 Sample ID: WG397668-20

Instrument ID: HYDRA Run Time: 12:14 Method: 7470A

File ID: HY.051012.121418 Analyst: PDM Units: ug/L

Workgroup (AAB#): WG397594 Cal ID: HYDRA - 10-MAY-12

Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	-0.133	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: 2409713
Report generated 05/10/2012 13:23

Microbac Laboratories Inc.

INITIAL CALIBRATION VERIFICATION (ICV)
(Alternate Source)

Login Number: L12050153 Run Date: 05/10/2012 Sample ID: WG397668-07
Instrument ID: HYDRA Run Time: 09:49 Method: 7470A
File ID: HY.051012.094923 Analyst: PDM Units: ug/L
Workgroup (AAB#): WG397594 Cal ID: HYDRA - 10-MAY-12
QC Key: WATERLOO

Analyte		Expected	Found	%REC	LIMITS	Q
Mercury		2	1.81	90.5	90 - 110	

* Exceeds LIMITS Limit

ICV - Modified 03/06/2008
PDF File ID: 2409699
Report generated 05/10/2012 13:23

Microbac Laboratories Inc.

INITIAL CALIBRATION VERIFICATION (ICV)
(Alternate Source)

Login Number: L12050153 Run Date: 05/10/2012 Sample ID: WG397668-07
Instrument ID: HYDRA Run Time: 09:49 Method: 7470A
File ID: HY.051012.094923 Analyst: PDM Units: ug/L
Workgroup (AAB#): WG397594 Cal ID: HYDRA - 10-MAY-12
QC Key: WATERLOO

Analyte		Expected	Found	%REC	LIMITS	Q
Mercury		2	1.81	90.5	90 - 110	

* Exceeds LIMITS Limit

ICV - Modified 03/06/2008
PDF File ID: 2409710
Report generated 05/10/2012 13:23

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050153 Run Date: 05/10/2012 Sample ID: WG397668-09

Instrument ID: HYDRA Run Time: 09:53 Method: 7470A

File ID: HY.051012.095304 Analyst: PDM QC Key: WATERLOO

Workgroup (AAB#): WG397594 Cal ID: HYDRA - 10-MAY-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00210	mg/L	105	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2409701

Report generated 05/10/2012 13:23

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050153 Run Date: 05/10/2012 Sample ID: WG397668-15
Instrument ID: HYDRA Run Time: 11:28 Method: 7470A
File ID: HY.051012.112803 Analyst: PDM QC Key: WATERLOO
Workgroup (AAB#): WG397594 Cal ID: HYDRA - 10-MAY-12
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00206	mg/L	103	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
PDF File ID: 2409701
Report generated 05/10/2012 13:23

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050153 Run Date: 05/10/2012 Sample ID: WG397668-17

Instrument ID: HYDRA Run Time: 11:49 Method: 7470A

File ID: HY.051012.114937 Analyst: PDM QC Key: WATERLOO

Workgroup (AAB#): WG397594 Cal ID: HYDRA - 10-MAY-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00208	mg/L	104	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2409701

Report generated 05/10/2012 13:23

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050153 Run Date: 05/10/2012 Sample ID: WG397668-09

Instrument ID: HYDRA Run Time: 09:53 Method: 7470A

File ID: HY.051012.095304 Analyst: PDM QC Key: WATERLOO

Workgroup (AAB#): WG397594 Cal ID: HYDRA - 10-MAY-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00210	mg/L	105	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2409712

Report generated 05/10/2012 13:23

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050153 Run Date: 05/10/2012 Sample ID: WG397668-15
Instrument ID: HYDRA Run Time: 11:28 Method: 7470A
File ID: HY.051012.112803 Analyst: PDM QC Key: WATERLOO
Workgroup (AAB#): WG397594 Cal ID: HYDRA - 10-MAY-12
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00206	mg/L	103	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
PDF File ID: 2409712
Report generated 05/10/2012 13:23

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050153 Run Date: 05/10/2012 Sample ID: WG397668-17

Instrument ID: HYDRA Run Time: 11:49 Method: 7470A

File ID: HY.051012.114937 Analyst: PDM QC Key: WATERLOO

Workgroup (AAB#): WG397594 Cal ID: HYDRA - 10-MAY-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00208	mg/L	104	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2409712

Report generated 05/10/2012 13:23

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050153 Run Date: 05/10/2012 Sample ID: WG397668-19

Instrument ID: HYDRA Run Time: 12:12 Method: 7470A

File ID: HY.051012.121235 Analyst: PDM QC Key: WATERLOO

Workgroup (AAB#): WG397594 Cal ID: HYDRA - 10-MAY-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00210	mg/L	105	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2409712

Report generated 05/10/2012 13:23

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: 10 09:30:25 10 May 12 HG

Hg .000 ppb 234

*** Standard: 2 Rep: 1 Seq: 11 09:32:09 10 May 12 HG

Hg .200 ppb 841

*** Standard: 3 Rep: 1 Seq: 12 09:34:11 10 May 12 HG

Hg 1.00 ppb 3432

*** Standard: 4 Rep: 1 Seq: 13 09:35:55 10 May 12 HG

Hg 2.00 ppb 6909

*** Standard: 5 Rep: 1 Seq: 14 09:38:23 10 May 12 HG

Hg 5.00 ppb 16640

*** Standard: 6 Rep: 1 Seq: 15 09:40:17 10 May 12 HG

Hg 10.0 ppb 32345

*** Check Standard: 2 Ck2ICV Seq: 16 09:49:23 10 May 12 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		90.3	1.81	2.00	ppb	.000

*** Check Standard: 3 Ck3ICB Seq: 17 09:51:10 10 May 12 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		-67.2	-.134	.200	ppb	.000

*** Check Standard: 4 Ck4CCV Seq: 18 09:53:04 10 May 12 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		105.	2.10	2.00	ppb	.000

*** Check Standard: 5 Ck5CCB Seq: 19 09:54:49 10 May 12 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		-63.3	-.127	.200	ppb	.000

*** Sample ID: WG39732302 051012B\ Seq: 20 10:41:19 10 May 12 HG

PBW 71

Hg .064 ppb .000 .064

==========

*** Sample ID: WG39732303 051012B\ Seq: 21 10:43:03 10 May 12 HG

LCSW 71

Hg 4.05 ppb .000 4.05

=

==========

Approved: 05/10/2012 14:00

Pierce Morris

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
--------------------------------------------------------------------------------

*** Sample ID: WG39726001 051012B\   Seq:  22     10:44:44 10 May 12   HG
                          TCLP BLANK
Hg   -.140    ppb       .000     -.140
                                                                              =
================================================================================
*** Sample ID: 1205009901 051012B\   Seq:  23     10:46:26 10 May 12   HG

Hg   -.095    ppb       .000     -.095
                                                                              =
================================================================================
*** Sample ID: WG39759301 051012B\   Seq:  24     10:48:23 10 May 12   HG
                          1205009901PS.9
Hg    1.01    ppb       .000      1.01
                                                                              =
================================================================================
*** Sample ID: 1205009902 051012B\   Seq:  25     10:50:16 10 May 12   HG

Hg   -.110    ppb       .000     -.110
                                                                              =
================================================================================
*** Sample ID: 1205009903 051012B\   Seq:  26     10:52:00 10 May 12   HG

Hg   -.070    ppb       .000     -.070
                                                                              =
================================================================================
*** Sample ID: 1205009904 051012B\   Seq:  27     10:53:52 10 May 12   HG

Hg   -.077    ppb       .000     -.077
                                                                              =
================================================================================
*** Sample ID: 1205009905 051012B\   Seq:  28     10:55:46 10 May 12   HG

Hg   -.060    ppb       .000     -.060
                                                                              =
================================================================================
*** Sample ID: 1205009906 051012B\   Seq:  29     10:57:40 10 May 12   HG

Hg   -.050    ppb       .000     -.050
                                                                              =
*** Check Standard: 4  Ck4CCV       Seq:  30     10:59:24 10 May 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          108.     2.16    2.00   ppb        .000
                                                                              =
*** Check Standard: 5  Ck5CCB       Seq:  31     11:01:18 10 May 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg         -59.1    -.118    .200   ppb        .000
                                                                              =
```

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
--------------------------------------------------------------------------------

*** Sample ID: 1205009907 051012B\   Seq:  32     11:03:03 10 May 12   HG

Hg   -.089    ppb       .000     -.089
                                                                              =
================================================================================
*** Sample ID: 1205009908 051012B\   Seq:  33     11:04:49 10 May 12   HG

Hg   -.073    ppb       .000     -.073
                                                                              =
================================================================================
*** Sample ID: 1205009909 051012B\   Seq:  34     11:06:35 10 May 12   HG

Hg   -.063    ppb       .000     -.063
                                                                              =
================================================================================
*** Sample ID: 1205009910 051012B\   Seq:  35     11:08:16 10 May 12   HG

Hg   -.090    ppb       .000     -.090
                                                                              =
================================================================================
*** Sample ID: 1205010902 051012B\   Seq:  36     11:09:59 10 May 12   HG

Hg   -.091    ppb       .000     -.091
                                                                              =
================================================================================
*** Sample ID: WG39759302 051012B\   Seq:  37     11:11:41 10 May 12   HG
                          1205010902PS.9
Hg    .976    ppb       .000      .976
                                                                              =
================================================================================
*** Sample ID: 1205010904 051012B\   Seq:  38     11:13:33 10 May 12   HG

Hg   -.091    ppb       .000     -.091
                                                                              =
================================================================================
*** Sample ID: 1205010906 051012B\   Seq:  39     11:15:18 10 May 12   HG

Hg   -.086    ppb       .000     -.086
                                                                              =
================================================================================
*** Sample ID: 1205016901 051012B\   Seq:  40     11:17:00 10 May 12   HG
                          WG39732301
Hg   -.097    ppb       .000     -.097
                                                                              =
================================================================================
*** Sample ID: WG39732304 051012B\   Seq:  41     11:18:43 10 May 12   HG
                          1205016901S
Hg    3.71    ppb       .000      3.71
                                                                              =
```

Approved: 05/10/2012 14:00

Pierce Morris

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
--------------------------------------------------------------------------------

*** Check Standard: 4  Ck4CCV       Seq:  42      11:20:36 10 May 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          105.     2.10    2.00   ppb        .000
                                                                              =
*** Check Standard: 5  Ck5CCB       Seq:  43      11:22:18 10 May 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg         -72.4    -.145    .200   ppb        .000
                                                                              =
*** Sample ID: WG39732305 051012B\   Seq:  44     11:24:12 10 May 12   HG
                          1205016901SD
Hg    4.16    ppb       .000      4.16
                                                                              =
================================================================================
*** Sample ID: 1205022305 051012B\   Seq:  45     11:26:10 10 May 12   HG

Hg   -.081    ppb       .000     -.081
                                                                              =
*** Check Standard: 4  Ck4CCV       Seq:  46      11:28:03 10 May 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          103.     2.06    2.00   ppb        .000
                                                                              =
*** Check Standard: 5  Ck5CCB       Seq:  47      11:30:09 10 May 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg         -42.6    -.085    .200   ppb        .000
                                                                              =
*** Sample ID: WG39734803 051012B\   Seq:  48     11:31:53 10 May 12   HG
                          PBW 98
Hg   -.098    ppb       .000     -.098
                                                                              =
================================================================================
*** Sample ID: WG39734804 051012B\   Seq:  49     11:33:36 10 May 12   HG
                          LCSW 98
Hg    3.89    ppb       .000      3.89
                                                                              =
================================================================================
*** Sample ID: 1205015301 051012B\   Seq:  50     11:35:21 10 May 12   HG

Hg   -.034    ppb       .000     -.034
                                                                              =
================================================================================
*** Sample ID: WG39759401 051012B\   Seq:  51     11:37:05 10 May 12   HG
                          1205015301PS.9
Hg    1.10    ppb       .000      1.10
                                                                              =
================================================================================
*** Sample ID: 1205015302 051012B\   Seq:  52     11:38:51 10 May 12   HG

Hg   -.041    ppb       .000     -.041
                                                                              =
================================================================================
```

Approved: 05/10/2012 14:00

Pierce Morris

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
--------------------------------------------------------------------------------

*** Sample ID: 1205015303 051012B\   Seq:  53     11:40:45 10 May 12   HG

Hg   -.090    ppb       .000     -.090
                                                                              =
================================================================================
*** Sample ID: 1205015304 051012B\   Seq:  54     11:42:38 10 May 12   HG

Hg   -.098    ppb       .000     -.098
                                                                              =
================================================================================
*** Sample ID: 1205015305 051012B\   Seq:  55     11:44:26 10 May 12   HG

Hg   -.069    ppb       .000     -.069
                                                                              =
================================================================================
*** Sample ID: 1205015306 051012B\   Seq:  56     11:46:11 10 May 12   HG

Hg   -.092    ppb       .000     -.092
                                                                              =
================================================================================
*** Sample ID: 1205015307 051012B\   Seq:  57     11:47:54 10 May 12   HG

Hg   -.081    ppb       .000     -.081
                                                                              =
*** Check Standard: 4  Ck4CCV       Seq:  58      11:49:37 10 May 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          104.     2.08    2.00   ppb        .000
                                                                              =
*** Check Standard: 5  Ck5CCB       Seq:  59      11:51:43 10 May 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg         -50.4    -.101    .200   ppb        .000
                                                                              =
*** Sample ID: 1205015308 051012B\   Seq:  60     11:53:51 10 May 12   HG

Hg   -.088    ppb       .000     -.088
                                                                              =
================================================================================
*** Sample ID: 1205017101 051012B\   Seq:  61     11:55:38 10 May 12   HG
                          WG39734801
Hg   -.061    ppb       .000     -.061
                                                                              =
================================================================================
*** Sample ID: 1205017102 051012B\   Seq:  62     11:57:50 10 May 12   HG
                          WG39734802
Hg   -.081    ppb       .000     -.081
                                                                              =
================================================================================
```

Approved: 05/10/2012 14:00

Pierce Morris

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
--------------------------------------------------------------------------------

*** Sample ID: WG39734805 051012B\   Seq:  63     11:59:45 10 May 12   HG
                          1205017103S
Hg    3.92    ppb       .000      3.92
                                                                              =
================================================================================
*** Sample ID: WG39734807 051012B\   Seq:  64     12:01:29 10 May 12   HG
                          1205017104S
Hg    3.74    ppb       .000      3.74
                                                                              =
================================================================================
*** Sample ID: WG39734806 051012B\   Seq:  65     12:03:13 10 May 12   HG
                          1205017105SD
Hg    4.28    ppb       .000      4.28
                                                                              =
================================================================================
*** Sample ID: WG39734808 051012B\   Seq:  66     12:04:58 10 May 12   HG
                          1205017106SD
Hg    4.27    ppb       .000      4.27
                                                                              =
================================================================================
*** Sample ID: 1205017107 051012B\   Seq:  67     12:07:23 10 May 12   HG

Hg   -.040    ppb       .000     -.040
                                                                              =
================================================================================
*** Sample ID: 1205017108 051012B\   Seq:  68     12:09:07 10 May 12   HG

Hg   -.089    ppb       .000     -.089
                                                                              =
================================================================================
*** Sample ID: 1205023001 051012B\   Seq:  69     12:10:50 10 May 12   HG

Hg    .319    ppb       .000      .319
                                                                              =
*** Check Standard: 4  Ck4CCV       Seq:  70      12:12:35 10 May 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          105.     2.10    2.00   ppb        .000
                                                                              =
*** Check Standard: 5  Ck5CCB       Seq:  71      12:14:18 10 May 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg         -66.4    -.133    .200   ppb        .000
                                                                              =
```

Approved: 05/10/2012 14:00

Pierce Morris

2.4 General Chemistry Data

2.4.1 Alkalinity Data

2.4.1.1 Summary Data

Login Number: L12050153
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.

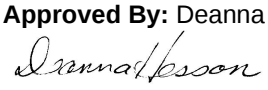
Duplicates: All acceptance criteria were met.

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: 46691
Approved By: Deanna Hesson



Certificate of Analysis

Sample #: L12050153-01 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-15-050312 **Prep Method:** 310.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 310.2 **Cal Date:** 05/14/2012 12:21
Workgroup #: WG397895 **Analyst:** DIH **Run Date:** 05/14/2012 12:24
Collect Date: 05/03/2012 10:45 **Dilution:** 1 **File ID:** SC120514002.013
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Alkalinity, Total (as CaCO3)		170		20.0	10.0

Sample #: L12050153-03 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-17-050312 **Prep Method:** 310.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 310.2 **Cal Date:** 05/14/2012 12:21
Workgroup #: WG397895 **Analyst:** DIH **Run Date:** 05/14/2012 12:25
Collect Date: 05/03/2012 11:30 **Dilution:** 3 **File ID:** SC120514002.014
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Alkalinity, Total (as CaCO3)		616		60.0	30.0

Sample #: L12050153-05 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-28050312 **Prep Method:** 310.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 310.2 **Cal Date:** 05/14/2012 15:48
Workgroup #: WG397939 **Analyst:** DIH **Run Date:** 05/14/2012 15:51
Collect Date: 05/03/2012 15:00 **Dilution:** 2 **File ID:** SC120514005.013
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Alkalinity, Total (as CaCO3)		355		40.0	20.0

Sample #: L12050153-07 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: TW-02-050312 **Prep Method:** 310.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 310.2 **Cal Date:** 05/14/2012 12:21
Workgroup #: WG397895 **Analyst:** DIH **Run Date:** 05/14/2012 12:26
Collect Date: 05/03/2012 13:30 **Dilution:** 4 **File ID:** SC120514002.016
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Alkalinity, Total (as CaCO3)		739		80.0	40.0

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: 14-MAY-2012
Analyst: DIH
Analyst: NA
Method: ALK
Instrument: SC
Curve Workgroup: NA
Runlog ID:
Analytical Workgroups: WG397895 WG397913 WG397931 WG397939

Calibration/Linearity	5/14/2012
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:
18-MAY-2012
Dianna Ibsson

Secondary Reviewer:
18-MAY-2012
Dianna Ibsson

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-18-2012 11:52:24

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 310.2 **AAB#:** WG397895

Login Number: L12050153

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-15-050312	01	05/03/12							14		05/14/12	11.1	14	
MW-17-050312	03	05/03/12							14		05/14/12	11	14	
TW-02-050312	07	05/03/12							14		05/14/12	11	14	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2421060
Report generated 05/18/2012 10:54

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 310.2 **AAB#:** WG397939

Login Number: L12050153

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-28050312	05	05/03/12							14		05/14/12	11	14	

*** = SEE PROJECT QAPP REQUIREMENTS**

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2421060
Report generated 05/18/2012 10:54

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12050153
Blank File ID: SC120514002.010
Prep Date: 05/14/12 12:22
Analyzed Date: 05/14/12 12:22
Analyst: DIH

Work Group: WG397895
Blank Sample ID: WG397895-01
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	WG397895-02	SC120514002.011	05/14/12 12:23	01
LCS2	WG397895-03	SC120514002.012	05/14/12 12:23	01
MW-15-050312	L12050153-01	SC120514002.013	05/14/12 12:24	01
MW-17-050312	L12050153-03	SC120514002.014	05/14/12 12:25	DL01
TW-02-050312	L12050153-07	SC120514002.016	05/14/12 12:26	DL01
DUP	WG397895-05	SC120514002.033	05/14/12 12:36	01

Report Name: BLANK_SUMMARY
PDF File ID: 2421061
Report generated 05/18/2012 10:54

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number:	L12050153	Work Group:	WG397939
Blank File ID:	SC120514005.040	Blank Sample ID:	WG397939-01
Prep Date:	05/14/12 16:07	Instrument ID:	SMARTCHEM
Analyzed Date:	05/14/12 16:07	Method:	310.2
Analyst:	DIH		

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG397939-02	SC120514005.011	05/14/12 15:50	01
LCS2	WG397939-03	SC120514005.012	05/14/12 15:51	01
MW-28050312	L12050153-05	SC120514005.013	05/14/12 15:51	DL01
DUP	WG397939-05	SC120514005.015	05/14/12 15:52	DL01

Report Name: BLANK_SUMMARY
PDF File ID: 2421061
Report generated 05/18/2012 10:54

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050153 Prep Date: 05/14/12 12:22 Sample ID: WG397895-01
Instrument ID: SMARTCHEM Run Date: 05/14/12 12:22 Prep Method: 310.2
File ID: SC120514002.010 Analyst: DIH Method: 310.2
Workgroup (AAB#): WG397895 Matrix: Water Units: mg/L
Contract #: Cal ID: SMARTC-14-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: 2421062
18-MAY-2012 10:54

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050153 Prep Date: 05/14/12 16:07 Sample ID: WG397939-01
Instrument ID: SMARTCHEM Run Date: 05/14/12 16:07 Prep Method: 310.2
File ID: SC120514005.040 Analyst: DIH Method: 310.2
Workgroup (AAB#): WG397939 Matrix: Water Units: mg/L
Contract #: Cal ID: SMARTC-14-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: 2421062
18-MAY-2012 10:54

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050153 **Analyst:** DIH **Prep Method:** 310.2
Instrument ID: SMARTCHEM **Matrix:** Water **Method:** 310.2
Workgroup (AAB#): WG397939 **Units:** mg/L
QC Key: WATERLOO **Lot #:** STD51238

Sample ID: WG397939-02 LCS **File ID:** SC120514005.011 **Run Date:** 05/14/2012 15:50
Sample ID: WG397939-03 LCS2 **File ID:** SC120514005.012 **Run Date:** 05/14/2012 15:51

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Alkalinity, Total (as CaCO3)	200	198	99.2	200	198	99.0	0.210	85 - 115	25	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 2421063
Report generated: 05/18/2012 10:54

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050153 **Analyst:** DIH **Prep Method:** 310.2
Instrument ID: SMARTCHEM **Matrix:** Water **Method:** 310.2
Workgroup (AAB#): WG397895 **Units:** mg/L
QC Key: WATERLOO **Lot #:** STD51238

Sample ID: WG397895-02 LCS **File ID:** SC120514002.011 **Run Date:** 05/14/2012 12:23
Sample ID: WG397895-03 LCS2 **File ID:** SC120514002.012 **Run Date:** 05/14/2012 12:23

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Alkalinity, Total (as CaCO3)	200	208	104	200	208	104	0.294	85 - 115	25	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 2421063
Report generated: 05/18/2012 10:54

2.4.1.3 Raw Data

WORKGROUP: WG997895 (A)

SMARTCHEM RUN LOG

B 397913
C 397931
D 397939

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 #** 20120514002
2) **Workgroup** B **Plan #** 20120514003
3) **Workgroup** C **Plan #** 20120514004
D 20120514005

	Analyte	1	2	3
		ALK		
		Dilution		
SC Prepared Curve				
Position				
1-1	ICV 250			
1-2	BLK			
1-3	LCS 200			
1-4	LCSDUP			
1-5	05-153-01			
1-6	03	1/3		
1-7	05			
1-8	07	1/4		
1-9	05-245-04	1/3		
1-10	12	1/3		
1-11	14	1/3		
1-12	05-257-01			
1-13	03			
1-14	05			
1-15	07			
1-16	09			
1-17	11			
1-18	13			
1-19	05-259-01	1/2		
1-20	02			
1-21	DUP 02			
1-22	MS04			
2-1	MSD 06			
2-2	08	1/10		
2-3	09	1/5		

Position	Analyte	1	2	3
		Run 2		
2-4 1	ICV 250			
2-5 2	BLK			
2-6 3	LCS 200			
2-7 4	LCS DUP			
2-8 5	05-~~285-01~~ min-340-04			
2-9 6	05-297-01	1/3		
2-10 7	03	1/2		
2-11 8	05	1/2		
2-12 9	07	1/2		
2-13 10	09	1/3		
2-14 11	10	1/3		
2-15 12	11	1/2		
2-16 13	05-367-02	1/5		color
2-17 14	03	1/5		↓
2-18 15	05	1/5		
2-19 16	06	1/5		
2-20 17	08	1/5		
2-21 18	09	1/5		
2-22 19	05-226-01	1/20		
2-23 20	03	1/2		
2-24 21	05	1/2		
2-25 22	07	1/20		
2-26 1	05-340-01	1/2		
3-1 2	02			
3-2 3	DUP 02			
4				
5				

NOTES:
* Run NO2 std on NO3 runs
* LCS/LCS Dup all parameters
*MS(10% sample): NO3, TKN, NH3

2-4 05-259-10
2-5 12
2-6
2-7

DCN#90860

pg 1

WORKGROUP: WG397895

SMARTCHEM RUN LOG

Position	Analyte	1	2	3
3-3 1	Run 3			
3-4 2	ICV			
3-5 3	BLK			
3-6 4	LCS			
3-7 5	LCSDUP			
3-8 6	05-340-05	1/2		
3-9 7	07	1/2		
3-10 8	08	1/2		
3-11 9	09	1/2		
3-12 10	05-342-01			
3-13 11	03			
3-14 12	05			
3-15 13	07			
3-16 14	09			
3-17 15	05-342-11			
3-18 16	05-285-01			
3-19 17	05-284-01	1/10		
3-20 18	03			
3-21 19	05	1/2		
3-22 20	07	1/3		
3-23 21	05-362-01	1/3		
3-24 22	03	1/3		
3-25 1	04	1/3		
3-26 2	05	1/3		
3-27 3	07	1/3		
3-28 4	DUP 07	1/3		
	RR BLK			

- ☐ 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
- ☐ Phos — EPA 365.4

Analyte	ALK		Reagents
SOP & Revision	K 3102 R14		RGT 17349
Curve Stock (SC made)	Std 50178		
Curve ID (user made)			
ICV	Std 51237		
CCV	Std 51236		
LCS	Std 51238		
MS	Std 50179 Dilution 0.2/5(2500)=100		

Comments: 05-382, 383 pH < 8.3

Analyst: Deanne Nesson Date: 5/14/12

pg 2

DCN#90860

WORKGROUP: WG397895

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 Run 4	2	3
		Dilution		
SC Prepared Curve				
Position				
1-1	ICV 250			
1-2	BLK			
1-3	LCS 200			
1-4	LCSDUP			
1-5	05-153-05	1/2		
1-6	05-259-02	1/2		
1-7	DUP 02	1/2		
1-8	MS 04	1/2		
1-9	msd 06	1/2		
1-10	08	1/4		
1-11	09	1/3		
1-12	10	1/2		
1-13	12	1/2		
1-14	05-362-08	1/3		
1-15	12	1/3		
1-16	14	1/3		
1-17	22	1/3		
1-18	05-382-01			B
1-19	05-383-01			B
1-20	05-386-01	1/2		
1-21	03	1/2		
1-22	05	1/4		
2-1	06	1/2		
2-2	08	1/2		
2-3	09	1/2		

Position	Analyte	1	2	3
2-4	05-386-10	1/2		
2-5	05-396-01		1/3	colar
2-6	RR BLK			
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

pg 3

DCN#90860

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	0.7797	0.00		12:15:31 PM
DIL-1	RBL	0.0	0.7830	0.00		12:15:49 PM
DIL-1	RBL	0.0	0.7808	0.00		12:16:43 PM
DIL-1	Std-1	0.0	-0.0019	0.00		12:17:01 PM
SR5-1	Std-2	10.0	-0.0200	0.00		12:17:55 PM
SR5-2	Std-3	20.0	-0.0237	0.00		12:18:13 PM
SR5-3	Std-4	50.0	-0.0745	0.00		12:19:07 PM
SR5-4	Std-5	100.0	-0.1540	0.00		12:19:25 PM
SR5-5	Std-6	200.0	-0.3435	0.00		12:20:19 PM
SR5-6	Std-7	250.0	-0.4306	0.00		12:20:37 PM
SR5-7	Std-8	300.0	-0.5153	0.00		12:21:31 PM
1	ICV 250	250.7	-0.4280	0.00		12:21:49 PM
2	WG397895-01 BLK	-5.2	0.0111	0.00	INV,><,LL	12:22:43 PM
3	WG397895-02 LCS	208.2	-0.3505	0.00		12:23:01 PM
4	WG397895-03 LCSDUP	207.6	-0.3494	0.00		12:23:55 PM
5	L12050153-01	169.8	-0.2820	0.00		12:24:13 PM
6	L12050153-03 (3)	205.2	-0.3451	0.00		12:25:07 PM
7	L12050153-05	338.5	-0.5956	0.00	><,LH	12:25:25 PM
8	L12050153-07 (4)	184.9	-0.3087	0.00		12:26:19 PM
9	L12050245-04 (3)	194.4	-0.3256	0.00		12:26:37 PM
10	L12050245-12 (3)	191.5	-0.3206	0.00		12:27:31 PM
ST-2	CCV (150 mg/L)	157.8	-0.2611	105.22		12:27:49 PM
ST-3	CCB (0 mg/L)	3.1	-0.0022	0.00		12:28:43 PM
11	L12050245-14 (3)	143.6	-0.2364	0.00		12:29:01 PM
12	L12050257-01	273.7	-0.4710	0.00		12:29:55 PM
13	L12050257-03	263.7	-0.4522	0.00		12:30:13 PM
14	L12050257-05	225.5	-0.3817	0.00		12:31:07 PM
15	L12050257-07	56.9	-0.0898	0.00		12:31:25 PM
16	L12050257-09	47.1	-0.0736	0.00		12:32:19 PM
17	L12050257-11	280.3	-0.4835	0.00		12:32:37 PM
18	L12050257-13	230.9	-0.3917	0.00		12:33:31 PM
19	L12050259-01 (2)	158.3	-0.2619	0.00		12:33:49 PM

Report Date :05/14/2012 **Run Date :5/14/2012** **Operator : WESTCO** **Plan # :20120514002**

Plan Description : ALK-A-DIH/05/14/2012

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	L12050259-02 wg-04	313.7	-0.5473	0.00	><,LH	12:34:43 PM
ST-2	CCV (150 mg/L)	166.6	-0.2764	111.04		12:35:01 PM
ST-3	CCB (0 mg/L)	17.6	-0.0256	0.00		12:35:55 PM
21	WG397895-05 DUP	317.1	-0.5539	0.00	><,LH	12:36:13 PM
22	L12050259-04 MS wg-06	350.4	-0.6193	0.00	><,LH	12:37:07 PM
23	L12050259-06 MSD wg07	351.0	-0.6205	0.00	><,LH	12:37:25 PM
24	L12050259-08 (10)	79.9	-0.1280	0.00		12:38:19 PM
25	L12050259-09 (5)	99.2	-0.1605	0.00		12:38:37 PM
26	L12050259-10	367.2	-0.6528	0.00	><,LH	12:39:31 PM
27	L12050259-12	362.4	-0.6432	0.00	><,LH	12:39:49 PM
28	ID 28	27.4	-0.0414	0.00		12:40:43 PM
29	ID 29	27.4	-0.0415	0.00		12:41:01 PM
ST-2	CCV (150 mg/L)	175.6	-0.2923	117.06		12:41:55 PM
ST-3	CCB (0 mg/L)	17.4	-0.0252	0.00		12:42:13 PM
7-[1/2]	L12050153-05	443.8	-0.3752	0.00	LH	12:49:54 PM
ST-2	CCV (150 mg/L)	174.6	-0.2905	116.38		12:49:54 PM
ST-3	CCB (0 mg/L)	32.8	-0.0502	0.00		12:50:48 PM
20-[1/2]	L12050259-02	377.5	-0.3156	0.00	LH	12:52:18 PM
21-[1/2]	WG397895-05 DUP	387.8	-0.3248	0.00	LH	12:53:30 PM
22-[1/2]	L12050259-04 MS	479.4	-0.4078	0.00	LH	12:54:42 PM
23-[1/2]	L12050259-06 MSD	487.5	-0.4152	0.00	LH	12:55:54 PM
26-[1/2]	L12050259-10	583.9	-0.5055	0.00	LH	12:57:06 PM
27-[1/2]	L12050259-12	556.5	-0.4795	0.00	LH	12:58:18 PM
ST-2	CCV (150 mg/L)	186.3	-0.3113	124.22		12:58:18 PM
ST-3	CCB (0 mg/L)	43.5	-0.0678	0.00		12:59:12 PM

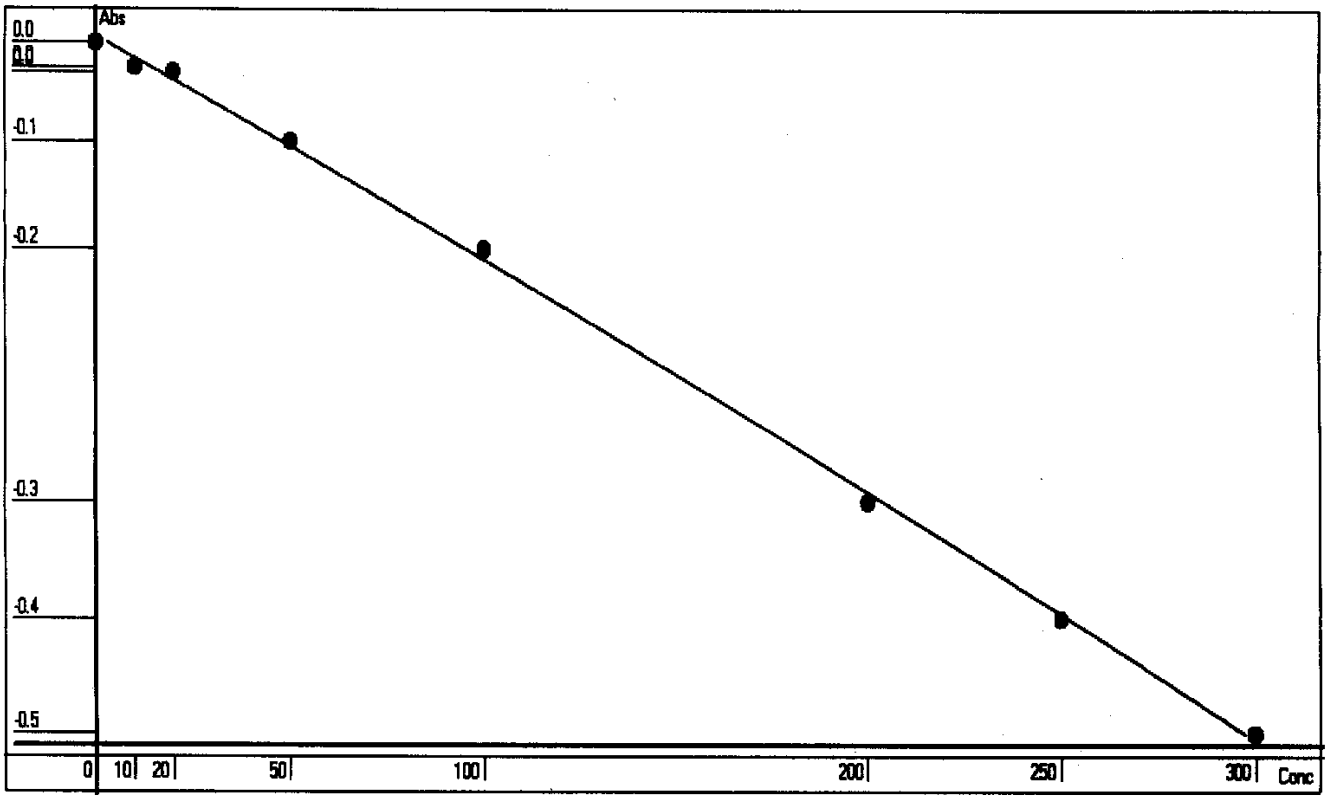
Report Date :05/14/2012 **Run Date :5/14/2012** **Operator : WESTCO** **Plan # :20120514002**

Plan Description : ALK-A-DIH/05/14/2012

Calibrant Report - WALK -

Calib Lot #:010104 Exp Date:6/21/2020 User:MICROBAC

Plan # : 20120514002 Description : [ALK-A-DIH/05/14/2012]



Point	OD	Conc	Recalc Conc	% Error
1	-0.0019	0	2.9350	293.50
2	-0.0200	10	14.1773	41.77
3	-0.0237	20	16.4676	-17.66
4	-0.0745	50	47.6439	-4.71
5	-0.1540	100	95.4269	-4.57
6	-0.3435	200	204.3712	2.19
7	-0.4306	250	252.1042	0.84
8	-0.5153	300	297.1079	-0.96

Conc= -97.176*Abso^2 -623.249*Abso +1.7512 R^2=0.9990

RBL
0.7803
0

Report Date 5/14/2012 Run Date 5/14/2012

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	0.6164	0.00		1:42:51 PM
DIL-1	RBL	0.0	0.6063	0.00		1:43:09 PM
DIL-1	RBL	0.0	0.6065	0.00		1:44:03 PM
DIL-1	Std-1	0.0	0.0009	0.00	INV	1:44:21 PM
SR5-1	Std-2	10.0	-0.0142	0.00		1:45:15 PM
SR5-2	Std-3	20.0	-0.0285	0.00		1:45:33 PM
SR5-3	Std-4	50.0	-0.0614	0.00		1:46:27 PM
SR5-4	Std-5	100.0	-0.1289	0.00		1:46:45 PM
SR5-5	Std-6	200.0	-0.2735	0.00		1:47:39 PM
SR5-6	Std-7	250.0	-0.3393	0.00		1:47:57 PM
SR5-7	Std-8	300.0	-0.4025	0.00		1:48:52 PM
1	ICV 250	258.1	-0.3482	0.00		1:49:09 PM
2	WG397913-01 BLK	-3.2	0.0055	0.00	INV,><,LL	1:50:04 PM
3	WG397913-02 LCS	196.9	-0.2647	0.00		1:50:21 PM
4	WG397913-03 LCSDUP	194.6	-0.2615	0.00		1:51:16 PM
5	~~L12050285-01~~ 340-04	343.1 X	-0.4650	0.00	><,LH	1:51:33 PM
6	L12050297-01 (3)	134.2	-0.1795	0.00		1:52:28 PM
7	L12050297-03 (2)	222.4	-0.2994	0.00		1:52:46 PM
8	L12050297-05 (2)	159.1	-0.2133	0.00		1:53:40 PM
9	L12050297-07 (2)	240.0	-0.3235	0.00		1:53:58 PM
10	L12050297-09 (3)	185.2	-0.2488	0.00		1:54:52 PM
ST-2	CCV (150 mg/L)	145.8	-0.1952	97.17		1:55:10 PM
ST-3	CCB (0 mg/L)	-10.2	0.0149	0.00	INV,><,LL	1:56:04 PM
11	L12050297-10 (3)	183.0	-0.2457	0.00		1:56:22 PM
12	L12050297-11 (2)	162.0	-0.2172	0.00		1:57:16 PM
13	L12050367-02 (5)	122.4	-0.1636	0.00		1:57:34 PM
14	L12050367-03 (5)	93.5	-0.1245	0.00		1:58:28 PM
15	L12050367-05 (5)	157.9	-0.2117	0.00		1:58:46 PM
16	L12050367-06 (5)	150.3	-0.2013	0.00		1:59:40 PM
17	L12050367-08 (5)	143.5	-0.1922	0.00		1:59:58 PM
18	L12050367-09 (5)	100.8	-0.1343	0.00		2:00:52 PM
19	L12050226-01 (20)	268.6	-0.3626	0.00		2:01:10 PM

Report Date :05/14/2012 **Run Date :5/14/2012** **Operator : WESTCO** **Plan # :20120514003**

Plan Description : ALK-B-DIH/5/14/2012

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	L12050226-03 (2)	135.3	-0.1810	0.00		2:02:04 PM
ST-2	CCV (150 mg/L)	161.4	-0.2164	107.59		2:02:22 PM
ST-3	CCB (0 mg/L)	5.9	-0.0067	0.00		2:03:16 PM
21	L12050226-05 (2)	208.8	-0.2809	0.00		2:03:34 PM
22	L12050226-07 (20)	141.6	-0.1896	0.00		2:04:28 PM
23	L12050340-01 (2)	162.0	-0.2172	0.00		2:04:46 PM
24	L12050340-02	313.4 X	-0.4241	0.00	><,LH	2:05:40 PM
25	WG397913-05 DUP	309.9 X	-0.4192	0.00	><,LH	2:05:58 PM
26	ID 26	8.7	-0.0105	0.00		2:06:52 PM
27	ID 27	6.4	-0.0074	0.00		2:07:10 PM
ST-2	CCV (150 mg/L)	160.4	-0.2150	106.90		2:08:04 PM
ST-3	CCB (0 mg/L)	9.2	-0.0111	0.00		2:08:22 PM
5-[1/2]	~~L12050285-01~~ 05-340-04	427.6	-0.2877	0.00	LH	2:15:52 PM
24-[1/2]	L12050340-02	363.5	-0.2441	0.00	LH	2:17:04 PM
25-[1/2]	WG397913-05 DUP	379.7	-0.2551	0.00	LH	2:18:16 PM
ST-2	CCV (150 mg/L)	170.1	-0.2283	113.43		2:18:16 PM
ST-3	CCB (0 mg/L)	31.1 or	-0.0405	0.00		2:19:10 PM

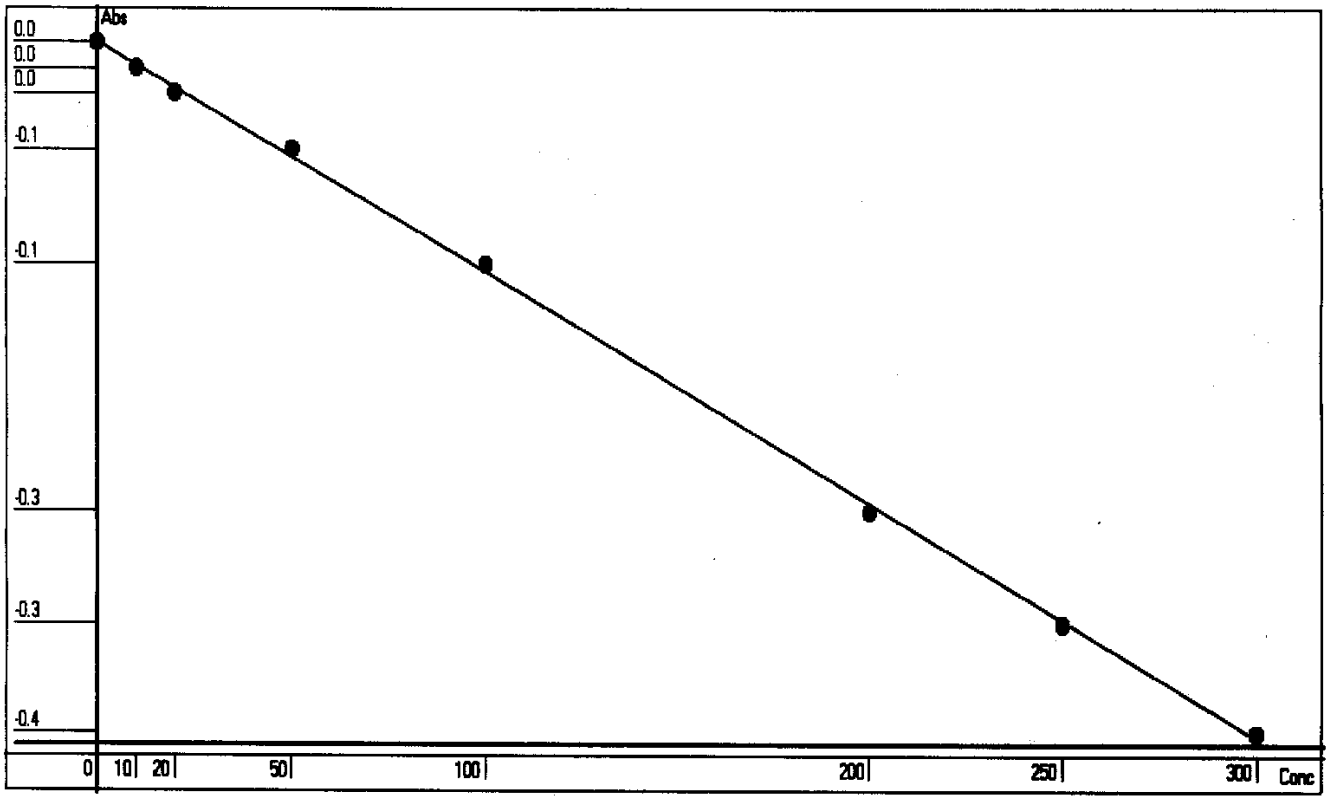
Report Date :05/14/2012 **Run Date :5/14/2012** **Operator : WESTCO** **Plan # :20120514003**

Plan Description : ALK-B-DIH/5/14/2012

Calibrant Report - WALK -

Calib Lot #:010104 Exp Date:6/21/2020 User:MICROBAC

Plan # : 20120514003 Description : [ALK-B-DIH/5/14/2012]



Point	OD	Conc	Recalc Conc	% Error
1	0.0009	0	0.2407	24.07
2	-0.0142	10	11.5070	15.07
3	-0.0285	20	22.1669	10.83
4	-0.0614	50	46.6574	-6.69
5	-0.1289	100	96.7519	-3.25
6	-0.2735	200	203.3781	1.69
7	-0.3393	250	251.5879	0.64
8	-0.4025	300	297.7100	-0.76

Conc= -22.4147*Abso^2 -746.407*Abso +0.9125 R^2=0.9995

RBL
0.6064
0

Report Date 5/14/2012 Run Date 5/14/2012

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	0.5184	0.00		2:42:56 PM
DIL-1	RBL	0.0	0.5073	0.00		2:43:14 PM
DIL-1	RBL	0.0	0.5058	0.00		2:44:08 PM
DIL-1	Std-1	0.0	0.0008	0.00	INV	2:44:26 PM
SR5-1	Std-2	10.0	-0.0103	0.00		2:45:20 PM
SR5-2	Std-3	20.0	-0.0143	0.00		2:45:38 PM
SR5-3	Std-4	50.0	-0.0475	0.00		2:46:32 PM
SR5-4	Std-5	100.0	-0.1087	0.00		2:46:50 PM
SR5-5	Std-6	200.0	-0.2212	0.00		2:47:44 PM
SR5-6	Std-7	250.0	-0.2956	0.00		2:48:02 PM
SR5-7	Std-8	300.0	-0.3372	0.00		2:48:56 PM
1	ICV 250	248.6	-0.2824	0.00		2:49:14 PM
2	WG397931-01 BLK	-16.1	0.0220	0.00	INV,><,LL	2:50:09 PM
3	WG397931-02 LCS	201.8	-0.2265	0.00		2:50:27 PM
4	WG397931-03 LCSDUP	199.2	-0.2235	0.00		2:51:21 PM
5	L12050340-05 (2)	184.3	-0.2059	0.00		2:51:39 PM
6	L12050340-07 (2)	207.9	-0.2338	0.00		2:52:33 PM
7	L12050340-08 (2)	277.6	-0.3174	0.00		2:52:51 PM
8	L12050340-09 (2)	243.2	-0.2759	0.00		2:53:45 PM
9	L12050342-01	219.6	-0.2477	0.00		2:54:03 PM
10	L12050342-03	61.3	-0.0644	0.00		2:54:57 PM
ST-2	CCV (150 mg/L)	161.8	-0.1796	107.87		2:55:15 PM
ST-3	CCB (0 mg/L)	-3.7	0.0082	0.00	INV,><,LL	2:56:09 PM
11	L12050342-05	164.9	-0.1832	0.00		2:56:27 PM
12	L12050342-07	197.2	-0.2211	0.00		2:57:21 PM
13	L12050342-09	153.3	-0.1697	0.00		2:57:39 PM
14	L12050342-11	269.5	-0.3076	0.00		2:58:33 PM
15	L12050285-01	19.8	-0.0179	0.00		2:58:51 PM
16	L12050284-01 (10)	42.3	-0.0430	0.00		2:59:45 PM
17	L12050284-03	274.5	-0.3137	0.00		3:00:03 PM
18	L12050284-05 (2)	218.0	-0.2458	0.00		3:00:57 PM
19	L12050284-07 (3)	220.4	-0.2486	0.00		3:01:15 PM

Report Date :05/14/2012 **Run Date :5/14/2012** **Operator : WESTCO** **Plan # :20120514004**

Plan Description : ALK-C-DIH/5/14/2012

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	L12050362-01 (3)	146.7	-0.1620	0.00		3:02:09 PM
ST-2	CCV (150 mg/L)	154.0	-0.1705	102.66		3:02:27 PM
ST-3	CCB (0 mg/L)	6.5	-0.0031	0.00		3:03:21 PM
21	L12050362-03 (3)	109.7	-0.1194	0.00		3:03:39 PM
22	L12050362-04 (3)	291.1	-0.3339	0.00		3:04:33 PM
23	L12050362-05 (3)	128.0	-0.1404	0.00		3:04:51 PM
24	L12050362-07 (3)	137.7	-0.1516	0.00		3:05:45 PM
25	WG397931-05 (3) DUP	141.1	-0.1555	0.00		3:06:03 PM
26	ID 26 Blank	6.8	-0.0034	0.00		3:06:57 PM
27	ID 27	1.6	0.0024	0.00	INV,><	3:07:15 PM
ST-2	CCV (150 mg/L)	159.2	-0.1766	106.16		3:08:09 PM
ST-3	CCB (0 mg/L)	7.0	-0.0035	0.00		3:08:27 PM

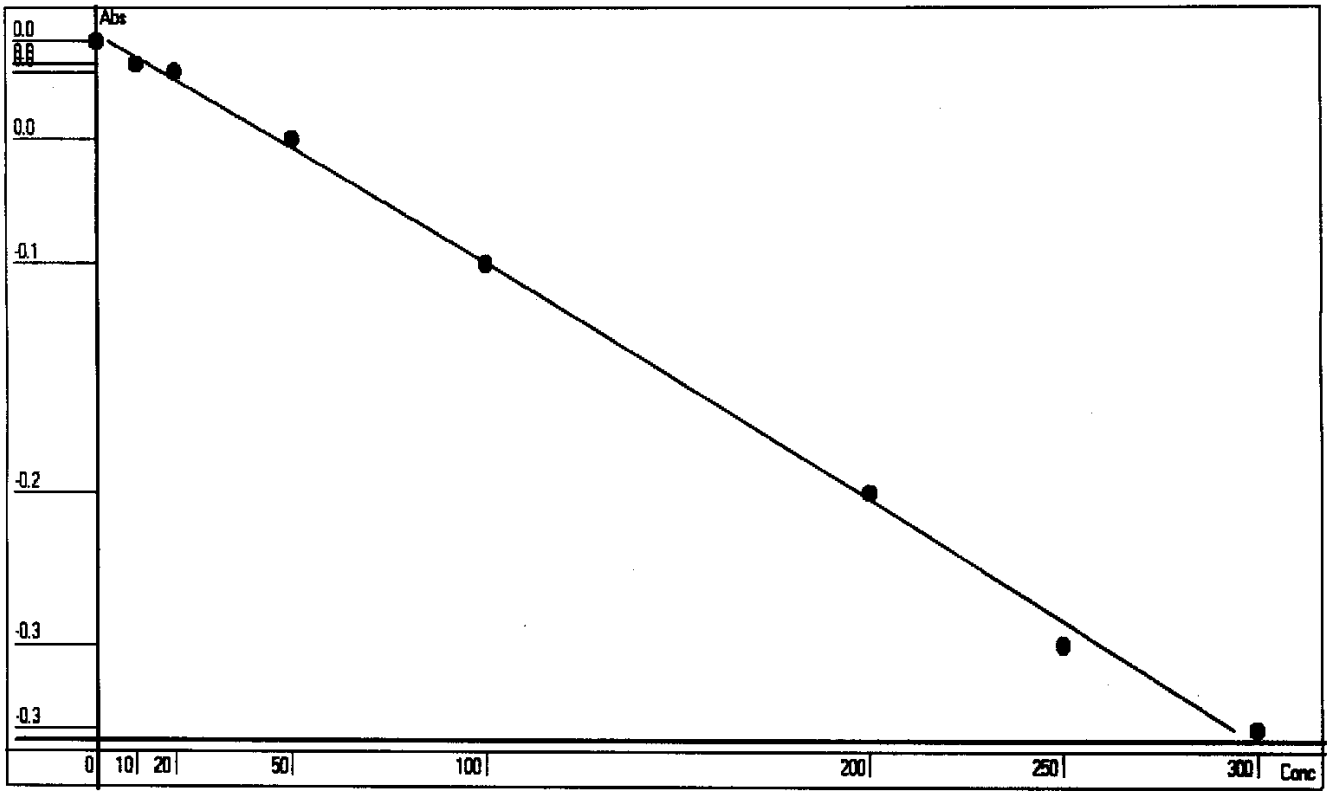
Report Date :05/14/2012 **Run Date :5/14/2012** **Operator : WESTCO** **Plan # :20120514004**

Plan Description : ALK-C-DIH/5/14/2012

Calibrant Report - WALK -

Calib Lot #:010104 Exp Date:6/21/2020 User:MICROBAC

Plan # : 20120514004 Description : [ALK-C-DIH/5/14/2012]



Point	OD	Conc	Recalc Conc	% Error
1	0.0008	0	3.0432	304.32
2	-0.0103	10	13.0510	30.51
3	-0.0143	20	16.6498	-16.75
4	-0.0475	50	46.3646	-7.27
5	-0.1087	100	100.4130	0.41
6	-0.2212	200	197.3077	-1.35
7	-0.2956	250	259.6374	3.86
8	-0.3372	300	293.8812	-2.04

Conc= -125.8421*Abso^2 -902.8009*Abso +3.7655 R^2=0.9981

RBL
0.5066
0

Report Date 5/14/2012 Run Date 5/14/2012

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	0.4185	0.00		3:42:37 PM
DIL-1	RBL	0.0	0.4197	0.00		3:42:55 PM
DIL-1	RBL	0.0	0.4229	0.00		3:43:49 PM
DIL-1	Std-1	0.0	0.0008	0.00	INV	3:44:07 PM
SR5-1	Std-2	10.0	-0.0106	0.00		3:45:01 PM
SR5-2	Std-3	20.0	-0.0132	0.00		3:45:19 PM
SR5-3	Std-4	50.0	-0.0432	0.00		3:46:13 PM
SR5-4	Std-5	100.0	-0.0845	0.00		3:46:31 PM
SR5-5	Std-6	200.0	-0.1913	0.00		3:47:25 PM
SR5-6	Std-7	250.0	-0.2384	0.00		3:47:43 PM
SR5-7	Std-8	300.0	-0.2785	0.00		3:48:37 PM
1	ICV 250	251.2	-0.2357	0.00		3:48:55 PM
2	WG397939-01 BLK	-11.8 X	0.0138	0.00	INV,><,LL	3:49:50 PM
3	WG397939-02 LCS	198.4	-0.1849	0.00		3:50:08 PM
4	WG397939-03 LCSDUP	198.0	-0.1845	0.00	EPL	3:51:02 PM
5	L12050153-05 (2)	177.7	-0.1651	0.00		3:51:20 PM
6	L12050259-02 (2)	146.8	-0.1356	0.00		3:52:14 PM
7	WG397939-05 (2) DUP	146.4	-0.1352	0.00		3:52:32 PM
8	L12050259-04 (2) MS	198.8	-0.1853	0.00		3:53:26 PM
9	L12050259-06 (2) MSD	198.1	-0.1846	0.00		3:53:44 PM
10	L12050259-08 (4)	102.4	-0.0934	0.00		3:54:38 PM
ST-2	CCV (150 mg/L)	150.7	-0.1393	100.47		3:54:56 PM
ST-3	CCB (0 mg/L)	-17.2	0.0188	0.00	INV,><,LL	3:55:50 PM
11	L12050259-09 (3)	147.6	-0.1363	0.00		3:56:08 PM
12	L12050259-10 (2)	259.5	-0.2437	0.00		3:57:02 PM
13	L12050259-12 (2)	237.7	-0.2227	0.00		3:57:20 PM
14	L12050362-08 (3)	118.5	-0.1087	0.00		3:58:14 PM
15	L12050362-12 (3)	290.4	-0.2737	0.00		3:58:32 PM
16	L12050362-14 (3)	342.7 X	-0.3247	0.00	><,LH	3:59:26 PM
17	L12050362-22 (2) (3)	280.2	-0.2638	0.00		3:59:44 PM
18	L12050382-01	47.4	-0.0416	0.00		4:00:38 PM
19	L12050383-01	57.2	-0.0508	0.00		4:00:56 PM

Report Date :05/14/2012 **Run Date :5/14/2012** **Operator : WESTCO** **Plan # :20120514005**

Plan Description : ALK-D-DIH/5/14/2012

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	L12050386-01 (2)	161.8	-0.1499	0.00		4:01:50 PM
ST-2	CCV (150 mg/L)	156.9	-0.1452	104.60		4:02:08 PM
ST-3	CCB (0 mg/L)	-5.8	0.0082	0.00	INV,><,LL	4:03:02 PM
21	L12050386-02 (2)	139.5	-0.1286	0.00		4:03:20 PM
22	L12050386-05 (4)	158.9	-0.1471	0.00		4:04:14 PM
23	L12050386-06 (2)	216.4	-0.2022	0.00		4:04:32 PM
24	L12050386-08 (2)	203.4	-0.1897	0.00		4:05:26 PM
25	L12050386-09 (2)	207.2	-0.1933	0.00		4:05:44 PM
26	L12050386-10 (2)	63.8	-0.0570	0.00		4:06:38 PM
27	L12050396-01	69.5	-0.0624	0.00		4:06:56 PM
28	ID 28 BLK	0.9	0.0019	0.00	INV,><	4:07:50 PM
29	ID 29	0.6	0.0022	0.00	INV,><	4:08:08 PM
ST-2	CCV (150 mg/L)	157.8	-0.1461	105.23		4:09:02 PM
ST-3	CCB (0 mg/L)	-3.9	0.0064	0.00	INV,><,LL	4:09:20 PM
16-[1/2]	L12050362-14 (3)	549.1	-0.2583	0.00	LH	4:17:00 PM
ST-2	CCV (150 mg/L)	167.5	-0.1553	111.66		4:17:00 PM
ST-3	CCB (0 mg/L)	8.7	-0.0054	0.00		4:17:54 PM

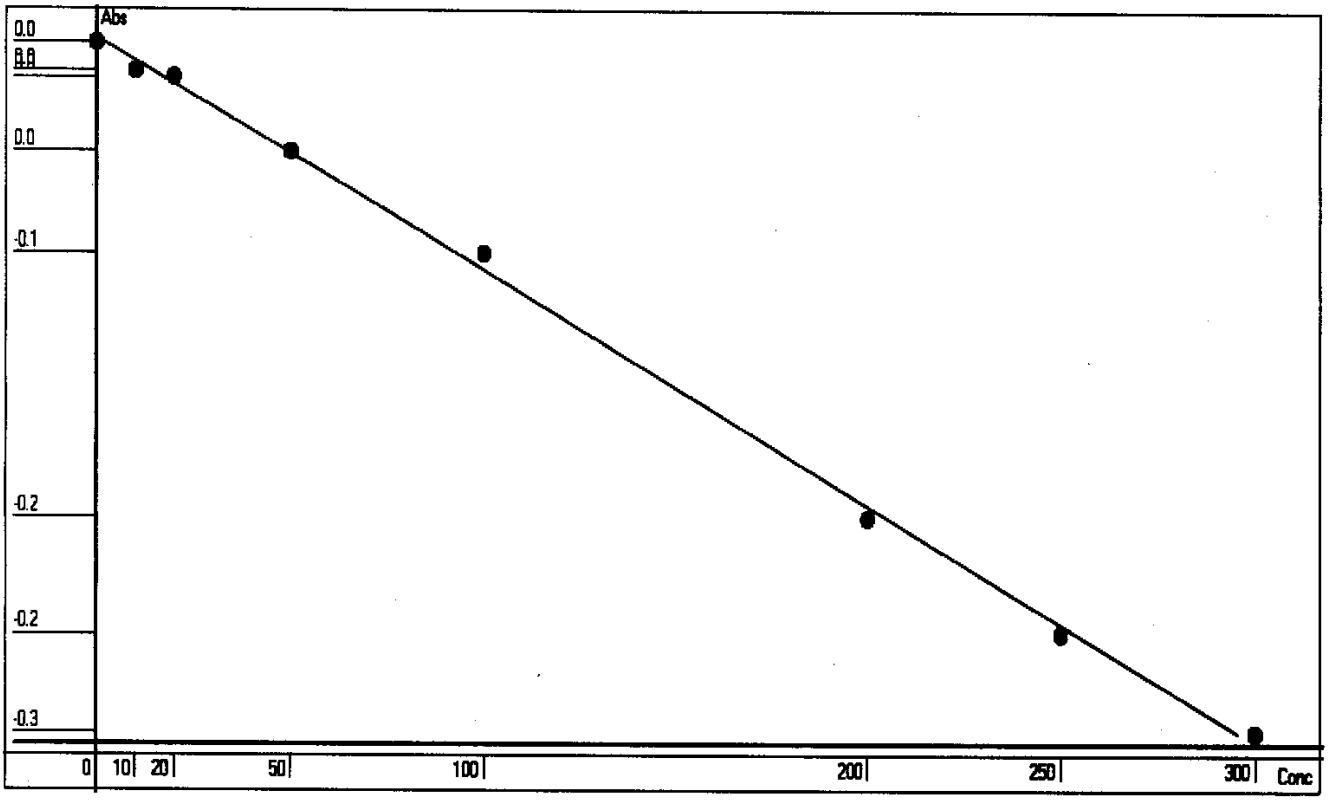
Report Date :05/14/2012 **Run Date :5/14/2012** **Operator : WESTCO** **Plan # :20120514005**

Plan Description : ALK-D-DIH/5/14/2012

Calibrant Report - WALK -

Calib Lot #:010104 Exp Date:6/21/2020 User:MICROBAC

Plan # : 20120514005 Description : [ALK-D-DIH/5/14/2012]



Point	OD	Conc	Recalc Conc	% Error
1	0.0008	0	2.1090	210.90
2	-0.0106	10	14.3145	43.15
3	-0.0132	20	17.0954	-14.52
4	-0.0432	50	49.1068	-1.79
5	-0.0845	100	92.9477	-7.05
6	-0.1913	200	205.0926	2.55
7	-0.2384	250	253.9881	1.60
8	-0.2785	300	295.3458	-1.55

Conc= -77.4907*Abso^2 -1071.418*Abso +2.9662 R^2=0.9985

RBL
0.4191
0

Report Date 5/14/2012 Run Date 5/14/2012

2.4.2 Nitrate Data

2.4.2.1 Summary Data

Login Number: L12050153
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.

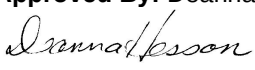
Duplicates: All acceptance criteria were met.

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: 46694
Approved By: Deanna Hesson



Certificate of Analysis

Sample #: L12050153-01 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-15-050312 **Prep Method:** 353.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 353.2 **Cal Date:** 05/07/2012 08:43
Workgroup #: WG397183 **Analyst:** DIH **Run Date:** 05/07/2012 11:15
Collect Date: 05/03/2012 10:45 **Dilution:** 1 **File ID:** SC12050910172001
Sample Tag: **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8	0.671		0.0500	0.0250

Sample #: L12050153-03 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-17-050312 **Prep Method:** 353.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 353.2 **Cal Date:** 05/07/2012 08:43
Workgroup #: WG397183 **Analyst:** DIH **Run Date:** 05/07/2012 11:15
Collect Date: 05/03/2012 11:30 **Dilution:** 1 **File ID:** SC12050910172301
Sample Tag: **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8	0.208		0.0500	0.0250

Sample #: L12050153-05 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-28050312 **Prep Method:** 353.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 353.2 **Cal Date:** 05/07/2012 08:43
Workgroup #: WG397183 **Analyst:** DIH **Run Date:** 05/07/2012 11:15
Collect Date: 05/03/2012 15:00 **Dilution:** 1 **File ID:** SC12050910172601
Sample Tag: **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8	0.0340		0.0500	0.0250

Sample #: L12050153-07 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: TW-02-050312 **Prep Method:** 353.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 353.2 **Cal Date:** 05/07/2012 08:43
Workgroup #: WG397183 **Analyst:** DIH **Run Date:** 05/07/2012 11:15
Collect Date: 05/03/2012 13:30 **Dilution:** 1 **File ID:** SC12050910173001
Sample Tag: **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8	0.161		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: 07-MAY-2012
Analyst: DIH
Analyst: NA
Method: NO3
Instrument: SC
Curve Workgroup: NA
Runlog ID:
Analytical Workgroups: WG397183

Calibration/Linearity	5/7/2012
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
Dianna Ibsson

Secondary Reviewer:
09-MAY-2012
Dianna Ibsson

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-09-2012 12:54:08

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 353.2 AAB#: WG397183

Login Number: L12050153

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-15-050312	01	05/03/12							2		05/07/12	4	2	*
MW-17-050312	03	05/03/12							2		05/07/12	4	2	*
MW-28050312	05	05/03/12							2		05/07/12	3.8	2	*
TW-02-050312	07	05/03/12							2		05/07/12	3.9	2	*

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2407754
Report generated 05/09/2012 13:09

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12050153
Work Group: WG397183
Blank File ID: SC12050910132601
Blank Sample ID: WG397183-01
Prep Date: 05/07/12 11:15
Instrument ID: SMARTCHEM
Analyzed Date: 05/07/12 11:15
Method: 353.2
Analyst: DIH

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
TW-02-050312	L12050153-07	SC12050910173001	05/07/12 11:15	
LCS2	WG397183-03	SC12050910135001	05/07/12 11:15	
DUP	WG397183-05	SC12050910140401	05/07/12 11:15	
MW-15-050312	L12050153-01	SC12050910172001	05/07/12 11:15	
MW-28050312	L12050153-05	SC12050910172601	05/07/12 11:15	
LCS	WG397183-02	SC12050910133901	05/07/12 11:15	
MW-17-050312	L12050153-03	SC12050910172301	05/07/12 11:15	

Report Name: BLANK_SUMMARY
PDF File ID: 2407755
Report generated 05/09/2012 13:09

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050153 Prep Date: 05/07/12 11:15 Sample ID: WG397183-01
Instrument ID: SMARTCHEM Run Date: 05/07/12 11:15 Prep Method: 353.2
File ID: SC12050910132601 Analyst: DIH Method: 353.2
Workgroup (AAB#): WG397183 Matrix: Water Units: mg/L
Contract #: Cal ID: SMARTC-07-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: 2407756
09-MAY-2012 13:09

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050153 **Analyst:** DIH **Prep Method:** 353.2
Instrument ID: SMARTCHEM **Matrix:** Water **Method:** 353.2
Workgroup (AAB#): WG397183 **Units:** mg/L
QC Key: WATERLOO **Lot #:** STD51196

Sample ID: WG397183-02 LCS **File ID:** SC12050910133901 **Run Date:** 05/07/2012 11:15
Sample ID: WG397183-03 LCS2 **File ID:** SC12050910135001 **Run Date:** 05/07/2012 11:15

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Nitrate (as N)	1.00	1.04	104	1.00	1.03	103	0.774	90 - 110	15	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 2407757
Report generated: 05/09/2012 13:09

2.4.2.3 Raw Data

SMARTCHEM RUN LOG

Daily Check

- [x] Lamp On
- [x] Probe Rinse Full
- [x] DI Water > ½ Full
- [x] Wash Solution > ½ Full
- [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 # 144930

1) **Workgroup** _____
Plan # 20120507002
2) **Workgroup** _____
Plan # _____
3) **Workgroup** _____
Plan # _____

Position	Analyte	1 NO3 Dilution	2	3
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	05-143-02	1/10		
1-7	05-150-30	1/2*	1/3	color
1-8	05-153-01			
1-9	03			
1-10	05			
1-11	07			
1-12	05-093-01	1/5 1/75		color
1-13	02	1/5		
1-14	03	1/5 1/2		
1-15	05-103-01	1/5		color
1-16	02	1/5		
1-17	03	1/5		
1-18	DUP 093-02			
1-19	MS ↓			
1-20	~~MS 103-03~~	~~1/5~~	~~1/2~~ 04-171-07	
1-21	05-171-01			
1-22	MS 03			
2-1	mdl 05			
2-2	05-143-02	1/25		
2-3	05-093-03	–		

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#90774

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
- [ ] 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	123532 R18		
Curve Stock (SC made)	std 51582		R6+17230
Curve ID (user made) NO2	std 51363		R6+17254
ICV	std 51584		
CCV	std 51583		
LCS	std 51196		
MS	std 48249 Dilution 0.1/5(25)=0.5		

Comments: _____

Analyst: Deana Deason Date: 5/7/12

DCN#90774

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	0.0363	0.00			11:02:11 AM
DIL-1	RBL	0.000	0.0197	0.00			11:03:23 AM
DIL-1	RBL	0.000	0.0183	0.00			11:04:35 AM
DIL-1	RBL	0.000	0.0185	0.00			11:05:47 AM
DIL-1	Std-1	0.000	0.0005	0.00			11:06:59 AM
SR5-1	Std-2	0.040	0.0129	0.00			11:08:11 AM
SR5-2	Std-3	0.100	0.0313	0.00			11:09:23 AM
SR5-3	Std-4	0.500	0.1529	0.00			11:10:35 AM
SR5-4	Std-5	1.000	0.3128	0.00			11:11:47 AM
ST-1	Std-6	2.000	0.6303	0.00			11:12:59 AM
1	ICV 1.5	1.602	0.5035	0.00			11:14:11 AM
2	WG397183-01 BLK	-0.001	-0.0012	0.00	INV,><,LL		11:15:23 AM
3	WG397183-02 LCS	1.037	0.3255	0.00			11:16:35 AM
4	WG397183-03 LCSDUP	1.029	0.3231	0.00			11:17:47 AM
5	NO2	1.135	0.3566	0.00			11:18:59 AM
6	L12050143-02 (10)	2.759X	0.8679	0.00	><,LH		11:20:11 AM
7	L12050150-30 (6)	0.073	0.0220	0.00		NO2 0.149	11:21:23 AM
8	L12050153-01	0.671	0.2104	0.00		0	11:22:36 AM
9	L12050153-03	0.208	0.0647	0.00		0	11:23:48 AM
10	L12050153-05	0.034	0.0099	0.00		0	11:25:00 AM
ST-2	CCV (1 mg/L)	1.564	0.4917	156.43			11:26:12 AM
ST-3	CCB (0 mg/L)	-0.002	-0.0016	0.00	INV,><,LL		11:27:24 AM
11	L12050153-07	0.161	0.0499	0.00		0	11:28:36 AM
12	L12050093-01 (75)	1.429	0.4490	0.00			11:29:48 AM
13	L12050093-02	0.423	0.1323	0.00			11:31:00 AM
14	L12050093-03 (2)	0.063X	0.0189	0.00			11:32:12 AM
15	L12050103-01 (5)	0.005	0.0007	0.00			11:33:24 AM
16	L12050103-02 (5)	0.004	0.0002	0.00	><		11:34:36 AM
17	L12050103-03 (5)	-0.002	-0.0014	0.00	INV,><,LL		11:35:48 AM
18	DUP 093-02	0.438	0.1371	0.00			11:37:00 AM
19	MS 093-02	0.841	0.2640	0.00			11:38:12 AM
20	~~MS 103-03~~ 05-171-07	0.163	0.0504	0.00			11:39:24 AM

Report Date :05/07/2012 **Run Date :5/7/2012** **Operator : WESTCO** **Plan # :20120507002**

Plan Description : NO3-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 : WNO3 - EPA 353.2 Nitrate-Nitrite

Smp#/[Dil Fact]	Sample ID	Conc	OD	%Recovery/RPD	Flag		Analysis Time
ST-2	CCV (1 mg/L)	1.463	0.4598	146.30			11:40:36 AM
ST-3	CCB (0 mg/L)	0.003	0.0000	0.00	><		11:41:48 AM
21	ID 2105-171-01	1.583	0.4976	0.00		0.006	11:43:00 AM
22	ID 22 03 ms	2.099 0.01	0.6601	0.00	><,LH		11:44:12 AM
23	ID 23 05 msd	2.125 0.01	0.6683	0.00	><,LH		11:45:24 AM
ST-2	CCV (1 mg/L)	1.558	0.4897	155.80			11:46:36 AM
ST-3	CCB (0 mg/L)	0.000	-0.0008	0.00	INV,><		11:47:48 AM
24	Add-ID 2405-143-02(25)	0.947	0.2974	0.00			11:49:00 AM
25	Add-ID 2505-093-03	0.131	0.0404	0.00			11:50:12 AM
26	Add-ID 26	0.000 X	-0.0009	0.00	INV,><		11:51:24 AM
ST-2	Add-CCV (1 mg/L)	1.526	0.4795	152.56			11:52:36 AM
ST-3	Add-CCB (0 mg/L)	0.003	-0.0001	0.00	INV,><		11:53:48 AM
6-[1/4]	L12050143-02 (10)	2.999X	0.2352	0.00	LH		12:02:58 PM
22-[1/4]	ID 22	2.233X	0.1749	0.00	LH		12:05:04 PM
23-[1/4]	ID 23	2.317X	0.1815	0.00	LH		12:07:11 PM
ST-2	CCV (1 mg/L)	1.533X	0.4817	153.26			12:08:05 PM
ST-3	CCB (0 mg/L)	0.002X	-0.0003	0.00	INV,><		12:09:17 PM

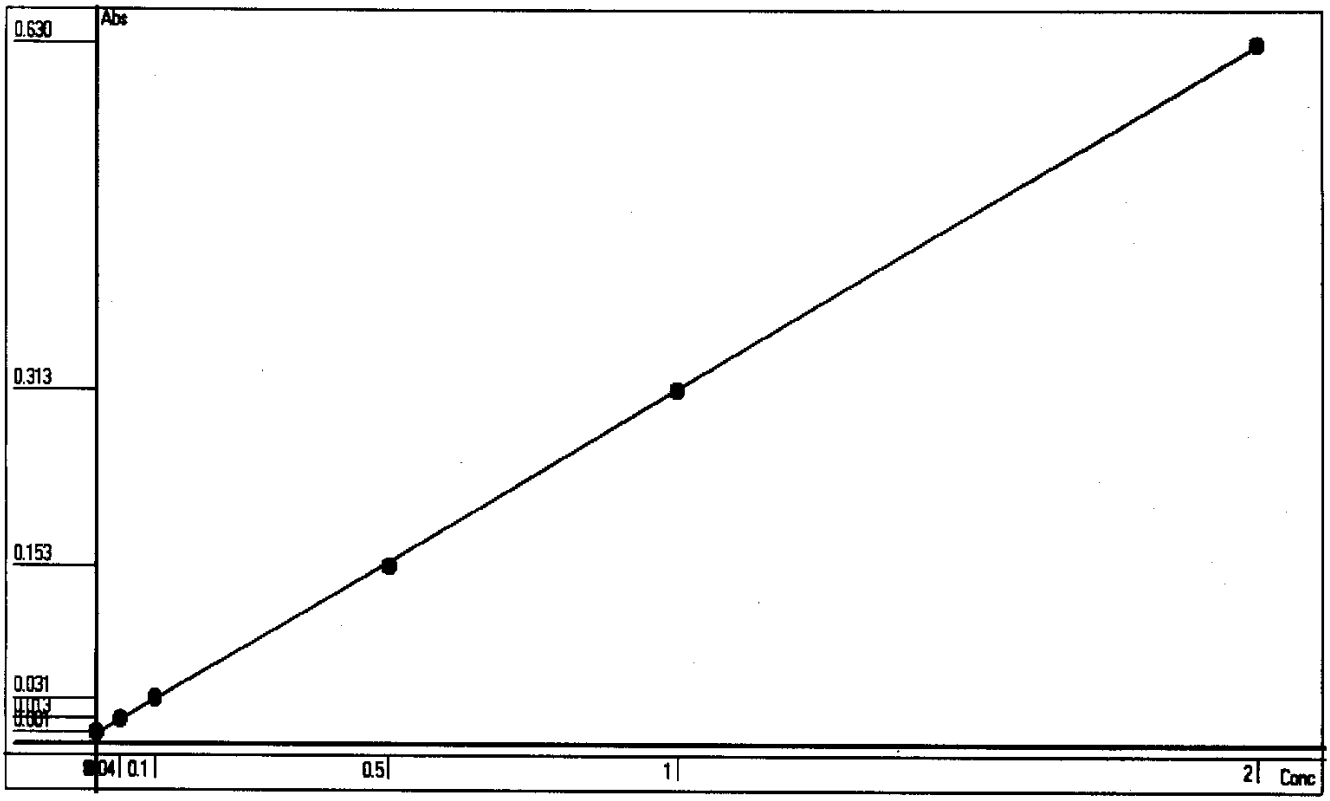
Report Date :05/07/2012 **Run Date :5/7/2012** **Operator : WESTCO** **Plan # :20120507002**

Plan Description : NO3-A-DIH/5/8/2012

Calibrant Report - WNO3 -

Calib Lot #:010104 Exp Date:6/17/2020 User:MICROBAC

Plan # : 20120507002 Description : [NO3-A-DIH/5/8/2012]



Point	OD	Conc	Recalc Conc	% Error
1	0.0005	0	0.0046	0.46
2	0.0129	0.04	0.0440	10.00
3	0.0313	0.1	0.1024	2.40
4	0.1529	0.5	0.4885	-2.30
5	0.3128	1	0.9963	-0.37
6	0.6303	2	2.0045	0.23

Conc= +3.1755*Abso +0.003 **R^2=0.9999**

RBL
0.0191
0

Report Date 5/7/2012 Run Date 5/7/2012

2.4.3 Phosphorus Data

2.4.3.1 Summary Data

Login Number: L12050153
Department: Conventionals
Analyst: Jeremy Kinney

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.

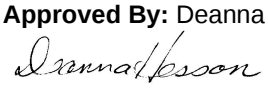
Duplicates: All acceptance criteria were met.

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: 46692
Approved By: Deanna Hesson



Certificate of Analysis

Sample #: L12050153-01 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-15-050312 **Prep Method:** 365.4 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 365.4 **Cal Date:** 05/15/2012 08:40
Workgroup #: WG397809 **Analyst:** JBK **Run Date:** 05/15/2012 08:46
Collect Date: 05/03/2012 10:45 **Dilution:** 1 **File ID:** SC120515001.016
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 #: L12050153-03 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-17-050312 **Prep Method:** 365.4 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 365.4 **Cal Date:** 05/15/2012 08:40
Workgroup #: WG397809 **Analyst:** JBK **Run Date:** 05/15/2012 08:48
Collect Date: 05/03/2012 11:30 **Dilution:** 1 **File ID:** SC120515001.019
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 #: L12050153-05 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-28050312 **Prep Method:** 365.4 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 365.4 **Cal Date:** 05/15/2012 08:40
Workgroup #: WG397809 **Analyst:** JBK **Run Date:** 05/15/2012 08:49
Collect Date: 05/03/2012 15:00 **Dilution:** 1 **File ID:** SC120515001.020
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 #: L12050153-07 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: TW-02-050312 **Prep Method:** 365.4 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 365.4 **Cal Date:** 05/15/2012 08:40
Workgroup #: WG397809 **Analyst:** JBK **Run Date:** 05/15/2012 08:49
Collect Date: 05/03/2012 13:30 **Dilution:** 1 **File ID:** SC120515001.021
Sample Tag: 01 **Units:** mg/L

Certificate of Analysis

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: 15-MAY-2012
Analyst: JBK
Analyst: NA
Method: PHOS
Instrument: SC
Curve Workgroup: NA
Runlog ID:
Analytical Workgroups: WG397809

Calibration/Linearity	05/15/2012
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	
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:
16-MAY-2012

Secondary Reviewer:
16-MAY-2012

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-16-2012 15:26:41

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 365.4 **AAB#:** WG397809

Login Number: L12050153

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-15-050312	01	05/03/12							28		05/15/12	11.9	28	
MW-17-050312	03	05/03/12							28		05/15/12	11.9	28	
MW-28050312	05	05/03/12							28		05/15/12	11.7	28	
TW-02-050312	07	05/03/12							28		05/15/12	11.8	28	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2417197
Report generated 05/16/2012 14:42

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number:	L12050153	Work Group:	WG397809
Blank File ID:	SC120515001.008	Blank Sample ID:	WG397809-01
Prep Date:	05/15/12 08:41	Instrument ID:	SMARTCHEM
Analyzed Date:	05/15/12 08:41	Method:	365.4
Analyst:	JBK		

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG397809-02	SC120515001.009	05/15/12 08:42	01
MW-15-050312	L12050153-01	SC120515001.016	05/15/12 08:46	01
MW-17-050312	L12050153-03	SC120515001.019	05/15/12 08:48	01
MW-28050312	L12050153-05	SC120515001.020	05/15/12 08:49	01
TW-02-050312	L12050153-07	SC120515001.021	05/15/12 08:49	01
DUP	WG397809-04	SC120515001.023	05/15/12 08:50	01

Report Name: BLANK_SUMMARY
PDF File ID: 2417198
Report generated 05/16/2012 14:42

Microbac Laboratories Inc.
METHOD BLANK REPORT

Login Number: L12050153 Prep Date: 05/15/12 08:41 Sample ID: WG397809-01
Instrument ID: SMARTCHEM Run Date: 05/15/12 08:41 Prep Method: 365.4
File ID: SC120515001.008 Analyst: JBK Method: 365.4
Workgroup (AAB#): WG397809 Matrix: Water Units: mg/L
Contract #: Cal ID: SMARTC-15-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: 2417199
16-MAY-2012 14:42

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050153 **Run Date:** 05/15/2012 **Sample ID:** WG397809-02
Instrument ID: SMARTCHEM **Run Time:** 08:42 **Prep Method:** 365.4
File ID: SC120515001.009 **Analyst:** JBK **Method:** 365.4
Workgroup (AAB#): WG397809 **Matrix:** Water **Units:** mg/L
QC Key: WATERLOO **Lot#:** STD51133 **Cal ID:** SMARTC-15-MAY-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Phosphorus, Total	1.00	0.973	97.3	70 - 130	

LCS - Modified 03/06/2008
PDF File ID: 2417200
Report generated: 05/16/2012 14:42

2.4.3.3 Raw Data

WORKGROUP: WG397809

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 # 26120515001
2) **Workgroup** _____
Plan # _____
3) **Workgroup** _____
Plan # _____

Analyte		1	2	3
NO5		Dilution		
SC Prepared Curve				
Position				
1-1	ICV 1-5			
1-2	Blank			
1-3	LCS 1			
1-4	05-274-03	4/250		
1-5	05-099-01			
1-6	-03			
1-7	-05			
1-8	-07			
1-9	-09			
1-10	05-153-01			
1-11	-03			
1-12	-05			
1-13	-07			
1-14	05-171-01			
1-15	Dup -01			
1-16	MS -03			
1-17	SD -05			
1-18	-07			√
1-19	05-226-01			
1-20	-03			
1-21	-05			
1-22	-07			
2-1	05-284-01			
2-2	-03			
2-3	-05			

Position	Analyte	1	2	3
2-4	05-284-07			
2-5	MS ↓			
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#90873

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	☐ Ammonia	EPA 350.1/SM 4500-NH3 B
☐ Sulfate	EPA 375.4/SM 426C(15th)	☐ TKN	EPA 351.2
☐ Alkalinity	EPA 310.2	☑ Phos	EPA 365.4
☐ Nitrate-Nitrite	EPA 353.2/SM 4500-NO3 F		

Analyte	Phos		Reagents
SOP & Revision	12654 R14		17274
Curve Stock (SC made)			14857
Curve ID (user made)	See		17324
ICV			
CCV	Digest		
LCS			
MS	Dilution 10		

Comments: _____

Analyst: _____ Date: 5/15/12

DCN#90873

TKN/Phosphorus Digestion Log

TKN WG: ~~397809~~ 498 5/5/11
TKN Std:
TKN CCV:
TKN ICV:
TKN LCS:

Phos WG: 397809
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: RGT17224

	Sample	Volume	TKN Dilution	Phos Dilution		Sample	Volume	TKN Dilution	Phos Dilution
1	STD				26	05-28403			
2	CCV				27	-05			
3	ICV				28	-07			
4	Blank				29	MS ↓			
5	LCS				30				
6	05-274-03			1/250	31				
7	05-099-01				32				
8	-03				33				
9	-05				34				
10	-07				35				
11	-09				36				
12	05-153-01				37				
13	-03				38				
14	-05				39				
15	-07				40				
16	05-171-01				41				
17	Dup -01				42				
18	MS -03				43				
19	SD -05				44				
20	-07				45				
21	05-226-01				46				
22	-03				47				
23	-05				48				
24	-07				49				
25	05-284-01				50				

Analyst: _____ Date: 5/12/12

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	0.0246	0.00		8:35:47 AM
DIL-1	RBL	0.000	0.0238	0.00		8:36:05 AM
DIL-1	RBL	0.000	0.0243	0.00		8:36:59 AM
SR5-1	Std-1	0.010	0.0023	0.00		8:37:17 AM
SR5-2	Std-2	0.200	0.0308	0.00		8:38:11 AM
SR5-3	Std-3	0.500	0.0704	0.00		8:38:29 AM
SR5-4	Std-4	1.000	0.1340	0.00		8:39:24 AM
SR5-5	Std-5	1.500	0.2111	0.00		8:39:41 AM
ST-1	Std-6	2.000	0.2749	0.00		8:40:35 AM
1	ICV 1.5	1.439	0.1989	0.00		8:40:53 AM
2	WG397809-01 BLANK	-0.008	0.0004	0.00	><,LL	8:41:47 AM
3	WG397809-02 LCS1	0.973	0.1349	0.00		8:42:05 AM
4	L12050274-03 (250)	1.290	0.1784	0.00		8:42:59 AM
5	L12050099-01	0.159	0.0233	0.00		8:43:17 AM
6	L12050099-03	-0.025	-0.0021	0.00	INV,><,LL	8:44:11 AM
7	L12050099-05	-0.039	-0.0040	0.00	INV,><,LL	8:44:29 AM
8	L12050099-07	0.204	0.0294	0.00		8:45:23 AM
9	L12050099-09	-0.049	-0.0054	0.00	INV,><,LL	8:45:41 AM
10	L12050153-01	-0.025	-0.0019	0.00	INV,><,LL	8:46:35 AM
ST-2	CCV (1 mg/L)	0.999	0.1385	99.88		8:46:53 AM
ST-3	CCB (0 mg/L)	-0.066	-0.0077	0.00	INV,><,LL	8:47:47 AM
11	L12050153-03	-0.021	-0.0015	0.00	INV,><,LL	8:48:05 AM
12	L12050153-05	-0.027	-0.0023	0.00	INV,><,LL	8:49:00 AM
13	L12050153-07	-0.073	-0.0087	0.00	INV,><,LL	8:49:17 AM
14	L12050171-01	0.110	0.0166	0.00		8:50:11 AM
15	WG397809-04 DUP	0.162	0.0237	0.00		8:50:29 AM
16	L12050171-03 MS	1.000	0.1387	0.00	EPL	8:51:24 AM
17	L12050171-05 SD	1.041	0.1443	0.00		8:51:41 AM
18	L12050171-07	2.720	0.3747	0.00	><,LH	8:52:36 AM
19	L12050226-01	0.471	0.0660	0.00		8:52:53 AM
20	L12050226-03	-0.005	0.0007	0.00	><,LL	8:53:48 AM
ST-2	CCV (1 mg/L)	0.951	0.1320	95.14		8:54:05 AM

Report Date :05/15/2012 **Run Date :5/15/2012** **Operator : WESTCO** **Plan # :20120515001**

Plan Description : PHOS-A-JBK/05/15/2012

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)	-0.066	-0.0077	0.00	INV,><,LL	8:54:59 AM
21	L12050226-05	-0.071	-0.0084	0.00	INV,><,LL	8:55:17 AM
22	L12050226-07	0.591	0.0826	0.00		8:56:11 AM
23	L12050284-01	0.658	0.0918	0.00		8:56:29 AM
24	L12050284-03	0.082	0.0127	0.00		8:57:23 AM
25	L12050284-05	-0.033	-0.0032	0.00	INV,><,LL	8:57:41 AM
26	L12050284-07	0.062	0.0098	0.00		8:58:35 AM
27	WG397809-08 MS	0.724	0.1008	0.00	EPL	8:58:53 AM
28	ID 28	0.836	0.1161	0.00		8:59:47 AM
ST-2	CCV (1 mg/L)	0.985	0.1366	98.50		9:00:05 AM
ST-3	CCB (0 mg/L)	-0.046	-0.0050	0.00	INV,><,LL	9:00:59 AM
18-[1/2]	L12050171-07	2.639	0.1825	0.00	LH	9:08:40 AM
ST-2	CCV (1 mg/L)	0.984	0.1364	98.35		9:08:40 AM
ST-3	CCB (0 mg/L)	-0.038	-0.0038	0.00	INV,><,LL	9:09:34 AM

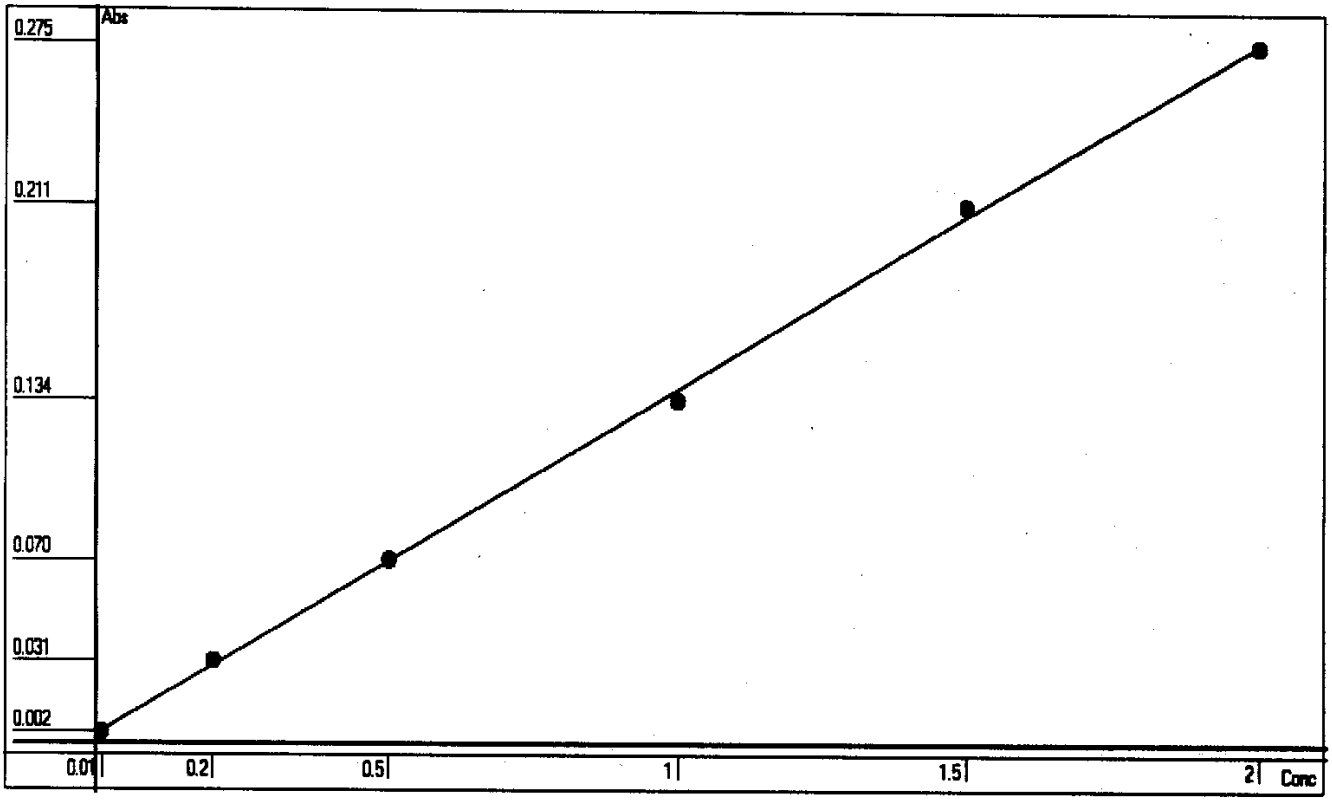
Report Date :05/15/2012 **Run Date :5/15/2012** **Operator : WESTCO** **Plan # :20120515001**

Plan Description : PHOS-A-JBK/05/15/2012

Calibrant Report - WTPH -

Calib Lot #:010104 Exp Date:6/18/2020 User:MICROBAC

Plan # : 20120515001 Description : [PHOS-A-JBK/05/15/2012]



Point	OD	Conc	Recalc Conc	% Error
1	0.0023	0.01	0.0065	-35.00
2	0.0308	0.2	0.2142	7.10
3	0.0704	0.5	0.5028	0.56
4	0.1340	1	0.9664	-3.36
5	0.2111	1.5	1.5283	1.89
6	0.2749	2	1.9933	-0.34

Conc= +7.2886*Abso -0.0103 R^2=0.9993

RBL
0.0245
0

Report Date 5/15/2012 Run Date 5/15/2012

2.4.4 Sulfate Data

2.4.4.1 Summary Data

Login Number: L12050153
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.

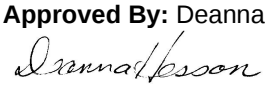
Matrix Spikes: All acceptance criteria were met.

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: 46693
Approved By: Deanna Hesson



Certificate of Analysis

Sample #: L12050153-01 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-15-050312 **Prep Method:** 375.4 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 375.4 **Cal Date:** 05/07/2012 14:08
Workgroup #: WG397213 **Analyst:** DIH **Run Date:** 05/07/2012 14:16
Collect Date: 05/03/2012 10:45 **Dilution:** 2 **File ID:** SC120507003.021
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	53.8		10.0	5.00

Sample #: L12050153-03 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-17-050312 **Prep Method:** 375.4 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 375.4 **Cal Date:** 05/07/2012 14:08
Workgroup #: WG397213 **Analyst:** DIH **Run Date:** 05/07/2012 14:17
Collect Date: 05/03/2012 11:30 **Dilution:** 10 **File ID:** SC120507003.022
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	244		50.0	25.0

Sample #: L12050153-05 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-28050312 **Prep Method:** 375.4 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 375.4 **Cal Date:** 05/07/2012 14:08
Workgroup #: WG397213 **Analyst:** DIH **Run Date:** 05/07/2012 14:18
Collect Date: 05/03/2012 15:00 **Dilution:** 2 **File ID:** SC120507003.024
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	68.6		10.0	5.00

Sample #: L12050153-07 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: TW-02-050312 **Prep Method:** 375.4 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 375.4 **Cal Date:** 05/07/2012 14:08
Workgroup #: WG397213 **Analyst:** DIH **Run Date:** 05/07/2012 14:33
Collect Date: 05/03/2012 13:30 **Dilution:** 10 **File ID:** SC120507003.037
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	277		50.0	25.0

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: 07-MAY-2012
Analyst: DIH
Analyst: NA
Method: SO4
Instrument: SC
Curve Workgroup: NA
Runlog ID:
Analytical Workgroups: WG397213

Calibration/Linearity	5/7/2012
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
Dianna Ibsson

Secondary Reviewer:
09-MAY-2012
Dianna Ibsson

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-09-2012 12:51:00

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 375.4 **AAB#:** WG397213

Login Number: L12050153

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-15-050312	01	05/03/12							28		05/07/12	4.1	28	
MW-17-050312	03	05/03/12							28		05/07/12	4.1	28	
MW-28050312	05	05/03/12							28		05/07/12	4	28	
TW-02-050312	07	05/03/12							28		05/07/12	4	28	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2407640
Report generated 05/09/2012 12:34

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12050153
Blank File ID: SC120507003.010
Prep Date: 05/07/12 14:10
Analyzed Date: 05/07/12 14:10
Analyst: DIH

Work Group: WG397213
Blank Sample ID: WG397213-01
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	WG397213-02	SC120507003.011	05/07/12 14:10	01
LCS2	WG397213-03	SC120507003.012	05/07/12 14:11	01
MW-15-050312	L12050153-01	SC120507003.021	05/07/12 14:16	DL01
MW-17-050312	L12050153-03	SC120507003.022	05/07/12 14:17	DL01
MW-28050312	L12050153-05	SC120507003.024	05/07/12 14:18	DL01
DUP	WG397213-05	SC120507003.027	05/07/12 14:20	DL01
TW-02-050312	L12050153-07	SC120507003.037	05/07/12 14:33	DL01

Report Name: BLANK_SUMMARY
PDF File ID: 2407642
Report generated 05/09/2012 12:34

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050153 Prep Date: 05/07/12 14:10 Sample ID: WG397213-01
Instrument ID: SMARTCHEM Run Date: 05/07/12 14:10 Prep Method: 375.4
File ID: SC120507003.010 Analyst: DIH Method: 375.4
Workgroup (AAB#): WG397213 Matrix: Water Units: mg/L
Contract #: Cal ID: SMARTC-07-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: 2407643
09-MAY-2012 12:34

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050153 **Analyst:** DIH **Prep Method:** 375.4
Instrument ID: SMARTCHEM **Matrix:** Water **Method:** 375.4
Workgroup (AAB#): WG397213 **Units:** mg/L
QC Key: WATERLOO **Lot #:** STD51193

Sample ID: WG397213-02 LCS **File ID:** SC120507003.011 **Run Date:** 05/07/2012 14:10
Sample ID: WG397213-03 LCS2 **File ID:** SC120507003.012 **Run Date:** 05/07/2012 14:11

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Sulfate	20.0	20.2	101	20.0	19.4	96.8	4.29	85 - 115	10	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 2407644
Report generated: 05/09/2012 12:34

2.4.4.3 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
- [ ] Waste Container Check

Syringe filter lot # 144930

1) **Workgroup** _____
Plan # 20120507003
2) **Workgroup** _____
Plan # _____
3) **Workgroup** _____
Plan # _____

Analyte		1 NO4	2	3
		Dilution		
SC Prepared Curve				
Position				
1-1	ICV 30			
1-2	BLK			
1-3	LCS 20			
1-4	LCSDUP			
1-5	05-150 $ 30	1/5	color	
1-6	05-099-01	1/2		
1-7	03	1/2		
1-8	05	1/2		
1-9	07	1/50		
1-10	09	1/2		
1-11	05-153-01	1/2		
1-12	03	1/10		
1-13	05	1/2		
1-14	07	1/5		
1-15	05-171-01	1/5		
1-16	DUP 01	1/5		
1-17	MS03	1/5		
1-18	msd 05	1/5		
1-19	07	1/2		
1-20				
1-21				
1-22				
2-1	R05-099-07	1/10		
2-2				
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#90780

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				

- [x] 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	SO4		Reagents
SOP & Revision	IC 3754 R16		Rgt 17164
Curve Stock (SC made)	std 50590		Rgt 16922
Curve ID (user made)			
ICV	std 51192		
CCV	std 51191		
LCS	std 51193		
MS	std 49132 Dilution 0.1/0 (1000) = 10		

Comments: _____

Analyst: Deanna Hasson Date: 5/7/12

DCN#90780

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	0.0005	0.00		2:02:54 PM
DIL-1	RBL	0.00	-0.0032	0.00	R	2:03:12 PM
DIL-1	RBL	0.00	0.0007	0.00		2:04:06 PM
DIL-1	Std-1	0.00	-0.0024	0.00	INV	2:04:24 PM
SR5-1	Std-2	5.00	0.0199	0.00		2:05:18 PM
SR5-2	Std-3	10.00	0.0491	0.00		2:05:36 PM
SR5-3	Std-4	15.00	0.0703	0.00		2:06:30 PM
SR5-4	Std-5	20.00	0.0849	0.00		2:06:48 PM
SR5-5	Std-6	25.00	0.1073	0.00		2:07:42 PM
SR5-6	Std-7	30.00	0.1171	0.00		2:08:00 PM
SR5-7	Std-8	35.00	0.1309	0.00		2:08:55 PM
1	ICV 30	29.46	0.1166	0.00		2:09:12 PM
2	WG397213-01 BLK	0.67	-0.0015	0.00	INV	2:10:07 PM
3	WG397213-02 LCS	20.21	0.0877	0.00		2:10:25 PM
4	WG397213-03 LCSDUP	19.36	0.0848	0.00		2:11:19 PM
R-3	CCV (30 mg/L)	30.79	0.1204	102.62		2:11:37 PM
5	L12050150-30 (5)	3.19	0.0146	0.00		2:12:31 PM
6	L12050099-01 (2)	23.47	0.0984	0.00		2:12:49 PM
7	L12050099-03 (2)	23.19	0.0975	0.00		2:13:43 PM
8	L12050099-05 (2)	19.01	0.0836	0.00		2:14:01 PM
R-3	CCV (30 mg/L)	33.18	0.1271	110.60		2:14:55 PM
9	L12050099-07 (50)	4.87	0.0240	0.00		2:15:13 PM
10	L12050099-09 (2)	27.22	0.1100	0.00		2:16:07 PM
11	L12050153-01 (2)	26.92	0.1091	0.00		2:16:25 PM
12	L12050153-03 (10)	24.42	0.1014	0.00		2:17:19 PM
R-3	CCV (30 mg/L)	31.67	0.1229	105.56		2:17:37 PM
13	L12050153-05 (2)	34.31	0.1302	0.00		2:18:31 PM
14	L12050153-07 (5)	50.89	0.1713	0.00	><,LH	2:18:49 PM
15	L12050171-01 (5)	22.78	0.0962	0.00		2:19:43 PM
16	WG397213-05 (5) DUP	22.81	0.0963	0.00		2:20:01 PM
R-3	CCV (30 mg/L)	32.38	0.1249	107.95		2:20:55 PM
17	L12050171-03 (5) MS	25.19	0.1038	0.00		2:21:13 PM

Report Date :05/07/2012 **Run Date :5/7/2012** **Operator : WESTCO** **Plan # :20120507003**

Plan Description : SO4-A-DIH/5/7/2012

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	L12050171-05 (5) MSD	25.58	0.1050	0.00		2:22:07 PM
19	L12050171-07 (2)	44.59	0.1565	0.00	><,LH	2:22:25 PM
20	ID 20	19.94	0.0868	0.00		2:23:19 PM
R-3	CCV (30 mg/L)	31.74	0.1231	105.80		2:23:37 PM
23	Add-ID 2305-099-07 (10)	25.51	0.1048	0.00		2:24:31 PM
24	Add-ID 24	0.79	-0.0007	0.00	INV	2:24:49 PM
R-3	Add-CCV (30 mg/L)	31.42	0.1222	104.74		2:26:43 PM
14-[1/2]	L12050153-07 (5)	55.38	0.1114	0.00	LH	2:33:41 PM
19-[1/2]	L12050171-07 (2)	42.21	0.0907	0.00	LH	2:34:53 PM
R-3	CCV (30 mg/L)	32.78	0.1260	109.27		2:34:53 PM

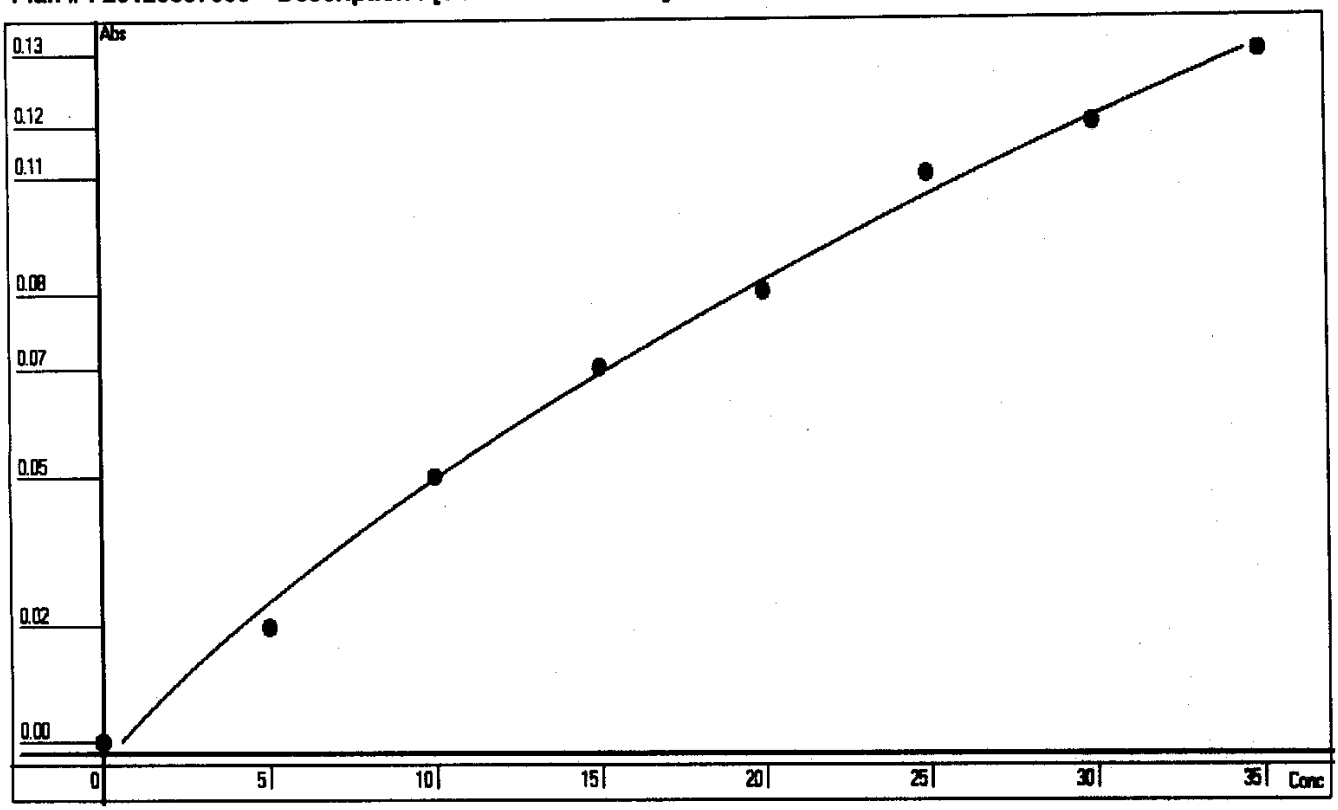
Report Date :05/07/2012 **Run Date :5/7/2012** **Operator : WESTCO** **Plan # :20120507003**

Plan Description : SO4-A-DIH/5/7/2012

Calibrant Report - WSO4 -

Calib Lot #:010104 Exp Date:6/17/2020 User:MICROBAC

Plan # : 20120507003 Description : [SO4-A-DIH/5/7/2012]



Point	OD	Conc	Recalc Conc	% Error
1	-0.0024	0	0.5472	54.72
2	0.0199	5	4.1185	-17.63
3	0.0491	10	10.0830	0.83
4	0.0703	15	15.3287	2.19
5	0.0849	20	19.3891	-3.05
6	0.1073	25	26.3287	5.31
7	0.1171	30	29.6351	-1.22
8	0.1309	35	34.5700	-1.23

Conc= +856.645*Abso^2 +145.1565*Abso +0.8906 R^2=0.9965

RBL 0.0006 0

Report Date 5/7/2012 Run Date 5/7/2012

2.4.5 Total Organic Carbon Data

2.4.5.1 Summary Data

Login Number: L12050153
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.

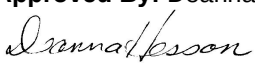
Matrix Spikes: All acceptance criteria were met.

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: 46695
Approved By: Deanna Hesson



Certificate of Analysis

Sample #: L12050153-01 **PrePrep Method:** N/A **Instrument:** TOC-VWP
Client ID: MW-15-050312 **Prep Method:** 415.1 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 415.1 **Cal Date:** 12/06/2011 09:40
Workgroup #: WG397595 **Analyst:** JBK **Run Date:** 05/10/2012 20:01
Collect Date: 05/03/2012 10:45 **Dilution:** 1 **File ID:** TC05102012.021
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		4.56		1.00	0.500

Sample #: L12050153-03 **PrePrep Method:** N/A **Instrument:** TOC-VWP
Client ID: MW-17-050312 **Prep Method:** 415.1 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 415.1 **Cal Date:** 12/06/2011 09:40
Workgroup #: WG397595 **Analyst:** JBK **Run Date:** 05/10/2012 20:14
Collect Date: 05/03/2012 11:30 **Dilution:** 4 **File ID:** TC05102012.022
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		10.7		4.00	2.00

Sample #: L12050153-05 **PrePrep Method:** N/A **Instrument:** TOC-VWP
Client ID: MW-28050312 **Prep Method:** 415.1 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 415.1 **Cal Date:** 12/06/2011 09:40
Workgroup #: WG397767 **Analyst:** JBK **Run Date:** 05/13/2012 08:44
Collect Date: 05/03/2012 15:00 **Dilution:** 2 **File ID:** TC05122012.052
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		3.20		2.00	1.00

Sample #: L12050153-07 **PrePrep Method:** N/A **Instrument:** TOC-VWP
Client ID: TW-02-050312 **Prep Method:** 415.1 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 415.1 **Cal Date:** 12/06/2011 09:40
Workgroup #: WG397767 **Analyst:** JBK **Run Date:** 05/13/2012 08:57
Collect Date: 05/03/2012 13:30 **Dilution:** 2 **File ID:** TC05122012.053
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		7.73		2.00	1.00

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: 10-MAY-2012
Analyst: JBK
Analyst: NA
Method: TOC
Instrument: TOC
Curve Workgroup: NA
Runlog ID:
Analytical Workgroups: WG397595 WG397597

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	JBK
Comments	

Primary Reviewer:
11-MAY-2012

Secondary Reviewer:
11-MAY-2012

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-11-2012 11:55:25

Microbac Laboratories Inc.

Data Checklist

Date: 12-MAY-2012
Analyst: JBK
Analyst: NA
Method: TOC
Instrument: TOC
Curve Workgroup: NA
Runlog ID:
Analytical Workgroups: WG397767 WG397599

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	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	JBK
Secondary Reviewer	DIH
Comments	

Primary Reviewer:
15-MAY-2012

Secondary Reviewer:
16-MAY-2012

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-16-2012 13:30:06

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 415.1 **AAB#:** WG397595

Login Number: L12050153

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-15-050312	01	05/03/12							28		05/10/12	7.4	28	
MW-17-050312	03	05/03/12							28		05/10/12	7.4	28	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2416105
Report generated 05/15/2012 19:12

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 415.1 **AAB#:** WG397767

Login Number: L12050153

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-28050312	05	05/03/12							28		05/13/12	9.7	28	
TW-02-050312	07	05/03/12							28		05/13/12	9.8	28	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2416105
Report generated 05/15/2012 19:12

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number:	L12050153	Work Group:	WG397595
Blank File ID:	TC05102012.003	Blank Sample ID:	WG397595-01
Prep Date:	05/10/12 16:04	Instrument ID:	TOC-VWP
Analyzed Date:	05/10/12 16:04	Method:	415.1
Analyst:	JBK		

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG397595-02	TC05102012.004	05/10/12 16:16	01
LCS2	WG397595-03	TC05102012.005	05/10/12 16:28	01
MW-15-050312	L12050153-01	TC05102012.021	05/10/12 20:01	01
MW-17-050312	L12050153-03	TC05102012.022	05/10/12 20:14	DL01
DUP	WG397595-05	TC05102012.030	05/10/12 22:07	01

Report Name: BLANK_SUMMARY
PDF File ID: 2416106
Report generated 05/15/2012 19:12

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number:	L12050153	Work Group:	WG397767
Blank File ID:	TC05122012.042	Blank Sample ID:	WG397767-01
Prep Date:	05/13/12 06:42	Instrument ID:	TOC-VWP
Analyzed Date:	05/13/12 06:42	Method:	415.1
Analyst:	JBK		

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG397767-02	TC05122012.043	05/13/12 06:55	01
LCS2	WG397767-03	TC05122012.044	05/13/12 07:08	01
MW-28050312	L12050153-05	TC05122012.052	05/13/12 08:44	DL01
TW-02-050312	L12050153-07	TC05122012.053	05/13/12 08:57	DL01
DUP	WG397767-05	TC05122012.065	05/13/12 11:25	DL01

Report Name: BLANK_SUMMARY
PDF File ID: 2416106
Report generated 05/15/2012 19:12

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050153 Prep Date: 05/10/12 16:04 Sample ID: WG397595-01
Instrument ID: TOC-VWP Run Date: 05/10/12 16:04 Prep Method: 415.1
File ID: TC05102012.003 Analyst: JBK Method: 415.1
Workgroup (AAB#): WG397595 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: 2416107
15-MAY-2012 19:12

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050153 Prep Date: 05/13/12 06:42 Sample ID: WG397767-01
Instrument ID: TOC-VWP Run Date: 05/13/12 06:42 Prep Method: 415.1
File ID: TC05122012.042 Analyst: JBK Method: 415.1
Workgroup (AAB#): WG397767 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: 2416107
15-MAY-2012 19:12

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050153 **Analyst:** JBK **Prep Method:** 415.1
Instrument ID: TOC-VWP **Matrix:** Water **Method:** 415.1
Workgroup (AAB#): WG397595 **Units:** mg/L
QC Key: WATERLOO **Lot #:** STD50986

Sample ID: WG397595-02 LCS **File ID:** TC05102012.004 **Run Date:** 05/10/2012 16:16
Sample ID: WG397595-03 LCS2 **File ID:** TC05102012.005 **Run Date:** 05/10/2012 16:28

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Total Organic Carbon	25.0	21.7	86.9	25.0	22.2	88.8	2.18	85 - 115	15	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 2416108
Report generated: 05/15/2012 19:12

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050153 **Analyst:** JBK **Prep Method:** 415.1
Instrument ID: TOC-VWP **Matrix:** Water **Method:** 415.1
Workgroup (AAB#): WG397767 **Units:** mg/L
QC Key: WATERLOO **Lot #:** STD50986

Sample ID: WG397767-02 LCS **File ID:** TC05122012.043 **Run Date:** 05/13/2012 06:55
Sample ID: WG397767-03 LCS2 **File ID:** TC05122012.044 **Run Date:** 05/13/2012 07:08

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Total Organic Carbon	25.0	23.9	95.4	25.0	26.8	107	11.8	85 - 115	15	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 2416108
Report generated: 05/15/2012 19:12

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 116590 RGT 116642

☑ 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
1	TC Curve	
2	TIC Curve	
3	TC ICV	
4	TIC ICV	
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19	All points analyzed	
20	in duplicate	
21		
22		
23		
24		
25		

Position	Sample ID	Dilution
26	TC Curve	
27	STD 47722	
28		
29	TIC Curve	
30	STD 47189	
31		
32		
33		
34		
35		
36		
37	TC ICV	
38	STD 47544	
39		
40	TIC ICV	
41	STD 47190	
42		
43		
44		
45		
46		
47		
48		
49		
50		

Position	Sample ID	Dilution
51		
52		
53	See SOP for	
54	Curve points	
55		
56		
57		
58		
59		
60		
61		
62		
63	5/200(1000)	
64	= 25 mg/L	
65		
66		
67		
68		
69		
70		
71		
72		
73		
74		
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

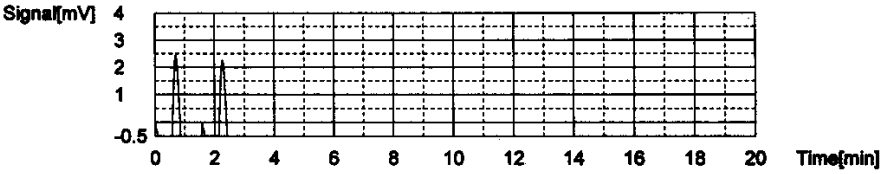
Sample Name:	TC CURVE
Sample ID:	Untitled
Cal. Curve:	TCCURVE-12-06-2011.2011_12_06_08_40_57.cal
Status	Completed

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

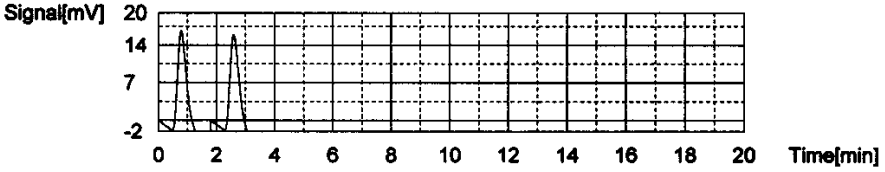
Acid Add. 0.000%
Mean Area 5.716



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

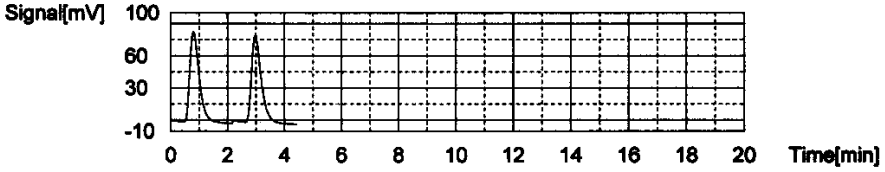
Acid Add. 0.000%
Mean Area 39.48



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

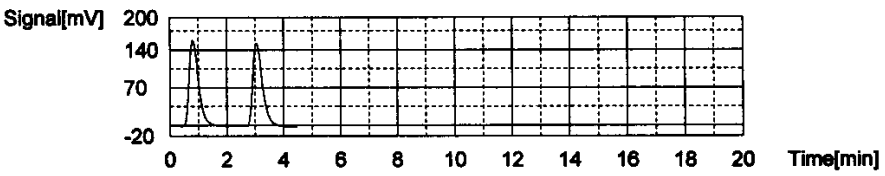
Acid Add. 0.000%
Mean Area 190.6



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

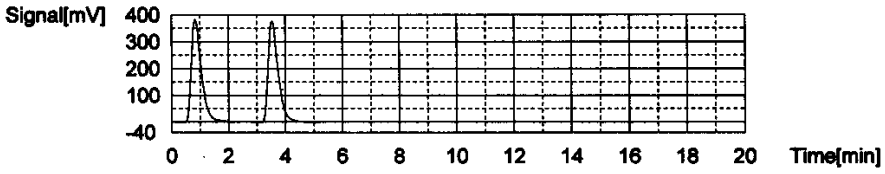
Acid Add. 0.000%
Mean Area 367.4



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

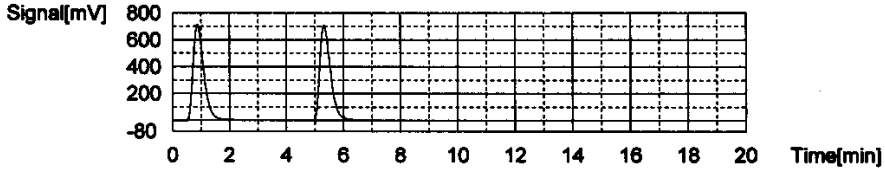
Acid Add. 0.000%
Mean Area 933.4



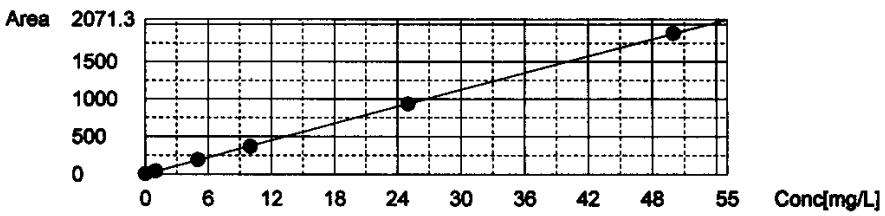
Conc: 50.00mg/L

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

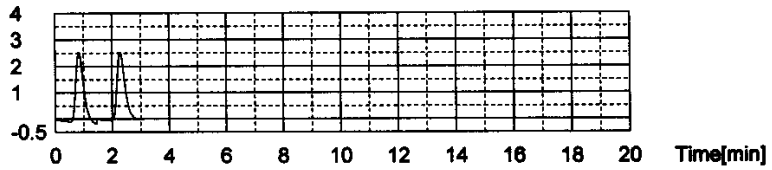
Sample Name: TIC CURVE
Sample ID: Untitled
Cal. Curve: TICCURVE-12-06-2011B.2011_12_06_15_47_44.cal
Status Completed

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

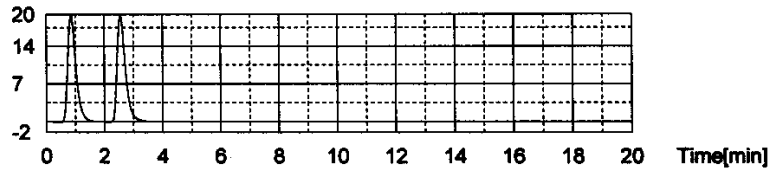
Acid Add. 10.00%
Mean Area 4.883



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

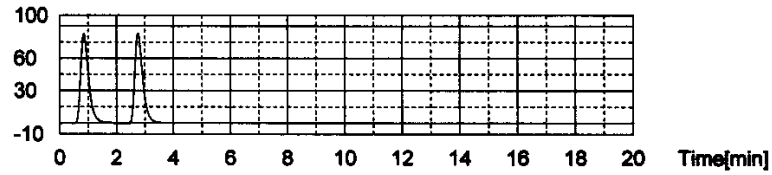
Acid Add. 10.00%
Mean Area 38.90



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

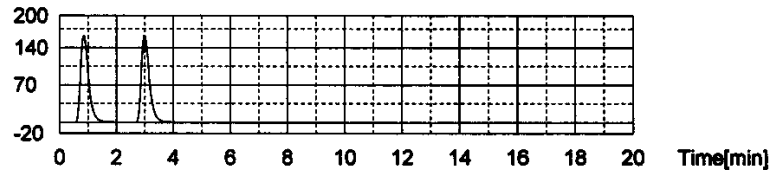
Acid Add. 10.00%
Mean Area 161.3



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

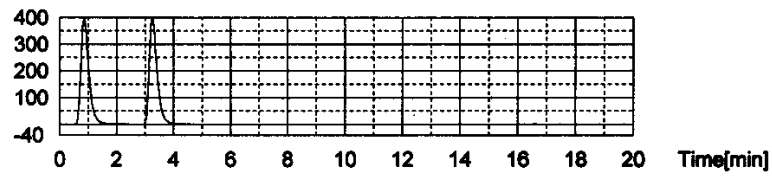
Acid Add. 10.00%
Mean Area 318.9



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

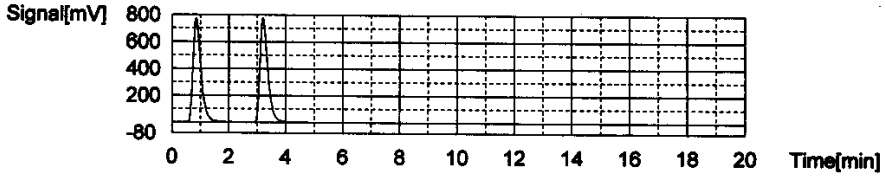
Acid Add. 10.00%
Mean Area 765.5



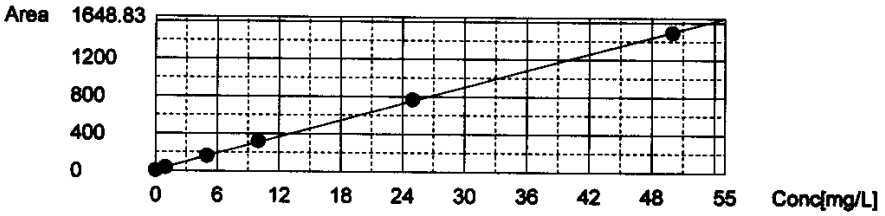
Conc: 50.00mg/L

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

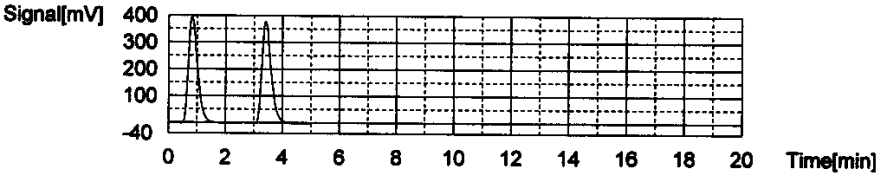
Type	Anal.	Dil.	Result
Unknown	TC	1.000	TC:23.27mg/L

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

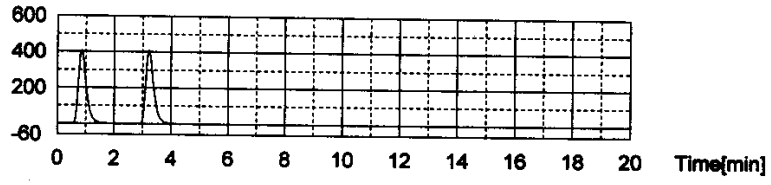
Type	Anal.	Dil.	Result
Unknown	IC	1.000	IC:26.21mg/L

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: WG397595

397597
~~397599~~

Total Organic Carbon

MAKE DAILY

CCV (TOC): STD 49750 (5/200)(1000) = 25mg/L

LCS (TOC): STD 50986 (5/200)(1000) = 25mg/L

CCV (TIC): STD 50244 (5/200)(1000) = 25mg/L

MS (TOC): STD 50986 04/40 (1000) = 10

Calibration Curve Date: 12/6/11

Reagent: RGT 17216
RGT 17230

☑ SM5310-C : Matrix 2 WG 397577

☑ EPA 415.1/9060A(mod): Matrix 1 WG 397595 SOP: K 4151 Rev. 14

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
1	CCV 25	
2	TIC 25	
~~3~~ 0	Blank	
4	LCS 25	
5	LCS Dup	
6	05-052-14	1/10
7	05-151-11	1/50
8	-11	1/100
9	05-254-01	1/5
10	-02	
11	-03	
12	-04	
13	-05	
14	CCV	
~~1~~ 50	CCB	
16	05-099-01	
17	-03	
18	-05	
19	-07	1/4
20	-09	
21	05-153-01	
22	-03	1/4
23	-05	
24	-07	
25	05-245-04	

Position	Sample ID	Dilution
26	CCV	
~~2~~ 70	CCB	
28	05-245-12	
29	-14	
30	Dup ↓	
31	MS ↓	
~~3~~ 70	Blank	
33	LCS 25	
34	LCS Dup	
35	05-119-01	1/10 HG
36	-07	1/10 HG
37	-03	1/10 HG
38	CCV	
~~3~~ 50	CCB	
40	05-269-01	
41	-03	
42	-05	
43	-07	
44	-09	
45	-11	
46	-13	
47	Dup 269-09	
48	MS ↓	
~~4~~ 90	Blank	
50	CCV	

Position	Sample ID	Dilution
~~5~~ 10	CCB	
52	LCS 25	
53	LCS Dup	
54	~~05-267-01~~ CCV	
55	~~-03~~ CCB	
56	-09	
57	-07	
58	-09	
59	-11	
60	-13	
61	05-264-01	
62	CCV	
~~6~~ 30	CCB	
64	05-264-02	
65	05-265-01	
66	05-264-04	
67	-05	
68	-04	
3 69	-07	
15 70	05-171-01	
27 71	Dup-01	
32 72	MS-03	
39 73	SD -05	
1 74	CCV	
0 75	CCB	
49	05-171-07	
14	CCV	
0	CCB	

Analyst: _____ 5/10/12 Date/Time: _____

DCN#90824

C:\TOC3201\Data\05-10-2012-JBK-TOC.t32

	Analysi	Sample Name	Result	Status	Date / Time	Vial
1	TOC	CCV 25	TOC:21.74mg/L TC:22.19mg/L IC:0.4483mg/L	Completed	05/10/2012 03:45:58 P	1
2	TOC	TIC 25	TOC:1.189mg/L TC:25.22mg/L IC:24.03mg/L	Completed	05/10/2012 03:59:22 P	2
3	TOC	WG397595-01 BLANK	!!Error!! TOC:0.3661mg/L TC:0.2112mg/L IC:-0.1549mg	Completed	05/10/2012 04:08:29 P	0
4	TOC	WG397595-02 LCS25	!!Error!! TOC:21.73mg/L TC:21.46mg/L IC:-0.2719mg/L	Completed	05/10/2012 04:20:40 P	4
5	TOC	WG397595-03 LCSDU	!!Error!! TOC:22.21mg/L TC:21.93mg/L IC:-0.2807mg/L	Completed	05/10/2012 04:32:44 P	5
6	TOC	L12050052-14 (10)	TOC:7.362mg/L TC:17.97mg/L IC:10.61mg/L	Completed	05/10/2012 04:45:52 P	6
7	TOC	L12050151-11 (50)	TOC:8.190mg/L TC:8.991mg/L IC:0.8009mg/L	Completed	05/10/2012 04:58:25 P	7
8	TOC	L12050151-11 (100) X	TOC:4.268mg/L TC:4.442mg/L IC:0.1741mg/L	Completed	05/10/2012 05:10:27 P	8
9	TOC	L12050254-01 (15)	TOC:12.95mg/L TC:16.27mg/L IC:3.315mg/L	Completed	05/10/2012 05:25:31 P	9
10	TOC		TOC:6.906mg/L TC:88.10mg/L IC:81.19mg/L	Completed	05/10/2012 05:41:12 P	10
11	TOC		TOC:13.30mg/L TC:67.47mg/L IC:54.17mg/L	Completed	05/10/2012 05:55:44 P	11
12	TOC		TOC:4.461mg/L TC:53.15mg/L IC:48.69mg/L	Completed	05/10/2012 06:09:49 P	12
13	TOC		TOC:6.676mg/L TC:67.95mg/L IC:61.27mg/L	Completed	05/10/2012 06:23:57 P	13
14	TOC	CCV	TOC:24.07mg/L TC:24.51mg/L IC:0.4399mg/L	Completed	05/10/2012 06:36:34 P	14
15	TOC	CCB	!!Error!! TOC:0.3202mg/L TC:0.1007mg/L IC:-0.2196mg	Completed	05/10/2012 06:45:44 P	0
16	TOC		TOC:7.214mg/L TC:60.82mg/L IC:53.60mg/L	Completed	05/10/2012 06:59:42 P	16
17	TOC	L12050099-03	TOC:4.187mg/L TC:43.99mg/L IC:39.81mg/L	Completed	05/10/2012 07:13:38 P	17
18	TOC	L12050099-05	TOC:3.110mg/L TC:28.58mg/L IC:25.47mg/L	Completed	05/10/2012 07:26:48 P	18
19	TOC	L12050099-07 (4)	TOC:2.485mg/L TC:24.05mg/L IC:21.56mg/L	Completed	05/10/2012 07:40:00 P	19
20	TOC	L12050099-09	TOC:2.524mg/L TC:40.48mg/L IC:37.96mg/L	Completed	05/10/2012 07:53:23 P	20
21	TOC	L12050153-01	TOC:4.560mg/L TC:21.07mg/L IC:16.51mg/L	Completed	05/10/2012 08:06:28 P	21
22	TOC	L12050153-03 (4)	TOC:2.686mg/L TC:22.81mg/L IC:20.12mg/L	Completed	05/10/2012 08:19:50 P	22
23	TOC		TOC:5.032mg/L TC:57.36mg/L IC:52.32mg/L	Completed	05/10/2012 08:33:38 P	23
24	TOC		!!Error!! TOC:-5.070mg/L TC:77.77mg/L IC:82.84mg/L	Completed	05/10/2012 08:48:43 P	24
25	TOC		TOC:42.00mg/L TC:150.8mg/L IC:108.8mg/L	Completed	05/10/2012 09:05:53 P	25
26	TOC	CCV	TOC:24.55mg/L TC:25.08mg/L IC:0.5287mg/L	Completed	05/10/2012 09:19:04 P	26
27	TOC	CCB	!!Error!! TOC:0.2931mg/L TC:0.1155mg/L IC:-0.1776mg	Completed	05/10/2012 09:28:16 P	0
28	TOC		!!Error!! TOC:-3.075mg/L TC:85.89mg/L IC:88.96mg/L	Completed	05/10/2012 09:43:09 P	28
29	TOC	WG397595-04 Ref	TOC:42.98mg/L TC:89.75mg/L IC:46.77mg/L	Completed	05/10/2012 09:57:55 P	29
30	TOC	WG397595-05 Dup	TOC:43.95mg/L TC:90.12mg/L IC:46.17mg/L	Completed	05/10/2012 10:13:25 P	30
31	TOC	WG397595-06 MS	TOC:44.73mg/L TC:99.94mg/L IC:55.22mg/L	Completed	05/10/2012 10:28:02 P	31
32	TOC	WG397597-01 BLANK	!!Error!! TOC:0.2770mg/L TC:0.1349mg/L IC:-0.1421mg	Completed	05/10/2012 10:45:09 P	0
33	TOC		!!Error!! TOC:20.17mg/L TC:20.10mg/L IC:-0.06631mg/L	Completed	05/10/2012 11:06:14 P	33
34	TOC		!!Error!! TOC:21.03mg/L TC:20.92mg/L IC:-0.1081mg/L	Completed	05/10/2012 11:27:18 P	34
35	TOC	L12050119-01 (10)	TOC:0.8545mg/L TC:2.451mg/L IC:1.597mg/L	Completed	05/10/2012 11:48:26 P	35
36	TOC	L12050119-02 (10)	TOC:1.333mg/L TC:3.531mg/L IC:2.197mg/L	Completed	05/11/2012 12:09:59 A	36
37	TOC	L12050119-03 (10)	TOC:1.033mg/L TC:1.627mg/L IC:0.5940mg/L	Completed	05/11/2012 12:31:13 A	37
38	TOC	CCV	!!Error!! TOC:23.08mg/L TC:22.85mg/L IC:-0.2290mg/L	Completed	05/11/2012 12:43:30 A	38
39	TOC	CCB	!!Error!! TOC:0.4837mg/L TC:0.2365mg/L IC:-0.2472mg	Completed	05/11/2012 12:52:40 A	0
40	TOC	L12050269-01	TOC:14.82mg/L TC:22.91mg/L IC:8.091mg/L	Completed	05/11/2012 01:15:57 A	40
41	TOC	L12050269-03	TOC:3.160mg/L TC:18.59mg/L IC:15.43mg/L	Completed	05/11/2012 01:39:14 A	41
42	TOC	L12050269-05	TOC:1.192mg/L TC:4.486mg/L IC:3.294mg/L	Completed	05/11/2012 02:00:10 A	42
43	TOC	L12050269-07	TOC:6.690mg/L TC:21.52mg/L IC:14.83mg/L	Completed	05/11/2012 02:23:24 A	43
44	TOC	L12050269-09	TOC:1.372mg/L TC:8.697mg/L IC:7.325mg/L	Completed	05/11/2012 02:45:24 A	44
45	TOC	L12050269-11	TOC:1.891mg/L TC:9.917mg/L IC:8.027mg/L	Completed	05/11/2012 03:07:40 A	45
46	TOC	L12050269-13	!!Error!! TOC:0.7796mg/L TC:0.5670mg/L IC:-0.2126mg	Completed	05/11/2012 03:27:14 A	46
47	TOC	WG397597-05 DUP	TOC:2.041mg/L TC:7.573mg/L IC:5.532mg/L	Completed	05/11/2012 03:48:50 A	47
48	TOC	WG397597-06 MS	TOC:11.27mg/L TC:30.02mg/L IC:18.75mg/L	Completed	05/11/2012 04:13:25 A	48
49	TOC	20 LCS W	!!Error!! TOC:23.83mg/L TC:23.70mg/L IC:-0.1297mg/L	Completed	05/11/2012 04:25:40 A	49
50	TOC	CCV	!!Error!! TOC:24.29mg/L TC:24.14mg/L IC:-0.1506mg/L	Completed	05/11/2012 04:37:57 A	50
51	TOC	CCB	!!Error!! TOC:0.3257mg/L TC:0.08990mg/L IC:-0.2358m	Completed	05/11/2012 04:47:03 A	0
52	TOC	CCV	TOC:23.09mg/L TC:23.14mg/L IC:0.05734mg/L	Completed	05/11/2012 07:00:12 A	1
53	TOC	CCB	!!Error!! TOC:0.2946mg/L TC:0.06459mg/L IC:-0.2300m	Completed	05/11/2012 07:09:27 A	0
54	TOC	WG397597-02 LCS	!!Error!! TOC:22.68mg/L TC:22.65mg/L IC:-0.03283mg/L	Completed	05/11/2012 07:30:47 A	3
55	TOC	WG397597-03 LCS2	!!Error!! TOC:22.40mg/L TC:22.38mg/L IC:-0.01853mg/L	Completed	05/11/2012 07:51:56 A	4
56	TOC	CCV	TOC:22.14mg/L TC:22.15mg/L IC:0.01057mg/L	Completed	05/11/2012 08:04:14 A	5
57	TOC	CCB	!!Error!! TOC:0.3152mg/L TC:0.07867mg/L IC:-0.2365m	Completed	05/11/2012 08:13:28 A	0

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

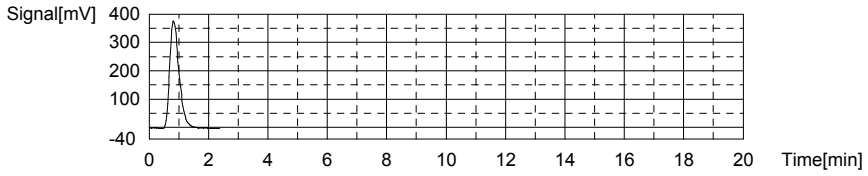
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:21.74mg/L TC:22.19mg/L IC:0.4483mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	833.6	22.19mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 03:41:21 PM

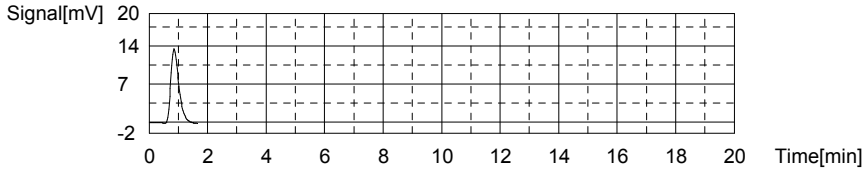
Mean Area 833.6
Mean Conc. 22.19mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	26.21	0.4483mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 03:45:55 PM

Mean Area 26.21
Mean Conc. 0.4483mg/L



Sample

Sample Name: TIC 25
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

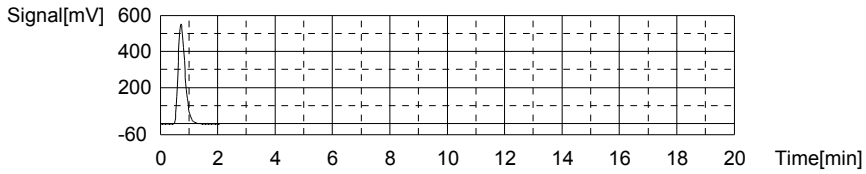
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.189mg/L TC:25.22mg/L IC:24.03mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	947.5	25.22mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 03:53:25 PM

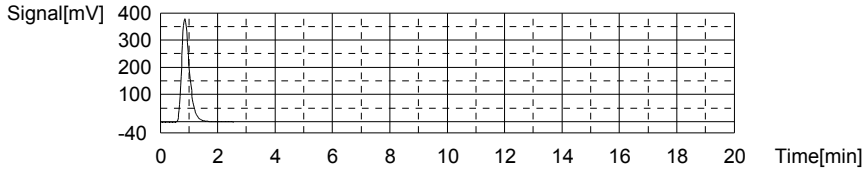
Mean Area 947.5
Mean Conc. 25.22mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	727.0	24.03mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 03:59:22 PM

Mean Area 727.0
Mean Conc. 24.03mg/L



Sample

Sample Name: WG397595-01 BLANK
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

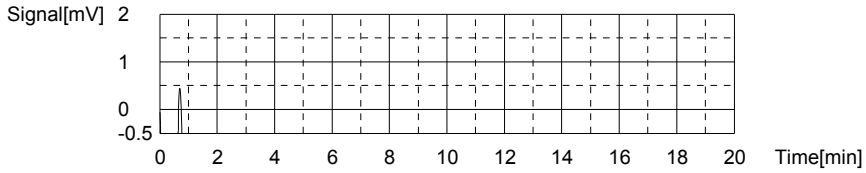
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3661mg/L TC:0.2112mg/L IC:-0.1549mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.029	0.2112mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 04:04:32 PM

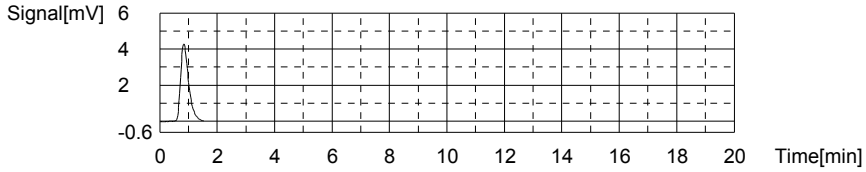
Mean Area 8.029
Mean Conc. 0.2112mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.282	-0.1549mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 04:08:29 PM

Mean Area 8.282
Mean Conc. -0.1549mg/L



Sample

Sample Name: WG397595-02 LCS25
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

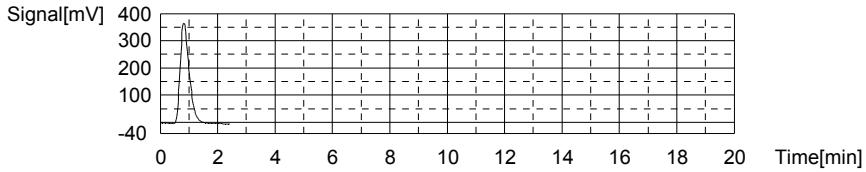
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:21.73mg/L TC:21.46mg/L IC:-0.2719mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	806.2	21.46mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 04:16:21 PM

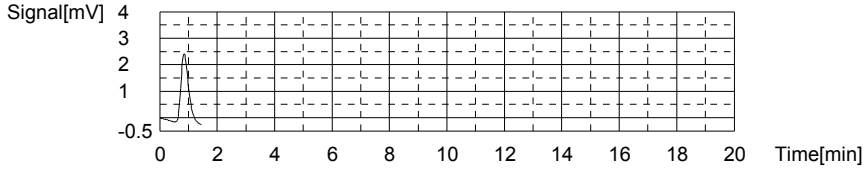
Mean Area 806.2
Mean Conc. 21.46mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.805	-0.2719mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 04:20:40 PM

Mean Area 4.805
Mean Conc. -0.2719mg/L



Sample

Sample Name: WG397595-03 LCSDUP
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

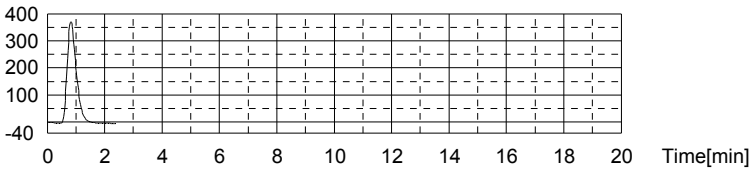
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:22.21mg/L TC:21.93mg/L IC:-0.2807mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	824.1	21.93mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 04:28:29 PM

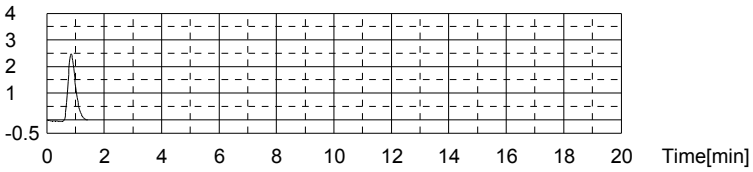
Mean Area 824.1
Mean Conc. 21.93mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.544	-0.2807mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 04:32:44 PM

Mean Area 4.544
Mean Conc. -0.2807mg/L



Sample

Sample Name: L12050052-14 (10)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

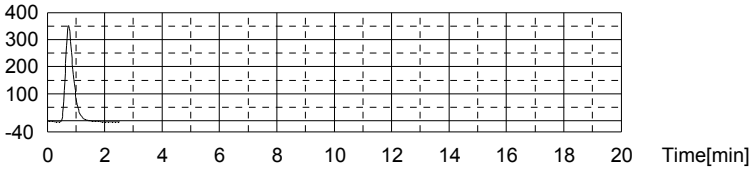
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:7.362mg/L TC:17.97mg/L IC:10.61mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	675.4	17.97mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 04:40:42 PM

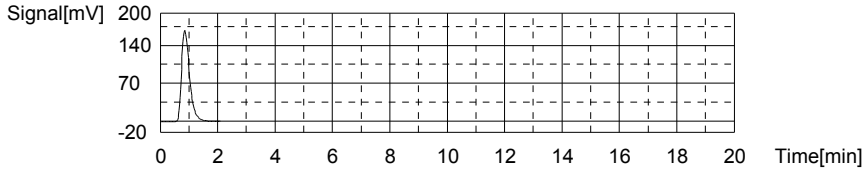
Mean Area 675.4
Mean Conc. 17.97mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	328.3	10.61mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 04:45:52 PM

Mean Area 328.3
Mean Conc. 10.61mg/L



Sample

Sample Name: L12050151-11 (50)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

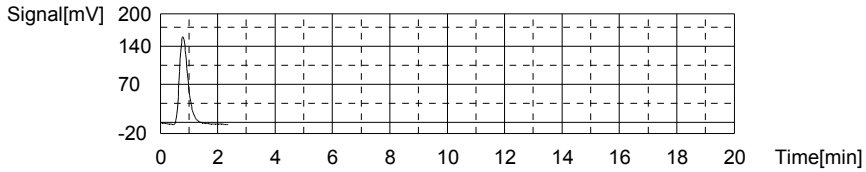
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:8.190mg/L TC:8.991mg/L IC:0.8009mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	337.9	8.991mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 04:53:44 PM

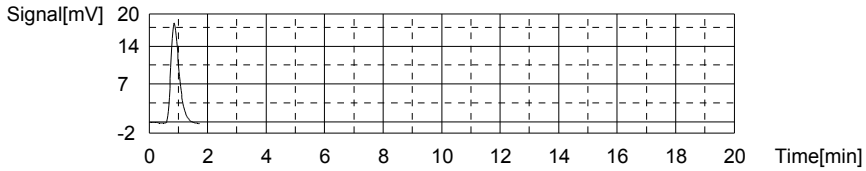
Mean Area 337.9
Mean Conc. 8.991mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	36.69	0.8009mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 04:58:25 PM

Mean Area 36.69
Mean Conc. 0.8009mg/L



Sample

Sample Name: L12050151-11 (100)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

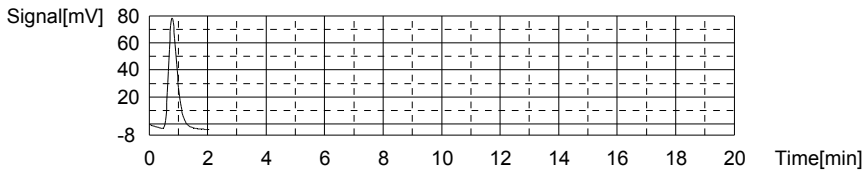
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:4.268mg/L TC:4.442mg/L IC:0.1741mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	167.0	4.442mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 05:05:54 PM

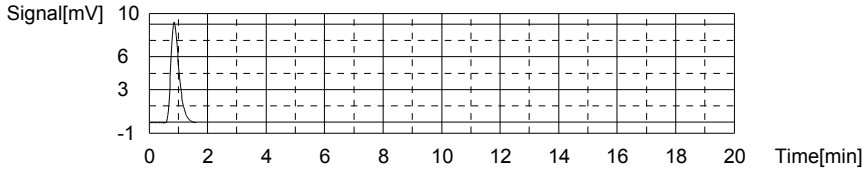
Mean Area 167.0
Mean Conc. 4.442mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	18.06	0.1741mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 05:10:27 PM

Mean Area 18.06
Mean Conc. 0.1741mg/L



Sample

Sample Name: L12050254-01 (15)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

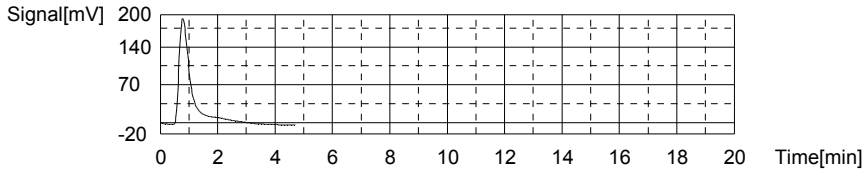
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:12.95mg/L TC:16.27mg/L IC:3.315mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	611.2	16.27mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 05:20:36 PM

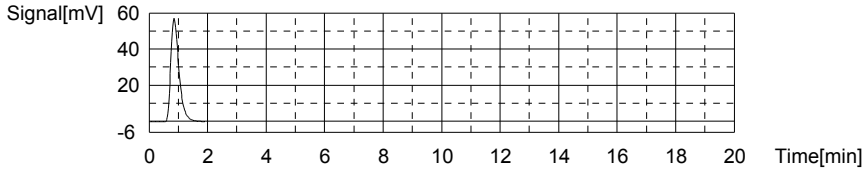
Mean Area 611.2
Mean Conc. 16.27mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	111.4	3.315mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 05:25:31 PM

Mean Area 111.4
Mean Conc. 3.315mg/L



Sample

Sample Name:
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

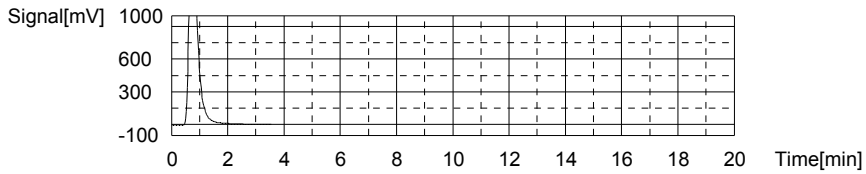
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:6.906mg/L TC:88.10mg/L IC:81.19mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3310	88.10mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 05:34:29 PM

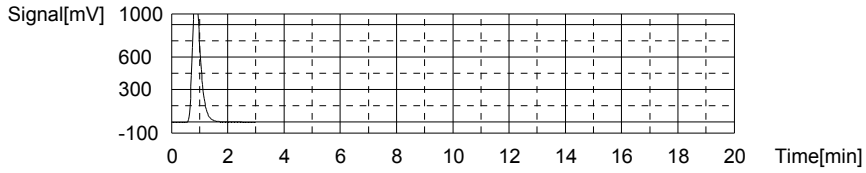
Mean Area 3310
Mean Conc. 88.10mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2426	81.19mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 05:41:12 PM

Mean Area 2426
Mean Conc. 81.19mg/L



Sample

Sample Name:
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

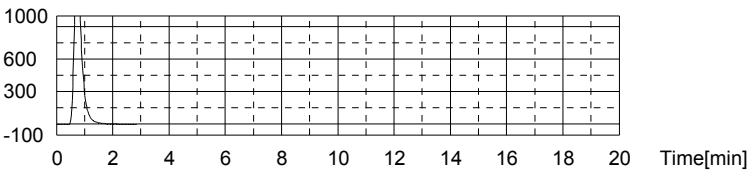
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:13.30mg/L TC:67.47mg/L IC:54.17mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2535	67.47mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 05:49:28 PM

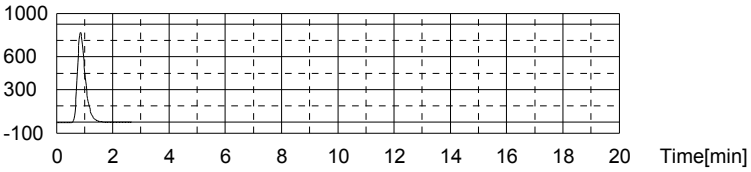
Mean Area 2535
Mean Conc. 67.47mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1623	54.17mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 05:55:44 PM

Mean Area 1623
Mean Conc. 54.17mg/L



Sample

Sample Name:
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

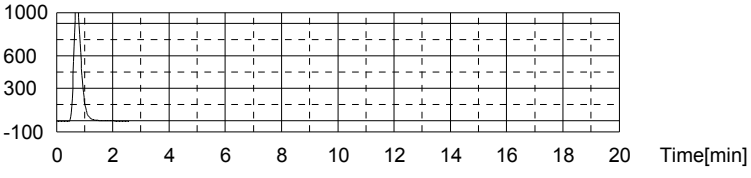
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:4.461mg/L TC:53.15mg/L IC:48.69mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1997	53.15mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 06:03:45 PM

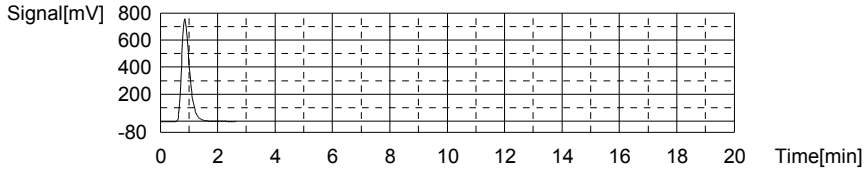
Mean Area 1997
Mean Conc. 53.15mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1460	48.69mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 06:09:49 PM

Mean Area 1460
Mean Conc. 48.69mg/L



Sample

Sample Name:
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

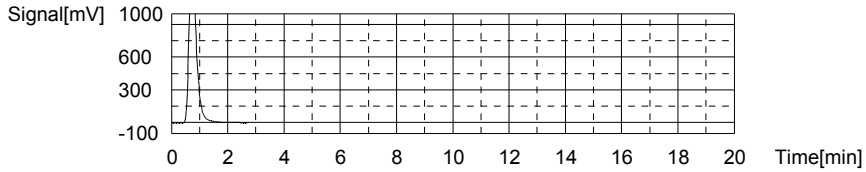
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:6.676mg/L TC:67.95mg/L IC:61.27mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2553	67.95mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 06:17:56 PM

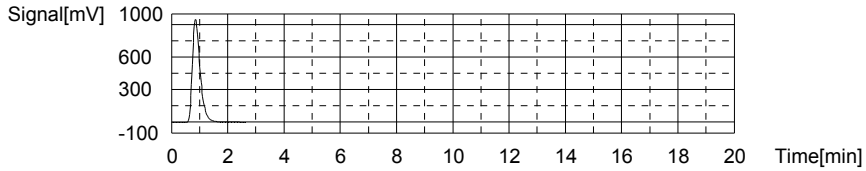
Mean Area 2553
Mean Conc. 67.95mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1834	61.27mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 06:23:57 PM

Mean Area 1834
Mean Conc. 61.27mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

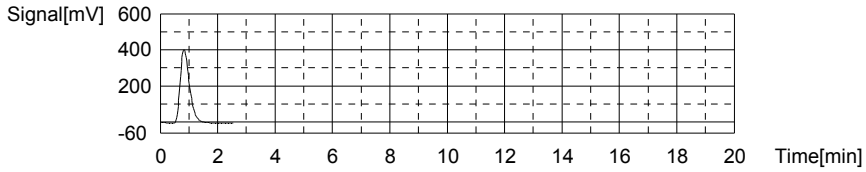
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:24.07mg/L TC:24.51mg/L IC:0.4399mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	920.9	24.51mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 06:31:56 PM

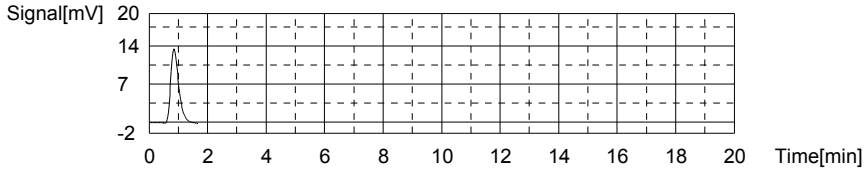
Mean Area 920.9
Mean Conc. 24.51mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	25.96	0.4399mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 06:36:34 PM

Mean Area 25.96
Mean Conc. 0.4399mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

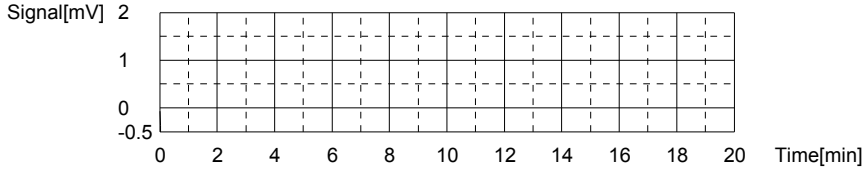
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3202mg/L TC:0.1007mg/L IC:-0.2196mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.875	0.1007mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 06:41:49 PM

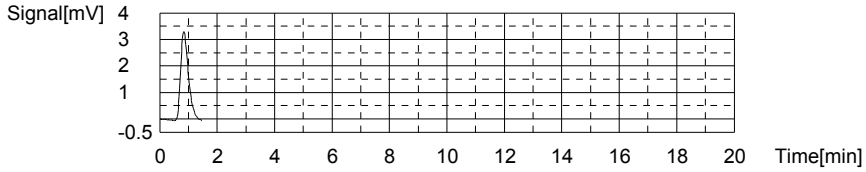
Mean Area 3.875
Mean Conc. 0.1007mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.360	-0.2196mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 06:45:44 PM

Mean Area 6.360
Mean Conc. -0.2196mg/L



Sample

Sample Name:
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

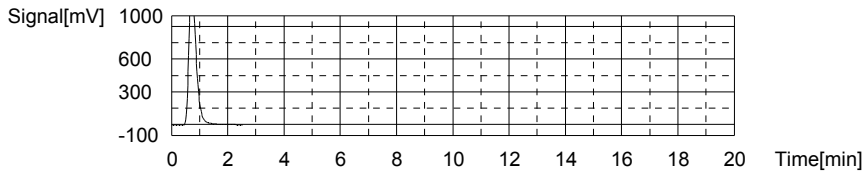
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:7.214mg/L TC:60.82mg/L IC:53.60mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2285	60.82mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 06:53:41 PM

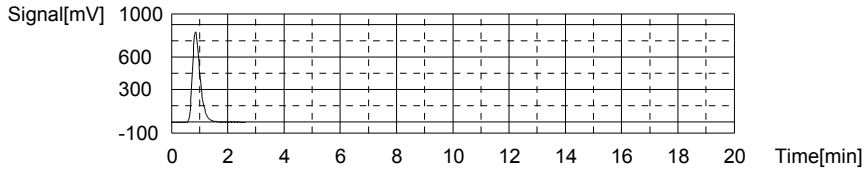
Mean Area 2285
Mean Conc. 60.82mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1606	53.60mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 06:59:42 PM

Mean Area 1606
Mean Conc. 53.60mg/L



Sample

Sample Name: L12050099-03
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

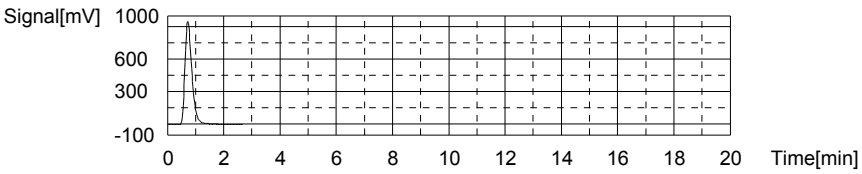
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:4.187mg/L TC:43.99mg/L IC:39.81mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1653	43.99mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 07:07:49 PM

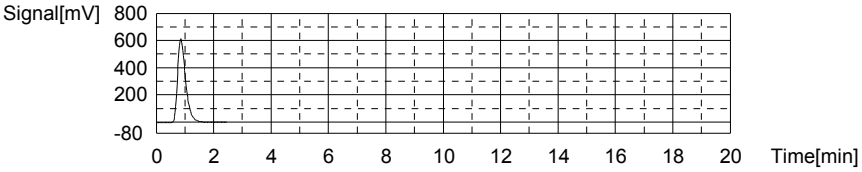
Mean Area 1653
Mean Conc. 43.99mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1196	39.81mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 07:13:38 PM

Mean Area 1196
Mean Conc. 39.81mg/L



Sample

Sample Name: L12050099-05
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

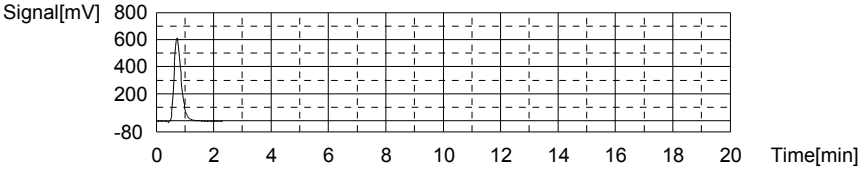
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.110mg/L TC:28.58mg/L IC:25.47mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1074	28.58mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 07:21:22 PM

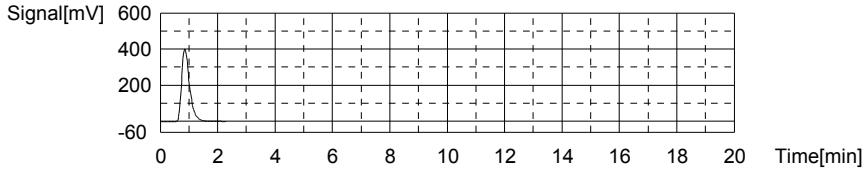
Mean Area 1074
Mean Conc. 28.58mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	770.0	25.47mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 07:26:48 PM

Mean Area 770.0
Mean Conc. 25.47mg/L



Sample

Sample Name: L12050099-07 (4)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

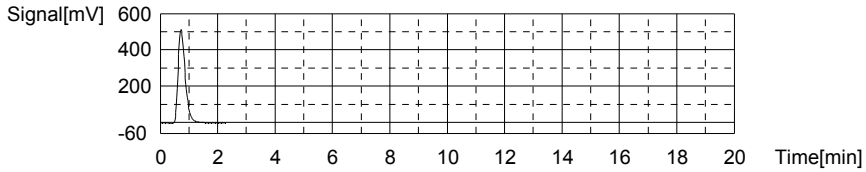
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:2.485mg/L TC:24.05mg/L IC:21.56mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	903.5	24.05mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 07:34:31 PM

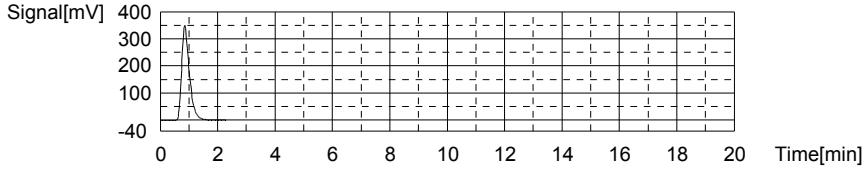
Mean Area 903.5
Mean Conc. 24.05mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	653.7	21.56mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 07:40:00 PM

Mean Area 653.7
Mean Conc. 21.56mg/L



Sample

Sample Name: L12050099-09
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

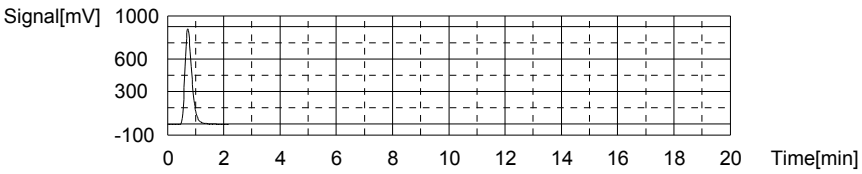
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:2.524mg/L TC:40.48mg/L IC:37.96mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1521	40.48mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 07:47:36 PM

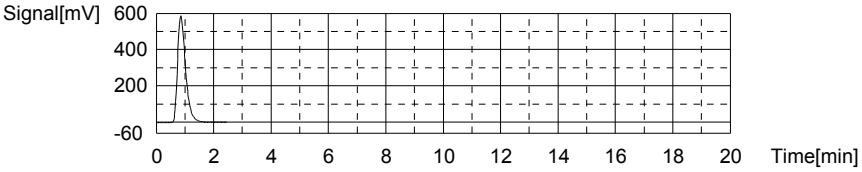
Mean Area 1521
Mean Conc. 40.48mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1141	37.96mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 07:53:23 PM

Mean Area 1141
Mean Conc. 37.96mg/L



Sample

Sample Name: L12050153-01
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

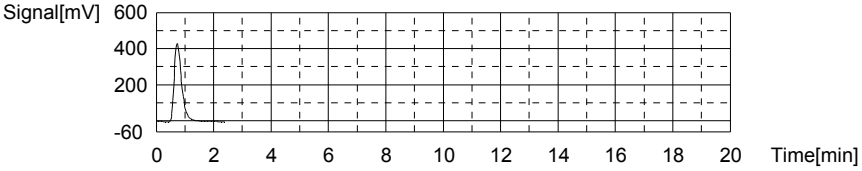
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:4.560mg/L TC:21.07mg/L IC:16.51mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	791.6	21.07mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 08:01:12 PM

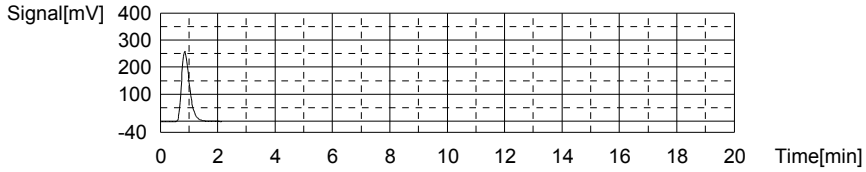
Mean Area 791.6
Mean Conc. 21.07mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	503.5	16.51mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 08:06:28 PM

Mean Area 503.5
Mean Conc. 16.51mg/L



Sample

Sample Name: L12050153-03 (4)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

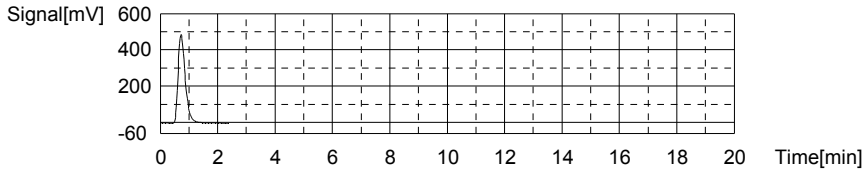
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:2.686mg/L TC:22.81mg/L IC:20.12mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	857.1	22.81mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 08:14:18 PM

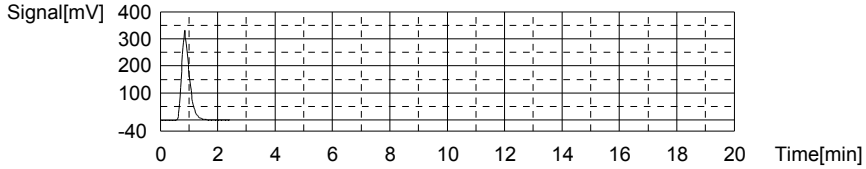
Mean Area 857.1
Mean Conc. 22.81mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	611.0	20.12mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 08:19:50 PM

Mean Area 611.0
Mean Conc. 20.12mg/L



Sample

Sample Name:
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

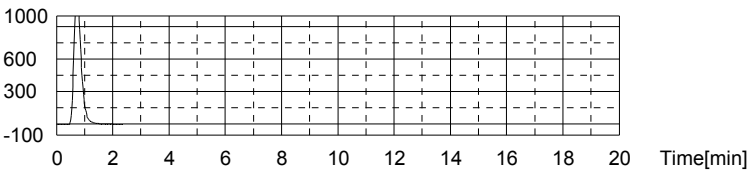
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.032mg/L TC:57.36mg/L IC:52.32mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2155	57.36mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 08:27:36 PM

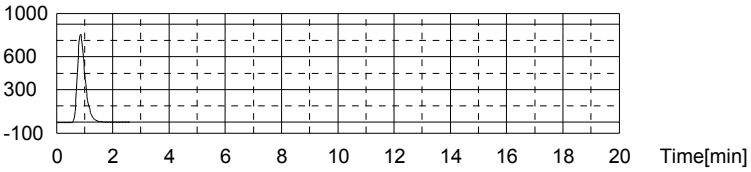
Mean Area 2155
Mean Conc. 57.36mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1568	52.32mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 08:33:38 PM

Mean Area 1568
Mean Conc. 52.32mg/L



Sample

Sample Name:
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

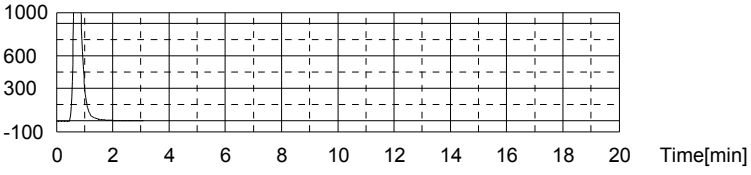
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:-5.070mg/L TC:77.77mg/L IC:82.84mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2922	77.77mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 08:42:10 PM

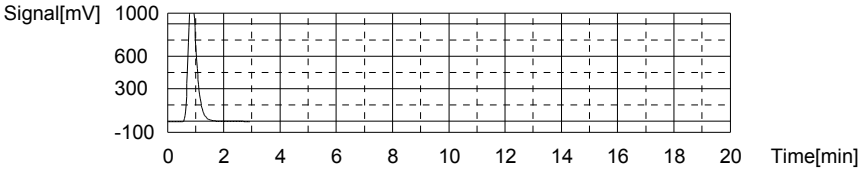
Mean Area 2922
Mean Conc. 77.77mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2475	82.84mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 08:48:43 PM

Mean Area 2475
Mean Conc. 82.84mg/L



Sample

Sample Name:
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

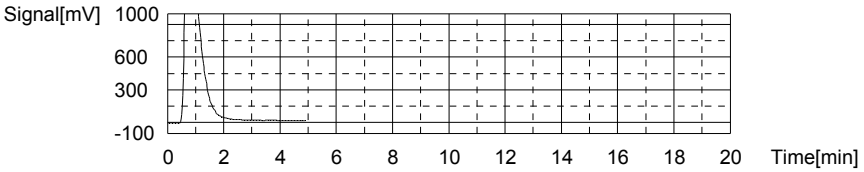
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:42.00mg/L TC:150.8mg/L IC:108.8mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5665	150.8mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 08:59:03 PM

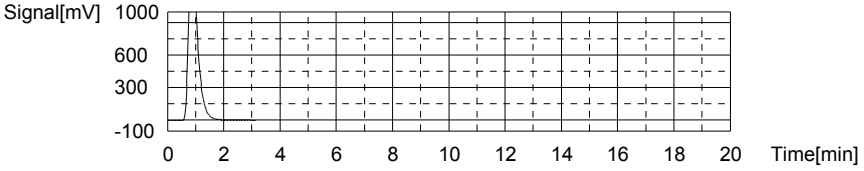
Mean Area 5665
Mean Conc. 150.8mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3246	108.8mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 09:05:53 PM

Mean Area 3246
Mean Conc. 108.8mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

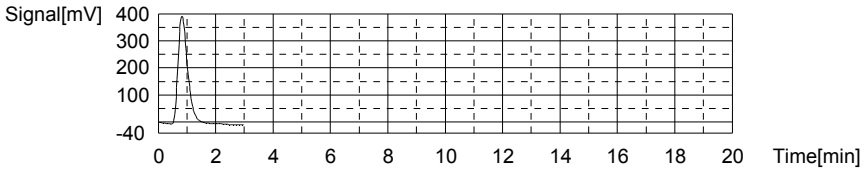
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:24.55mg/L TC:25.08mg/L IC:0.5287mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	942.4	25.08mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 09:14:17 PM

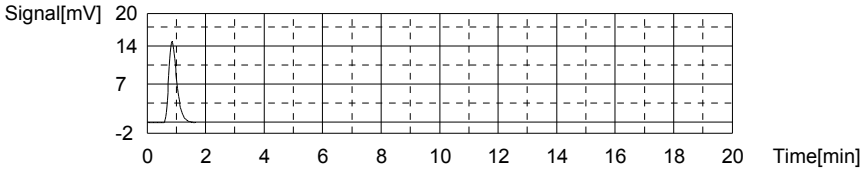
Mean Area 942.4
Mean Conc. 25.08mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	28.60	0.5287mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 09:19:04 PM

Mean Area 28.60
Mean Conc. 0.5287mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

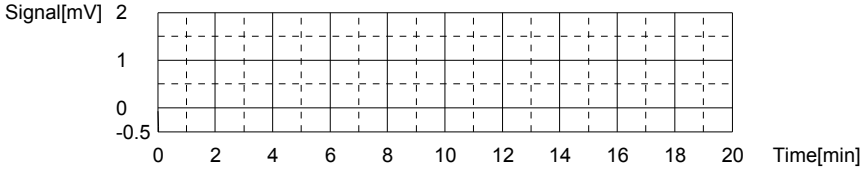
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.2931mg/L TC:0.1155mg/L IC:-0.1776mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.432	0.1155mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 09:24:19 PM

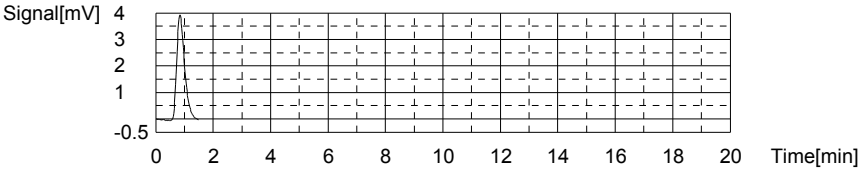
Mean Area 4.432
Mean Conc. 0.1155mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.608	-0.1776mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 09:28:16 PM

Mean Area 7.608
Mean Conc. -0.1776mg/L



Sample

Sample Name:
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

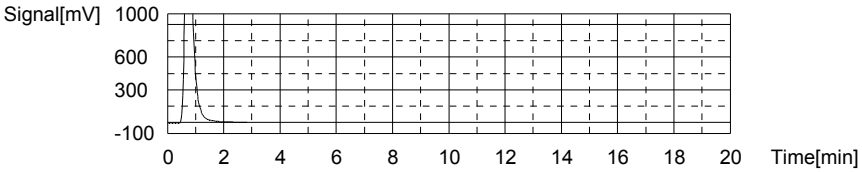
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:-3.075mg/L TC:85.89mg/L IC:88.96mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3227	85.89mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 09:36:31 PM

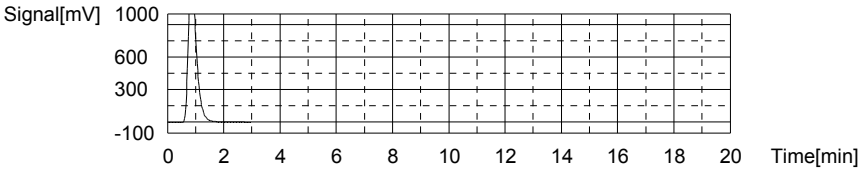
Mean Area 3227
Mean Conc. 85.89mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2657	88.96mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 09:43:09 PM

Mean Area 2657
Mean Conc. 88.96mg/L



Sample

Sample Name: WG397595-04
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

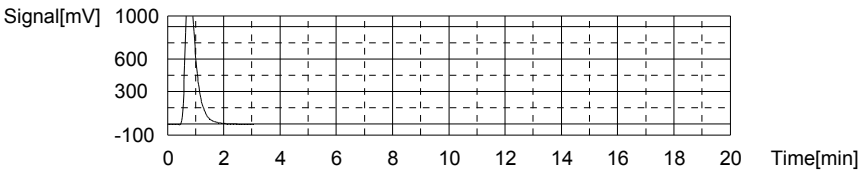
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:42.98mg/L TC:89.75mg/L IC:46.77mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3372	89.75mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 09:51:40 PM

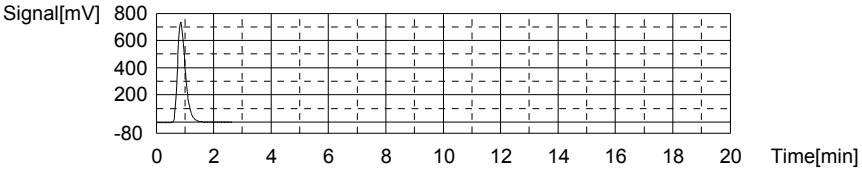
Mean Area 3372
Mean Conc. 89.75mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1403	46.77mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 09:57:55 PM

Mean Area 1403
Mean Conc. 46.77mg/L



Sample

Sample Name: WG397595-05
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

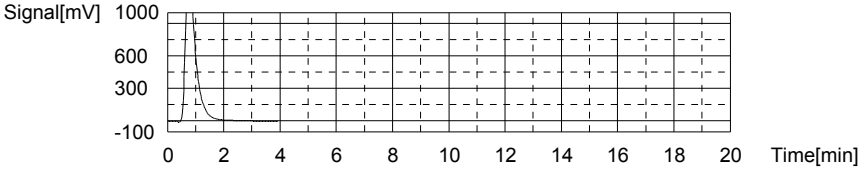
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:43.95mg/L TC:90.12mg/L IC:46.17mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3386	90.12mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 10:07:17 PM

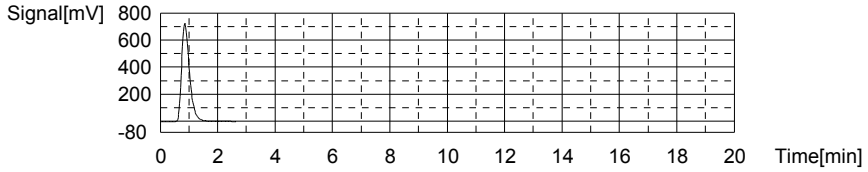
Mean Area 3386
Mean Conc. 90.12mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1385	46.17mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 10:13:25 PM

Mean Area 1385
Mean Conc. 46.17mg/L



Sample

Sample Name: WG397595-06
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

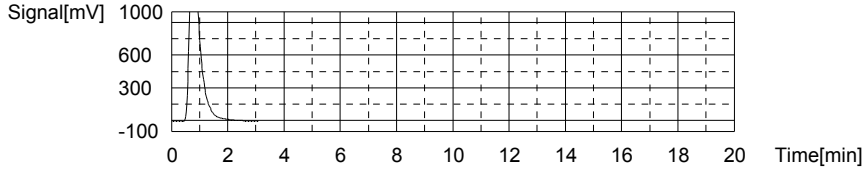
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:44.73mg/L TC:99.94mg/L IC:55.22mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3755	99.94mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 10:21:58 PM

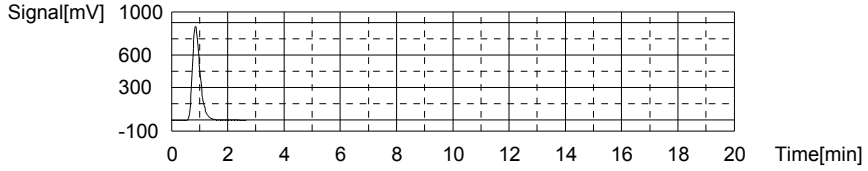
Mean Area 3755
Mean Conc. 99.94mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1654	55.22mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 10:28:02 PM

Mean Area 1654
Mean Conc. 55.22mg/L



Sample

Sample Name: WG397597-01 BLANK
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

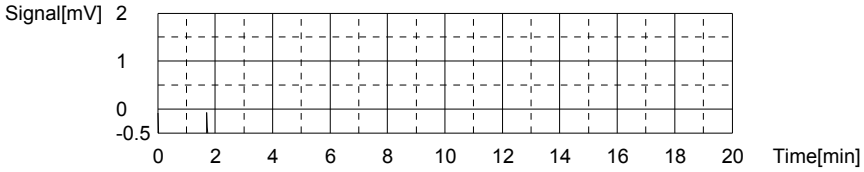
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.2770mg/L TC:0.1349mg/L IC:-0.1421mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.397	0.1678mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 10:33:22 PM
2	3.925	0.1020mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 10:37:08 PM

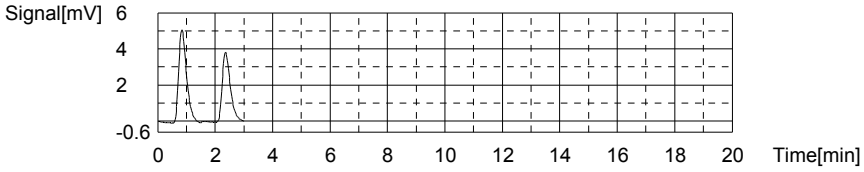
Mean Area 5.161
Mean Conc. 0.1349mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.923	-0.09969mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 10:41:12 PM
2	7.399	-0.1846mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 10:45:09 PM

Mean Area 8.661
Mean Conc. -0.1421mg/L



Sample

Sample Name:
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

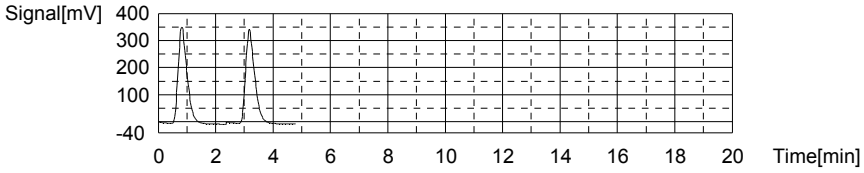
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:20.17mg/L TC:20.10mg/L IC:-0.06631mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	756.7	20.14mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 10:52:57 PM
2	754.2	20.07mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 10:57:38 PM

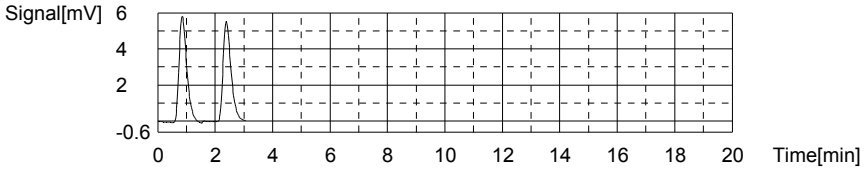
Mean Area 755.5
Mean Conc. 20.10mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.26	-0.05470mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 11:02:04 PM
2	10.57	-0.07792mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 11:06:14 PM

Mean Area 10.91
Mean Conc. -0.06631mg/L



Sample

Sample Name:
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

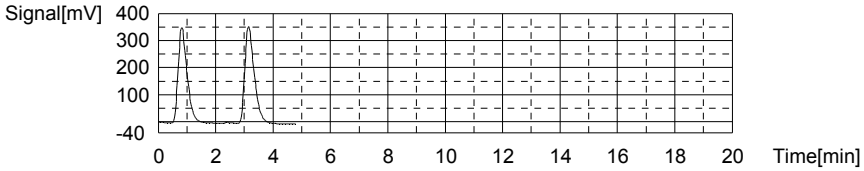
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:21.03mg/L TC:20.92mg/L IC:-0.1081mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	760.4	20.24mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 11:14:00 PM
2	812.0	21.61mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 11:18:47 PM

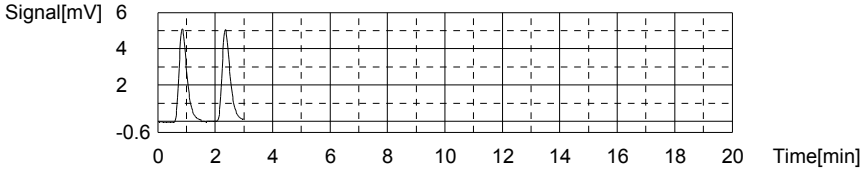
Mean Area 786.2
Mean Conc. 20.92mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.765	-0.1050mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 11:23:09 PM
2	9.579	-0.1113mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 11:27:18 PM

Mean Area 9.672
Mean Conc. -0.1081mg/L



Sample

Sample Name: L12050119-01 (10)
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

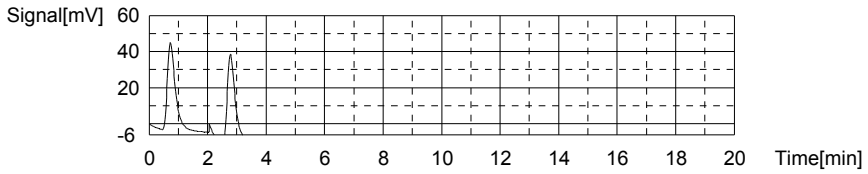
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:0.8545mg/L TC:2.451mg/L IC:1.597mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	91.14	2.423mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 11:34:48 PM
2	93.24	2.479mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 11:39:15 PM

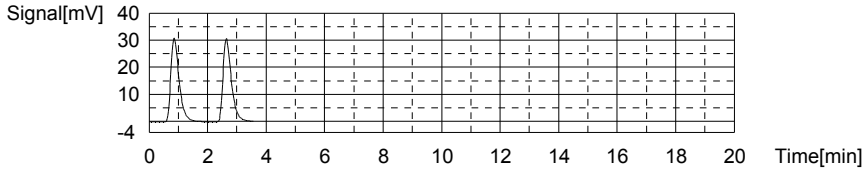
Mean Area 92.19
Mean Conc. 2.451mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	60.50	1.602mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 11:43:57 PM
2	60.19	1.592mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/10/2012 11:48:26 PM

Mean Area 60.34
Mean Conc. 1.597mg/L



Sample

Sample Name: L12050119-02 (10)
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

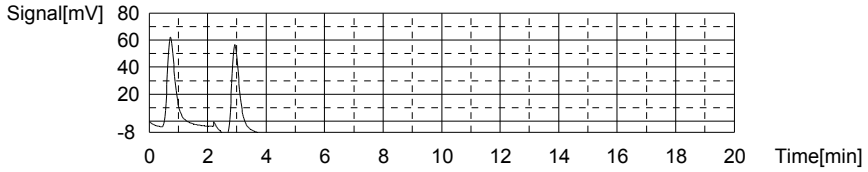
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.333mg/L TC:3.531mg/L IC:2.197mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	133.6	3.553mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/10/2012 11:56:05 PM
2	131.9	3.508mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 12:00:45 AM

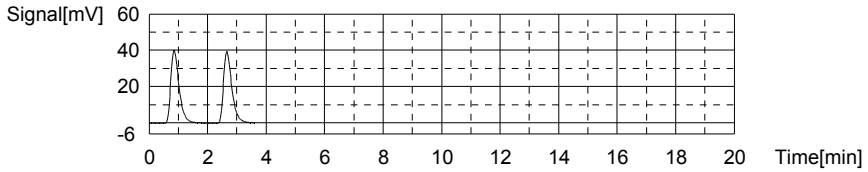
Mean Area 132.8
Mean Conc. 3.531mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	78.75	2.216mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 12:05:29 AM
2	77.64	2.179mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 12:09:59 AM

Mean Area 78.19
Mean Conc. 2.197mg/L



Sample

Sample Name: L12050119-03 (10)
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

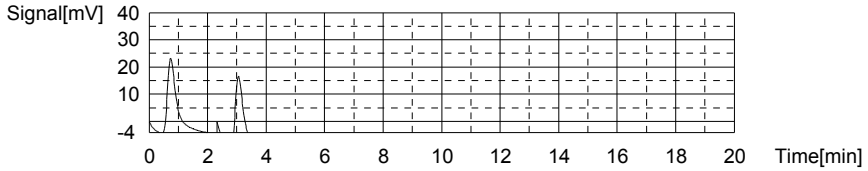
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.033mg/L TC:1.627mg/L IC:0.5940mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	63.02	1.675mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 12:17:45 AM
2	59.44	1.580mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 12:22:19 AM

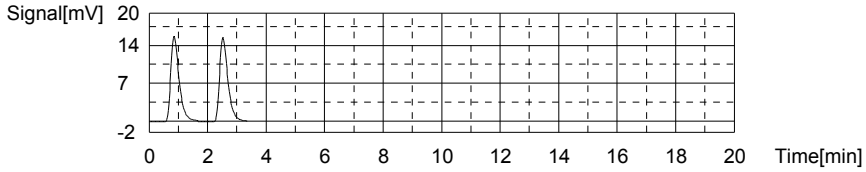
Mean Area 61.23
Mean Conc. 1.627mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	30.71	0.5997mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 12:26:51 AM
2	30.37	0.5883mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 12:31:13 AM

Mean Area 30.54
Mean Conc. 0.5940mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

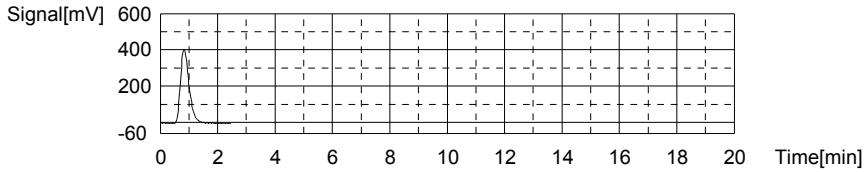
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.08mg/L TC:22.85mg/L IC:-0.2290mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	858.5	22.85mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 12:39:08 AM

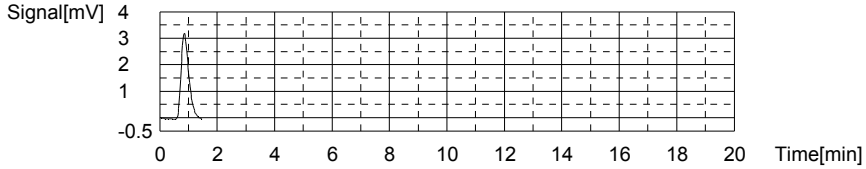
Mean Area 858.5
Mean Conc. 22.85mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.079	-0.2290mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 12:43:30 AM

Mean Area 6.079
Mean Conc. -0.2290mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

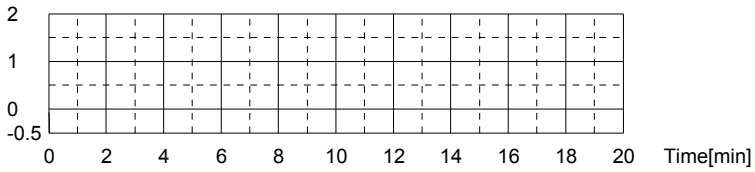
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.4837mg/L TC:0.2365mg/L IC:-0.2472mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.977	0.2365mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 12:48:47 AM

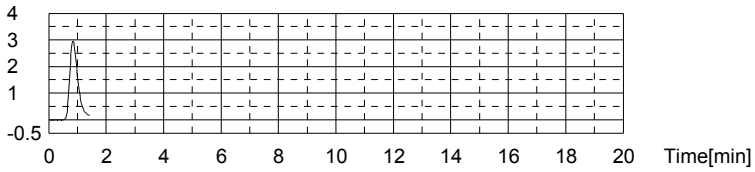
Mean Area 8.977
Mean Conc. 0.2365mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.538	-0.2472mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 12:52:40 AM

Mean Area 5.538
Mean Conc. -0.2472mg/L



Sample

Sample Name: L12050269-01
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

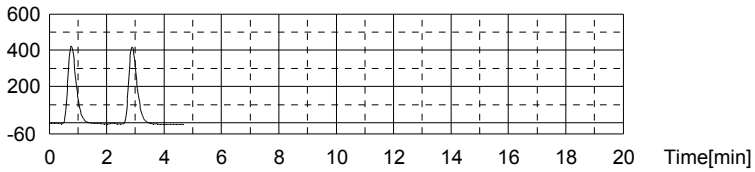
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:14.82mg/L TC:22.91mg/L IC:8.091mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	862.2	22.95mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 01:00:14 AM
2	859.4	22.87mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 01:06:15 AM

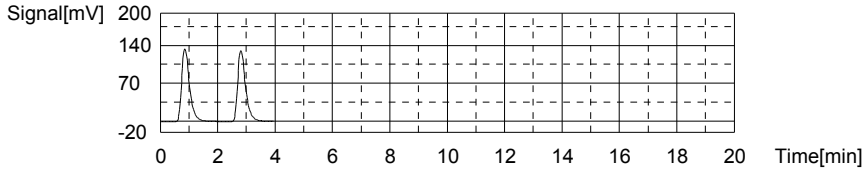
Mean Area 860.8
Mean Conc. 22.91mg/L



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	05/11/2012 01:11:11 AM
2	251.3	8.022mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 01:15:57 AM

Mean Area 253.4
Mean Conc. 8.091mg/L



Sample

Sample Name: L12050269-03
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

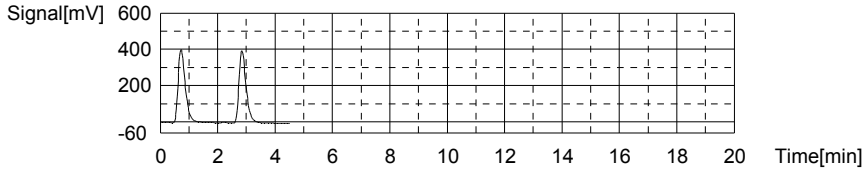
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.160mg/L TC:18.59mg/L IC:15.43mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	704.0	18.74mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 01:23:31 AM
2	693.4	18.45mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 01:29:00 AM

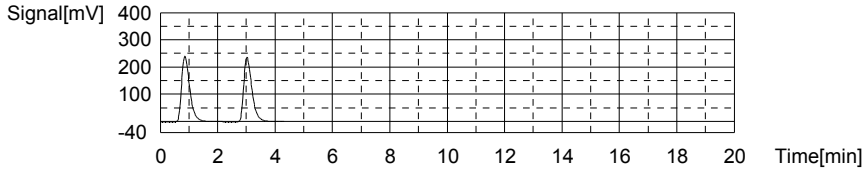
Mean Area 698.7
Mean Conc. 18.59mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	475.3	15.56mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 01:34:14 AM
2	467.9	15.31mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 01:39:14 AM

Mean Area 471.6
Mean Conc. 15.43mg/L



Sample

Sample Name: L12050269-05
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

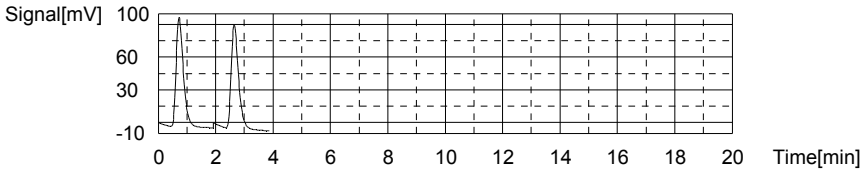
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.192mg/L TC:4.486mg/L IC:3.294mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	174.1	4.631mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 01:46:37 AM
2	163.2	4.341mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 01:50:49 AM

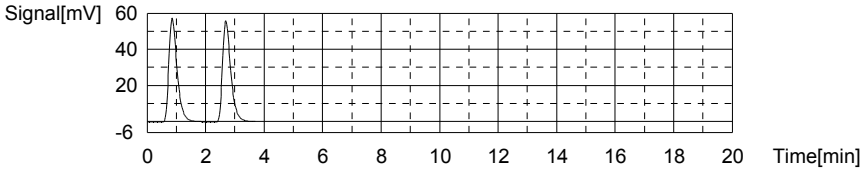
Mean Area 168.7
Mean Conc. 4.486mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	112.2	3.342mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 01:55:38 AM
2	109.4	3.247mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 02:00:10 AM

Mean Area 110.8
Mean Conc. 3.294mg/L



Sample

Sample Name: L12050269-07
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

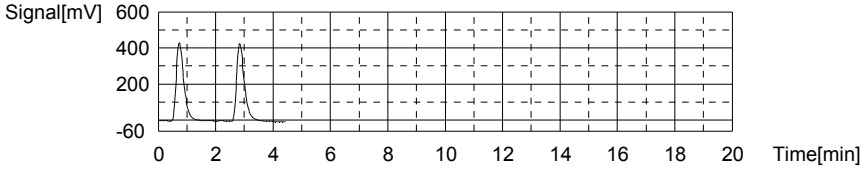
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:6.690mg/L TC:21.52mg/L IC:14.83mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	802.6	21.36mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 02:07:43 AM
2	814.5	21.68mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 02:13:10 AM

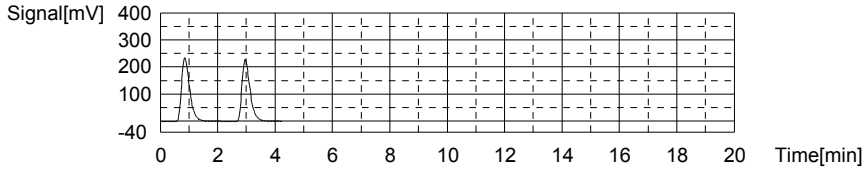
Mean Area 808.5
Mean Conc. 21.52mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	459.3	15.02mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 02:18:22 AM
2	447.9	14.64mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 02:23:24 AM

Mean Area 453.6
Mean Conc. 14.83mg/L



Sample

Sample Name: L12050269-09
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

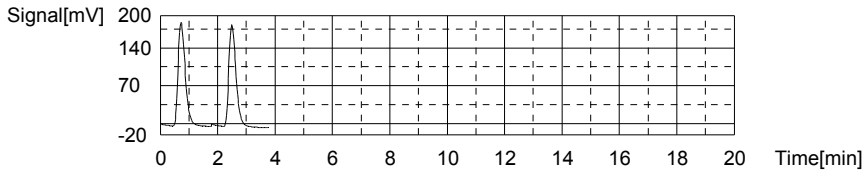
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.372mg/L TC:8.697mg/L IC:7.325mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	330.1	8.784mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 02:30:37 AM
2	323.6	8.611mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 02:35:42 AM

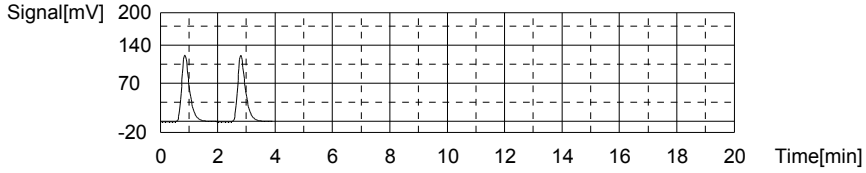
Mean Area 326.9
Mean Conc. 8.697mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	231.1	7.342mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 02:40:39 AM
2	230.1	7.308mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 02:45:24 AM

Mean Area 230.6
Mean Conc. 7.325mg/L



Sample

Sample Name: L12050269-11
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

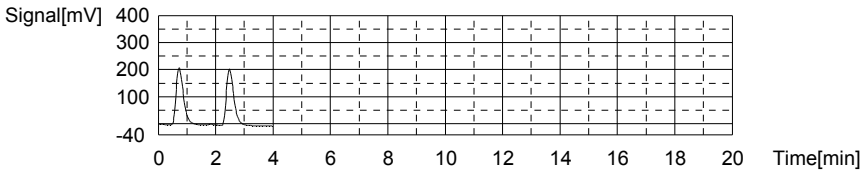
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.891mg/L TC:9.917mg/L IC:8.027mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	373.4	9.936mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 02:52:37 AM
2	372.0	9.899mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 02:57:55 AM

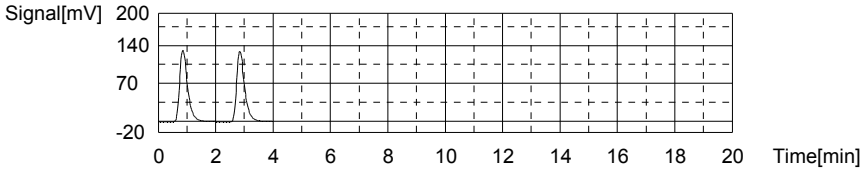
Mean Area 372.7
Mean Conc. 9.917mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	252.5	8.062mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 03:02:54 AM
2	250.4	7.991mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 03:07:40 AM

Mean Area 251.4
Mean Conc. 8.027mg/L



Sample

Sample Name: L12050269-13
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

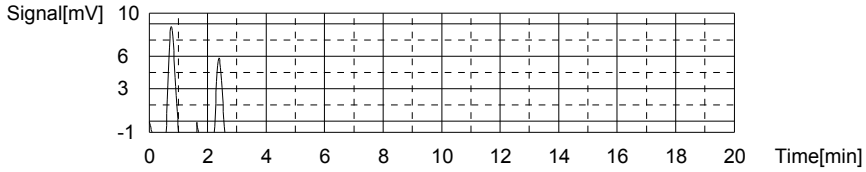
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.7796mg/L TC:0.5670mg/L IC:-0.2126mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	23.22	0.6156mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 03:14:44 AM
2	19.57	0.5184mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 03:18:44 AM

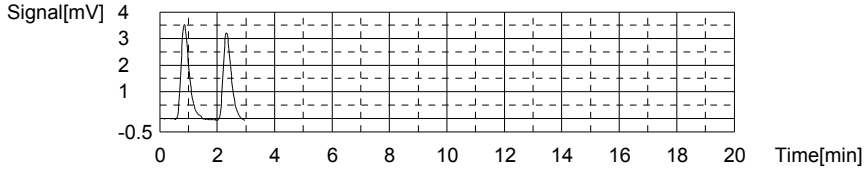
Mean Area 21.40
Mean Conc. 0.5670mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.779	-0.2055mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 03:23:04 AM
2	6.356	-0.2197mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 03:27:14 AM

Mean Area 6.567
Mean Conc. -0.2126mg/L



Sample

Sample Name: WG397597-05 DUP
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

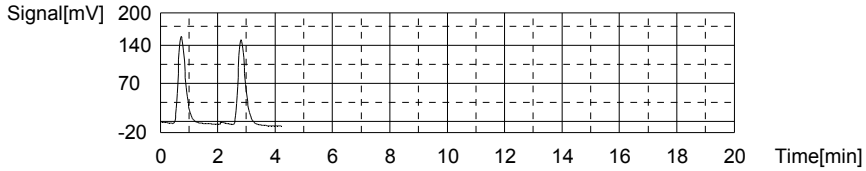
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:2.041mg/L TC:7.573mg/L IC:5.532mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	288.2	7.668mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 03:34:46 AM
2	281.0	7.477mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 03:39:16 AM

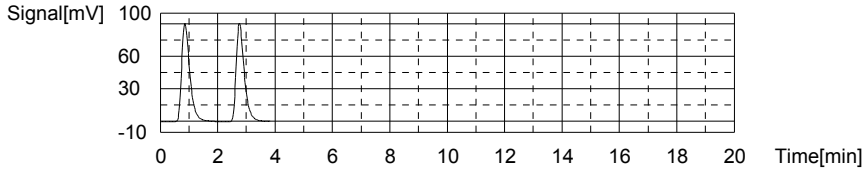
Mean Area 284.6
Mean Conc. 7.573mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	177.1	5.525mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 03:44:09 AM
2	177.5	5.539mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 03:48:50 AM

Mean Area 177.3
Mean Conc. 5.532mg/L



Sample

Sample Name: WG3975597-06 MS
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

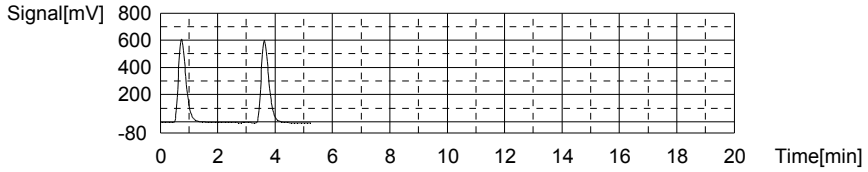
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:11.27mg/L TC:30.02mg/L IC:18.75mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1132	30.13mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 03:57:12 AM
2	1124	29.91mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 04:02:58 AM

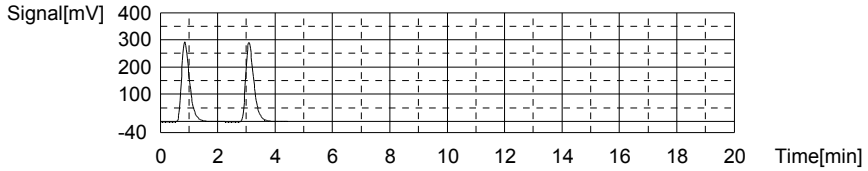
Mean Area 1128
Mean Conc. 30.02mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	570.7	18.77mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 04:08:20 AM
2	569.4	18.72mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 04:13:25 AM

Mean Area 570.0
Mean Conc. 18.75mg/L



Sample

Sample Name:
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

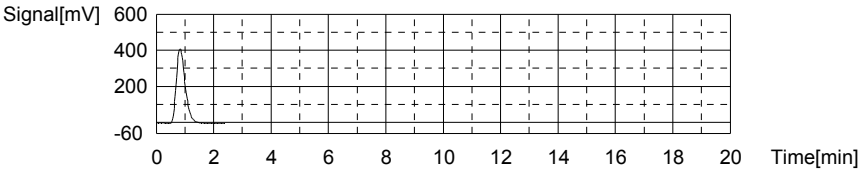
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.83mg/L TC:23.70mg/L IC:-0.1297mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	890.7	23.70mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 04:21:16 AM

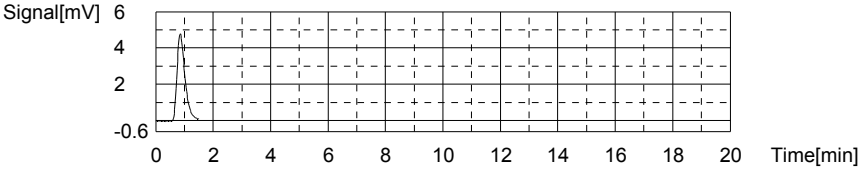
Mean Area 890.7
Mean Conc. 23.70mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.031	-0.1297mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 04:25:40 AM

Mean Area 9.031
Mean Conc. -0.1297mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

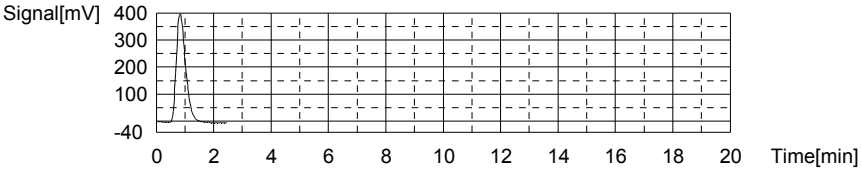
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:24.29mg/L TC:24.14mg/L IC:-0.1506mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	907.0	24.14mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 04:33:35 AM

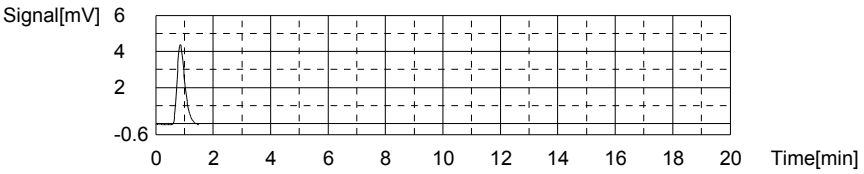
Mean Area 907.0
Mean Conc. 24.14mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.411	-0.1506mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 04:37:57 AM

Mean Area 8.411
Mean Conc. -0.1506mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

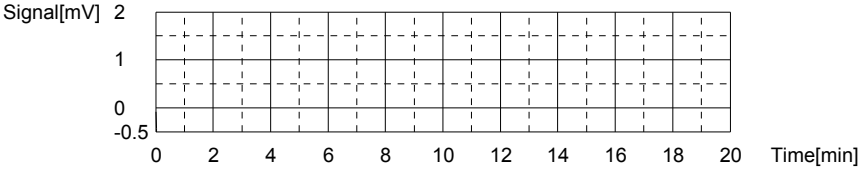
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3257mg/L TC:0.08990mg/L IC:-0.2358mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.471	0.08990mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 04:43:11 AM

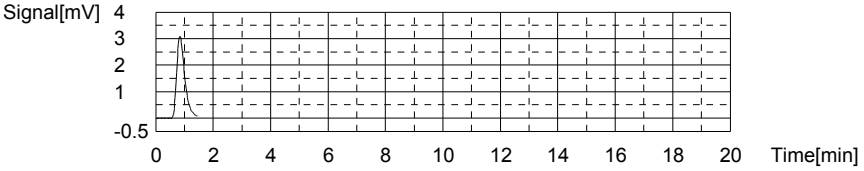
Mean Area 3.471
Mean Conc. 0.08990mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.878	-0.2358mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 04:47:03 AM

Mean Area 5.878
Mean Conc. -0.2358mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

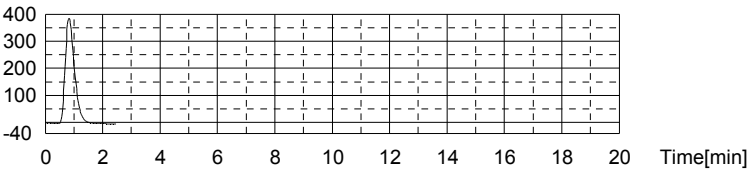
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:23.09mg/L TC:23.14mg/L IC:0.05734mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	869.6	23.14mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 06:55:36 AM

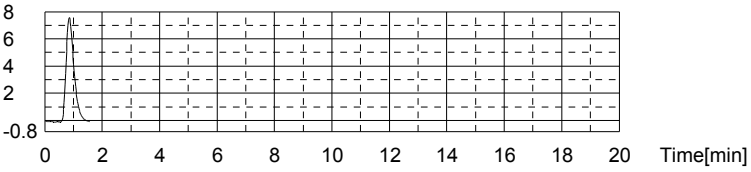
Mean Area 869.6
Mean Conc. 23.14mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	14.59	0.05734mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 07:00:12 AM

Mean Area 14.59
Mean Conc. 0.05734mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

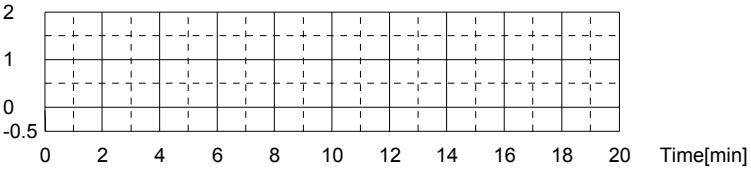
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.2946mg/L TC:0.06459mg/L IC:-0.2300mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.520	0.06459mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 07:05:29 AM

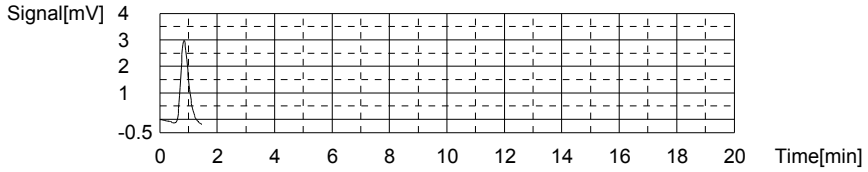
Mean Area 2.520
Mean Conc. 0.06459mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.050	-0.2300mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 07:09:27 AM

Mean Area 6.050
Mean Conc. -0.2300mg/L



Sample

Sample Name: WG397597-02 LCS
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

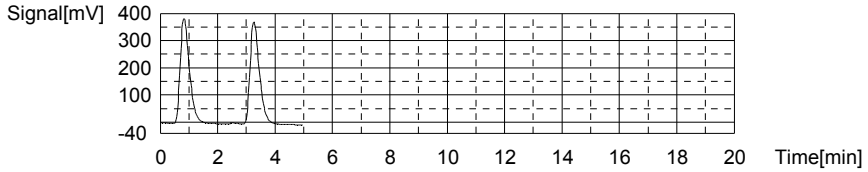
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:22.68mg/L TC:22.65mg/L IC:-0.03283mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	861.6	22.93mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 07:17:20 AM
2	840.7	22.37mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 07:22:07 AM

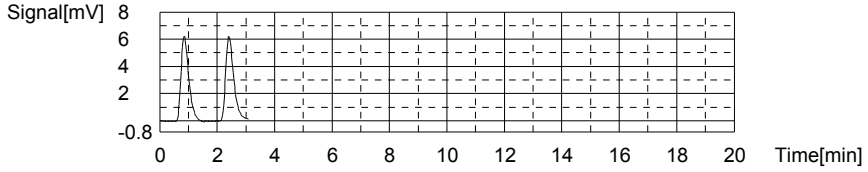
Mean Area 851.2
Mean Conc. 22.65mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.01	-0.02947mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 07:26:34 AM
2	11.81	-0.03620mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 07:30:47 AM

Mean Area 11.91
Mean Conc. -0.03283mg/L



Sample

Sample Name: WG397597-03 LCS2
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

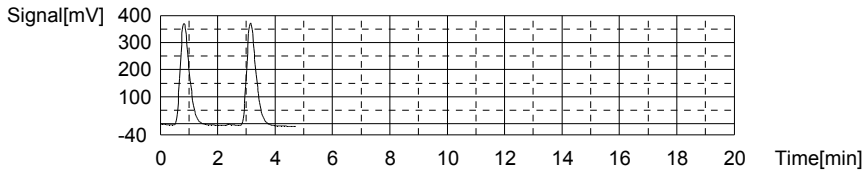
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:22.40mg/L TC:22.38mg/L IC:-0.01853mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	833.0	22.17mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 07:38:33 AM
2	848.6	22.58mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 07:43:17 AM

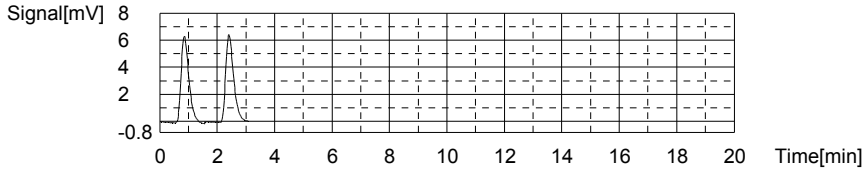
Mean Area 840.8
Mean Conc. 22.38mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.29	-0.02004mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 07:47:42 AM
2	12.38	-0.01702mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 07:51:55 AM

Mean Area 12.34
Mean Conc. -0.01853mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

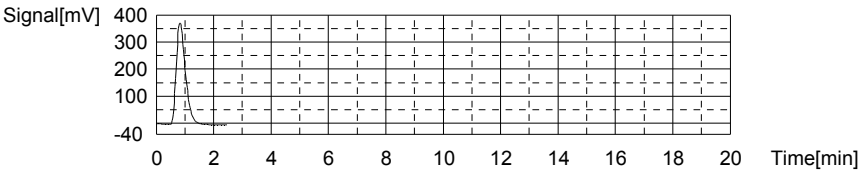
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:22.14mg/L TC:22.15mg/L IC:0.01057mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	832.4	22.15mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 07:59:48 AM

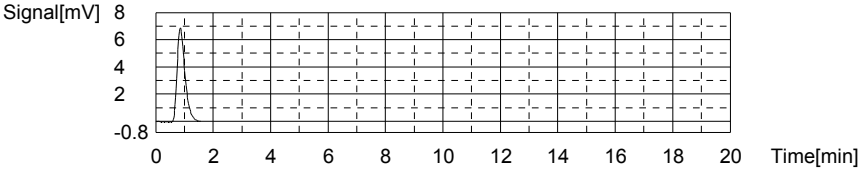
Mean Area 832.4
Mean Conc. 22.15mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.20	0.01057mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 08:04:14 AM

Mean Area 13.20
Mean Conc. 0.01057mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

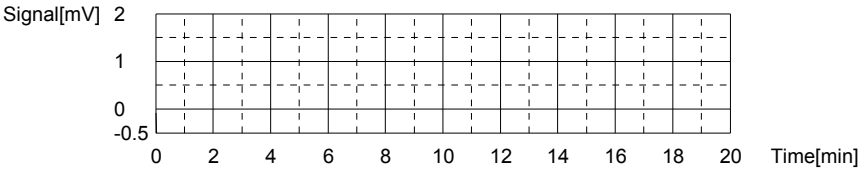
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3152mg/L TC:0.07867mg/L IC:-0.2365mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.049	0.07867mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/11/2012 08:09:30 AM

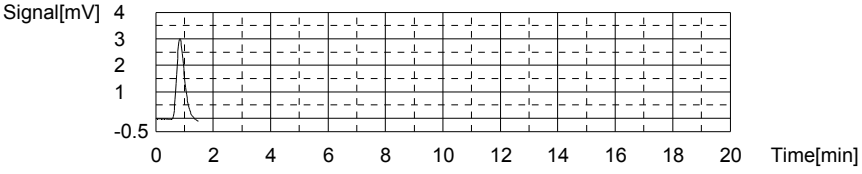
Mean Area 3.049
Mean Conc. 0.07867mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.857	-0.2365mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/11/2012 08:13:28 AM

Mean Area 5.857
Mean Conc. -0.2365mg/L



WORKGROUP: WG397599

Total Organic Carbon

~~397764~~
397767

MAKE DAILY

CCV (TOC): STD 48750 (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 Vo=5=10

Calibration Curve Date: 12/6/11

Reagent: RGT 17216 RGT 17250

☑ SM5310-C : Matrix 2 WG 397764

☑ EPA 415.1/9060A(mod): Matrix 1 WG 397599 SOP: K 4151 Rev. 14

WG 397767 Instrument: Shimadzu 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	CCV25	
2	TJC25	
3	Blank	
4	LCS25	
5	LCSDup	
6	05-257-01	
7	-03	
8	-05	
9	-07	
10	-09	
11	-11	
12	-13	
13	05-266-01	
14	CCV	
15	CCB	
16	05-266-02	
17	05-285-01	
18	05-284-04	1/4
19	-05	1/4
20	-06	1/4
21	-07	1/4
22	05-171-01	
23	Dup -01	
24	MS -03	
25	SD -05	

Position	Sample ID	Dilution
26	CCV	
27	CCB	
28	05-171-07	1/10
29	~~05-254-07~~ 254-01	1/200
30	-03	-03 1/5
31	~~-04~~	-05 1/2
32	~~-05~~	-07 1/20
33	Blank	
34	LCS25	
35	LCSDup	
36	05-314-01	
37	-02	
38	CCV	
39	CCB	
40	Dup 314-02	
41	MS ↓	
42	Blank	
43	LCS25	
44	LcsDup	
45	05-099-01	1/2
46	05-254-02	1/3
47	-03	1/2
48	-04	1/2
49	-05	1/2
50	CCV	

Position	Sample ID	Dilution
51	CCB	
52	05-153-05	1/2
53	-07	1/2
54	05-245-04	1/5
55	-10-12	1/5
56	-14	1/5
57	05-341-04	1/3
58	-05	1/3
59	-06	1/10
60	-07	1/5
61	-08	DIL
62	CCV	
63	CCB	
64	05-341-10	1/4
65	DUP-10	↓
66	MS-11	
67	SD-12	
68	-13	1/2
~~69~~ 71	CCV	
~~70~~ 70	CCB	
71		
72		
73		
74		
75		

Analyst: [signature] Date/Time: 5/12/12

DCN#90847

C:\TOC3201\Data\05-12-2012-JBK-TOC.t32

	Analysi	Sample Name	Result	Status	Date / Time	Vial
1	TOC	CCV 25	!!Error!! TOC:23.68mg/L TC:23.51mg/L IC:-0.1659mg/L	Completed	05/12/2012 10:25:50 A	1
2	TOC	TIC 25	TOC:1.862mg/L TC:25.94mg/L IC:24.08mg/L	Completed	05/12/2012 10:43:33 A	2
3	TOC	WG397599-01 BLANK	!!Error!! TOC:0.4364mg/L TC:0.2839mg/L IC:-0.1525mg	Completed	05/12/2012 10:52:38 A	0
4	TOC	WG397599-02 LCS25	!!Error!! TOC:23.26mg/L TC:22.98mg/L IC:-0.2778mg/L	Completed	05/12/2012 11:01:53 A	4
5	TOC	WG397599-03 LCSDU	!!Error!! TOC:23.04mg/L TC:22.76mg/L IC:-0.2833mg/L	Completed	05/12/2012 11:17:05 A	5
6	TOC	L12050257-01	TOC:5.869mg/L TC:43.49mg/L IC:37.62mg/L	Completed	05/12/2012 11:30:57 A	6
7	TOC	L12050257-03	TOC:6.842mg/L TC:44.90mg/L IC:38.06mg/L	Completed	05/12/2012 11:45:17 A	7
8	TOC	L12050257-05	TOC:5.248mg/L TC:42.40mg/L IC:37.15mg/L	Completed	05/12/2012 11:59:02 A	8
9	TOC	L12050257-07	TOC:6.813mg/L TC:20.43mg/L IC:13.62mg/L	Completed	05/12/2012 12:12:48 P	9
10	TOC	L12050257-09	TOC:6.736mg/L TC:20.88mg/L IC:14.14mg/L	Completed	05/12/2012 12:25:51 P	10
11	TOC	L12050257-11 X	TOC:7.170mg/L TC:51.55mg/L IC:44.38mg/L	Completed	05/12/2012 12:40:17 P	11
12	TOC	L12050257-13	TOC:6.484mg/L TC:43.83mg/L IC:37.35mg/L	Completed	05/12/2012 12:54:41 P	12
13	TOC	L12050266-01	TOC:2.711mg/L TC:9.148mg/L IC:6.437mg/L	Completed	05/12/2012 01:08:06 P	13
14	TOC	CCV	!!Error!! TOC:25.83mg/L TC:25.67mg/L IC:-0.1642mg/L	Completed	05/12/2012 01:20:22 P	14
15	TOC	CCB	!!Error!! TOC:0.4375mg/L TC:0.2406mg/L IC:-0.1969mg	Completed	05/12/2012 01:29:19 P	0
16	TOC	L12050266-02	TOC:3.780mg/L TC:9.231mg/L IC:5.451mg/L	Completed	05/12/2012 01:43:02 P	16
17	TOC	L12050285-01	TOC:3.003mg/L TC:21.14mg/L IC:18.14mg/L	Completed	05/12/2012 01:56:08 P	17
18	TOC	L12050286-04 (4)	TOC:6.402mg/L TC:19.15mg/L IC:12.75mg/L	Completed	05/12/2012 02:09:02 P	18
19	TOC	L12050286-05 (4)	TOC:8.066mg/L TC:28.82mg/L IC:20.76mg/L	Completed	05/12/2012 02:21:59 P	19
20	TOC	L12050286-06 (4)	TOC:8.125mg/L TC:26.39mg/L IC:18.26mg/L	Completed	05/12/2012 02:35:32 P	20
21	TOC	L12050286-07 (4)	TOC:8.810mg/L TC:43.44mg/L IC:34.63mg/L	Completed	05/12/2012 02:48:28 P	21
22	TOC	L12050171-01	TOC:5.890mg/L TC:39.20mg/L IC:33.31mg/L	Completed	05/12/2012 03:02:50 P	22
23	TOC	WG397599-05 DUP	TOC:4.271mg/L TC:35.98mg/L IC:31.71mg/L	Completed	05/12/2012 03:16:48 P	23
24	TOC	L12050171-03 MS	TOC:15.15mg/L TC:51.02mg/L IC:35.87mg/L	Completed	05/12/2012 03:30:44 P	24
25	TOC	L12050171-05 MSD	TOC:15.20mg/L TC:47.03mg/L IC:31.83mg/L	Completed	05/12/2012 03:44:30 P	25
26	TOC	CCV	!!Error!! TOC:25.00mg/L TC:24.92mg/L IC:-0.07186mg/L	Completed	05/12/2012 03:56:48 P	26
27	TOC	CCB	!!Error!! TOC:0.4377mg/L TC:0.2516mg/L IC:-0.1861mg	Completed	05/12/2012 04:06:54 P	0
28	TOC	L12050171-07 (10)	TOC:1.372mg/L TC:25.07mg/L IC:23.70mg/L	Completed	05/12/2012 04:18:52 P	28
29	TOC	L12050226-01 (200)	TOC:31.25mg/L TC:31.59mg/L IC:0.3460mg/L	Completed	05/12/2012 04:31:19 P	29
30	TOC	L12050226-03 (5)	TOC:1.809mg/L TC:7.072mg/L IC:5.263mg/L	Completed	05/12/2012 04:44:11 P	30
31	TOC	L12050226-05 (2)	TOC:3.580mg/L TC:40.56mg/L IC:36.98mg/L	Completed	05/12/2012 04:58:23 P	31
32	TOC	L12050226-07 (20) X	TOC:17.61mg/L TC:66.54mg/L IC:48.93mg/L	Completed	05/12/2012 05:13:06 P	32
33	TOC	WG397764-01 BLANK	!!Error!! TOC:0.4759mg/L TC:0.3571mg/L IC:-0.1188mg	Completed	05/12/2012 05:29:54 P	0
34	TOC	WG397764-02 LCS25	!!Error!! TOC:23.29mg/L TC:23.06mg/L IC:-0.2312mg/L	Completed	05/12/2012 05:51:06 P	34
35	TOC	WG397764-03 LCSDU	!!Error!! TOC:23.46mg/L TC:23.22mg/L IC:-0.2415mg/L	Completed	05/12/2012 06:11:57 P	35
36	TOC	L12050314-01 X	!!Error!! TOC:266.2mg/L TC:266.1mg/L IC:-0.08946mg/L	Completed	05/13/2012 04:36:40 A	36
37	TOC	L12050314-02 X	TOC:109.4mg/L TC:169.2mg/L IC:59.81mg/L	Completed	05/13/2012 05:00:52 A	37
38	TOC	CCV	TOC:22.63mg/L TC:22.79mg/L IC:0.1556mg/L	Completed	05/13/2012 05:19:34 A	38
39	TOC	CCB	!!Error!! TOC:0.6383mg/L TC:0.5022mg/L IC:-0.1362mg	Completed	05/13/2012 05:29:08 A	0
40	TOC	WG397764-05 DUP	TOC:146.6mg/L TC:266.1mg/L IC:119.5mg/L	Completed	05/13/2012 06:04:34 A	40
41	TOC	WG397764-06 MS	TOC:194.4mg/L TC:266.1mg/L IC:71.69mg/L	Completed	05/13/2012 06:35:53 A	41
42	TOC	WG397767-01 BLANK	!!Error!! TOC:-0.1954mg/L TC:-0.00248mg/L IC:0.1929m	Completed	05/13/2012 06:46:53 A	0
43	TOC	WG397767-02 LCS25	!!Error!! TOC:23.86mg/L TC:23.80mg/L IC:-0.06042mg/L	Completed	05/13/2012 07:00:01 A	43
44	TOC	WG397767-03 LCSDU	!!Error!! TOC:26.84mg/L TC:26.69mg/L IC:-0.1497mg/L	Completed	05/13/2012 07:12:55 A	44
45	TOC	L12050099-01 (2)	TOC:3.173mg/L TC:7.793mg/L IC:4.620mg/L	Completed	05/13/2012 07:25:34 A	45
46	TOC	L12050254-02 (3)	TOC:6.855mg/L TC:7.857mg/L IC:1.003mg/L	Completed	05/13/2012 07:38:01 A	46
47	TOC	L12050254-03 (2)	TOC:6.246mg/L TC:9.957mg/L IC:3.712mg/L	Completed	05/13/2012 07:50:38 A	47
48	TOC	L12050254-04 (2)	TOC:1.809mg/L TC:3.769mg/L IC:1.960mg/L	Completed	05/13/2012 08:02:45 A	48
49	TOC	L12050254-05 (2)	TOC:5.135mg/L TC:9.005mg/L IC:3.870mg/L	Completed	05/13/2012 08:15:51 A	49
50	TOC	CCV	!!Error!! TOC:24.73mg/L TC:24.70mg/L IC:-0.03317mg/L	Completed	05/13/2012 08:28:19 A	50
51	TOC	CCB	!!Error!! TOC:0.4010mg/L TC:0.2358mg/L IC:-0.1652mg	Completed	05/13/2012 08:37:29 A	0
52	TOC	L12050153-05 (2)	TOC:1.599mg/L TC:3.609mg/L IC:2.011mg/L	Completed	05/13/2012 08:49:32 A	52
53	TOC	L12050153-07 (2)	TOC:3.863mg/L TC:7.056mg/L IC:3.194mg/L	Completed	05/13/2012 09:02:02 A	53
54	TOC	L12050245-04 (5)	TOC:17.09mg/L TC:19.12mg/L IC:2.029mg/L	Completed	05/13/2012 09:14:57 A	54
55	TOC	L12050245-12 (5)	TOC:3.885mg/L TC:6.207mg/L IC:2.322mg/L	Completed	05/13/2012 09:27:23 A	55
56	TOC	L12050245-14 (5)	TOC:10.13mg/L TC:10.93mg/L IC:0.8016mg/L	Completed	05/13/2012 09:39:50 A	56
57	TOC	L12050341-04 (3)	TOC:4.739mg/L TC:5.390mg/L IC:0.6505mg/L	Completed	05/13/2012 09:52:07 A	57
58	TOC	L12050341-05 (3)	TOC:8.336mg/L TC:8.659mg/L IC:0.3221mg/L	Completed	05/13/2012 10:04:40 A	58
59	TOC	L12050341-06 (10) X	TOC:23.94mg/L TC:67.82mg/L IC:43.88mg/L	Completed	05/13/2012 10:18:52 A	59
60	TOC	L12050341-07 (5)	TOC:7.553mg/L TC:12.19mg/L IC:4.640mg/L	Completed	05/13/2012 10:31:56 A	60
61	TOC	L12050341-08	!!Error!! TOC:2.645mg/L TC:2.488mg/L IC:-0.1570mg/L	Completed	05/13/2012 10:43:36 A	61
62	TOC	CCV	TOC:24.51mg/L TC:24.52mg/L IC:0.01024mg/L	Completed	05/13/2012 10:56:07 A	62
63	TOC	CCB	!!Error!! TOC:0.3839mg/L TC:0.2189mg/L IC:-0.1651mg	Completed	05/13/2012 11:06:17 A	0
64	TOC	L12050341-10 (4)	TOC:5.602mg/L TC:6.958mg/L IC:1.356mg/L	Completed	05/13/2012 11:17:53 A	64
65	TOC	WG397767-05 (4) DUP	TOC:5.149mg/L TC:6.793mg/L IC:1.644mg/L	Completed	05/13/2012 11:30:21 A	65
66	TOC	L12050341-11 (4) MS	TOC:9.559mg/L TC:11.24mg/L IC:1.684mg/L	Completed	05/13/2012 11:42:58 A	66
67	TOC	L12050341-12 (4) MSD	TOC:8.308mg/L TC:9.260mg/L IC:0.9517mg/L	Completed	05/13/2012 11:55:28 A	67

	Analysi	Sample Name	Result	Status	Date / Time	Vial
68	TOC	L12050341-13 (2)	TOC:9.186mg/L TC:11.70mg/L IC:2.518mg/L	Completed	05/13/2012 12:08:16 P	68
69	TOC	CCV	TOC:24.82mg/L TC:24.86mg/L IC:0.04388mg/L	Completed	05/13/2012 12:20:33 P	1
70	TOC	CCB	!!Error!! TOC:0.3926mg/L TC:0.2204mg/L IC:-0.1722mg/	Completed	05/13/2012 12:26:44 P	0

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

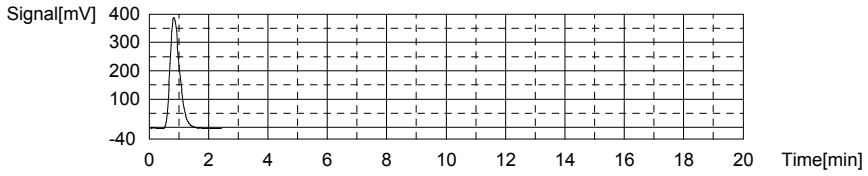
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.68mg/L TC:23.51mg/L IC:-0.1659mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	883.5	23.51mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 10:25:24 AM

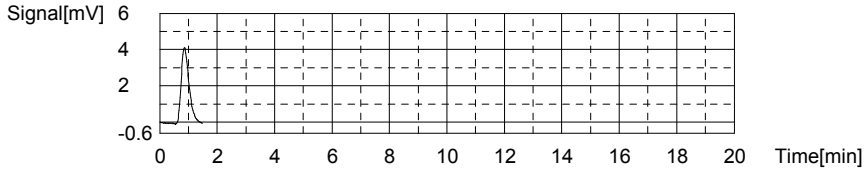
Mean Area 883.5
Mean Conc. 23.51mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.954	-0.1659mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 10:29:50 AM

Mean Area 7.954
Mean Conc. -0.1659mg/L



Sample

Sample Name: TIC 25
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

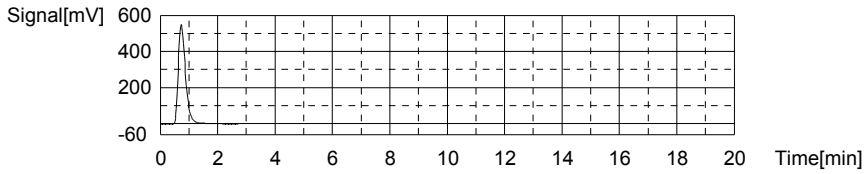
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.862mg/L TC:25.94mg/L IC:24.08mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	974.8	25.94mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 10:37:58 AM

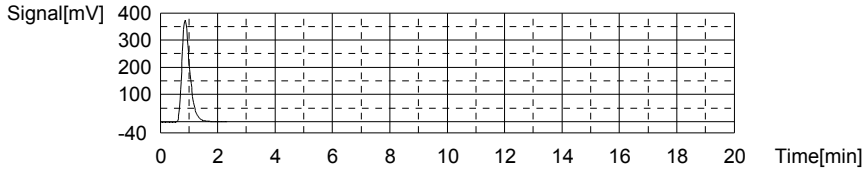
Mean Area 974.8
Mean Conc. 25.94mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	728.6	24.08mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 10:43:33 AM

Mean Area 728.6
Mean Conc. 24.08mg/L



Sample

Sample Name: WG397599-01 BLANK
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

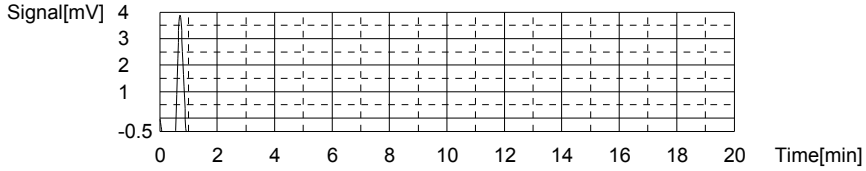
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.4364mg/L TC:0.2839mg/L IC:-0.1525mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.76	0.2839mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 10:48:40 AM

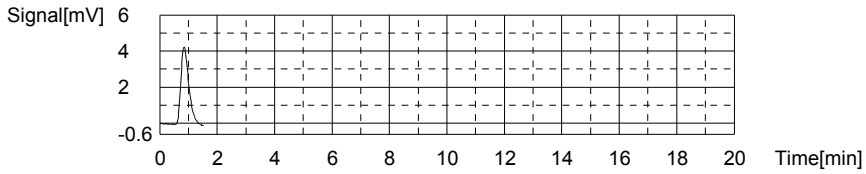
Mean Area 10.76
Mean Conc. 0.2839mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.353	-0.1525mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 10:52:39 AM

Mean Area 8.353
Mean Conc. -0.1525mg/L



Sample

Sample Name: WG397599-02 LCS25
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

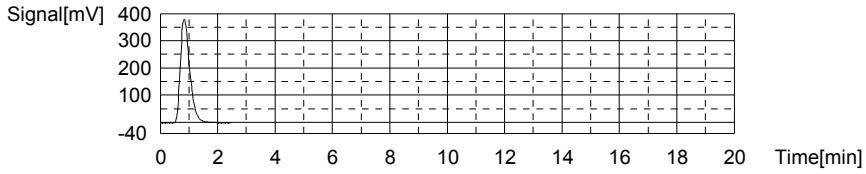
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.26mg/L TC:22.98mg/L IC:-0.2778mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	863.5	22.98mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 11:00:32 AM

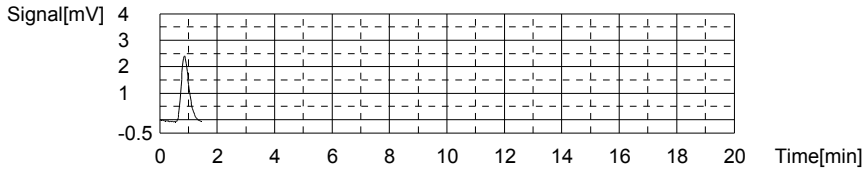
Mean Area 863.5
Mean Conc. 22.98mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.628	-0.2778mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 11:04:53 AM

Mean Area 4.628
Mean Conc. -0.2778mg/L



Sample

Sample Name: WG397599-03 LCSDUP
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

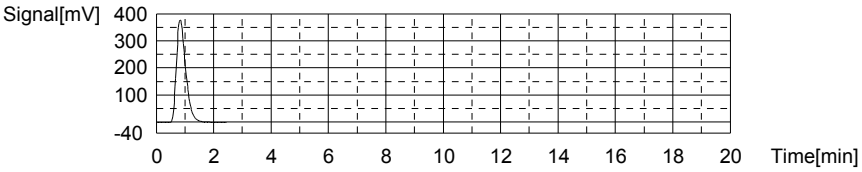
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.04mg/L TC:22.76mg/L IC:-0.2833mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	855.2	22.76mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 11:12:45 AM

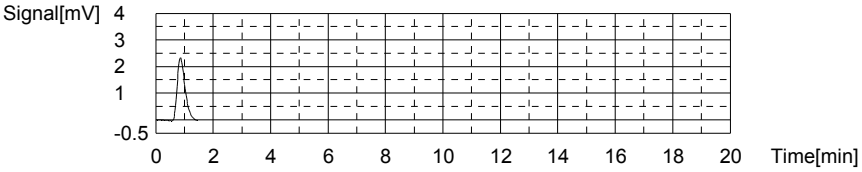
Mean Area 855.2
Mean Conc. 22.76mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.467	-0.2833mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 11:17:05 AM

Mean Area 4.467
Mean Conc. -0.2833mg/L



Sample

Sample Name: L12050257-01
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

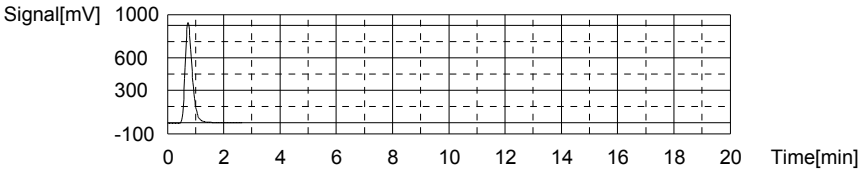
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.869mg/L TC:43.49mg/L IC:37.62mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1634	43.49mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 11:25:10 AM

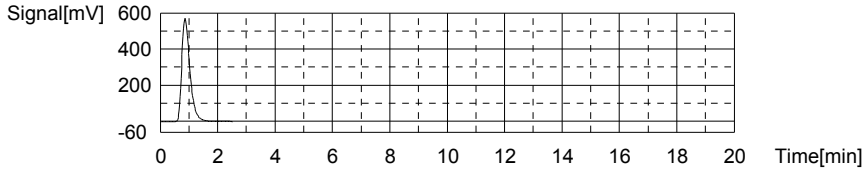
Mean Area 1634
Mean Conc. 43.49mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1131	37.62mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 11:30:57 AM

Mean Area 1131
Mean Conc. 37.62mg/L



Sample

Sample Name: L12050257-03
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

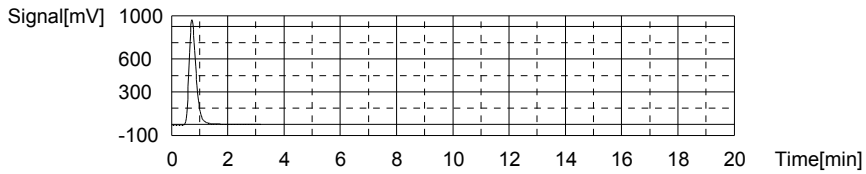
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:6.842mg/L TC:44.90mg/L IC:38.06mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1687	44.90mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 11:39:33 AM

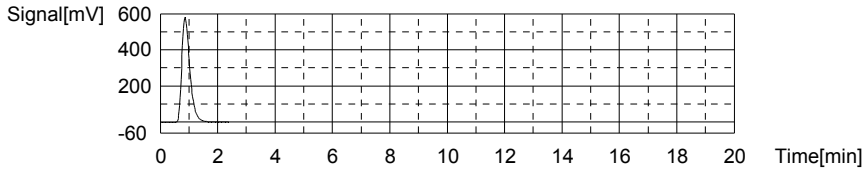
Mean Area 1687
Mean Conc. 44.90mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1144	38.06mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 11:45:17 AM

Mean Area 1144
Mean Conc. 38.06mg/L



Sample

Sample Name: L12050257-05
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

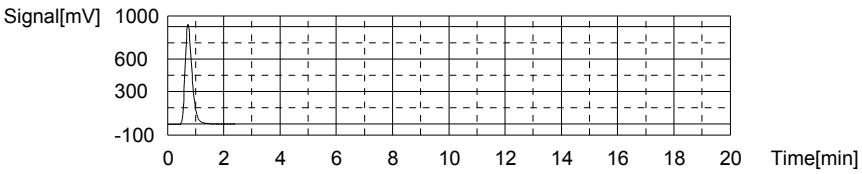
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.248mg/L TC:42.40mg/L IC:37.15mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1593	42.40mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 11:53:07 AM

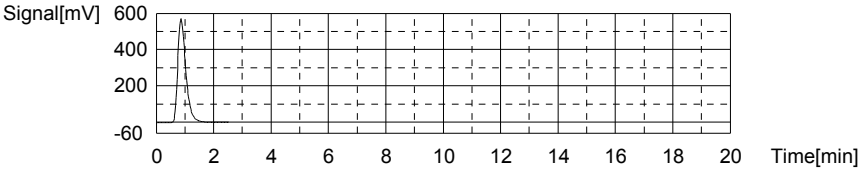
Mean Area 1593
Mean Conc. 42.40mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1117	37.15mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 11:59:02 AM

Mean Area 1117
Mean Conc. 37.15mg/L



Sample

Sample Name: L12050257-07
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

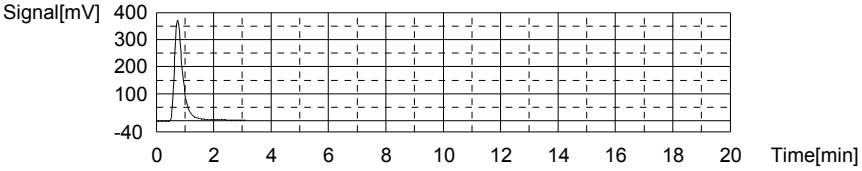
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:6.813mg/L TC:20.43mg/L IC:13.62mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	767.8	20.43mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 12:07:35 PM

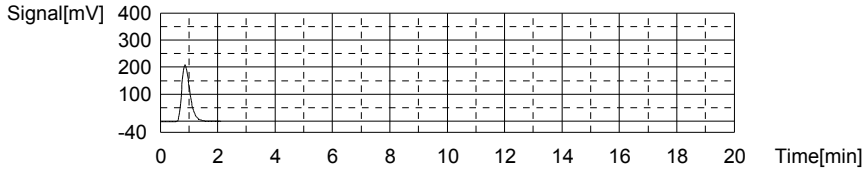
Mean Area 767.8
Mean Conc. 20.43mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	417.7	13.62mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 12:12:48 PM

Mean Area 417.7
Mean Conc. 13.62mg/L



Sample

Sample Name: L12050257-09
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

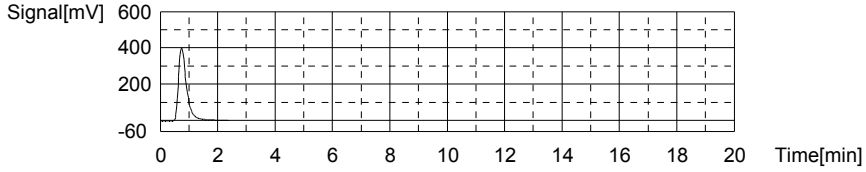
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:6.736mg/L TC:20.88mg/L IC:14.14mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	784.5	20.88mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 12:20:37 PM

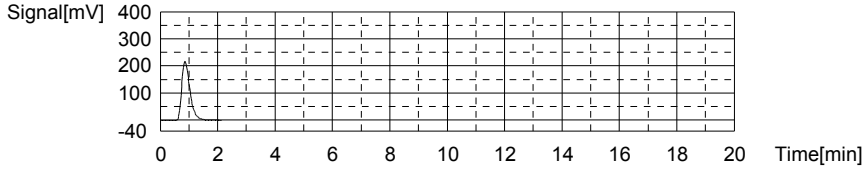
Mean Area 784.5
Mean Conc. 20.88mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	433.2	14.14mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 12:25:51 PM

Mean Area 433.2
Mean Conc. 14.14mg/L



Sample

Sample Name: L12050257-11
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

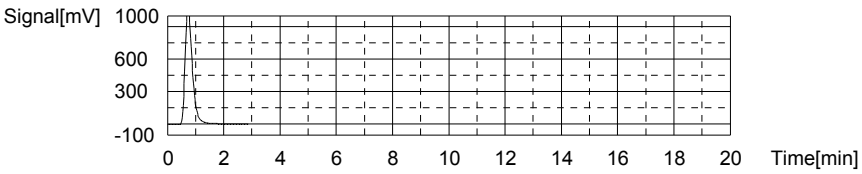
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:7.170mg/L TC:51.55mg/L IC:44.38mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1937	51.55mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 12:34:09 PM

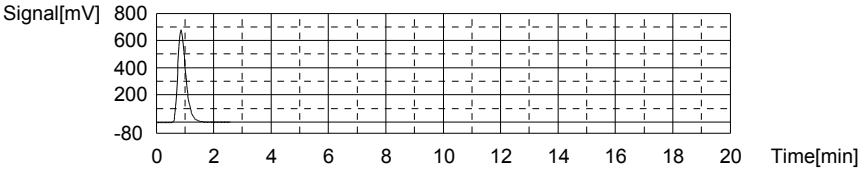
Mean Area 1937
Mean Conc. 51.55mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1332	44.38mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 12:40:17 PM

Mean Area 1332
Mean Conc. 44.38mg/L



Sample

Sample Name: L12050257-13
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

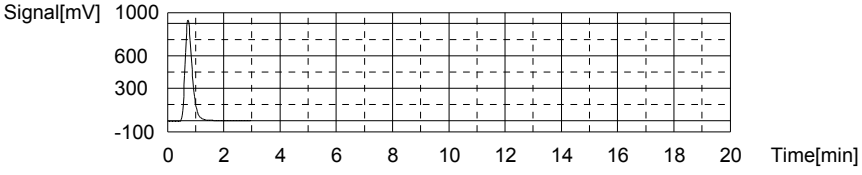
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:6.484mg/L TC:43.83mg/L IC:37.35mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1647	43.83mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 12:48:41 PM

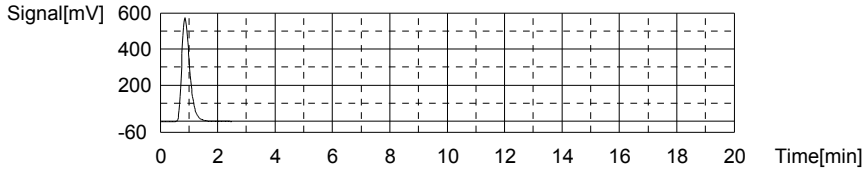
Mean Area 1647
Mean Conc. 43.83mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1123	37.35mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 12:54:41 PM

Mean Area 1123
Mean Conc. 37.35mg/L



Sample

Sample Name: L12050266-01
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

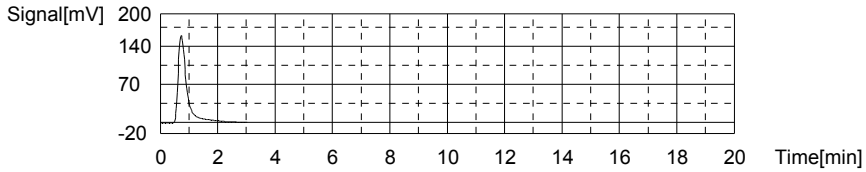
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:2.711mg/L TC:9.148mg/L IC:6.437mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	343.8	9.148mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 01:03:07 PM

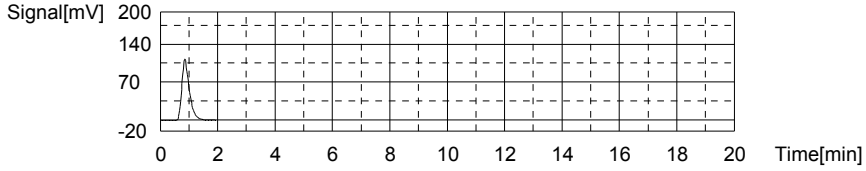
Mean Area 343.8
Mean Conc. 9.148mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	204.2	6.437mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 01:08:06 PM

Mean Area 204.2
Mean Conc. 6.437mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

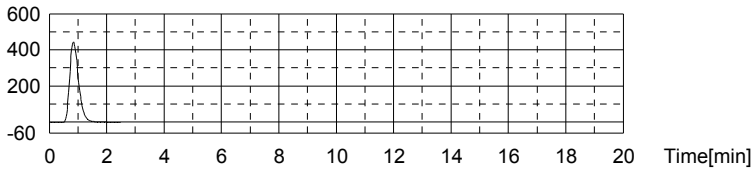
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:25.83mg/L TC:25.67mg/L IC:-0.1642mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	964.5	25.67mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 01:16:01 PM

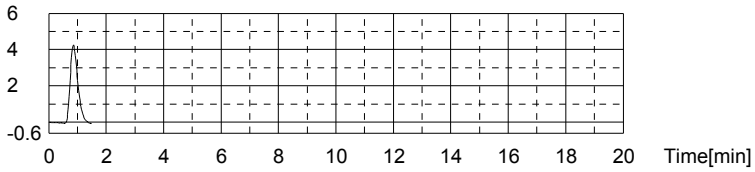
Mean Area 964.5
Mean Conc. 25.67mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.007	-0.1642mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 01:20:22 PM

Mean Area 8.007
Mean Conc. -0.1642mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

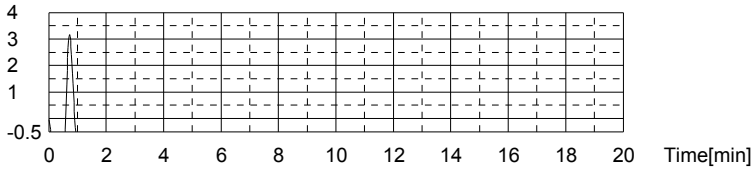
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.4375mg/L TC:0.2406mg/L IC:-0.1969mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.133	0.2406mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 01:25:28 PM

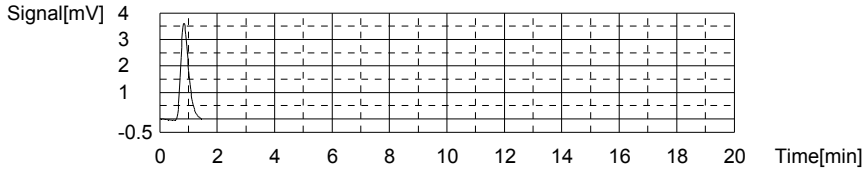
Mean Area 9.133
Mean Conc. 0.2406mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.034	-0.1969mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 01:29:19 PM

Mean Area 7.034
Mean Conc. -0.1969mg/L



Sample

Sample Name: L12050266-02
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

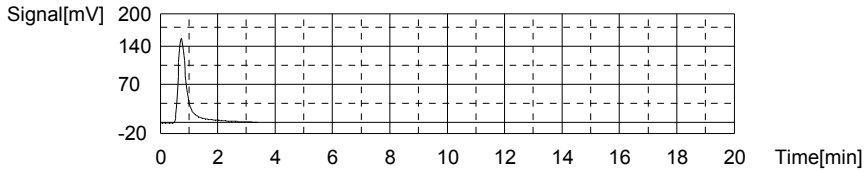
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.780mg/L TC:9.231mg/L IC:5.451mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	346.9	9.231mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 01:38:09 PM

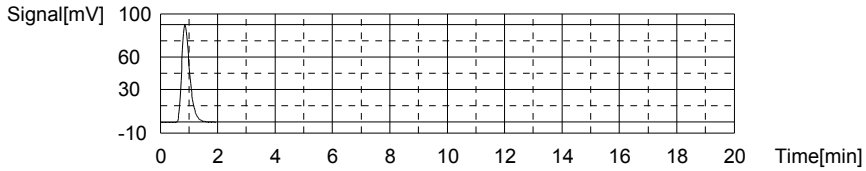
Mean Area 346.9
Mean Conc. 9.231mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	174.9	5.451mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 01:43:02 PM

Mean Area 174.9
Mean Conc. 5.451mg/L



Sample

Sample Name: L12050285-01
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

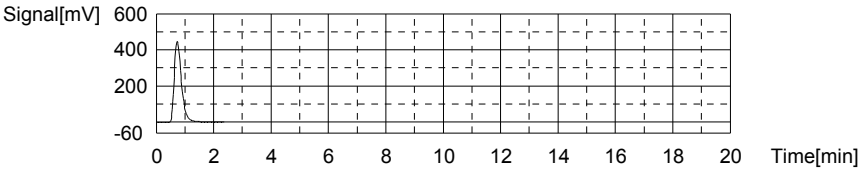
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.003mg/L TC:21.14mg/L IC:18.14mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	794.4	21.14mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 01:50:50 PM

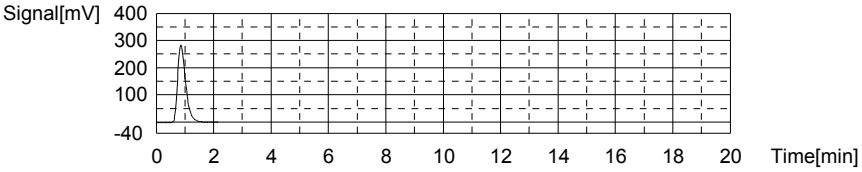
Mean Area 794.4
Mean Conc. 21.14mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	552.0	18.14mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 01:56:08 PM

Mean Area 552.0
Mean Conc. 18.14mg/L



Sample

Sample Name: L12050286-04 (4)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

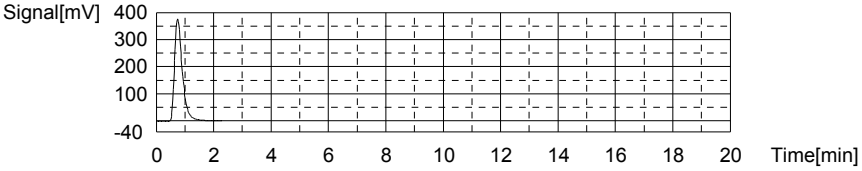
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:6.402mg/L TC:19.15mg/L IC:12.75mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	719.5	19.15mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 02:03:52 PM

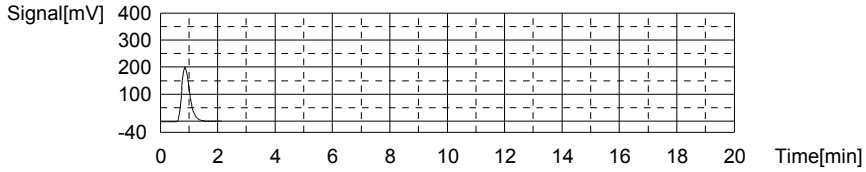
Mean Area 719.5
Mean Conc. 19.15mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	391.7	12.75mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 02:09:02 PM

Mean Area 391.7
Mean Conc. 12.75mg/L



Sample

Sample Name: L12050286-05 (4)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

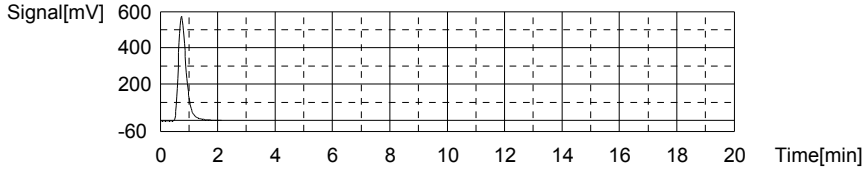
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:8.066mg/L TC:28.82mg/L IC:20.76mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1083	28.82mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 02:16:35 PM

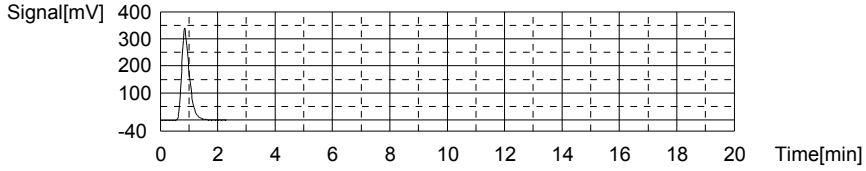
Mean Area 1083
Mean Conc. 28.82mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	629.8	20.76mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 02:21:59 PM

Mean Area 629.8
Mean Conc. 20.76mg/L



Sample

Sample Name: L12050286-06 (4)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

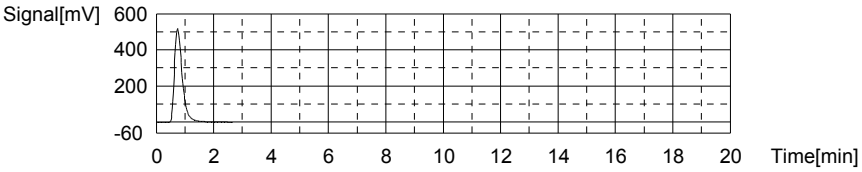
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:8.125mg/L TC:26.39mg/L IC:18.26mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	991.4	26.39mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 02:30:05 PM

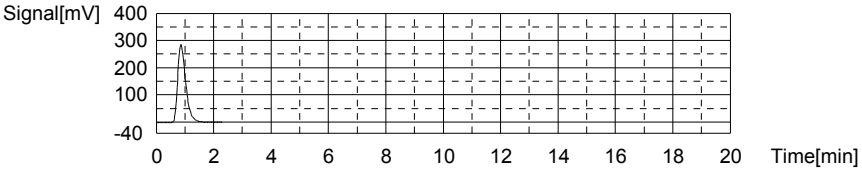
Mean Area 991.4
Mean Conc. 26.39mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	555.6	18.26mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 02:35:32 PM

Mean Area 555.6
Mean Conc. 18.26mg/L



Sample

Sample Name: L12050286-07 (4)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

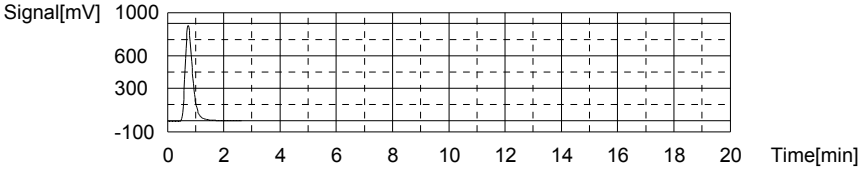
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:8.810mg/L TC:43.44mg/L IC:34.63mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1632	43.44mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 02:43:35 PM

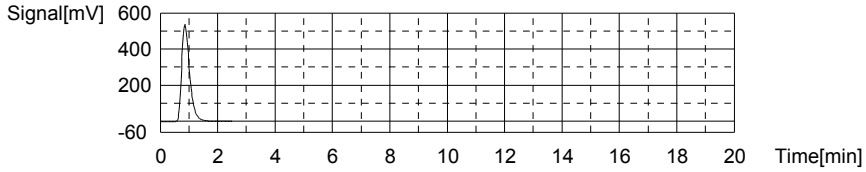
Mean Area 1632
Mean Conc. 43.44mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1042	34.63mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 02:49:28 PM

Mean Area 1042
Mean Conc. 34.63mg/L



Sample

Sample Name: L12050171-01
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

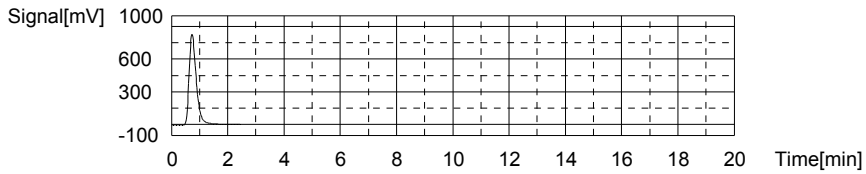
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.890mg/L TC:39.20mg/L IC:33.31mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1473	39.20mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 02:57:21 PM

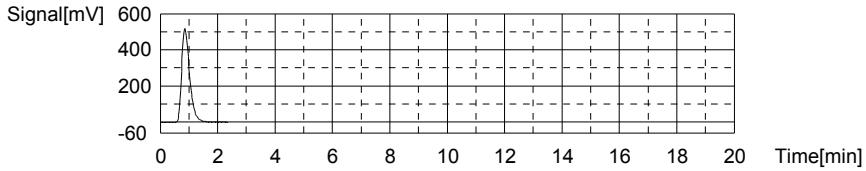
Mean Area 1473
Mean Conc. 39.20mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1003	33.31mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 03:02:59 PM

Mean Area 1003
Mean Conc. 33.31mg/L



Sample

Sample Name: WG397599-05 DUP
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

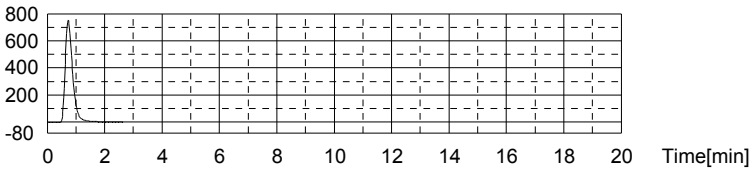
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:4.271mg/L TC:35.98mg/L IC:31.71mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1352	35.98mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 03:11:04 PM

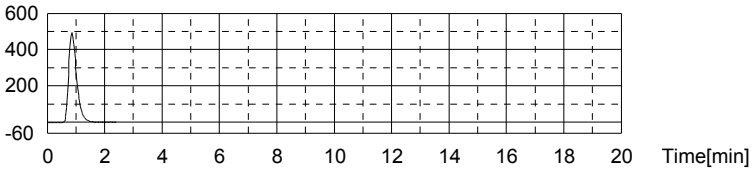
Mean Area 1352
Mean Conc. 35.98mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	955.4	31.71mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 03:16:48 PM

Mean Area 955.4
Mean Conc. 31.71mg/L



Sample

Sample Name: L12050171-03 MS
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

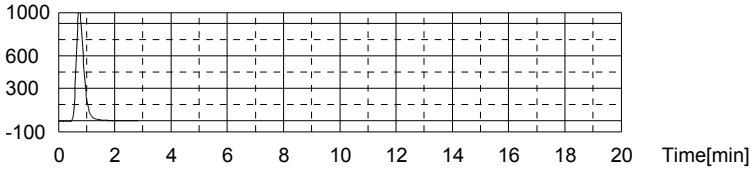
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:15.15mg/L TC:51.02mg/L IC:35.87mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1917	51.02mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 03:25:04 PM

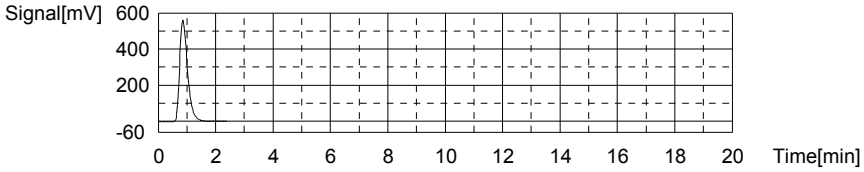
Mean Area 1917
Mean Conc. 51.02mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1079	35.87mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 03:30:44 PM

Mean Area 1079
Mean Conc. 35.87mg/L



Sample

Sample Name: L12050171-05 MSD
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

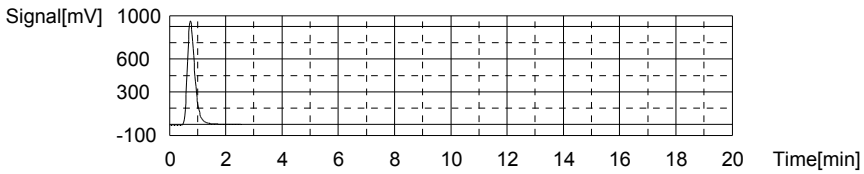
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:15.20mg/L TC:47.03mg/L IC:31.83mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1767	47.03mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 03:38:42 PM

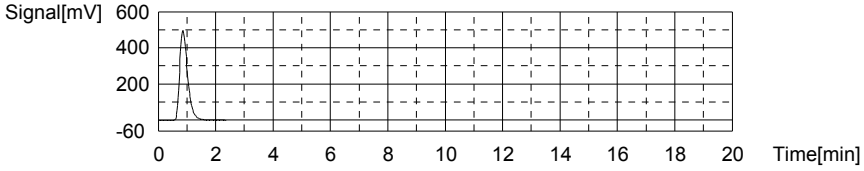
Mean Area 1767
Mean Conc. 47.03mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	959.0	31.83mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 03:44:30 PM

Mean Area 959.0
Mean Conc. 31.83mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

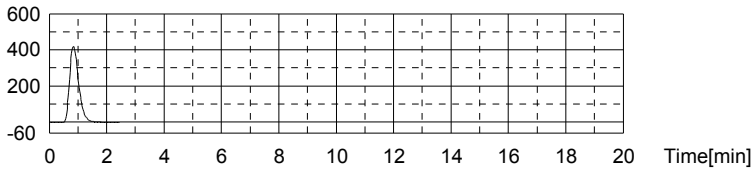
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:25.00mg/L TC:24.92mg/L IC:-0.07186mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	936.5	24.92mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 03:52:22 PM

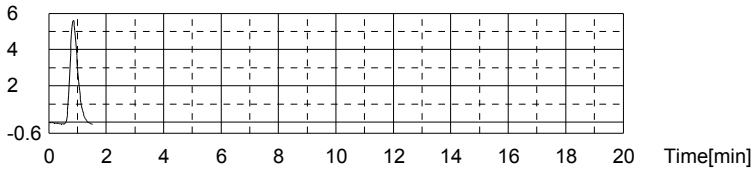
Mean Area 936.5
Mean Conc. 24.92mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.75	-0.07186mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 03:56:48 PM

Mean Area 10.75
Mean Conc. -0.07186mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

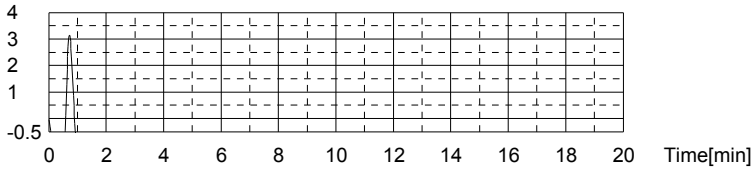
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.4377mg/L TC:0.2516mg/L IC:-0.1861mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.546	0.2516mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 04:02:00 PM

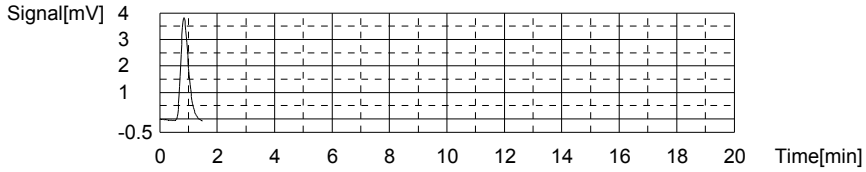
Mean Area 9.546
Mean Conc. 0.2516mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.356	-0.1861mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 04:05:54 PM

Mean Area 7.356
Mean Conc. -0.1861mg/L



Sample

Sample Name: L12050171-07 (10)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

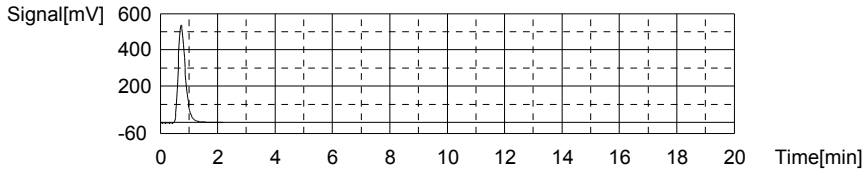
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.372mg/L TC:25.07mg/L IC:23.70mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	942.1	25.07mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 04:13:32 PM

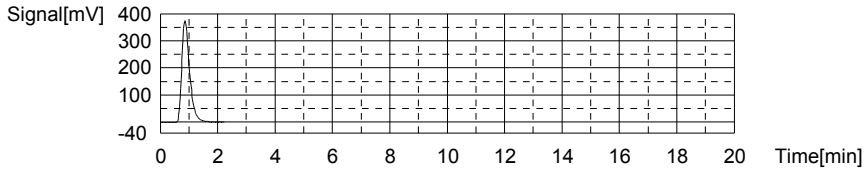
Mean Area 942.1
Mean Conc. 25.07mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	717.3	23.70mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 04:18:52 PM

Mean Area 717.3
Mean Conc. 23.70mg/L



Sample

Sample Name: L12050226-01 (200)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

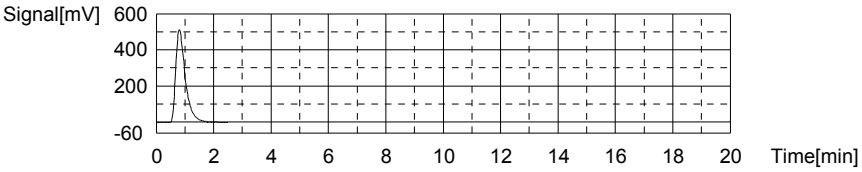
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:31.25mg/L TC:31.59mg/L IC:0.3460mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1187	31.59mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 04:26:48 PM

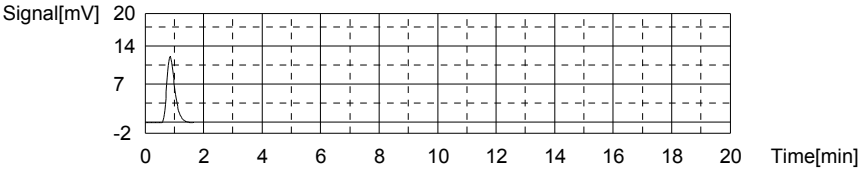
Mean Area 1187
Mean Conc. 31.59mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	23.17	0.3460mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 04:31:19 PM

Mean Area 23.17
Mean Conc. 0.3460mg/L



Sample

Sample Name: L12050226-03 (5)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

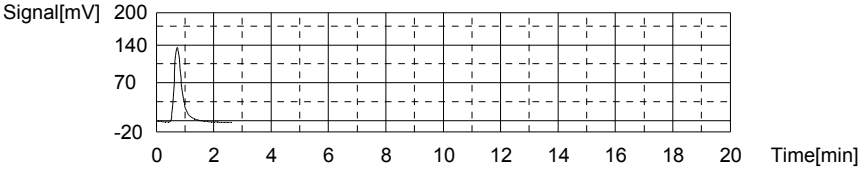
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.809mg/L TC:7.072mg/L IC:5.263mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	265.8	7.072mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 04:39:23 PM

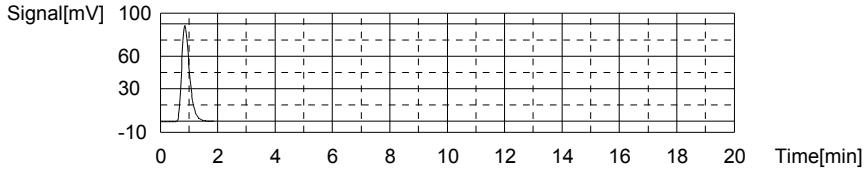
Mean Area 265.8
Mean Conc. 7.072mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	169.3	5.263mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 04:44:11 PM

Mean Area 169.3
Mean Conc. 5.263mg/L



Sample

Sample Name: L12050226-05 (2)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

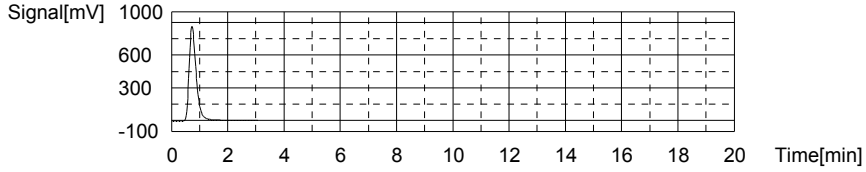
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.580mg/L TC:40.56mg/L IC:36.98mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1524	40.56mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 04:52:43 PM

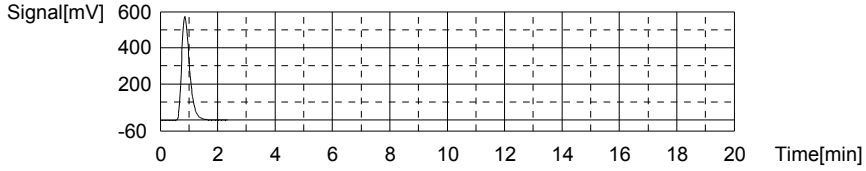
Mean Area 1524
Mean Conc. 40.56mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1112	36.98mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 04:58:23 PM

Mean Area 1112
Mean Conc. 36.98mg/L



Sample

Sample Name: L12050226-07 (20)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

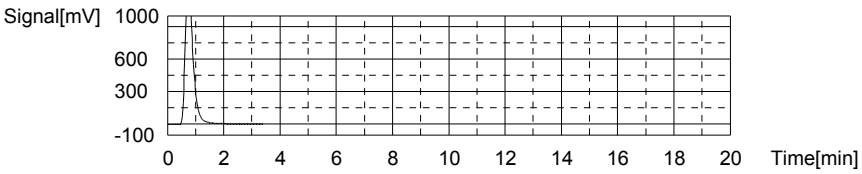
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:17.61mg/L TC:66.54mg/L IC:48.93mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2500	66.54mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 05:07:13 PM

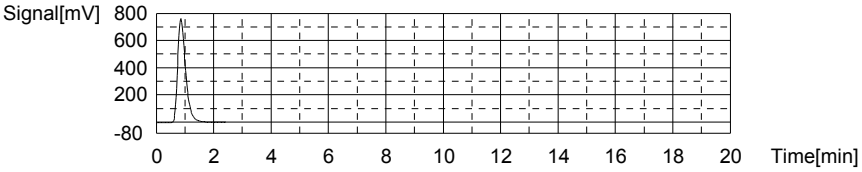
Mean Area 2500
Mean Conc. 66.54mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1467	48.93mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 05:13:06 PM

Mean Area 1467
Mean Conc. 48.93mg/L



Sample

Sample Name: WG397764-01 BLANK
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

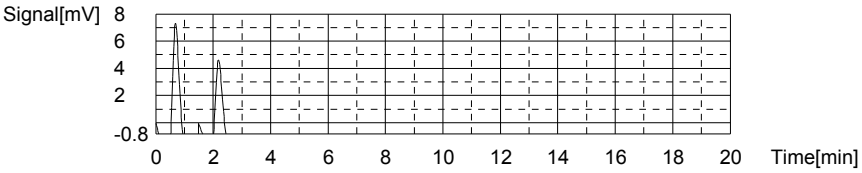
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.4759mg/L TC:0.3571mg/L IC:-0.1188mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	15.82	0.4186mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 05:18:16 PM
2	11.20	0.2956mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 05:21:54 PM

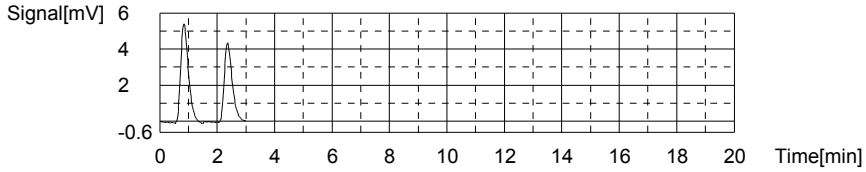
Mean Area 13.51
Mean Conc. 0.3571mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.39	-0.08397mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 05:25:56 PM
2	8.322	-0.1536mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 05:29:54 PM

Mean Area 9.356
Mean Conc. -0.1188mg/L



Sample

Sample Name: WG397764-02 LCS25
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

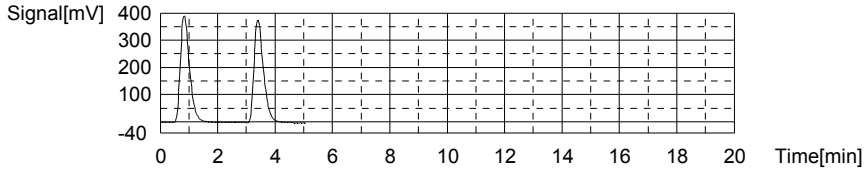
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.29mg/L TC:23.06mg/L IC:-0.2312mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	871.5	23.19mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 05:37:56 PM
2	861.2	22.92mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 05:42:42 PM

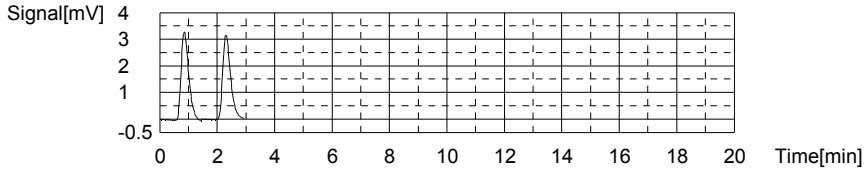
Mean Area 866.4
Mean Conc. 23.06mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.118	-0.2277mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 05:46:58 PM
2	5.911	-0.2347mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 05:51:05 PM

Mean Area 6.015
Mean Conc. -0.2312mg/L



Sample

Sample Name: WG397764-03 LCSDUP
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

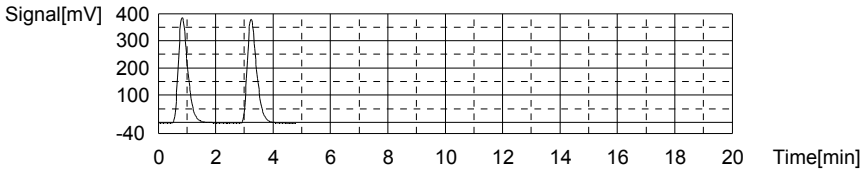
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.46mg/L TC:23.22mg/L IC:-0.2415mg/L

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	05/12/2012 05:58:56 PM
2	866.7	23.07mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 06:03:35 PM

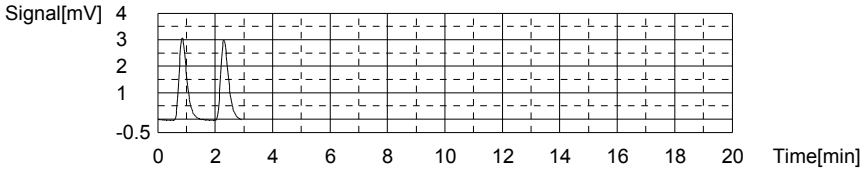
Mean Area 872.6
Mean Conc. 23.22mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.751	-0.2401mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 06:07:52 PM
2	5.663	-0.2430mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/12/2012 06:11:57 PM

Mean Area 5.707
Mean Conc. -0.2415mg/L



Sample

Sample Name: L12050314-01
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

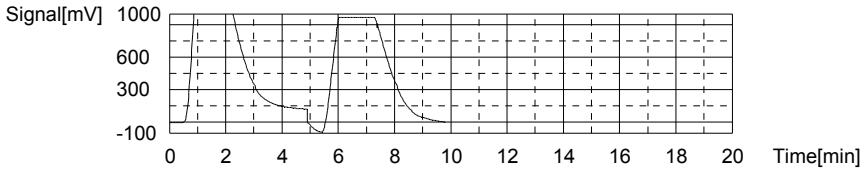
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:266.2mg/L TC:266.1mg/L IC:-0.08946mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9999	266.1mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 06:22:19 PM
2	9999	266.1mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/12/2012 06:31:28 PM

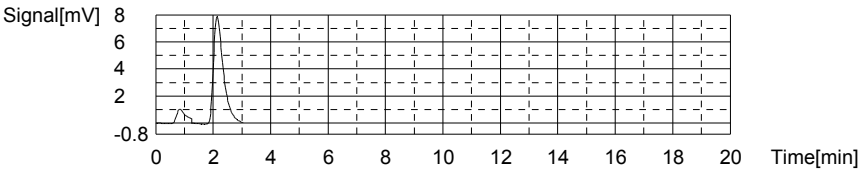
Mean Area 9999
Mean Conc. 266.1mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.634	-0.3786mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 04:31:02 AM
2	18.82	0.1997mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 04:35:40 AM

Mean Area 10.23
Mean Conc. -0.08946mg/L



Sample

Sample Name: L12050314-02
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

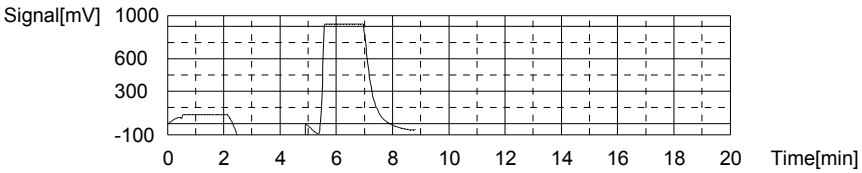
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:109.4mg/L TC:169.2mg/L IC:59.81mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2714	72.23mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 04:46:02 AM
2	9999	266.1mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 04:54:51 AM

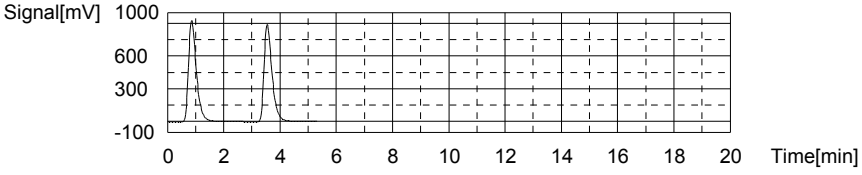
Mean Area 6357
Mean Conc. 169.2mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1812	60.53mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 05:01:02 AM
2	1769	59.09mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 05:06:52 AM

Mean Area 1791
Mean Conc. 59.81mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

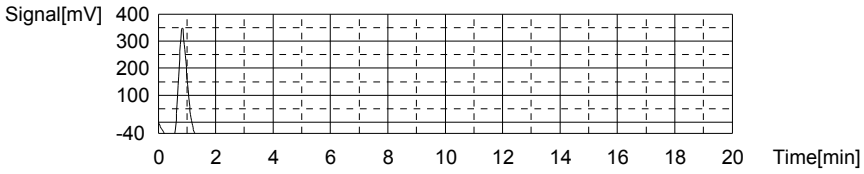
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:22.63mg/L TC:22.79mg/L IC:0.1556mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	856.2	22.79mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 05:14:59 AM

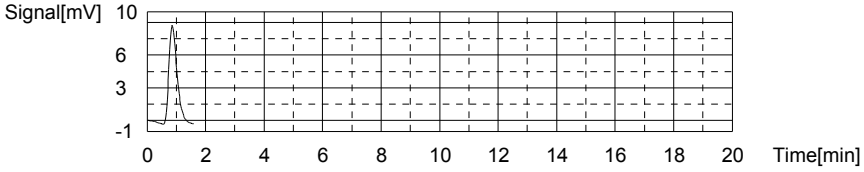
Mean Area 856.2
Mean Conc. 22.79mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	17.51	0.1556mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 05:19:34 AM

Mean Area 17.51
Mean Conc. 0.1556mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

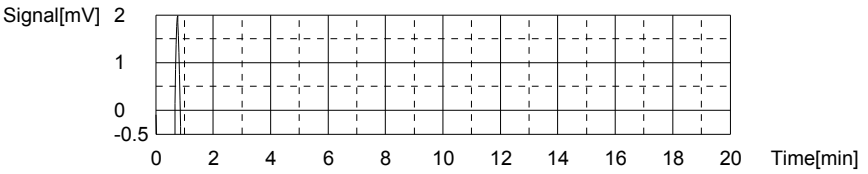
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.6383mg/L TC:0.5022mg/L IC:-0.1362mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	18.96	0.5022mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 05:25:09 AM

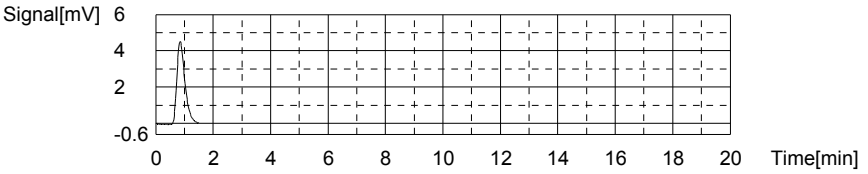
Mean Area 18.96
Mean Conc. 0.5022mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.839	-0.1362mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 05:29:08 AM

Mean Area 8.839
Mean Conc. -0.1362mg/L



Sample

Sample Name: WG397764-05 DUP
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

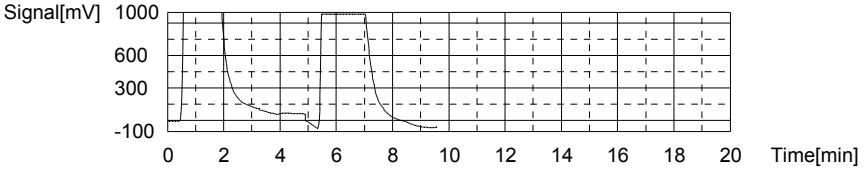
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:146.6mg/L TC:266.1mg/L IC:119.5mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9999	266.1mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 05:39:30 AM
2	9999	266.1mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 05:49:51 AM

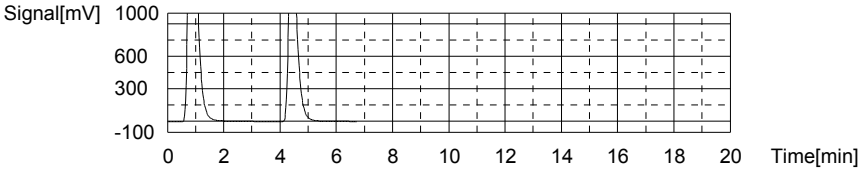
Mean Area 9999
Mean Conc. 266.1mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4020	134.8mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 05:57:36 AM
2	3109	104.2mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 06:04:34 AM

Mean Area 3565
Mean Conc. 119.5mg/L



Sample

Sample Name: WG397764-06 MS
Sample ID: <Untitled>
Origin: TOC-12-06-2011A.met
Status Completed
Chk. Result

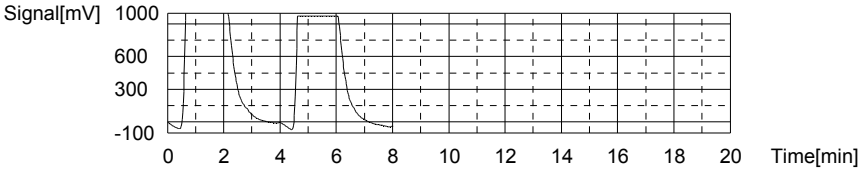
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:194.4mg/L TC:266.1mg/L IC:71.69mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9999	266.1mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 06:14:00 AM
2	9999	266.1mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 06:23:16 AM

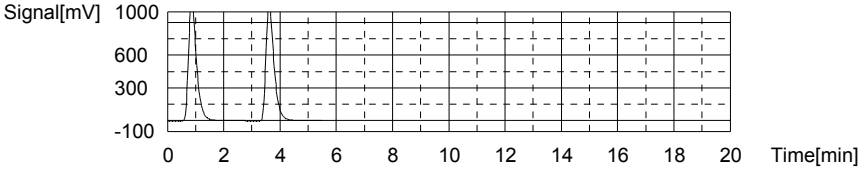
Mean Area 9999
Mean Conc. 266.1mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2160	72.24mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 06:29:48 AM
2	2127	71.13mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 06:35:53 AM

Mean Area 2144
Mean Conc. 71.69mg/L



Sample

Sample Name: WG397767-01 BLANK
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

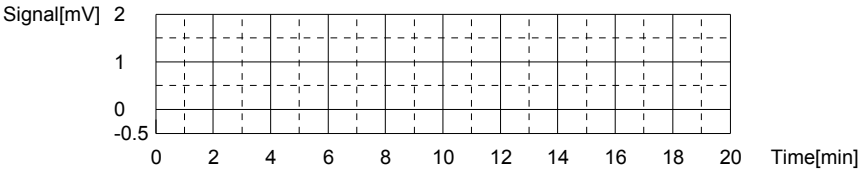
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:-0.1954mg/L TC:-0.00248mg/L IC:0.1929mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.000	-0.00248mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 06:42:24 AM

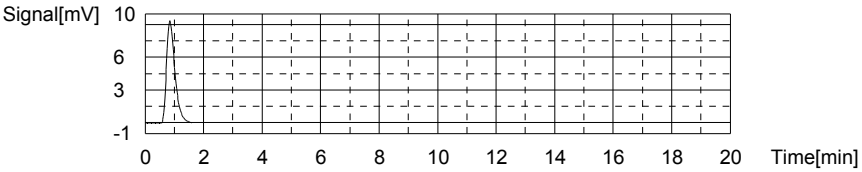
Mean Area 0.000
Mean Conc. -0.00248mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	18.62	0.1929mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47_	05/13/2012 06:46:53 AM

Mean Area 18.62
Mean Conc. 0.1929mg/L



Sample

Sample Name: WG397767-02 LCS25
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

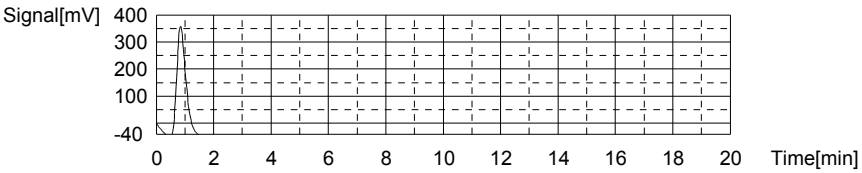
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.86mg/L TC:23.80mg/L IC:-0.06042mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	894.3	23.80mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 06:55:30 AM

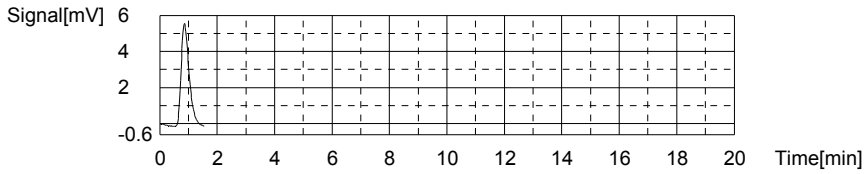
Mean Area 894.3
Mean Conc. 23.80mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.09	-0.06042mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 07:00:01 AM

Mean Area 11.09
Mean Conc. -0.06042mg/L



Sample

Sample Name: WG397767-03 LCSDUP
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

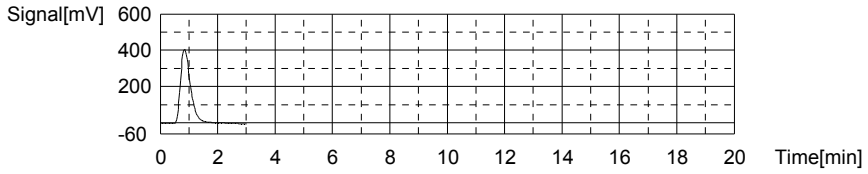
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:26.84mg/L TC:26.69mg/L IC:-0.1497mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1003	26.69mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 07:08:29 AM

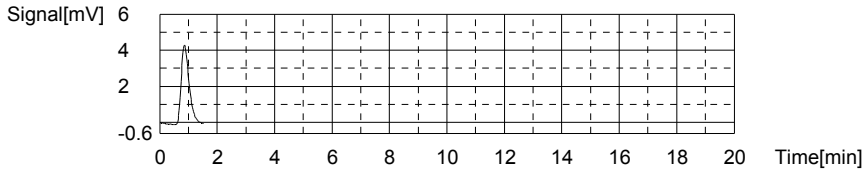
Mean Area 1003
Mean Conc. 26.69mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.436	-0.1497mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 07:12:55 AM

Mean Area 8.436
Mean Conc. -0.1497mg/L



Sample

Sample Name: L12050099-01 (2)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

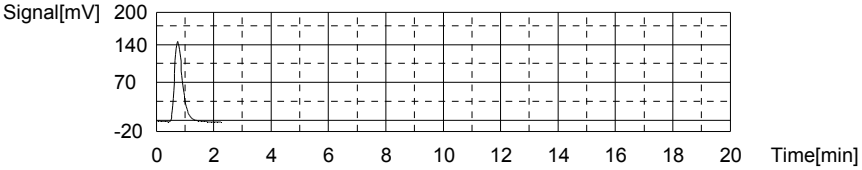
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.173mg/L TC:7.793mg/L IC:4.620mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	292.9	7.793mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 07:20:37 AM

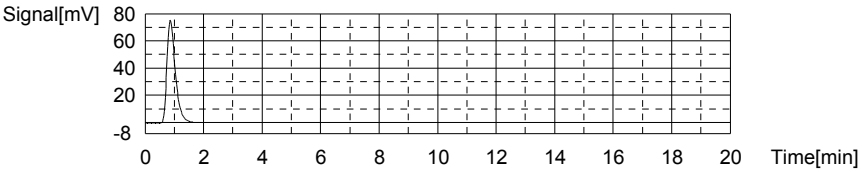
Mean Area 292.9
Mean Conc. 7.793mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	150.2	4.620mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 07:25:34 AM

Mean Area 150.2
Mean Conc. 4.620mg/L



Sample

Sample Name: L12050254-02 (3)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

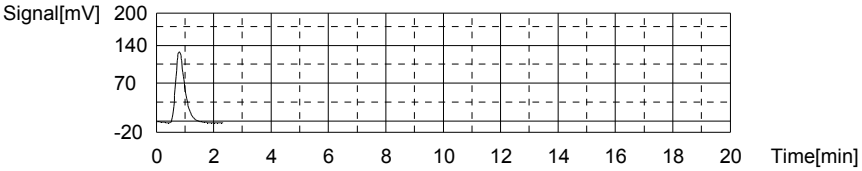
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:6.855mg/L TC:7.857mg/L IC:1.003mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	295.3	7.857mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 07:33:21 AM

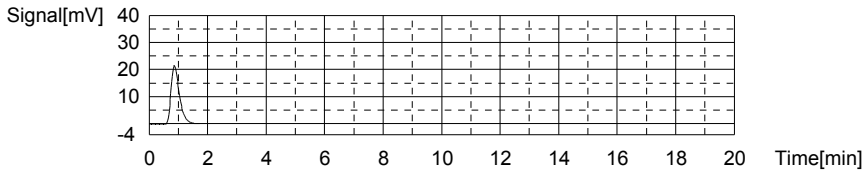
Mean Area 295.3
Mean Conc. 7.857mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	42.69	1.003mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 07:38:01 AM

Mean Area 42.69
Mean Conc. 1.003mg/L



Sample

Sample Name: L12050254-03 (2)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

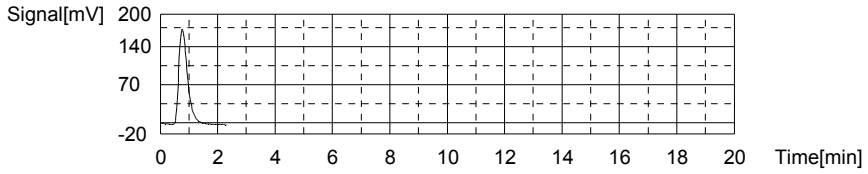
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:6.246mg/L TC:9.957mg/L IC:3.712mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	374.2	9.957mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 07:45:48 AM

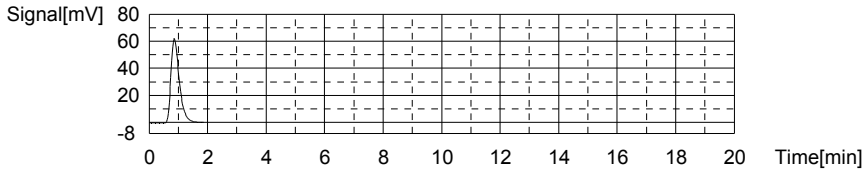
Mean Area 374.2
Mean Conc. 9.957mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	123.2	3.712mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 07:50:38 AM

Mean Area 123.2
Mean Conc. 3.712mg/L



Sample

Sample Name: L12050254-04 (2)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

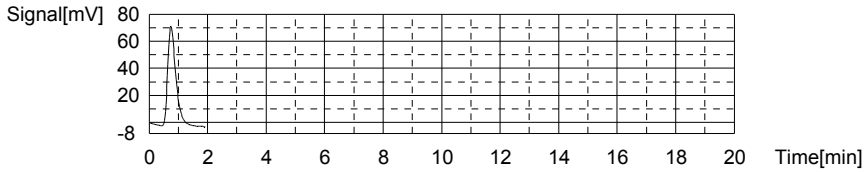
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.809mg/L TC:3.769mg/L IC:1.960mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	141.7	3.769mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 07:58:02 AM

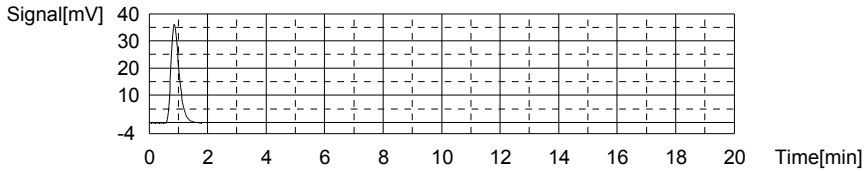
Mean Area 141.7
Mean Conc. 3.769mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	71.14	1.960mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 08:02:45 AM

Mean Area 71.14
Mean Conc. 1.960mg/L



Sample

Sample Name: L12050254-05 (2)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

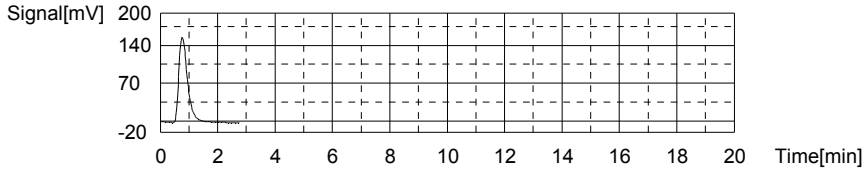
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.135mg/L TC:9.005mg/L IC:3.870mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	338.4	9.005mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 08:10:59 AM

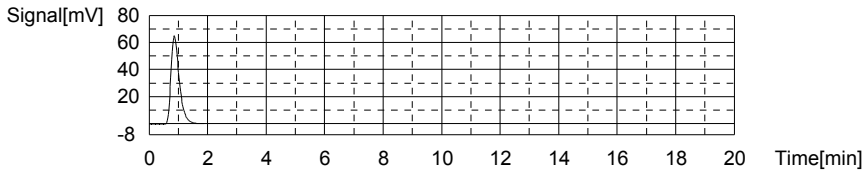
Mean Area 338.4
Mean Conc. 9.005mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	127.9	3.870mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 08:15:51 AM

Mean Area 127.9
Mean Conc. 3.870mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

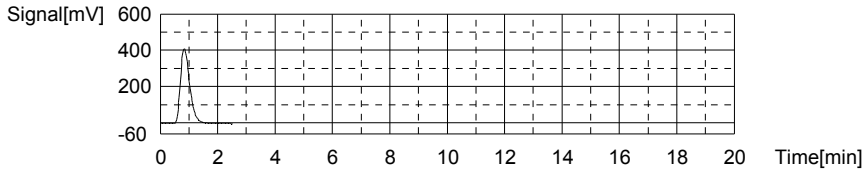
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:24.73mg/L TC:24.70mg/L IC:-0.03317mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	928.0	24.70mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 08:23:50 AM

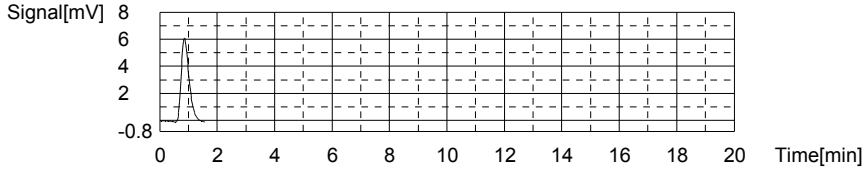
Mean Area 928.0
Mean Conc. 24.70mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.90	-0.03317mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 08:28:19 AM

Mean Area 11.90
Mean Conc. -0.03317mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

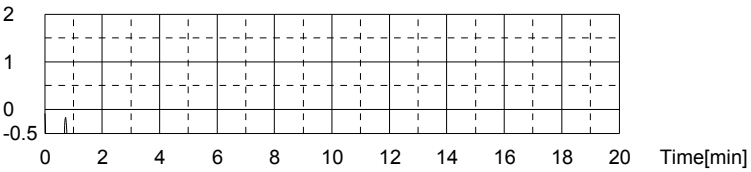
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.4010mg/L TC:0.2358mg/L IC:-0.1652mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.951	0.2358mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 08:33:30 AM

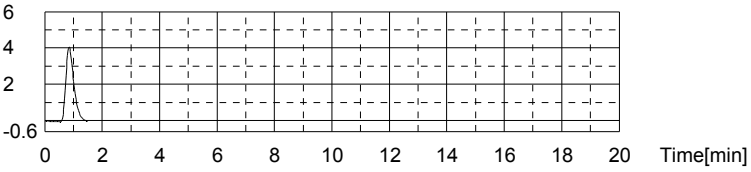
Mean Area 8.951
Mean Conc. 0.2358mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.976	-0.1652mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47_	05/13/2012 08:37:29 AM

Mean Area 7.976
Mean Conc. -0.1652mg/L



Sample

Sample Name: L12050153-05 (2)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

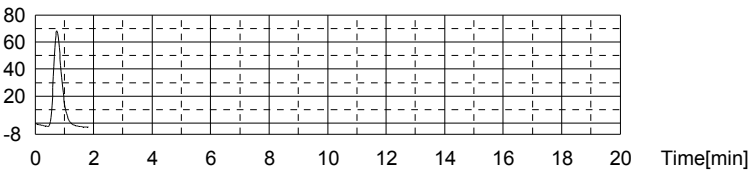
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.599mg/L TC:3.609mg/L IC:2.011mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	135.7	3.609mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 08:44:47 AM

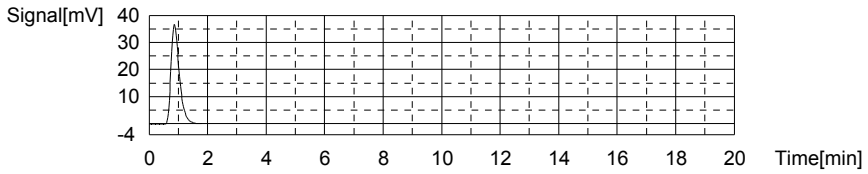
Mean Area 135.7
Mean Conc. 3.609mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	72.65	2.011mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 08:49:32 AM

Mean Area 72.65
Mean Conc. 2.011mg/L



Sample

Sample Name: L12050153-07 (2)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

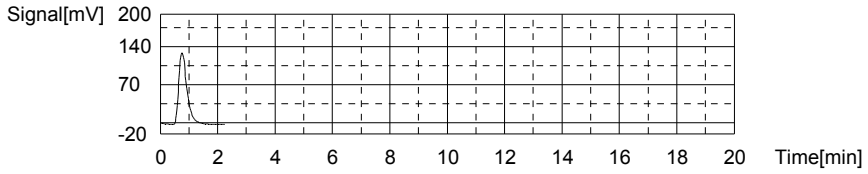
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.863mg/L TC:7.056mg/L IC:3.194mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	265.2	7.056mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 08:57:14 AM

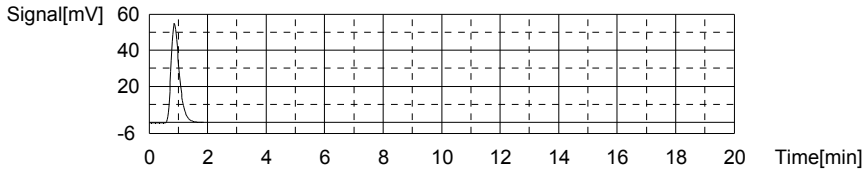
Mean Area 265.2
Mean Conc. 7.056mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	107.8	3.194mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 09:02:02 AM

Mean Area 107.8
Mean Conc. 3.194mg/L



Sample

Sample Name: L12050245-04 (5)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

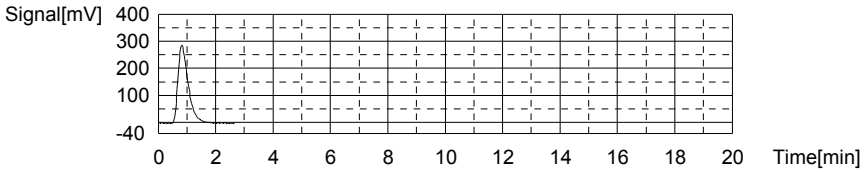
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:17.09mg/L TC:19.12mg/L IC:2.029mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	718.4	19.12mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 09:10:10 AM

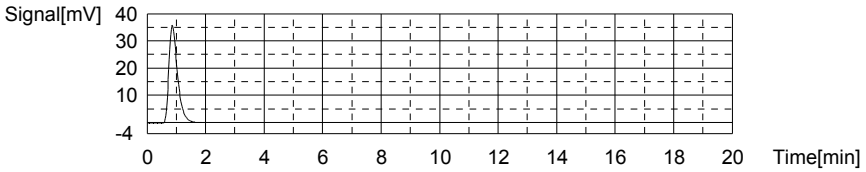
Mean Area 718.4
Mean Conc. 19.12mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	73.20	2.029mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47_	05/13/2012 09:14:57 AM

Mean Area 73.20
Mean Conc. 2.029mg/L



Sample

Sample Name: L12050245-12 (5)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

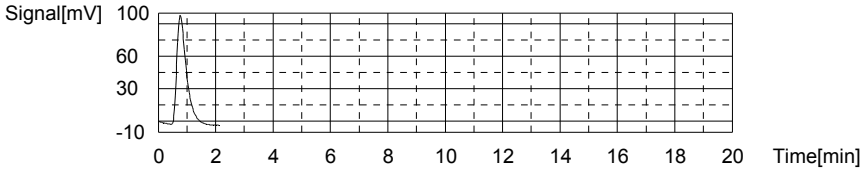
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.885mg/L TC:6.207mg/L IC:2.322mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	233.3	6.207mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 09:22:34 AM

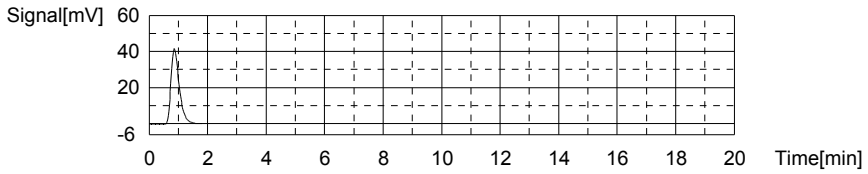
Mean Area 233.3
Mean Conc. 6.207mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	81.91	2.322mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 09:27:23 AM

Mean Area 81.91
Mean Conc. 2.322mg/L



Sample

Sample Name: L12050245-14 (5)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

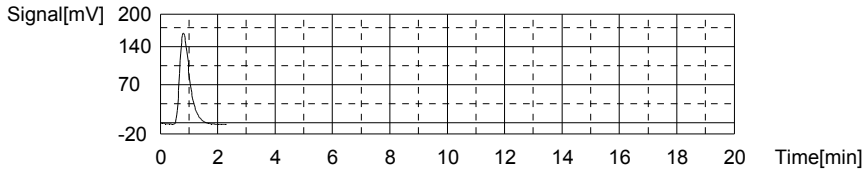
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:10.13mg/L TC:10.93mg/L IC:0.8016mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	410.8	10.93mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 09:35:09 AM

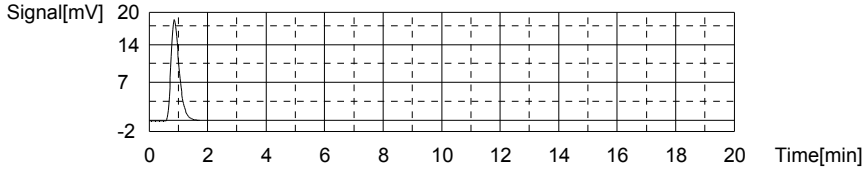
Mean Area 410.8
Mean Conc. 10.93mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	36.71	0.8016mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 09:39:50 AM

Mean Area 36.71
Mean Conc. 0.8016mg/L



Sample

Sample Name: L12050341-04 (3)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

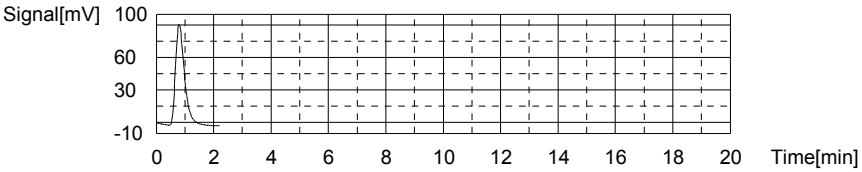
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:4.739mg/L TC:5.390mg/L IC:0.6505mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	202.6	5.390mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 09:47:31 AM

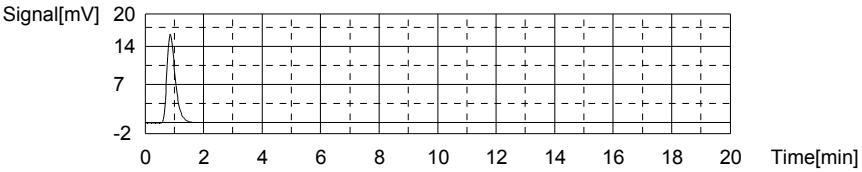
Mean Area 202.6
Mean Conc. 5.390mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	32.22	0.6505mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 09:52:07 AM

Mean Area 32.22
Mean Conc. 0.6505mg/L



Sample

Sample Name: L12050341-05 (3)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

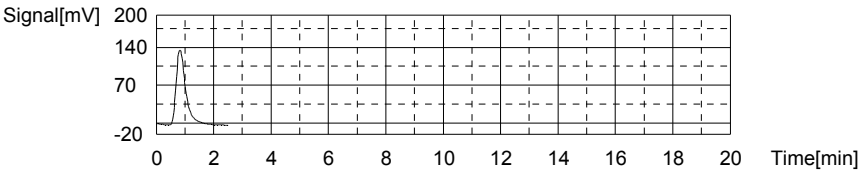
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:8.336mg/L TC:8.659mg/L IC:0.3221mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	325.4	8.659mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 10:00:05 AM

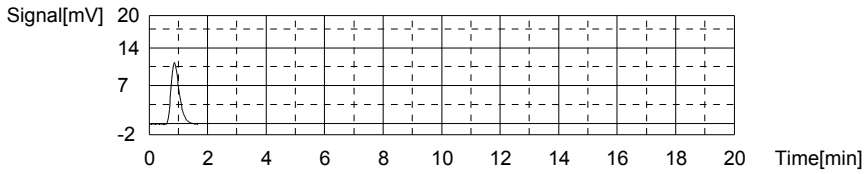
Mean Area 325.4
Mean Conc. 8.659mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	22.46	0.3221mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 10:04:40 AM

Mean Area 22.46
Mean Conc. 0.3221mg/L



Sample

Sample Name: L12050341-06 (10)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

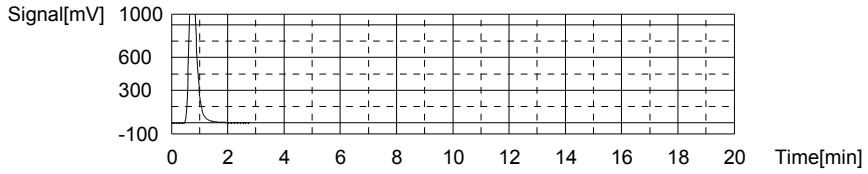
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:23.94mg/L TC:67.82mg/L IC:43.88mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2548	67.82mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 10:12:54 AM

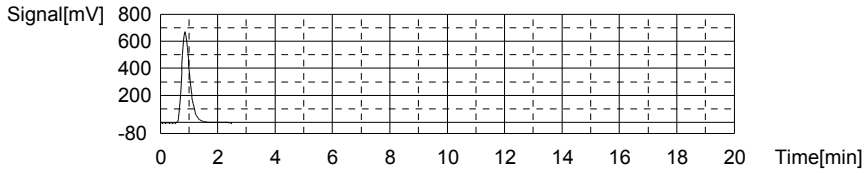
Mean Area 2548
Mean Conc. 67.82mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1317	43.88mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 10:18:52 AM

Mean Area 1317
Mean Conc. 43.88mg/L



Sample

Sample Name: L12050341-07 (5)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

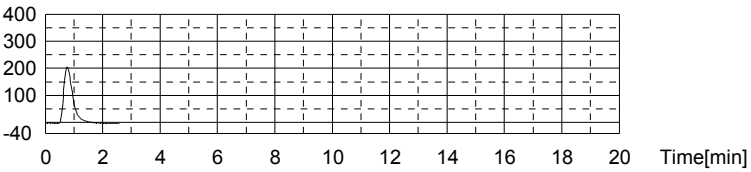
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:7.553mg/L TC:12.19mg/L IC:4.640mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	458.2	12.19mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 10:26:55 AM

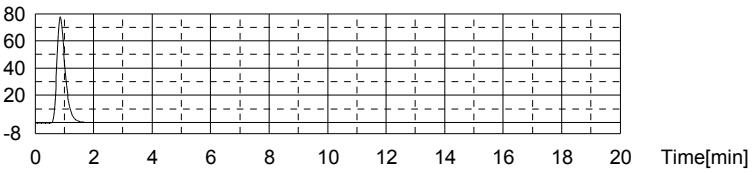
Mean Area 458.2
Mean Conc. 12.19mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	150.8	4.640mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 10:31:56 AM

Mean Area 150.8
Mean Conc. 4.640mg/L



Sample

Sample Name: L12050341-08
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

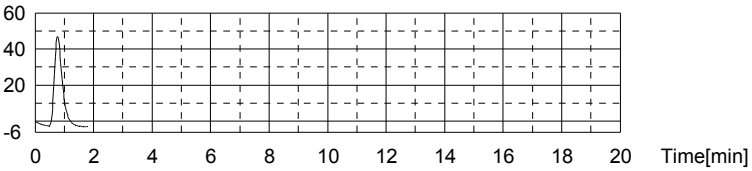
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:2.645mg/L TC:2.488mg/L IC:-0.1570mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	93.58	2.488mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 10:39:11 AM

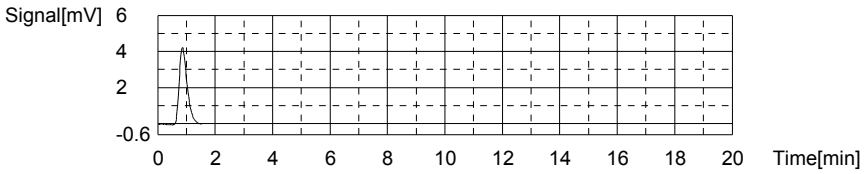
Mean Area 93.58
Mean Conc. 2.488mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.221	-0.1570mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 10:43:36 AM

Mean Area 8.221
Mean Conc. -0.1570mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

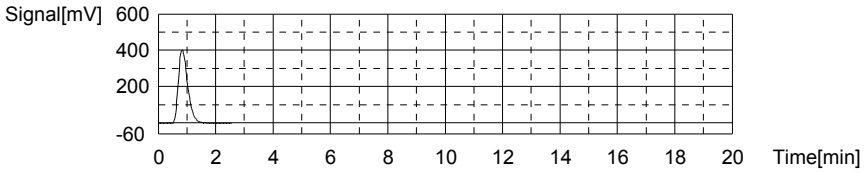
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:24.51mg/L TC:24.52mg/L IC:0.01024mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	921.3	24.52mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 10:51:39 AM

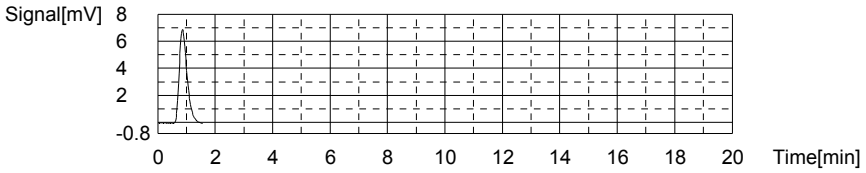
Mean Area 921.3
Mean Conc. 24.52mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.19	0.01024mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 10:56:07 AM

Mean Area 13.19
Mean Conc. 0.01024mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

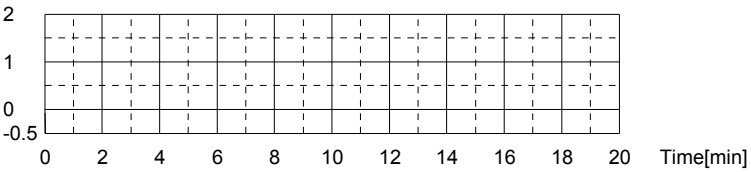
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3839mg/L TC:0.2189mg/L IC:-0.1651mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.317	0.2189mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 11:01:18 AM

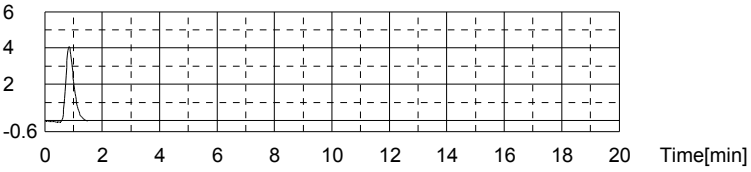
Mean Area 8.317
Mean Conc. 0.2189mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.980	-0.1651mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 11:05:17 AM

Mean Area 7.980
Mean Conc. -0.1651mg/L



Sample

Sample Name: L12050341-10 (4)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

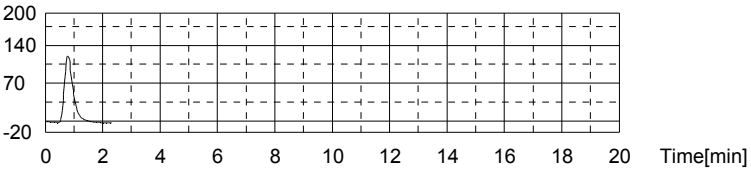
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.602mg/L TC:6.958mg/L IC:1.356mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	261.5	6.958mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 11:13:07 AM

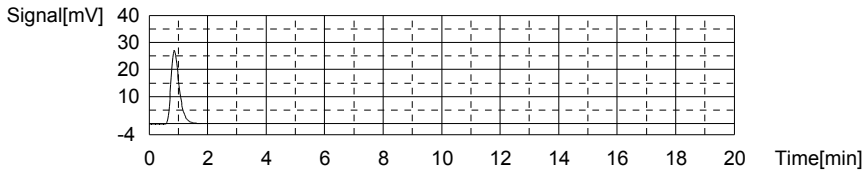
Mean Area 261.5
Mean Conc. 6.958mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	53.18	1.356mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 11:17:53 AM

Mean Area 53.18
Mean Conc. 1.356mg/L



Sample

Sample Name: WG397767-05 (4) DUP
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

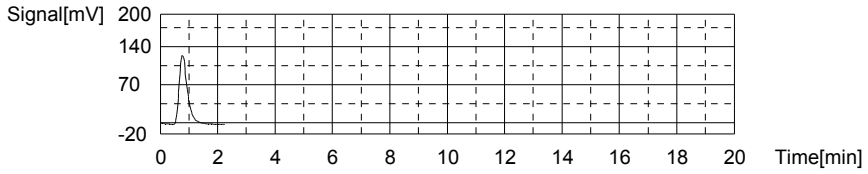
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.149mg/L TC:6.793mg/L IC:1.644mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	255.3	6.793mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 11:25:37 AM

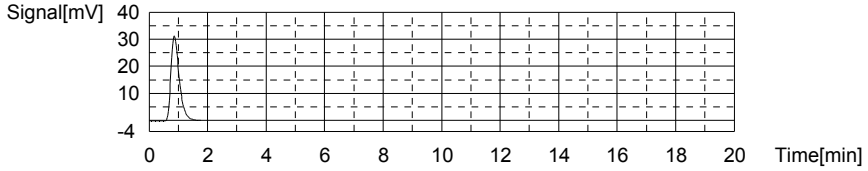
Mean Area 255.3
Mean Conc. 6.793mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	61.75	1.644mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 11:30:21 AM

Mean Area 61.75
Mean Conc. 1.644mg/L



Sample

Sample Name: L12050341-11 (4) MS
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

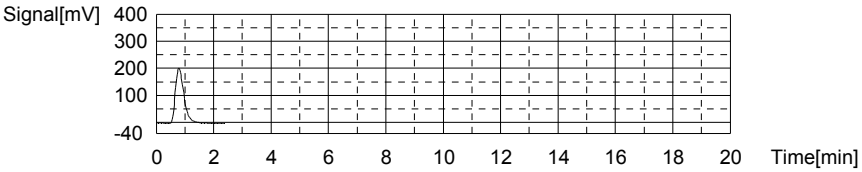
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:9.559mg/L TC:11.24mg/L IC:1.684mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	422.5	11.24mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 11:38:13 AM

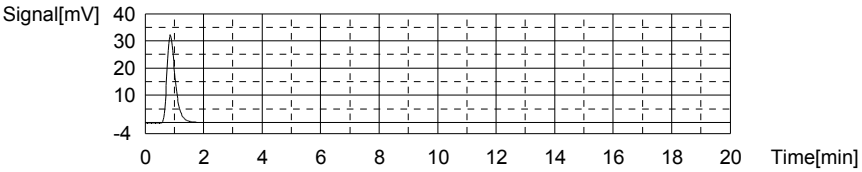
Mean Area 422.5
Mean Conc. 11.24mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	62.94	1.684mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47_	05/13/2012 11:42:58 AM

Mean Area 62.94
Mean Conc. 1.684mg/L



Sample

Sample Name: L12050341-12 (4) MSD
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

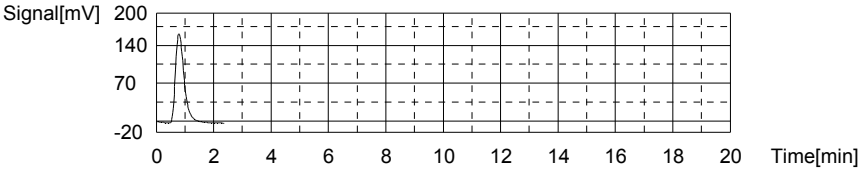
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:8.308mg/L TC:9.260mg/L IC:0.9517mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	348.0	9.260mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 11:50:49 AM

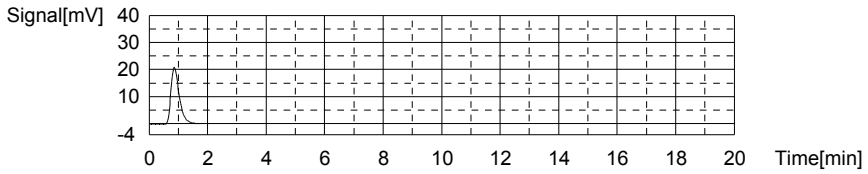
Mean Area 348.0
Mean Conc. 9.260mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	41.17	0.9517mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 11:55:28 AM

Mean Area 41.17
Mean Conc. 0.9517mg/L



Sample

Sample Name: L12050341-13 (2)
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

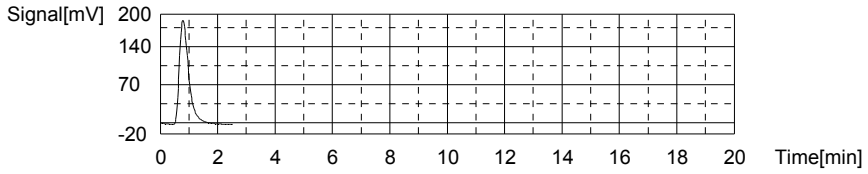
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:9.186mg/L TC:11.70mg/L IC:2.518mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	439.8	11.70mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 12:03:29 PM

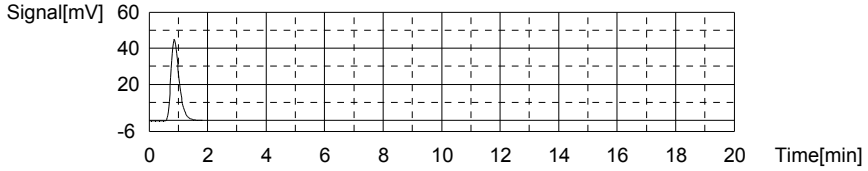
Mean Area 439.8
Mean Conc. 11.70mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	87.72	2.518mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 12:08:16 PM

Mean Area 87.72
Mean Conc. 2.518mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

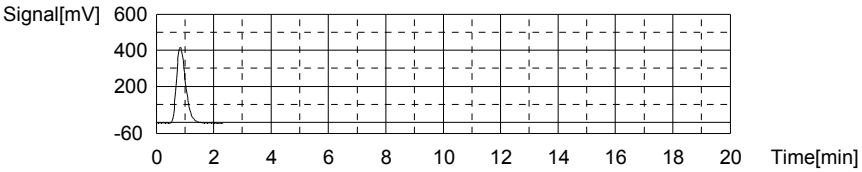
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:24.82mg/L TC:24.86mg/L IC:0.04388mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	934.2	24.86mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 12:16:04 PM

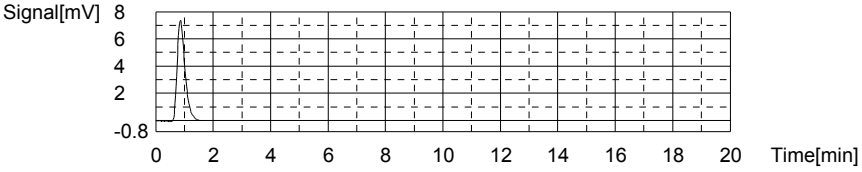
Mean Area 934.2
Mean Conc. 24.86mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	14.19	0.04388mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 12:20:33 PM

Mean Area 14.19
Mean Conc. 0.04388mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC-12-06-2011.met
Status Completed
Chk. Result

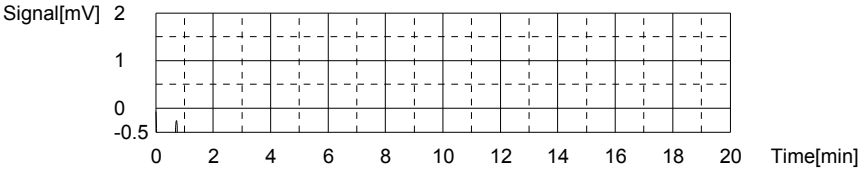
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3926mg/L TC:0.2204mg/L IC:-0.1722mg/L

1. Det

Anal.: TC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.374	0.2204mg/L	500uL	1		TCCURVE-12-06-2011.2011_12_06_08_40_5	05/13/2012 12:25:46 PM

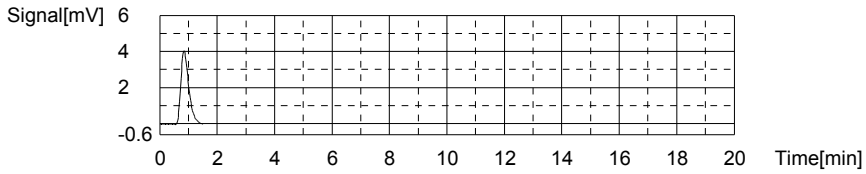
Mean Area 8.374
Mean Conc. 0.2204mg/L



Anal.: IC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.769	-0.1722mg/L	500uL	1		TICCURVE-12-06-2011B.2011_12_06_15_47	05/13/2012 12:29:44 PM

Mean Area 7.769
Mean Conc. -0.1722mg/L



3.0 Attachments

Microbac Laboratories Inc.
Ohio Valley Division Analyst List
May 23, 2012

ADC – ANTHONY D. CANTER	AGK – ANDREW G. KASICK	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 23, 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

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Microbac Laboratories Inc.

Internal Chain of Custody Report

Login: L12050153
Account: 2736
Project: 2736.061
Samples: 9
Due Date: 18-MAY-2012

Samplenum	Container ID	Products
L12050153-01	967651	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	04-MAY-2012 15:54	RLK		<2
2	ANALYZ	V1	ORG4	04-MAY-2012 17:55	MES	RLK	

Comments:Products cancelled.

3	STORE	ORG4	A2	18-MAY-2012 08:58	JKT	AGK	

Comments:Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	04-MAY-2012 15:54	RLK		<2
2	ANALYZ	V1	ORG4	04-MAY-2012 17:55	MES	RLK	

Comments:Products cancelled.

3	STORE	ORG4	A2	18-MAY-2012 08:58	JKT	AGK	

Comments:Products cancelled.

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	04-MAY-2012 15:54	RLK		<2
2	ANALYZ	V1	ORG4	04-MAY-2012 17:55	MES	RLK	

Comments:Products cancelled.

3	STORE	ORG4	A2	18-MAY-2012 08:59	JKT	AGK	

Comments:Products cancelled.

Samplenum	Container ID	Products
L12050153-01	967652	826-SPE 827-PAHL 827-SPE-DIOX RSK175EXT

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	04-MAY-2012 15:54	RLK		
2	ANALYZ	V1	ORG4	07-MAY-2012 09:24	MRT	JKT	
3	STORE	ORG4	A2	18-MAY-2012 09:00	JKT	AGK	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	04-MAY-2012 15:54	RLK		
2	ANALYZ	V1	ORG4	07-MAY-2012 09:24	MRT	JKT	
3	STORE	ORG4	A2	18-MAY-2012 09:00	JKT	AGK	

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	04-MAY-2012 15:54	RLK		
2	ANALYZ	V1	ORG4	07-MAY-2012 09:24	MRT	JKT	
3	STORE	ORG4	A2	18-MAY-2012 09:00	JKT	AGK	

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: L12050153
Account: 2736
Project: 2736.061
Samples: 9
Due Date: 18-MAY-2012

Samplenum	Container ID	Products
L12050153-01	967653	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-MAY-2012 15:54	RLK		
2	PREP	W1	EXT	07-MAY-2012 13:32	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	04-MAY-2012 15:54	RLK		
2	STORE	W1	A1	08-MAY-2012 08:09	BLG	BLG	

Comments:Products cancelled.

Samplenum	Container ID	Products
L12050153-01	967654	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-MAY-2012 15:54	RLK		
2	PREP	W1	EXT	09-MAY-2012 09:17	CEB	CLS	

Comments:Products cancelled.

3	DISP	EXT	DISP	10-MAY-2012 08:41	RLB	RLB	

Comments:Products cancelled.Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-MAY-2012 15:54	RLK		
2	STORE	W1	A1	08-MAY-2012 08:09	BLG	BLG	

Comments:Products cancelled.

Samplenum	Container ID	Products
L12050153-01	967655	ALK

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-MAY-2012 15:54	RLK		
2	ANALYZ	W1	WET	04-MAY-2012 16:27	JDH	RLK	
3	STORE	WET	A2	14-MAY-2012 16:32	RLK	JDH	

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: L12050153
Account: 2736
Project: 2736.061
Samples: 9
Due Date: 18-MAY-2012

Samplenum	Container ID	Products
L12050153-01	967656	NO3 SO4

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-MAY-2012 15:54	RLK		
2	ANALYZ	W1	WET	04-MAY-2012 16:21	HJR	RLK	
3	STORE	WET	W1	14-MAY-2012 08:05	RLK	JDH	

Samplenum	Container ID	Products
L12050153-01	967657	PHOS TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-MAY-2012 15:54	RLK		<2
2	ANALYZ	W1	WET	07-MAY-2012 08:35	DIH	RLK	
3	STORE	WET	A2	15-MAY-2012 08:49	RLK	JBK	

Samplenum	Container ID	Products
L12050153-01	967658	AG AL AS-MS BA BE-AX CA CD-AX CO CU CR-AX FE H

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-MAY-2012 15:54	RLK		
2	PREP	W1	DIG	07-MAY-2012 05:22	REK	AZH	
3	ANALYZ*	DIG	METALS	08-MAY-2012 12:13	JYH	REK	
4	STORE	DIG	A2	08-MAY-2012 13:42	JKS	BRG	

Sample extract/digestate/leachate

Samplenum	Container ID	Products
L12050153-02	967659	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	04-MAY-2012 15:54	RLK		
2	PREP	W1	DIG	07-MAY-2012 05:22	REK	AZH	
3	ANALYZ*	DIG	METALS	08-MAY-2012 12:13	JYH	REK	
4	STORE	DIG	A2	08-MAY-2012 13:42	JKS	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: L12050153
Account: 2736
Project: 2736.061
Samples: 9
Due Date: 18-MAY-2012

Samplenum	Container ID	Products
L12050153-03	967660	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	04-MAY-2012 15:54	RLK		<2
2	ANALYZ	V1	ORG4	04-MAY-2012 17:55	MES	RLK	

Comments:Products cancelled.

3	STORE	ORG4	A2	18-MAY-2012 08:59	JKT	AGK	

Comments:Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	04-MAY-2012 15:54	RLK		<2
2	ANALYZ	V1	ORG4	04-MAY-2012 17:55	MES	RLK	

Comments:Products cancelled.

3	STORE	ORG4	A2	18-MAY-2012 08:59	JKT	AGK	

Comments:Products cancelled.

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	04-MAY-2012 15:54	RLK		<2
2	ANALYZ	V1	ORG4	04-MAY-2012 17:55	MES	RLK	

Comments:Products cancelled.

3	STORE	ORG4	A2	18-MAY-2012 08:59	JKT	AGK	

Comments:Products cancelled.

Samplenum	Container ID	Products
L12050153-03	967661	826-SPE 827-PAHL 827-SPE-DIOX RSK175EXT

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	04-MAY-2012 15:54	RLK		
2	ANALYZ	V1	ORG4	07-MAY-2012 09:24	MRT	JKT	
3	STORE	ORG4	A2	18-MAY-2012 09:00	JKT	AGK	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	04-MAY-2012 15:54	RLK		
2	ANALYZ	V1	ORG4	07-MAY-2012 09:24	MRT	JKT	
3	STORE	ORG4	A2	18-MAY-2012 09:00	JKT	AGK	

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	04-MAY-2012 15:54	RLK		
2	ANALYZ	V1	ORG4	07-MAY-2012 09:24	MRT	JKT	
3	STORE	ORG4	A2	18-MAY-2012 09:00	JKT	AGK	

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: L12050153
Account: 2736
Project: 2736.061
Samples: 9
Due Date: 18-MAY-2012

Samplenum	Container ID	Products
L12050153-03	967662	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-MAY-2012 15:54	RLK		
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	04-MAY-2012 15:54	RLK		
2	STORE	W1	A1	08-MAY-2012 08:09	BLG	BLG	

Comments:Products cancelled.

Samplenum	Container ID	Products
L12050153-03	967663	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-MAY-2012 15:54	RLK		
2	PREP	W1	EXT	09-MAY-2012 09:17	CEB	CLS	

Comments:Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-MAY-2012 15:54	RLK		
2	STORE	W1	A1	08-MAY-2012 08:09	BLG	BLG	

Comments:Products cancelled.

Samplenum	Container ID	Products
L12050153-03	967664	ALK

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-MAY-2012 15:54	RLK		
2	ANALYZ	W1	WET	04-MAY-2012 16:27	JDH	RLK	
3	STORE	WET	A2	14-MAY-2012 16:33	RLK	JDH	

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: L12050153
Account: 2736
Project: 2736.061
Samples: 9
Due Date: 18-MAY-2012

Samplenum	Container ID	Products
L12050153-03	967665	NO3 SO4

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-MAY-2012 15:54	RLK		
2	ANALYZ	W1	WET	04-MAY-2012 16:21	HJR	RLK	
3	STORE	WET	W1	14-MAY-2012 08:04	RLK	JDH	

Samplenum	Container ID	Products
L12050153-03	967666	PHOS TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-MAY-2012 15:54	RLK		<2
2	ANALYZ	W1	WET	07-MAY-2012 08:35	DIH	RLK	
3	STORE	WET	A2	15-MAY-2012 08:49	RLK	JBK	

Samplenum	Container ID	Products
L12050153-03	967667	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	04-MAY-2012 15:54	RLK		
2	PREP	W1	DIG	07-MAY-2012 05:22	REK	AZH	
3	ANALYZ*	DIG	METALS	08-MAY-2012 12:13	JYH	REK	
4	STORE	DIG	A2	08-MAY-2012 13:42	JKS	BRG	

Sample extract/digestate/leachate

Samplenum	Container ID	Products
L12050153-04	967668	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	04-MAY-2012 15:54	RLK		
2	PREP	W1	DIG	07-MAY-2012 05:22	REK	AZH	
3	ANALYZ*	DIG	METALS	08-MAY-2012 12:13	JYH	REK	
4	STORE	DIG	A2	08-MAY-2012 13:42	JKS	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: L12050153
Account: 2736
Project: 2736.061
Samples: 9
Due Date: 18-MAY-2012

Samplenum	Container ID	Products
L12050153-05	967669	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	04-MAY-2012 15:54	RLK		<2
2	ANALYZ	V1	ORG4	04-MAY-2012 17:55	MES	RLK	

Comments:Products cancelled.

3	STORE	ORG4	A2	18-MAY-2012 08:59	JKT	AGK	

Comments:Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	04-MAY-2012 15:54	RLK		<2
2	ANALYZ	V1	ORG4	04-MAY-2012 17:55	MES	RLK	

Comments:Products cancelled.

3	STORE	ORG4	A2	18-MAY-2012 08:59	JKT	AGK	

Comments:Products cancelled.

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	04-MAY-2012 15:54	RLK		<2
2	ANALYZ	V1	ORG4	04-MAY-2012 17:55	MES	RLK	

Comments:Products cancelled.

3	STORE	ORG4	A2	18-MAY-2012 08:59	JKT	AGK	

Comments:Products cancelled.

Samplenum	Container ID	Products
L12050153-05	967670	826-SPE 827-PAHL 827-SPE-DIOX RSK175EXT

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	04-MAY-2012 15:54	RLK		
2	ANALYZ	V1	ORG4	07-MAY-2012 09:24	MRT	JKT	
3	STORE	ORG4	A2	18-MAY-2012 09:00	JKT	AGK	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	04-MAY-2012 15:54	RLK		
2	ANALYZ	V1	ORG4	07-MAY-2012 09:24	MRT	JKT	
3	STORE	ORG4	A2	18-MAY-2012 09:00	JKT	AGK	

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	04-MAY-2012 15:54	RLK		
2	ANALYZ	V1	ORG4	07-MAY-2012 09:24	MRT	JKT	
3	STORE	ORG4	A2	18-MAY-2012 09:00	JKT	AGK	

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: L12050153
Account: 2736
Project: 2736.061
Samples: 9
Due Date: 18-MAY-2012

Samplenum	Container ID	Products
L12050153-05	967671	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-MAY-2012 15:54	RLK		
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	04-MAY-2012 15:54	RLK		
2	STORE	W1	A1	08-MAY-2012 08:09	BLG	BLG	

Comments:Products cancelled.

Samplenum	Container ID	Products
L12050153-05	967672	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-MAY-2012 15:54	RLK		
2	PREP	W1	EXT	09-MAY-2012 09:17	CEB	CLS	

Comments:Products cancelled.

3	DISP	EXT	DISP	10-MAY-2012 08:41	RLB	RLB	

Comments:Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-MAY-2012 15:54	RLK		
2	STORE	W1	A1	08-MAY-2012 08:09	BLG	BLG	

Comments:Products cancelled.

Samplenum	Container ID	Products
L12050153-05	967673	ALK

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-MAY-2012 15:54	RLK		
2	ANALYZ	W1	WET	04-MAY-2012 16:27	JDH	RLK	
3	STORE	WET	A2	14-MAY-2012 16:32	RLK	JDH	

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: L12050153
Account: 2736
Project: 2736.061
Samples: 9
Due Date: 18-MAY-2012

Samplenum	Container ID	Products
L12050153-05	967674	NO3 SO4

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-MAY-2012 15:54	RLK		
2	ANALYZ	W1	WET	04-MAY-2012 16:21	HJR	RLK	
3	STORE	WET	W1	14-MAY-2012 08:04	RLK	JDH	

Samplenum	Container ID	Products
L12050153-05	967675	PHOS TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-MAY-2012 15:54	RLK		<2
2	ANALYZ	W1	WET	07-MAY-2012 08:35	DIH	RLK	
3	STORE	WET	A2	15-MAY-2012 08:49	RLK	JBK	

Samplenum	Container ID	Products
L12050153-05	967676	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	04-MAY-2012 15:54	RLK		
2	PREP	W1	DIG	07-MAY-2012 05:22	REK	AZH	
3	ANALYZ*	DIG	METALS	08-MAY-2012 12:13	JYH	REK	
4	STORE	DIG	A2	08-MAY-2012 13:42	JKS	BRG	

Sample extract/digestate/leachate

Samplenum	Container ID	Products
L12050153-06	967677	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	04-MAY-2012 15:54	RLK		
2	PREP	W1	DIG	07-MAY-2012 05:22	REK	AZH	
3	ANALYZ*	DIG	METALS	08-MAY-2012 12:13	JYH	REK	
4	STORE	DIG	A2	08-MAY-2012 13:42	JKS	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: L12050153
Account: 2736
Project: 2736.061
Samples: 9
Due Date: 18-MAY-2012

Samplenum	Container ID	Products
L12050153-07	967678	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	04-MAY-2012 15:54	RLK		<2
2	ANALYZ	V1	ORG4	04-MAY-2012 17:55	MES	RLK	

Comments:Products cancelled.

3	STORE	ORG4	A2	18-MAY-2012 08:59	JKT	AGK	

Comments:Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	04-MAY-2012 15:54	RLK		<2
2	ANALYZ	V1	ORG4	04-MAY-2012 17:56	MES	RLK	

Comments:Products cancelled.

3	STORE	ORG4	A2	18-MAY-2012 08:59	JKT	AGK	

Comments:Products cancelled.

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	04-MAY-2012 15:54	RLK		<2
2	ANALYZ	V1	ORG4	04-MAY-2012 17:56	MES	RLK	

Comments:Products cancelled.

3	STORE	ORG4	A2	18-MAY-2012 08:59	JKT	AGK	

Comments:Products cancelled.

Samplenum	Container ID	Products
L12050153-07	967679	826-SPE 827-PAHL 827-SPE-DIOX RSK175EXT

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	04-MAY-2012 15:54	RLK		
2	ANALYZ	V1	ORG4	07-MAY-2012 09:24	MRT	JKT	
3	STORE	ORG4	A2	18-MAY-2012 09:00	JKT	AGK	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	04-MAY-2012 15:54	RLK		
2	ANALYZ	V1	ORG4	07-MAY-2012 09:24	MRT	JKT	
3	STORE	ORG4	A2	18-MAY-2012 09:00	JKT	AGK	

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	04-MAY-2012 15:54	RLK		
2	ANALYZ	V1	ORG4	07-MAY-2012 09:24	MRT	JKT	
3	STORE	ORG4	A2	18-MAY-2012 09:00	JKT	AGK	

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: L12050153
Account: 2736
Project: 2736.061
Samples: 9
Due Date: 18-MAY-2012

Samplenum	Container ID	Products
L12050153-07	967680	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-MAY-2012 15:54	RLK		
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	04-MAY-2012 15:54	RLK		
2	STORE	W1	A1	08-MAY-2012 08:09	BLG	BLG	

Comments:Products cancelled.

Samplenum	Container ID	Products
L12050153-07	967681	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-MAY-2012 15:54	RLK		
2	PREP	W1	EXT	09-MAY-2012 09:17	CEB	CLS	

Comments:Products cancelled.

3	DISP	EXT	DISP	10-MAY-2012 08:40	RLB	RLB	

Comments:Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-MAY-2012 15:54	RLK		
2	STORE	W1	A1	08-MAY-2012 08:09	BLG	BLG	

Comments:Products cancelled.

Samplenum	Container ID	Products
L12050153-07	967682	ALK

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-MAY-2012 15:54	RLK		
2	ANALYZ	W1	WET	04-MAY-2012 16:27	JDH	RLK	
3	STORE	WET	A2	14-MAY-2012 16:33	RLK	JDH	

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: L12050153
Account: 2736
Project: 2736.061
Samples: 9
Due Date: 18-MAY-2012

Samplenum	Container ID	Products
L12050153-07	967683	NO3 SO4

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-MAY-2012 15:54	RLK		
2	ANALYZ	W1	WET	04-MAY-2012 16:21	HJR	RLK	
3	STORE	WET	W1	14-MAY-2012 08:04	RLK	JDH	

Samplenum	Container ID	Products
L12050153-07	967684	PHOS TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	04-MAY-2012 15:54	RLK		<2
2	ANALYZ	W1	WET	07-MAY-2012 08:35	DIH	RLK	
3	STORE	WET	A2	15-MAY-2012 08:49	RLK	JBK	

Samplenum	Container ID	Products
L12050153-07	967685	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	04-MAY-2012 15:54	RLK		
2	PREP	W1	DIG	07-MAY-2012 05:22	REK	AZH	
3	ANALYZ*	DIG	METALS	08-MAY-2012 12:13	JYH	REK	
4	STORE	DIG	A2	08-MAY-2012 13:42	JKS	BRG	

Sample extract/digestate/leachate

Samplenum	Container ID	Products
L12050153-08	967686	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	04-MAY-2012 15:54	RLK		
2	PREP	W1	DIG	07-MAY-2012 05:22	REK	AZH	
3	ANALYZ*	DIG	METALS	08-MAY-2012 12:13	JYH	REK	
4	STORE	DIG	A2	08-MAY-2012 13:42	JKS	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: L12050153
Account: 2736
Project: 2736.061
Samples: 9
Due Date: 18-MAY-2012

Samplenum	Container ID	Products
L12050153-09	967687	826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	04-MAY-2012 15:54	RLK		<2
2	ANALYZ	V1	ORG4	04-MAY-2012 17:56	MES	RLK	
3	STORE	ORG4	A2	18-MAY-2012 08:59	JKT	AGK	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	04-MAY-2012 15:54	RLK		<2
2	ANALYZ	V1	ORG4	04-MAY-2012 17:56	MES	RLK	
3	STORE	ORG4	A2	18-MAY-2012 08:59	JKT	AGK	

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 RSK0I/GC-FID

Isobutane
n-Butane
Propane
Propylene
Propyne

OVL HPLC07/HPLC-MS-MS

Hexamethylphosphoramide (XMPA-LCMS)

SOLID AND HAZARDOUS CHEMICALS

OVL HPLC0S-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)
Isoprene
Methylacetate
Methylcyclohexane
n-Hexane
T-amylmethylether (TAME)