Microbac



Laboratory Report Number: L12050171

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 #: L12050171
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 #
0014145	H	3.0		345750271100260079576316274768 10
0017171	H	0.0		1015931280610004575000795763162736
0013141	H	0.0		1001847380610004575000872646572150

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

Samples Received

Client ID	Laboratory ID	Date Collected	Date Received
MW-12-050412	L12050171-01	05/04/2012 10:30	05/05/2012 09:48
MW-12-050412	L12050171-02	05/04/2012 10:30	05/05/2012 09:48
MW-12-050412	L12050171-03	05/04/2012 10:30	05/05/2012 09:48
MW-12-050412	L12050171-04	05/04/2012 10:30	05/05/2012 09:48
MW-12-050412	L12050171-05	05/04/2012 10:30	05/05/2012 09:48
MW-12-050412	L12050171-06	05/04/2012 10:30	05/05/2012 09:48
PZ-01-050412	L12050171-07	05/04/2012 12:07	05/05/2012 09:48
PZ-01-050412	L12050171-08	05/04/2012 12:07	05/05/2012 09:48
TB-050412	L12050171-09	05/04/2012 08:05	05/05/2012 09:48

Microbac REPORT L12050171
PREPARED FOR CH2MHILL, Inc
WORK ID:

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1.0 Summary Data

1.1 Narratives

Login Number: L12050171
Department: Volatiles
Analyst: Anthony Canter

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, 1,1,1-Trichloroethane, Carbon Tetrachloride, Trichlorofluoromethane. 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: Recoveries out of range were observed for the following analytes: Dichlorodifluoromethane, Methyl acetate. Please see the applicable QC report for a detailed presentation of the failures.

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.

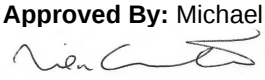
Reason #3: Improperly Integrated Isomers and/or coeluting compounds. This system often fails to distinguish coeluting compounds and or isomers. The integration areas and concentrations are wrong, and they must be corrected by manual integration. Prime examples are benzo(k)fluoranthene and benzo(b)fluoranthene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

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Narrative ID: 46740
Approved By: Michael Albertson



Login Number: L12050171
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: Recoveries out of range were observed for the following analytes: Methane. Please see the applicable QC report for a detailed presentation of the failures.

SAMPLES

Samples: Samples 01, 07, required dilution analyses.

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: 46164
Approved By: Michael Albertson



Login Number: L12050171
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, 3,3'-Dichlorobenzidine, 3-Nitroaniline. 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 above the reporting limit in the samples associated with the LCS.

Matrix Spikes: Recoveries out of range were observed for the following analytes: 3-Nitroaniline, Hexachlorocyclopentadiene. Please see the applicable QC report for a detailed presentation of the failures.

The MS/MSD pair exceeded % RPD criteria for six (6) analytes, however the recoveries for both the MS and MSD are within specified limits.

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: 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: 46419
Approved By: Mike Cochran



Login Number: L12050171
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: All acceptance criteria were met.

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: 46195
Approved By: Mike Cochran



Login Number: L12050171
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.

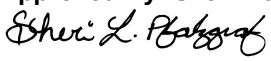
Serial Dilution/Post Digestion Spikes: WG397657 - All acceptance criteria were met.

Matrix Spikes: WG397657 - Sample 01 was chosen by the client for MS/MSD analysis. Samples 03(MS) and 05(MSD) yielded noncompliant recoveries for three analytes. Sample 02 was chosen by the client for MS/MSD analysis. Samples 04(MS) and 06(MSD) yielded noncompliant recoveries for three analytes.

SAMPLES

Samples: All acceptance criteria were met.

Narrative ID: 46276
Approved By: Sheri Pfalzgraf



Login Number: L12050171
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: WG397375 - All acceptance criteria were met.

Matrix Spikes: WG397375 - Sample 01 was chosen by the client for MS/MSD analysis. Samples 03(MS) and 05(MSD) met all acceptance criteria. Sample 02 was chosen by the client for MS/MSD analysis. Samples 04(MS) and 06(MSD) met all acceptance criteria.

SAMPLES

Samples: All acceptance criteria were met.

Narrative ID: 46074
Approved By: Sheri Pfalzgraf

Login Number: L12050171
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: WG397594 - Sample 01 was chosen by the client for MS/MSD analysis. Samples 03(MS) and 05(MSD) met all acceptance criteria. Sample 02 was chosen by the client for MS/MSD analysis. Samples 04(MS) and 06(MSD) met all acceptance criteria.

SAMPLES

Samples: All acceptance criteria were met.

Narrative ID: 46141
Approved By: Sheri Pfalzgraf



Login Number: L12050171
Department: Conventionals
Analyst: Jeremy Kinney

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: Recoveries out of range were observed for the following analytes: Alkalinity, Total (as CaCO3). Please see the applicable QC report for a detailed presentation of the failures.

Duplicates: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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Narrative ID: 46785
Approved By: Deanna Hesson

Login Number: L12050171
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.

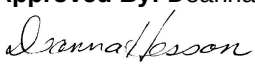
Duplicates: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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Narrative ID: 46788
Approved By: Deanna Hesson



Login Number: L12050171
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.

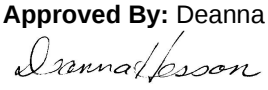
Duplicates: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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Narrative ID: 46786
Approved By: Deanna Hesson



Login Number: L12050171
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.

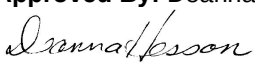
Matrix Spikes: Recoveries out of range were observed for the following analytes: Sulfate. Please see the applicable QC report for a detailed presentation of the failures.

SAMPLES

Samples: All acceptance criteria were met.

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Narrative ID: 46787
Approved By: Deanna Hesson



Login Number: L12050171
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.

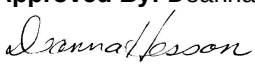
Matrix Spikes: All acceptance criteria were met.

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: 46789
Approved By: Deanna Hesson



1.2 Certificate of Analysis

Certificate of Analysis

Sample #:	L12050171-01	**PrePrep Method:**	N/A	**Instrument:**	HPMS8
Client ID:	MW-12-050412	**Prep Method:**	5030B/5030C/5035A	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	8260B	**Cal Date:**	03/27/2012 15:49
Workgroup #:	WG397815	**Analyst:**	ADC	**Run Date:**	05/12/2012 12:23
Collect Date:	05/04/2012 10:30	**Dilution:**	1	**File ID:**	8M379023
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	110	80	120	
Dibromofluoromethane	102	86	118	
p-Bromofluorobenzene	98.8	86	115	
Toluene-d8	99.8	88	110	

U	Not detected at or above adjusted sample detection limit.

Sample #: L12050171-01
Client ID: MW-12-050412
Matrix: Water
Workgroup #: WG397366
Collect Date: 05/04/2012 10:30
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: 05/08/2012 18:51
File ID: 16G32334

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	4730	E	5.00	1.00
Carbon Dioxide	124-38-9	46600		10000	2500

E	Semiquantitative result (out of calibration range)

Certificate of Analysis

Sample #:	L12050171-01	**PrePrep Method:**	N/A	**Instrument:**	HP16
Client ID:	MW-12-050412	**Prep Method:**	5021	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	RSK175	**Cal Date:**	04/30/2012 15:04
Workgroup #:	WG397514	**Analyst:**	MDA	**Run Date:**	05/09/2012 15:51
Collect Date:	05/04/2012 10:30	**Dilution:**	20	**File ID:**	16G32365
Sample Tag:	DL01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	4180		100	20.0
Carbon Dioxide	124-38-9	52200		200000	50000

Sample #:	L12050171-01	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-12-050412	**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:**	05/14/2012 15:41
Collect Date:	05/04/2012 10:30	**Dilution:**	1	**File ID:**	4M60873
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
unknown		5.96		0.000	0.000
unknown		10.3		0.000	0.000
unknown		4.59		0.000	0.000
unknown		7.13		0.000	0.000
unknown		11.0		0.000	0.000
unknown		6.56		0.000	0.000
unknown		9.33		0.000	0.000

Sample #:	L12050171-01	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-12-050412	**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:**	05/14/2012 15:41
Collect Date:	05/04/2012 10:30	**Dilution:**	1	**File ID:**	4M60873
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

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Analyte	CAS #	Result	Qual	RL	MDL
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
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	5.36		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

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
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	93.6	10	123	
2-Fluorobiphenyl	66.8	43	116	
2-Fluorophenol	61.2	21	100	
Nitrobenzene-d5	69.8	35	114	
p-Terphenyl-d14	108	33	141	
Phenol-d5	67.0	10	94	

U	Not detected at or above adjusted sample detection limit.

Sample #: L12050171-01
Client ID: MW-12-050412
Matrix: Water
Workgroup #: WG397601
Collect Date: 05/04/2012 10:30
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 15:10
File ID: 7M54965

Analyte	CAS #	Result	Qual	RL	MDL
2-Methylnaphthalene	91-57-6		U	0.0543	0.0272
Acenaphthene	83-32-9		U	0.0543	0.0272
Acenaphthylene	208-96-8		U	0.0543	0.0272
Anthracene	120-12-7		U	0.0543	0.0272
Benzo(a)anthracene	56-55-3		U	0.0543	0.0272
Benzo(a)pyrene	50-32-8		U	0.0543	0.0272
Benzo(b)fluoranthene	205-99-2		U	0.0543	0.0272
Benzo(g,h,i)perylene	191-24-2		U	0.0543	0.0272

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Benzo(k)fluoranthene	207-08-9		U	0.0543	0.0272
Chrysene	218-01-9		U	0.0543	0.0272
Dibenzo(a,h)anthracene	53-70-3		U	0.0543	0.0272
Fluoranthene	206-44-0		U	0.0543	0.0272
Fluorene	86-73-7		U	0.0543	0.0272
Indeno(1,2,3-cd)pyrene	193-39-5		U	0.0543	0.0272
Naphthalene	91-20-3		U	0.0543	0.0272
Phenanthrene	85-01-8		U	0.0543	0.0272
Pyrene	129-00-0		U	0.0543	0.0272

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2-Fluorobiphenyl	50.9	43	116	
Nitrobenzene-d5	55.6	35	114	
p-Terphenyl-d14	79.1	33	141	

U	Not detected at or above adjusted sample detection limit.

Sample #: L12050171-01
Client ID: MW-12-050412
Matrix: Water
Workgroup #: WG397657
Collect Date: 05/04/2012 10:30
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: 05/10/2012 07:40
Cal Date: 05/11/2012 11:47
Run Date: 05/11/2012 12:44
File ID: P2.051112.124416

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5		U	0.100	0.0500
Barium, Total	7440-39-3	0.122		0.0100	0.00250
Beryllium, Total	7440-41-7		U	0.00200	0.000500
Cadmium, Total	7440-43-9	0.000383		0.000500	0.000250
Calcium, Total	7440-70-2	131		0.200	0.100
Chromium, Total	7440-47-3		U	0.00500	0.00250
Cobalt, Total	7440-48-4		U	0.0200	0.00250
Copper, Total	7440-50-8		U	0.0200	0.00500
Iron, Total	7439-89-6	0.376		0.100	0.0250
Magnesium, Total	7439-95-4	21.0		0.500	0.250
Manganese, Total	7439-96-5	0.280		0.0100	0.00500
Nickel, Total	7440-02-0		U	0.0400	0.00500
Potassium, Total	7440-09-7	5.24		1.00	0.250
Silver, Total	7440-22-4		U	0.0100	0.00500
Sodium, Total	7440-23-5	118		0.500	0.250
Vanadium, Total	7440-62-2	0.00598		0.0100	0.00500
Zinc, Total	7440-66-6	0.0485		0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Sample #: L12050171-01 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: MW-12-050412 **Prep Method:** 3015 **Prep Date:** 05/08/2012 10:09
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 05/08/2012 09:20
Workgroup #: WG397375 **Analyst:** JYH **Run Date:** 05/08/2012 15:03
Collect Date: 05/04/2012 10:30 **Dilution:** 1 **File ID:** NI.050812.150341
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		U	0.00100	0.000500
Arsenic, Total	7440-38-2	0.000833		0.00100	0.000500
Lead, Total	7439-92-1	0.000651		0.00100	0.000500
Selenium, Total	7782-49-2	0.00236		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 #: L12050171-01 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-12-050412 **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 11:55
Collect Date: 05/04/2012 10:30 **Dilution:** 1 **File ID:** HY.051012.115538
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 #: L12050171-01 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-12-050412 **Prep Method:** 310.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 310.2 **Cal Date:** 05/10/2012 14:05
Workgroup #: WG397664 **Analyst:** JBK **Run Date:** 05/10/2012 14:21
Collect Date: 05/04/2012 10:30 **Dilution:** 1 **File ID:** SC120510002.035
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Alkalinity, Total (as CaCO3)		290		20.0	10.0

Certificate of Analysis

Sample #: L12050171-01 | **PrePrep Method:** N/A | **Instrument:** SMARTCHEM
Client ID: MW-12-050412 | **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: 05/04/2012 10:30 | **Dilution:** 1 | **File ID:** SC12050910173301
Sample Tag: | **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8	1.58		0.0500	0.0250

Sample #: L12050171-01 | **PrePrep Method:** N/A | **Instrument:** SMARTCHEM
Client ID: MW-12-050412 | **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 08:50
Collect Date: 05/04/2012 10:30 | **Dilution:** 1 | **File ID:** SC120515001.022
Sample Tag: 01 | **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Phosphorus, Total	7723-14-0	0.110		0.200	0.100

Sample #: L12050171-01 | **PrePrep Method:** N/A | **Instrument:** SMARTCHEM
Client ID: MW-12-050412 | **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 14:19
Collect Date: 05/04/2012 10:30 | **Dilution:** 5 | **File ID:** SC120507003.026
Sample Tag: DL01 | **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	114		25.0	12.5

Sample #: L12050171-01 | **PrePrep Method:** N/A | **Instrument:** TOC-VWP
Client ID: MW-12-050412 | **Prep Method:** 415.1 | **Prep Date:** N/A
Matrix: Water | **Analytical Method:** 415.1 | **Cal Date:** 12/06/2011 09:40
Workgroup #: WG397599 | **Analyst:** JBK | **Run Date:** 05/12/2012 14:57
Collect Date: 05/04/2012 10:30 | **Dilution:** 1 | **File ID:** TC05122012.022
Sample Tag: 01 | **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		5.89		1.00	0.500

Certificate of Analysis

Sample #:	L12050171-02	**PrePrep Method:**	N/A	**Instrument:**	PE-ICP2
Client ID:	MW-12-050412	**Prep Method:**	3005A	**Prep Date:**	05/10/2012 07:40
Matrix:	Water	**Analytical Method:**	6010B	**Cal Date:**	05/11/2012 11:47
Workgroup #:	WG397657	**Analyst:**	KHR	**Run Date:**	05/11/2012 12:50
Collect Date:	05/04/2012 10:30	**Dilution:**	1	**File ID:**	P2.051112.125016
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	0.116		0.0100	0.00250
Beryllium, Dissolved	7440-41-7		U	0.00200	0.000500
Cadmium, Dissolved	7440-43-9		U	0.000500	0.000250
Calcium, Dissolved	7440-70-2	125		0.200	0.100
Chromium, Dissolved	7440-47-3		U	0.00500	0.00250
Cobalt, Dissolved	7440-48-4		U	0.0200	0.00250
Copper, Dissolved	7440-50-8		U	0.0200	0.00500
Iron, Dissolved	7439-89-6	0.245		0.100	0.0250
Magnesium, Dissolved	7439-95-4	19.3		0.500	0.250
Manganese, Dissolved	7439-96-5	0.264		0.0100	0.00500
Nickel, Dissolved	7440-02-0		U	0.0400	0.00500
Potassium, Dissolved	7440-09-7	4.97		1.00	0.250
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Sodium, Dissolved	7440-23-5	108		0.500	0.250
Vanadium, Dissolved	7440-62-2		U	0.0100	0.00500
Zinc, Dissolved	7440-66-6		U	0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Sample #:	L12050171-02	**PrePrep Method:**	N/A	**Instrument:**	ICP-MS2
Client ID:	MW-12-050412	**Prep Method:**	3015	**Prep Date:**	05/08/2012 10:09
Matrix:	Water	**Analytical Method:**	6020	**Cal Date:**	05/08/2012 09:20
Workgroup #:	WG397375	**Analyst:**	JYH	**Run Date:**	05/08/2012 15:32
Collect Date:	05/04/2012 10:30	**Dilution:**	1	**File ID:**	NI.050812.153225
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Dissolved	7440-36-0		U	0.00100	0.000500
Arsenic, Dissolved	7440-38-2	0.000853		0.00100	0.000500
Lead, Dissolved	7439-92-1		U	0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.00205		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 #: L12050171-02 | **PrePrep Method:** N/A | **Instrument:** HYDRA
Client ID: MW-12-050412 | **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 11:57
Collect Date: 05/04/2012 10:30 | **Dilution:** 1 | **File ID:** HY.051012.115750
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 #: L12050171-03 | **PrePrep Method:** N/A | **Instrument:** HPMS8
Client ID: MW-12-050412 | **Prep Method:** 5030B/5030C/5035A | **Prep Date:** N/A
Matrix: Water | **Analytical Method:** 8260B | **Cal Date:** 03/27/2012 15:49
Workgroup #: WG397815 | **Analyst:** ADC | **Run Date:** 05/12/2012 10:15
Collect Date: 05/04/2012 10:30 | **Dilution:** 1 | **File ID:** 8M379019
Sample Tag: 01 | **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1-Trichloroethane	71-55-6	24.4		1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5	18.1		1.00	0.200
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	21.7		5.00	2.00
1,1,2-Trichloroethane	79-00-5	19.5		1.00	0.250
1,1-Dichloroethane	75-34-3	21.5		1.00	0.125
1,1-Dichloroethene	75-35-4	23.4		1.00	0.500
1,2,3-Trichlorobenzene	87-61-6	20.4		1.00	0.500
1,2,4-Trichlorobenzene	120-82-1	19.6		1.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8	18.4		5.00	1.00
1,2-Dibromoethane	106-93-4	19.1		1.00	0.250
1,2-Dichlorobenzene	95-50-1	20.1		1.00	0.125
1,2-Dichloroethane	107-06-2	23.1		1.00	0.250
cis-1,2-Dichloroethene	156-59-2	21.5		1.00	0.250
trans-1,2-Dichloroethene	156-60-5	22.2		1.00	0.250
1,2-Dichloropropane	78-87-5	20.6		1.00	0.200
1,3-Dichlorobenzene	541-73-1	20.1		1.00	0.250
1,4-Dichlorobenzene	106-46-7	19.9		1.00	0.125
2-Butanone	78-93-3	17.6		10.0	2.50
2-Hexanone	591-78-6	16.7		10.0	2.50
4-Methyl-2-pentanone	108-10-1	18.0		10.0	2.50
Acetone	67-64-1	19.8		10.0	2.50

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Benzene	71-43-2	20.5		1.00	0.125
Bromochloromethane	74-97-5	22.6		1.00	0.200
Bromodichloromethane	75-27-4	23.0		1.00	0.250
Bromoform	75-25-2	20.8		1.00	0.500
Bromomethane	74-83-9	15.8		1.00	0.500
Carbon disulfide	75-15-0	22.2		1.00	0.500
Carbon tetrachloride	56-23-5	25.4		1.00	0.250
Chlorobenzene	108-90-7	20.1		1.00	0.125
Chloroethane	75-00-3	21.7		1.00	0.500
Chloroform	67-66-3	21.8		1.00	0.125
Chloromethane	74-87-3	24.8		1.00	0.500
cis-1,3-Dichloropropene	10061-01-5	21.9		1.00	0.250
Cyclohexane	110-82-7	20.7		5.00	1.00
Dibromochloromethane	124-48-1	21.4		1.00	0.250
Dichlorodifluoromethane	75-71-8	32.6		1.00	0.250
Ethyl benzene	100-41-4	20.7		1.00	0.250
Isopropylbenzene	98-82-8	18.7		1.00	0.250
Methyl acetate	79-20-9	13.7		5.00	1.00
Methyl tert-butyl ether	1634-04-4	19.8		1.00	0.500
Methylcyclohexane	108-87-2	20.0		5.00	1.00
Methylene chloride	75-09-2	20.4		5.00	0.250
m,p-Xylene	179601-23-1	40.9		1.00	0.500
o-Xylene	95-47-6	19.9		1.00	0.250
Styrene	100-42-5	18.5		1.00	0.125
Tetrachloroethene	127-18-4	21.6		1.00	0.250
Toluene	108-88-3	19.4		1.00	0.250
trans-1,3-Dichloropropene	10061-02-6	18.1		1.00	0.500
Trichloroethene	79-01-6	22.5		1.00	0.250
Trichlorofluoromethane	75-69-4	26.7		1.00	0.250
Vinyl chloride	75-01-4	24.9		1.00	0.250
Epichlorohydrin	106-89-8			0.000	0.000

Surrogate	Recovery	Lower Limit	Upper Limit	Q
1,2-Dichloroethane-d4	108	80	120	
Dibromofluoromethane	100	86	118	
p-Bromofluorobenzene	98.7	86	115	
Toluene-d8	101	88	110	

Certificate of Analysis

Sample #:	L12050171-03	**PrePrep Method:**	N/A	**Instrument:**	HP16
Client ID:	MW-12-050412	**Prep Method:**	5021	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	RSK175	**Cal Date:**	04/30/2012 15:04
Workgroup #:	WG397366	**Analyst:**	FJB	**Run Date:**	05/08/2012 19:00
Collect Date:	05/04/2012 10:30	**Dilution:**	1	**File ID:**	16G32335
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	4710	E	5.00	1.00
Carbon Dioxide	124-38-9	61300		10000	2500

E	Semiquantitative result (out of calibration range)

Sample #:	L12050171-03	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-12-050412	**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:**	05/14/2012 16:17
Collect Date:	05/04/2012 10:30	**Dilution:**	1	**File ID:**	4M60874
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
1,1'-Biphenyl	92-52-4	43.3		22.2	2.78
1,3,5-Trinitrobenzene	99-35-4	59.7		5.56	2.78
1,3-Dinitrobenzene	99-65-0	56.5		5.56	2.78
1,4-Dioxane	123-91-1	31.5		11.1	5.56
2,4,5-Trichlorophenol	95-95-4	58.4		5.56	2.78
2,4,6-Trichlorophenol	88-06-2	52.9		5.56	2.78
2,4-Dichlorophenol	120-83-2	49.0		5.56	2.78
2,4-Dimethylphenol	105-67-9	46.0		5.56	2.78
2,4-Dinitrophenol	51-28-5	55.6		27.8	13.9
2,4-Dinitrotoluene	121-14-2	61.6		5.56	2.78
2,6-Dinitrotoluene	606-20-2	57.3		5.56	2.78
2-Chloronaphthalene	91-58-7	52.5		5.56	2.78
2-Chlorophenol	95-57-8	43.7		5.56	2.78
2-Methylnaphthalene	91-57-6	41.9		5.56	2.78
2-Methylphenol	95-48-7	45.2		5.56	2.78
2-Nitroaniline	88-74-4	45.5		27.8	13.9
2-Nitrophenol	88-75-5	46.6		5.56	2.78
3-Nitroaniline	99-09-2	76.0		27.8	13.9
3,3'-Dichlorobenzidine	91-94-1	42.9		5.56	2.78
3-,4-Methylphenol	106-44-5	51.5		5.56	2.78
4-Bromophenyl-phenylether	101-55-3	51.0		5.56	2.78

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
4-Chloroaniline	106-47-8	47.5		5.56	2.78
4-Nitrophenol	100-02-7	56.8		27.8	13.9
Acenaphthene	83-32-9	47.2		5.56	2.78
Acenaphthylene	208-96-8	49.6		5.56	2.78
Anthracene	120-12-7	46.4		5.56	2.78
Benzo(a)anthracene	56-55-3	45.5		5.56	2.78
Benzo(a)pyrene	50-32-8	46.6		5.56	2.78
Benzo(b)fluoranthene	205-99-2	48.2		5.56	2.78
Benzo(g,h,i)Perylene	191-24-2	29.9		5.56	2.78
Benzo(k)fluoranthene	207-08-9	46.6		5.56	2.78
Benzoic acid	65-85-0	17.0		22.2	11.1
Benzyl alcohol	100-51-6	46.4		5.56	2.78
Bis(2-Chloroethyl)ether	111-44-4	43.5		5.56	2.78
Bis(2-Chloroethoxy)Methane	111-91-1	52.3		5.56	2.78
bis(2-Ethylhexyl)phthalate	117-81-7	54.1		5.56	2.78
Butylbenzylphthalate	85-68-7	56.6		5.56	2.78
Carbazole	86-74-8	58.6		22.2	2.78
Chrysene	218-01-9	47.3		5.56	2.78
Di-N-Butylphthalate	84-74-2	53.5		5.56	2.78
Di-n-octylphthalate	117-84-0	57.4		5.56	2.78
Dibenzo(a,h)Anthracene	53-70-3	35.1		5.56	2.78
Dibenzofuran	132-64-9	51.0		5.56	2.78
Diethylphthalate	84-66-2	61.3		5.56	2.78
Dimethylphthalate	131-11-3	58.8		5.56	2.78
Fluoranthene	206-44-0	47.4		5.56	2.78
Fluorene	86-73-7	51.9		5.56	2.78
Hexachlorobenzene	118-74-1	46.2		5.56	2.78
Hexachlorobutadiene	87-68-3	26.0		5.56	2.78
Hexachlorocyclopentadiene	77-47-4	3.91		5.56	2.78
Hexachloroethane	67-72-1	19.9		5.56	2.78
Indeno(1,2,3-cd)pyrene	193-39-5	34.5		5.56	2.78
Isophorone	78-59-1	48.9		5.56	2.78
N-Nitrosodiphenylamine	86-30-6	96.3		5.56	2.78
Naphthalene	91-20-3	41.4		5.56	2.78
Nitrobenzene	98-95-3	53.9		5.56	2.78
Pentachlorophenol	87-86-5	59.7		27.8	13.9
Phenanthrene	85-01-8	52.7		5.56	2.78
Phenol	108-95-2	45.6		5.56	2.78
Pyrene	129-00-0	51.2		5.56	2.78

Certificate of Analysis

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2,4,6-Tribromophenol	104	10	123	
2-Fluorobiphenyl	84.2	43	116	
2-Fluorophenol	77.8	21	100	
Nitrobenzene-d5	84.7	35	114	
p-Terphenyl-d14	109	33	141	
Phenol-d5	83.6	10	94	

Sample #: L12050171-03
Client ID: MW-12-050412
Matrix: Water
Workgroup #: WG397601
Collect Date: 05/04/2012 10:30
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 15:37
File ID: 7M54966

Analyte	CAS #	Result	Qual	RL	MDL
2-Methylnaphthalene	91-57-6	0.806		0.0575	0.0287
Acenaphthene	83-32-9	0.758		0.0575	0.0287
Acenaphthylene	208-96-8	0.736		0.0575	0.0287
Anthracene	120-12-7	0.841		0.0575	0.0287
Benzo(a)anthracene	56-55-3	0.892		0.0575	0.0287
Benzo(a)pyrene	50-32-8	0.967		0.0575	0.0287
Benzo(b)fluoranthene	205-99-2	0.914		0.0575	0.0287
Benzo(g,h,i)perylene	191-24-2	0.874		0.0575	0.0287
Benzo(k)fluoranthene	207-08-9	0.934		0.0575	0.0287
Chrysene	218-01-9	0.978		0.0575	0.0287
Dibenzo(a,h)anthracene	53-70-3	0.888		0.0575	0.0287
Fluoranthene	206-44-0	0.986		0.0575	0.0287
Fluorene	86-73-7	0.742		0.0575	0.0287
Indeno(1,2,3-cd)pyrene	193-39-5	0.866		0.0575	0.0287
Naphthalene	91-20-3	0.736		0.0575	0.0287
Phenanthrene	85-01-8	0.790		0.0575	0.0287
Pyrene	129-00-0	0.978		0.0575	0.0287

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2-Fluorobiphenyl	57.0	43	116	
Nitrobenzene-d5	61.6	35	114	
p-Terphenyl-d14	87.1	33	141	

Certificate of Analysis

Sample #:	L12050171-03	**PrePrep Method:**	N/A	**Instrument:**	PE-ICP2
Client ID:	MW-12-050412	**Prep Method:**	3005A	**Prep Date:**	05/10/2012 07:40
Matrix:	Water	**Analytical Method:**	6010B	**Cal Date:**	05/11/2012 11:47
Workgroup #:	WG397657	**Analyst:**	KHR	**Run Date:**	05/11/2012 12:56
Collect Date:	05/04/2012 10:30	**Dilution:**	1	**File ID:**	P2.051112.125616
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	5.13		0.100	0.0500
Barium, Total	7440-39-3	0.623		0.0100	0.00250
Beryllium, Total	7440-41-7	0.0239		0.00200	0.000500
Cadmium, Total	7440-43-9	0.0230		0.000500	0.000250
Calcium, Total	7440-70-2	138		0.200	0.100
Chromium, Total	7440-47-3	0.250		0.00500	0.00250
Cobalt, Total	7440-48-4	0.0990		0.0200	0.00250
Copper, Total	7440-50-8	0.245		0.0200	0.00500
Iron, Total	7439-89-6	2.32		0.100	0.0250
Magnesium, Total	7439-95-4	24.5		0.500	0.250
Manganese, Total	7439-96-5	0.532		0.0100	0.00500
Nickel, Total	7440-02-0	0.247		0.0400	0.00500
Potassium, Total	7440-09-7	30.7		1.00	0.250
Silver, Total	7440-22-4	0.197		0.0100	0.00500
Sodium, Total	7440-23-5	150		0.500	0.250
Vanadium, Total	7440-62-2	0.519		0.0100	0.00500
Zinc, Total	7440-66-6	0.536		0.0200	0.00500

Sample #:	L12050171-03	**PrePrep Method:**	N/A	**Instrument:**	ICP-MS2
Client ID:	MW-12-050412	**Prep Method:**	3015	**Prep Date:**	05/08/2012 10:09
Matrix:	Water	**Analytical Method:**	6020	**Cal Date:**	05/08/2012 09:20
Workgroup #:	WG397375	**Analyst:**	JYH	**Run Date:**	05/08/2012 15:06
Collect Date:	05/04/2012 10:30	**Dilution:**	1	**File ID:**	NI.050812.150633
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0	0.0620		0.00100	0.000500
Arsenic, Total	7440-38-2	0.0637		0.00100	0.000500
Lead, Total	7439-92-1	0.0635		0.00100	0.000500
Selenium, Total	7782-49-2	0.0614		0.00100	0.000500
Thallium, Total	7440-28-0	0.0637		0.000200	0.000100

Certificate of Analysis

Sample #: L12050171-03 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-12-050412 **Prep Method:** 7470A **Prep Date:** 05/08/2012 12:34
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 05/10/2012 09:40
Workgroup #: WG397594 **Analyst:** PDM **Run Date:** 05/10/2012 11:59
Collect Date: 05/04/2012 10:30 **Dilution:** 1 **File ID:** HY.051012.115945
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Mercury	7439-97-6	0.00436		0.000222	0.000111

Sample #: L12050171-03 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-12-050412 **Prep Method:** 310.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 310.2 **Cal Date:** 05/10/2012 14:05
Workgroup #: WG397664 **Analyst:** JBK **Run Date:** 05/10/2012 14:22
Collect Date: 05/04/2012 10:30 **Dilution:** 1 **File ID:** SC120510002.037
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Alkalinity, Total (as CaCO3)		343		20.0	10.0

Sample #: L12050171-03 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-12-050412 **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: 05/04/2012 10:30 **Dilution:** 1 **File ID:** SC12050910174201
Sample Tag: **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8	2.09		0.0500	0.0250

Sample #: L12050171-03 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-12-050412 **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 08:51
Collect Date: 05/04/2012 10:30 **Dilution:** 1 **File ID:** SC120515001.024
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Phosphorus, Total	7723-14-0	1.00		0.200	0.100

Certificate of Analysis

Sample #: L12050171-03 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-12-050412 **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 14:21
Collect Date: 05/04/2012 10:30 **Dilution:** 5 **File ID:** SC120507003.029
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	126		25.0	12.5

Sample #: L12050171-03 **PrePrep Method:** N/A **Instrument:** TOC-VWP
Client ID: MW-12-050412 **Prep Method:** 415.1 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 415.1 **Cal Date:** 12/06/2011 09:40
Workgroup #: WG397599 **Analyst:** JBK **Run Date:** 05/12/2012 15:25
Collect Date: 05/04/2012 10:30 **Dilution:** 1 **File ID:** TC05122012.024
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		15.2		1.00	0.500

Sample #: L12050171-04 **PrePrep Method:** N/A **Instrument:** PE-ICP2
Client ID: MW-12-050412 **Prep Method:** 3005A **Prep Date:** 05/10/2012 07:40
Matrix: Water **Analytical Method:** 6010B **Cal Date:** 05/11/2012 11:47
Workgroup #: WG397657 **Analyst:** KHR **Run Date:** 05/11/2012 13:02
Collect Date: 05/04/2012 10:30 **Dilution:** 1 **File ID:** P2.051112.130218
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Dissolved	7429-90-5	4.97		0.100	0.0500
Barium, Dissolved	7440-39-3	0.599		0.0100	0.00250
Beryllium, Dissolved	7440-41-7	0.0230		0.00200	0.000500
Cadmium, Dissolved	7440-43-9	0.0222		0.000500	0.000250
Calcium, Dissolved	7440-70-2	128		0.200	0.100
Chromium, Dissolved	7440-47-3	0.240		0.00500	0.00250
Cobalt, Dissolved	7440-48-4	0.0956		0.0200	0.00250
Copper, Dissolved	7440-50-8	0.236		0.0200	0.00500
Iron, Dissolved	7439-89-6	2.15		0.100	0.0250
Magnesium, Dissolved	7439-95-4	23.4		0.500	0.250
Manganese, Dissolved	7439-96-5	0.507		0.0100	0.00500
Nickel, Dissolved	7440-02-0	0.239		0.0400	0.00500
Potassium, Dissolved	7440-09-7	30.0		1.00	0.250

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Silver, Dissolved	7440-22-4	0.191		0.0100	0.00500
Sodium, Dissolved	7440-23-5	143		0.500	0.250
Vanadium, Dissolved	7440-62-2	0.498		0.0100	0.00500
Zinc, Dissolved	7440-66-6	0.464		0.0200	0.00500

Sample #: L12050171-04 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: MW-12-050412 **Prep Method:** 3015 **Prep Date:** 05/08/2012 10:09
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 05/08/2012 09:20
Workgroup #: WG397375 **Analyst:** JYH **Run Date:** 05/08/2012 15:35
Collect Date: 05/04/2012 10:30 **Dilution:** 1 **File ID:** NI.050812.153517
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Dissolved	7440-36-0	0.0627		0.00100	0.000500
Arsenic, Dissolved	7440-38-2	0.0644		0.00100	0.000500
Lead, Dissolved	7439-92-1	0.0629		0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.0613		0.00100	0.000500
Thallium, Dissolved	7440-28-0	0.0640		0.000200	0.000100

Sample #: L12050171-04 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-12-050412 **Prep Method:** 7470A **Prep Date:** 05/08/2012 12:34
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 05/10/2012 09:40
Workgroup #: WG397594 **Analyst:** PDM **Run Date:** 05/10/2012 12:01
Collect Date: 05/04/2012 10:30 **Dilution:** 1 **File ID:** HY.051012.120129
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Mercury, Dissolved	7439-97-6	0.00416		0.000222	0.000111

Sample #: L12050171-05 **PrePrep Method:** N/A **Instrument:** HPMS8
Client ID: MW-12-050412 **Prep Method:** 5030B/5030C/5035A **Prep Date:** N/A
Matrix: Water **Analytical Method:** 8260B **Cal Date:** 03/27/2012 15:49
Workgroup #: WG397815 **Analyst:** ADC **Run Date:** 05/12/2012 10:47
Collect Date: 05/04/2012 10:30 **Dilution:** 1 **File ID:** 8M379020
Sample Tag: 01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1-Trichloroethane	71-55-6	23.6		1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5	18.7		1.00	0.200
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	20.4		5.00	2.00

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
1,1,2-Trichloroethane	79-00-5	19.9		1.00	0.250
1,1-Dichloroethane	75-34-3	21.2		1.00	0.125
1,1-Dichloroethene	75-35-4	21.8		1.00	0.500
1,2,3-Trichlorobenzene	87-61-6	20.6		1.00	0.500
1,2,4-Trichlorobenzene	120-82-1	19.7		1.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8	20.4		5.00	1.00
1,2-Dibromoethane	106-93-4	20.0		1.00	0.250
1,2-Dichlorobenzene	95-50-1	20.3		1.00	0.125
1,2-Dichloroethane	107-06-2	23.2		1.00	0.250
cis-1,2-Dichloroethene	156-59-2	21.2		1.00	0.250
trans-1,2-Dichloroethene	156-60-5	22.1		1.00	0.250
1,2-Dichloropropane	78-87-5	20.6		1.00	0.200
1,3-Dichlorobenzene	541-73-1	20.0		1.00	0.250
1,4-Dichlorobenzene	106-46-7	19.8		1.00	0.125
2-Butanone	78-93-3	18.5		10.0	2.50
2-Hexanone	591-78-6	17.3		10.0	2.50
4-Methyl-2-pentanone	108-10-1	17.7		10.0	2.50
Acetone	67-64-1	21.2		10.0	2.50
Benzene	71-43-2	20.1		1.00	0.125
Bromochloromethane	74-97-5	21.8		1.00	0.200
Bromodichloromethane	75-27-4	23.2		1.00	0.250
Bromoform	75-25-2	21.9		1.00	0.500
Bromomethane	74-83-9	11.7		1.00	0.500
Carbon disulfide	75-15-0	21.0		1.00	0.500
Carbon tetrachloride	56-23-5	24.4		1.00	0.250
Chlorobenzene	108-90-7	19.9		1.00	0.125
Chloroethane	75-00-3	20.2		1.00	0.500
Chloroform	67-66-3	21.6		1.00	0.125
Chloromethane	74-87-3	22.8		1.00	0.500
cis-1,3-Dichloropropene	10061-01-5	21.6		1.00	0.250
Cyclohexane	110-82-7	19.9		5.00	1.00
Dibromochloromethane	124-48-1	22.1		1.00	0.250
Dichlorodifluoromethane	75-71-8	29.8		1.00	0.250
Ethyl benzene	100-41-4	20.2		1.00	0.250
Isopropylbenzene	98-82-8	18.1		1.00	0.250
Methyl acetate	79-20-9	14.1		5.00	1.00
Methyl tert-butyl ether	1634-04-4	20.5		1.00	0.500
Methylcyclohexane	108-87-2	18.8		5.00	1.00
Methylene chloride	75-09-2	20.1		5.00	0.250

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Analyte	CAS #	Result	Qual	RL	MDL
m,p-Xylene	179601-23-1	40.6		1.00	0.500
o-Xylene	95-47-6	19.8		1.00	0.250
Styrene	100-42-5	18.6		1.00	0.125
Tetrachloroethene	127-18-4	21.0		1.00	0.250
Toluene	108-88-3	19.1		1.00	0.250
trans-1,3-Dichloropropene	10061-02-6	18.6		1.00	0.500
Trichloroethene	79-01-6	21.8		1.00	0.250
Trichlorofluoromethane	75-69-4	24.5		1.00	0.250
Vinyl chloride	75-01-4	24.2		1.00	0.250
Epichlorohydrin	106-89-8			0.000	0.000

Surrogate	Recovery	Lower Limit	Upper Limit	Q
1,2-Dichloroethane-d4	109	80	120	
Dibromofluoromethane	103	86	118	
p-Bromofluorobenzene	101	86	115	
Toluene-d8	100	88	110	

Sample #: L12050171-05 **PrePrep Method:** N/A **Instrument:** HP16
Client ID: MW-12-050412 **Prep Method:** 5021 **Prep Date:** N/A
Matrix: Water **Analytical Method:** RSK175 **Cal Date:** 04/30/2012 15:04
Workgroup #: WG397366 **Analyst:** FJB **Run Date:** 05/08/2012 19:09
Collect Date: 05/04/2012 10:30 **Dilution:** 1 **File ID:** 16G32336
Sample Tag: 01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	4710	E	5.00	1.00
Carbon Dioxide	124-38-9	68800		10000	2500

E	Semiquantitative result (out of calibration range)

Sample #: L12050171-05 **PrePrep Method:** N/A **Instrument:** HPMS4
Client ID: MW-12-050412 **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:** 05/14/2012 16:51
Collect Date: 05/04/2012 10:30 **Dilution:** 1 **File ID:** 4M60875
Sample Tag: 01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
1,1'-Biphenyl	92-52-4	48.1		22.7	2.84
1,3,5-Trinitrobenzene	99-35-4	57.6		5.68	2.84
1,3-Dinitrobenzene	99-65-0	56.9		5.68	2.84
1,4-Dioxane	123-91-1	42.4		11.4	5.68

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Analyte	CAS #	Result	Qual	RL	MDL
2,4,5-Trichlorophenol	95-95-4	59.2		5.68	2.84
2,4,6-Trichlorophenol	88-06-2	55.8		5.68	2.84
2,4-Dichlorophenol	120-83-2	53.5		5.68	2.84
2,4-Dimethylphenol	105-67-9	51.2		5.68	2.84
2,4-Dinitrophenol	51-28-5	54.6		28.4	14.2
2,4-Dinitrotoluene	121-14-2	61.4		5.68	2.84
2,6-Dinitrotoluene	606-20-2	58.2		5.68	2.84
2-Chloronaphthalene	91-58-7	60.2		5.68	2.84
2-Chlorophenol	95-57-8	50.4		5.68	2.84
2-Methylnaphthalene	91-57-6	48.0		5.68	2.84
2-Methylphenol	95-48-7	50.9		5.68	2.84
2-Nitroaniline	88-74-4	47.5		28.4	14.2
2-Nitrophenol	88-75-5	53.1		5.68	2.84
3-Nitroaniline	99-09-2	77.1		28.4	14.2
3,3'-Dichlorobenzidine	91-94-1	54.9		5.68	2.84
3-,4-Methylphenol	106-44-5	57.4		5.68	2.84
4-Bromophenyl-phenylether	101-55-3	57.8		5.68	2.84
4-Chloroaniline	106-47-8	53.1		5.68	2.84
4-Nitrophenol	100-02-7	57.5		28.4	14.2
Acenaphthene	83-32-9	51.6		5.68	2.84
Acenaphthylene	208-96-8	54.1		5.68	2.84
Anthracene	120-12-7	51.5		5.68	2.84
Benzo(a)anthracene	56-55-3	58.0		5.68	2.84
Benzo(a)pyrene	50-32-8	61.7		5.68	2.84
Benzo(b)fluoranthene	205-99-2	66.8		5.68	2.84
Benzo(g,h,i)Perylene	191-24-2	41.1		5.68	2.84
Benzo(k)fluoranthene	207-08-9	63.1		5.68	2.84
Benzoic acid	65-85-0	19.0		22.7	11.4
Benzyl alcohol	100-51-6	51.6		5.68	2.84
Bis(2-Chloroethyl)ether	111-44-4	49.8		5.68	2.84
Bis(2-Chloroethoxy)Methane	111-91-1	59.4		5.68	2.84
bis(2-Ethylhexyl)phthalate	117-81-7	66.9		5.68	2.84
Butylbenzylphthalate	85-68-7	68.6		5.68	2.84
Carbazole	86-74-8	58.2		22.7	2.84
Chrysene	218-01-9	60.8		5.68	2.84
Di-N-Butylphthalate	84-74-2	60.2		5.68	2.84
Di-n-octylphthalate	117-84-0	75.9		5.68	2.84
Dibenzo(a,h)Anthracene	53-70-3	48.5		5.68	2.84
Dibenzofuran	132-64-9	54.7		5.68	2.84

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Diethylphthalate	84-66-2	61.6		5.68	2.84
Dimethylphthalate	131-11-3	59.7		5.68	2.84
Fluoranthene	206-44-0	56.3		5.68	2.84
Fluorene	86-73-7	55.4		5.68	2.84
Hexachlorobenzene	118-74-1	56.7		5.68	2.84
Hexachlorobutadiene	87-68-3	37.1		5.68	2.84
Hexachlorocyclopentadiene	77-47-4	4.09		5.68	2.84
Hexachloroethane	67-72-1	26.7		5.68	2.84
Indeno(1,2,3-cd)pyrene	193-39-5	47.2		5.68	2.84
Isophorone	78-59-1	54.7		5.68	2.84
N-Nitrosodiphenylamine	86-30-6	97.7		5.68	2.84
Naphthalene	91-20-3	47.5		5.68	2.84
Nitrobenzene	98-95-3	61.5		5.68	2.84
Pentachlorophenol	87-86-5	59.1		28.4	14.2
Phenanthrene	85-01-8	56.8		5.68	2.84
Phenol	108-95-2	51.7		5.68	2.84
Pyrene	129-00-0	61.4		5.68	2.84

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2,4,6-Tribromophenol	100	10	123	
2-Fluorobiphenyl	92.2	43	116	
2-Fluorophenol	89.5	21	100	
Nitrobenzene-d5	95.0	35	114	
p-Terphenyl-d14	111	33	141	
Phenol-d5	92.6	10	94	

Sample #: L12050171-05
Client ID: MW-12-050412
Matrix: Water
Workgroup #: WG397601
Collect Date: 05/04/2012 10:30
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 16:06
File ID: 7M54967

Analyte	CAS #	Result	Qual	RL	MDL
2-Methylnaphthalene	91-57-6	0.873		0.0575	0.0287
Acenaphthene	83-32-9	0.767		0.0575	0.0287
Acenaphthylene	208-96-8	0.799		0.0575	0.0287
Anthracene	120-12-7	0.888		0.0575	0.0287
Benzo(a)anthracene	56-55-3	0.852		0.0575	0.0287
Benzo(a)pyrene	50-32-8	0.931		0.0575	0.0287
Benzo(b)fluoranthene	205-99-2	0.897		0.0575	0.0287

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Benzo(g,h,i)perylene	191-24-2	0.808		0.0575	0.0287
Benzo(k)fluoranthene	207-08-9	0.952		0.0575	0.0287
Chrysene	218-01-9	0.956		0.0575	0.0287
Dibenzo(a,h)anthracene	53-70-3	0.822		0.0575	0.0287
Fluoranthene	206-44-0	0.974		0.0575	0.0287
Fluorene	86-73-7	0.800		0.0575	0.0287
Indeno(1,2,3-cd)pyrene	193-39-5	0.816		0.0575	0.0287
Naphthalene	91-20-3	0.796		0.0575	0.0287
Phenanthrene	85-01-8	0.835		0.0575	0.0287
Pyrene	129-00-0	0.956		0.0575	0.0287

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2-Fluorobiphenyl	61.2	43	116	
Nitrobenzene-d5	65.8	35	114	
p-Terphenyl-d14	79.5	33	141	

Sample #: L12050171-05
Client ID: MW-12-050412
Matrix: Water
Workgroup #: WG397657
Collect Date: 05/04/2012 10:30
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: 05/10/2012 07:40
Cal Date: 05/11/2012 11:47
Run Date: 05/11/2012 13:08
File ID: P2.051112.130819

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	5.12		0.100	0.0500
Barium, Total	7440-39-3	0.619		0.0100	0.00250
Beryllium, Total	7440-41-7	0.0243		0.00200	0.000500
Cadmium, Total	7440-43-9	0.0232		0.000500	0.000250
Calcium, Total	7440-70-2	133		0.200	0.100
Chromium, Total	7440-47-3	0.251		0.00500	0.00250
Cobalt, Total	7440-48-4	0.0987		0.0200	0.00250
Copper, Total	7440-50-8	0.248		0.0200	0.00500
Iron, Total	7439-89-6	2.31		0.100	0.0250
Magnesium, Total	7439-95-4	23.8		0.500	0.250
Manganese, Total	7439-96-5	0.523		0.0100	0.00500
Nickel, Total	7440-02-0	0.249		0.0400	0.00500
Potassium, Total	7440-09-7	30.3		1.00	0.250
Silver, Total	7440-22-4	0.200		0.0100	0.00500
Sodium, Total	7440-23-5	142		0.500	0.250
Vanadium, Total	7440-62-2	0.519		0.0100	0.00500
Zinc, Total	7440-66-6	0.528		0.0200	0.00500

Certificate of Analysis

Sample #:	L12050171-05	**PrePrep Method:**	N/A	**Instrument:**	ICP-MS2
Client ID:	MW-12-050412	**Prep Method:**	3015	**Prep Date:**	05/08/2012 10:09
Matrix:	Water	**Analytical Method:**	6020	**Cal Date:**	05/08/2012 09:20
Workgroup #:	WG397375	**Analyst:**	JYH	**Run Date:**	05/08/2012 15:09
Collect Date:	05/04/2012 10:30	**Dilution:**	1	**File ID:**	NI.050812.150925
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0	0.0650		0.00100	0.000500
Arsenic, Total	7440-38-2	0.0652		0.00100	0.000500
Lead, Total	7439-92-1	0.0654		0.00100	0.000500
Selenium, Total	7782-49-2	0.0620		0.00100	0.000500
Thallium, Total	7440-28-0	0.0653		0.000200	0.000100

Sample #:	L12050171-05	**PrePrep Method:**	N/A	**Instrument:**	HYDRA
Client ID:	MW-12-050412	**Prep Method:**	7470A	**Prep Date:**	05/08/2012 12:34
Matrix:	Water	**Analytical Method:**	7470A	**Cal Date:**	05/10/2012 09:40
Workgroup #:	WG397594	**Analyst:**	PDM	**Run Date:**	05/10/2012 12:03
Collect Date:	05/04/2012 10:30	**Dilution:**	1	**File ID:**	HY.051012.120313
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Mercury	7439-97-6	0.00476		0.000222	0.000111

Sample #:	L12050171-05	**PrePrep Method:**	N/A	**Instrument:**	SMARTCHEM
Client ID:	MW-12-050412	**Prep Method:**	310.2	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	310.2	**Cal Date:**	05/10/2012 14:05
Workgroup #:	WG397664	**Analyst:**	JBK	**Run Date:**	05/10/2012 14:23
Collect Date:	05/04/2012 10:30	**Dilution:**	1	**File ID:**	SC120510002.038
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Alkalinity, Total (as CaCO3)		347		20.0	10.0

Certificate of Analysis

Sample #:	L12050171-05	**PrePrep Method:**	N/A	**Instrument:**	SMARTCHEM
Client ID:	MW-12-050412	**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:	05/04/2012 10:30	**Dilution:**	1	**File ID:**	SC12050910175201
Sample Tag:		**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8	2.12		0.0500	0.0250

Sample #:	L12050171-05	**PrePrep Method:**	N/A	**Instrument:**	SMARTCHEM
Client ID:	MW-12-050412	**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 08:51
Collect Date:	05/04/2012 10:30	**Dilution:**	1	**File ID:**	SC120515001.025
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Phosphorus, Total	7723-14-0	1.04		0.200	0.100

Sample #:	L12050171-05	**PrePrep Method:**	N/A	**Instrument:**	SMARTCHEM
Client ID:	MW-12-050412	**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 14:22
Collect Date:	05/04/2012 10:30	**Dilution:**	5	**File ID:**	SC120507003.030
Sample Tag:	DL01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	128		25.0	12.5

Sample #:	L12050171-05	**PrePrep Method:**	N/A	**Instrument:**	TOC-VWP
Client ID:	MW-12-050412	**Prep Method:**	415.1	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	415.1	**Cal Date:**	12/06/2011 09:40
Workgroup #:	WG397599	**Analyst:**	JBK	**Run Date:**	05/12/2012 15:38
Collect Date:	05/04/2012 10:30	**Dilution:**	1	**File ID:**	TC05122012.025
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		15.2		1.00	0.500

Certificate of Analysis

Sample #:	L12050171-06	**PrePrep Method:**	N/A	**Instrument:**	PE-ICP2
Client ID:	MW-12-050412	**Prep Method:**	3005A	**Prep Date:**	05/10/2012 07:40
Matrix:	Water	**Analytical Method:**	6010B	**Cal Date:**	05/11/2012 11:47
Workgroup #:	WG397657	**Analyst:**	KHR	**Run Date:**	05/11/2012 13:14
Collect Date:	05/04/2012 10:30	**Dilution:**	1	**File ID:**	P2.051112.131420
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Dissolved	7429-90-5	5.04		0.100	0.0500
Barium, Dissolved	7440-39-3	0.616		0.0100	0.00250
Beryllium, Dissolved	7440-41-7	0.0239		0.00200	0.000500
Cadmium, Dissolved	7440-43-9	0.0229		0.000500	0.000250
Calcium, Dissolved	7440-70-2	129		0.200	0.100
Chromium, Dissolved	7440-47-3	0.248		0.00500	0.00250
Cobalt, Dissolved	7440-48-4	0.0983		0.0200	0.00250
Copper, Dissolved	7440-50-8	0.241		0.0200	0.00500
Iron, Dissolved	7439-89-6	2.19		0.100	0.0250
Magnesium, Dissolved	7439-95-4	23.7		0.500	0.250
Manganese, Dissolved	7439-96-5	0.517		0.0100	0.00500
Nickel, Dissolved	7440-02-0	0.245		0.0400	0.00500
Potassium, Dissolved	7440-09-7	30.3		1.00	0.250
Silver, Dissolved	7440-22-4	0.196		0.0100	0.00500
Sodium, Dissolved	7440-23-5	141		0.500	0.250
Vanadium, Dissolved	7440-62-2	0.513		0.0100	0.00500
Zinc, Dissolved	7440-66-6	0.483		0.0200	0.00500

Sample #:	L12050171-06	**PrePrep Method:**	N/A	**Instrument:**	ICP-MS2
Client ID:	MW-12-050412	**Prep Method:**	3015	**Prep Date:**	05/08/2012 10:09
Matrix:	Water	**Analytical Method:**	6020	**Cal Date:**	05/08/2012 09:20
Workgroup #:	WG397375	**Analyst:**	JYH	**Run Date:**	05/08/2012 15:38
Collect Date:	05/04/2012 10:30	**Dilution:**	1	**File ID:**	NI.050812.153810
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Dissolved	7440-36-0	0.0644		0.00100	0.000500
Arsenic, Dissolved	7440-38-2	0.0653		0.00100	0.000500
Lead, Dissolved	7439-92-1	0.0645		0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.0622		0.00100	0.000500
Thallium, Dissolved	7440-28-0	0.0656		0.000200	0.000100

Certificate of Analysis

Sample #: L12050171-06 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-12-050412 **Prep Method:** 7470A **Prep Date:** 05/08/2012 12:34
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 05/10/2012 09:40
Workgroup #: WG397594 **Analyst:** PDM **Run Date:** 05/10/2012 12:04
Collect Date: 05/04/2012 10:30 **Dilution:** 1 **File ID:** HY.051012.120458
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Mercury, Dissolved	7439-97-6	0.00474		0.000222	0.000111

Sample #: L12050171-07 **PrePrep Method:** N/A **Instrument:** HPMS8
Client ID: PZ-01-050412 **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 04:11
Collect Date: 05/04/2012 12:07 **Dilution:** 1 **File ID:** 8M378979
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	8.97		1.00	0.250
trans-1,2-Dichloroethene	156-60-5	0.406		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	4.16		10.0	2.50
Benzene	71-43-2		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200

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Analyte	CAS #	Result	Qual	RL	MDL
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	0.679		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	105	86	118	
p-Bromofluorobenzene	97.6	86	115	
Toluene-d8	98.9	88	110	

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #: L12050171-07 **PrePrep Method:** N/A **Instrument:** HP16
Client ID: PZ-01-050412 **Prep Method:** 5021 **Prep Date:** N/A
Matrix: Water **Analytical Method:** RSK175 **Cal Date:** 04/30/2012 15:04
Workgroup #: WG397366 **Analyst:** FJB **Run Date:** 05/08/2012 19:28
Collect Date: 05/04/2012 12:07 **Dilution:** 1 **File ID:** 16G32338
Sample Tag: 01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	2450	E	5.00	1.00
Carbon Dioxide	124-38-9	55900		10000	2500

E	Semiquantitative result (out of calibration range)

Sample #: L12050171-07 **PrePrep Method:** N/A **Instrument:** HP16
Client ID: PZ-01-050412 **Prep Method:** 5021 **Prep Date:** N/A
Matrix: Water **Analytical Method:** RSK175 **Cal Date:** 04/30/2012 15:04
Workgroup #: WG397514 **Analyst:** MDA **Run Date:** 05/09/2012 16:00
Collect Date: 05/04/2012 12:07 **Dilution:** 20 **File ID:** 16G32366
Sample Tag: DL01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	4470		100	20.0
Carbon Dioxide	124-38-9	95800		200000	50000

Sample #: L12050171-07 **PrePrep Method:** N/A **Instrument:** HPMS4
Client ID: PZ-01-050412 **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:** 05/14/2012 17:26
Collect Date: 05/04/2012 12:07 **Dilution:** 1 **File ID:** 4M60876
Sample Tag: 01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
1,1'-Biphenyl	92-52-4		U	25.3	3.16
1,3,5-Trinitrobenzene	99-35-4		U	6.33	3.16
1,3-Dinitrobenzene	99-65-0		U	6.33	3.16
1,4-Dioxane	123-91-1		U	12.7	6.33
2,4,5-Trichlorophenol	95-95-4		U	6.33	3.16
2,4,6-Trichlorophenol	88-06-2		U	6.33	3.16
2,4-Dichlorophenol	120-83-2		U	6.33	3.16
2,4-Dimethylphenol	105-67-9		U	6.33	3.16
2,4-Dinitrophenol	51-28-5		U	31.6	15.8
2,4-Dinitrotoluene	121-14-2		U	6.33	3.16

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
2,6-Dinitrotoluene	606-20-2		U	6.33	3.16
2-Chloronaphthalene	91-58-7		U	6.33	3.16
2-Chlorophenol	95-57-8		U	6.33	3.16
2-Methylnaphthalene	91-57-6		U	6.33	3.16
2-Methylphenol	95-48-7		U	6.33	3.16
2-Nitroaniline	88-74-4		U	31.6	15.8
2-Nitrophenol	88-75-5		U	6.33	3.16
3-Nitroaniline	99-09-2		U	31.6	15.8
3,3'-Dichlorobenzidine	91-94-1		U	6.33	3.16
3-,4-Methylphenol	106-44-5		U	6.33	3.16
4-Bromophenyl-phenylether	101-55-3		U	6.33	3.16
4-Chloroaniline	106-47-8		U	6.33	3.16
4-Nitrophenol	100-02-7		U	31.6	15.8
Acenaphthene	83-32-9		U	6.33	3.16
Acenaphthylene	208-96-8		U	6.33	3.16
Anthracene	120-12-7		U	6.33	3.16
Benzo(a)anthracene	56-55-3		U	6.33	3.16
Benzo(a)pyrene	50-32-8		U	6.33	3.16
Benzo(b)fluoranthene	205-99-2		U	6.33	3.16
Benzo(g,h,i)Perylene	191-24-2		U	6.33	3.16
Benzo(k)fluoranthene	207-08-9		U	6.33	3.16
Benzoic acid	65-85-0		U	25.3	12.7
Benzyl alcohol	100-51-6		U	6.33	3.16
Bis(2-Chloroethyl)ether	111-44-4		U	6.33	3.16
Bis(2-Chloroethoxy)Methane	111-91-1		U	6.33	3.16
bis(2-Ethylhexyl)phthalate	117-81-7	3.85		6.33	3.16
Butylbenzylphthalate	85-68-7		U	6.33	3.16
Carbazole	86-74-8		U	25.3	3.16
Chrysene	218-01-9		U	6.33	3.16
Di-N-Butylphthalate	84-74-2		U	6.33	3.16
Di-n-octylphthalate	117-84-0		U	6.33	3.16
Dibenzo(a,h)Anthracene	53-70-3		U	6.33	3.16
Dibenzofuran	132-64-9		U	6.33	3.16
Diethylphthalate	84-66-2		U	6.33	3.16
Dimethylphthalate	131-11-3		U	6.33	3.16
Fluoranthene	206-44-0		U	6.33	3.16
Fluorene	86-73-7		U	6.33	3.16
Hexachlorobenzene	118-74-1		U	6.33	3.16
Hexachlorobutadiene	87-68-3		U	6.33	3.16

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Hexachlorocyclopentadiene	77-47-4		U	6.33	3.16
Hexachloroethane	67-72-1		U	6.33	3.16
Indeno(1,2,3-cd)pyrene	193-39-5		U	6.33	3.16
Isophorone	78-59-1		U	6.33	3.16
N-Nitrosodiphenylamine	86-30-6		U	6.33	3.16
Naphthalene	91-20-3		U	6.33	3.16
Nitrobenzene	98-95-3		U	6.33	3.16
Pentachlorophenol	87-86-5		U	31.6	15.8
Phenanthrene	85-01-8		U	6.33	3.16
Phenol	108-95-2		U	6.33	3.16
Pyrene	129-00-0		U	6.33	3.16

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2,4,6-Tribromophenol	92.8	10	123	
2-Fluorobiphenyl	78.8	43	116	
2-Fluorophenol	76.7	21	100	
Nitrobenzene-d5	80.4	35	114	
p-Terphenyl-d14	60.7	33	141	
Phenol-d5	78.9	10	94	

U	Not detected at or above adjusted sample detection limit.

Sample #: L12050171-07
Client ID: PZ-01-050412
Matrix: Water
Workgroup #: WG397604
Collect Date: 05/04/2012 12:07
Sample Tag: 01

PrePrep Method: N/A
Prep Method: 3520C
Analytical Method: 8270C
Analyst: CAA
Dilution: 1
Units: ug/L

Instrument: HPMS4
Prep Date: 05/07/2012 11:00
Cal Date: 04/19/2012 13:23
Run Date: 05/14/2012 17:26
File ID: 4M60876

Analyte	CAS #	Result	Qual	RL	MDL
2-Propanone, 1-chloro-		8.86		0.000	0.000
2-Butanone, 4-hydroxy-		18.3		0.000	0.000
unknown		49.1		0.000	0.000
unknown		5.29		0.000	0.000
unknown		12.8		0.000	0.000
unknown		5.28		0.000	0.000
unknown		19.3		0.000	0.000
unknown		7.48		0.000	0.000
unknown		10.6		0.000	0.000

Certificate of Analysis

Sample #: L12050171-07 **PrePrep Method:** N/A **Instrument:** HPMS7
Client ID: PZ-01-050412 **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 16:34
Collect Date: 05/04/2012 12:07 **Dilution:** 1 **File ID:** 7M54968
Sample Tag: 01 **Units:** ug/L

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

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2-Fluorobiphenyl	52.4	43	116	
Nitrobenzene-d5	61.2	35	114	
p-Terphenyl-d14	70.8	33	141	

U	Not detected at or above adjusted sample detection limit.

Sample #: L12050171-07 **PrePrep Method:** N/A **Instrument:** PE-ICP2
Client ID: PZ-01-050412 **Prep Method:** 3005A **Prep Date:** 05/10/2012 07:41
Matrix: Water **Analytical Method:** 6010B **Cal Date:** 05/11/2012 11:47
Workgroup #: WG397657 **Analyst:** KHR **Run Date:** 05/11/2012 13:46
Collect Date: 05/04/2012 12:07 **Dilution:** 1 **File ID:** P2.051112.134612
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	28.9		0.100	0.0500
Barium, Total	7440-39-3	0.608		0.0100	0.00250

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Beryllium, Total	7440-41-7		U	0.00200	0.000500
Cadmium, Total	7440-43-9	0.000642		0.000500	0.000250
Calcium, Total	7440-70-2	373		0.200	0.100
Chromium, Total	7440-47-3	0.0391		0.00500	0.00250
Cobalt, Total	7440-48-4	0.0138		0.0200	0.00250
Copper, Total	7440-50-8	0.0450		0.0200	0.00500
Iron, Total	7439-89-6	47.7		0.100	0.0250
Magnesium, Total	7439-95-4	196		0.500	0.250
Manganese, Total	7439-96-5	1.58		0.0100	0.00500
Nickel, Total	7440-02-0	0.0354		0.0400	0.00500
Potassium, Total	7440-09-7	10.5		1.00	0.250
Silver, Total	7440-22-4		U	0.0100	0.00500
Sodium, Total	7440-23-5	71.7		0.500	0.250
Vanadium, Total	7440-62-2	0.0601		0.0100	0.00500
Zinc, Total	7440-66-6	0.102		0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Sample #:	L12050171-07	**PrePrep Method:**	N/A	**Instrument:**	ICP-MS2
Client ID:	PZ-01-050412	**Prep Method:**	3015	**Prep Date:**	05/08/2012 10:09
Matrix:	Water	**Analytical Method:**	6020	**Cal Date:**	05/08/2012 09:20
Workgroup #:	WG397375	**Analyst:**	JYH	**Run Date:**	05/08/2012 15:41
Collect Date:	05/04/2012 12:07	**Dilution:**	1	**File ID:**	NI.050812.154102
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		U	0.00100	0.000500
Arsenic, Total	7440-38-2	0.0250		0.00100	0.000500
Lead, Total	7439-92-1	0.0229		0.00100	0.000500
Selenium, Total	7782-49-2	0.00251		0.00100	0.000500
Thallium, Total	7440-28-0	0.000388		0.000200	0.000100

U	Not detected at or above adjusted sample detection limit.

Sample #:	L12050171-07	**PrePrep Method:**	N/A	**Instrument:**	HYDRA
Client ID:	PZ-01-050412	**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 12:07
Collect Date:	05/04/2012 12:07	**Dilution:**	1	**File ID:**	HY.051012.120723
Sample Tag:	01	**Units:**	mg/L		

Certificate of Analysis

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 #: L12050171-07 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: PZ-01-050412 **Prep Method:** 310.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 310.2 **Cal Date:** 05/10/2012 14:05
Workgroup #: WG397664 **Analyst:** JBK **Run Date:** 05/10/2012 14:23
Collect Date: 05/04/2012 12:07 **Dilution:** 1 **File ID:** SC120510002.039
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Alkalinity, Total (as CaCO3)		21.6		20.0	10.0

Sample #: L12050171-07 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: PZ-01-050412 **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: 05/04/2012 12:07 **Dilution:** 1 **File ID:** SC12050910180001
Sample Tag: **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8	0.163		0.0500	0.0250

Sample #: L12050171-07 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: PZ-01-050412 **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 09:08
Collect Date: 05/04/2012 12:07 **Dilution:** 2 **File ID:** SC120515001.041
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Phosphorus, Total	7723-14-0	2.64		0.400	0.200

Sample #: L12050171-07 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: PZ-01-050412 **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 14:34
Collect Date: 05/04/2012 12:07 **Dilution:** 4 **File ID:** SC120507003.038
Sample Tag: DL01 **Units:** mg/L

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	84.4		20.0	10.0

Sample #: L12050171-07 **PrePrep Method:** N/A **Instrument:** TOC-VWP
Client ID: PZ-01-050412 **Prep Method:** 415.1 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 415.1 **Cal Date:** 12/06/2011 09:40
Workgroup #: WG397599 **Analyst:** JBK **Run Date:** 05/12/2012 16:13
Collect Date: 05/04/2012 12:07 **Dilution:** 10 **File ID:** TC05122012.028
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		13.7		10.0	5.00

Sample #: L12050171-08 **PrePrep Method:** N/A **Instrument:** PE-ICP2
Client ID: PZ-01-050412 **Prep Method:** 3005A **Prep Date:** 05/10/2012 07:41
Matrix: Water **Analytical Method:** 6010B **Cal Date:** 05/11/2012 11:47
Workgroup #: WG397657 **Analyst:** KHR **Run Date:** 05/11/2012 13:52
Collect Date: 05/04/2012 12:07 **Dilution:** 1 **File ID:** P2.051112.135208
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Dissolved	7429-90-5	0.0849		0.100	0.0500
Barium, Dissolved	7440-39-3	0.487		0.0100	0.00250
Beryllium, Dissolved	7440-41-7		U	0.00200	0.000500
Cadmium, Dissolved	7440-43-9	0.000489		0.000500	0.000250
Calcium, Dissolved	7440-70-2	95.0		0.200	0.100
Chromium, Dissolved	7440-47-3		U	0.00500	0.00250
Cobalt, Dissolved	7440-48-4		U	0.0200	0.00250
Copper, Dissolved	7440-50-8		U	0.0200	0.00500
Iron, Dissolved	7439-89-6	2.47		0.100	0.0250
Magnesium, Dissolved	7439-95-4	83.6		0.500	0.250
Manganese, Dissolved	7439-96-5	0.0347		0.0100	0.00500
Nickel, Dissolved	7440-02-0		U	0.0400	0.00500
Potassium, Dissolved	7440-09-7	2.88		1.00	0.250
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Sodium, Dissolved	7440-23-5	68.2		0.500	0.250
Vanadium, Dissolved	7440-62-2		U	0.0100	0.00500
Zinc, Dissolved	7440-66-6		U	0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

Sample #:	L12050171-08	**PrePrep Method:**	N/A	**Instrument:**	ICP-MS2
Client ID:	PZ-01-050412	**Prep Method:**	3015	**Prep Date:**	05/08/2012 10:09
Matrix:	Water	**Analytical Method:**	6020	**Cal Date:**	05/08/2012 09:20
Workgroup #:	WG397375	**Analyst:**	JYH	**Run Date:**	05/08/2012 15:43
Collect Date:	05/04/2012 12:07	**Dilution:**	1	**File ID:**	NI.050812.154355
Sample Tag:	01	**Units:**	mg/L		

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Dissolved	7440-36-0		U	0.00100	0.000500
Arsenic, Dissolved	7440-38-2	0.0167		0.00100	0.000500
Lead, Dissolved	7439-92-1		U	0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.00177		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 #:	L12050171-08	**PrePrep Method:**	N/A	**Instrument:**	HYDRA
Client ID:	PZ-01-050412	**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 12:09
Collect Date:	05/04/2012 12:07	**Dilution:**	1	**File ID:**	HY.051012.120907
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 #:	L12050171-09	**PrePrep Method:**	N/A	**Instrument:**	HPMS8
Client ID:	TB-050412	**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 23:55
Collect Date:	05/04/2012 08:05	**Dilution:**	1	**File ID:**	8M378971
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

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
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
Tetrachloroethene	127-18-4		U	1.00	0.250

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
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	102	86	118	
p-Bromofluorobenzene	97.7	86	115	
Toluene-d8	98.9	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: L12050171
Department: Volatiles
Analyst: Anthony Canter

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, 1,1,1-Trichloroethane, Carbon Tetrachloride, Trichlorofluoromethane. 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: Recoveries out of range were observed for the following analytes: Dichlorodifluoromethane, Methyl acetate. Please see the applicable QC report for a detailed presentation of the failures.

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.

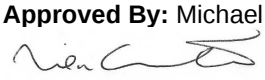
Reason #3: Improperly Integrated Isomers and/or coeluting compounds. This system often fails to distinguish coeluting compounds and or isomers. The integration areas and concentrations are wrong, and they must be corrected by manual integration. Prime examples are benzo(k)fluoranthene and benzo(b)fluoranthene 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: 46740
Approved By: Michael Albertson



Certificate of Analysis

Sample #:	L12050171-01	**PrePrep Method:**	N/A	**Instrument:**	HPMS8
Client ID:	MW-12-050412	**Prep Method:**	5030B/5030C/5035A	**Prep Date:**	N/A
Matrix:	Water	**Analytical Method:**	8260B	**Cal Date:**	03/27/2012 15:49
Workgroup #:	WG397815	**Analyst:**	ADC	**Run Date:**	05/12/2012 12:23
Collect Date:	05/04/2012 10:30	**Dilution:**	1	**File ID:**	8M379023
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	110	80	120	
Dibromofluoromethane	102	86	118	
p-Bromofluorobenzene	98.8	86	115	
Toluene-d8	99.8	88	110	

U	Not detected at or above adjusted sample detection limit.

Sample #: L12050171-03
Client ID: MW-12-050412
Matrix: Water
Workgroup #: WG397815
Collect Date: 05/04/2012 10:30
Sample Tag: 01

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

Instrument: HPMS8
Prep Date: N/A
Cal Date: 03/27/2012 15:49
Run Date: 05/12/2012 10:15
File ID: 8M379019

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1-Trichloroethane	71-55-6	24.4		1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5	18.1		1.00	0.200
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	21.7		5.00	2.00
1,1,2-Trichloroethane	79-00-5	19.5		1.00	0.250
1,1-Dichloroethane	75-34-3	21.5		1.00	0.125
1,1-Dichloroethene	75-35-4	23.4		1.00	0.500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
1,2,3-Trichlorobenzene	87-61-6	20.4		1.00	0.500
1,2,4-Trichlorobenzene	120-82-1	19.6		1.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8	18.4		5.00	1.00
1,2-Dibromoethane	106-93-4	19.1		1.00	0.250
1,2-Dichlorobenzene	95-50-1	20.1		1.00	0.125
1,2-Dichloroethane	107-06-2	23.1		1.00	0.250
cis-1,2-Dichloroethene	156-59-2	21.5		1.00	0.250
trans-1,2-Dichloroethene	156-60-5	22.2		1.00	0.250
1,2-Dichloropropane	78-87-5	20.6		1.00	0.200
1,3-Dichlorobenzene	541-73-1	20.1		1.00	0.250
1,4-Dichlorobenzene	106-46-7	19.9		1.00	0.125
2-Butanone	78-93-3	17.6		10.0	2.50
2-Hexanone	591-78-6	16.7		10.0	2.50
4-Methyl-2-pentanone	108-10-1	18.0		10.0	2.50
Acetone	67-64-1	19.8		10.0	2.50
Benzene	71-43-2	20.5		1.00	0.125
Bromochloromethane	74-97-5	22.6		1.00	0.200
Bromodichloromethane	75-27-4	23.0		1.00	0.250
Bromoform	75-25-2	20.8		1.00	0.500
Bromomethane	74-83-9	15.8		1.00	0.500
Carbon disulfide	75-15-0	22.2		1.00	0.500
Carbon tetrachloride	56-23-5	25.4		1.00	0.250
Chlorobenzene	108-90-7	20.1		1.00	0.125
Chloroethane	75-00-3	21.7		1.00	0.500
Chloroform	67-66-3	21.8		1.00	0.125
Chloromethane	74-87-3	24.8		1.00	0.500
cis-1,3-Dichloropropene	10061-01-5	21.9		1.00	0.250
Cyclohexane	110-82-7	20.7		5.00	1.00
Dibromochloromethane	124-48-1	21.4		1.00	0.250
Dichlorodifluoromethane	75-71-8	32.6		1.00	0.250
Ethyl benzene	100-41-4	20.7		1.00	0.250
Isopropylbenzene	98-82-8	18.7		1.00	0.250
Methyl acetate	79-20-9	13.7		5.00	1.00
Methyl tert-butyl ether	1634-04-4	19.8		1.00	0.500
Methylcyclohexane	108-87-2	20.0		5.00	1.00
Methylene chloride	75-09-2	20.4		5.00	0.250
m,p-Xylene	179601-23-1	40.9		1.00	0.500
o-Xylene	95-47-6	19.9		1.00	0.250
Styrene	100-42-5	18.5		1.00	0.125

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Tetrachloroethene	127-18-4	21.6		1.00	0.250
Toluene	108-88-3	19.4		1.00	0.250
trans-1,3-Dichloropropene	10061-02-6	18.1		1.00	0.500
Trichloroethene	79-01-6	22.5		1.00	0.250
Trichlorofluoromethane	75-69-4	26.7		1.00	0.250
Vinyl chloride	75-01-4	24.9		1.00	0.250
Epichlorohydrin	106-89-8			0.000	0.000

Surrogate	Recovery	Lower Limit	Upper Limit	Q
1,2-Dichloroethane-d4	108	80	120	
Dibromofluoromethane	100	86	118	
p-Bromofluorobenzene	98.7	86	115	
Toluene-d8	101	88	110	

Sample #: L12050171-05
Client ID: MW-12-050412
Matrix: Water
Workgroup #: WG397815
Collect Date: 05/04/2012 10:30
Sample Tag: 01

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

Instrument: HPMS8
Prep Date: N/A
Cal Date: 03/27/2012 15:49
Run Date: 05/12/2012 10:47
File ID: 8M379020

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1-Trichloroethane	71-55-6	23.6		1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5	18.7		1.00	0.200
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	20.4		5.00	2.00
1,1,2-Trichloroethane	79-00-5	19.9		1.00	0.250
1,1-Dichloroethane	75-34-3	21.2		1.00	0.125
1,1-Dichloroethene	75-35-4	21.8		1.00	0.500
1,2,3-Trichlorobenzene	87-61-6	20.6		1.00	0.500
1,2,4-Trichlorobenzene	120-82-1	19.7		1.00	0.200
1,2-Dibromo-3-chloropropane	96-12-8	20.4		5.00	1.00
1,2-Dibromoethane	106-93-4	20.0		1.00	0.250
1,2-Dichlorobenzene	95-50-1	20.3		1.00	0.125
1,2-Dichloroethane	107-06-2	23.2		1.00	0.250
cis-1,2-Dichloroethene	156-59-2	21.2		1.00	0.250
trans-1,2-Dichloroethene	156-60-5	22.1		1.00	0.250
1,2-Dichloropropane	78-87-5	20.6		1.00	0.200
1,3-Dichlorobenzene	541-73-1	20.0		1.00	0.250
1,4-Dichlorobenzene	106-46-7	19.8		1.00	0.125
2-Butanone	78-93-3	18.5		10.0	2.50
2-Hexanone	591-78-6	17.3		10.0	2.50

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
4-Methyl-2-pentanone	108-10-1	17.7		10.0	2.50
Acetone	67-64-1	21.2		10.0	2.50
Benzene	71-43-2	20.1		1.00	0.125
Bromochloromethane	74-97-5	21.8		1.00	0.200
Bromodichloromethane	75-27-4	23.2		1.00	0.250
Bromoform	75-25-2	21.9		1.00	0.500
Bromomethane	74-83-9	11.7		1.00	0.500
Carbon disulfide	75-15-0	21.0		1.00	0.500
Carbon tetrachloride	56-23-5	24.4		1.00	0.250
Chlorobenzene	108-90-7	19.9		1.00	0.125
Chloroethane	75-00-3	20.2		1.00	0.500
Chloroform	67-66-3	21.6		1.00	0.125
Chloromethane	74-87-3	22.8		1.00	0.500
cis-1,3-Dichloropropene	10061-01-5	21.6		1.00	0.250
Cyclohexane	110-82-7	19.9		5.00	1.00
Dibromochloromethane	124-48-1	22.1		1.00	0.250
Dichlorodifluoromethane	75-71-8	29.8		1.00	0.250
Ethyl benzene	100-41-4	20.2		1.00	0.250
Isopropylbenzene	98-82-8	18.1		1.00	0.250
Methyl acetate	79-20-9	14.1		5.00	1.00
Methyl tert-butyl ether	1634-04-4	20.5		1.00	0.500
Methylcyclohexane	108-87-2	18.8		5.00	1.00
Methylene chloride	75-09-2	20.1		5.00	0.250
m,p-Xylene	179601-23-1	40.6		1.00	0.500
o-Xylene	95-47-6	19.8		1.00	0.250
Styrene	100-42-5	18.6		1.00	0.125
Tetrachloroethene	127-18-4	21.0		1.00	0.250
Toluene	108-88-3	19.1		1.00	0.250
trans-1,3-Dichloropropene	10061-02-6	18.6		1.00	0.500
Trichloroethene	79-01-6	21.8		1.00	0.250
Trichlorofluoromethane	75-69-4	24.5		1.00	0.250
Vinyl chloride	75-01-4	24.2		1.00	0.250
Epichlorohydrin	106-89-8			0.000	0.000

Surrogate	Recovery	Lower Limit	Upper Limit	Q
1,2-Dichloroethane-d4	109	80	120	
Dibromofluoromethane	103	86	118	
p-Bromofluorobenzene	101	86	115	
Toluene-d8	100	88	110	

Certificate of Analysis

Sample #:	L12050171-07	**PrePrep Method:**	N/A	**Instrument:**	HPMS8
Client ID:	PZ-01-050412	**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 04:11
Collect Date:	05/04/2012 12:07	**Dilution:**	1	**File ID:**	8M378979
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	8.97		1.00	0.250
trans-1,2-Dichloroethene	156-60-5	0.406		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	4.16		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	0.679		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	105	86	118	
p-Bromofluorobenzene	97.6	86	115	
Toluene-d8	98.9	88	110	

U	Not detected at or above adjusted sample detection limit.

Sample #: L12050171-09
Client ID: TB-050412
Matrix: Water
Workgroup #: WG397692
Collect Date: 05/04/2012 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 23:55
File ID: 8M378971

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	113	80	120	
Dibromofluoromethane	102	86	118	
p-Bromofluorobenzene	97.7	86	115	
Toluene-d8	98.9	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.

Instrument Run Log

Instrument: HPMS8 Dataset: 051212
Analyst1: ADC Analyst2: NA
Method: 8260 SOP: MSV01 Rev: 14
Method: 5030/5035 SOP: PAT01 Rev: 13

Maintenance Log ID: 41788

Internal Standard: STD51606 Surrogate Standard: STD51606
CCV: STD51468 LCS: STD51372 MS/MSD: STD51372

Column 1 ID: RTX502.2 Column 2 ID: NA
Workgroups: WG397815

Comments:

File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
8M379014	WG397812-01 BFB 50ng 8260	NA	1	1	STD51241	05/12/12 07:16
8M379015	WG397812-02 50ug/L CCV 8260	NA	1	1	STD51468	05/12/12 07:40
8M379016	WG397XXX-01 100ug/L CCV A9	NA	1	1	STDXXXXX	05/12/12 08:19
8M379017	WG397815-01 VBLK0512 BLANK 8260	NA	1	1		05/12/12 08:49
8M379018	WG397815-02 20ug/L LCS 8260	NA	1	1	STD51372	05/12/12 09:21
8M379019	L12050171-03 A MS 826-SPE	<2	1	1	STD51372	05/12/12 10:15
8M379020	L12050171-05 A MSD 826-SPE	<2	1	1	STD51372	05/12/12 10:47
8M379021	L12050151-03 B 10X 826-SPE	<2	1	10		05/12/12 11:18
8M379022	L12050193-11 A 826-SPE	<2	1	1		05/12/12 11:51
8M379023	L12050171-01 A 826-SPE	<2	1	1		05/12/12 12:23
8M379024	L12050193-01 A 826-SPE	<2	1	1		05/12/12 12:56
8M379025	L12050193-02 A 826-SPE	<2	1	1		05/12/12 13:28
8M379026	L12050193-03 A 826-SPE	<2	1	1		05/12/12 14:01
8M379027	L12050193-04 A 826-SPE	<2	1	1		05/12/12 14:33
8M379028	L12050193-05 A 826-SPE	3	1	1		05/12/12 15:07
8M379029	L12050193-06 A 826-SPE	<2	1	1		05/12/12 15:40
8M379030	L12050193-07 A 826-SPE	<2	1	1		05/12/12 16:13
8M379031	L12050193-08 A 826-SPE	<2	1	1		05/12/12 16:46
8M379032	L12050193-09 A 826-SPE	<2	1	1		05/12/12 17:18
8M379033	L12050193-10 A 826-SPE	<2	1	1		05/12/12 17:51
8M379034	L12050226-01 A 50X 826-SPE	5	1	50		05/12/12 18:24
8M379035	L12050226-03 A 826-SPE	<2	1	1		05/12/12 18:57
8M379036	L12050226-05 A 826-SPE	<2	1	1		05/12/12 19:29
8M379037	L12050226-07 A 5X 826-SPE	7	1	5		05/12/12 20:03
8M379038	RINSE	NA	1	1		05/12/12 20:36
8M379039	RINSE	NA	1	1		05/12/12 21:08
8M379040	RINSE	NA	1	1		05/12/12 21:41

Comments

Seq.	Rerun	Dil.	Reason	Analytes
20				
File ID: 8M379033				
	rr 5x			

Approved: May 20, 2012

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Microbac Laboratories Inc.

Instrument Run Log

Instrument: HPMS8 Dataset: 051212
Analyst1: ADC Analyst2: NA
Method: 8260 SOP: MSV01 Rev: 14
Method: 5030/5035 SOP: PAT01 Rev: 13

Maintenance Log ID: 41788

Internal Standard: STD51606 Surrogate Standard: STD51606
CCV: STD51468 LCS: STD51372 MS/MSD: STD51372

Column 1 ID: RTX502.2 Column 2 ID: NA
Workgroups: WG397815

Comments:

Comments

Seq.	Rerun	Dil.	Reason	Analytes
21				
File ID: 8M379034				
	rr 250x			
23				
File ID: 8M379036				
	mt dnr			
24				
File ID: 8M379037				
	mt dnr			

Approved: May 20, 2012

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.

Data Checklist

Date: 12-MAY-2012
Analyst: ADC
Analyst: NA
Method: 8260
Instrument: HPMS8
Curve Workgroup: NA
Runlog ID: 46849
Analytical Workgroups: WG397815

System Performance Check	NA
BFB	X
Initial Calibration	X
Average RF	X
Linear Reg or Higher Order Curve	X
Second Source standard % Difference	X
Continuing Calibration /Check Standards	X
Project/Client Specific Requirements	X
Special Standards	X
Blanks	X
TCL's	X
Surrogates	X
LCS (Laboratory Control Sample)	X
Recoveries	X
Surrogates	X
MS/MSD/Duplicates	X
Samples	X
TCL Hits	WTD
Spectra of TCL Hits	X
Surrogates	X
Internal Standards Criteria	X
Library Searches	X
Calculations & Correct Factors	X
Dilutions Run	X
Reruns	NA
Manual Integrations	NA
Case Narrative	X
Results Reporting/Data Qualifiers	X
KOBRA Workgroup Data	X
Check for Completeness	X
Primary Reviewer	WTD
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:
20-MAY-2012

Secondary Reviewer:
20-MAY-2012

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-20-2012 21:07:34

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

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

Login Number: L12050171

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
PZ-01-050412	07	05/04/12							14		05/11/12	6.7	14	
TB-050412	09	05/04/12							14		05/10/12	6.7	14	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2423081
Report generated 05/21/2012 11:59

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 8260B **AAB#:** WG397815

Login Number: L12050171

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-12-050412	01	05/04/12							14		05/12/12	8.1	14	
MW-12-050412	03	05/04/12							14		05/12/12	8	14	
MW-12-050412	05	05/04/12							14		05/12/12	8	14	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2423081
Report generated 05/21/2012 11:59

Microbac Laboratories Inc.
SURROGATE STANDARDS

Login Number: L12050171 **Method:** 8260
Instrument Id: HPMS8 **CAL ID:** HPMS8-27-MAR-12
Workgroup (AAB#): WG397692 **Matrix:** Water

Sample Number	Dilution	Tag	1	2	3	4
L12050171-07	1.00	01	114	105	97.6	98.9
L12050171-09	1.00	01	113	102	97.7	98.9
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: 2416755
Report generated: 05/21/2012 12:00

Microbac Laboratories Inc.
SURROGATE STANDARDS

Login Number: L12050171 **Method:** 8260
Instrument Id: HPMS8 **CAL ID:** HPMS8-27-MAR-12
Workgroup (AAB#): WG397815 **Matrix:** Water

Sample Number	Dilution	Tag	1	2	3	4
L12050171-01	1.00	01	110	102	98.8	99.8
L12050171-03	1.00	01	108	100	98.7	101
L12050171-05	1.00	01	109	103	101	100
WG397815-01	1.00	01	112	102	100	101
WG397815-02	1.00	01	107	99.6	100	99.5

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: 2416755
Report generated: 05/21/2012 12:00

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number:	L12050171	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-050412	L12050171-09	8M378971	05/10/12 23:55	01
PZ-01-050412	L12050171-07	8M378979	05/11/12 04:11	01

Report Name: BLANK_SUMMARY
PDF File ID: 2423082
Report generated 05/21/2012 11:59

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number:	L12050171	Work Group:	WG397815
Blank File ID:	8M379017	Blank Sample ID:	WG397815-01
Prep Date:	05/12/12 08:49	Instrument ID:	HPMS8
Analyzed Date:	05/12/12 08:49	Method:	8260B
Analyst:	ADC		

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG397815-02	8M379018	05/12/12 09:21	01
MW-12-050412	L12050171-03	8M379019	05/12/12 10:15	01
MW-12-050412	L12050171-05	8M379020	05/12/12 10:47	01
MW-12-050412	L12050171-01	8M379023	05/12/12 12:23	01

Report Name: BLANK_SUMMARY
PDF File ID: 2423082
Report generated 05/21/2012 11:59

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number:L12050171 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: 2423083
21-MAY-2012 11:59

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050171 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: 2423083
21-MAY-2012 11:59

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number:L12050171 Prep Date:05/12/12 08:49 Sample ID:WG397815-01
Instrument ID:HPMS8 Run Date:05/12/12 08:49 Prep Method:5030B/5030C/503
File ID:8M379017 Analyst:ADC Method:8260B
Workgroup (AAB#):WG397815 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: 2423083
21-MAY-2012 11:59

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050171 Prep Date: 05/12/12 08:49 Sample ID: WG397815-01
Instrument ID: HPMS8 Run Date: 05/12/12 08:49 Prep Method: 5030B/5030C/503
File ID: 8M379017 Analyst: ADC Method: 8260B
Workgroup (AAB#): WG397815 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	112	80 - 120	PASS
Dibromofluoromethane	102	86 - 118	PASS
p-Bromofluorobenzene	100	86 - 115	PASS
Toluene-d8	101	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: 2423083
21-MAY-2012 11:59

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number:L12050171 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: 2416751
Report generated: 05/21/2012 12:00

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050171 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: 2416751
Report generated: 05/21/2012 12:00

Login Number: L12050171 Run Date: 05/12/2012 Sample ID: WG397815-02
Instrument ID: HPMS8 Run Time: 09:21 Prep Method: 5030B/5030C/503
File ID: 8M379018 Analyst: ADC Method: 8260B
Workgroup (AAB#): WG397815 Matrix: Water Units: ug/L
QC Key: WATERLOO Lot#: STD51372 Cal ID: HPMS8-27-MAR-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
1,1,1-Trichloroethane	20.0	23.5	118	80 - 134	
1,1,2,2-Tetrachloroethane	20.0	17.9	89.6	79 - 125	
1,1,2-Trichloro-1,2,2-Trifluoroethane	20.0	20.5	103	80 - 130	
1,1,2-Trichloroethane	20.0	19.6	98.2	80 - 125	
1,1-Dichloroethane	20.0	20.4	102	80 - 125	
1,1-Dichloroethene	20.0	21.7	108	80 - 132	
1,2,3-Trichlorobenzene	20.0	20.0	100	55 - 140	
1,2,4-Trichlorobenzene	20.0	19.6	98.1	65 - 135	
1,2-Dibromo-3-chloropropane	20.0	19.1	95.6	50 - 130	
1,2-Dibromoethane	20.0	19.1	95.4	80 - 125	
1,2-Dichlorobenzene	20.0	19.8	99.2	80 - 125	
1,2-Dichloroethane	20.0	22.5	113	80 - 129	
cis-1,2-Dichloroethene	20.0	21.1	105	70 - 125	
trans-1,2-Dichloroethene	20.0	21.3	106	80 - 127	
1,2-Dichloropropane	20.0	20.1	101	80 - 120	
1,3-Dichlorobenzene	20.0	20.1	101	80 - 120	
1,4-Dichlorobenzene	20.0	19.8	99.2	80 - 120	
2-Butanone	20.0	18.7	93.5	30 - 150	
2-Hexanone	20.0	16.7	83.7	55 - 130	
4-Methyl-2-pentanone	20.0	17.2	85.8	64 - 140	
Acetone	20.0	19.9	99.5	40 - 142	
Benzene	20.0	20.5	102	80 - 121	
Bromochloromethane	20.0	21.0	105	65 - 130	
Bromodichloromethane	20.0	22.9	114	80 - 131	
Bromoform	20.0	21.0	105	70 - 130	
Bromomethane	20.0	17.2	86.0	30 - 145	
Carbon disulfide	20.0	20.9	104	58 - 138	
Carbon tetrachloride	20.0	24.3	121	65 - 140	
Chlorobenzene	20.0	19.8	99.2	80 - 120	
Chloroethane	20.0	21.1	106	60 - 135	
Chloroform	20.0	21.4	107	80 - 125	
Chloromethane	20.0	24.1	120	40 - 125	
cis-1,3-Dichloropropene	20.0	21.6	108	70 - 130	
Cyclohexane	20.0	19.3	96.6	80 - 130	
Dibromochloromethane	20.0	21.5	107	60 - 135	
Dichlorodifluoromethane	20.0	32.7	163	50 - 133	*
Ethyl benzene	20.0	20.4	102	80 - 122	
Isopropylbenzene	20.0	18.5	92.4	80 - 122	
Methyl acetate	20.0	17.4	86.8	80 - 130	
Methyl tert-butyl ether	20.0	19.2	95.8	65 - 125	
Methylcyclohexane	20.0	19.1	95.5	80 - 130	

LCS - Modified 03/06/2008
PDF File ID: 2423259
Report generated: 05/21/2012 13:05

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050171 Run Date: 05/12/2012 Sample ID: WG397815-02
Instrument ID: HPMS8 Run Time: 09:21 Prep Method: 5030B/5030C/503
File ID: 8M379018 Analyst: ADC Method: 8260B
Workgroup (AAB#): WG397815 Matrix: Water Units: ug/L
QC Key: WATERLOO Lot#: STD51372 Cal ID: HPMS8-27-MAR-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Methylene chloride	20.0	19.9	99.7	80 - 123	
m,p-Xylene	40.0	41.0	102	80 - 122	
o-Xylene	20.0	19.9	99.5	80 - 122	
Styrene	20.0	18.6	93.2	80 - 123	
Tetrachloroethene	20.0	21.3	107	80 - 124	
Toluene	20.0	19.2	96.2	80 - 124	
trans-1,3-Dichloropropene	20.0	18.3	91.6	80 - 130	
Trichloroethene	20.0	21.9	110	80 - 122	
Trichlorofluoromethane	20.0	24.4	122	62 - 151	
Vinyl chloride	20.0	25.4	127	65 - 140	

Surrogates	% Recovery	Surrogate Limits	Qualifier
1,2-Dichloroethane-d4	107	80 - 120	PASS
Dibromofluoromethane	99.6	86 - 118	PASS
p-Bromofluorobenzene	100	86 - 115	PASS
Toluene-d8	99.5	88 - 110	PASS

* EXCEEDS %REC LIMIT

LCS - Modified 03/06/2008
PDF File ID: 2423259
Report generated: 05/21/2012 13:05

Microbac Laboratories Inc.

MS/MSD REPORT

Loginnum: L12050171 Cal ID: HPMS8- 27-MAR-12 Worknum: WG397815

Instrument ID: HPMS8 Contract #: Prep Method: 5030B/5030C/

Parent ID: L12050171-01 File ID: 8M379023 Dil: 1 Method: 5035A

Sample ID: L12050171-03 MS File ID: 8M379019 Dil: 1 Matrix: 8260B

Sample ID: L12050171-05 MSD File ID: 8M379020 Dil: 1 Units: Water

ug/L

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
1,1,1-Trichloroethane	U	20.0	24.4	122	20.0	23.6	118	3.39	80 - 134	30	
1,1,2,2-Tetrachloroethane	U	20.0	18.1	90.6	20.0	18.7	93.3	2.94	79 - 125	30	
1,1,2-Trichloro-1,2,2-Trifluoroethane	U	20.0	21.7	109	20.0	20.4	102	6.13	80 - 130	30	
1,1,2-Trichloroethane	U	20.0	19.5	97.6	20.0	19.9	99.3	1.71	80 - 125	30	
1,1-Dichloroethane	U	20.0	21.5	107	20.0	21.2	106	1.36	80 - 125	30	
1,1-Dichloroethene	U	20.0	23.4	117	20.0	21.8	109	7.21	80 - 132	30	
1,2,3-Trichlorobenzene	U	20.0	20.4	102	20.0	20.6	103	0.503	55 - 140	30	
1,2,4-Trichlorobenzene	U	20.0	19.6	98.2	20.0	19.7	98.7	0.530	65 - 135	30	
1,2-Dibromo-3-chloropropane	U	20.0	18.4	92.2	20.0	20.4	102	10.1	50 - 130	30	
1,2-Dibromoethane	U	20.0	19.1	95.5	20.0	20.0	99.9	4.49	80 - 125	30	
1,2-Dichlorobenzene	U	20.0	20.1	101	20.0	20.3	102	0.954	80 - 125	30	
1,2-Dichloroethane	U	20.0	23.1	115	20.0	23.2	116	0.487	80 - 129	30	
cis-1,2-Dichloroethene	U	20.0	21.5	107	20.0	21.2	106	1.36	70 - 125	30	
trans-1,2-Dichloroethene	U	20.0	22.2	111	20.0	22.1	110	0.668	80 - 127	30	
1,2-Dichloropropane	U	20.0	20.6	103	20.0	20.6	103	0.0560	80 - 120	30	
1,3-Dichlorobenzene	U	20.0	20.1	101	20.0	20.0	100	0.672	80 - 120	30	
1,4-Dichlorobenzene	U	20.0	19.9	99.6	20.0	19.8	98.8	0.857	80 - 120	30	
2-Butanone	U	20.0	17.6	88.1	20.0	18.5	92.5	4.79	30 - 150	30	
2-Hexanone	U	20.0	16.7	83.7	20.0	17.3	86.3	3.09	55 - 130	30	
4-Methyl-2-pentanone	U	20.0	18.0	90	20.0	17.7	88.7	1.35	64 - 140	30	
Acetone	U	20.0	19.8	98.8	20.0	21.2	106	6.92	40 - 142	30	
Benzene	U	20.0	20.5	102	20.0	20.1	101	1.80	80 - 121	30	
Bromochloromethane	U	20.0	22.6	113	20.0	21.8	109	3.25	65 - 130	30	
Bromodichloromethane	U	20.0	23.0	115	20.0	23.2	116	0.859	80 - 131	30	
Bromoform	U	20.0	20.8	104	20.0	21.9	109	4.72	70 - 130	30	
Bromomethane	U	20.0	15.8	78.9	20.0	11.7	58.6	29.5	30 - 145	30	
Carbon disulfide	U	20.0	22.2	111	20.0	21.0	105	5.81	58 - 138	30	
Carbon tetrachloride	U	20.0	25.4	127	20.0	24.4	122	3.93	65 - 140	30	
Chlorobenzene	U	20.0	20.1	100	20.0	19.9	99.4	0.849	80 - 120	30	
Chloroethane	U	20.0	21.7	108	20.0	20.2	101	7.07	60 - 135	30	
Chloroform	U	20.0	21.8	109	20.0	21.6	108	1.02	80 - 125	30	
Chloromethane	U	20.0	24.8	124	20.0	22.8	114	8.48	40 - 125	30	
cis-1,3-Dichloropropene	U	20.0	21.9	110	20.0	21.6	108	1.23	70 - 130	30	
Cyclohexane	U	20.0	20.7	103	20.0	19.9	99.5	3.91	80 - 130	30	
Dibromochloromethane	U	20.0	21.4	107	20.0	22.1	110	3.36	60 - 135	30	
Dichlorodifluoromethane	U	20.0	32.6	163	20.0	29.8	149	9.05	50 - 133	30	*
Ethyl benzene	U	20.0	20.7	103	20.0	20.2	101	2.23	80 - 122	30	
Isopropylbenzene	U	20.0	18.7	93.3	20.0	18.1	90.5	3.01	80 - 122	30	
Methyl acetate	U	20.0	13.7	68.5	20.0	14.1	70.3	2.64	80 - 130	30	*
Methyl tert-butyl ether	U	20.0	19.8	99.2	20.0	20.5	103	3.33	65 - 125	30	
Methylcyclohexane	U	20.0	20.0	99.9	20.0	18.8	94	6.08	80 - 130	30	

MS_MSD - Modified 03/06/2008

PDF File ID: 2423084

Report generated 05/21/2012 12:00

Microbac Laboratories Inc.

MS/MSD REPORT

Loginnum: L12050171 Cal ID: HPMS8 27-MAR-12 Worknum: WG397815

Instrument ID: HPMS8 Contract #: Prep Method: 5030B/5030C/

Parent ID: L12050171-01 File ID: 8M379023 Dil: 1 Method: 5035A

Sample ID: L12050171-03 MS File ID: 8M379019 Dil: 1 Matrix: 8260B

Sample ID: L12050171-05 MSD File ID: 8M379020 Dil: 1 Units: Water

ug/L

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Methylene chloride	U	20.0	20.4	102	20.0	20.1	100	1.51	80 - 123	30	
m,p-Xylene	U	40.0	40.9	102	40.0	40.6	101	0.923	80 - 122	30	
o-Xylene	U	20.0	19.9	99.7	20.0	19.8	98.8	0.907	80 - 122	30	
Styrene	U	20.0	18.5	92.7	20.0	18.6	92.9	0.279	80 - 123	30	
Tetrachloroethene	U	20.0	21.6	108	20.0	21.0	105	2.55	80 - 124	30	
Toluene	U	20.0	19.4	97.1	20.0	19.1	95.4	1.69	80 - 124	30	
trans-1,3-Dichloropropene	U	20.0	18.1	90.4	20.0	18.6	93	2.86	80 - 130	30	
Trichloroethene	U	20.0	22.5	112	20.0	21.8	109	2.93	80 - 122	30	
Trichlorofluoromethane	U	20.0	26.7	133	20.0	24.5	122	8.61	62 - 151	30	
Vinyl chloride	U	20.0	24.9	124	20.0	24.2	121	2.78	65 - 140	30	

* FAILS %REC LIMIT

\# FAILS RPD LIMIT

MS_MSD - Modified 03/06/2008

PDF File ID: 2423084

Report generated 05/21/2012 12:00

BFB

Login Number: L12050171
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: 2423085
Report generated 05/21/2012 12:00

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

BFB

Login Number: L12050171
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: 2423085
Report generated 05/21/2012 12:00

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

BFB

Login Number: L12050171
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	
L12050171-09	TB-050412	01	05/10/2012 23:55	
L12050171-07	PZ-01-050412	01	05/11/2012 04:11	

* Sample past 12 hour tune limit

TUNE - Modified 03/06/2008
PDF File ID: 2423085
Report generated 05/21/2012 12:00

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

BFB

Login Number: L12050171
Instrument: HPMS8
Analyst: ADC
Workgroup: WG397812

Tune ID: WG397812-01
Run Date: 05/12/2012
Run Time: 07:16
File ID: 8M379014
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	20.7	8160	PASS
75.0	95.0	30.0	60.0	46.9	18488	PASS
95.0	95.0	100	100	100	39445	PASS
96.0	95.0	5.00	9.00	7.42	2926	PASS
173	174	0	2.00	0.513	189	PASS
174	95.0	50.0	100	93.4	36834	PASS
175	174	5.00	9.00	7.64	2813	PASS
176	174	95.0	101	96.6	35583	PASS
177	176	5.00	9.00	7.03	2500	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG397812-02	CCV	01	05/12/2012 07:40	
WG397815-01	BLANK	01	05/12/2012 08:49	
WG397815-01	BLANK	01	05/12/2012 08:49	
WG397815-02	LCS	01	05/12/2012 09:21	
L12050171-03	MW-12-050412	01	05/12/2012 10:15	
L12050171-05	MW-12-050412	01	05/12/2012 10:47	
L12050171-01	MW-12-050412	01	05/12/2012 12:23	

* Sample past 12 hour tune limit

TUNE - Modified 03/06/2008
PDF File ID: 2423085
Report generated 05/21/2012 12:00

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: L12050171 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: 2416752
Report generated 05/21/2012 12:00

Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12050171 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: 2416752
Report generated 05/21/2012 12:00

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050171 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: 2416753

Report generated 05/21/2012 12:00

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050171 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: 2416753
Report generated 05/21/2012 12:00

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050171 Run Date: 05/12/2012 Sample ID: WG397812-02
Instrument ID: HPMS8 Run Time: 07:40 Method: 8260B
File ID: 8M379015 Analyst: ADC QC Key: WATERLOO
Workgroup (AAB#): WG397815 Cal ID: HPMS8 - 27-MAR-12
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
1,1-Dichloroethene	CCC	50.0	56.0	ug/L	0.375	11.9	20	
1,2-Dichloropropane	CCC	50.0	50.6	ug/L	0.236	1.27	20	
Chloroform	CCC	50.0	53.8	ug/L	0.448	7.51	20	
Ethylbenzene	CCC	50.0	51.3	ug/L	0.525	2.62	20	
Toluene	CCC	50.0	47.3	ug/L	1.31	5.32	20	
Vinyl Chloride	CCC	50.0	55.3	ug/L	0.289	10.6	20	
1,1,2,2-Tetrachloroethane	SPCC	50.0	44.4	ug/L	0.357	11.2	20	
1,1-Dichloroethane	SPCC	50.0	51.7	ug/L	0.419	3.42	20	
Bromoform	SPCC	50.0	53.6	ug/L	0.193	7.27	20	
Chlorobenzene	SPCC	50.0	50.0	ug/L	0.963	0.00220	20	
Chloromethane	SPCC	50.0	51.2	ug/L	0.321	2.36	20	
1,1,1-Trichloroethane		50.0	61.1	ug/L	0.463	22.3	20	*
1,1,2-Trichloro-1,2,2-Trifluoroethane		50.0	53.0	ug/L	0.245	5.91	20	
1,1,2-Trichloroethane		50.0	48.0	ug/L	0.205	4.07	20	
1,2,3-Trichlorobenzene		50.0	48.7	ug/L	0.796	2.60	20	
1,2,4-Trichlorobenzene		50.0	48.2	ug/L	0.919	3.63	20	
1,2-Dibromo-3-Chloropropane		50.0	48.7	ug/L	0.0674	2.60	20	
1,2-Dibromoethane		50.0	48.0	ug/L	0.220	4.06	20	
1,2-Dichlorobenzene		50.0	49.2	ug/L	1.39	1.65	20	
1,2-Dichloroethane		50.0	57.9	ug/L	0.297	15.8	20	
cis-1,2-Dichloroethene		50.0	52.0	ug/L	0.273	4.03	20	
trans-1,2-Dichloroethene		50.0	55.6	ug/L	0.352	11.1	20	
1,3-Dichlorobenzene		50.0	50.2	ug/L	1.60	0.431	20	
1,4-Dichlorobenzene		50.0	50.4	ug/L	1.61	0.808	20	
2-Butanone		50.0	49.7	ug/L	0.0546	0.589	20	
2-Hexanone		50.0	44.6	ug/L	0.0477	10.8	20	
4-Methyl-2-Pentanone		50.0	46.8	ug/L	0.0453	6.38	20	
Acetone		50.0	53.0	ug/L	0.0391	5.94	20	
Benzene		50.0	50.3	ug/L	0.963	0.523	20	
Bromochloromethane		50.0	52.3	ug/L	0.177	4.65	20	
Bromodichloromethane		50.0	56.2	ug/L	0.338	12.5	20	
Bromomethane		50.0	41.6	ug/L	0.168	16.8	20	
Carbon Disulfide		50.0	51.8	ug/L	0.668	3.69	20	
Carbon Tetrachloride		50.0	61.9	ug/L	0.439	23.7	20	*
Chloroethane		50.0	50.3	ug/L	0.169	0.537	20	
cis-1,3-Dichloropropene		50.0	55.2	ug/L	0.390	10.3	20	
Cyclohexane		50.0	51.0	ug/L	0.382	2.07	20	
Dibromochloromethane		50.0	55.0	ug/L	0.344	9.95	20	
Dichlorodifluoromethane		50.0	56.8	ug/L	0.309	13.6	20	
Isopropylbenzene		50.0	52.1	ug/L	1.65	4.28	20	
Methyl acetate		50.0	56.2	ug/L	0.131	12.4	20	
Methyl Tert Butyl Ether		50.0	51.4	ug/L	0.439	2.74	20	

CCV - Modified 03/05/2008
PDF File ID: 2416753
Report generated 05/21/2012 12:00

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050171 Run Date: 05/12/2012 Sample ID: WG397812-02
Instrument ID: HPMS8 Run Time: 07:40 Method: 8260B
File ID: 8M379015 Analyst: ADC QC Key: WATERLOO
Workgroup (AAB#): WG397815 Cal ID: HPMS8 - 27-MAR-12
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Methylcyclohexane		50.0	49.2	ug/L	0.360	1.64	20	
Methylene Chloride		50.0	48.1	ug/L	0.240	3.80	20	
m-,p-Xylene		100	103	ug/L	0.641	2.63	20	
o-Xylene		50.0	50.6	ug/L	0.635	1.17	20	
Styrene		50.0	46.6	ug/L	1.05	6.78	20	
Tetrachloroethene		50.0	53.2	ug/L	0.331	6.49	20	
trans-1,3-Dichloropropene		50.0	50.8	ug/L	0.388	1.54	20	
Trichloroethene		50.0	56.0	ug/L	0.355	12.0	20	
Trichlorofluoromethane		50.0	62.4	ug/L	0.481	24.8	20	*
1,2-Dichloroethene		100	108	ug/L	0.312	7.59	20	
Xylenes		150	153	ug/L	0.638	2.14	20	

* Exceeds %D Criteria

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

CCV - Modified 03/05/2008
PDF File ID: 2416753
Report generated 05/21/2012 12:00

Microbac Laboratories Inc.

INTERNAL STANDARD AREA SUMMARY
(COMPARED TO CCV)

Login Number: L12050171
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
L12050171-07	1.00	01	313366	556423	631182
L12050171-09	1.00	01	317394	577664	652550
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: 2423086
Report generated 05/21/2012 12:00

Microbac Laboratories Inc.

INTERNAL STANDARD AREA SUMMARY
(COMPARED TO CCV)

Login Number: L12050171
Instrument ID: HPMS8
Workgroup (AAB#): WG397815

CCV Number: WG397812-02
CAL ID: HPMS8-27-MAR-12
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG397812-02	NA	NA	343820	616336	708839
Upper Limit	NA	NA	687640	1232672	1417678
Lower Limit	NA	NA	171910	308168	354420
L12050171-01	1.00	01	331010	591396	680597
L12050171-03	1.00	01	333586	607382	675970
L12050171-05	1.00	01	331599	609366	694693
WG397815-01	1.00	01	328230	594997	681167
WG397815-02	1.00	01	330150	606261	691495

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: 2423086
Report generated 05/21/2012 12:00

Microbac Laboratories Inc.

INTERNAL STANDARD RETENTION TIME SUMMARY
(COMPARED TO CCV)

Login Number: L12050171
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
L12050171-07	1.00	01	17.06	14.04	10.19
L12050171-09	1.00	01	17.06	14.05	10.19
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: 2423087
Report generated 05/21/2012 12:00

Microbac Laboratories Inc.

INTERNAL STANDARD RETENTION TIME SUMMARY
(COMPARED TO CCV)

Login Number: L12050171
Instrument ID: HPMS8
Workgroup (AAB#): WG397815

CCV Number: WG397812-02
CAL ID: HPMS8-27-MAR-12
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3
WG397812-02	NA	NA	17.05	14.04	10.19
Upper Limit	NA	NA	17.55	14.54	10.69
Lower Limit	NA	NA	16.55	13.54	9.69
L12050171-01	1.00	01	17.05	14.04	10.19
L12050171-03	1.00	01	17.05	14.04	10.2
L12050171-05	1.00	01	17.05	14.05	10.19
WG397815-01	1.00	01	17.05	14.04	10.19
WG397815-02	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: 2423087
Report generated 05/21/2012 12:00

2.1.1.3 Sample Data

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\051212\8M379023.D Vial: 10
Acq On : 12 May 2012 12:23 Operator: ADC
Sample : L12050171-01 A 826-SPE Inst : HPMS8
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 18 08:53:18 2012 Quant Results File: 8260WT.RES

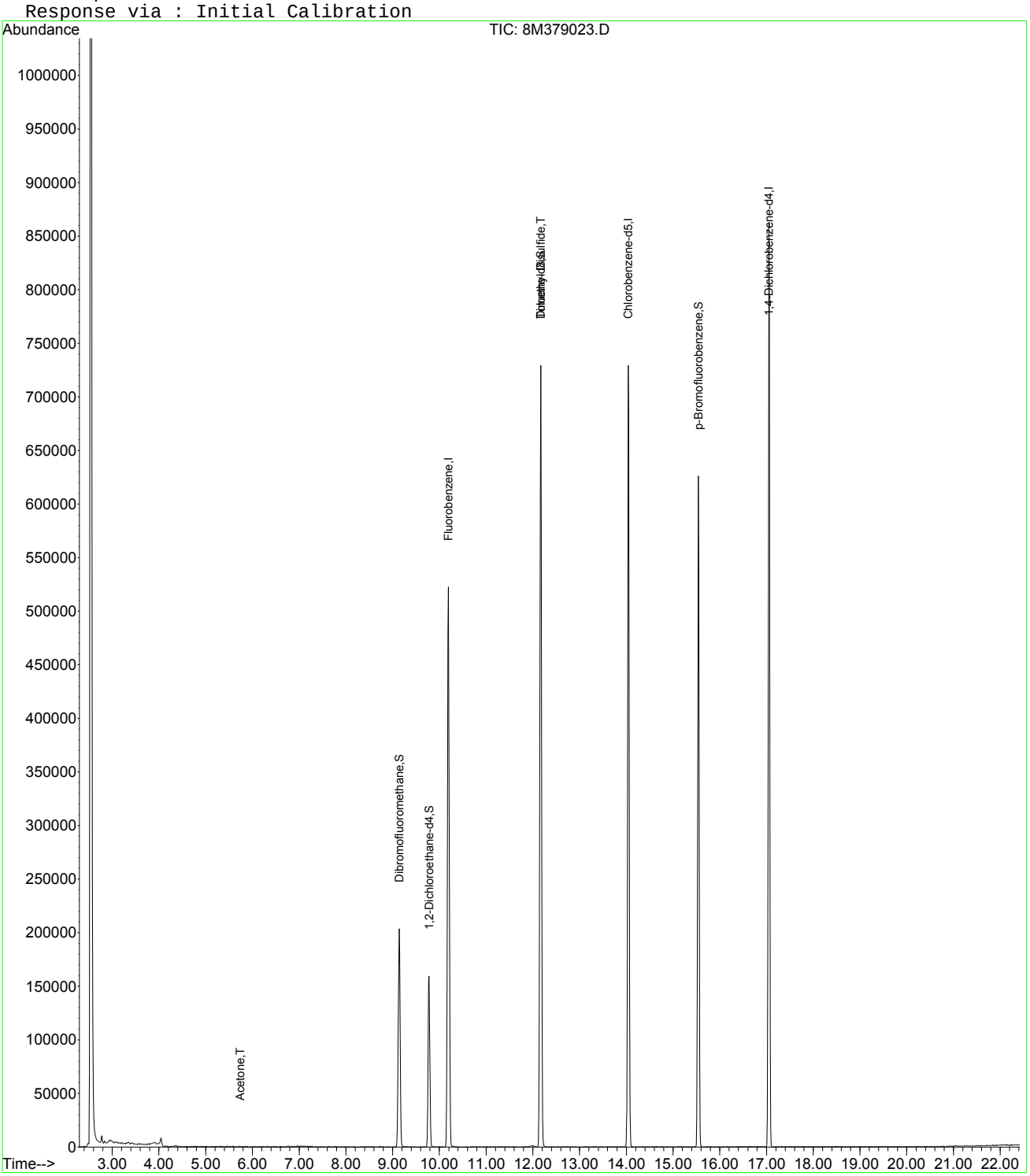
Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration
DataAcq Meth : 8260WT

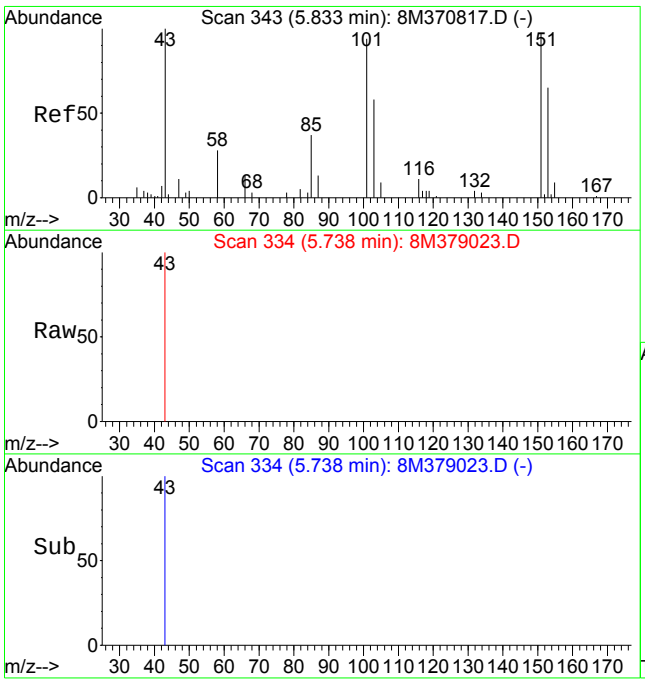
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.19	96	680597	25.00	ug/L	0.01
57) Chlorobenzene-d5	14.04	117	591396	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.05	152	331010	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.14	111	179440	25.4128	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 101.64%			
43) 1,2-Dichloroethane-d4	9.78	65	149382	27.4735	ug/L	0.01
Spiked Amount 25.000	Range 80 - 120		Recovery = 109.88%			
58) Toluene-d8	12.17	98	681481	24.9574	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 99.84%			
80) p-Bromofluorobenzene	15.54	95	264510	24.7023	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 98.80%			
Target Compounds						Qvalue
13) Acetone	5.74	43	391	0.3894	ug/L #	47
56) Dimethyl Disulfide	12.17	94	19085	1.7890	ug/L #	28

(#) = qualifier out of range (m) = manual integration
8M379023.D 8260WT.M Fri May 18 08:53:18 2012 Page 1

Data File : C:\MSDCHEM\1\DATA\051212\8M379023.D Vial: 10
Acq On : 12 May 2012 12:23 Operator: ADC
Sample : L12050171-01 A 826-SPE Inst : HPMS8
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 18 8:53 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

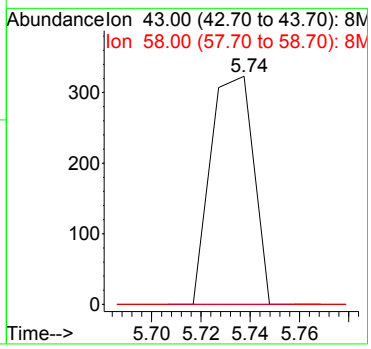


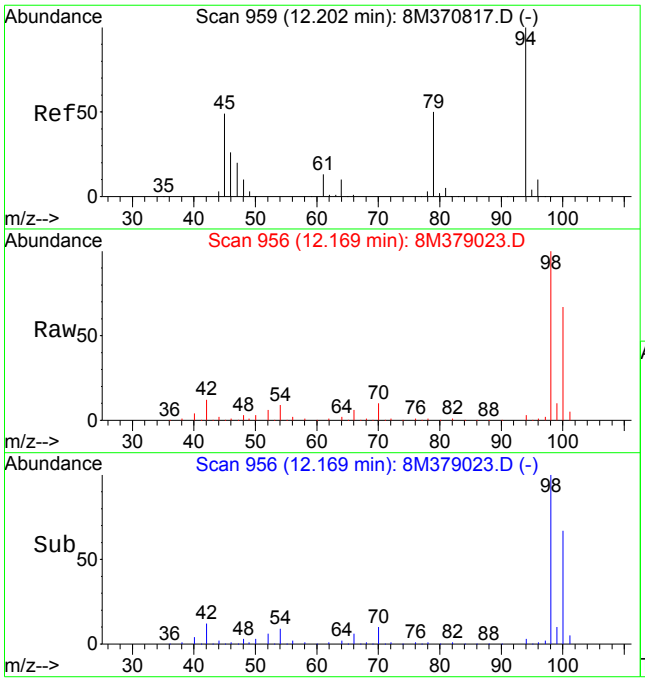


#13
Acetone
Concen: 0.39 ug/L
RT: 5.74 min Scan# 334
Delta R.T. 0.02 min
Lab File: 8M379023.D
Acq: 12 May 2012 12:23

Tgt Ion: 43 Resp: 391

Ion	Ratio	Lower	Upper
43	100		
58	0.0	16.9	39.3#

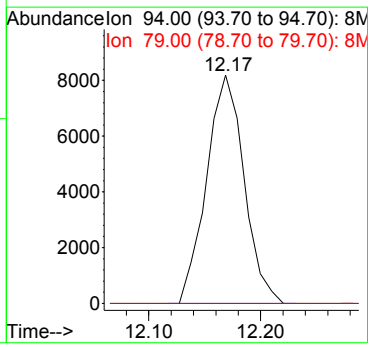




#56
Dimethyl Disulfide
Concen: 1.79 ug/L
RT: 12.17 min Scan# 956
Delta R.T. 0.08 min
Lab File: 8M379023.D
Acq: 12 May 2012 12:23

Tgt Ion: 94 Resp: 19085

Ion	Ratio	Lower	Upper
94	100		
79	0.0	29.2	68.0#



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\051212\8M379023.D Vial: 10
Acq On : 12 May 2012 12:23 Operator: ADC
Sample : L12050171-01 A 826-SPE Inst : HPMS8
Misc : 1,1 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
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 200 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

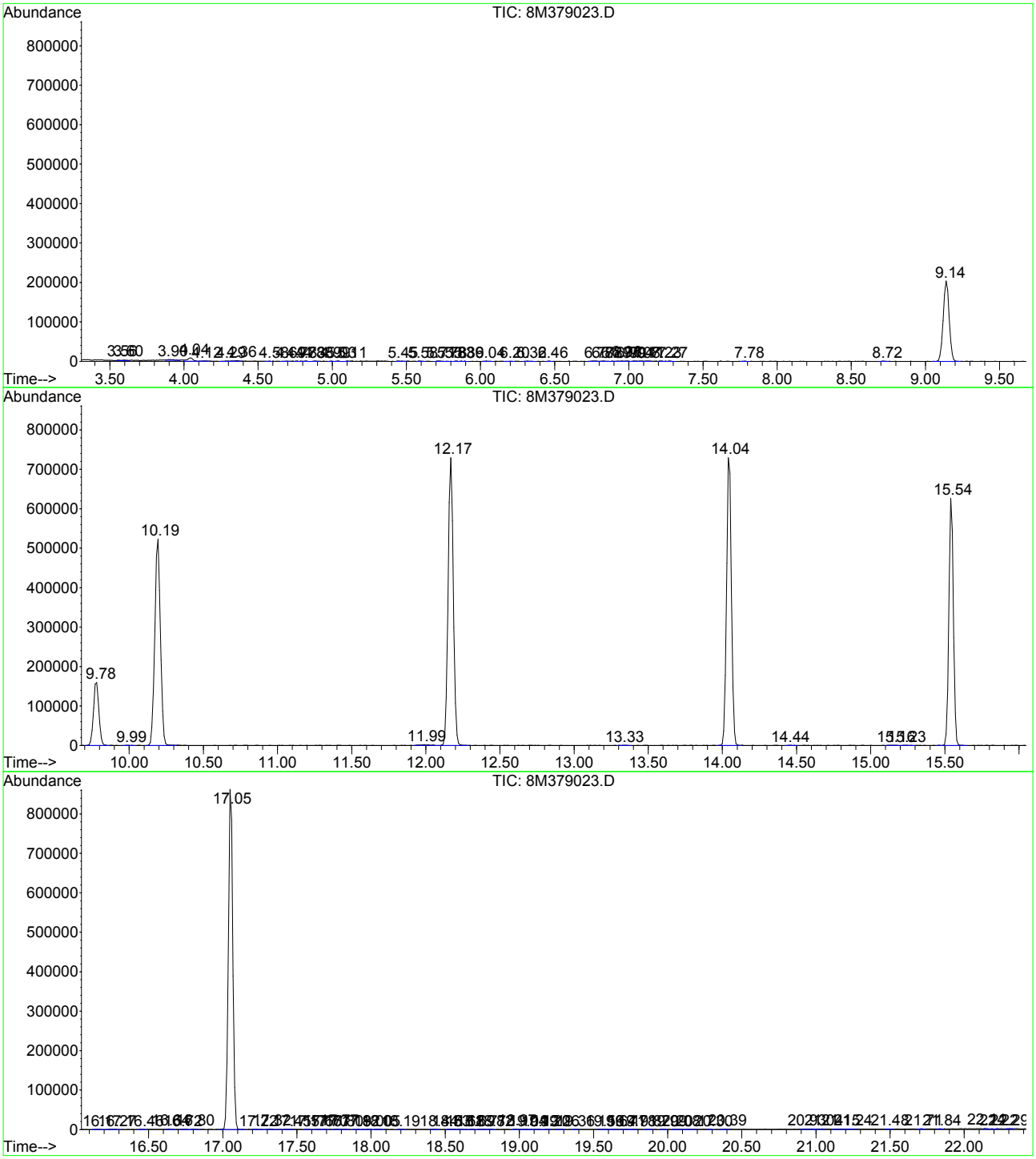
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.556	122	123	125	rVB2	1044	971	0.05%	0.011%
2	3.597	125	127	130	rBV2	1057	1900	0.11%	0.021%
3	3.897	154	156	163	rVV4	1678	5514	0.31%	0.061%
4	4.042	166	170	176	rVB	8030	21465	1.19%	0.237%
5	4.125	176	178	182	rVB	561	1292	0.07%	0.014%
6	4.290	189	194	196	rBV	833	2540	0.14%	0.028%
7	4.362	196	201	203	rVB	1215	2954	0.16%	0.033%
8	4.579	219	222	223	rVB	777	977	0.05%	0.011%
9	4.693	229	233	235	rBV	691	1488	0.08%	0.016%
10	4.766	238	240	241	rBB	806	980	0.05%	0.011%
11	4.828	241	246	248	rBB	750	1753	0.10%	0.019%
12	4.879	249	251	254	rBV	701	1513	0.08%	0.017%
13	4.993	260	262	264	rBB	721	872	0.05%	0.010%
14	5.034	264	266	269	rBB	681	1104	0.06%	0.012%
15	5.107	270	273	274	rBV	625	1026	0.06%	0.011%
16	5.448	304	306	311	rBV2	1068	2523	0.14%	0.028%
17	5.582	318	319	323	rBB2	811	1382	0.08%	0.015%
18	5.707	329	331	336	rBB2	767	1727	0.10%	0.019%
19	5.779	336	338	341	rBB2	471	733	0.04%	0.008%
20	5.831	342	343	345	rBB2	641	780	0.04%	0.009%
21	5.893	345	349	351	rBB2	701	1087	0.06%	0.012%
22	6.037	360	363	367	rBB2	703	1464	0.08%	0.016%
23	6.203	375	379	381	rBB2	421	890	0.05%	0.010%
24	6.317	387	390	395	rBB	690	1484	0.08%	0.016%
25	6.461	402	404	406	rBB	712	853	0.05%	0.009%
26	6.771	429	434	438	rBV2	909	3162	0.18%	0.035%
27	6.823	438	439	444	rVB	729	1553	0.09%	0.017%
28	6.885	444	445	448	rBV	778	1152	0.06%	0.013%
29	6.958	448	452	453	rVV	1186	2045	0.11%	0.023%
30	6.989	453	455	457	rVB2	1000	1501	0.08%	0.017%
31	7.040	457	460	462	rBV2	999	1951	0.11%	0.022%
32	7.082	462	464	466	rVV	710	1505	0.08%	0.017%
33	7.113	466	467	471	rVV2	1044	2102	0.12%	0.023%
34	7.226	475	478	479	rBB2	757	1312	0.07%	0.014%
35	7.268	479	482	486	rBB	796	1593	0.09%	0.018%
36	7.785	529	532	534	rBB	700	827	0.05%	0.009%
37	8.715	619	622	625	rBB	684	1030	0.06%	0.011%
38	9.139	654	663	672	rBB	203707	561022	31.19%	6.192%
39	9.780	718	725	733	rBB	159399	407821	22.68%	4.501%
40	9.987	742	745	750	rBB	409	857	0.05%	0.009%
41	10.194	757	765	777	rBV	522765	1389693	77.27%	15.339%
42	11.993	932	939	947	rBB	1353	6835	0.38%	0.075%
43	12.169	948	956	967	rBB	729600	1766752	98.23%	19.501%

44	13.327	1065	1068	1073	rBB	371	1074	0.06%	0.012%
45	14.040	1130	1137	1145	rBB	729590	1670118	92.86%	18.434%
46	14.443	1174	1176	1182	rBB	358	842	0.05%	0.009%
47	15.157	1240	1245	1249	rBB	606	1664	0.09%	0.018%
48	15.229	1250	1252	1258	rBB	465	1084	0.06%	0.012%
49	15.539	1273	1282	1292	rBB	626449	1307944	72.72%	14.436%
50	16.170	1338	1343	1345	rBB	481	1034	0.06%	0.011%
51	16.273	1347	1353	1356	rBB	444	1384	0.08%	0.015%
52	16.460	1368	1371	1373	rBB	378	841	0.05%	0.009%
53	16.635	1386	1388	1392	rVB	758	1362	0.08%	0.015%
54	16.718	1395	1396	1401	rBB	367	1122	0.06%	0.012%
55	16.801	1402	1404	1408	rBB	724	1435	0.08%	0.016%
56	17.049	1421	1428	1438	rBB	862338	1798542	100.00%	19.851%
57	17.225	1442	1445	1450	rBB	424	1138	0.06%	0.013%
58	17.318	1451	1454	1458	rBB	833	1410	0.08%	0.016%
59	17.452	1460	1467	1469	rBV	439	1831	0.10%	0.020%
60	17.566	1476	1478	1481	rBB	380	883	0.05%	0.010%
61	17.659	1483	1487	1488	rBB	436	865	0.05%	0.010%
62	17.700	1488	1491	1492	rBB	422	730	0.04%	0.008%
63	17.773	1495	1498	1499	rBB	727	903	0.05%	0.010%
64	17.804	1499	1501	1505	rBB	432	1105	0.06%	0.012%
65	17.917	1508	1512	1514	rBB	586	771	0.04%	0.009%
66	18.000	1514	1520	1521	rBB	461	1135	0.06%	0.013%
67	18.052	1522	1525	1528	rBB	402	1109	0.06%	0.012%
68	18.186	1537	1538	1542	rBB	455	959	0.05%	0.011%
69	18.445	1558	1563	1564	rBB	483	1185	0.07%	0.013%
70	18.527	1569	1571	1576	rBB	461	1463	0.08%	0.016%
71	18.621	1576	1580	1583	rBB	533	1161	0.06%	0.013%
72	18.693	1584	1587	1588	rBB	420	734	0.04%	0.008%
73	18.765	1589	1594	1596	rBB	421	1288	0.07%	0.014%
74	18.817	1596	1599	1600	rBB	444	793	0.04%	0.009%
75	18.972	1612	1614	1619	rBB	614	1598	0.09%	0.018%
76	19.044	1619	1621	1623	rBB	444	757	0.04%	0.008%
77	19.127	1623	1629	1632	rBB	504	1752	0.10%	0.019%
78	19.200	1633	1636	1637	rBV	442	888	0.05%	0.010%
79	19.262	1640	1642	1646	rVB	596	1330	0.07%	0.015%
80	19.365	1651	1652	1655	rBV	400	924	0.05%	0.010%
81	19.561	1668	1671	1676	rVB	506	1742	0.10%	0.019%
82	19.644	1676	1679	1681	rBV	500	1200	0.07%	0.013%
83	19.706	1683	1685	1689	rVB	451	1337	0.07%	0.015%
84	19.779	1689	1692	1693	rBV	400	940	0.05%	0.010%
85	19.872	1698	1701	1704	rBB	439	1209	0.07%	0.013%
86	19.985	1708	1712	1713	rBB	470	1015	0.06%	0.011%
87	20.078	1716	1721	1725	rBB	443	1939	0.11%	0.021%
88	20.171	1725	1730	1732	rBV	537	1797	0.10%	0.020%
89	20.295	1739	1742	1743	rVB	515	835	0.05%	0.009%
90	20.389	1747	1751	1754	rBV	713	2023	0.11%	0.022%
91	20.926	1800	1803	1809	rBV	641	2665	0.15%	0.029%
92	21.040	1809	1814	1816	rBV2	927	2249	0.13%	0.025%
93	21.154	1821	1825	1831	rBV2	626	2536	0.14%	0.028%
94	21.236	1831	1833	1836	rBV2	605	981	0.05%	0.011%
95	21.485	1855	1857	1860	rBV	833	1443	0.08%	0.016%
96	21.712	1876	1879	1881	rBV	885	1290	0.07%	0.014%
97	21.836	1889	1891	1893	rVB2	790	816	0.05%	0.009%
98	22.136	1919	1920	1926	rVB3	1291	2932	0.16%	0.032%
99	22.219	1926	1928	1930	rBV2	1067	1663	0.09%	0.018%
100	22.291	1933	1935	1939	rBV2	940	2256	0.13%	0.025%

Sum of corrected areas: 9060011

File : C:\MSDCHEM\1\DATA\051212\8M379023.D
Operator : ADC
Acquired : 12 May 2012 12:23 using AcqMethod 8260WT
Instrument : HPMS8
Sample Name: L12050171-01 A 826-SPE
Misc Info : 1,1
Vial Number: 10
Quant File :8260WT.RES (RTE Integrator)



Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\051212\8M379019.D Vial: 6
Acq On : 12 May 2012 10:15 Operator: ADC
Sample : L12050171-03 A MS 826-SPE Inst : HPMS8
Misc : 1,1 STD51372 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 12 10:37:30 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	675970	25.00	ug/L	0.01
57) Chlorobenzene-d5	14.04	117	607382	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.05	152	333586	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.14	111	175871	25.0779	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 100.32%			
43) 1,2-Dichloroethane-d4	9.78	65	145981	27.0318	ug/L	0.01
Spiked Amount 25.000	Range 80 - 120		Recovery = 108.12%			
58) Toluene-d8	12.17	98	709793	25.3101	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 101.24%			
80) p-Bromofluorobenzene	15.54	95	266403	24.6870	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 98.76%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.82	85	239705	32.6022	ug/L	99
3) Chloromethane	3.23	50	210000	24.7818	ug/L	99
4) Vinyl Chloride	3.43	62	175596	24.8629	ug/L	98
5) 1,3-Butadiene	3.46	54	445	Below Cal	#	1
6) Bromomethane	4.25	94	86338	15.7853	ug/L	98
7) Chloroethane	4.41	64	98659	21.6844	ug/L	98
8) Trichlorofluoromethane	4.90	101	278217	26.6787	ug/L	98
10) Isoprene	5.45	67	156113	19.0228	ug/L	94
12) 1,1,2-Trichloro-1,2,2-Trif	5.68	101	135950	21.7063	ug/L	95
13) Acetone	5.73	43	19712	19.7635	ug/L	94
14) 1,1-Dichloroethene	5.96	61	212019	23.3939	ug/L	93
16) Dimethyl Sulfide	6.21	62	145205	22.7589	ug/L	95
17) Iodomethane	6.45	142	202097	19.1025	ug/L	94
18) Methyl acetate	6.48	43	42978	13.6923	ug/L	98
19) Methylene Chloride	6.72	84	137379	20.3700	ug/L	94
20) Carbon Disulfide	6.75	76	387393	22.2464	ug/L	100
21) Acrylonitrile	6.90	53	24638	18.2480	ug/L	100
22) Methyl Tert Butyl Ether	6.98	73	228895	19.8352	ug/L	99
23) trans-1,2-Dichloroethene	7.20	61	189995	22.1994	ug/L	95
24) n-Hexane	7.31	57	156582	20.0500	ug/L	96
27) 1,1-Dichloroethane	7.81	63	234841	21.4639	ug/L	99
29) 2-Butanone	8.37	43	26161	17.6269	ug/L	98
31) 2,2-Dichloropropane	8.59	77	222593	23.6458	ug/L	99
32) cis-1,2-Dichloroethene	8.64	96	152194	21.4794	ug/L	96
33) Chloroform	8.85	83	245522	21.7734	ug/L	99
35) Bromochloromethane	9.08	130	102999	22.5704	ug/L	98
38) 1,1,1-Trichloroethane	9.40	97	250507	24.4486	ug/L	99
39) Cyclohexane	9.44	56	209485	20.6934	ug/L	99
40) 1,1-Dichloropropene	9.60	75	195873	22.1936	ug/L	99
42) Carbon Tetrachloride	9.74	117	243259	25.3764	ug/L	99
45) 1,2-Dichloroethane	9.90	62	160063	23.0689	ug/L	98
46) Benzene	9.94	78	530858	20.4941	ug/L	98
47) Trichloroethene	10.70	130	192379	22.4657	ug/L	100
48) Methylcyclohexane	10.81	83	197764	19.9820	ug/L	99
49) 1,2-Dichloropropane	10.91	63	129803	20.5959	ug/L	89
50) Bromodichloromethane	11.20	83	187144	23.0197	ug/L	98
52) Dibromomethane	11.27	93	68817	21.0918	ug/L	98
53) 2-Chloroethyl Vinyl Ether	11.52	63	10291	3.5586	ug/L	93
54) 4-Methyl-2-Pentanone	11.56	58	23540	17.9905	ug/L	98
55) cis-1,3-Dichloropropene	11.84	75	209590	21.9044	ug/L	100
56) Dimethyl Disulfide	12.10	94	205945	19.4370	ug/L	96

(#) = qualifier out of range (m) = manual integration
8M379019.D 8260WT.M Sat May 12 10:37:30 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\051212\8M379019.D Vial: 6
Acq On : 12 May 2012 10:15 Operator: ADC
Sample : L12050171-03 A MS 826-SPE Inst : HPMS8
Misc : 1,1 STD51372 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 12 10:37:30 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

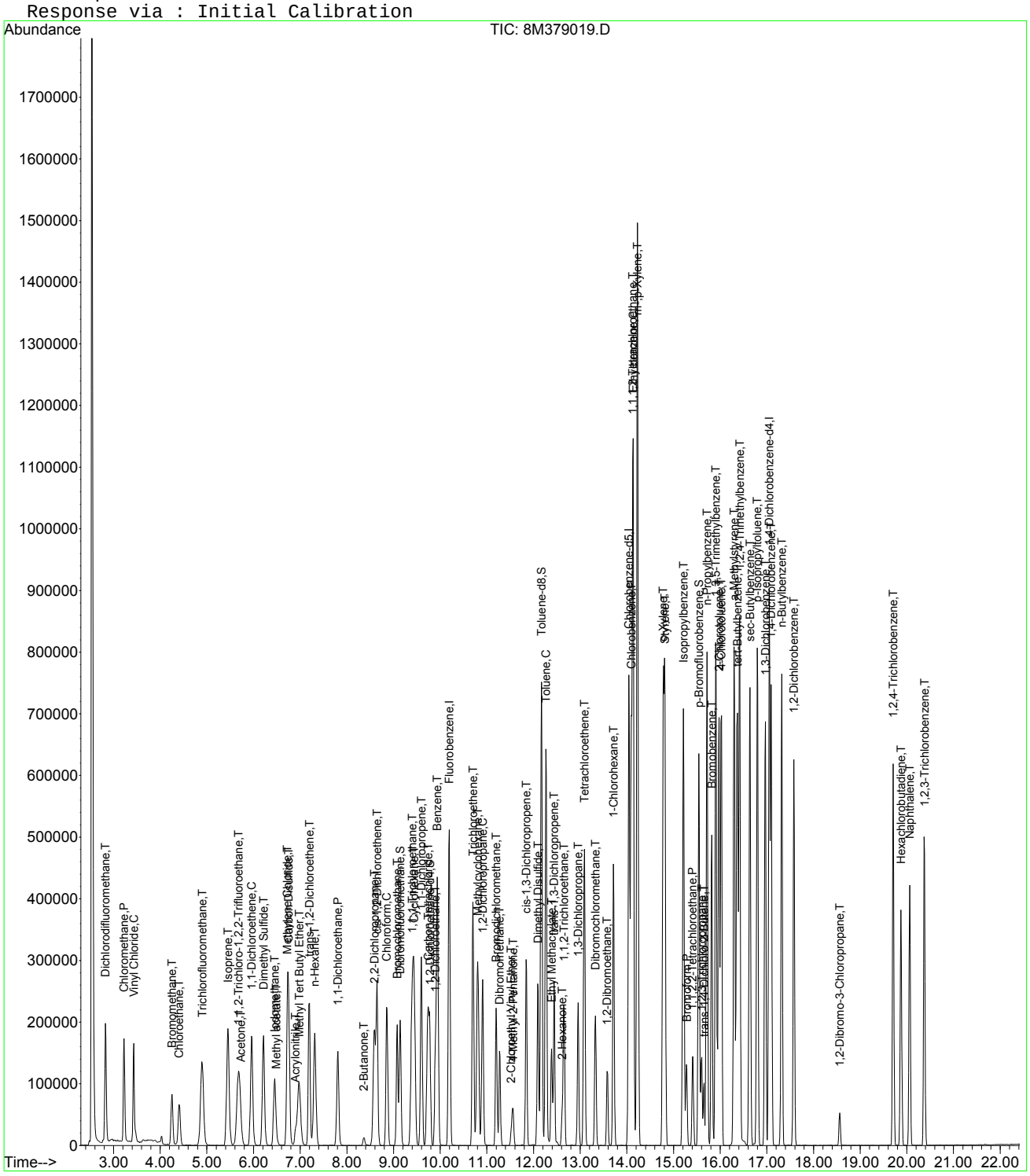
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
59)	Toluene	12.26	91	650251	19.4124	ug/L	99
60)	Ethyl Methacrylate	12.39	69	107947	18.4740	ug/L	98
62)	trans-1,3-Dichloropropene	12.44	75	168048	18.0824	ug/L	100
63)	1,1,2-Trichloroethane	12.66	97	101109	19.5259	ug/L	99
64)	2-Hexanone	12.62	58	21738	16.7385	ug/L	86
65)	1,3-Dichloropropane	12.96	76	160249	18.9013	ug/L	93
66)	Tetrachloroethene	13.09	164	162714	21.5519	ug/L	97
67)	Dibromochloromethane	13.33	129	162519	21.3537	ug/L	100
68)	1,2-Dibromoethane	13.58	107	106563	19.1030	ug/L	98
69)	1-Chlorohexane	13.71	91	203437	18.1834	ug/L	94
70)	Chlorobenzene	14.09	112	469441	20.0578	ug/L	98
71)	1,1,1,2-Tetrachloroethane	14.12	131	183709	21.5673	ug/L	99
72)	Ethylbenzene	14.13	106	256805	20.6564	ug/L	96
73)	m-,p-Xylene	14.23	106	621268	40.9322	ug/L	94
74)	o-Xylene	14.78	106	304148	19.9481	ug/L	94
75)	Styrene	14.82	104	505789	18.5302	ug/L	96
76)	Bromoform	15.28	173	91006	20.8434	ug/L	100
77)	Isopropylbenzene	15.21	105	714800	18.6512	ug/L	98
79)	1,1,2,2-Tetrachloroethane	15.41	83	97128	18.1179	ug/L	99
81)	1,2,3-Trichloropropane	15.60	110	34939	19.7012	ug/L	94
82)	trans-1,4-Dichloro-2-Buten	15.65	53	27078	17.4484	ug/L	88
83)	n-Propylbenzene	15.72	91	864279	20.0051	ug/L	99
84)	Bromobenzene	15.82	156	222906	20.7548	ug/L	97
85)	1,3,5-Trimethylbenzene	15.90	105	672464	20.8716	ug/L	98
86)	2-Chlorotoluene	15.98	91	551938	20.0838	ug/L	98
87)	4-Chlorotoluene	16.03	91	522770	20.1231	ug/L	99
88)	a-Methylstyrene	16.30	118	373173	19.4790	ug/L	99
89)	tert-Butylbenzene	16.37	134	146587	20.5778	ug/L	88
90)	1,2,4-Trimethylbenzene	16.42	105	711658	22.6475	ug/L	97
91)	sec-Butylbenzene	16.64	105	784885	19.9225	ug/L	100
92)	p-Isopropyltoluene	16.79	119	726307	20.4264	ug/L	98
93)	1,3-Dichlorobenzene	16.97	146	426751	20.1333	ug/L	100
94)	1,4-Dichlorobenzene	17.09	146	423889	19.9271	ug/L	100
95)	n-Butylbenzene	17.32	91	573415	20.6290	ug/L	100
96)	1,2-Dichlorobenzene	17.58	146	380250	20.1251	ug/L	99
97)	1,2-Dibromo-3-Chloropropan	18.56	75	17014	18.4379	ug/L	97
98)	1,2,4-Trichlorobenzene	19.71	182	249913	19.6419	ug/L	100
99)	Hexachlorobutadiene	19.87	225	111180	24.5932	ug/L	99
100)	Naphthalene	20.06	128	458846	18.4282	ug/L	100
101)	1,2,3-Trichlorobenzene	20.38	180	222980	20.4488	ug/L	99

(#) = qualifier out of range (m) = manual integration
8M379019.D 8260WT.M Sat May 12 10:37:31 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\051212\8M379019.D Vial: 6
Acq On : 12 May 2012 10:15 Operator: ADC
Sample : L12050171-03 A MS 826-SPE Inst : HPMS8
Misc : 1,1 STD51372 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 12 10:37 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



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\051212\8M379019.D Vial: 6
Acq On : 12 May 2012 10:15 Operator: ADC
Sample : L12050171-03 A MS 826-SPE Inst : HPMS8
Misc : 1,1 STD51372 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
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 200 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

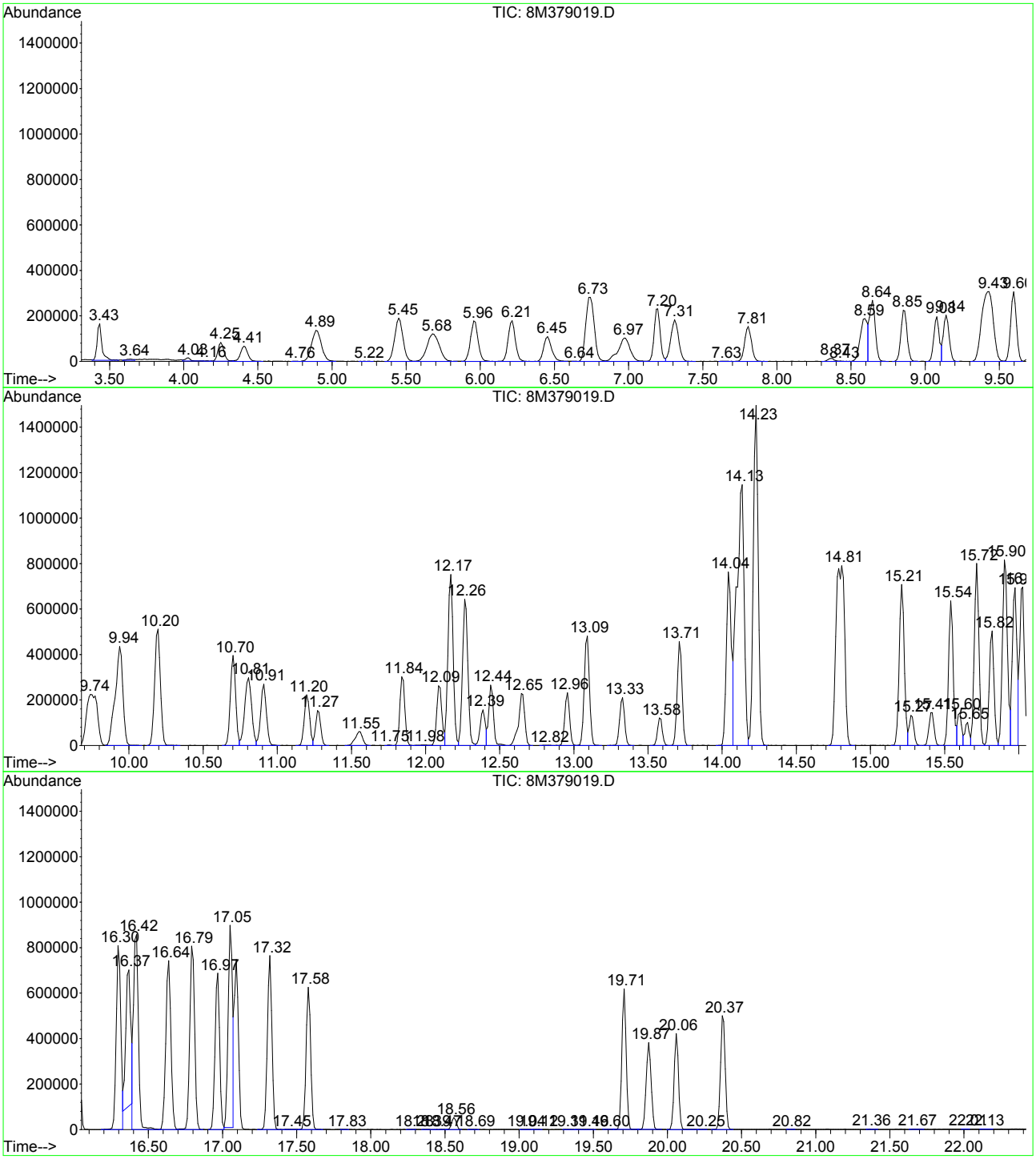
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.434	106	111	123	rVB	161151	355305	8.98%	0.473%
2	3.640	126	131	134	rBV3	4546	14275	0.36%	0.019%
3	4.033	165	169	178	rVB	13866	34794	0.88%	0.046%
4	4.157	179	181	183	rVB2	1501	1673	0.04%	0.002%
5	4.250	183	190	198	rBV	82182	231919	5.86%	0.309%
6	4.405	198	205	217	rVB	66701	221973	5.61%	0.296%
7	4.757	236	239	241	rBB	701	1328	0.03%	0.002%
8	4.891	242	252	265	rBV	135807	624562	15.79%	0.832%
9	5.222	280	284	289	rBB	612	1343	0.03%	0.002%
10	5.450	297	306	317	rBV	189639	737724	18.66%	0.982%
11	5.677	317	328	344	rVV2	120812	696445	17.61%	0.927%
12	5.956	347	355	369	rVB	177441	620615	15.69%	0.826%
13	6.215	370	380	392	rBB	178269	596573	15.09%	0.794%
14	6.453	393	403	416	rBV2	108576	403627	10.21%	0.537%
15	6.639	419	421	423	rVB	949	1288	0.03%	0.002%
16	6.732	423	430	441	rBV2	281874	1116985	28.25%	1.487%
17	6.970	441	453	468	rVV2	102255	566442	14.32%	0.754%
18	7.197	468	475	480	rVV	230967	656184	16.59%	0.874%
19	7.311	480	486	499	rVB	182352	654782	16.56%	0.872%
20	7.631	515	517	524	rBB	665	2031	0.05%	0.003%
21	7.807	525	534	546	rBB	152848	487631	12.33%	0.649%
22	8.365	582	588	593	rBV	12840	36485	0.92%	0.049%
23	8.428	593	594	599	rVB	1237	2136	0.05%	0.003%
24	8.593	599	610	612	rBV	187681	673831	17.04%	0.897%
25	8.645	612	615	625	rVB	267845	703815	17.80%	0.937%
26	8.851	628	635	645	rBB	224349	645790	16.33%	0.860%
27	9.079	650	657	660	rBV	195815	518774	13.12%	0.691%
28	9.141	660	663	671	rVB	203189	524923	13.27%	0.699%
29	9.430	679	691	701	rBV2	307271	1664846	42.10%	2.217%
30	9.596	701	707	713	rVV	306253	826719	20.91%	1.101%
31	9.741	713	721	731	rVV2	224923	1152279	29.14%	1.534%
32	9.937	731	740	754	rVB2	435569	1558060	39.40%	2.074%
33	10.196	758	765	779	rBB	512064	1388630	35.11%	1.849%
34	10.702	807	814	818	rBV	395077	982616	24.85%	1.308%
35	10.806	818	824	829	rVV	298047	974636	24.65%	1.298%
36	10.909	829	834	844	rVB	269421	716240	18.11%	0.954%
37	11.198	855	862	866	rBV	222880	553816	14.00%	0.737%
38	11.271	866	869	876	rVB	153280	356889	9.02%	0.475%
39	11.550	887	896	903	rBB2	60203	204362	5.17%	0.272%
40	11.746	913	915	918	rBB	1167	1884	0.05%	0.003%
41	11.840	919	924	931	rBB	301698	702979	17.78%	0.936%
42	11.984	932	938	943	rBV	1514	6385	0.16%	0.009%
43	12.088	943	948	952	rVV	262291	654607	16.55%	0.872%

44	12.170	952	956	961	rVV	751753	1826458	46.19%	2.432%
45	12.263	961	965	972	rVV	643012	1588197	40.16%	2.115%
46	12.388	972	977	979	rVV	156861	368719	9.32%	0.491%
47	12.439	979	982	993	rVB	265759	575694	14.56%	0.767%
48	12.646	994	1002	1009	rBB2	228349	658651	16.66%	0.877%
49	12.822	1014	1019	1023	rBB	1023	2409	0.06%	0.003%
50	12.956	1024	1032	1038	rBB	231775	518539	13.11%	0.690%
51	13.091	1038	1045	1054	rBB	480909	1165319	29.47%	1.552%
52	13.328	1058	1068	1075	rBB	210359	489369	12.37%	0.652%
53	13.577	1086	1092	1098	rBB	120507	268454	6.79%	0.357%
54	13.711	1099	1105	1112	rBB	456419	1025042	25.92%	1.365%
55	14.042	1129	1137	1140	rBV	763204	1896935	47.97%	2.526%
56	14.135	1140	1146	1150	rVV2	1146787	3954551	100.00%	5.265%
57	14.228	1150	1155	1162	rVB	1496628	3408633	86.20%	4.538%
58	14.807	1202	1211	1219	rBB2	790593	3219485	81.41%	4.287%
59	15.210	1243	1250	1254	rBV	708618	1690760	42.75%	2.251%
60	15.272	1254	1256	1263	rVB	131459	279770	7.07%	0.373%
61	15.407	1264	1269	1275	rBB	144395	341751	8.64%	0.455%
62	15.541	1276	1282	1286	rBV	635541	1408558	35.62%	1.875%
63	15.603	1286	1288	1290	rVV	143045	256020	6.47%	0.341%
64	15.655	1290	1293	1295	rVV	101055	208642	5.28%	0.278%
65	15.717	1295	1299	1304	rVV	800758	1738721	43.97%	2.315%
66	15.820	1304	1309	1313	rVV	503712	1109502	28.06%	1.477%
67	15.903	1313	1317	1321	rVV	815946	1956602	49.48%	2.605%
68	15.975	1321	1324	1326	rVV	694102	1523982	38.54%	2.029%
69	16.027	1326	1329	1337	rVB	697135	1461648	36.96%	1.946%
70	16.296	1344	1355	1358	rBV	809013	1778013	44.96%	2.367%
71	16.368	1358	1362	1364	rVV	613879	1458713	36.89%	1.942%
72	16.420	1364	1367	1382	rVB	857989	1907425	48.23%	2.540%
73	16.637	1382	1388	1394	rBV	742792	1761551	44.54%	2.345%
74	16.792	1394	1403	1410	rVB	807008	1834459	46.39%	2.442%
75	16.968	1414	1420	1424	rBV	687485	1487698	37.62%	1.981%
76	17.051	1424	1428	1430	rBV	889321	1880657	47.56%	2.504%
77	17.319	1446	1454	1462	rBB	764860	1616254	40.87%	2.152%
78	17.454	1463	1467	1473	rBB2	825	2539	0.06%	0.003%
79	17.578	1473	1479	1488	rBB	625950	1333957	33.73%	1.776%
80	17.826	1500	1503	1505	rVB	823	1557	0.04%	0.002%
81	18.281	1543	1547	1549	rBV	347	1213	0.03%	0.002%
82	18.395	1553	1558	1560	rBB	493	1366	0.03%	0.002%
83	18.467	1561	1565	1569	rBB	607	1241	0.03%	0.002%
84	18.560	1569	1574	1579	rBV	52986	112723	2.85%	0.150%
85	18.695	1583	1587	1590	rBB	474	1391	0.04%	0.002%
86	19.036	1617	1620	1625	rBB	389	1524	0.04%	0.002%
87	19.119	1625	1628	1631	rBB	420	1216	0.03%	0.002%
88	19.315	1645	1647	1653	rBB	374	1530	0.04%	0.002%
89	19.460	1653	1661	1666	rBB	444	2758	0.07%	0.004%
90	19.604	1671	1675	1678	rVV	834	1797	0.05%	0.002%
91	19.708	1678	1685	1694	rVV	618725	1262130	31.92%	1.680%
92	19.873	1694	1701	1709	rVV	381711	883016	22.33%	1.176%
93	20.059	1713	1719	1733	rBB	422336	852642	21.56%	1.135%
94	20.246	1733	1737	1739	rBV	655	1516	0.04%	0.002%
95	20.370	1742	1749	1756	rBV	500793	1087565	27.50%	1.448%
96	20.825	1791	1793	1796	rVB	611	1254	0.03%	0.002%
97	21.362	1843	1845	1850	rVB	476	1289	0.03%	0.002%
98	21.672	1871	1875	1880	rBV2	1098	2341	0.06%	0.003%
99	22.014	1905	1908	1910	rBV2	853	1915	0.05%	0.003%
100	22.127	1917	1919	1925	rBV2	856	2017	0.05%	0.003%

Sum of corrected areas: 75105879

File : C:\MSDCHEM\1\DATA\051212\8M379019.D
Operator : ADC
Acquired : 12 May 2012 10:15 using AcqMethod 8260WT
Instrument : HPMS8
Sample Name: L12050171-03 A MS 826-SPE
Misc Info : 1,1 STD51372
Vial Number: 6
Quant File :8260WT.RES (RTE Integrator)



Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\051212\8M379020.D Vial: 7
Acq On : 12 May 2012 10:47 Operator: ADC
Sample : L12050171-05 A MSD 826-SPE Inst : HPMS8
Misc : 1,1 STD51372 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 12 11:09:35 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	694693	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.05	117	609366	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.05	152	331599	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.14	111	185832	25.7841	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 103.12%			
43) 1,2-Dichloroethane-d4	9.78	65	151775	27.3472	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 109.40%			
58) Toluene-d8	12.17	98	705014	25.0579	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 100.24%			
80) p-Bromofluorobenzene	15.54	95	269674	25.1399	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 100.56%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.82	85	225007	29.7783	ug/L	100
3) Chloromethane	3.22	50	198265	22.7664	ug/L	98
4) Vinyl Chloride	3.43	62	175520	24.1824	ug/L	98
6) Bromomethane	4.25	94	65906	11.7250	ug/L	96
7) Chloroethane	4.40	64	94470	20.2041	ug/L	96
8) Trichlorofluoromethane	4.90	101	262310	24.4755	ug/L	100
10) Isoprene	5.45	67	153326	18.1796	ug/L	94
12) 1,1,2-Trichloro-1,2,2-Trif	5.67	101	131402	20.4147	ug/L	99
13) Acetone	5.72	43	21709	21.1791	ug/L	95
14) 1,1-Dichloroethene	5.95	61	202735	21.7666	ug/L	96
16) Dimethyl Sulfide	6.20	62	143682	21.9132	ug/L	94
17) Iodomethane	6.45	142	170854	15.7141	ug/L	94
18) Methyl acetate	6.48	43	45351	14.0589	ug/L	98
19) Methylene Chloride	6.72	84	139075	20.0657	ug/L	94
20) Carbon Disulfide	6.75	76	375627	20.9894	ug/L	99
21) Acrylonitrile	6.89	53	24777	17.8563	ug/L	99
22) Methyl Tert Butyl Ether	6.97	73	243189	20.5059	ug/L	98
23) trans-1,2-Dichloroethene	7.18	61	193957	22.0516	ug/L	96
24) n-Hexane	7.31	57	140106	17.4567	ug/L	96
27) 1,1-Dichloroethane	7.80	63	238082	21.1736	ug/L	100
29) 2-Butanone	8.36	43	28205	18.4919	ug/L	96
31) 2,2-Dichloropropane	8.58	77	218023	22.5361	ug/L	100
32) cis-1,2-Dichloroethene	8.64	96	154303	21.1902	ug/L	96
33) Chloroform	8.86	83	249760	21.5523	ug/L	99
35) Bromochloromethane	9.08	130	102467	21.8487	ug/L	99
38) 1,1,1-Trichloroethane	9.40	97	248857	23.6330	ug/L	99
39) Cyclohexane	9.44	56	207030	19.8997	ug/L	99
40) 1,1-Dichloropropene	9.59	75	195063	21.5062	ug/L	99
42) Carbon Tetrachloride	9.74	117	240371	24.3993	ug/L	99
45) 1,2-Dichloroethane	9.89	62	165299	23.1814	ug/L	97
46) Benzene	9.93	78	535828	20.1284	ug/L	98
47) Trichloroethene	10.70	130	191998	21.8170	ug/L	99
48) Methylcyclohexane	10.80	83	191253	18.8033	ug/L	99
49) 1,2-Dichloropropane	10.91	63	133473	20.6074	ug/L	89
50) Bromodichloromethane	11.20	83	193986	23.2182	ug/L	98
52) Dibromomethane	11.27	93	70864	21.1339	ug/L	97
54) 4-Methyl-2-Pentanone	11.56	58	23867	17.7488	ug/L	97
55) cis-1,3-Dichloropropene	11.85	75	212760	21.6364	ug/L	100
56) Dimethyl Disulfide	12.10	94	213310	19.5895	ug/L	96
59) Toluene	12.26	91	641435	19.0869	ug/L	98
60) Ethyl Methacrylate	12.38	69	108046	18.4307	ug/L	94

(#) = qualifier out of range (m) = manual integration
8M379020.D 8260WT.M Sat May 12 11:09:35 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\051212\8M379020.D Vial: 7
Acq On : 12 May 2012 10:47 Operator: ADC
Sample : L12050171-05 A MSD 826-SPE Inst : HPMS8
Misc : 1,1 STD51372 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 12 11:09:35 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

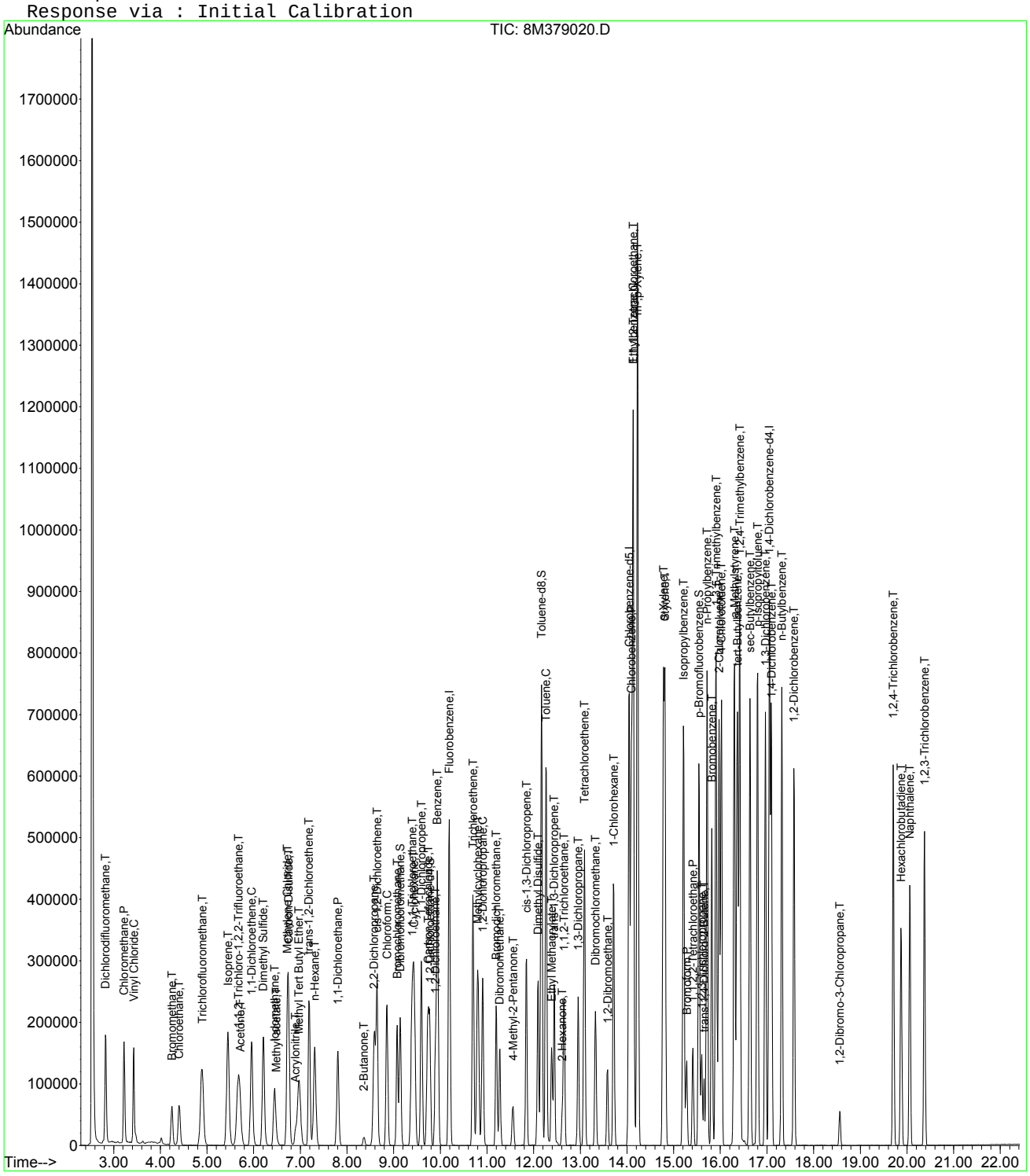
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
62)	trans-1,3-Dichloropropene	12.44	75	173494	18.6076	ug/L	99
63)	1,1,2-Trichloroethane	12.65	97	103186	19.8621	ug/L	99
64)	2-Hexanone	12.61	58	22493	17.2635	ug/L	85
65)	1,3-Dichloropropane	12.95	76	166644	19.5916	ug/L	94
66)	Tetrachloroethene	13.09	164	159142	21.0102	ug/L	97
67)	Dibromochloromethane	13.33	129	168621	22.0833	ug/L	99
68)	1,2-Dibromoethane	13.58	107	111823	19.9807	ug/L	98
69)	1-Chlorohexane	13.72	91	197900	17.6309	ug/L	96
70)	Chlorobenzene	14.09	112	466994	19.8883	ug/L	99
71)	1,1,1,2-Tetrachloroethane	14.13	131	184790	21.6236	ug/L	99
72)	Ethylbenzene	14.13	106	251960	20.2007	ug/L	95
73)	m-,p-Xylene	14.23	106	617572	40.5562	ug/L	96
74)	o-Xylene	14.78	106	302385	19.7679	ug/L	96
75)	Styrene	14.81	104	508859	18.5819	ug/L	96
76)	Bromoform	15.28	173	95717	21.8509	ug/L	98
77)	Isopropylbenzene	15.21	105	695848	18.0976	ug/L	99
79)	1,1,2,2-Tetrachloroethane	15.41	83	99430	18.6584	ug/L	98
81)	1,2,3-Trichloropropane	15.60	110	36329	20.6077	ug/L	94
82)	trans-1,4-Dichloro-2-Buten	15.65	53	29747	19.2830	ug/L	87
83)	n-Propylbenzene	15.71	91	846951	19.7215	ug/L	99
84)	Bromobenzene	15.82	156	225278	21.1013	ug/L	97
85)	1,3,5-Trimethylbenzene	15.91	105	658672	20.5660	ug/L	98
86)	2-Chlorotoluene	15.97	91	523224	19.1530	ug/L	99
87)	4-Chlorotoluene	16.02	91	533165	20.6462	ug/L	98
88)	a-Methylstyrene	16.30	118	380402	19.9753	ug/L	99
89)	tert-Butylbenzene	16.37	134	141863	20.0340	ug/L	87
90)	1,2,4-Trimethylbenzene	16.42	105	703191	22.5099	ug/L	96
91)	sec-Butylbenzene	16.63	105	759175	19.3854	ug/L	100
92)	p-Isopropyltoluene	16.80	119	708614	20.0482	ug/L	99
93)	1,3-Dichlorobenzene	16.97	146	421368	19.9985	ug/L	99
94)	1,4-Dichlorobenzene	17.10	146	417768	19.7570	ug/L	99
95)	n-Butylbenzene	17.32	91	554398	20.0644	ug/L	100
96)	1,2-Dichlorobenzene	17.58	146	381610	20.3181	ug/L	100
97)	1,2-Dibromo-3-Chloropropan	18.56	75	18720	20.4082	ug/L	89
98)	1,2,4-Trichlorobenzene	19.71	182	249744	19.7462	ug/L	99
99)	Hexachlorobutadiene	19.87	225	104551	23.2654	ug/L	98
100)	Naphthalene	20.06	128	473570	19.1336	ug/L	100
101)	1,2,3-Trichlorobenzene	20.38	180	222769	20.5519	ug/L	99

(#) = qualifier out of range (m) = manual integration
8M379020.D 8260WT.M Sat May 12 11:09:35 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\051212\8M379020.D Vial: 7
Acq On : 12 May 2012 10:47 Operator: ADC
Sample : L12050171-05 A MSD 826-SPE Inst : HPMS8
Misc : 1,1 STD51372 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 12 11:09 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



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\051212\8M379020.D Vial: 7
Acq On : 12 May 2012 10:47 Operator: ADC
Sample : L12050171-05 A MSD 826-SPE Inst : HPMS8
Misc : 1,1 STD51372 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
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 200 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

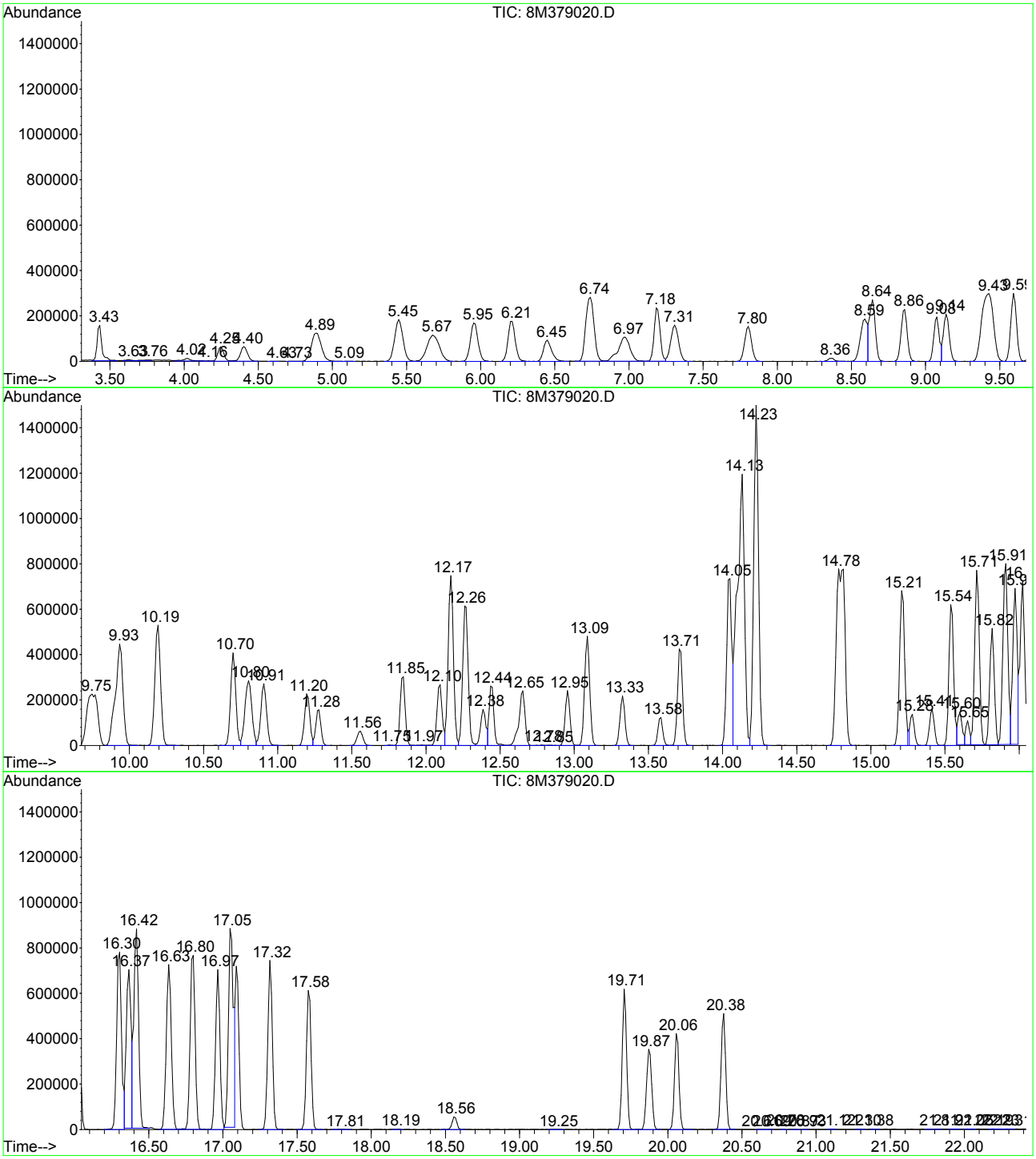
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.431	106	111	122	rVB	155869	338735	8.47%	0.453%
2	3.627	126	130	135	rVB3	4364	11201	0.28%	0.015%
3	3.762	135	143	145	rBV3	2611	13219	0.33%	0.018%
4	4.020	160	168	178	rVB2	11187	41137	1.03%	0.055%
5	4.165	178	182	184	rVV	1518	2832	0.07%	0.004%
6	4.248	184	190	197	rVV	62872	175282	4.38%	0.234%
7	4.403	197	205	214	rVB	64887	211286	5.28%	0.283%
8	4.630	221	227	228	rBV	740	2047	0.05%	0.003%
9	4.734	233	237	241	rBV2	721	2602	0.07%	0.003%
10	4.889	241	252	270	rVB	123805	585320	14.64%	0.783%
11	5.085	270	271	277	rBB	770	1781	0.04%	0.002%
12	5.447	297	306	317	rBV	184390	718079	17.96%	0.961%
13	5.674	317	328	342	rVB2	115459	667388	16.69%	0.893%
14	5.954	346	355	366	rBB	168565	601192	15.03%	0.804%
15	6.212	372	380	392	rBB	176454	594995	14.88%	0.796%
16	6.450	393	403	417	rBV2	93062	354555	8.87%	0.474%
17	6.739	421	431	441	rBV2	281385	1094735	27.37%	1.464%
18	6.967	441	453	468	rVV3	105968	583139	14.58%	0.780%
19	7.184	468	474	480	rVV	235102	655796	16.40%	0.877%
20	7.308	480	486	497	rVB	160076	580593	14.52%	0.777%
21	7.804	526	534	543	rBB	153443	490289	12.26%	0.656%
22	8.363	580	588	598	rBB	13187	40380	1.01%	0.054%
23	8.590	600	610	612	rBV	185912	653998	16.35%	0.875%
24	8.642	612	615	624	rVB	271051	713744	17.85%	0.955%
25	8.859	628	636	644	rBB	228445	659361	16.49%	0.882%
26	9.076	650	657	660	rBV	195636	523541	13.09%	0.700%
27	9.138	660	663	672	rVB	207992	545955	13.65%	0.730%
28	9.428	678	691	701	rBB2	298400	1631957	40.81%	2.183%
29	9.593	701	707	714	rBV	299561	814352	20.36%	1.089%
30	9.748	714	722	731	rVB2	225685	1162286	29.06%	1.555%
31	9.934	731	740	752	rBB2	446695	1577981	39.46%	2.111%
32	10.193	758	765	778	rBB	529787	1432102	35.81%	1.916%
33	10.699	805	814	819	rBV	407525	998224	24.96%	1.335%
34	10.803	819	824	829	rVV	285138	921532	23.04%	1.233%
35	10.906	829	834	845	rVB	272028	727437	18.19%	0.973%
36	11.196	856	862	866	rBV	226761	565446	14.14%	0.756%
37	11.278	866	870	876	rVB	156772	368919	9.23%	0.493%
38	11.558	890	897	904	rBB	63261	170223	4.26%	0.228%
39	11.754	913	916	919	rBB	1484	1899	0.05%	0.003%
40	11.847	919	925	933	rBB	302951	710489	17.77%	0.950%
41	11.971	933	937	942	rBV	1137	4551	0.11%	0.006%
42	12.095	942	949	952	rVV	267360	664050	16.61%	0.888%
43	12.168	952	956	961	rVV	748617	1817608	45.45%	2.431%

44	12.261	961	965	972	rVV	614202	1554126	38.86%	2.079%
45	12.385	972	977	980	rVV	158897	409552	10.24%	0.548%
46	12.436	980	982	994	rVV	261665	551429	13.79%	0.738%
47	12.654	994	1003	1009	rVB2	240330	681756	17.05%	0.912%
48	12.778	1010	1015	1018	rBB	1214	1523	0.04%	0.002%
49	12.850	1018	1022	1025	rBB	1019	1777	0.04%	0.002%
50	12.953	1026	1032	1039	rBV	241676	532962	13.33%	0.713%
51	13.088	1039	1045	1052	rVB	480643	1147788	28.70%	1.535%
52	13.326	1062	1068	1075	rBB	218199	503670	12.59%	0.674%
53	13.584	1087	1093	1099	rBB	123276	275471	6.89%	0.368%
54	13.708	1099	1105	1113	rBB	425040	986969	24.68%	1.320%
55	14.049	1131	1138	1140	rBV	735070	1837229	45.94%	2.458%
56	14.132	1140	1146	1151	rVV2	1195349	3999084	100.00%	5.349%
57	14.225	1151	1155	1164	rVB	1499273	3345793	83.66%	4.476%
58	14.784	1202	1209	1219	rBB2	777407	3183149	79.60%	4.258%
59	15.207	1243	1250	1254	rBV	681858	1647928	41.21%	2.204%
60	15.280	1255	1257	1263	rVB	137647	249512	6.24%	0.334%
61	15.414	1264	1270	1276	rBB	158173	356856	8.92%	0.477%
62	15.538	1276	1282	1286	rBV	620311	1403581	35.10%	1.878%
63	15.600	1286	1288	1291	rVV	144664	288541	7.22%	0.386%
64	15.652	1291	1293	1295	rVV	105420	182407	4.56%	0.244%
65	15.714	1295	1299	1304	rVB	768945	1693408	42.34%	2.265%
66	15.817	1304	1309	1313	rBV	512879	1096507	27.42%	1.467%
67	15.911	1313	1318	1321	rVV	797531	1877855	46.96%	2.512%
68	15.973	1321	1324	1326	rVV	687975	1457824	36.45%	1.950%
69	16.024	1326	1329	1337	rVB	724017	1485750	37.15%	1.987%
70	16.303	1346	1356	1359	rBV	781616	1834743	45.88%	2.454%
71	16.365	1359	1362	1364	rVV	699006	1620667	40.53%	2.168%
72	16.417	1364	1367	1375	rVB	878381	1884511	47.12%	2.521%
73	16.634	1382	1388	1394	rVB	726065	1712679	42.83%	2.291%
74	16.800	1394	1404	1411	rBV	767470	1785582	44.65%	2.389%
75	16.965	1413	1420	1424	rBV	704202	1467327	36.69%	1.963%
76	17.048	1424	1428	1431	rBV	875942	2144101	53.61%	2.868%
77	17.317	1447	1454	1463	rBB	744778	1560732	39.03%	2.088%
78	17.575	1472	1479	1488	rBB	612841	1340818	33.53%	1.794%
79	17.813	1495	1502	1506	rBB	779	2388	0.06%	0.003%
80	18.185	1534	1538	1540	rVB	1140	1994	0.05%	0.003%
81	18.557	1566	1574	1581	rBV	55660	122160	3.05%	0.163%
82	19.250	1636	1641	1645	rBB	852	2128	0.05%	0.003%
83	19.705	1678	1685	1692	rBB	618505	1259689	31.50%	1.685%
84	19.871	1692	1701	1709	rBV	353187	845620	21.15%	1.131%
85	20.057	1714	1719	1730	rBV	423052	876169	21.91%	1.172%
86	20.377	1744	1750	1757	rVV	509923	1083137	27.08%	1.449%
87	20.615	1771	1773	1777	rBB	695	1447	0.04%	0.002%
88	20.687	1777	1780	1782	rBV	910	1833	0.05%	0.002%
89	20.780	1787	1789	1791	rVB	1051	1628	0.04%	0.002%
90	20.873	1794	1798	1799	rVB	894	1848	0.05%	0.002%
91	20.925	1801	1803	1805	rBV	949	1817	0.05%	0.002%
92	21.122	1818	1822	1823	rVB2	760	1552	0.04%	0.002%
93	21.297	1836	1839	1842	rBV2	881	2000	0.05%	0.003%
94	21.380	1846	1847	1851	rBV	885	1956	0.05%	0.003%
95	21.814	1882	1889	1892	rBV3	680	2361	0.06%	0.003%
96	21.907	1897	1898	1904	rVB2	829	1825	0.05%	0.002%
97	22.052	1907	1912	1914	rBV2	1150	2851	0.07%	0.004%
98	22.187	1923	1925	1928	rVB2	1439	2496	0.06%	0.003%
99	22.228	1928	1929	1933	rBV2	967	1725	0.04%	0.002%
100	22.311	1933	1937	1939	rBV2	963	2313	0.06%	0.003%

Sum of corrected areas: 74756782

```
File       : C:\MSDCHEM\1\DATA\051212\8M379020.D
Operator   : ADC
Acquired   : 12 May 2012  10:47     using AcqMethod 8260WT
Instrument :   HPMS8
Sample Name: L12050171-05 A MSD 826-SPE
Misc Info  : 1,1 STD51372
Vial Number: 7
Quant File :8260WT.RES (RTE Integrator)
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Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\051012\8M378979.D Vial: 18
Acq On : 11 May 2012 4:11 Operator: TMB
Sample : L12050171-07 A 826-SPE Inst : HPMS8
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 15:04:17 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

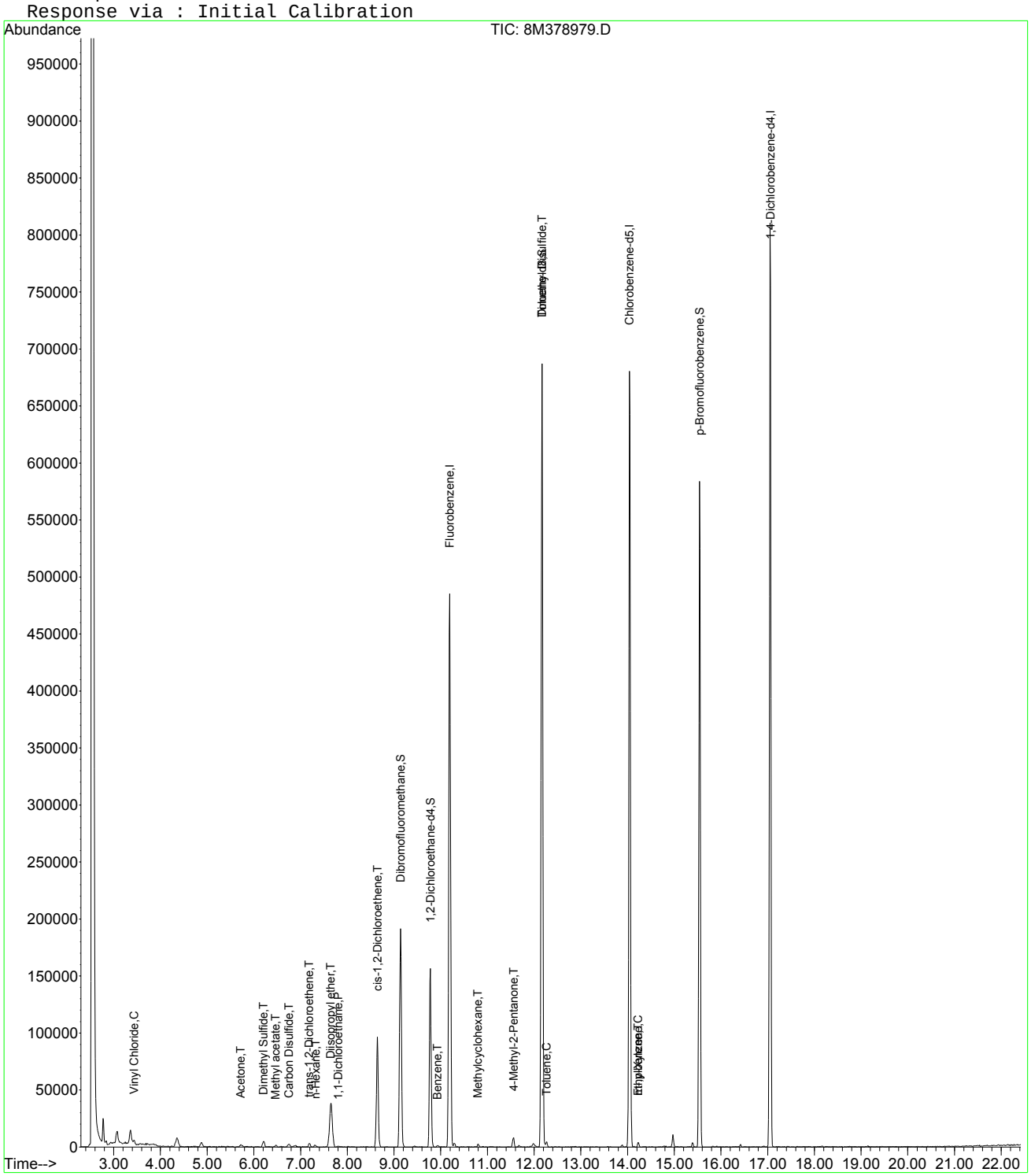
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.19	96	631182	25.00	ug/L	0.01
57) Chlorobenzene-d5	14.04	117	556423	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.06	152	313366	25.00	ug/L	0.01
System Monitoring Compounds						
37) Dibromofluoromethane	9.14	111	171325	26.1631	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 104.64%			
43) 1,2-Dichloroethane-d4	9.78	65	144342	28.6249	ug/L	0.01
Spiked Amount 25.000	Range 80 - 120		Recovery = 114.48%			
58) Toluene-d8	12.17	98	635411	24.7328	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 98.92%			
80) p-Bromofluorobenzene	15.54	95	247390	24.4043	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 97.60%			
Target Compounds						Qvalue
4) Vinyl Chloride	3.43	62	4479	0.6792	ug/L	97
13) Acetone	5.72	43	3871	4.1565	ug/L	87
16) Dimethyl Sulfide	6.20	62	4077	0.6844	ug/L	97
18) Methyl acetate	6.46	43	2741	0.9352	ug/L #	64
20) Carbon Disulfide	6.75	76	5170	0.3180	ug/L #	75
23) trans-1,2-Dichloroethene	7.19	61	3241	0.4056	ug/L	95
24) n-Hexane	7.32	57	1636	0.2244	ug/L	75
25) Diisopropyl ether	7.64	45	70200	3.6416	ug/L	94
27) 1,1-Dichloroethane	7.81	63	1615	0.1581	ug/L #	50
32) cis-1,2-Dichloroethene	8.64	96	59329	8.9674	ug/L	91
46) Benzene	9.93	78	3175	0.1313	ug/L #	58
48) Methylcyclohexane	10.79	83	2131	0.2306	ug/L #	81
54) 4-Methyl-2-Pentanone	11.56	58	2708	2.2165	ug/L	81
56) Dimethyl Disulfide	12.17	94	18080	1.8275	ug/L #	28
59) Toluene	12.26	91	6255	0.2038	ug/L	94
72) Ethylbenzene	14.23	106	2453	0.2154	ug/L	54
73) m-,p-Xylene	14.23	106	2453	0.1764	ug/L	87
90) 1,2,4-Trimethylbenzene	16.43	105	2176	Below Cal		75

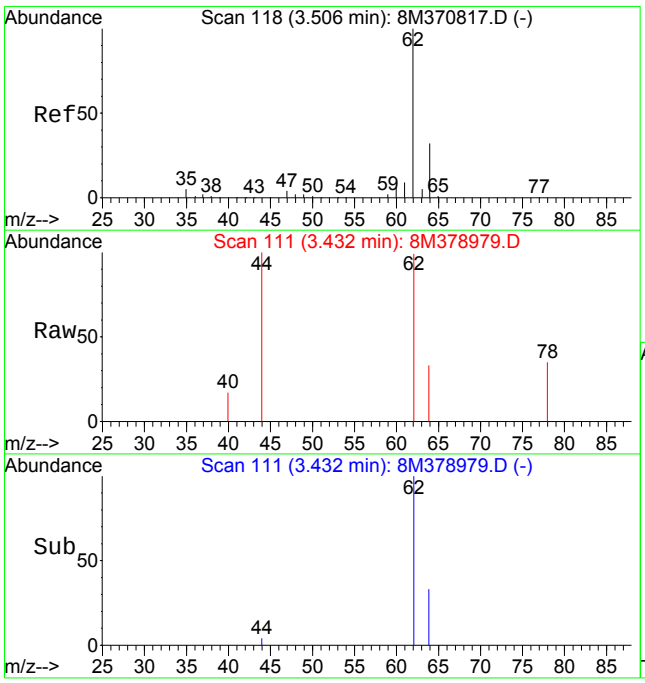
(#) = qualifier out of range (m) = manual integration
8M378979.D 8260WT.M Tue May 15 15:04:18 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\051012\8M378979.D Vial: 18
Acq On : 11 May 2012 4:11 Operator: TMB
Sample : L12050171-07 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

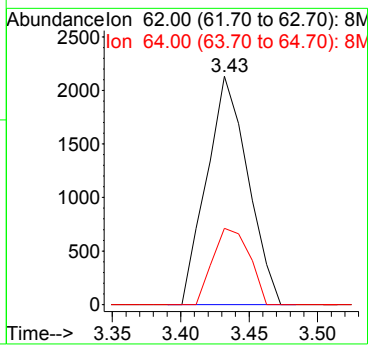


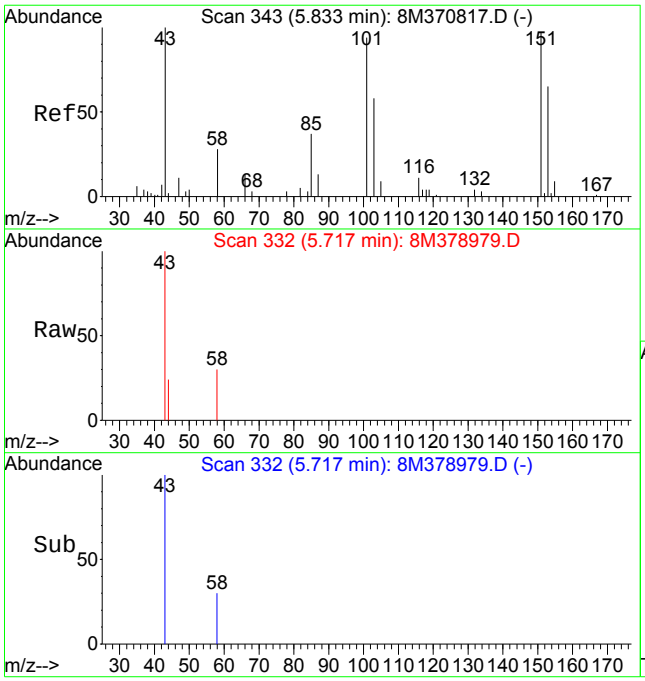


#4
Vinyl Chloride
Concen: 0.68 ug/L
RT: 3.43 min Scan# 111
Delta R.T. 0.01 min
Lab File: 8M378979.D
Acq: 11 May 2012 4:11

Tgt Ion: 62 Resp: 4479

Ion	Ratio	Lower	Upper
62	100		
64	29.8	18.9	44.1

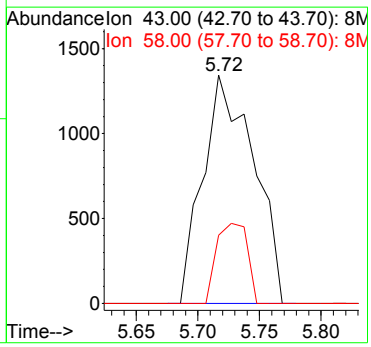


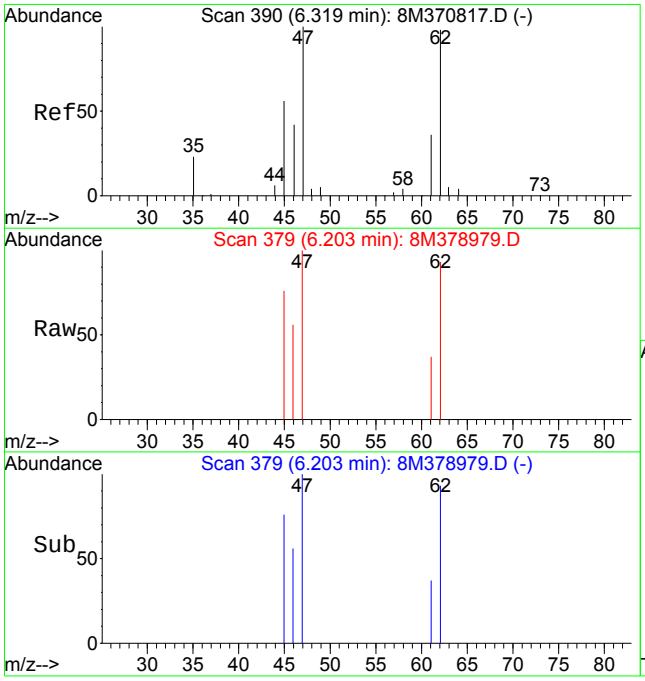


#13
Acetone
Concen: 4.16 ug/L
RT: 5.72 min Scan# 332
Delta R.T. 0.00 min
Lab File: 8M378979.D
Acq: 11 May 2012 4:11

Tgt Ion: 43 Resp: 3871

Ion	Ratio	Lower	Upper
43	100		
58	21.2	16.9	39.3

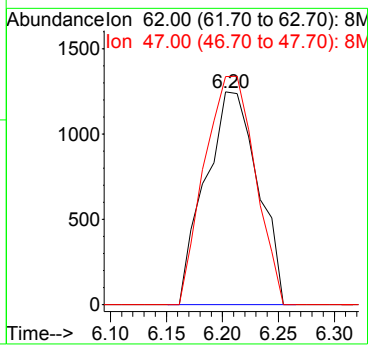


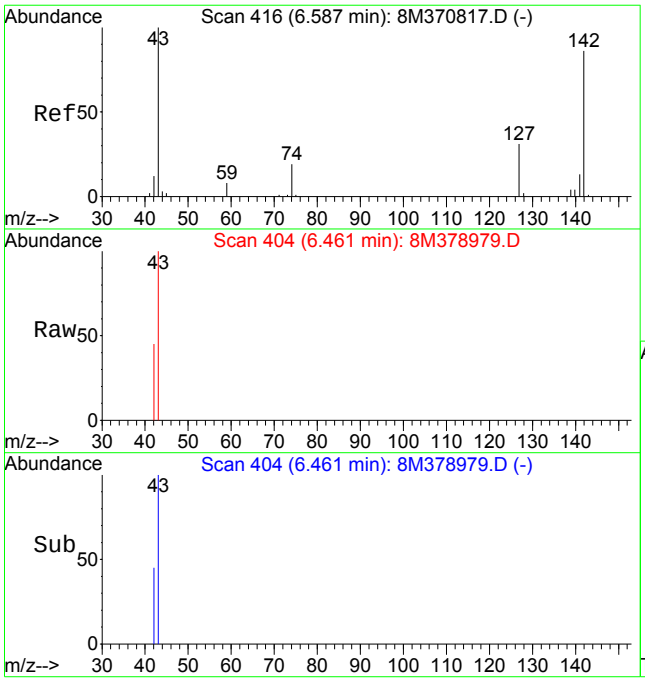


#16
Dimethyl Sulfide
Concen: 0.68 ug/L
RT: 6.20 min Scan# 379
Delta R.T. 0.00 min
Lab File: 8M378979.D
Acq: 11 May 2012 4:11

Tgt Ion: 62 Resp: 4077

Ion	Ratio	Lower	Upper
62	100		
47	103.8	60.2	140.6

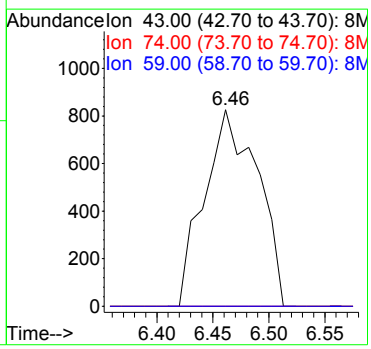


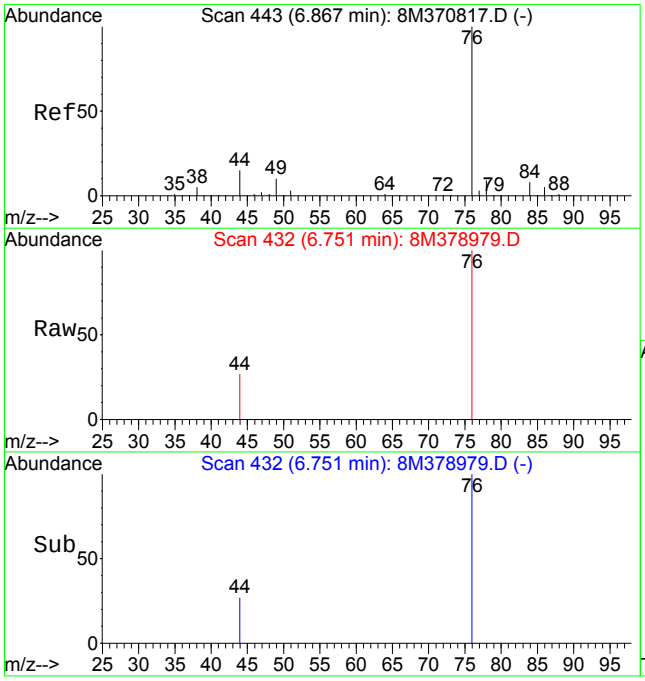


#18
Methyl acetate
Concen: 0.94 ug/L
RT: 6.46 min Scan# 404
Delta R.T. -0.02 min
Lab File: 8M378979.D
Acq: 11 May 2012 4:11

Tgt Ion: 43 Resp: 2741

Ion	Ratio	Lower	Upper
43	100		
74	0.0	11.5	26.7#
59	0.0	4.8	11.2#

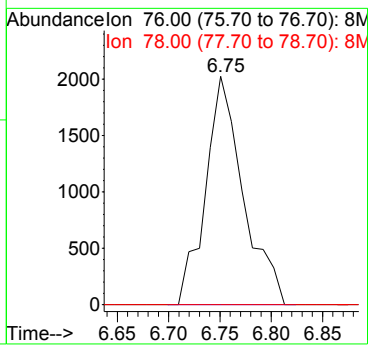


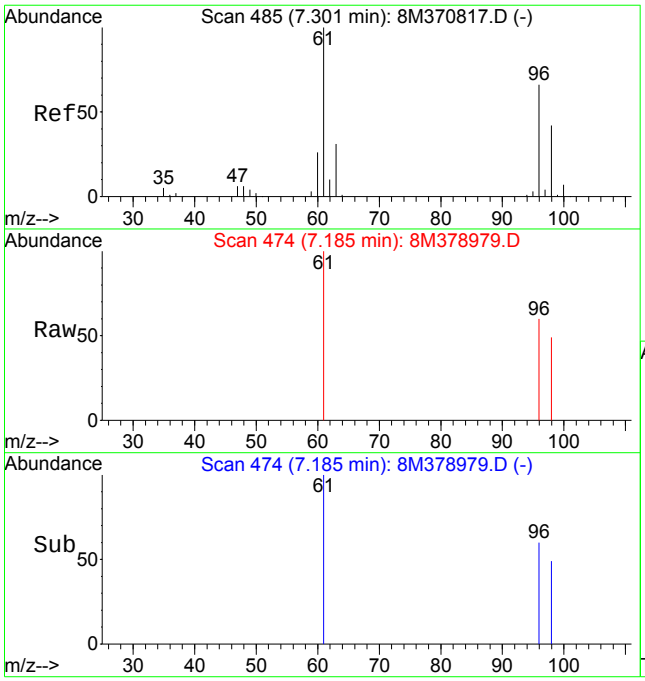


#20
Carbon Disulfide
Concen: 0.32 ug/L
RT: 6.75 min Scan# 432
Delta R.T. 0.00 min
Lab File: 8M378979.D
Acq: 11 May 2012 4:11

Tgt Ion: 76 Resp: 5170

Ion	Ratio	Lower	Upper
76	100		
78	0.0	5.5	12.7#

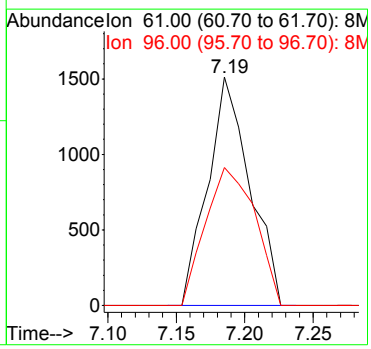


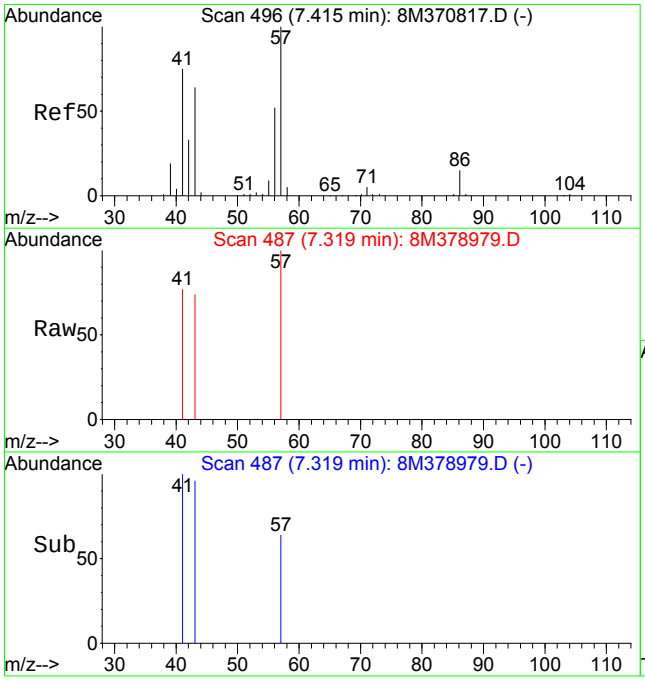


#23
trans-1,2-Dichloroethene
Concen: 0.41 ug/L
RT: 7.19 min Scan# 474
Delta R.T. 0.00 min
Lab File: 8M378979.D
Acq: 11 May 2012 4:11

Tgt Ion: 61 Resp: 3241

Ion	Ratio	Lower	Upper
61	100		
96	71.2	45.2	105.6

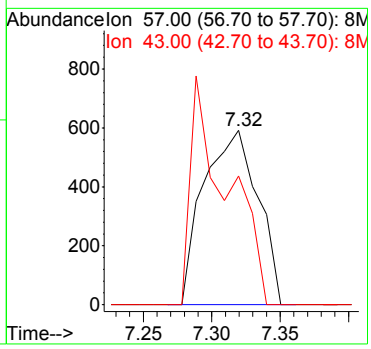


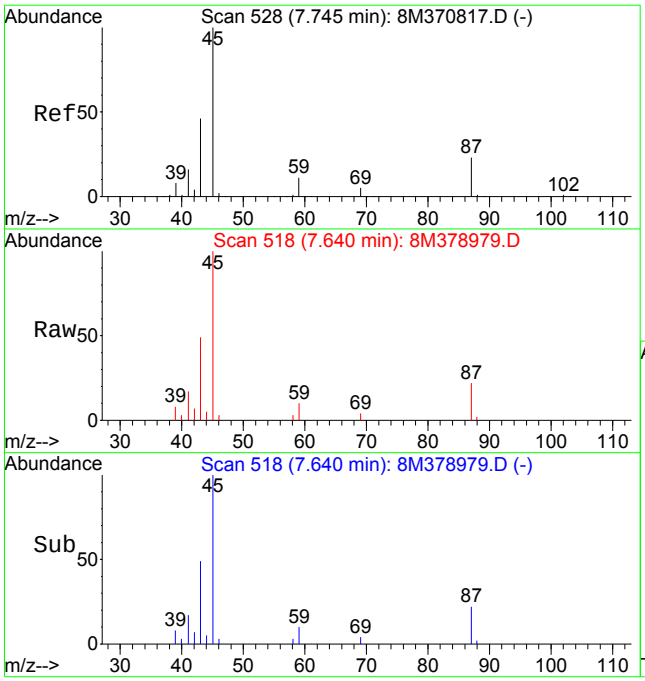


#24
n-Hexane
Concen: 0.22 ug/L
RT: 7.32 min Scan# 487
Delta R.T. 0.02 min
Lab File: 8M378979.D
Acq: 11 May 2012 4:11

Tgt Ion: 57 Resp: 1636

Ion	Ratio	Lower	Upper
57	100		
43	87.5	40.4	94.2

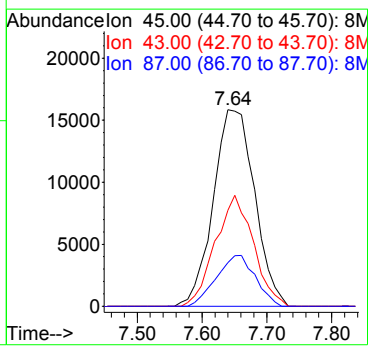


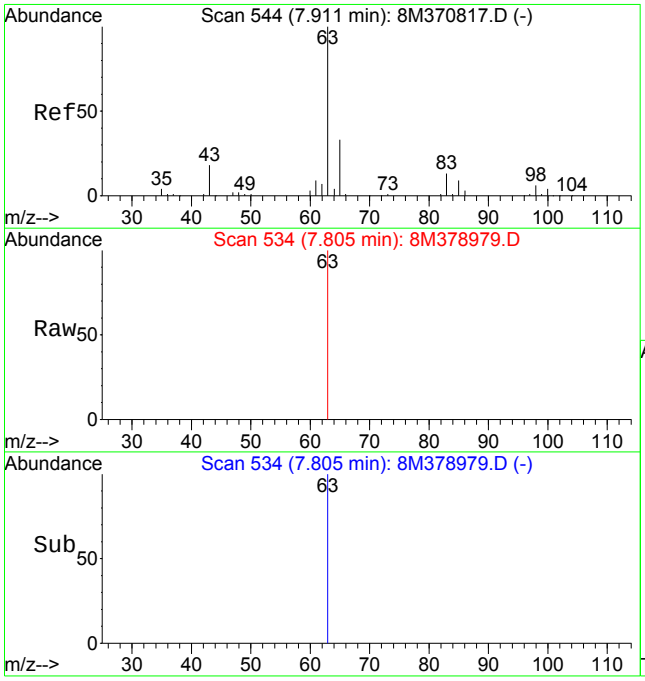


#25
Diisopropyl ether
Concen: 3.64 ug/L
RT: 7.64 min Scan# 518
Delta R.T. -0.01 min
Lab File: 8M378979.D
Acq: 11 May 2012 4:11

Tgt Ion: 45 Resp: 70200

Ion	Ratio	Lower	Upper
45	100		
43	52.0	27.8	64.8
87	24.4	15.4	35.8

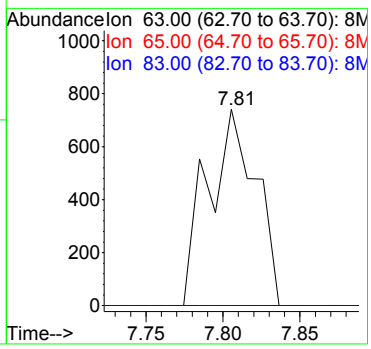


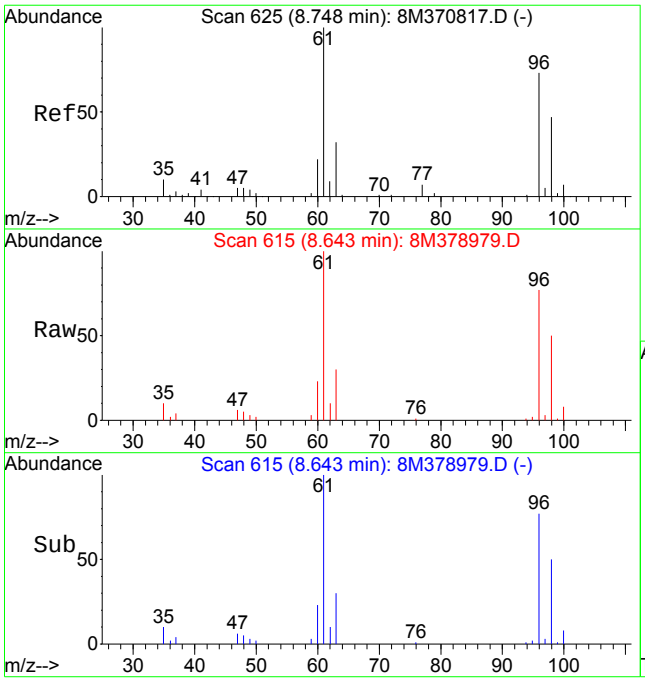


#27
1,1-Dichloroethane
Concen: 0.16 ug/L
RT: 7.81 min Scan# 534
Delta R.T. 0.01 min
Lab File: 8M378979.D
Acq: 11 May 2012 4:11

Tgt Ion: 63 Resp: 1615

Ion	Ratio	Lower	Upper
63	100		
65	0.0	19.3	44.9#
83	0.0	8.2	19.2#

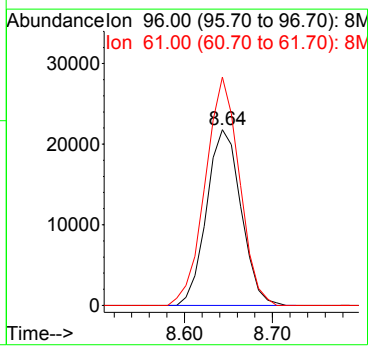


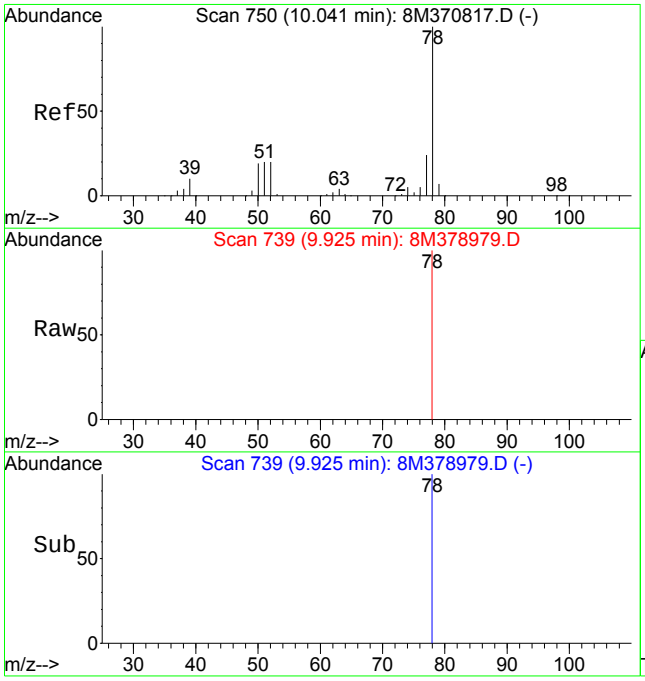


#32
cis-1,2-Dichloroethene
Concen: 8.97 ug/L
RT: 8.64 min Scan# 615
Delta R.T. 0.00 min
Lab File: 8M378979.D
Acq: 11 May 2012 4:11

Tgt Ion: 96 Resp: 59329

Ion	Ratio	Lower	Upper
96	100		
61	128.8	83.9	195.7

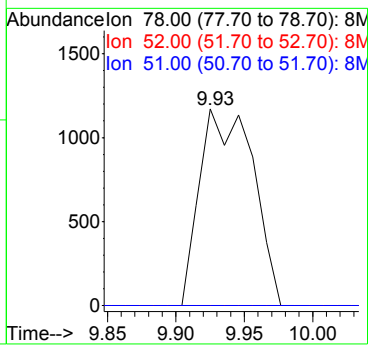


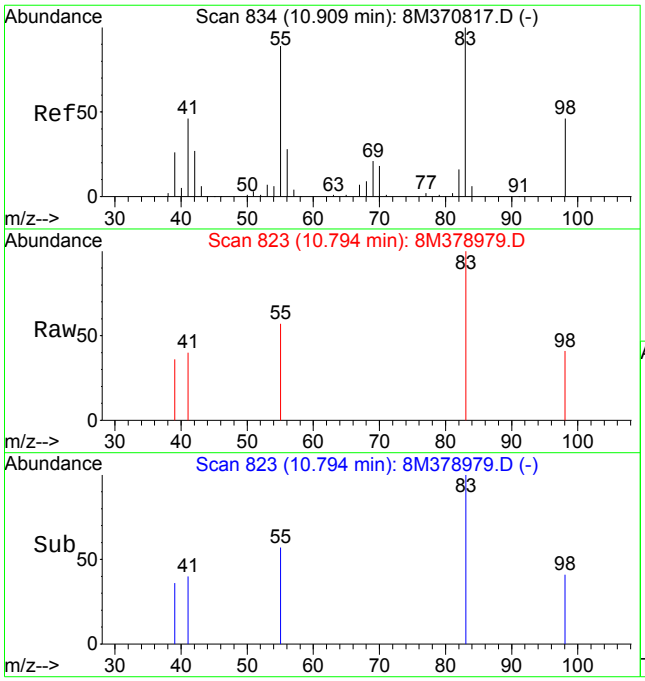


#46
Benzene
Concen: 0.13 ug/L
RT: 9.93 min Scan# 739
Delta R.T. -0.01 min
Lab File: 8M378979.D
Acq: 11 May 2012 4:11

Tgt Ion: 78 Resp: 3175

Ion	Ratio	Lower	Upper
78	100		
52	0.0	10.4	24.2#
51	0.0	12.0	28.0#

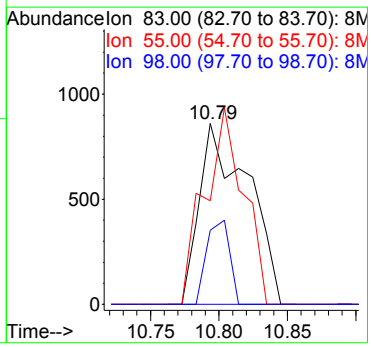


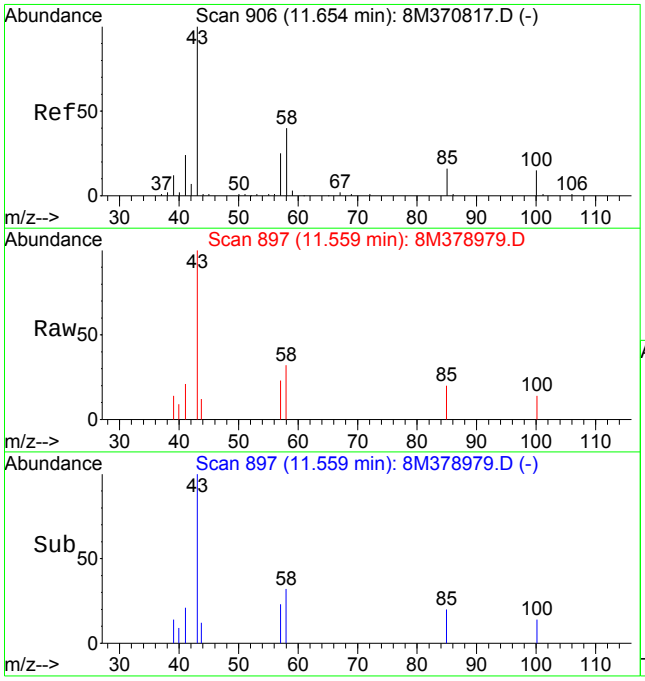


#48
Methylcyclohexane
Concen: 0.23 ug/L
RT: 10.79 min Scan# 823
Delta R.T. -0.01 min
Lab File: 8M378979.D
Acq: 11 May 2012 4:11

Tgt Ion: 83 Resp: 2131

Ion	Ratio	Lower	Upper
83	100		
55	86.8	48.9	114.1
98	22.0	29.3	68.5#

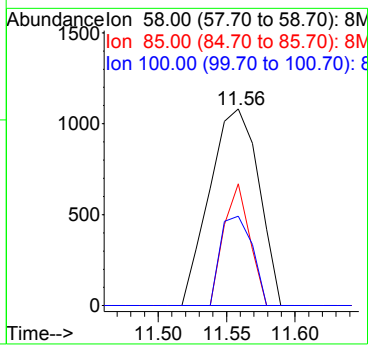


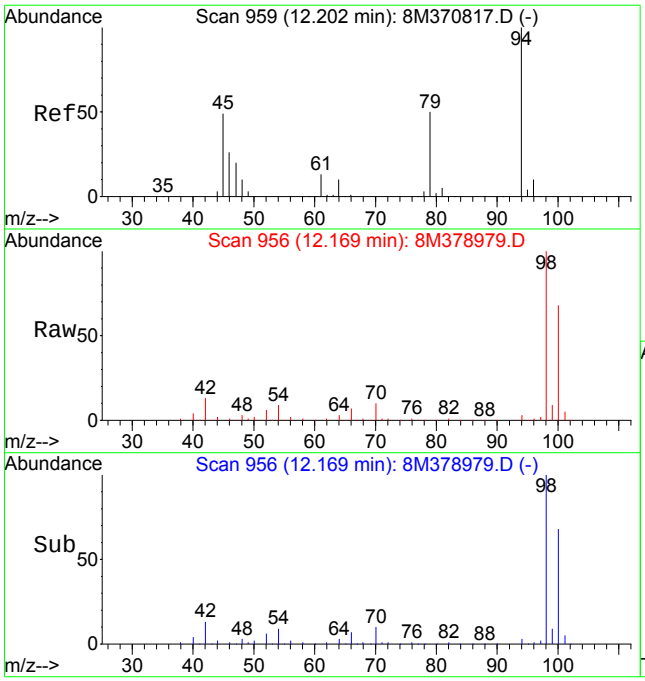


#54
4-Methyl-2-Pentanone
Concen: 2.22 ug/L
RT: 11.56 min Scan# 897
Delta R.T. 0.01 min
Lab File: 8M378979.D
Acq: 11 May 2012 4:11

Tgt Ion: 58 Resp: 2708

Ion	Ratio	Lower	Upper
58	100		
85	32.6	26.9	62.9
100	29.5	24.8	57.8

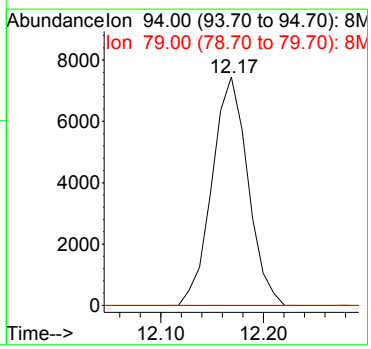


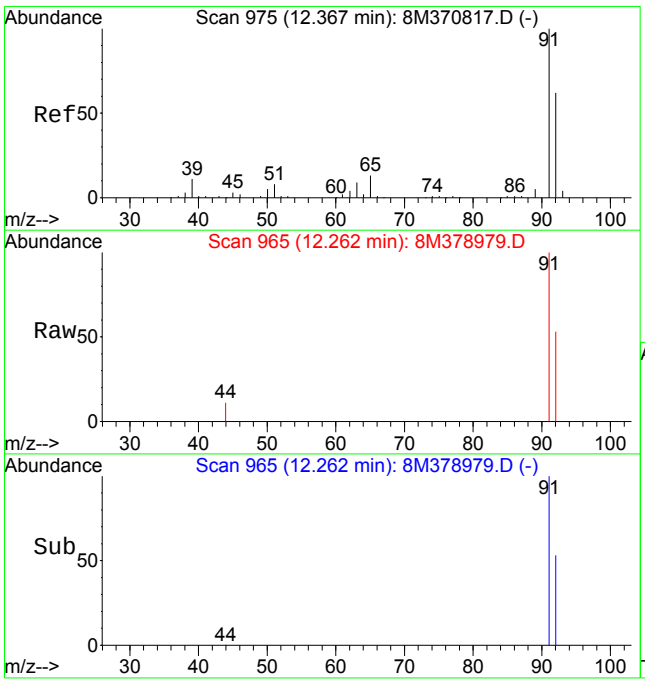


#56
Dimethyl Disulfide
Concen: 1.83 ug/L
RT: 12.17 min Scan# 956
Delta R.T. 0.08 min
Lab File: 8M378979.D
Acq: 11 May 2012 4:11

Tgt Ion: 94 Resp: 18080

Ion	Ratio	Lower	Upper
94	100		
79	0.0	29.2	68.0#

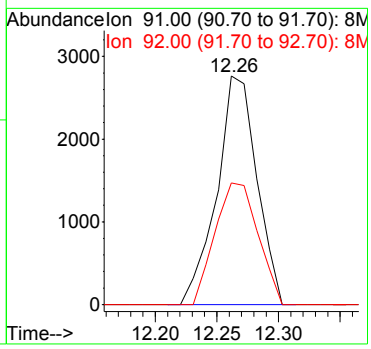


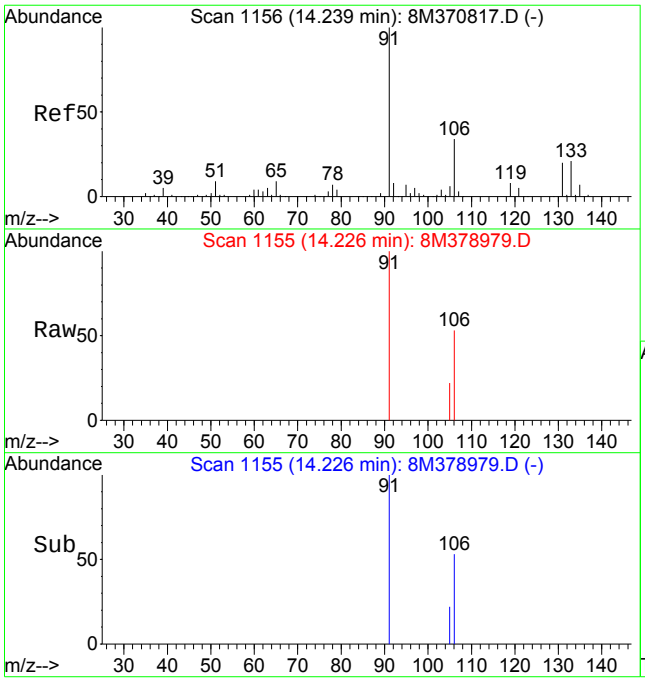


#59
Toluene
Concen: 0.20 ug/L
RT: 12.26 min Scan# 965
Delta R.T. 0.00 min
Lab File: 8M378979.D
Acq: 11 May 2012 4:11

Tgt Ion: 91 Resp: 6255

Ion	Ratio	Lower	Upper
91	100		
92	57.0	36.8	86.0

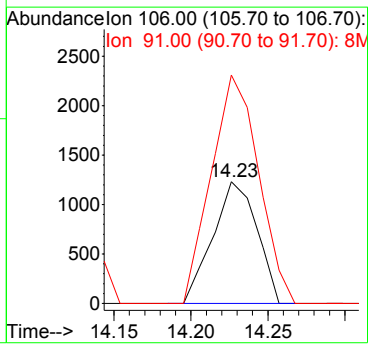


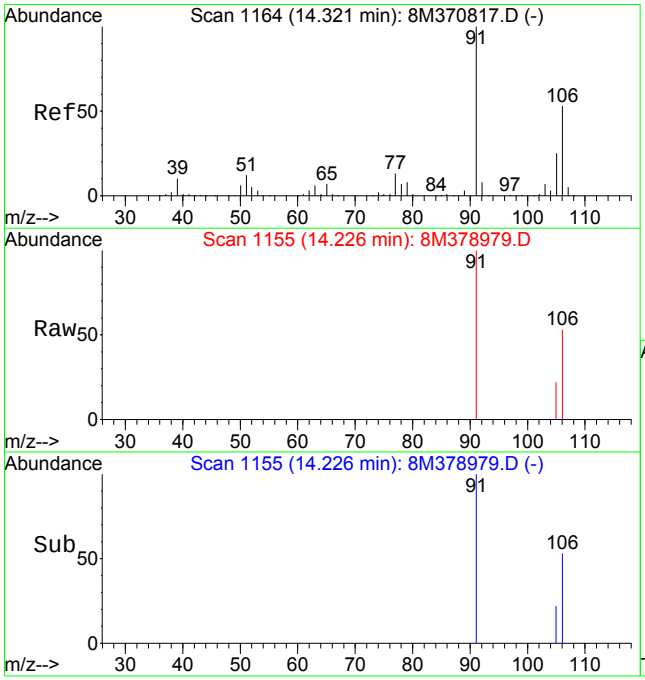


#72
Ethylbenzene
Concen: 0.22 ug/L
RT: 14.23 min Scan# 1155
Delta R.T. 0.09 min
Lab File: 8M378979.D
Acq: 11 May 2012 4:11

Tgt Ion:106 Resp: 2453

Ion	Ratio	Lower	Upper
106	100		
91	201.7	174.5	407.3

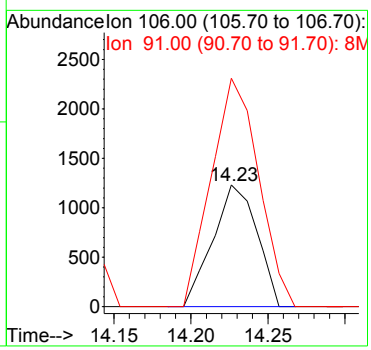


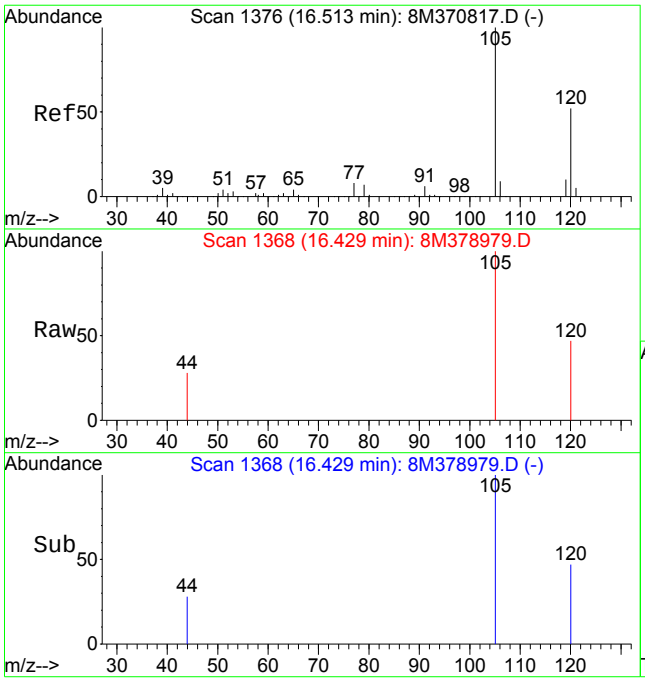


#73
m-,p-Xylene
Concen: 0.18 ug/L
RT: 14.23 min Scan# 1155
Delta R.T. 0.00 min
Lab File: 8M378979.D
Acq: 11 May 2012 4:11

Tgt Ion:106 Resp: 2453

Ion	Ratio	Lower	Upper
106	100		
91	201.7	109.5	255.5

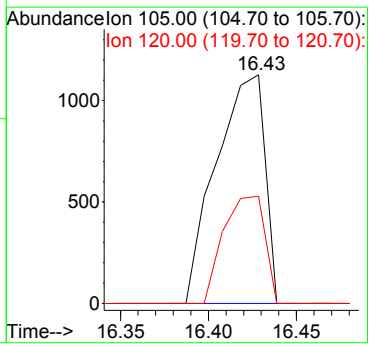




#90
1,2,4-Trimethylbenzene
Concen: Below Cal
RT: 16.43 min Scan# 1368
Delta R.T. 0.01 min
Lab File: 8M378979.D
Acq: 11 May 2012 4:11

Tgt Ion:105 Resp: 2176

Ion	Ratio	Lower	Upper
105	100		
120	39.9	35.0	81.6



LSC Area Percent Report

Data File : K:\ORGANICS\VOLATILE\HPMS8\DATA\051012\8M378979.D Vial: 18
Acq On : 11 May 2012 4:11 Operator: TMB
Sample : L12050171-07 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

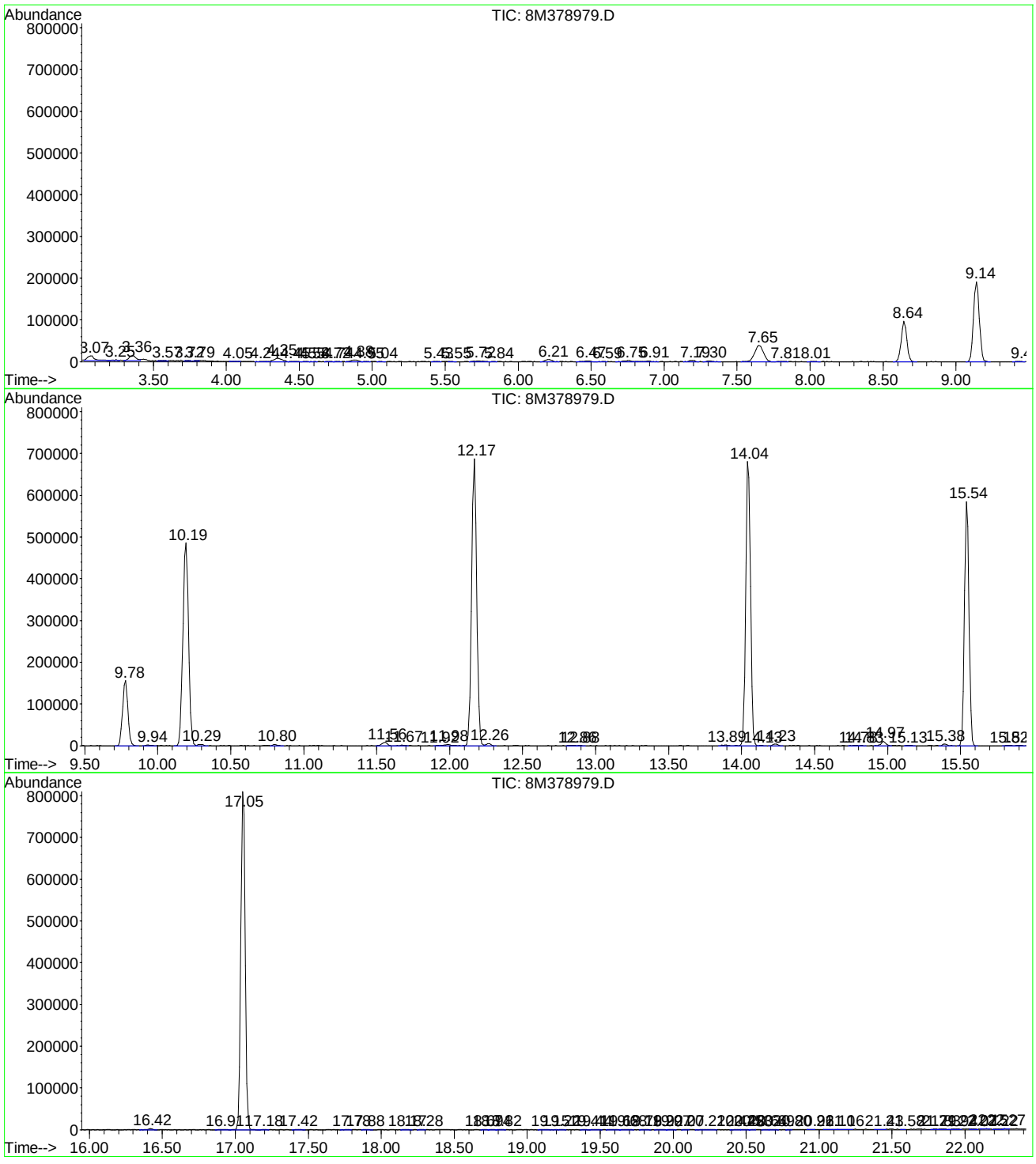
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.070	72	76	87	rVB3	11145	38192	2.24%	0.415%
2	3.246	88	93	95	rBV	1637	2530	0.15%	0.027%
3	3.359	98	104	109	rBV2	11660	35002	2.05%	0.380%
4	3.566	120	124	127	rBV2	1440	3806	0.22%	0.041%
5	3.721	138	139	143	rVB	1242	1981	0.12%	0.022%
6	3.794	144	146	148	rBV	551	885	0.05%	0.010%
7	4.052	168	171	175	rBV	497	909	0.05%	0.010%
8	4.238	185	189	193	rBV	932	2483	0.15%	0.027%
9	4.352	193	200	207	rVB2	8183	33498	1.96%	0.364%
10	4.445	207	209	215	rBB	725	2008	0.12%	0.022%
11	4.548	216	219	221	rBB	419	934	0.05%	0.010%
12	4.580	221	222	226	rBB	719	929	0.05%	0.010%
13	4.724	231	236	237	rBB	871	1737	0.10%	0.019%
14	4.745	237	238	242	rBB	743	1263	0.07%	0.014%
15	4.879	245	251	256	rBB	4054	13069	0.77%	0.142%
16	4.952	256	258	261	rBB	708	1178	0.07%	0.013%
17	5.045	266	267	271	rBB	717	1088	0.06%	0.012%
18	5.427	302	304	308	rBB	783	1777	0.10%	0.019%
19	5.551	313	316	318	rVB	758	961	0.06%	0.010%
20	5.717	327	332	340	rBB2	2071	7553	0.44%	0.082%
21	5.841	341	344	345	rBB2	740	936	0.05%	0.010%
22	6.213	374	380	386	rBB	4919	15717	0.92%	0.171%
23	6.472	398	405	410	rBB	1810	4948	0.29%	0.054%
24	6.585	411	416	418	rBB	674	1083	0.06%	0.012%
25	6.751	424	432	438	rBV2	2581	9146	0.54%	0.099%
26	6.906	438	447	452	rVB2	1366	5774	0.34%	0.063%
27	7.185	469	474	479	rBB	3166	7966	0.47%	0.087%
28	7.299	482	485	493	rBB	1751	4754	0.28%	0.052%
29	7.650	507	519	528	rBB2	38509	164006	9.61%	1.782%
30	7.805	529	534	538	rBB	742	2296	0.13%	0.025%
31	8.012	551	554	559	rBB	656	1216	0.07%	0.013%
32	8.643	608	615	623	rBB	96510	254590	14.92%	2.766%
33	9.139	656	663	672	rBB	191463	530395	31.09%	5.762%
34	9.449	687	693	695	rBB	855	1824	0.11%	0.020%
35	9.780	718	725	733	rBB	156628	390394	22.88%	4.241%
36	9.935	736	740	745	rBB	1278	3602	0.21%	0.039%
37	10.194	757	765	772	rBV	485425	1299853	76.19%	14.120%
38	10.287	772	774	779	rVB	3274	7495	0.44%	0.081%
39	10.804	821	824	829	rBB2	2673	5312	0.31%	0.058%
40	11.559	891	897	902	rBB	8380	19599	1.15%	0.213%
41	11.672	903	908	912	rBB	1444	3157	0.19%	0.034%
42	11.921	929	932	933	rBV	733	1134	0.07%	0.012%

43	11.983	933	938	948	rVB	3114	10475	0.61%	0.114%
44	12.169	948	956	963	rBV	687214	1654651	96.99%	17.974%
45	12.262	963	965	970	rVB	4550	9518	0.56%	0.103%
46	12.861	1017	1023	1024	rBB	414	1324	0.08%	0.014%
47	12.882	1024	1025	1029	rBB	759	888	0.05%	0.010%
48	13.885	1118	1122	1127	rBB3	1877	3780	0.22%	0.041%
49	14.040	1128	1137	1144	rBB	680509	1567120	91.86%	17.023%
50	14.133	1144	1146	1149	rBB	632	888	0.05%	0.010%
51	14.226	1151	1155	1160	rBB	4040	9002	0.53%	0.098%
52	14.785	1204	1209	1211	rBB	946	2097	0.12%	0.023%
53	14.826	1211	1213	1215	rBB	918	1061	0.06%	0.012%
54	14.971	1221	1227	1232	rBB2	11001	22799	1.34%	0.248%
55	15.126	1241	1242	1248	rBB2	384	1057	0.06%	0.011%
56	15.384	1264	1267	1274	rBB	3751	8305	0.49%	0.090%
57	15.539	1276	1282	1289	rBB	584008	1249902	73.27%	13.577%
58	15.819	1306	1309	1313	rBB	685	1578	0.09%	0.017%
59	15.912	1314	1318	1321	rBB	1011	1527	0.09%	0.017%
60	16.418	1360	1367	1371	rBB	2261	4734	0.28%	0.051%
61	16.914	1410	1415	1419	rBB	875	2374	0.14%	0.026%
62	17.049	1420	1428	1438	rBB	810595	1705993	100.00%	18.532%
63	17.183	1439	1441	1445	rBB	427	901	0.05%	0.010%
64	17.421	1461	1464	1469	rBB	685	1473	0.09%	0.016%
65	17.783	1493	1499	1500	rBB	441	1144	0.07%	0.012%
66	17.876	1507	1508	1514	rBB	483	1180	0.07%	0.013%
67	18.166	1533	1536	1540	rBB	958	2007	0.12%	0.022%
68	18.279	1544	1547	1549	rBB	462	1023	0.06%	0.011%
69	18.693	1586	1587	1591	rBB	398	937	0.05%	0.010%
70	18.745	1591	1592	1596	rBB	704	1294	0.08%	0.014%
71	18.817	1596	1599	1602	rBB	403	1051	0.06%	0.011%
72	19.148	1624	1631	1636	rBV2	1056	3242	0.19%	0.035%
73	19.220	1637	1638	1642	rBB2	411	945	0.06%	0.010%
74	19.406	1652	1656	1657	rBB2	440	870	0.05%	0.009%
75	19.437	1658	1659	1666	rBB	558	1806	0.11%	0.020%
76	19.623	1669	1677	1678	rBB	458	1896	0.11%	0.021%
77	19.675	1678	1682	1687	rBB	499	1881	0.11%	0.020%
78	19.779	1691	1692	1698	rBB	411	1358	0.08%	0.015%
79	19.923	1701	1706	1709	rBB	502	1705	0.10%	0.019%
80	19.975	1709	1711	1715	rBB	453	1271	0.07%	0.014%
81	20.068	1719	1720	1724	rBV	492	1184	0.07%	0.013%
82	20.213	1728	1734	1742	rBB	528	2938	0.17%	0.032%
83	20.420	1751	1754	1758	rBV	732	1654	0.10%	0.018%
84	20.482	1758	1760	1764	rVB	454	1231	0.07%	0.013%
85	20.533	1764	1765	1768	rBV	698	1194	0.07%	0.013%
86	20.637	1772	1775	1777	rBV	675	1421	0.08%	0.015%
87	20.688	1777	1780	1783	rVB	695	1595	0.09%	0.017%
88	20.802	1788	1791	1792	rBV	757	1518	0.09%	0.016%
89	20.957	1802	1806	1807	rBV	509	870	0.05%	0.009%
90	21.102	1813	1820	1822	rBV	430	1516	0.09%	0.016%
91	21.164	1822	1826	1832	rBV2	503	1931	0.11%	0.021%
92	21.433	1847	1852	1854	rBV2	802	2779	0.16%	0.030%
93	21.578	1864	1866	1867	rBV2	559	870	0.05%	0.009%
94	21.795	1884	1887	1889	rBV2	585	1144	0.07%	0.012%
95	21.826	1889	1890	1896	rVV2	657	1458	0.09%	0.016%
96	21.939	1896	1901	1904	rVB2	1145	3001	0.18%	0.033%
97	22.074	1910	1914	1915	rVB2	605	1380	0.08%	0.015%
98	22.146	1917	1921	1923	rVV2	904	1592	0.09%	0.017%
99	22.219	1925	1928	1932	rBV2	1153	2978	0.17%	0.032%
100	22.270	1932	1933	1936	rBV2	1028	1440	0.08%	0.016%

Sum of corrected areas: 9205731

File : K:\ORGANICS\VOLATILE\HPMS8\DATA\051012\8M378979.D
Operator : TMB
Acquired : 11 May 2012 4:11 using AcqMethod 8260WT
Instrument : HPMS8
Sample Name: L12050171-07 A 826-SPE
Misc Info : 1,1
Vial Number: 18
Quant File :8260WT.RES (RTE Integrator)



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\051012\8M378971.D Vial: 10
Acq On : 10 May 2012 23:55 Operator: TMB
Sample : L12050171-09 A 826-SPE Inst : HPMS8
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 15:04:00 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

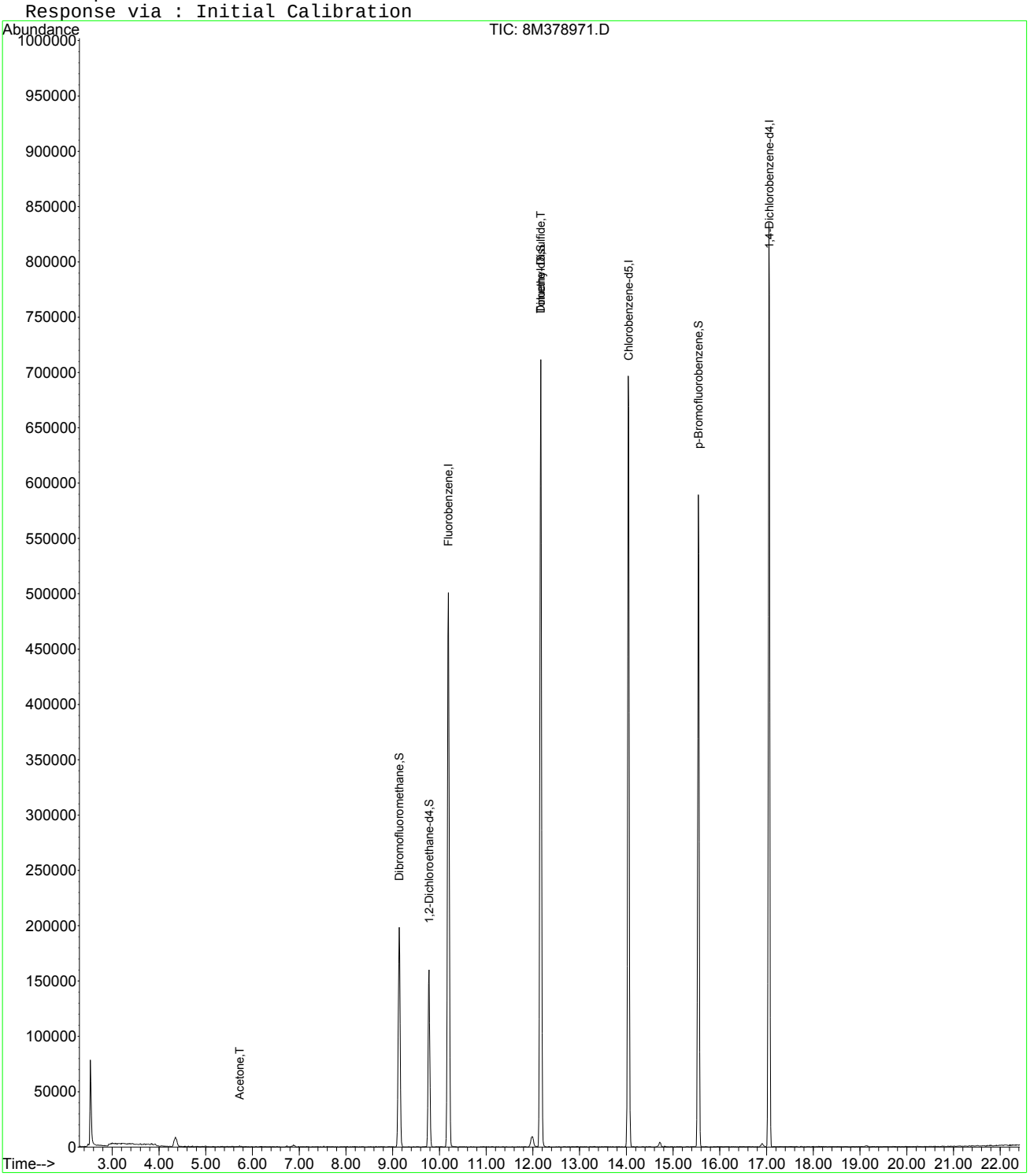
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.19	96	652550	25.00	ug/L	0.01
57) Chlorobenzene-d5	14.05	117	577664	25.00	ug/L	0.01
78) 1,4-Dichlorobenzene-d4	17.06	152	317394	25.00	ug/L	0.01
System Monitoring Compounds						
37) Dibromofluoromethane	9.14	111	173062	25.5630	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 102.24%			
43) 1,2-Dichloroethane-d4	9.78	65	147838	28.3582	ug/L	0.01
Spiked Amount 25.000	Range 80 - 120		Recovery = 113.44%			
58) Toluene-d8	12.17	98	659471	24.7255	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 98.92%			
80) p-Bromofluorobenzene	15.54	95	250728	24.4197	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 97.68%			
Target Compounds						Qvalue
13) Acetone	5.73	43	592	0.6148	ug/L #	47
56) Dimethyl Disulfide	12.17	94	19620	1.9182	ug/L #	28

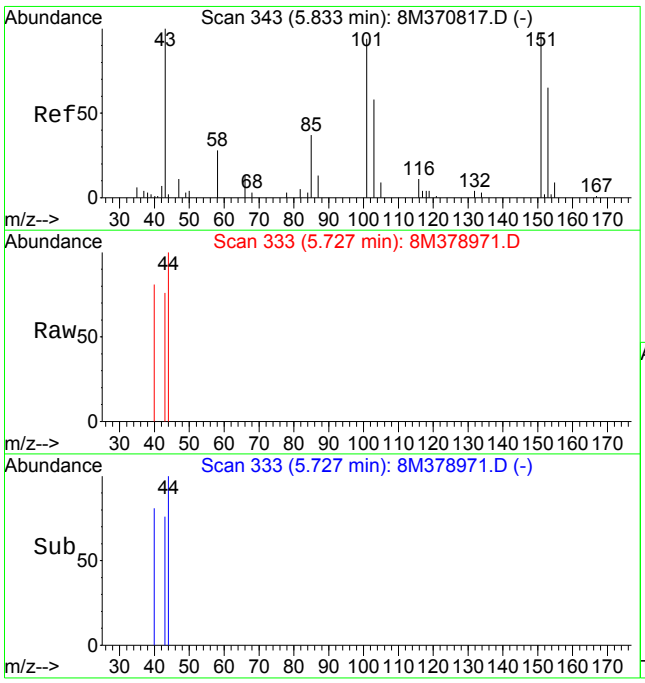
(#) = qualifier out of range (m) = manual integration
8M378971.D 8260WT.M Tue May 15 15:04:01 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\051012\8M378971.D Vial: 10
Acq On : 10 May 2012 23:55 Operator: TMB
Sample : L12050171-09 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

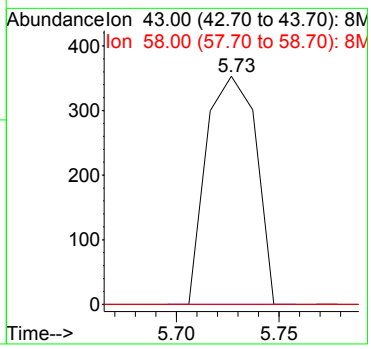


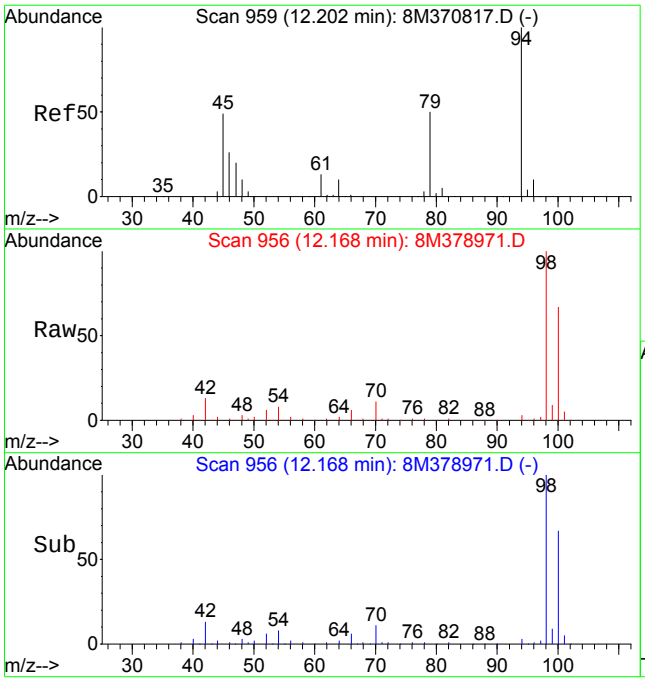


#13
Acetone
Concen: 0.61 ug/L
RT: 5.73 min Scan# 333
Delta R.T. 0.01 min
Lab File: 8M378971.D
Acq: 10 May 2012 23:55

Tgt Ion: 43 Resp: 592

Ion	Ratio	Lower	Upper
43	100		
58	0.0	16.9	39.3#

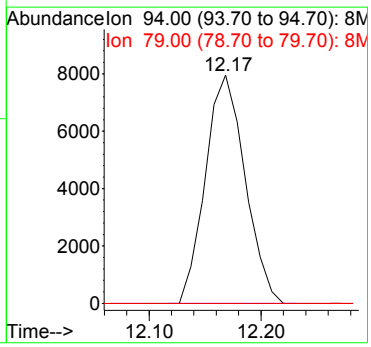




#56
Dimethyl Disulfide
Concen: 1.92 ug/L
RT: 12.17 min Scan# 956
Delta R.T. 0.08 min
Lab File: 8M378971.D
Acq: 10 May 2012 23:55

Tgt Ion: 94 Resp: 19620

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\8M378971.D Vial: 10
Acq On : 10 May 2012 23:55 Operator: TMB
Sample : L12050171-09 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

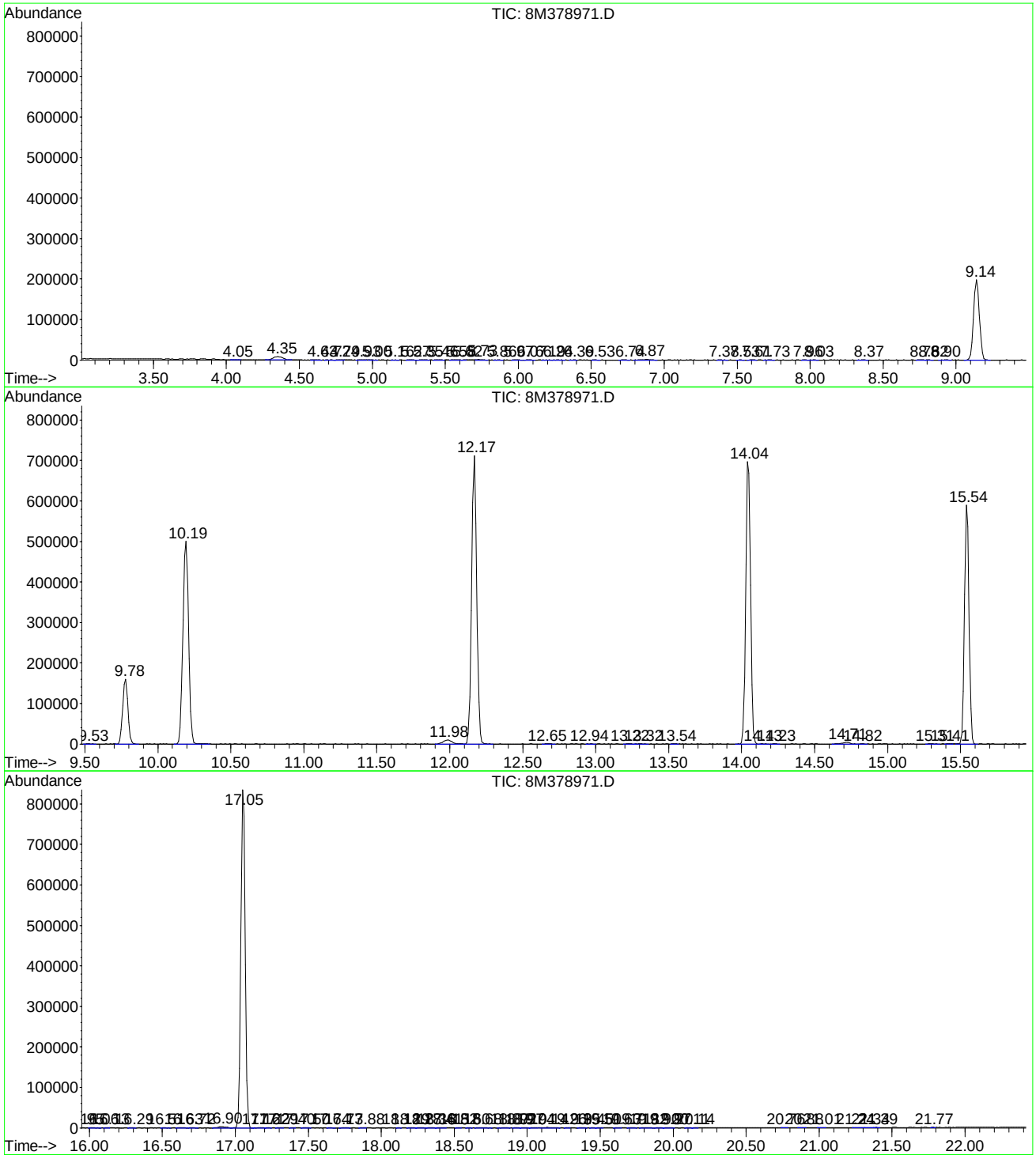
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.052	169	171	175	rBV	632	1532	0.09%	0.017%
2	4.352	192	200	209	rVB4	8589	35762	2.06%	0.406%
3	4.631	222	227	229	rVB4	838	1697	0.10%	0.019%
4	4.724	231	236	238	rBB	898	1732	0.10%	0.020%
5	4.786	238	242	244	rBV	635	1589	0.09%	0.018%
6	4.931	252	256	259	rBV	659	1853	0.11%	0.021%
7	5.003	260	263	266	rVB	843	1677	0.10%	0.019%
8	5.158	275	278	280	rBB	699	667	0.04%	0.008%
9	5.272	285	289	291	rBB	412	1174	0.07%	0.013%
10	5.355	292	297	300	rBB	826	1782	0.10%	0.020%
11	5.458	303	307	310	rBB	740	1598	0.09%	0.018%
12	5.582	314	319	322	rBB	764	2170	0.12%	0.025%
13	5.623	322	323	325	rBV	398	656	0.04%	0.007%
14	5.727	331	333	339	rVB	1190	2362	0.14%	0.027%
15	5.861	343	346	349	rBB	631	790	0.05%	0.009%
16	5.975	355	357	362	rBB	361	1036	0.06%	0.012%
17	6.068	363	366	370	rBB	435	932	0.05%	0.011%
18	6.192	375	378	381	rBB	761	955	0.05%	0.011%
19	6.244	382	383	390	rBB	381	901	0.05%	0.010%
20	6.389	393	397	398	rBB	426	658	0.04%	0.007%
21	6.533	408	411	413	rBB	630	775	0.04%	0.009%
22	6.740	426	431	433	rBB	1112	1586	0.09%	0.018%
23	6.875	436	444	451	rBB	1913	6824	0.39%	0.077%
24	7.381	491	493	498	rBB	364	831	0.05%	0.009%
25	7.526	504	507	509	rBB	859	736	0.04%	0.008%
26	7.609	511	515	517	rBB	636	1016	0.06%	0.012%
27	7.733	522	527	529	rBB	381	838	0.05%	0.010%
28	7.960	547	549	551	rBB	405	637	0.04%	0.007%
29	8.033	552	556	558	rBB	622	796	0.05%	0.009%
30	8.374	584	589	591	rBB	361	862	0.05%	0.010%
31	8.756	623	626	629	rBB	407	1043	0.06%	0.012%
32	8.818	629	632	634	rBB	403	646	0.04%	0.007%
33	8.901	638	640	646	rBB	357	818	0.05%	0.009%
34	9.139	655	663	672	rBB2	198539	548487	31.58%	6.227%
35	9.532	697	701	705	rBB2	363	852	0.05%	0.010%
36	9.780	718	725	733	rVB	160113	394890	22.74%	4.483%
37	10.193	757	765	780	rBB	501146	1342498	77.30%	15.241%
38	11.982	930	938	949	rBB2	9336	40405	2.33%	0.459%
39	12.168	949	956	968	rBB	711808	1706887	98.28%	19.378%
40	12.654	1001	1003	1009	rBB	402	1091	0.06%	0.012%
41	12.944	1030	1031	1036	rBB	647	790	0.05%	0.009%
42	13.223	1055	1058	1062	rBB	347	782	0.05%	0.009%

43	13.316	1062	1067	1071	rBB	689	1290	0.07%	0.015%
44	13.543	1086	1089	1091	rBB	366	789	0.05%	0.009%
45	14.040	1129	1137	1145	rBB	696882	1606049	92.48%	18.233%
46	14.133	1145	1146	1151	rBB	375	629	0.04%	0.007%
47	14.226	1152	1155	1158	rBB	356	633	0.04%	0.007%
48	14.712	1193	1202	1209	rBB3	4538	14527	0.84%	0.165%
49	14.815	1210	1212	1216	rBB	881	1188	0.07%	0.013%
50	15.312	1255	1260	1264	rBB	426	1105	0.06%	0.013%
51	15.415	1268	1270	1273	rBV	442	1101	0.06%	0.012%
52	15.539	1275	1282	1289	rVB	589544	1259549	72.52%	14.299%
53	15.953	1319	1322	1324	rBB	547	963	0.06%	0.011%
54	16.056	1326	1332	1334	rBB	397	1076	0.06%	0.012%
55	16.128	1336	1339	1340	rBV	374	834	0.05%	0.009%
56	16.294	1352	1355	1357	rBB	388	856	0.05%	0.010%
57	16.511	1374	1376	1380	rBB	461	932	0.05%	0.011%
58	16.635	1384	1388	1391	rBB	422	1283	0.07%	0.015%
59	16.718	1392	1396	1398	rBB	430	859	0.05%	0.010%
60	16.904	1408	1414	1420	rBB	3284	11203	0.65%	0.127%
61	17.049	1421	1428	1435	rBB	835200	1736713	100.00%	19.717%
62	17.162	1435	1439	1443	rBB	455	1283	0.07%	0.015%
63	17.224	1443	1445	1447	rBB	371	635	0.04%	0.007%
64	17.286	1450	1451	1455	rBV	450	1140	0.07%	0.013%
65	17.400	1459	1462	1463	rBV	467	919	0.05%	0.010%
66	17.503	1467	1472	1473	rBB	489	1140	0.07%	0.013%
67	17.638	1484	1485	1489	rBB	573	862	0.05%	0.010%
68	17.731	1492	1494	1499	rBB	646	1404	0.08%	0.016%
69	17.876	1505	1508	1510	rBV	420	1106	0.06%	0.013%
70	18.124	1530	1532	1533	rBB	706	734	0.04%	0.008%
71	18.186	1537	1538	1543	rBB	494	1253	0.07%	0.014%
72	18.269	1543	1546	1549	rBB	474	1312	0.08%	0.015%
73	18.362	1550	1555	1556	rBB	412	1122	0.06%	0.013%
74	18.413	1556	1560	1563	rBV	480	1577	0.09%	0.018%
75	18.517	1569	1570	1573	rBV	498	1005	0.06%	0.011%
76	18.599	1576	1578	1580	rBB	430	693	0.04%	0.008%
77	18.682	1582	1586	1593	rBB	470	2133	0.12%	0.024%
78	18.868	1597	1604	1605	rBB	470	1521	0.09%	0.017%
79	18.920	1607	1609	1612	rBB	527	1029	0.06%	0.012%
80	18.972	1612	1614	1618	rBB	632	1328	0.08%	0.015%
81	19.044	1618	1621	1624	rBV	511	1459	0.08%	0.017%
82	19.137	1625	1630	1638	rVB2	1229	4988	0.29%	0.057%
83	19.261	1641	1642	1645	rBV	573	1142	0.07%	0.013%
84	19.354	1650	1651	1656	rBB	523	1346	0.08%	0.015%
85	19.447	1658	1660	1662	rBB	435	741	0.04%	0.008%
86	19.499	1662	1665	1667	rBV	506	1280	0.07%	0.015%
87	19.633	1674	1678	1679	rBV	403	1175	0.07%	0.013%
88	19.706	1683	1685	1689	rBB	521	1478	0.09%	0.017%
89	19.820	1691	1696	1700	rBB	556	2059	0.12%	0.023%
90	19.902	1701	1704	1707	rBB	412	1150	0.07%	0.013%
91	19.975	1707	1711	1714	rBB	745	1636	0.09%	0.019%
92	20.109	1721	1724	1726	rBB	376	852	0.05%	0.010%
93	20.140	1726	1727	1730	rBV	551	1067	0.06%	0.012%
94	20.760	1785	1787	1789	rVB	606	764	0.04%	0.009%
95	20.884	1796	1799	1801	rBV	489	731	0.04%	0.008%
96	21.009	1809	1811	1814	rBV	535	1109	0.06%	0.013%
97	21.236	1832	1833	1840	rVB2	556	1922	0.11%	0.022%
98	21.339	1840	1843	1846	rBV2	807	1984	0.11%	0.023%
99	21.391	1846	1848	1850	rBV	863	1100	0.06%	0.012%
100	21.774	1884	1885	1887	rBV	860	1000	0.06%	0.011%

Sum of corrected areas: 8808371

File : K:\ORGANICS\VOLATILE\HPMS8\DATA\051012\8M378971.D
Operator : TMB
Acquired : 10 May 2012 23:55 using AcqMethod 8260WT
Instrument : HPMS8
Sample Name: L12050171-09 A 826-SPE
Misc Info : 1,1
Vial Number: 10
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

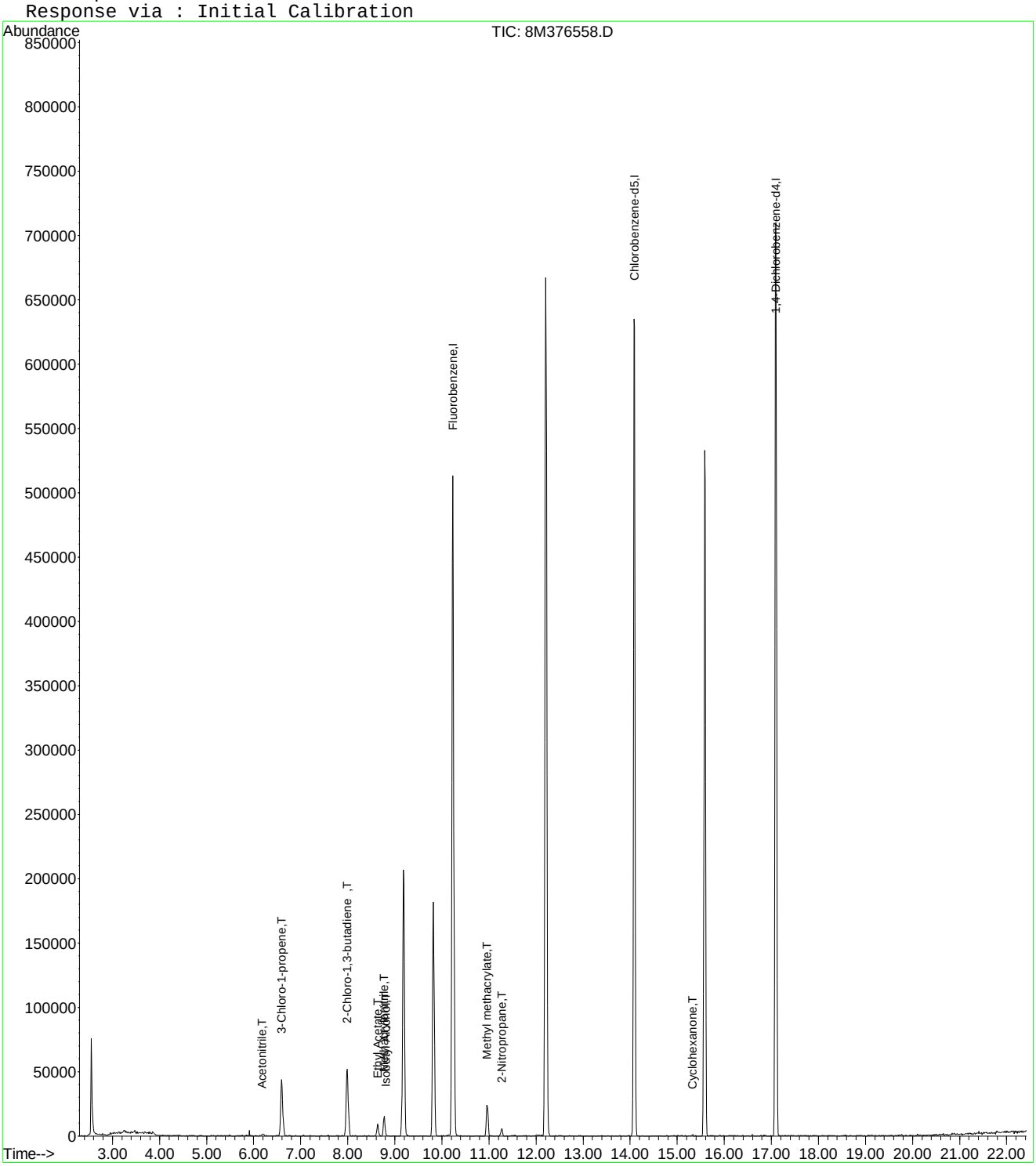
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	10.23	96	656295	25.00	ug/L		0.00
11) Chlorobenzene-d5	14.09	117	486754	25.00	ug/L		0.00
12) 1,4-Dichlorobenzene-d4	17.10	152	262855	25.00	ug/L		0.00
Target Compounds							Qvalue
2) Acetonitrile	6.18	41	2309	4.7425	ug/L		65
3) 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

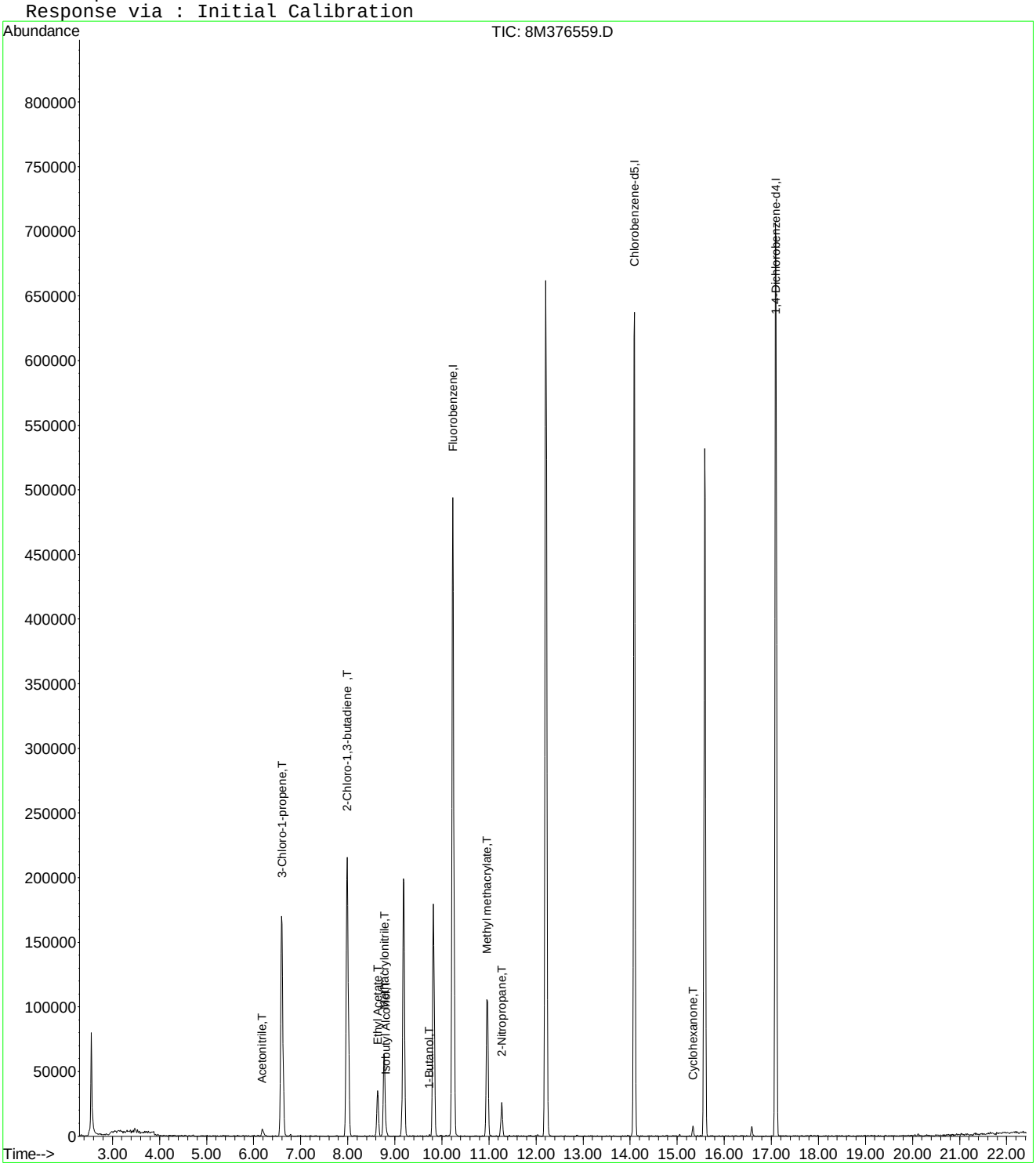
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	10.24	96	641906	25.00	ug/L		0.00
11) Chlorobenzene-d5	14.09	117	480006	25.00	ug/L		0.00
12) 1,4-Dichlorobenzene-d4	17.10	152	261314	25.00	ug/L		0.00
Target Compounds							Qvalue
2) Acetonitrile	6.18	41	8633	18.1289	ug/L		99
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

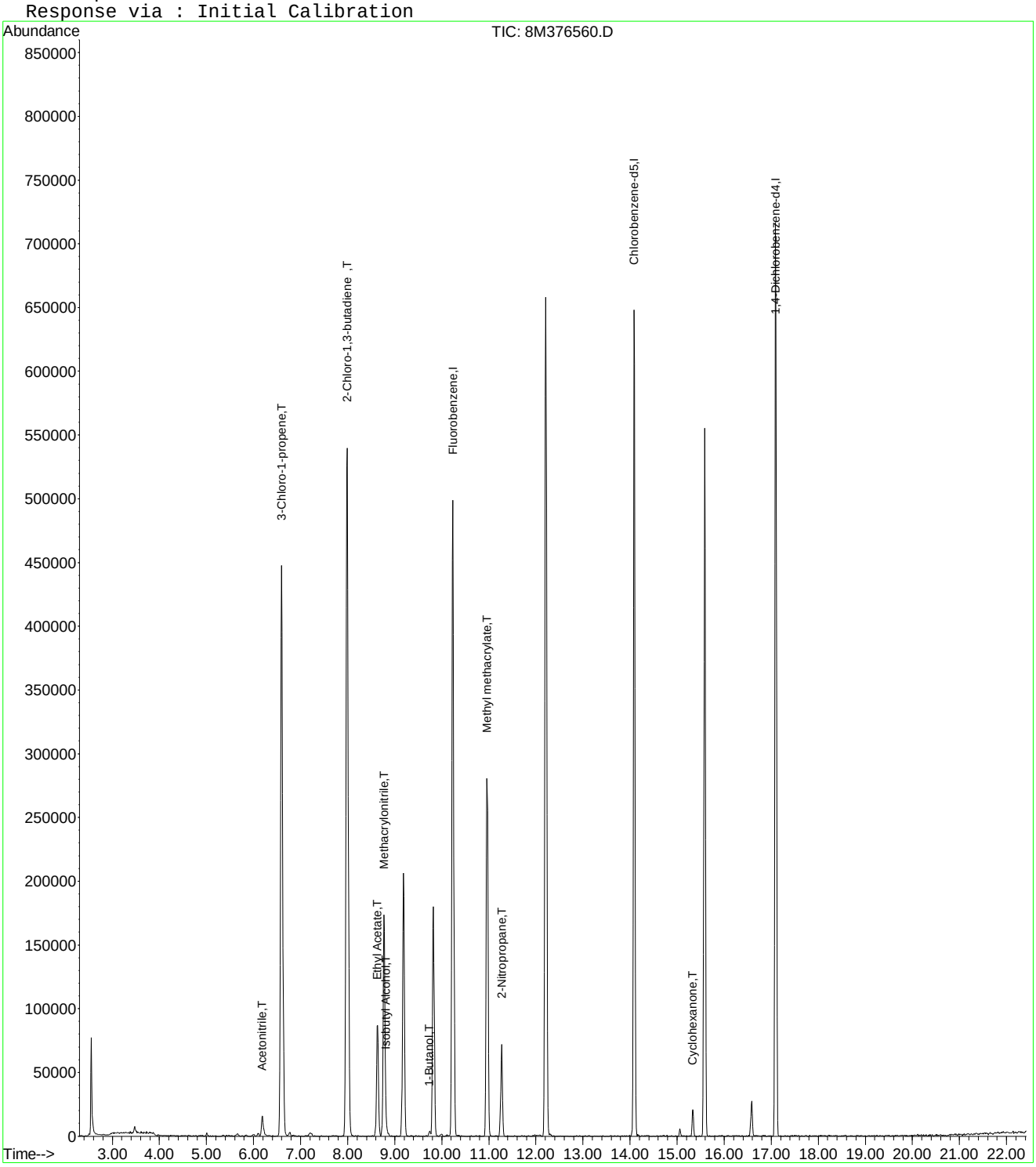
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.24	96	648527	25.00	ug/L	0.00
11) Chlorobenzene-d5	14.08	117	482506	25.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4	17.09	152	263746	25.00	ug/L	0.00
Target Compounds						Qvalue
2) Acetonitrile	6.18	41	23521	48.8886	ug/L	95
3) 3-Chloro-1-propene	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

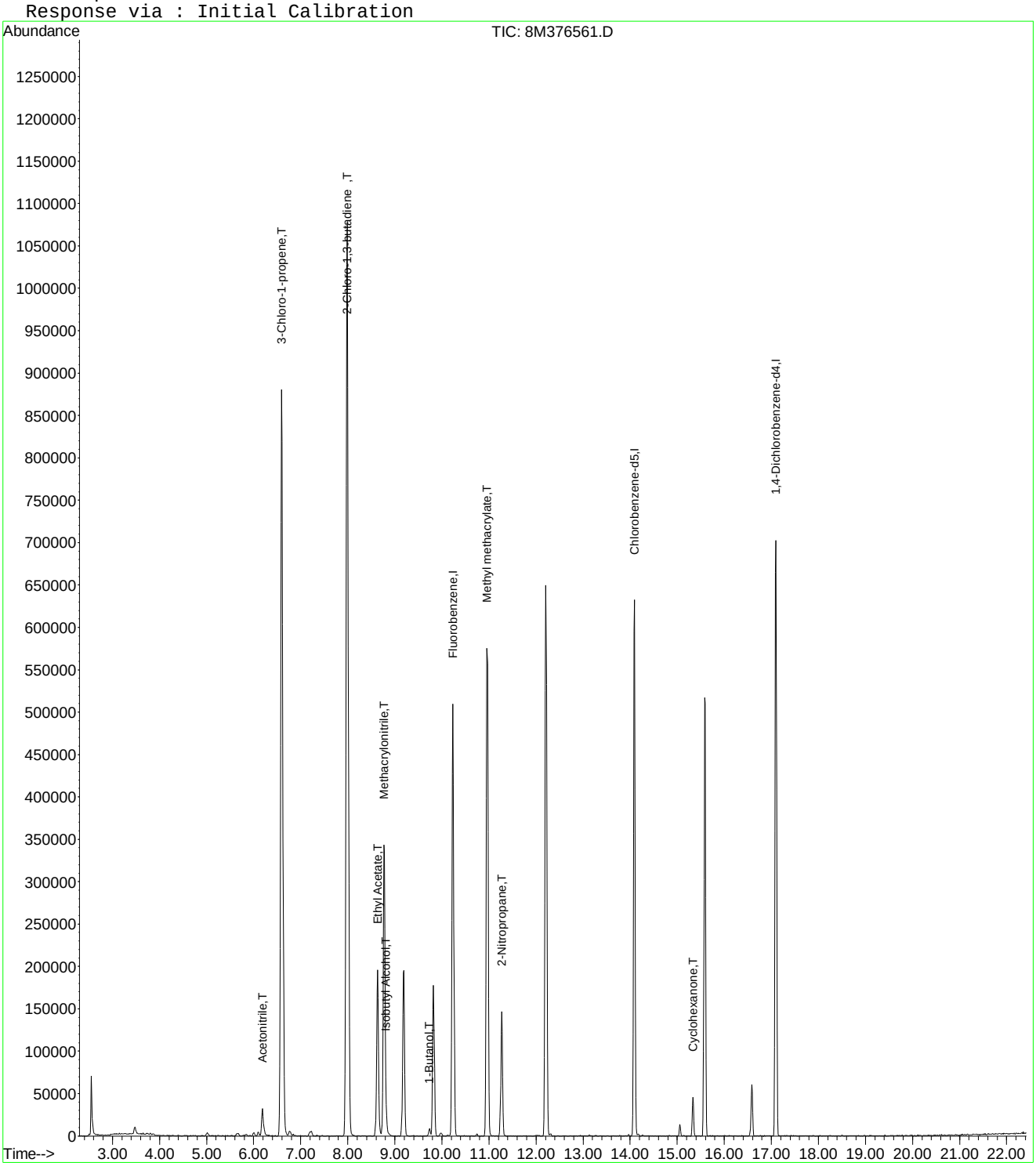
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.23	96	644867	25.00	ug/L	0.00
11) Chlorobenzene-d5	14.09	117	466673	25.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4	17.10	152	256948	25.00	ug/L	0.00
Target Compounds						Qvalue
2) Acetonitrile	6.19	41	49584	103.6457	ug/L	100
3) 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

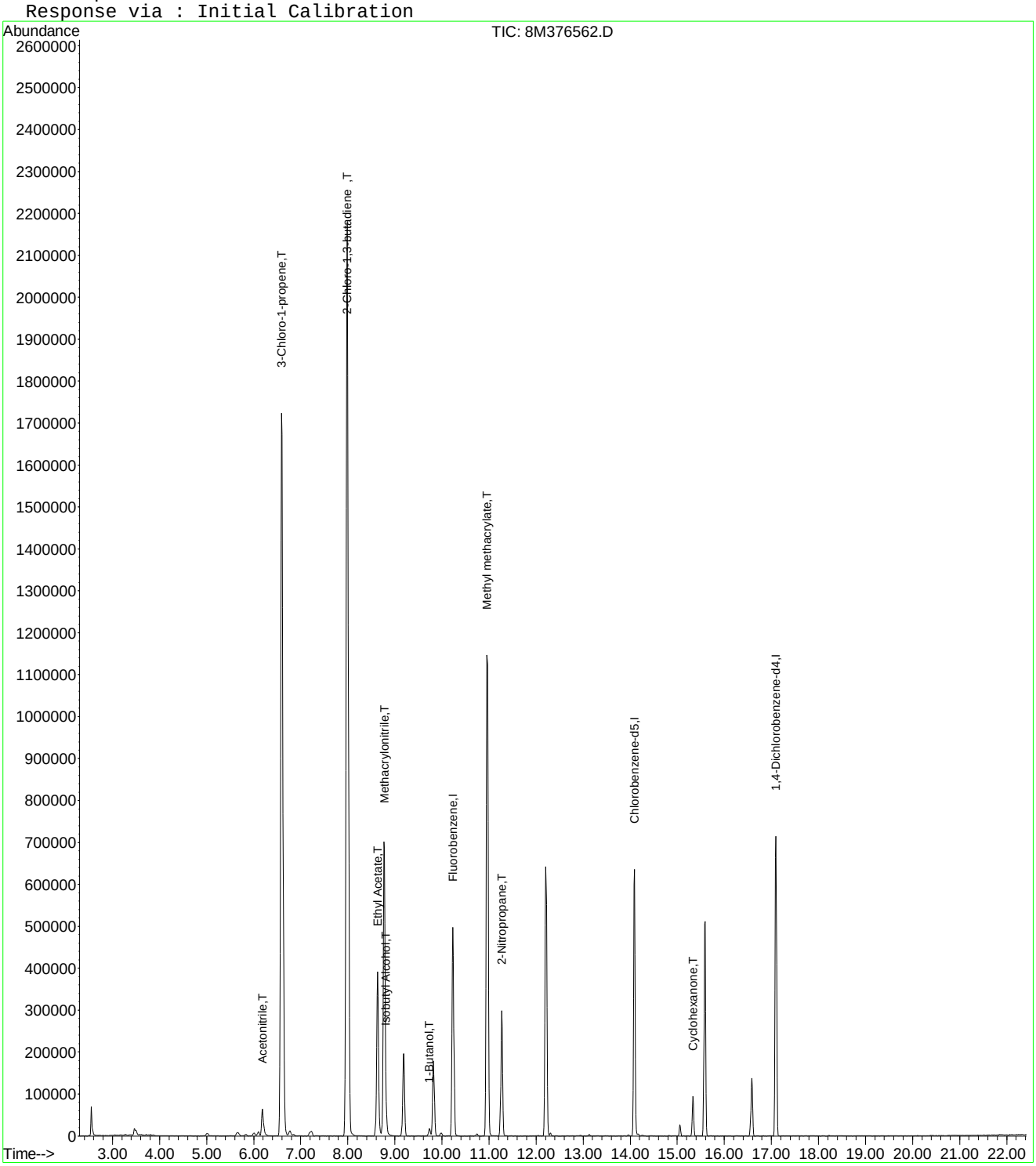
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.23	96	635990	25.00	ug/L	0.00
11) Chlorobenzene-d5	14.09	117	471643	25.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4	17.10	152	259529	25.00	ug/L	0.00
Target Compounds						Qvalue
2) Acetonitrile	6.19	41	102381	216.9947	ug/L	99
3) 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

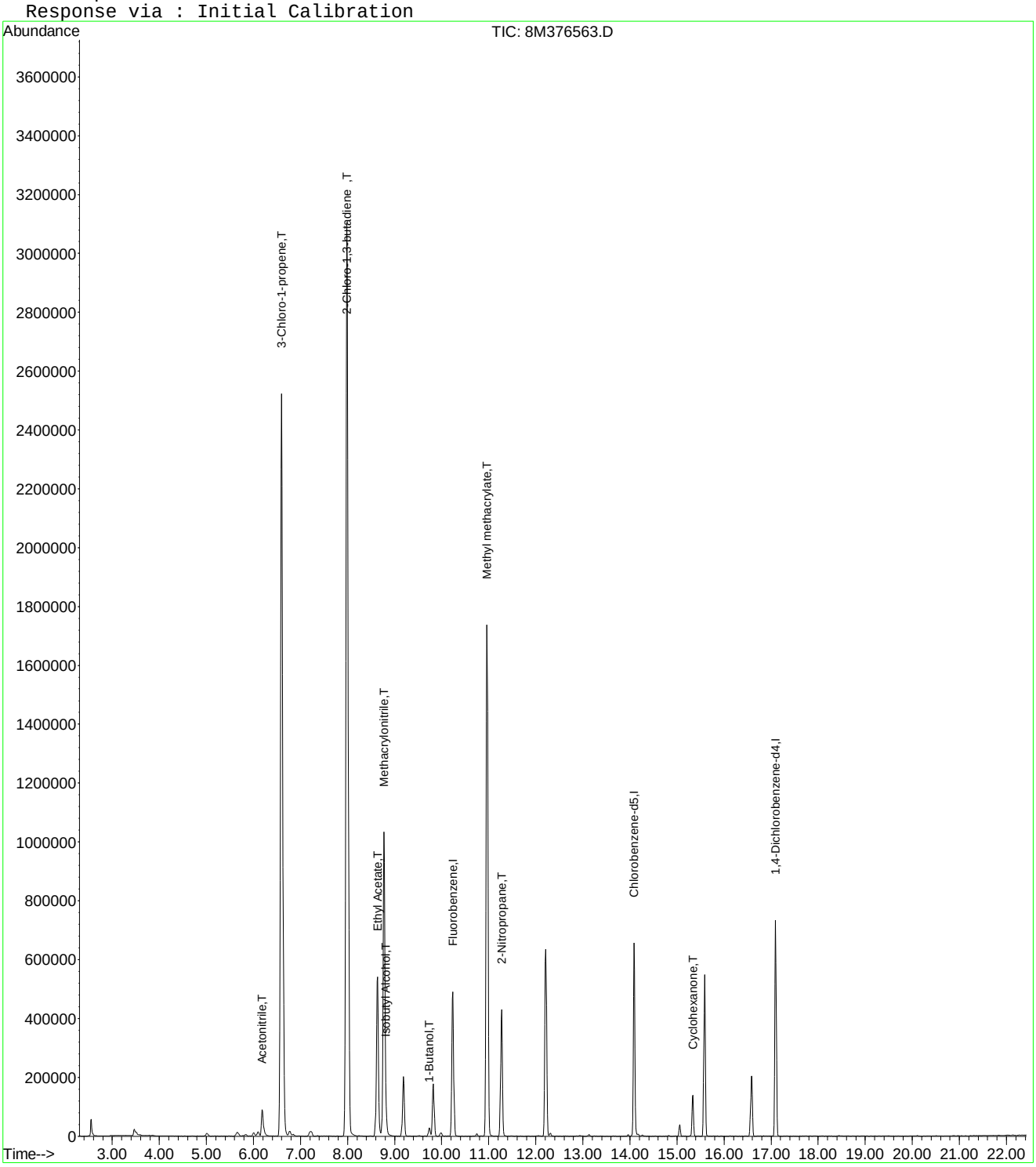
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	10.24	96	643596	25.00	ug/L		0.00
11) Chlorobenzene-d5	14.08	117	478604	25.00	ug/L		0.00
12) 1,4-Dichlorobenzene-d4	17.09	152	258958	25.00	ug/L		0.00
Target Compounds							Qvalue
2) Acetonitrile	6.19	41	145734	305.2302	ug/L		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

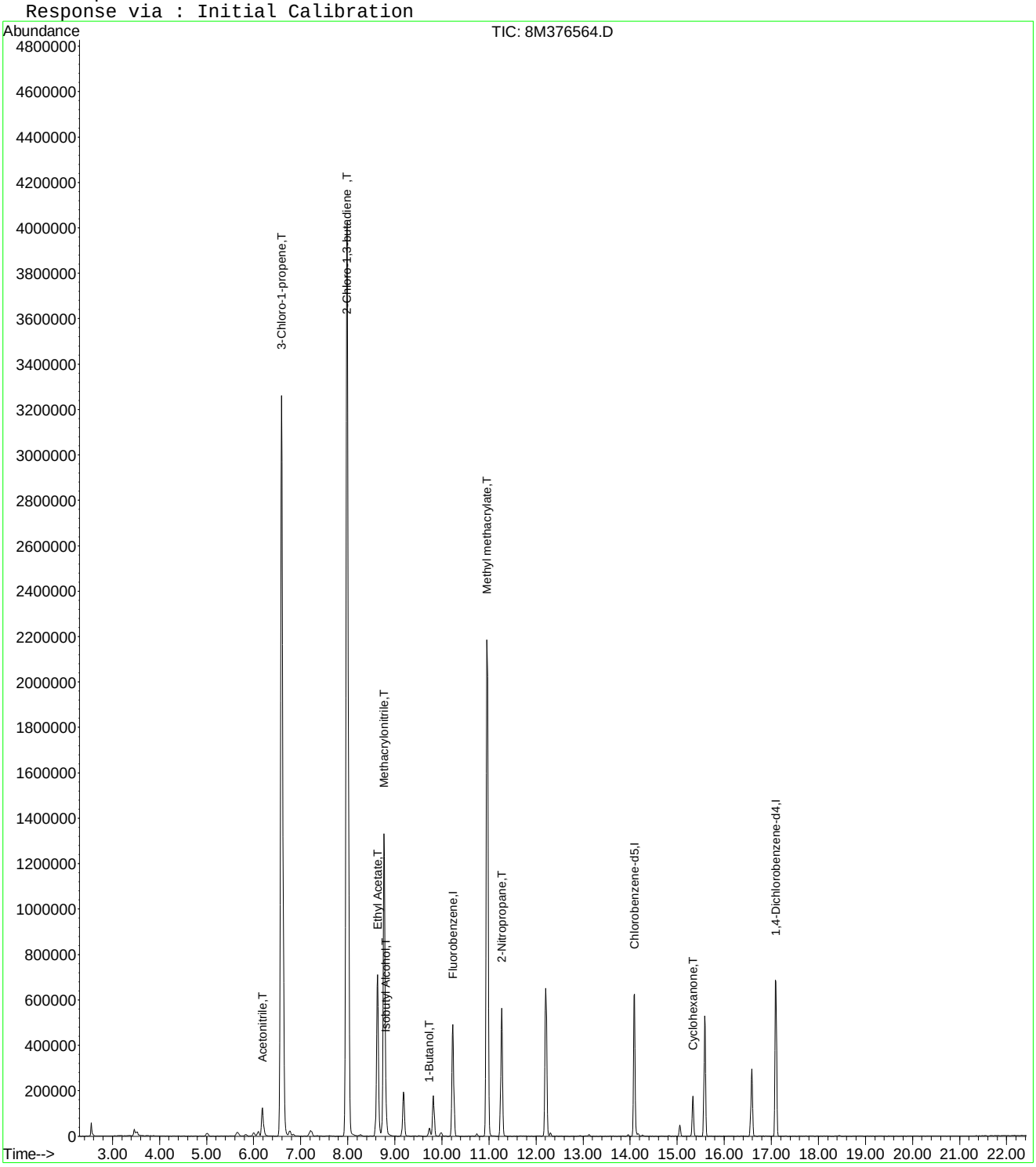
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.23	96	641318	25.00	ug/L	0.00
11) Chlorobenzene-d5	14.09	117	477949	25.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4	17.10	152	257944	25.00	ug/L	0.00
Target Compounds						Qvalue
2) Acetonitrile	6.19	41	195716	411.3703	ug/L	97
3) 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

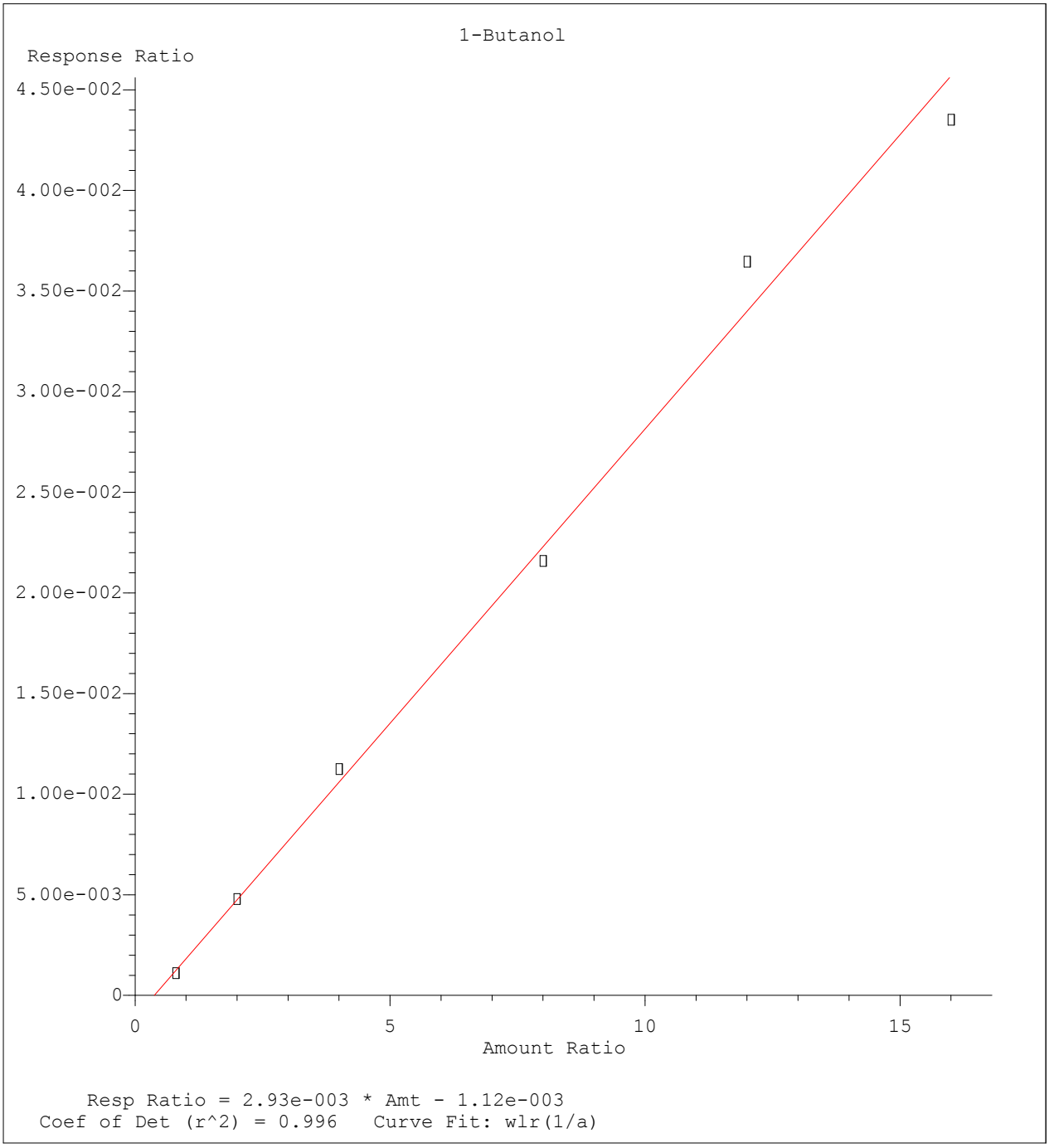
Quantitation Report (Not Reviewed)

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



8M376564.D A9FOOWT.M Wed Feb 01 15:38:26 2012 Page 2



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

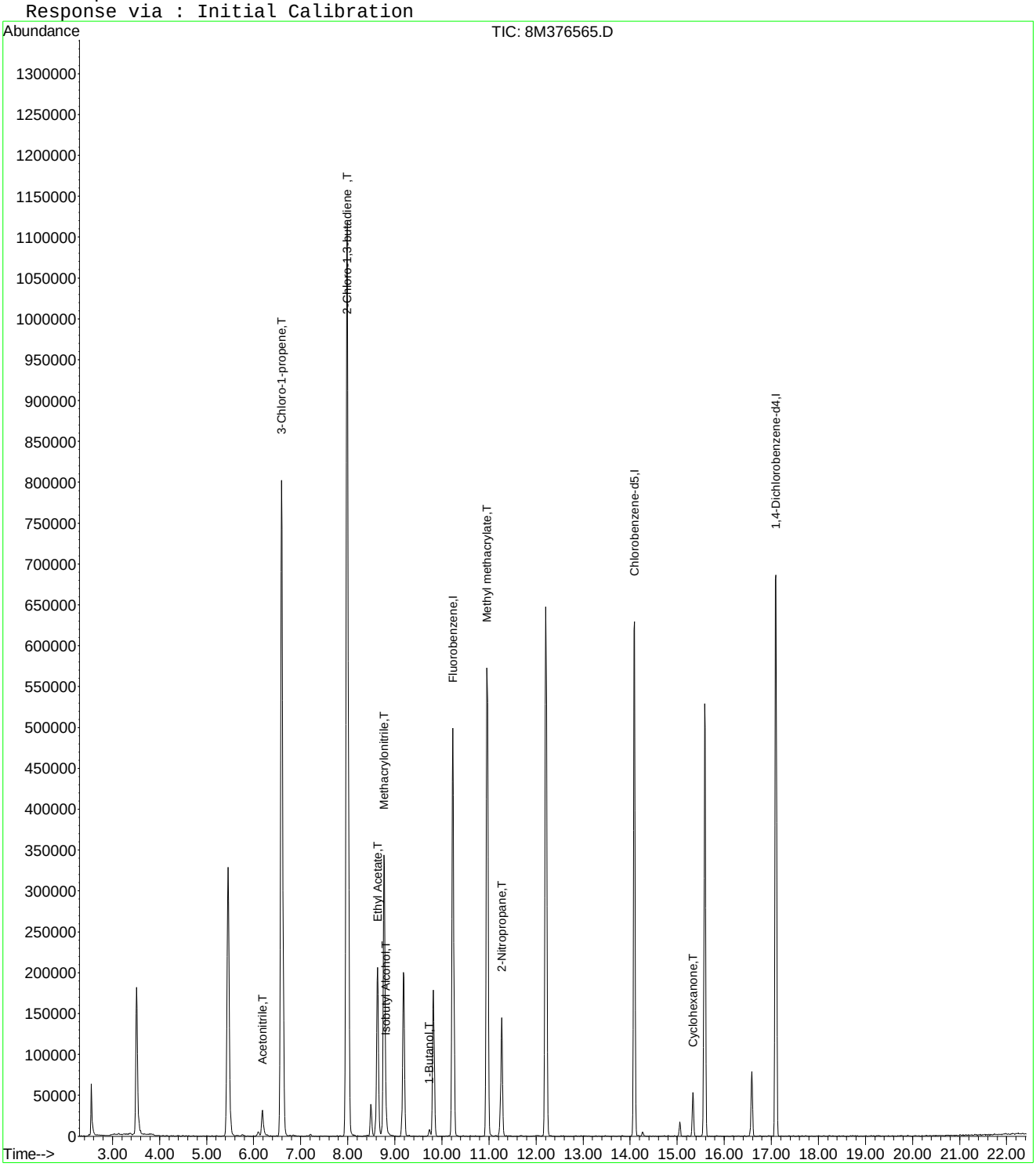
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.23	96	639588	25.00	ug/L	0.00
11) Chlorobenzene-d5	14.09	117	475173	25.00	ug/L	0.00
12) 1,4-Dichlorobenzene-d4	17.10	152	258713	25.00	ug/L	0.00
Target Compounds						Qvalue
2) Acetonitrile	6.19	41	44826	94.4734	ug/L	93
3) 3-Chloro-1-propene	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



Evaluate Continuing Calibration Report

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

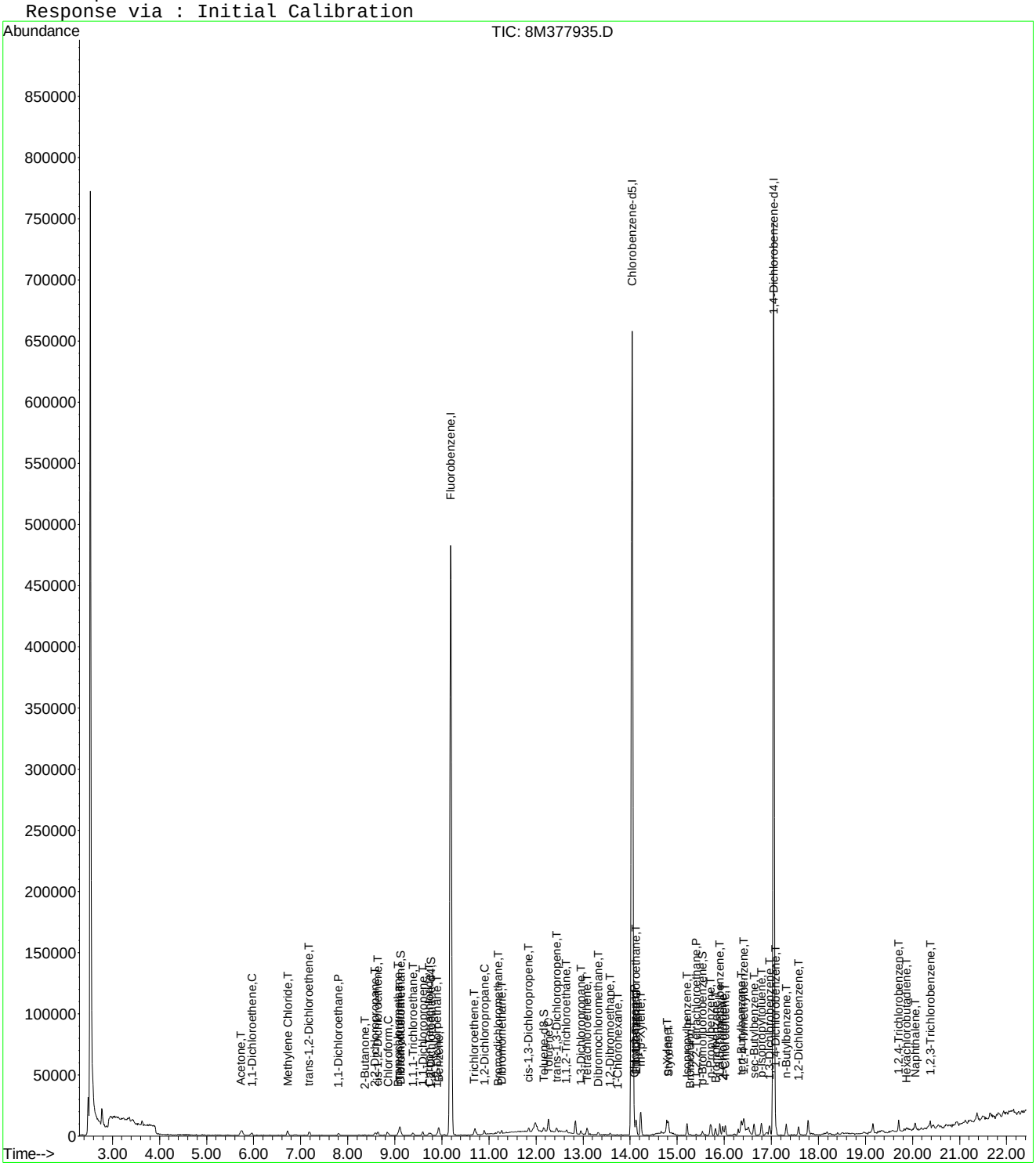
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
85)	1,3,5-Trimethylbenzene	15.90	105	8800	0.3260	ug/L		96
86)	2-Chlorotoluene	15.97	91	8121	0.3527	ug/L		92
87)	4-Chlorotoluene	16.02	91	7793	0.3580	ug/L		92
89)	tert-Butylbenzene	16.37	134	1962	0.3287	ug/L	#	73
90)	1,2,4-Trimethylbenzene	16.42	105	22731	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

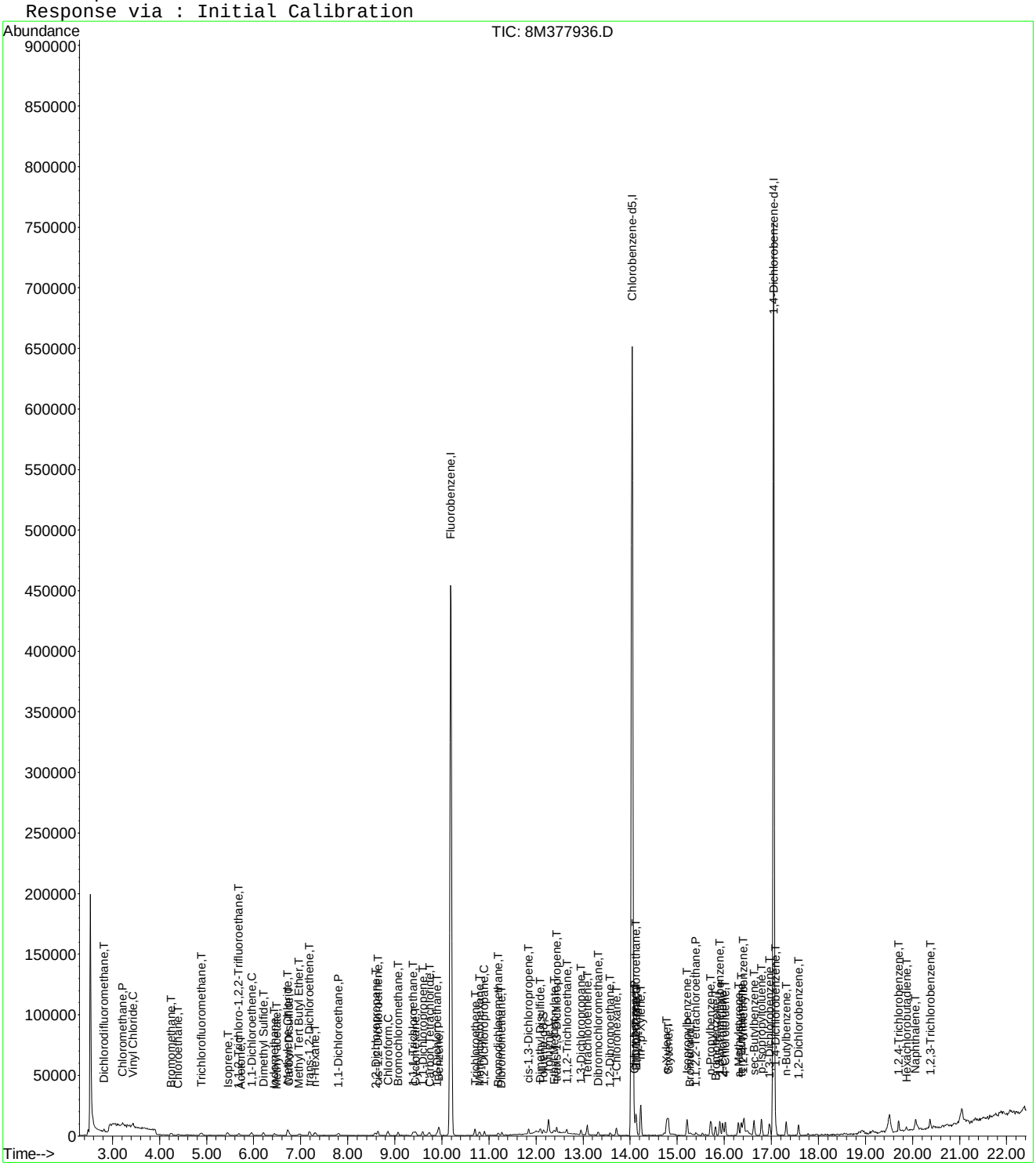
Quant Method : C:\MSDCHEM\2\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Last Update : Wed Mar 28 08:18:24 2012
Response via : Initial Calibration
DataAcq Meth : 8260WTR

	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

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

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

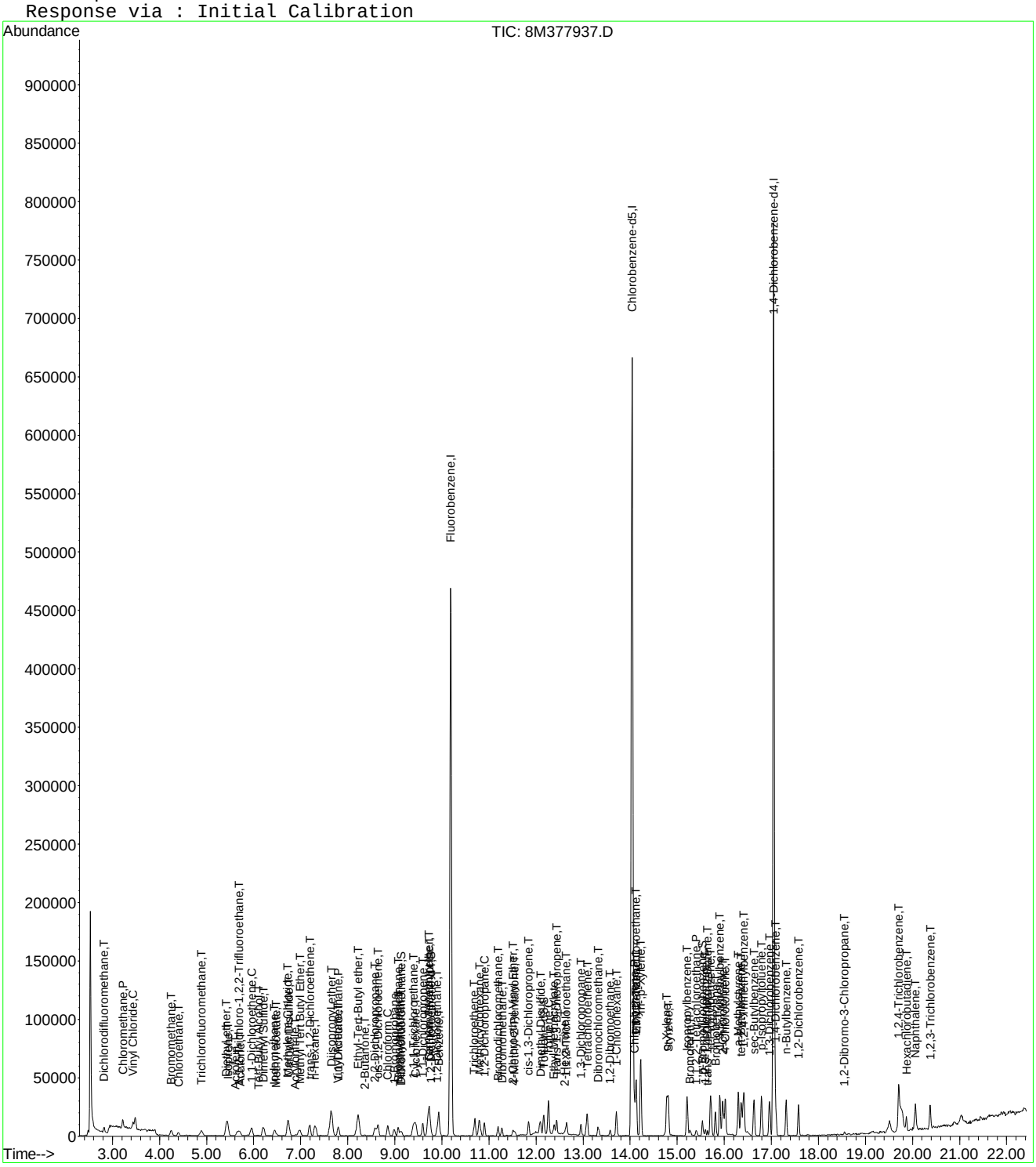
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
46)	Benzene	9.93	78	26693	1.0917	ug/L		96
47)	Trichloroethene	10.69	130	8435	1.0436	ug/L		95
48)	Methylcyclohexane	10.80	83	10318	1.1045	ug/L		98
49)	1,2-Dichloropropane	10.91	63	6029	1.0135	ug/L		99
50)	Bromodichloromethane	11.20	83	8166	1.0642	ug/L	#	90
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

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

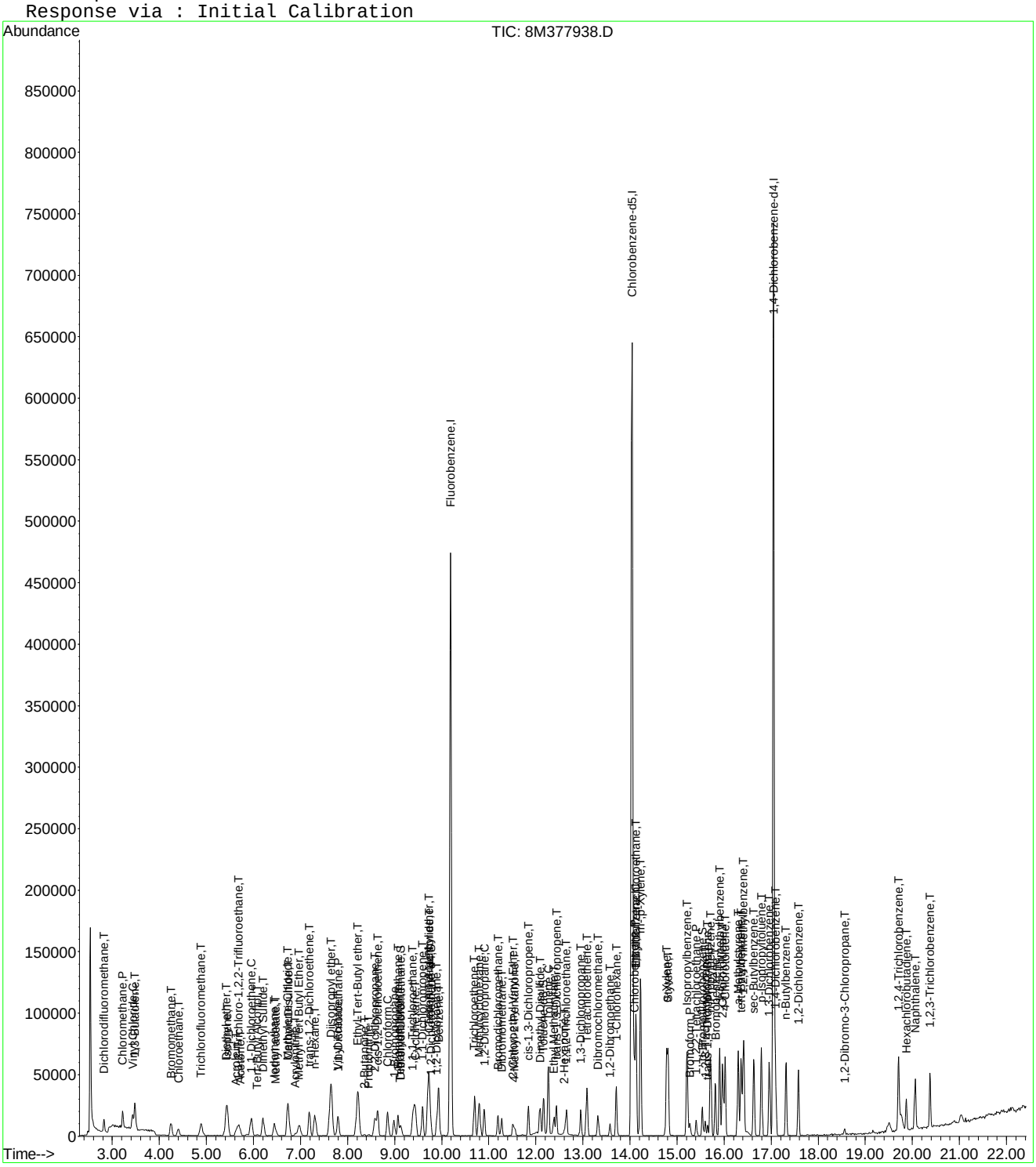
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
45)	1,2-Dichloroethane	9.89	62	14096	2.1739	ug/L	95
46)	Benzene	9.94	78	50618	2.0910	ug/L	98
47)	Trichloroethene	10.69	130	17092	2.1358	ug/L	98
48)	Methylcyclohexane	10.80	83	18455	1.9953	ug/L	97
49)	1,2-Dichloropropane	10.91	63	11976	2.0333	ug/L	97
50)	Bromodichloromethane	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

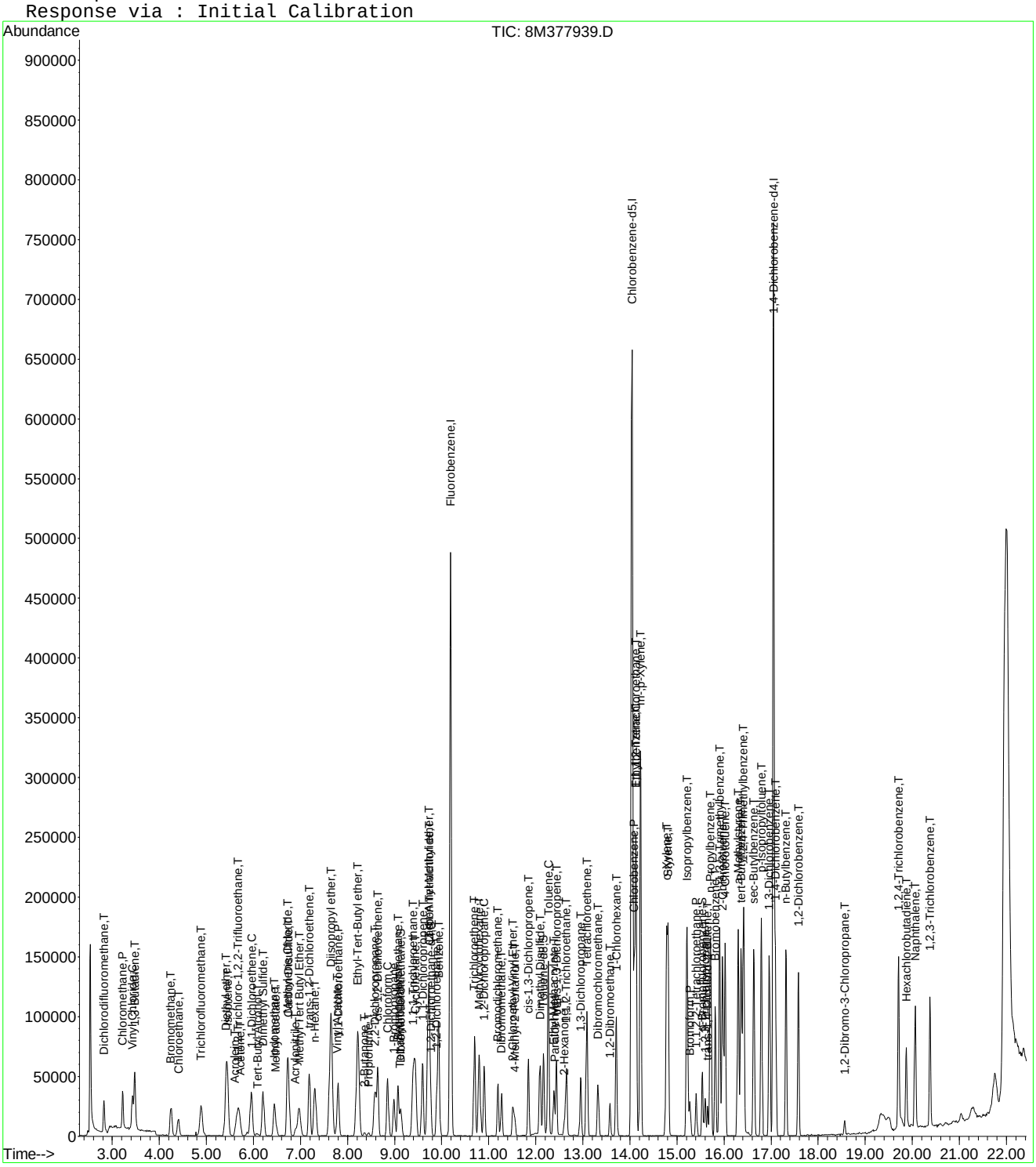
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
45)	1,2-Dichloroethane	9.89	62	33464	5.0148	ug/L	99
46)	Benzene	9.94	78	123801	4.9695	ug/L	98
47)	Trichloroethene	10.69	130	42032	5.1037	ug/L	99
48)	Methylcyclohexane	10.80	83	46930	4.9304	ug/L	97
49)	1,2-Dichloropropane	10.90	63	29883	4.9301	ug/L	97
50)	Bromodichloromethane	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

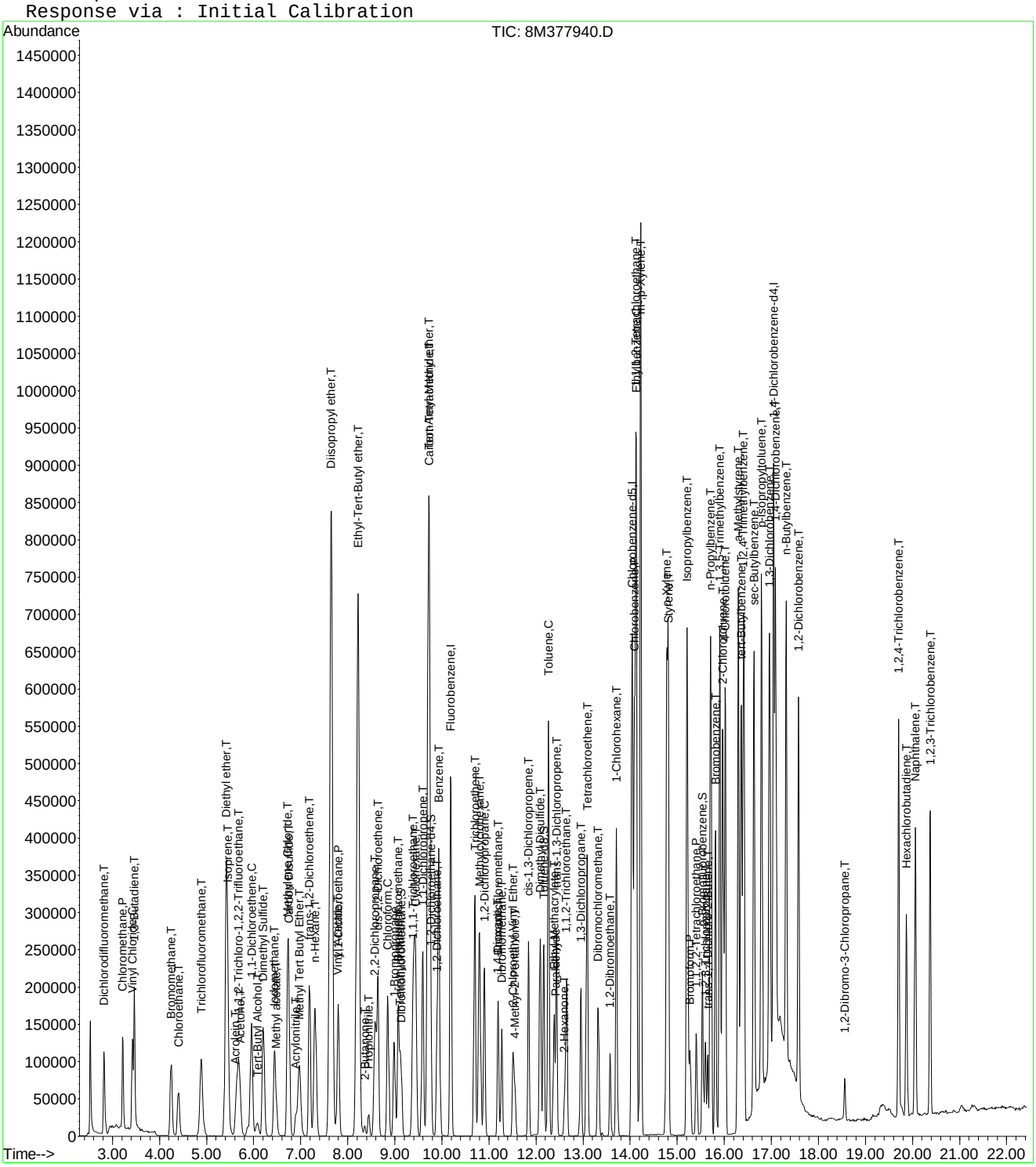
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
45)	1,2-Dichloroethane	9.89	62	131379	19.4236	ug/L	99
46)	Benzene	9.94	78	486251	19.2566	ug/L	99
47)	Trichloroethene	10.70	130	166438	19.9382	ug/L	99
48)	Methylcyclohexane	10.80	83	194100	20.1181	ug/L	99
49)	1,2-Dichloropropane	10.91	63	122795	19.9869	ug/L	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

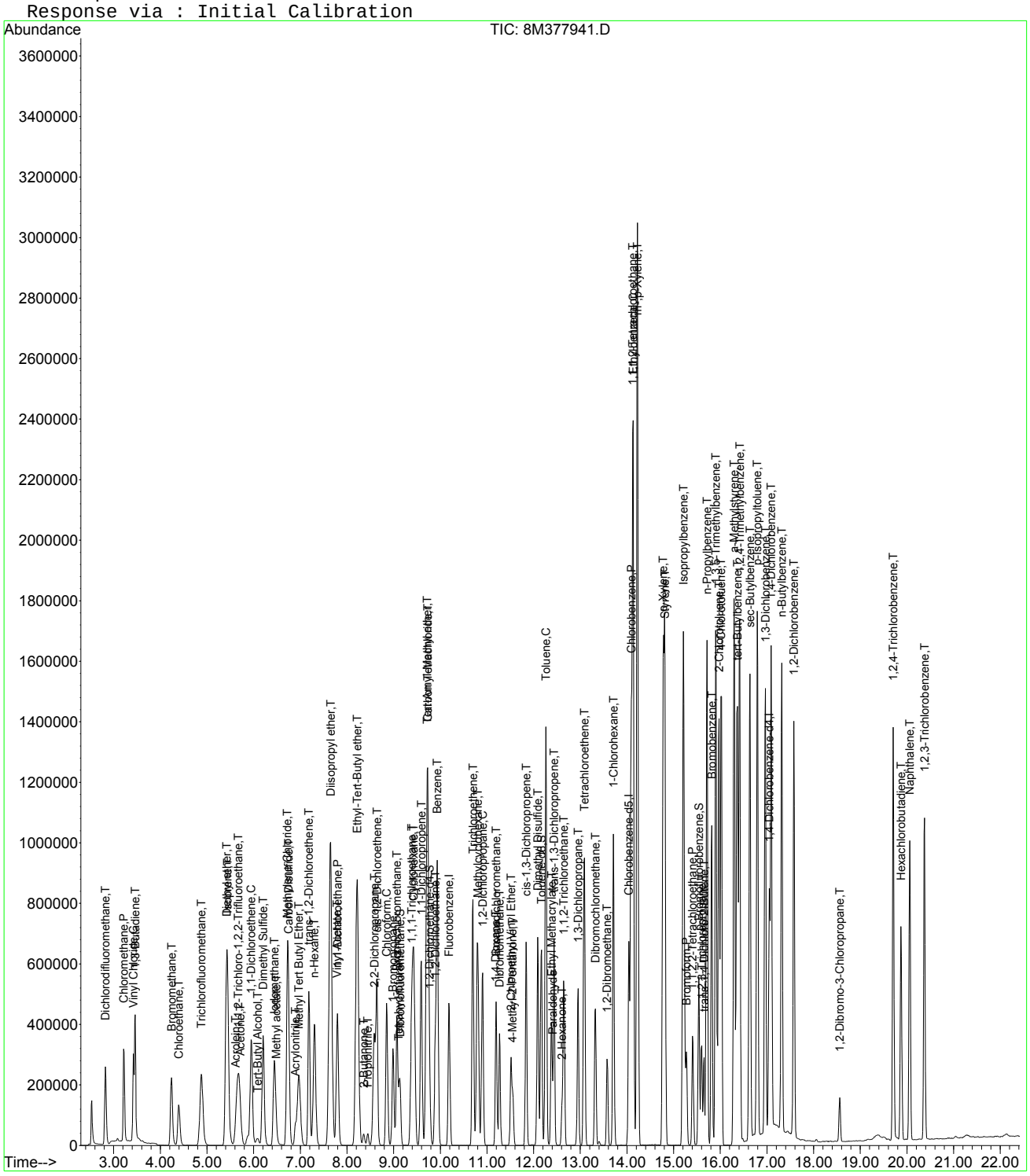
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
46)	Benzene	9.93	78	1197087	48.3993	ug/L	100
47)	Trichloroethene	10.70	130	413168	50.5304	ug/L	100
48)	Methylcyclohexane	10.80	83	470126	49.7472	ug/L	100
49)	1,2-Dichloropropane	10.91	63	309013	51.3495	ug/L	100
50)	Bromodichloromethane	11.20	83	393424	50.6813	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

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

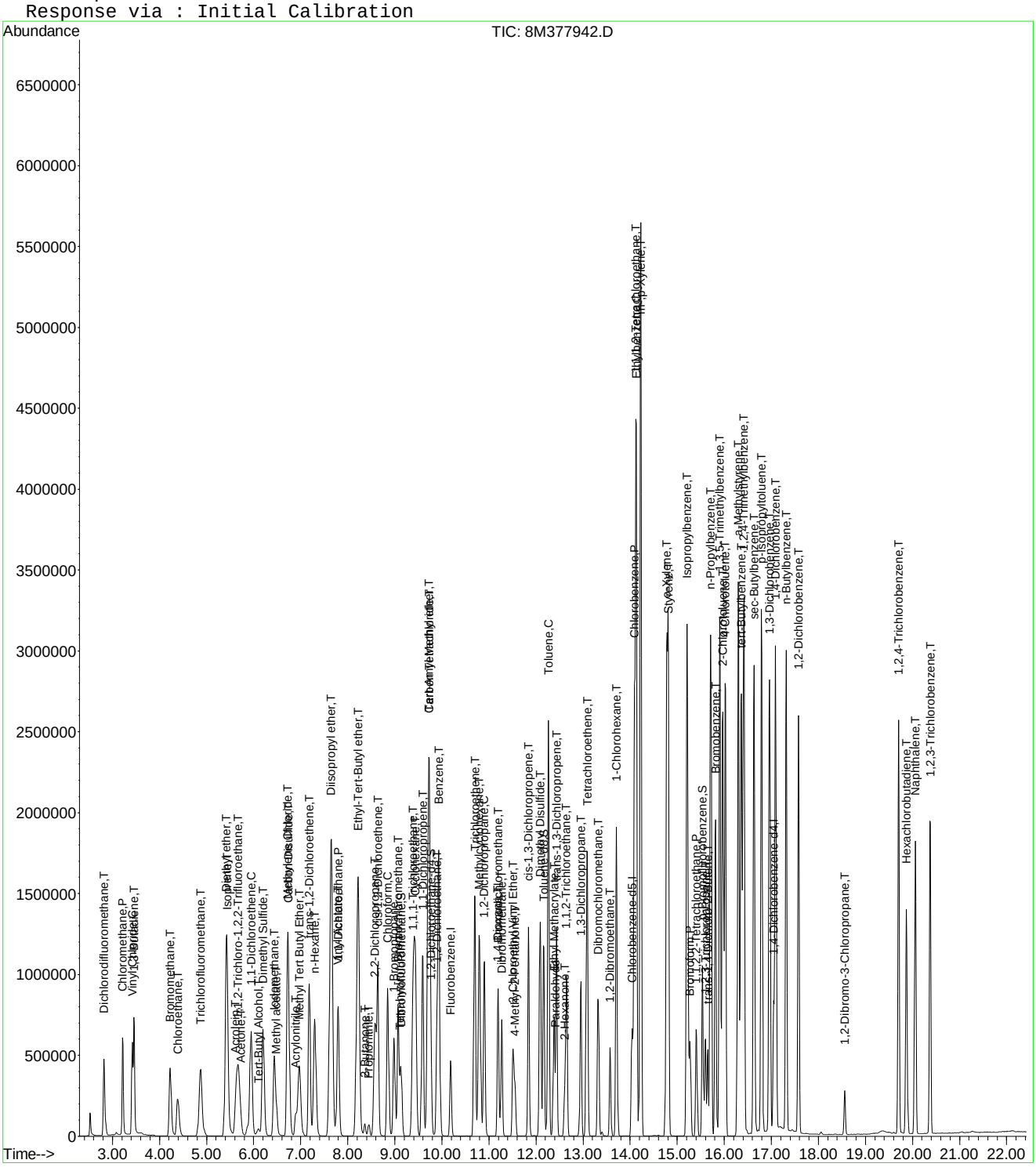
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
45)	1,2-Dichloroethane	9.89	62	638140	98.0115	ug/L	99
46)	Benzene	9.94	78	2241221	92.2063	ug/L	99
47)	Trichloroethene	10.70	130	784268	97.6008	ug/L	99
48)	Methylcyclohexane	10.79	83	878558	94.5992	ug/L	99
49)	1,2-Dichloropropane	10.90	63	589718	99.7163	ug/L	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

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

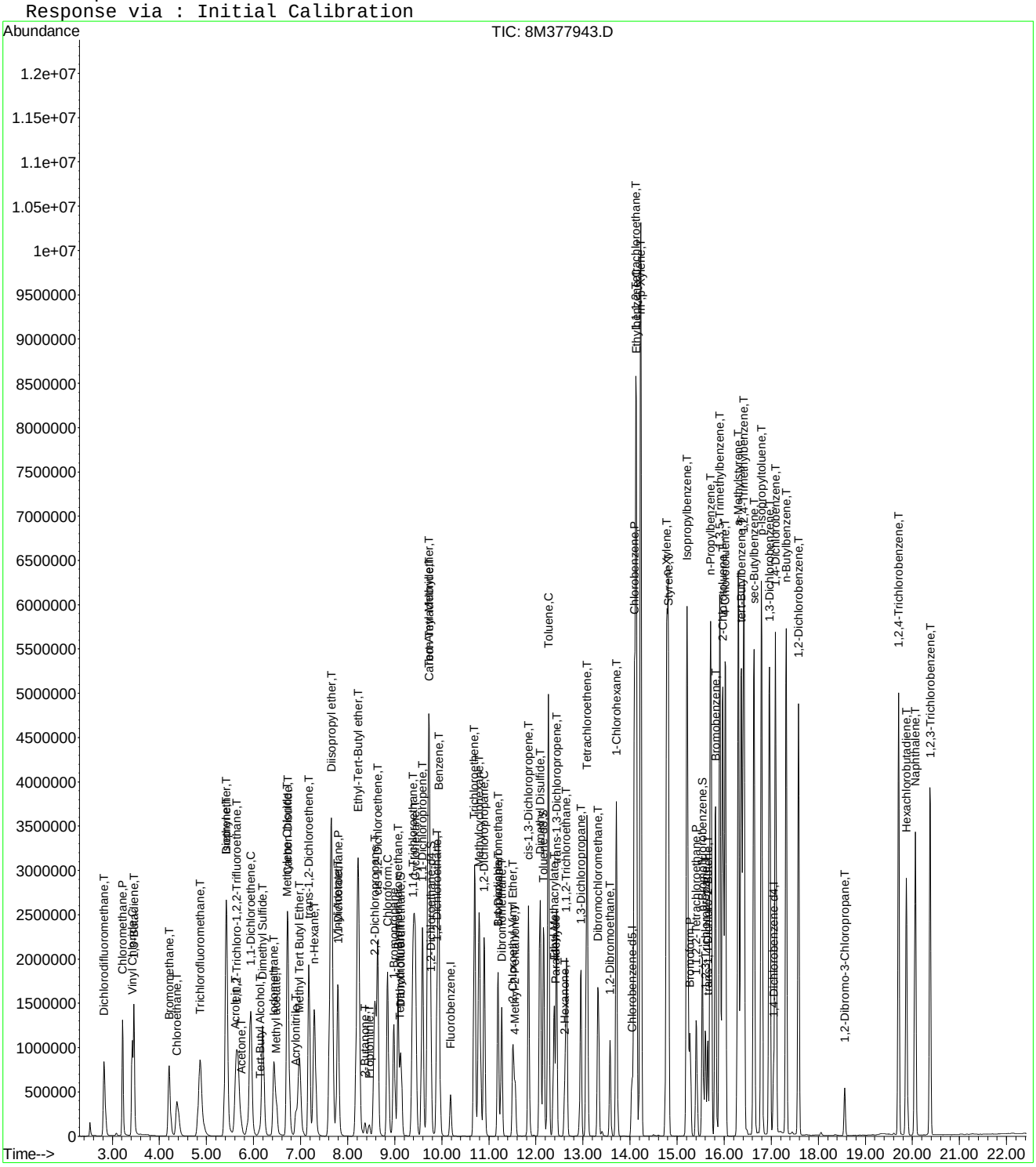
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
45)	1,2-Dichloroethane	9.90	62	1325593	205.2765 ug/L	99
46)	Benzene	9.94	78	4385066	181.8946 ug/L	98
47)	Trichloroethene	10.69	130	1571261	197.1538 ug/L	99
48)	Methylcyclohexane	10.79	83	1777684	192.9922 ug/L	99
49)	1,2-Dichloropropane	10.90	63	1191907	203.2039 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

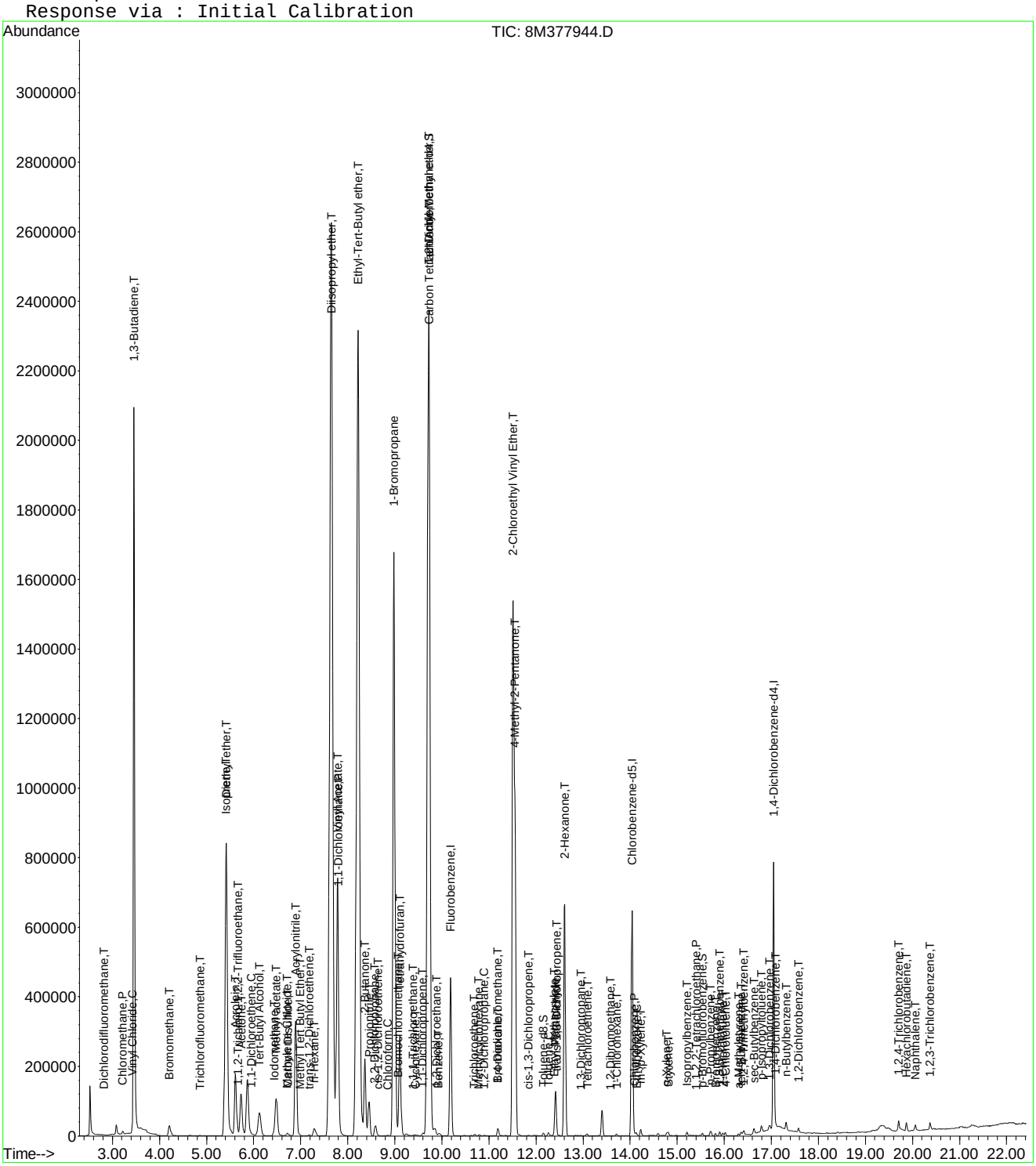
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
47)	Trichloroethene	10.69	130	2671	0.3399	ug/L		90
48)	Methylcyclohexane	10.78	83	3230	0.3557	ug/L		93
49)	1,2-Dichloropropane	10.90	63	1267	0.2191	ug/L	#	34
50)	Bromodichloromethane	11.19	83	1304	0.1748	ug/L	#	15
51)	1,4-Dioxane	11.19	88	21271	641.6257	ug/L		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

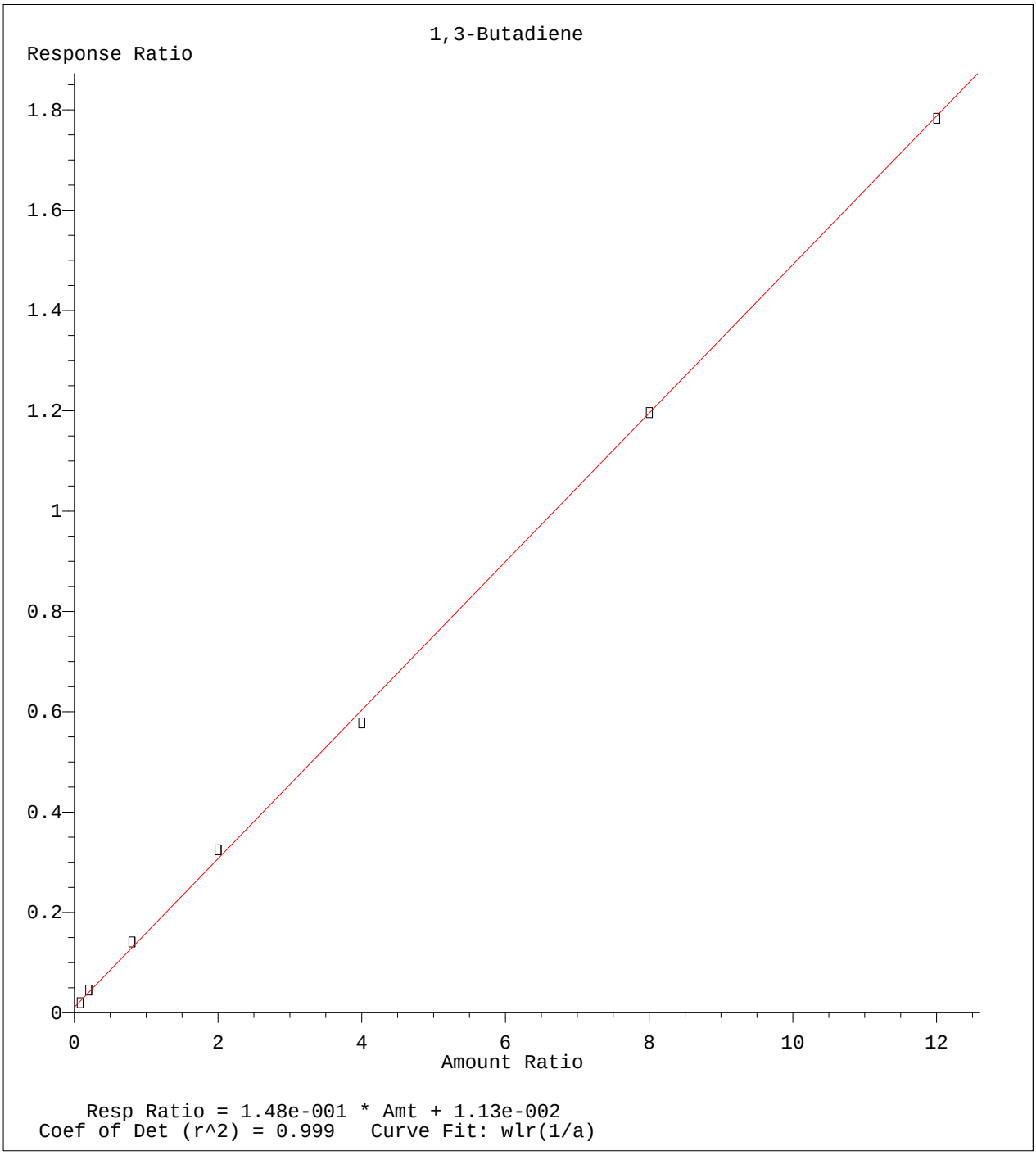
(#) = qualifier out of range (m) = manual integration
8M377944.D 8260WT.M Wed Mar 28 08:27:02 2012 Page 2

Quantitation Report (Not Reviewed)

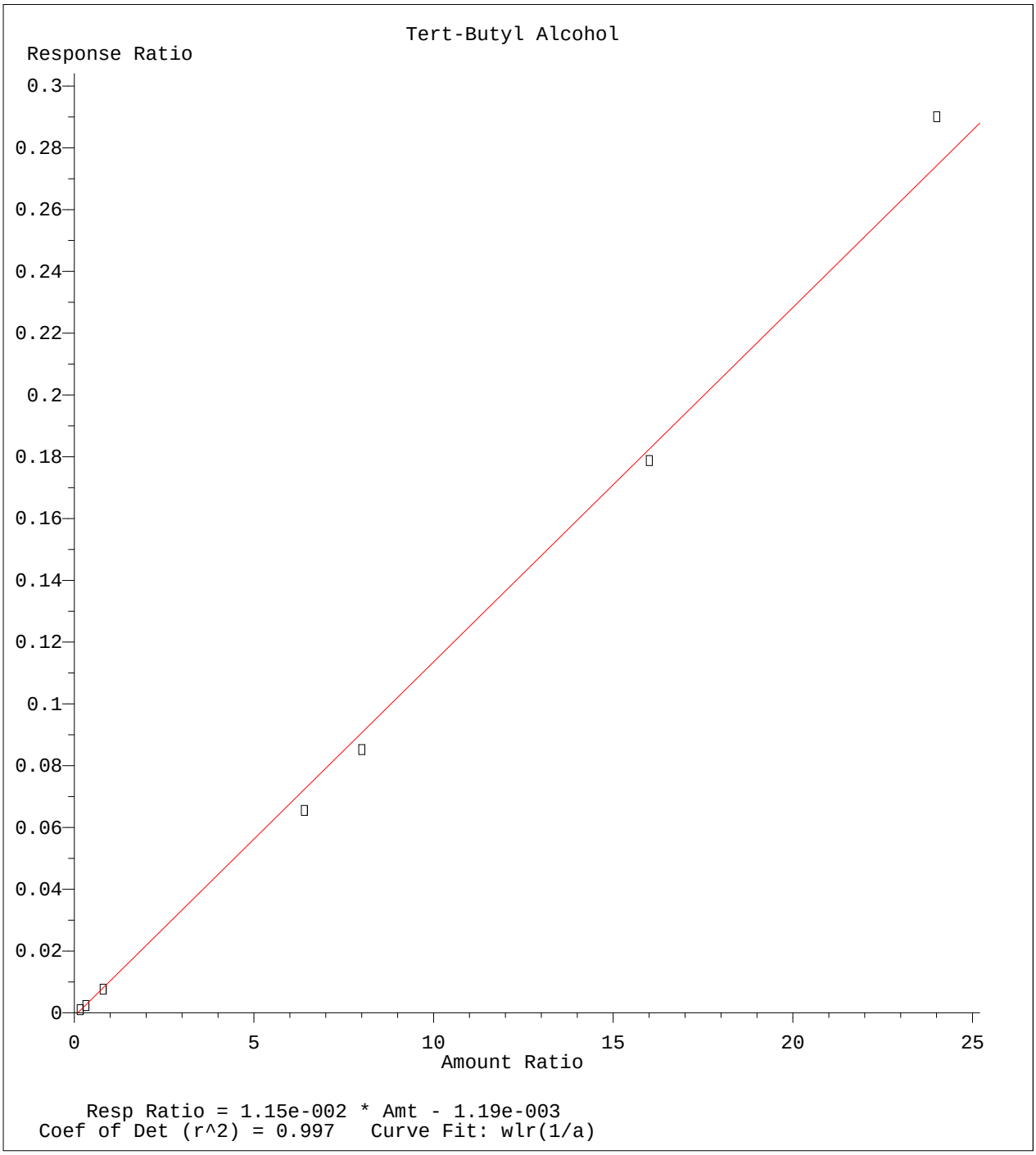
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Acq On : 27 Mar 2012 15:49 Operator: adc
Sample : WG393321-11 300.0 ug/L STD 8260 Inst : HPMS8
Misc : 1,1 STD50782 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 28 8:27 2012 Quant Results File: 8260WT.RES

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

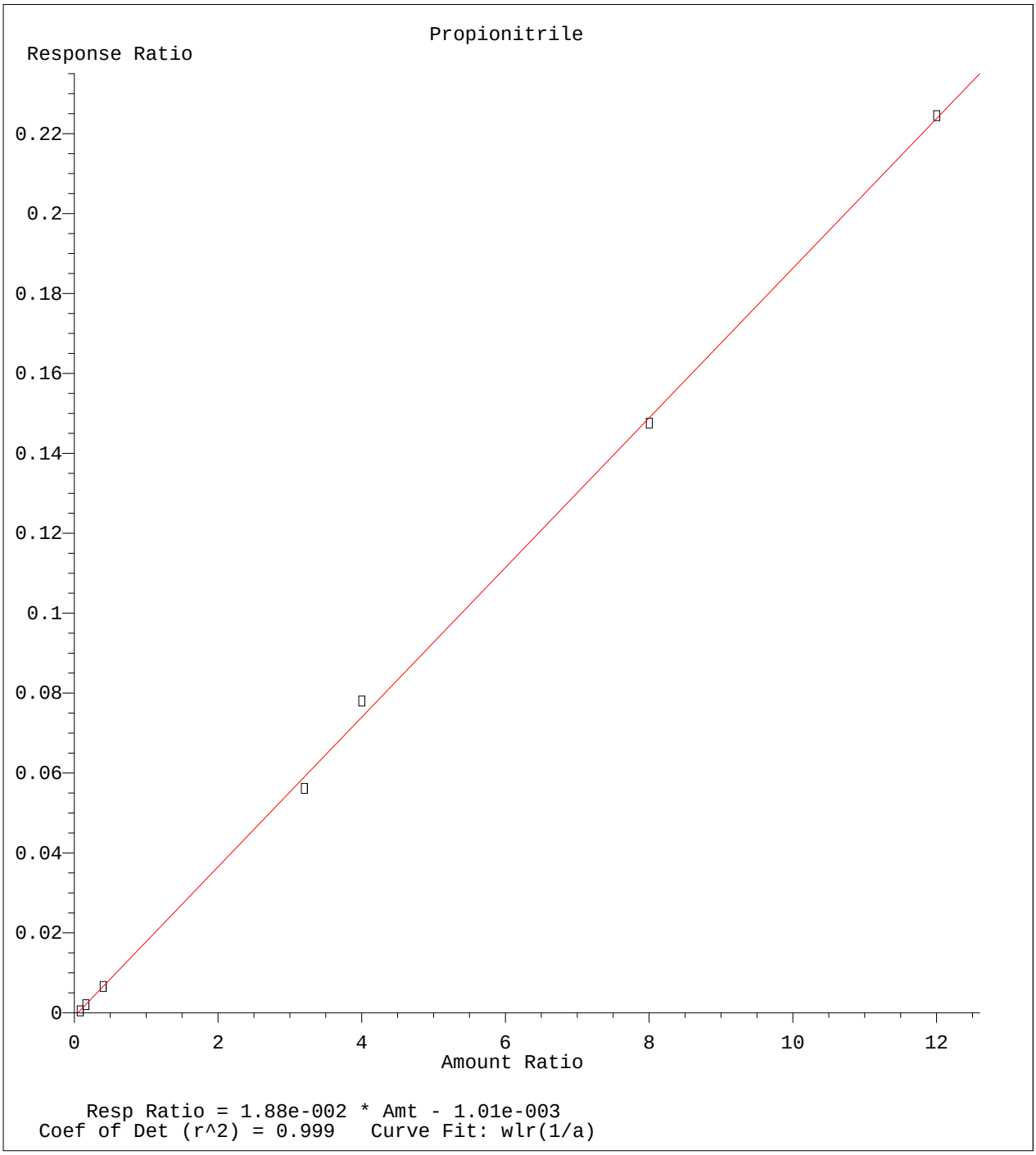




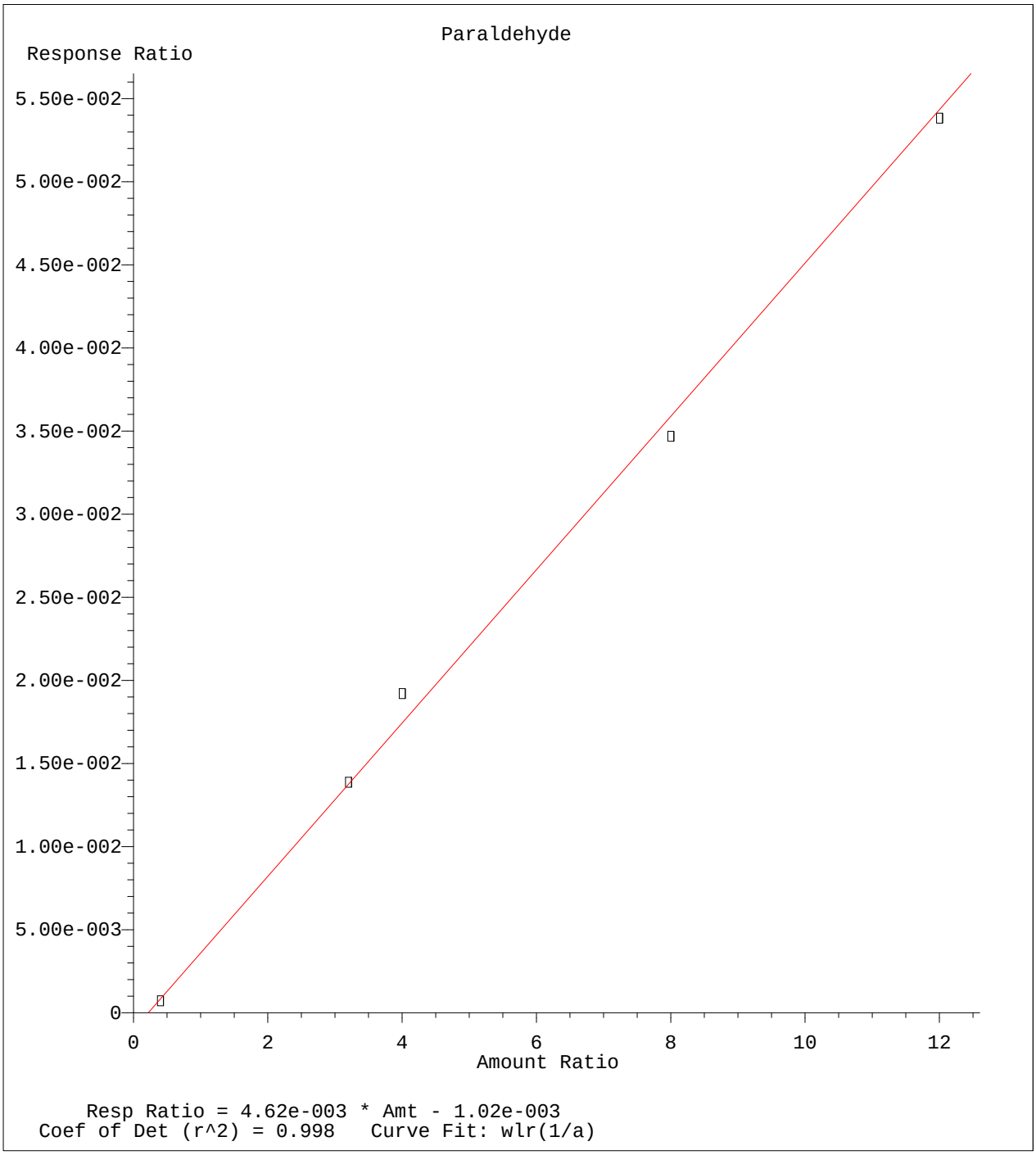
Method Name: C:\MSDCHEM\2\METHODS\8260WT.M
Calibration Table Last Updated: Wed Mar 28 08:18:24 2012



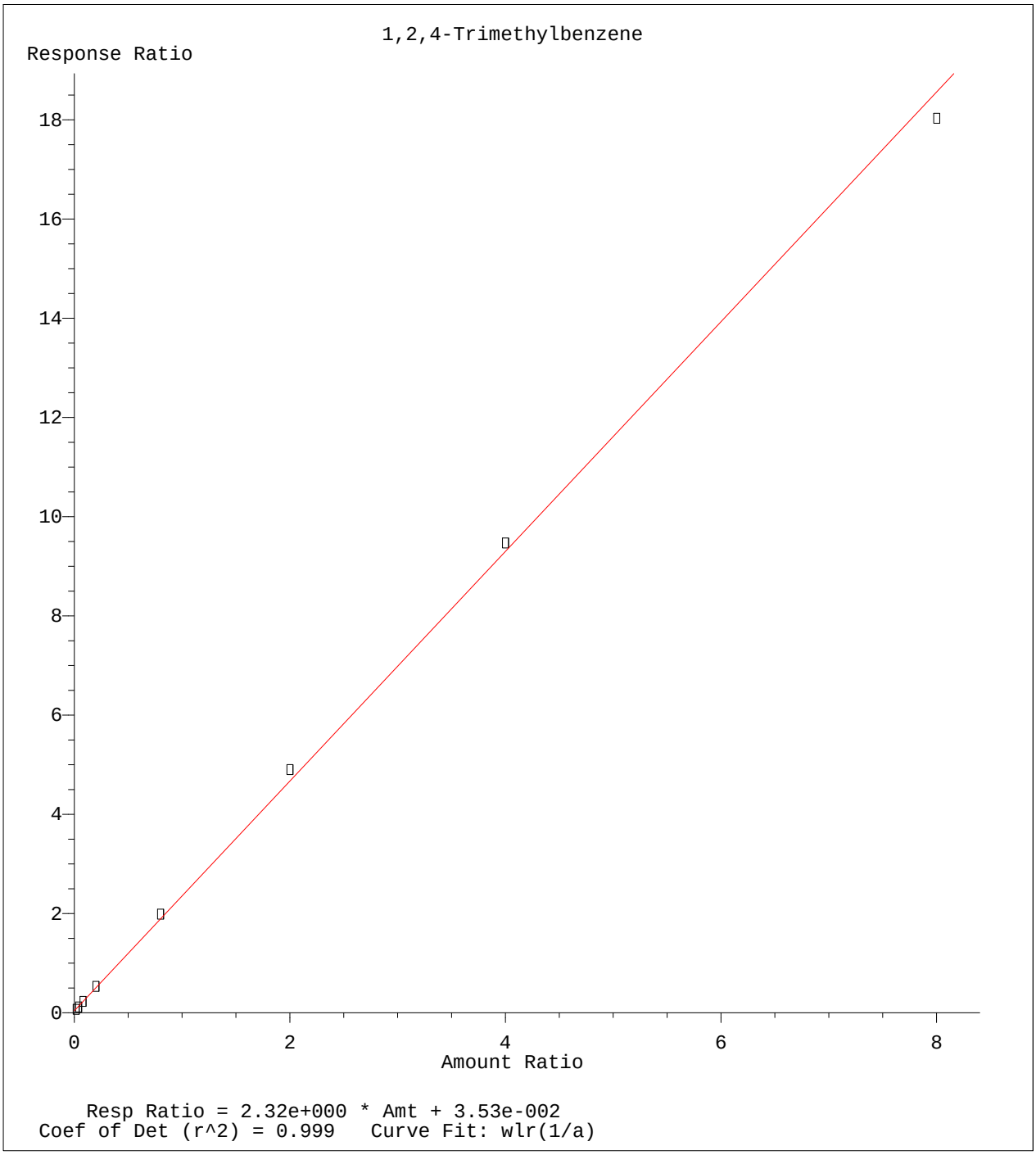
Method Name: C:\MSDCHEM\2\METHODS\8260WT.M
Calibration Table Last Updated: Wed Mar 28 08:18:24 2012



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

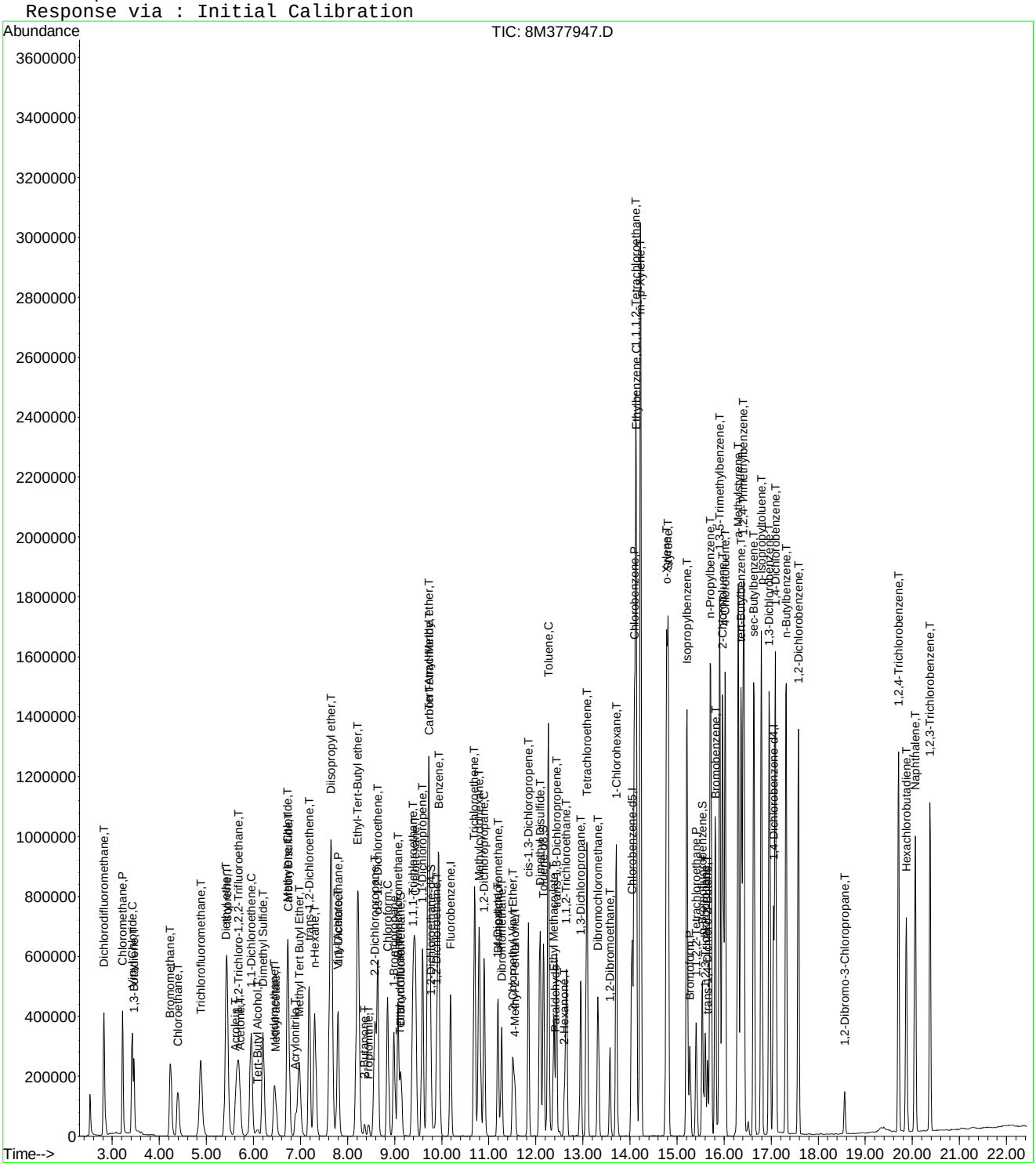
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
45)	1,2-Dichloroethane	9.89	62	336687	51.1441	ug/L	99
46)	Benzene	9.94	78	1223523	49.7848	ug/L	100
47)	Trichloroethene	10.69	130	424349	52.2301	ug/L	100
48)	Methylcyclohexane	10.80	83	486163	51.7735	ug/L	98
49)	1,2-Dichloropropane	10.90	63	314619	52.6157	ug/L	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

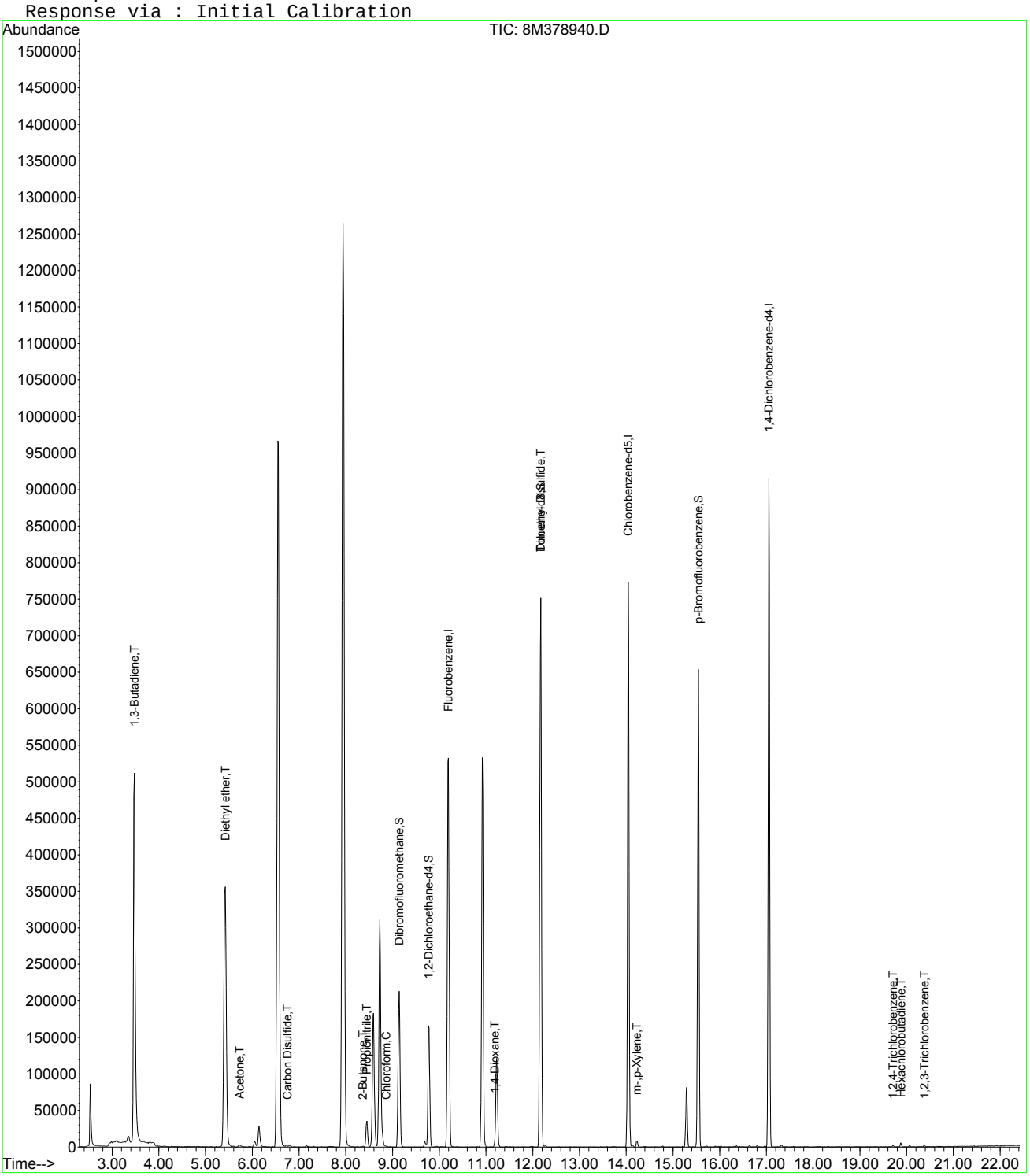
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.20	96	711474	25.00	ug/L	0.01
57) Chlorobenzene-d5	14.04	117	619124	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.05	152	346782	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.14	111	189105	25.6193	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

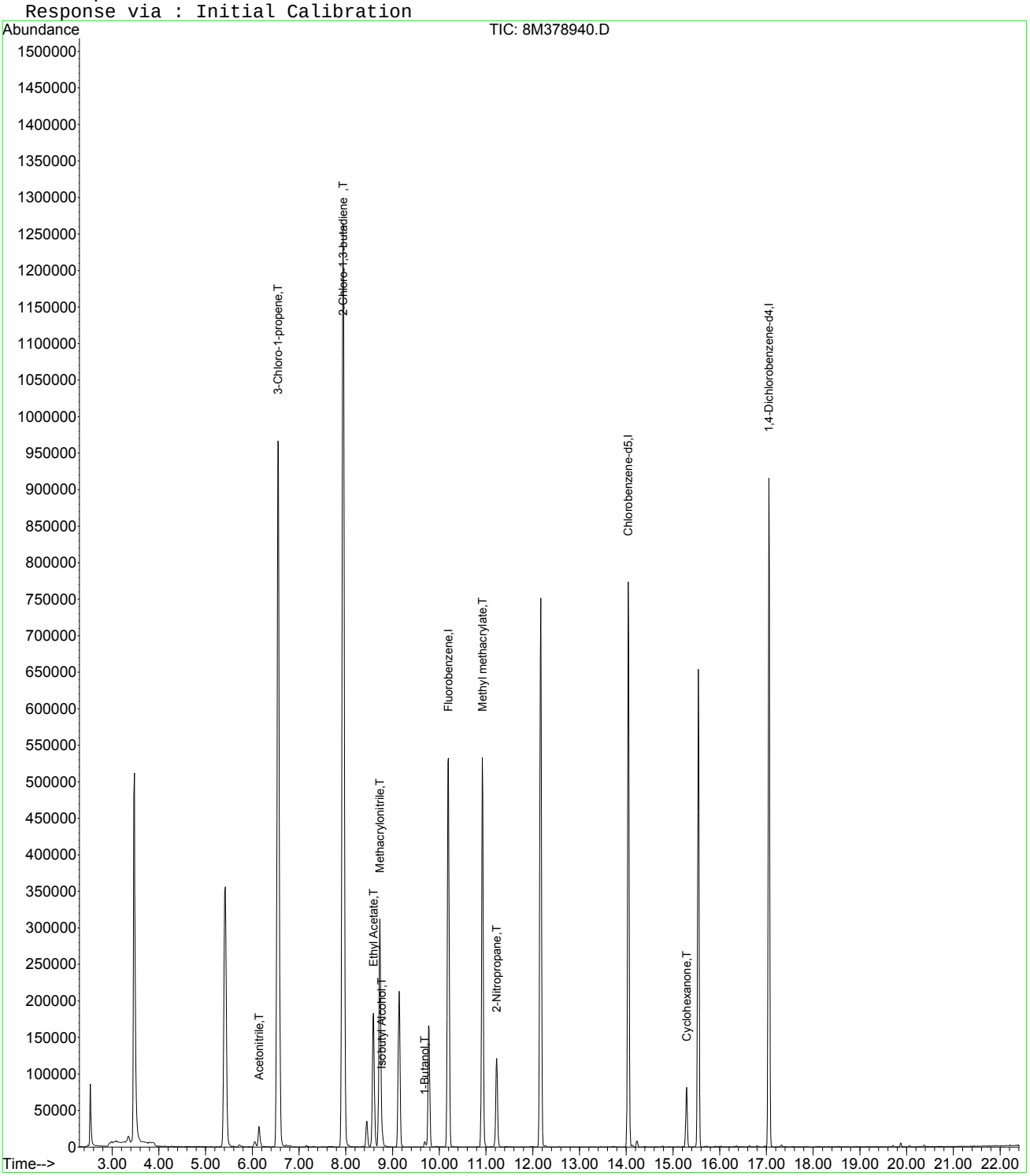
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	10.20	96	711474	25.00	ug/L		-0.04
11) Chlorobenzene-d5	14.04	117	619124	25.00	ug/L		-0.05
12) 1,4-Dichlorobenzene-d4	17.05	152	346782	25.00	ug/L		-0.05
Target Compounds							Qvalue
2) Acetonitrile	6.14	41	42043	79.6553	ug/L		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



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

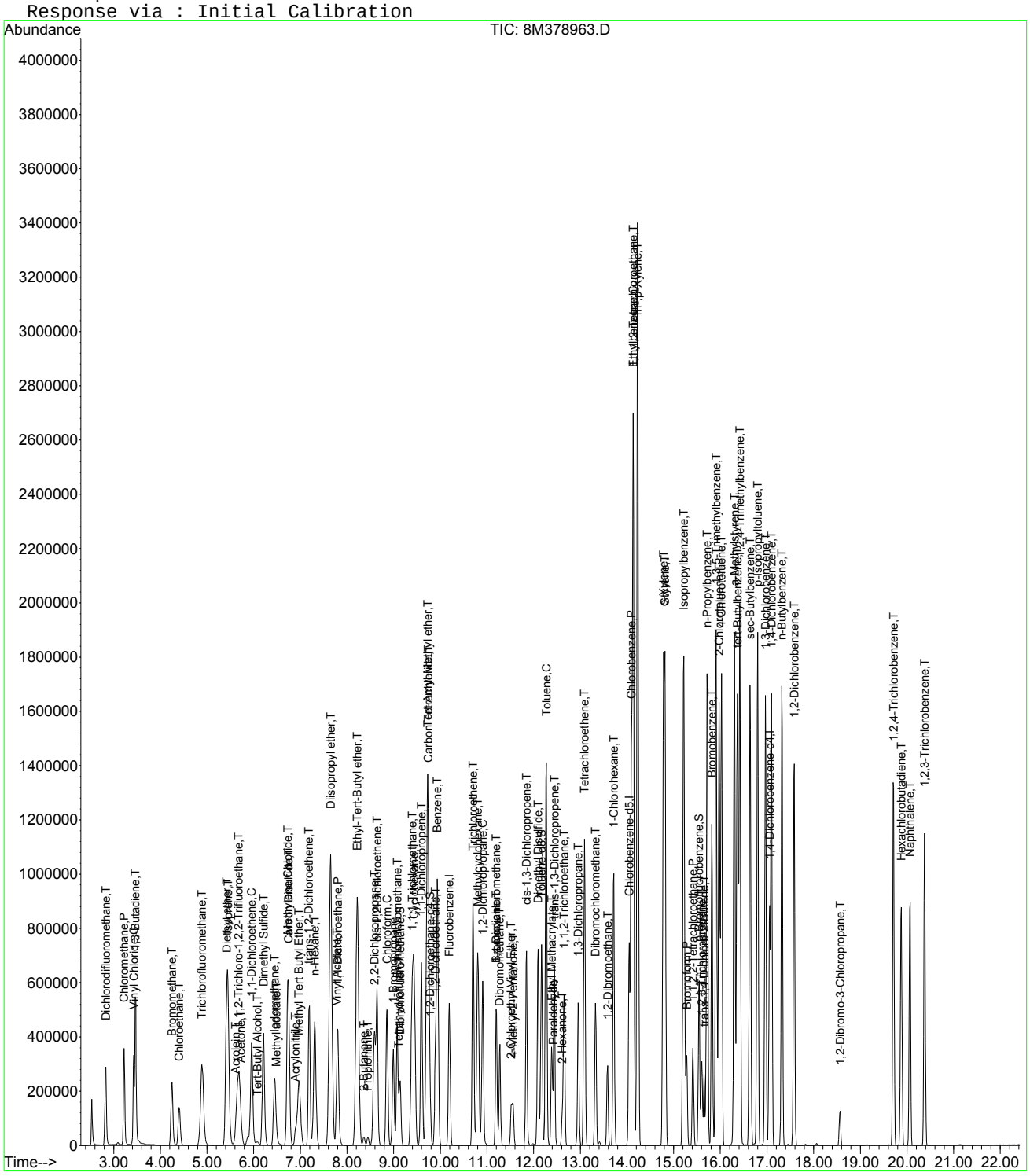
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
46)	Benzene	9.93	78	1189033	45.0102	ug/L	97
47)	Trichloroethene	10.70	130	442000	50.6119	ug/L	99
48)	Methylcyclohexane	10.80	83	457794	45.3554	ug/L	96
49)	1,2-Dichloropropane	10.91	63	289344	45.0171	ug/L	87
50)	Bromodichloromethane	11.20	83	428166	51.6420	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
8M378963.D 8260WT.M Thu May 10 20:16:39 2012 Page 2

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

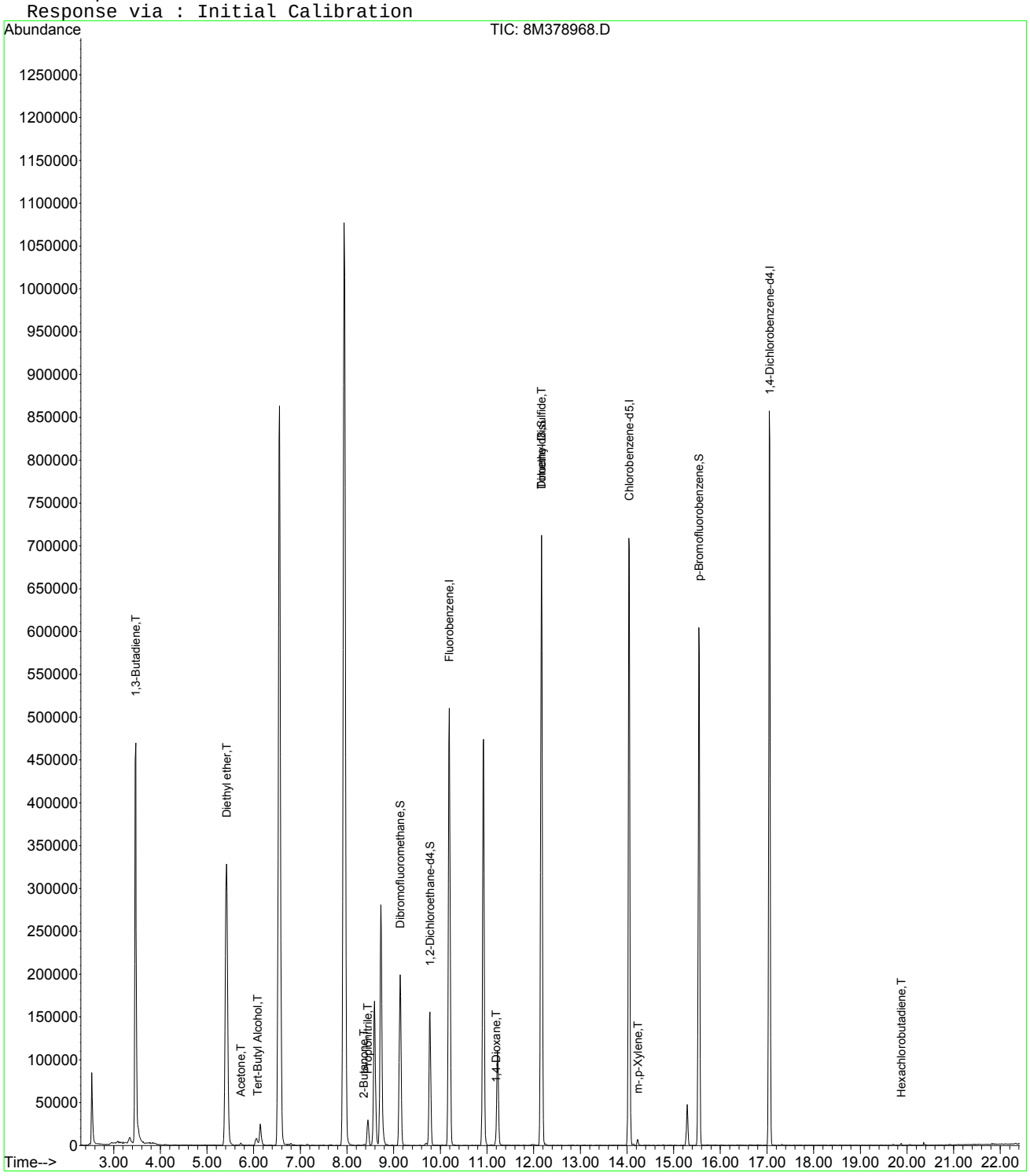
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	10.19	96	663643	25.00 ug/L	0.01
57) Chlorobenzene-d5	14.05	117	588284	25.00 ug/L	0.01
78) 1,4-Dichlorobenzene-d4	17.06	152	328764	25.00 ug/L	0.01
System Monitoring Compounds					
37) Dibromofluoromethane	9.14	111	173971	25.2677 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

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 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

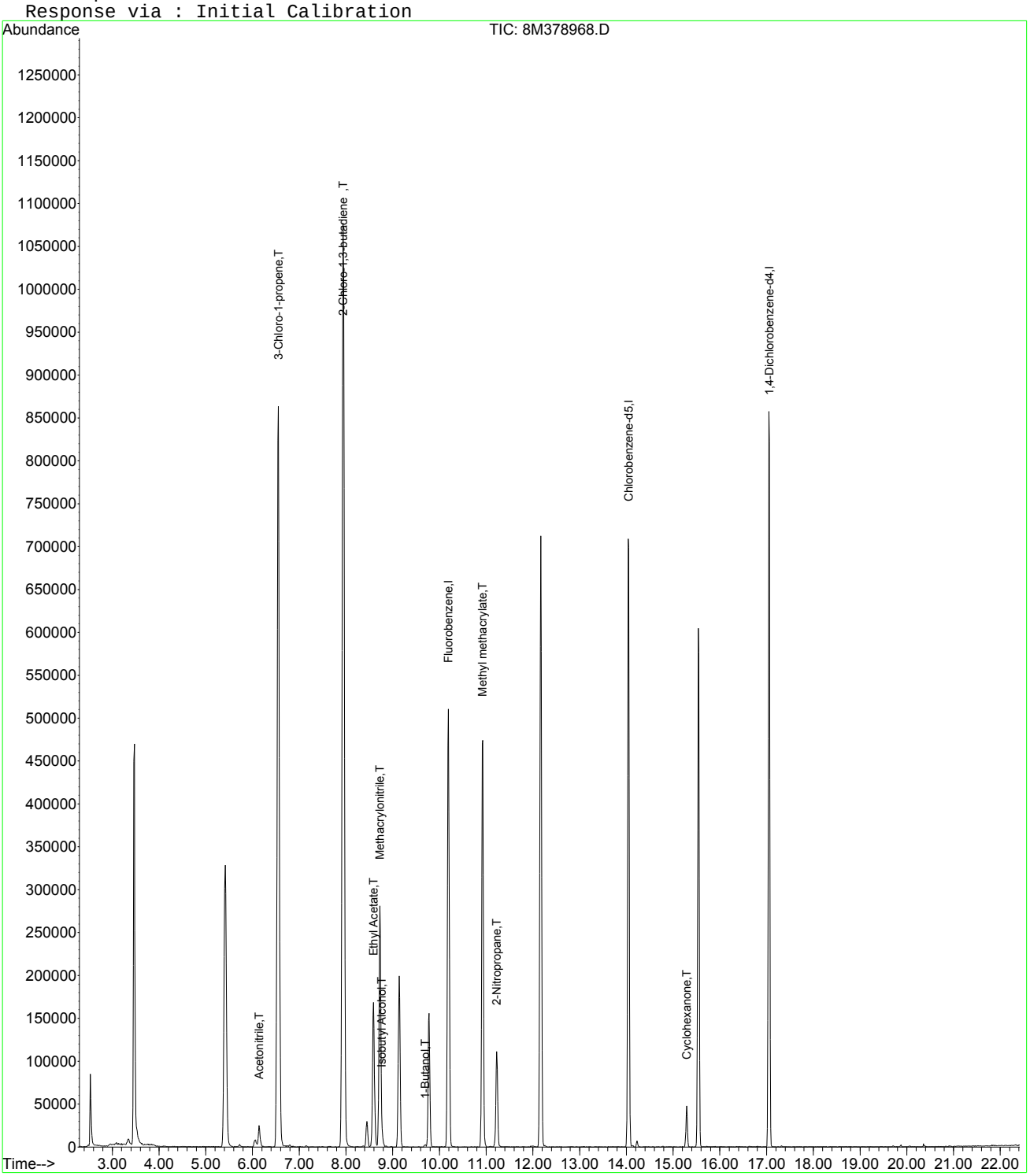
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	10.19	96	663643	25.00	ug/L		-0.04
11) Chlorobenzene-d5	14.05	117	588284	25.00	ug/L		-0.04
12) 1,4-Dichlorobenzene-d4	17.06	152	328764	25.00	ug/L		-0.04
Target Compounds							Qvalue
2) Acetonitrile	6.14	41	35008	71.1071	ug/L		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



8M378968.D A9FOOWT.M Tue May 15 15:22:16 2012 Page 2

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

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\051212\8M379015.D Vial: 2
Acq On : 12 May 2012 7:40 Operator: ADC
Sample : WG397812-02 50ug/L CCV 8260 Inst : HPMS8
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 12 08:02:28 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	708839	25.00	ug/L	0.01
57) Chlorobenzene-d5	14.04	117	616336	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.05	152	343820	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.14	111	189269	25.7369	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 102.96%			
43) 1,2-Dichloroethane-d4	9.77	65	157562	27.8234	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 111.28%			
58) Toluene-d8	12.17	98	709983	24.9491	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 99.80%			
80) p-Bromofluorobenzene	15.54	95	274685	24.6968	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 98.80%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.82	85	437940	56.8021	ug/L	99
3) Chloromethane	3.23	50	454769	51.1781	ug/L	100
4) Vinyl Chloride	3.42	62	409687	55.3184	ug/L	99
5) 1,3-Butadiene	3.46	54	182640	41.5943	ug/L	98
6) Bromomethane	4.24	94	238533	41.5892	ug/L	98
7) Chloroethane	4.39	64	239830	50.2683	ug/L	98
8) Trichlorofluoromethane	4.88	101	682420	62.4041	ug/L	99
9) Diethyl ether	5.42	59	376591	94.6033	ug/L	98
10) Isoprene	5.44	67	449895	52.2788	ug/L	92
11) Acrolein	5.61	56	25145	55.9255	ug/L	96
12) 1,1,2-Trichloro-1,2,2-Trif	5.68	101	347805	52.9569	ug/L	98
13) Acetone	5.73	43	55403	52.9720	ug/L	98
14) 1,1-Dichloroethene	5.95	61	531921	55.9700	ug/L	94
15) Tert-Butyl Alcohol	6.10	59	59310	184.9174	ug/L	97
16) Dimethyl Sulfide	6.20	62	356909	53.3466	ug/L	92
17) Iodomethane	6.44	142	401977	36.2335	ug/L	94
18) Methyl acetate	6.48	43	185047	56.2202	ug/L	100
19) Methylene Chloride	6.72	84	340169	48.1001	ug/L	94
20) Carbon Disulfide	6.75	76	946737	51.8462	ug/L	100
21) Acrylonitrile	6.90	53	67520	47.6894	ug/L	98
22) Methyl Tert Butyl Ether	6.98	73	621612	51.3687	ug/L	99
23) trans-1,2-Dichloroethene	7.19	61	498744	55.5721	ug/L	96
24) n-Hexane	7.30	57	450512	55.0121	ug/L	96
25) Diisopropyl ether	7.65	45	2271549	104.9249	ug/L	97
26) Vinyl Acetate	7.78	43	162614	23.3847	ug/L	98
27) 1,1-Dichloroethane	7.81	63	593276	51.7096	ug/L	100
28) Ethyl-Tert-Butyl ether	8.22	59	1849225	104.2267	ug/L	98
29) 2-Butanone	8.36	43	77358	49.7056	ug/L	97
30) Propionitrile	8.45	54	50866	96.9642	ug/L	98
31) 2,2-Dichloropropane	8.58	77	578897	58.6439	ug/L	100
32) cis-1,2-Dichloroethene	8.64	96	386479	52.0153	ug/L	93
33) Chloroform	8.85	83	635647	53.7565	ug/L	100
34) 1-Bromopropane	8.99	122	85991	57.1918	ug/L	98
35) Bromochloromethane	9.08	130	250391	52.3245	ug/L	99
36) Tetrahydrofuran	9.11	42	105990	100.4905	ug/L	97
38) 1,1,1-Trichloroethane	9.40	97	657001	61.1478	ug/L	99
39) Cyclohexane	9.44	56	541749	51.0337	ug/L	99
40) 1,1-Dichloropropene	9.59	75	514454	55.5878	ug/L	98
41) Tert-Amyl-Methyl ether	9.72	73	1414625	97.4309	ug/L	96
42) Carbon Tetrachloride	9.73	117	621817	61.8590	ug/L	99
45) 1,2-Dichloroethane	9.89	62	421381	57.9148	ug/L	98

(#) = qualifier out of range (m) = manual integration
8M379015.D 8260WT.M Sat May 12 08:02:28 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\051212\8M379015.D Vial: 2
Acq On : 12 May 2012 7:40 Operator: ADC
Sample : WG397812-02 50ug/L CCV 8260 Inst : HPMS8
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 12 08:02:28 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

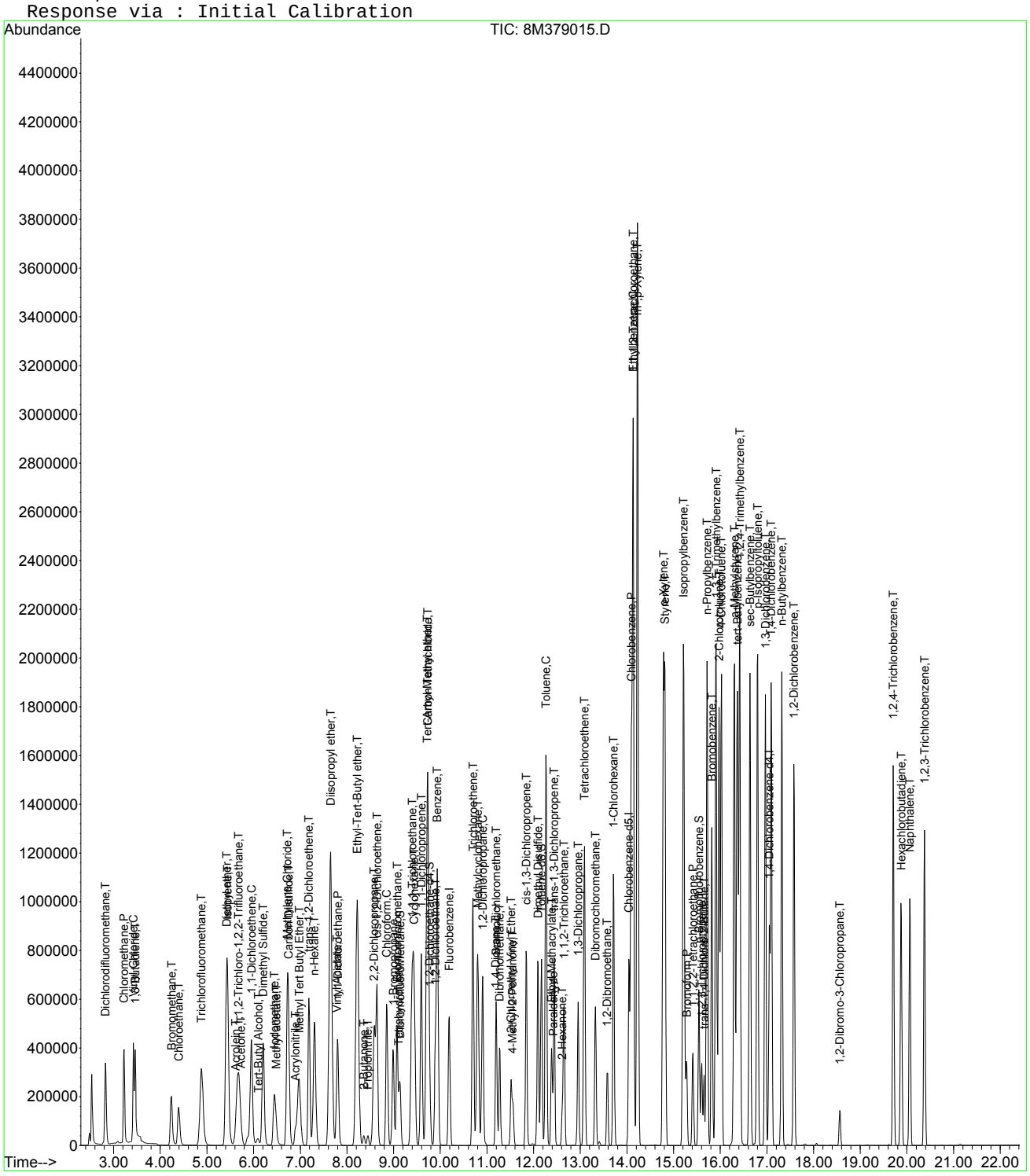
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
46)	Benzene	9.94	78	1365236	50.2617	ug/L	97
47)	Trichloroethene	10.70	130	502975	56.0130	ug/L	99
48)	Methylcyclohexane	10.80	83	510425	49.1816	ug/L	97
49)	1,2-Dichloropropane	10.91	63	334649	50.6367	ug/L	90
50)	Bromodichloromethane	11.20	83	479513	56.2475	ug/L	99
51)	1,4-Dioxane	11.19	88	8483	223.9105	ug/L	98
52)	Dibromomethane	11.27	93	179206	52.3783	ug/L	98
53)	2-Chloroethyl Vinyl Ether	11.52	63	129832	42.8132	ug/L	98
54)	4-Methyl-2-Pentanone	11.55	58	64225	46.8082	ug/L	97
55)	cis-1,3-Dichloropropene	11.84	75	553416	55.1558	ug/L	99
56)	Dimethyl Disulfide	12.10	94	607187	54.6487	ug/L	98
59)	Toluene	12.26	91	1609188	47.3423	ug/L	100
60)	Ethyl Methacrylate	12.39	69	244532	41.2411	ug/L	92
61)	Paraldehyde	12.42	89	9212	86.4710	ug/L	93
62)	trans-1,3-Dichloropropene	12.44	75	478796	50.7712	ug/L	100
63)	1,1,2-Trichloroethane	12.65	97	252023	47.9629	ug/L	99
64)	2-Hexanone	12.61	58	58797	44.6167	ug/L	91
65)	1,3-Dichloropropane	12.95	76	399421	46.4270	ug/L	92
66)	Tetrachloroethene	13.09	164	407905	53.2432	ug/L	97
67)	Dibromochloromethane	13.33	129	424564	54.9739	ug/L	99
68)	1,2-Dibromoethane	13.57	107	271529	47.9686	ug/L	100
69)	1-Chlorohexane	13.71	91	498972	43.9506	ug/L	95
70)	Chlorobenzene	14.09	112	1187495	50.0011	ug/L	98
71)	1,1,1,2-Tetrachloroethane	14.13	131	470594	54.4449	ug/L	99
72)	Ethylbenzene	14.13	106	647321	51.3116	ug/L	99
73)	m-,p-Xylene	14.23	106	1580611	102.6255	ug/L	97
74)	o-Xylene	14.78	106	782605	50.5829	ug/L	95
75)	Styrene	14.82	104	1291048	46.6119	ug/L	96
76)	Bromoform	15.28	173	237635	53.6355	ug/L	99
77)	Isopropylbenzene	15.21	105	2027750	52.1413	ug/L	100
79)	1,1,2,2-Tetrachloroethane	15.42	83	245271	44.3900	ug/L	100
81)	1,2,3-Trichloropropane	15.60	110	82057	44.8926	ug/L	93
82)	trans-1,4-Dichloro-2-Buten	15.65	53	73002	45.6404	ug/L	91
83)	n-Propylbenzene	15.72	91	2193322	49.2568	ug/L	100
84)	Bromobenzene	15.82	156	562271	50.7947	ug/L	96
85)	1,3,5-Trimethylbenzene	15.91	105	1698488	51.1477	ug/L	100
86)	2-Chlorotoluene	15.97	91	1371160	48.4083	ug/L	99
87)	4-Chlorotoluene	16.03	91	1396603	52.1594	ug/L	100
88)	a-Methylstyrene	16.30	118	942552	47.7352	ug/L	97
89)	tert-Butylbenzene	16.37	134	380057	51.7642	ug/L	90
90)	1,2,4-Trimethylbenzene	16.42	105	1728239	53.8779	ug/L	100
91)	sec-Butylbenzene	16.64	105	2017497	49.6852	ug/L	99
92)	p-Isopropyltoluene	16.80	119	1841021	50.2350	ug/L	99
93)	1,3-Dichlorobenzene	16.97	146	1097035	50.2156	ug/L	100
94)	1,4-Dichlorobenzene	17.09	146	1105092	50.4042	ug/L	100
95)	n-Butylbenzene	17.32	91	1455035	50.7879	ug/L	100
96)	1,2-Dichlorobenzene	17.58	146	957595	49.1731	ug/L	99
97)	1,2-Dibromo-3-Chloropropan	18.56	75	46319	48.7013	ug/L	92
98)	1,2,4-Trichlorobenzene	19.71	182	631867	48.1833	ug/L	99
99)	Hexachlorobutadiene	19.88	225	297544	63.8580	ug/L	99
100)	Naphthalene	20.06	128	1138981	44.3823	ug/L	100
101)	1,2,3-Trichlorobenzene	20.38	180	547347	48.7015	ug/L	99

(#) = qualifier out of range (m) = manual integration
8M379015.D 8260WT.M Sat May 12 08:02:29 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\051212\8M379015.D Vial: 2
Acq On : 12 May 2012 7:40 Operator: ADC
Sample : WG397812-02 50ug/L CCV 8260 Inst : HPMS8
Misc : 1,1 STD51468 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 12 8:02 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\051212\8M379015.D Vial: 2
Acq On : 12 May 2012 7:40 Operator: ADC
Sample : WG397812-02 50ug/L CCV 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	110	0.01
2	T	Dichlorodifluoromethane	0.2719	0.3089	-13.6	122	0.00
3	P	Chloromethane	0.3134	0.3208	-2.4	121	0.01
4	C	Vinyl Chloride	0.2612	0.2890	-10.6	132	0.00
5	T	1,3-Butadiene	0.1800	0.1288	28.4#	87	0.00
6	T	Bromomethane	0.2023	0.1683	16.8	92	0.00
7	T	Chloroethane	0.1683	0.1692	-0.5	110	0.00
8	T	Trichlorofluoromethane	0.3857	0.4814	-24.8	142	0.00
9	T	Diethyl ether	0.1404	0.1328	5.4	105	0.00
10	T	Isoprene	0.3035	0.3174	-4.6	115	0.00
11	T	Acrolein	0.0159	0.0089	44.1#	60	0.00
12	T	1,1,2-Trichloro-1,2,2-Trifl	0.2316	0.2453	-5.9	122	0.01
13	T	Acetone	0.0369	0.0391	-5.9	107	0.01
14	C	1,1-Dichloroethene	0.3352	0.3752	-11.9	125	0.01
15	T	Tert-Butyl Alcohol	0.0096	0.0105	-8.8	108	0.01
16	T	Dimethyl Sulfide	0.2360	0.2518	-6.7	116	0.00
17	T	Iodomethane	0.3913	0.2836	27.5#	72	0.00
18	T	Methyl acetate	0.1161	0.1305	-12.4	123	0.00
19	T	Methylene Chloride	0.2494	0.2400	3.8	106	0.00
20	T	Carbon Disulfide	0.6440	0.6678	-3.7	105	0.00
21	T	Acrylonitrile	0.0499	0.0476	4.6	97	0.00
22	T	Methyl Tert Butyl Ether	0.4268	0.4385	-2.7	113	0.01
23	T	trans-1,2-Dichloroethene	0.3165	0.3518	-11.1	120	0.00
24	T	n-Hexane	0.2888	0.3178	-10.0	119	0.00
25	T	Diisopropyl ether	0.7635	0.8012	-4.9	115	0.00
26	T	Vinyl Acetate	0.2453	0.1147	53.2#	50#	0.00
27	P	1,1-Dichloroethane	0.4047	0.4185	-3.4	115	0.01
28	T	Ethyl-Tert-Butyl ether	0.6258	0.6522	-4.2	112	0.00
29	T	2-Butanone	0.0549	0.0546	0.6	104	0.00
30	T	Propionitrile	0.0156	0.0179	-15.1	101	0.00
31	T	2,2-Dichloropropane	0.3482	0.4083	-17.3	131	0.00
32	T	cis-1,2-Dichloroethene	0.2621	0.2726	-4.0	113	0.00
33	C	Chloroform	0.4170	0.4484	-7.5	121	0.00
34		1-Bromopropane	0.0530	0.0607	-14.4	119	0.01
35	T	Bromochloromethane	0.1688	0.1766	-4.7	112	0.01
36	T	Tetrahydrofuran	0.0372	0.0374	-0.5	105	0.00
37	S	Dibromofluoromethane	0.2594	0.2670	-2.9	115	0.00
38	T	1,1,1-Trichloroethane	0.3790	0.4634	-22.3	135	0.01
39	T	Cyclohexane	0.3744	0.3821	-2.1	112	0.01
40	T	1,1-Dichloropropene	0.3264	0.3629	-11.2	121	0.00
41	T	Tert-Amyl-Methyl ether	0.5121	0.4989	2.6	105	0.00
42	T	Carbon Tetrachloride	0.3545	0.4386	-23.7	137	0.00
43	S	1,2-Dichloroethane-d4	0.1997	0.2223	-11.3	122	0.00
44		Heptane	0.0000	0.0000	0.0	0#	-2.46#
45	T	1,2-Dichloroethane	0.2566	0.2972	-15.8	127	0.00
46	T	Benzene	0.9580	0.9630	-0.5	114	0.00
47	T	Trichloroethene	0.3167	0.3548	-12.0	122	0.00
48	T	Methylcyclohexane	0.3660	0.3600	1.6	109	0.00
49	C	1,2-Dichloropropane	0.2331	0.2361	-1.3	108	0.00
50	T	Bromodichloromethane	0.3007	0.3382	-12.5	122	0.00
51	T	1,4-Dioxane	0.0013	0.0015	-11.9	125	0.00
52	T	Dibromomethane	0.1207	0.1264	-4.8	107	0.00
53	T	2-Chloroethyl Vinyl Ether	0.1070	0.0916	14.4	87	0.00
54	T	4-Methyl-2-Pentanone	0.0484	0.0453	6.4	95	0.00
55	T	cis-1,3-Dichloropropene	0.3539	0.3904	-10.3	116	0.00

(#) = Out of Range
8M379015.D 8260WT.M Sat May 12 08:45:50 2012 Page 1

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\051212\8M379015.D Vial: 2
Acq On : 12 May 2012 7:40 Operator: ADC
Sample : WG397812-02 50ug/L CCV 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	0.4283	-9.3	108	0.01
57	I	Chlorobenzene-d5	1.0000	1.0000	0.0	113	0.00
58	S	Toluene-d8	1.1543	1.1519	0.2	110	0.00
59	C	Toluene	1.3787	1.3055	5.3	114	0.00
60	T	Ethyl Methacrylate	0.2405	0.1984	17.5	89	0.00
61		Paraldehyde	0.0040	0.0037	5.3	88	0.01
62	T	trans-1,3-Dichloropropene	0.3825	0.3884	-1.5	112	0.00
63	T	1,1,2-Trichloroethane	0.2131	0.2044	4.1	104	0.01
64	T	2-Hexanone	0.0534	0.0477	10.8	96	0.01
65	T	1,3-Dichloropropane	0.3490	0.3240	7.1	104	0.00
66	T	Tetrachloroethene	0.3108	0.3309	-6.5	121	0.00
67	T	Dibromochloromethane	0.3133	0.3444	-10.0	116	0.00
68	T	1,2-Dibromoethane	0.2296	0.2203	4.1	105	0.00
69	T	1-Chlorohexane	0.4605	0.4048	12.1	104	0.00
70	P	Chlorobenzene	0.9633	0.9634	-0.0	115	0.00
71	T	1,1,1,2-Tetrachloroethane	0.3506	0.3818	-8.9	121	0.01
72	C	Ethylbenzene	0.5117	0.5251	-2.6	117	0.00
73	T	m-,p-Xylene	0.6247	0.6411	-2.6	117	0.00
74	T	o-Xylene	0.6276	0.6349	-1.2	113	0.01
75	T	Styrene	1.1235	1.0474	6.8	112	0.00
76	P	Bromoform	0.1797	0.1928	-7.3	114	0.01
77	T	Isopropylbenzene	1.5775	1.6450	-4.3	119	0.00
78	I	1,4-Dichlorobenzene-d4	1.0000	1.0000	0.0	116	0.00
79	P	1,1,2,2-Tetrachloroethane	0.4018	0.3567	11.2	100	0.01
80	S	p-Bromofluorobenzene	0.8087	0.7989	1.2	112	0.00
81	T	1,2,3-Trichloropropane	0.1329	0.1193	10.2	101	0.00
82	T	trans-1,4-Dichloro-2-Butene	0.1163	0.1062	8.7	96	0.00
83	T	n-Propylbenzene	3.2378	3.1896	1.5	117	0.00
84	T	Bromobenzene	0.8049	0.8177	-1.6	118	0.00
85	T	1,3,5-Trimethylbenzene	2.4146	2.4700	-2.3	120	0.01
86	T	2-Chlorotoluene	2.0596	1.9940	3.2	118	0.00
87	T	4-Chlorotoluene	1.9469	2.0310	-4.3	124	0.01
88	T	a-Methylstyrene	1.4357	1.3707	4.5	108	0.01
89	T	tert-Butylbenzene	0.5339	0.5527	-3.5	120	0.00
90	T	1,2,4-Trimethylbenzene	2.7881	2.5133	9.9	119	0.00
91	T	sec-Butylbenzene	2.9525	2.9339	0.6	119	0.00
92	T	p-Isopropyltoluene	2.6648	2.6773	-0.5	118	0.01
93	T	1,3-Dichlorobenzene	1.5885	1.5954	-0.4	119	0.00
94	T	1,4-Dichlorobenzene	1.5942	1.6071	-0.8	120	0.00
95	T	n-Butylbenzene	2.0832	2.1160	-1.6	121	0.00
96	T	1,2-Dichlorobenzene	1.4160	1.3926	1.7	115	0.00
97	T	1,2-Dibromo-3-Chloropropane	0.0692	0.0674	2.6	106	0.00
98	T	1,2,4-Trichlorobenzene	0.9535	0.9189	3.6	114	0.00
99	T	Hexachlorobutadiene	0.3388	0.4327	-27.7#	145	0.01
100	T	Naphthalene	1.8660	1.6564	11.2	104	0.00
101	T	1,2,3-Trichlorobenzene	0.8172	0.7960	2.6	115	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
8M379015.D 8260WT.M Sat May 12 08:45:50 2012 Page 2

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\051212\8M379015.D Vial: 2
Acq On : 12 May 2012 7:40 Operator: ADC
Sample : WG397812-02 50ug/L CCV 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	110	0.01
2	T	Dichlorodifluoromethane	50.0000	56.8021	-13.6	122	0.00
3	P	Chloromethane	50.0000	51.1781	-2.4	121	0.01
4	C	Vinyl Chloride	50.0000	55.3184	-10.6	132	0.00
5	T	1,3-Butadiene	50.0000	41.5943	16.8	87	0.00
6	T	Bromomethane	50.0000	41.5892	16.8	92	0.00
7	T	Chloroethane	50.0000	50.2683	-0.5	110	0.00
8	T	Trichlorofluoromethane	50.0000	62.4041	-24.8	142	0.00
9	T	Diethyl ether	100.0000	94.6033	5.4	105	0.00
10	T	Isoprene	50.0000	52.2788	-4.6	115	0.00
11	T	Acrolein	100.0000	55.9255	44.1#	60	0.00
12	T	1,1,2-Trichloro-1,2,2-Trifl	50.0000	52.9569	-5.9	122	0.01
13	T	Acetone	50.0000	52.9720	-5.9	107	0.01
14	C	1,1-Dichloroethene	50.0000	55.9700	-11.9	125	0.01
15	T	Tert-Butyl Alcohol	200.0000	184.9174	7.5	108	0.01
16	T	Dimethyl Sulfide	50.0000	53.3466	-6.7	116	0.00
17	T	Iodomethane	50.0000	36.2335	27.5#	72	0.00
18	T	Methyl acetate	50.0000	56.2203	-12.4	123	0.00
19	T	Methylene Chloride	50.0000	48.1001	3.8	106	0.00
20	T	Carbon Disulfide	50.0000	51.8462	-3.7	105	0.00
21	T	Acrylonitrile	50.0000	47.6894	4.6	97	0.00
22	T	Methyl Tert Butyl Ether	50.0000	51.3687	-2.7	113	0.01
23	T	trans-1,2-Dichloroethene	50.0000	55.5721	-11.1	120	0.00
24	T	n-Hexane	50.0000	55.0121	-10.0	119	0.00
25	T	Diisopropyl ether	100.0000	104.9249	-4.9	115	0.00
26	T	Vinyl Acetate	50.0000	23.3847	53.2#	50	0.00
27	P	1,1-Dichloroethane	50.0000	51.7096	-3.4	115	0.01
28	T	Ethyl-Tert-Butyl ether	100.0000	104.2267	-4.2	112	0.00
29	T	2-Butanone	50.0000	49.7056	0.6	104	0.00
30	T	Propionitrile	100.0000	96.9642	3.0	101	0.00
31	T	2,2-Dichloropropane	50.0000	58.6439	-17.3	131	0.00
32	T	cis-1,2-Dichloroethene	50.0000	52.0153	-4.0	113	0.00
33	C	Chloroform	50.0000	53.7565	-7.5	121	0.00
34		1-Bromopropane	50.0000	57.1918	-14.4	119	0.01
35	T	Bromochloromethane	50.0000	52.3245	-4.6	112	0.01
36	T	Tetrahydrofuran	100.0000	100.4905	-0.5	105	0.00
37	S	Dibromofluoromethane	25.0000	25.7369	-2.9	115	0.00
38	T	1,1,1-Trichloroethane	50.0000	61.1478	-22.3	135	0.01
39	T	Cyclohexane	50.0000	51.0337	-2.1	112	0.01
40	T	1,1-Dichloropropene	50.0000	55.5878	-11.2	121	0.00
41	T	Tert-Amyl-Methyl ether	100.0000	97.4309	2.6	105	0.00
42	T	Carbon Tetrachloride	50.0000	61.8590	-23.7	137	0.00
43	S	1,2-Dichloroethane-d4	25.0000	27.8234	-11.3	122	0.00
44		Heptane	50.0000	0.0000	100.0#	0	-2.46#
45	T	1,2-Dichloroethane	50.0000	57.9149	-15.8	127	0.00
46	T	Benzene	50.0000	50.2617	-0.5	114	0.00
47	T	Trichloroethene	50.0000	56.0130	-12.0	122	0.00
48	T	Methylcyclohexane	50.0000	49.1816	1.6	109	0.00
49	C	1,2-Dichloropropane	50.0000	50.6367	-1.3	108	0.00
50	T	Bromodichloromethane	50.0000	56.2475	-12.5	122	0.00
51	T	1,4-Dioxane	200.0000	223.9105	-12.0	125	0.00
52	T	Dibromomethane	50.0000	52.3783	-4.8	107	0.00
53	T	2-Chloroethyl Vinyl Ether	50.0000	42.8132	14.4	87	0.00
54	T	4-Methyl-2-Pentanone	50.0000	46.8082	6.4	95	0.00
55	T	cis-1,3-Dichloropropene	50.0000	55.1558	-10.3	116	0.00

(#) = Out of Range
8M379015.D 8260WT.M Sat May 12 08:45:48 2012 Page 1

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\051212\8M379015.D Vial: 2
Acq On : 12 May 2012 7:40 Operator: ADC
Sample : WG397812-02 50ug/L CCV 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

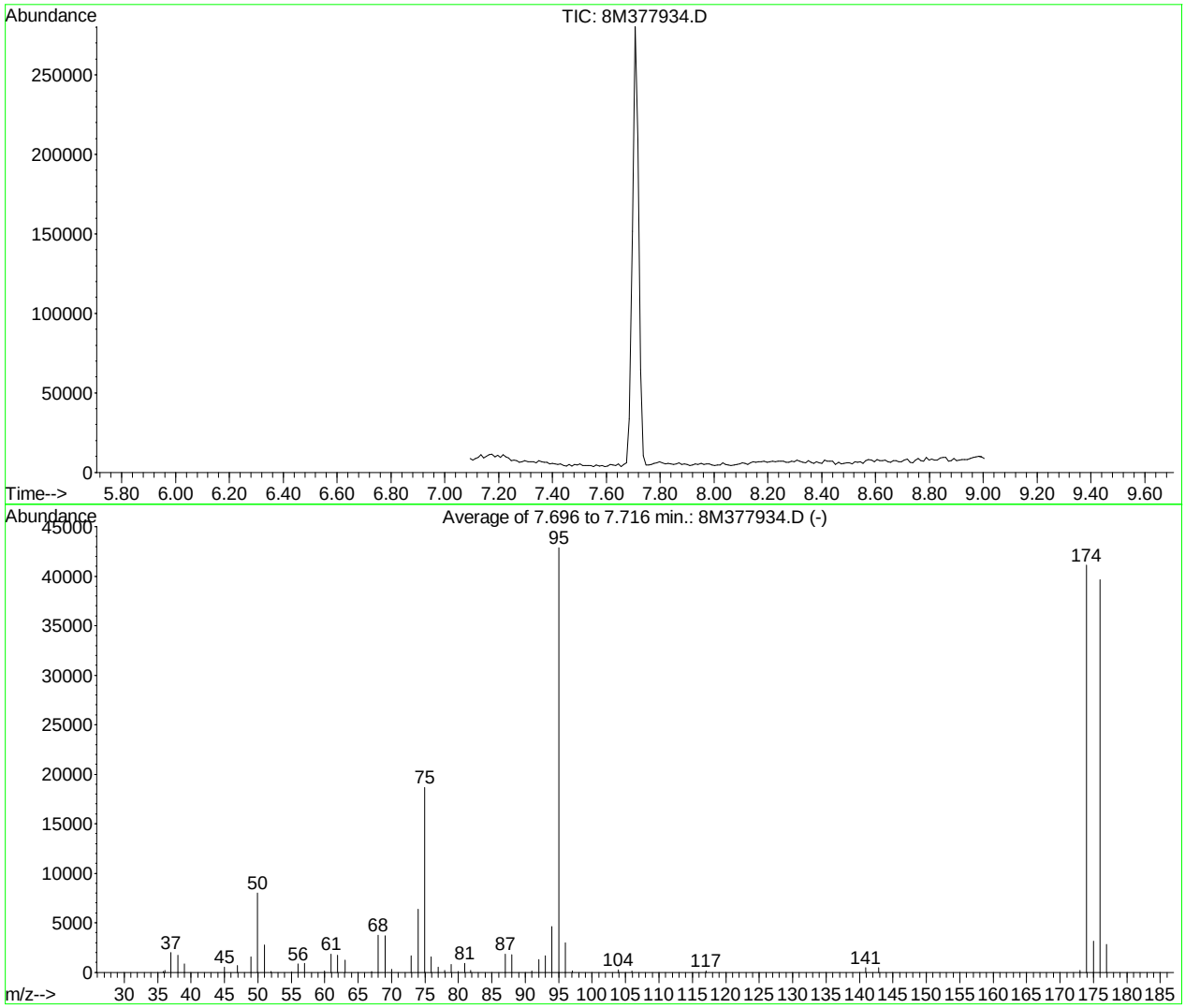
Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
56	T	Dimethyl Disulfide	50.0000	54.6487	-9.3	108	0.01
57	I	Chlorobenzene-d5	25.0000	25.0000	0.0	113	0.00
58	S	Toluene-d8	25.0000	24.9491	0.2	110	0.00
59	C	Toluene	50.0000	47.3423	5.3	114	0.00
60	T	Ethyl Methacrylate	50.0000	41.2411	17.5	89	0.00
61		Paraldehyde	100.0000	86.4710	13.5	88	0.01
62	T	trans-1,3-Dichloropropene	50.0000	50.7712	-1.5	112	0.00
63	T	1,1,2-Trichloroethane	50.0000	47.9629	4.1	104	0.01
64	T	2-Hexanone	50.0000	44.6167	10.8	96	0.01
65	T	1,3-Dichloropropane	50.0000	46.4270	7.1	104	0.00
66	T	Tetrachloroethene	50.0000	53.2432	-6.5	121	0.00
67	T	Dibromochloromethane	50.0000	54.9739	-9.9	116	0.00
68	T	1,2-Dibromoethane	50.0000	47.9686	4.1	105	0.00
69	T	1-Chlorohexane	50.0000	43.9506	12.1	104	0.00
70	P	Chlorobenzene	50.0000	50.0011	-0.0	115	0.00
71	T	1,1,1,2-Tetrachloroethane	50.0000	54.4449	-8.9	121	0.01
72	C	Ethylbenzene	50.0000	51.3116	-2.6	117	0.00
73	T	m-,p-Xylene	100.0000	102.6255	-2.6	117	0.00
74	T	o-Xylene	50.0000	50.5829	-1.2	113	0.01
75	T	Styrene	50.0000	46.6119	6.8	112	0.00
76	P	Bromoform	50.0000	53.6355	-7.3	114	0.01
77	T	Isopropylbenzene	50.0000	52.1413	-4.3	119	0.00
78	I	1,4-Dichlorobenzene-d4	25.0000	25.0000	0.0	116	0.00
79	P	1,1,2,2-Tetrachloroethane	50.0000	44.3900	11.2	100	0.01
80	S	p-Bromofluorobenzene	25.0000	24.6968	1.2	112	0.00
81	T	1,2,3-Trichloropropane	50.0000	44.8926	10.2	101	0.00
82	T	trans-1,4-Dichloro-2-Butene	50.0000	45.6404	8.7	96	0.00
83	T	n-Propylbenzene	50.0000	49.2568	1.5	117	0.00
84	T	Bromobenzene	50.0000	50.7947	-1.6	118	0.00
85	T	1,3,5-Trimethylbenzene	50.0000	51.1477	-2.3	120	0.01
86	T	2-Chlorotoluene	50.0000	48.4083	3.2	118	0.00
87	T	4-Chlorotoluene	50.0000	52.1594	-4.3	124	0.01
88	T	a-Methylstyrene	50.0000	47.7352	4.5	108	0.01
89	T	tert-Butylbenzene	50.0000	51.7642	-3.5	120	0.00
90	T	1,2,4-Trimethylbenzene	50.0000	53.8779	-7.8	119	0.00
91	T	sec-Butylbenzene	50.0000	49.6852	0.6	119	0.00
92	T	p-Isopropyltoluene	50.0000	50.2350	-0.5	118	0.01
93	T	1,3-Dichlorobenzene	50.0000	50.2156	-0.4	119	0.00
94	T	1,4-Dichlorobenzene	50.0000	50.4042	-0.8	120	0.00
95	T	n-Butylbenzene	50.0000	50.7879	-1.6	121	0.00
96	T	1,2-Dichlorobenzene	50.0000	49.1731	1.7	115	0.00
97	T	1,2-Dibromo-3-Chloropropane	50.0000	48.7013	2.6	106	0.00
98	T	1,2,4-Trichlorobenzene	50.0000	48.1833	3.6	114	0.00
99	T	Hexachlorobutadiene	50.0000	63.8580	-27.7#	145	0.01
100	T	Naphthalene	50.0000	44.3823	11.2	104	0.00
101	T	1,2,3-Trichlorobenzene	50.0000	48.7015	2.6	115	0.00

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

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

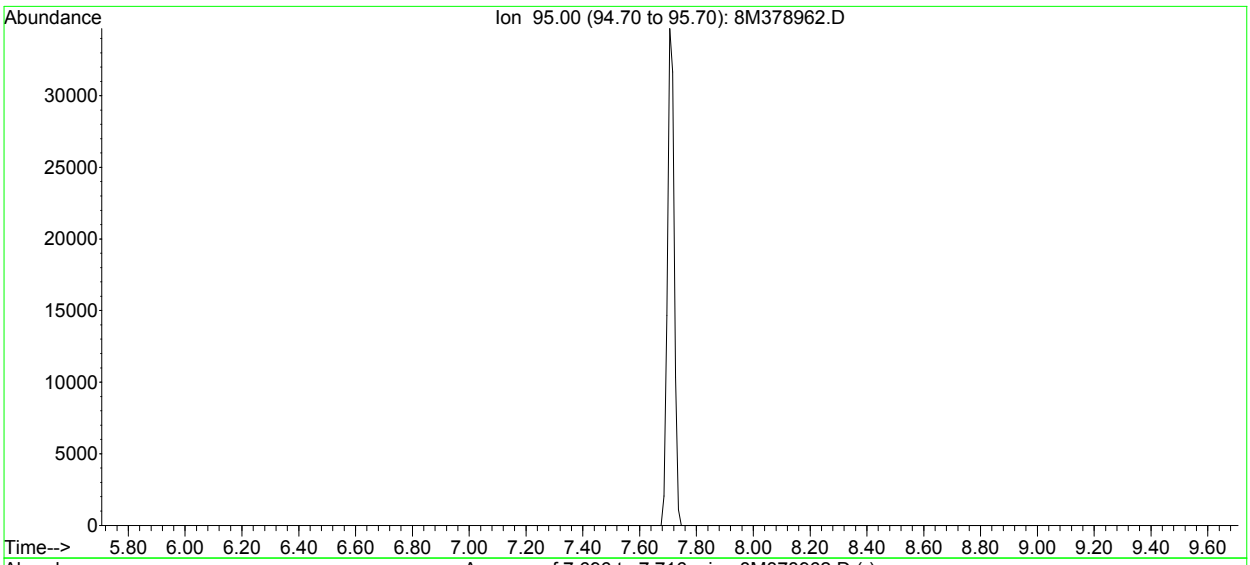


AutoFind: Scans 60, 61, 62; Background Corrected with Scan 55

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

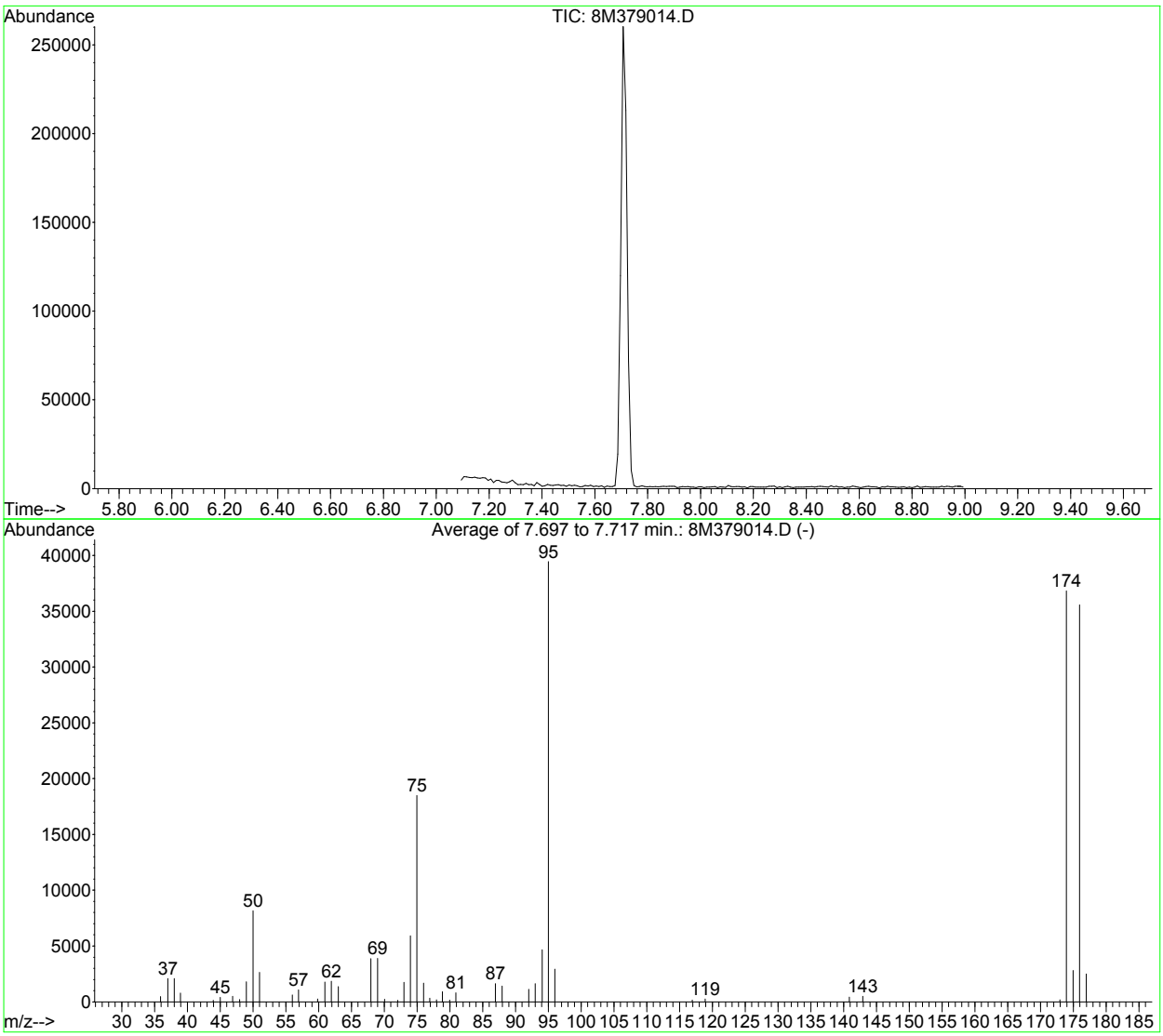


AutoFind: Scans 60, 61, 62; Background Corrected with Scan 56

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

Data File : C:\MSDCHEM\1\DATA\051212\8M379014.D Vial: 1
Acq On : 12 May 2012 7:16 Operator: ADC
Sample : WG397812-01 BFB 50ng 8260 Inst : HPMS8
Misc : 1,1 STD51241 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



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	20.7	8160	PASS
75	95	30	60	46.9	18488	PASS
95	95	100	100	100.0	39445	PASS
96	95	5	9	7.4	2926	PASS
173	174	0.00	2	0.5	189	PASS
174	95	50	100	93.4	36834	PASS
175	174	5	9	7.6	2813	PASS
176	174	95	101	96.6	35583	PASS
177	176	5	9	7.0	2500	PASS

8M379014.D 8260WT.M Sat May 12 08:46:18 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

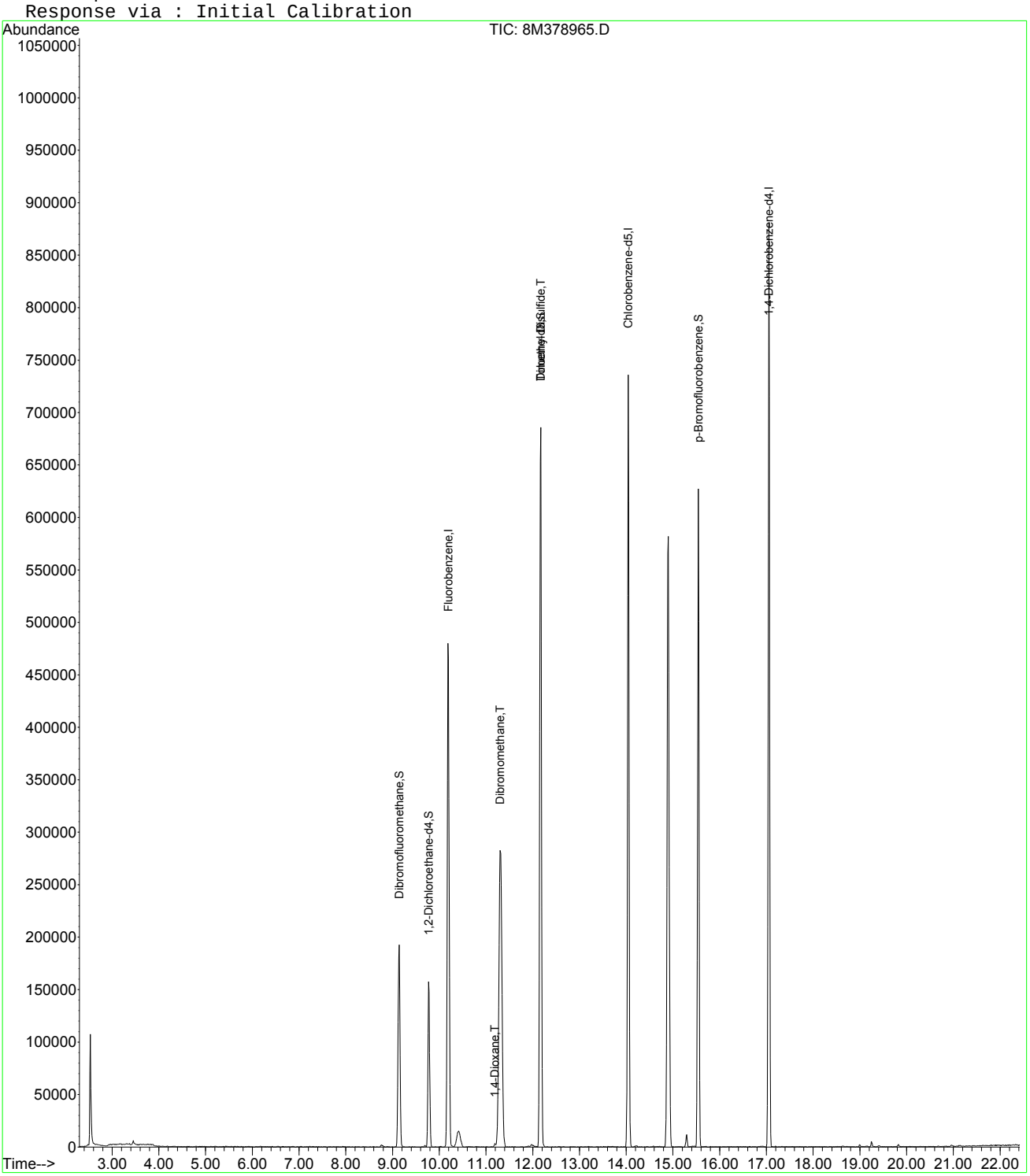
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.20	96	643325	25.00	ug/L	0.01
57) Chlorobenzene-d5	14.04	117	583069	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.05	152	324450	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.14	111	171176	25.6470	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

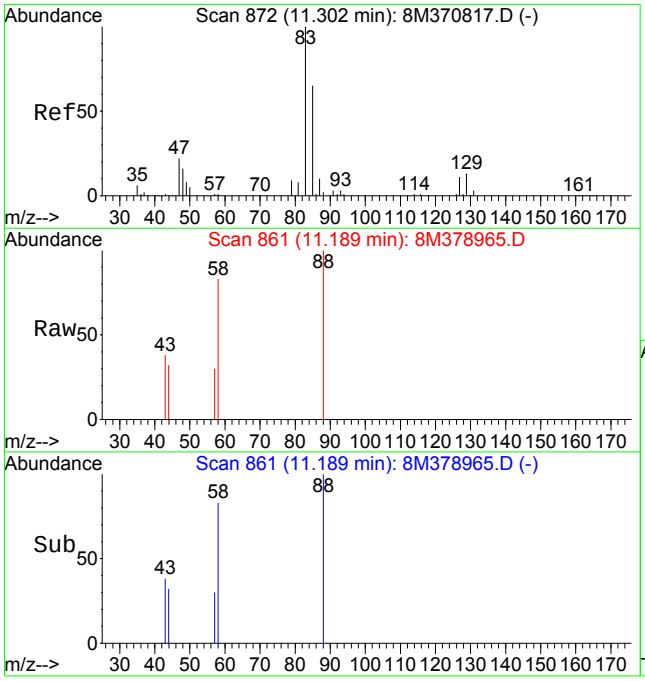
(#) = qualifier out of range (m) = manual integration
8M378965.D 8260WT.M Tue May 15 15:03:54 2012 Page 1

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

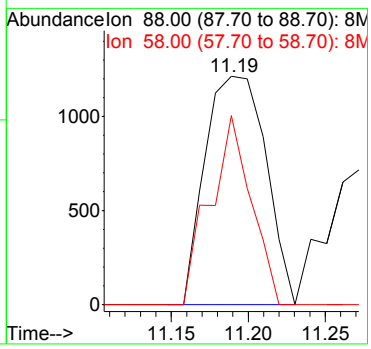


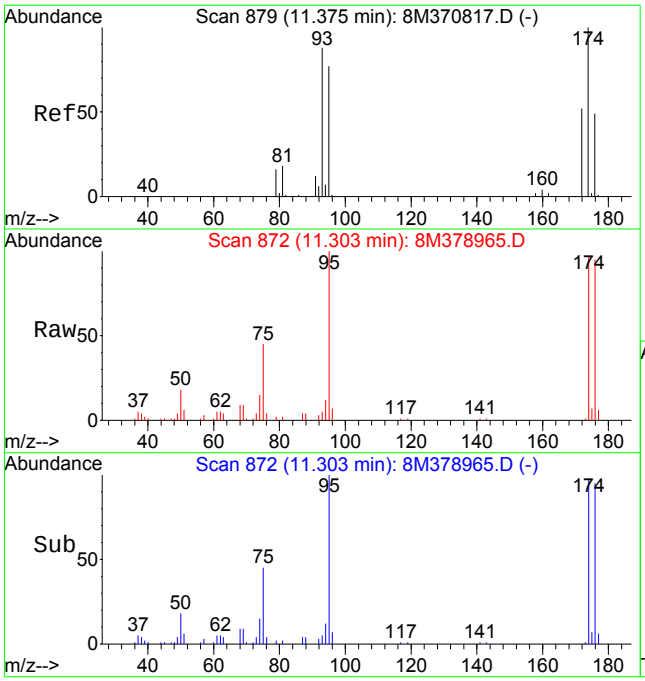


#51
1,4-Dioxane
Concen: 97.11 ug/L
RT: 11.19 min Scan# 861
Delta R.T. 0.00 min
Lab File: 8M378965.D
Acq: 10 May 2012 20:40

Tgt Ion: 88 Resp: 3339

Ion	Ratio	Lower	Upper
88	100		
58	56.1	35.0	81.6

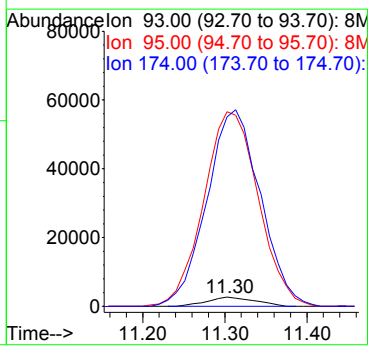


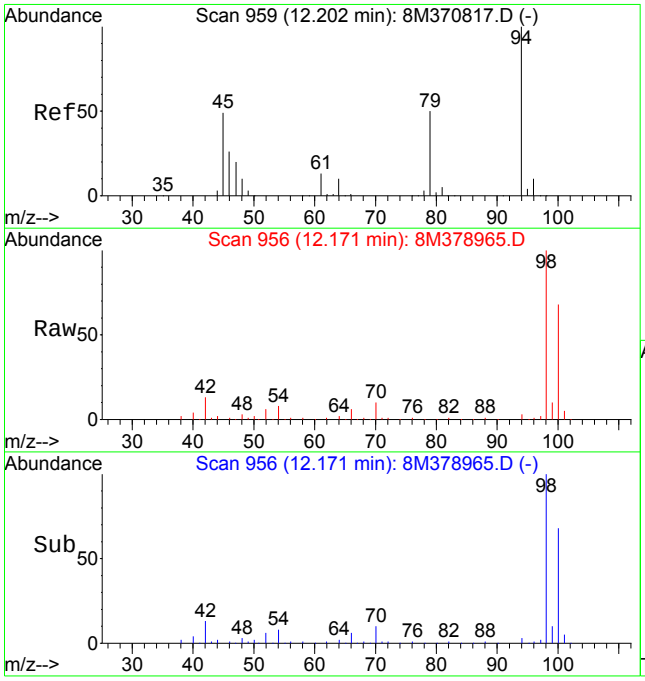


#52
Dibromomethane
Concen: 3.53 ug/L
RT: 11.30 min Scan# 872
Delta R.T. 0.03 min
Lab File: 8M378965.D
Acq: 10 May 2012 20:40

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#

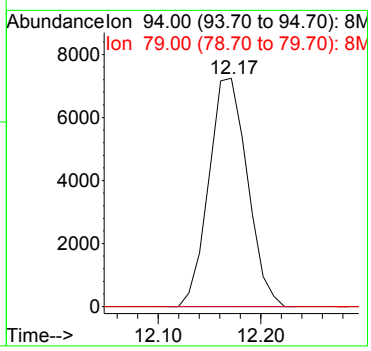




#56
Dimethyl Disulfide
Concen: 1.88 ug/L
RT: 12.17 min Scan# 956
Delta R.T. 0.09 min
Lab File: 8M378965.D
Acq: 10 May 2012 20:40

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

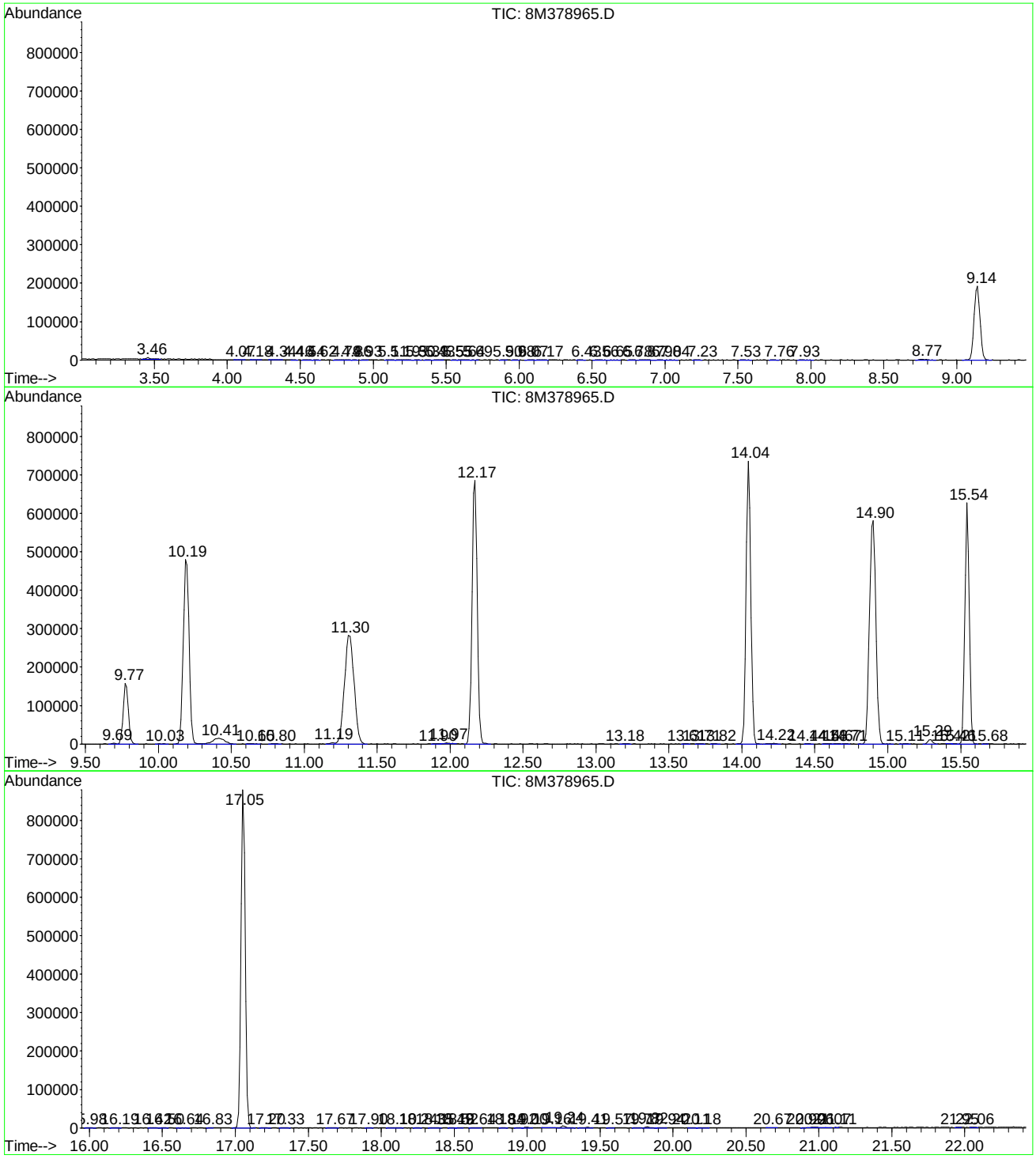
Signal : TIC

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

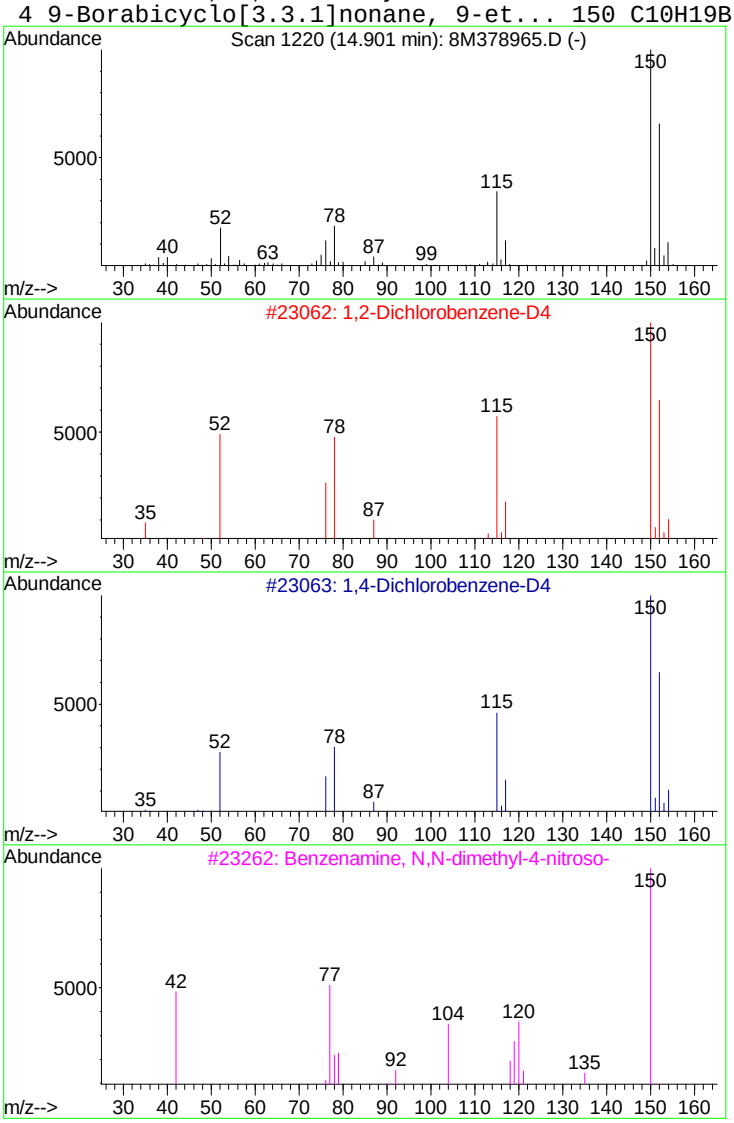
Quant Method : C:\MSDCHEM\1\METHODS\8260WT.M (RTE Integrator)
Title : Method 8260B/624 WTR-SOP:OVLMSV01 03/27/12 HPMS 8
Library : C:\DATABASE\NIST02.L

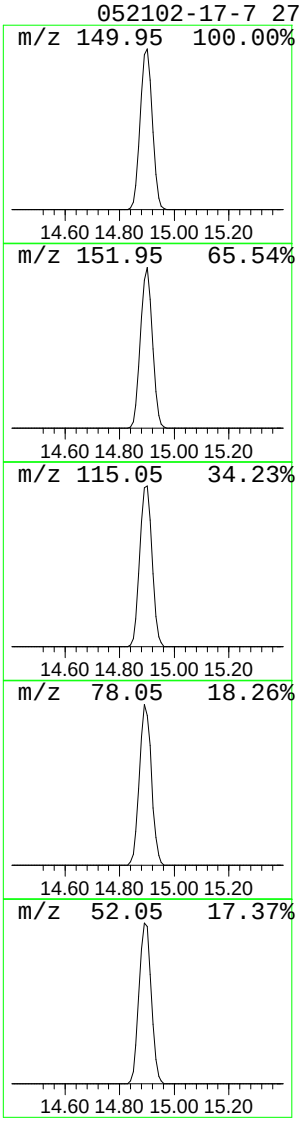
****

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\051212\8M379017.D Vial: 4
Acq On : 12 May 2012 8:49 Operator: ADC
Sample : WG397815-01 VBLK0512 BLANK 8260 Inst : HPMS8
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 18 08:53:11 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

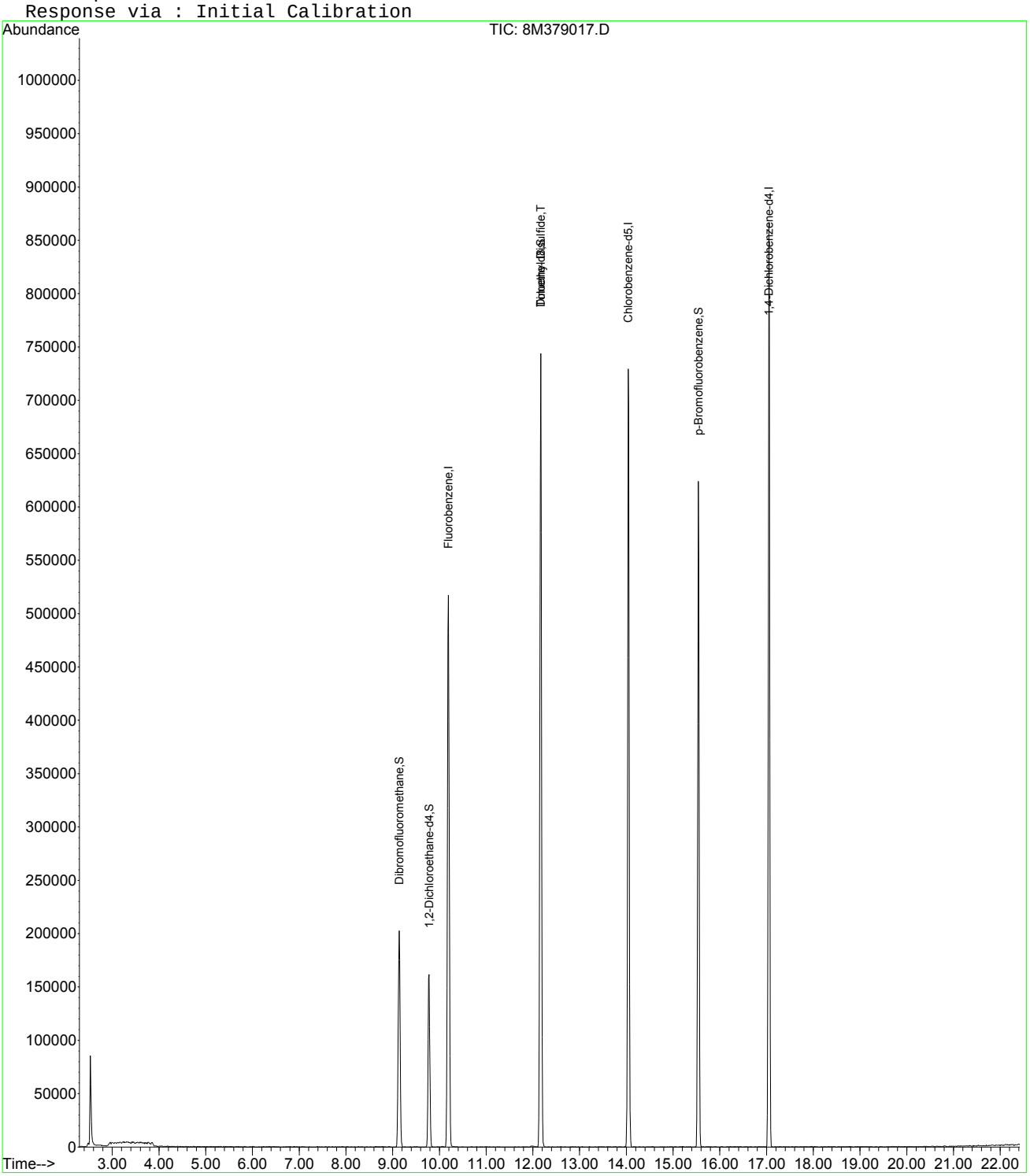
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	10.19	96	681167	25.00	ug/L	0.01
57) Chlorobenzene-d5	14.04	117	594997	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.05	152	328230	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.14	111	179910	25.4581	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 101.84%			
43) 1,2-Dichloroethane-d4	9.78	65	152199	27.9682	ug/L	0.01
Spiked Amount 25.000	Range 80 - 120		Recovery = 111.88%			
58) Toluene-d8	12.17	98	692115	25.1935	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 100.76%			
80) p-Bromofluorobenzene	15.54	95	266012	25.0530	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 100.20%			
Target Compounds						Qvalue
56) Dimethyl Disulfide	12.17	94	18987	1.7783	ug/L #	28

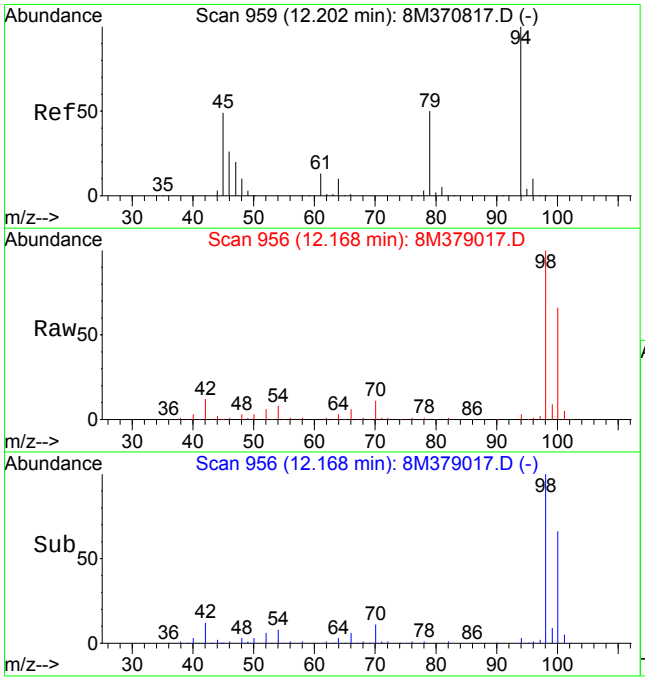
(#) = qualifier out of range (m) = manual integration
8M379017.D 8260WT.M Fri May 18 08:53:11 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\051212\8M379017.D Vial: 4
Acq On : 12 May 2012 8:49 Operator: ADC
Sample : WG397815-01 VBLK0512 BLANK 8260 Inst : HPMS8
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 18 8:53 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

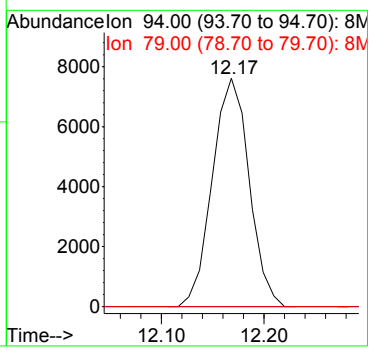




#56
Dimethyl Disulfide
Concen: 1.78 ug/L
RT: 12.17 min Scan# 956
Delta R.T. 0.08 min
Lab File: 8M379017.D
Acq: 12 May 2012 8:49

Tgt Ion: 94 Resp: 18987

Ion	Ratio	Lower	Upper
94	100		
79	0.0	29.2	68.0#



LSC Area Percent Report

Data File : C:\MSDCHEM\1\DATA\051212\8M379017.D Vial: 4
Acq On : 12 May 2012 8:49 Operator: ADC
Sample : WG397815-01 VBLK0512 BLANK 8260 Inst : HPMS8
Misc : 1,1 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
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 200 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

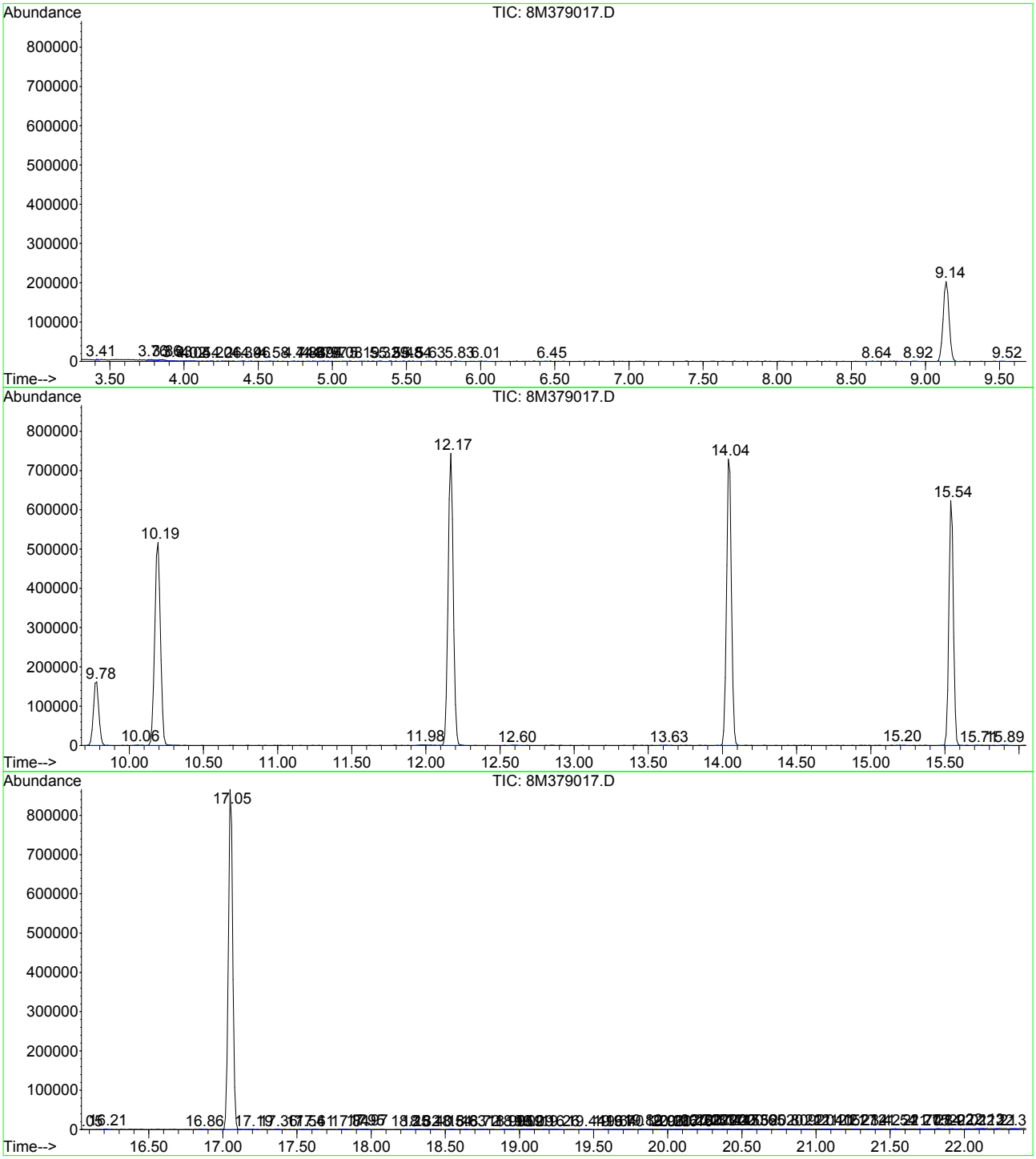
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.411	108	109	111	rBV	1588	2188	0.12%	0.024%
2	3.762	142	143	149	rVB3	1990	4740	0.27%	0.052%
3	3.855	149	152	157	rVB3	3549	9965	0.56%	0.110%
4	3.928	157	159	165	rVB	775	1518	0.08%	0.017%
5	4.021	165	168	169	rBV	434	787	0.04%	0.009%
6	4.052	169	171	175	rVB	661	1252	0.07%	0.014%
7	4.197	182	185	186	rVB	880	1441	0.08%	0.016%
8	4.259	189	191	192	rBV	684	927	0.05%	0.010%
9	4.393	200	204	207	rBB	773	1808	0.10%	0.020%
10	4.455	207	210	211	rBB	706	880	0.05%	0.010%
11	4.579	218	222	226	rBB	794	1846	0.10%	0.020%
12	4.745	235	238	239	rBB	718	963	0.05%	0.011%
13	4.827	245	246	249	rBB	457	696	0.04%	0.008%
14	4.869	249	250	253	rBB	716	879	0.05%	0.010%
15	4.941	253	257	259	rBB	668	1287	0.07%	0.014%
16	4.972	259	260	263	rBV	669	856	0.05%	0.009%
17	5.075	268	270	273	rBB	382	879	0.05%	0.010%
18	5.189	279	281	285	rBB	374	1082	0.06%	0.012%
19	5.324	291	294	297	rBB	732	1043	0.06%	0.011%
20	5.386	298	300	303	rBB	689	828	0.05%	0.009%
21	5.479	306	309	311	rBB	663	826	0.05%	0.009%
22	5.541	314	315	317	rBB	722	668	0.04%	0.007%
23	5.634	323	324	328	rBB	379	873	0.05%	0.010%
24	5.830	341	343	348	rBB	708	1080	0.06%	0.012%
25	6.006	357	360	365	rBB	693	1230	0.07%	0.014%
26	6.451	398	403	404	rBB	337	801	0.04%	0.009%
27	8.643	611	615	617	rBB	726	661	0.04%	0.007%
28	8.922	639	642	646	rBB	448	857	0.05%	0.009%
29	9.139	656	663	671	rBB	202889	561703	31.42%	6.192%
30	9.521	697	700	703	rBB	337	807	0.05%	0.009%
31	9.780	717	725	734	rBB	161818	413367	23.12%	4.557%
32	10.059	748	752	756	rBB	715	1325	0.07%	0.015%
33	10.193	757	765	776	rBV	517453	1398307	78.22%	15.415%
34	11.982	932	938	948	rBB	1050	4536	0.25%	0.050%
35	12.168	948	956	966	rBB	744034	1787571	100.00%	19.706%
36	12.603	994	998	1001	rBB	364	850	0.05%	0.009%
37	13.626	1091	1097	1099	rBB	376	882	0.05%	0.010%
38	14.040	1128	1137	1145	rBB	729491	1676759	93.80%	18.485%
39	15.198	1246	1249	1254	rBB	677	1006	0.06%	0.011%
40	15.539	1274	1282	1290	rBB	624102	1315728	73.60%	14.505%
41	15.715	1296	1299	1301	rBB	404	696	0.04%	0.008%
42	15.890	1313	1316	1321	rBB	385	1043	0.06%	0.011%
43	16.046	1327	1331	1334	rBB	459	858	0.05%	0.009%

44	16.211	1345	1347	1350	rBB	645	876	0.05%	0.010%
45	16.862	1407	1410	1411	rBB	392	690	0.04%	0.008%
46	17.048	1421	1428	1437	rBB	866311	1787445	99.99%	19.705%
47	17.193	1438	1442	1445	rBB	390	674	0.04%	0.007%
48	17.359	1457	1458	1461	rBB	404	683	0.04%	0.008%
49	17.545	1473	1476	1480	rBB	392	668	0.04%	0.007%
50	17.607	1481	1482	1486	rBB	397	922	0.05%	0.010%
51	17.845	1498	1505	1506	rBB	430	1523	0.09%	0.017%
52	17.948	1510	1515	1516	rBB	640	1032	0.06%	0.011%
53	17.969	1516	1517	1520	rBB	798	707	0.04%	0.008%
54	18.248	1540	1544	1547	rBB	387	858	0.05%	0.009%
55	18.320	1548	1551	1553	rBB	456	971	0.05%	0.011%
56	18.403	1555	1559	1562	rBV	397	1572	0.09%	0.017%
57	18.537	1569	1572	1575	rBB	402	880	0.05%	0.010%
58	18.630	1580	1581	1584	rBB	424	701	0.04%	0.008%
59	18.723	1589	1590	1595	rBB	398	1124	0.06%	0.012%
60	18.899	1604	1607	1609	rBB	373	659	0.04%	0.007%
61	18.951	1609	1612	1614	rBB	562	1068	0.06%	0.012%
62	19.023	1617	1619	1621	rBB	510	807	0.05%	0.009%
63	19.085	1621	1625	1626	rBV	428	1135	0.06%	0.013%
64	19.158	1631	1632	1636	rBB	406	885	0.05%	0.010%
65	19.261	1636	1642	1644	rBB	435	1423	0.08%	0.016%
66	19.437	1655	1659	1665	rBB	479	1400	0.08%	0.015%
67	19.613	1671	1676	1677	rBB	442	1179	0.07%	0.013%
68	19.644	1677	1679	1682	rBB	445	991	0.06%	0.011%
69	19.695	1682	1684	1688	rBV	567	1545	0.09%	0.017%
70	19.819	1694	1696	1703	rBV	690	2281	0.13%	0.025%
71	19.964	1708	1710	1713	rBB	523	1047	0.06%	0.012%
72	20.006	1713	1714	1717	rBB	431	684	0.04%	0.008%
73	20.057	1717	1719	1722	rBV	476	1322	0.07%	0.015%
74	20.161	1727	1729	1731	rBV	367	853	0.05%	0.009%
75	20.202	1731	1733	1737	rVB	647	1284	0.07%	0.014%
76	20.274	1737	1740	1742	rBV	617	1329	0.07%	0.015%
77	20.305	1742	1743	1748	rVB	622	1315	0.07%	0.014%
78	20.367	1748	1749	1751	rBV	778	1123	0.06%	0.012%
79	20.409	1752	1753	1756	rVB	681	1129	0.06%	0.012%
80	20.471	1756	1759	1761	rBV	666	1374	0.08%	0.015%
81	20.533	1762	1765	1770	rVB2	853	2836	0.16%	0.031%
82	20.595	1770	1771	1774	rBV	639	1103	0.06%	0.012%
83	20.647	1774	1776	1778	rVB	473	805	0.05%	0.009%
84	20.802	1786	1791	1798	rBV2	873	2147	0.12%	0.024%
85	20.915	1800	1802	1805	rVB	686	913	0.05%	0.010%
86	21.040	1812	1814	1817	rVB	548	1237	0.07%	0.014%
87	21.102	1817	1820	1822	rBV	844	1979	0.11%	0.022%
88	21.153	1824	1825	1827	rBV	623	742	0.04%	0.008%
89	21.267	1834	1836	1838	rBV2	536	899	0.05%	0.010%
90	21.339	1842	1843	1848	rVB2	1210	2036	0.11%	0.022%
91	21.422	1848	1851	1852	rBV2	1011	1056	0.06%	0.012%
92	21.536	1858	1862	1864	rBV	1414	3330	0.19%	0.037%
93	21.701	1876	1878	1880	rBV2	1175	1001	0.06%	0.011%
94	21.753	1880	1883	1887	rVV2	771	1962	0.11%	0.022%
95	21.836	1888	1891	1894	rVV3	952	1951	0.11%	0.022%
96	21.918	1896	1899	1903	rBV3	965	3137	0.18%	0.035%
97	22.011	1906	1908	1912	rBV3	1097	2265	0.13%	0.025%
98	22.125	1914	1919	1921	rBV	1299	3676	0.21%	0.041%
99	22.208	1926	1927	1929	rBV	931	1411	0.08%	0.016%
100	22.332	1936	1939	1942	rBV2	862	2095	0.12%	0.023%

Sum of corrected areas: 9071039

File : C:\MSDCHEM\1\DATA\051212\8M379017.D
Operator : ADC
Acquired : 12 May 2012 8:49 using AcqMethod 8260WT
Instrument : HPMS8
Sample Name: WG397815-01 VBLK0512 BLANK 8260
Misc Info : 1,1
Vial Number: 4
Quant File :8260WT.RES (RTE Integrator)



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

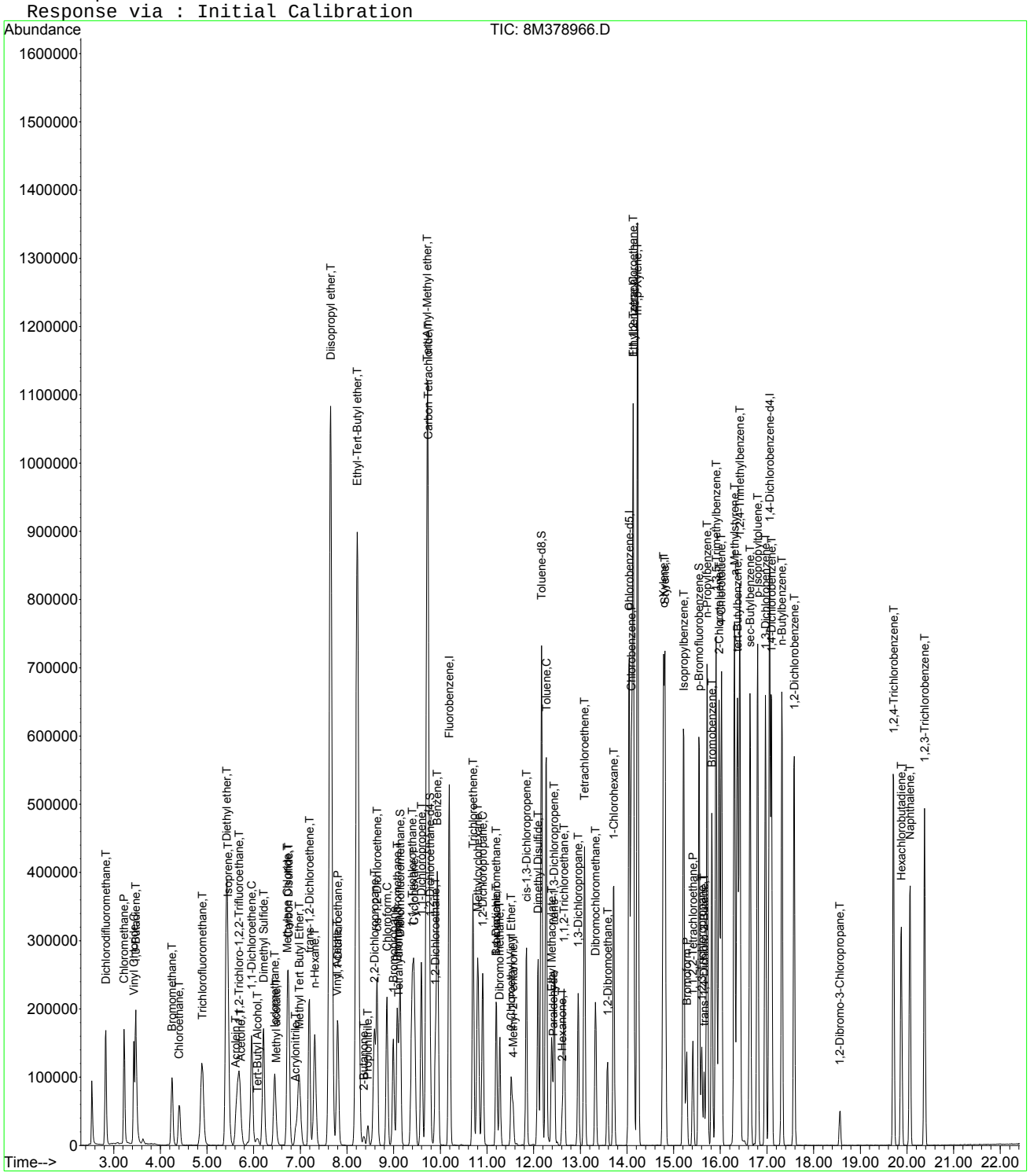
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
46)	Benzene	9.93	78	497477	19.0184	ug/L	98
47)	Trichloroethene	10.70	130	178043	20.5891	ug/L	100
48)	Methylcyclohexane	10.80	83	176252	17.6350	ug/L	97
49)	1,2-Dichloropropane	10.91	63	121166	19.0382	ug/L	86
50)	Bromodichloromethane	11.20	83	179050	21.8096	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
8M378966.D 8260WT.M Thu May 10 21:35:48 2012 Page 2

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\051212\8M379018.D Vial: 5
Acq On : 12 May 2012 9:21 Operator: ADC
Sample : WG397815-02 20ug/L LCS 8260 Inst : HPMS8
Misc : 1,1 STD51372 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 12 09:44:09 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	10.19	96	691495	25.00	ug/L	0.00
57) Chlorobenzene-d5	14.04	117	606261	25.00	ug/L	0.00
78) 1,4-Dichlorobenzene-d4	17.05	152	330150	25.00	ug/L	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	9.14	111	178677	24.9060	ug/L	0.00
Spiked Amount 25.000	Range 86 - 118		Recovery = 99.64%			
43) 1,2-Dichloroethane-d4	9.77	65	148141	26.8159	ug/L	0.00
Spiked Amount 25.000	Range 80 - 120		Recovery = 107.28%			
58) Toluene-d8	12.17	98	696096	24.8676	ug/L	0.00
Spiked Amount 25.000	Range 88 - 110		Recovery = 99.48%			
80) p-Bromofluorobenzene	15.54	95	267450	25.0420	ug/L	0.00
Spiked Amount 25.000	Range 86 - 115		Recovery = 100.16%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.82	85	245893	32.6930	ug/L	99
3) Chloromethane	3.22	50	208535	24.0564	ug/L	99
4) Vinyl Chloride	3.42	62	183311	25.3726	ug/L	100
5) 1,3-Butadiene	3.47	54	115015	26.1711	ug/L	98
6) Bromomethane	4.24	94	96263	17.2048	ug/L	96
7) Chloroethane	4.40	64	98421	21.1464	ug/L	97
8) Trichlorofluoromethane	4.89	101	259911	24.3638	ug/L	99
9) Diethyl ether	5.41	59	313846	80.8186	ug/L	98
10) Isoprene	5.44	67	152163	18.1252	ug/L	95
11) Acrolein	5.62	56	33351	76.0371	ug/L	88
12) 1,1,2-Trichloro-1,2,2-Trif	5.68	101	131421	20.5121	ug/L	96
13) Acetone	5.72	43	20313	19.9088	ug/L	91
14) 1,1-Dichloroethene	5.95	61	200998	21.6800	ug/L	94
15) Tert-Butyl Alcohol	6.08	59	54112	173.1099	ug/L	98
16) Dimethyl Sulfide	6.21	62	138671	21.2468	ug/L	95
17) Iodomethane	6.44	142	177642	16.4140	ug/L	95
18) Methyl acetate	6.48	43	55762	17.3663	ug/L	100
19) Methylene Chloride	6.72	84	137600	19.9447	ug/L	96
20) Carbon Disulfide	6.75	76	372219	20.8951	ug/L	100
21) Acrylonitrile	6.90	53	25747	18.6412	ug/L	94
22) Methyl Tert Butyl Ether	6.97	73	226107	19.1537	ug/L	98
23) trans-1,2-Dichloroethene	7.19	61	186096	21.2557	ug/L	98
24) n-Hexane	7.30	57	159268	19.9360	ug/L	98
25) Diisopropyl ether	7.64	45	2049214	97.0291	ug/L	98
26) Vinyl Acetate	7.79	43	137076	20.2066	ug/L	98
27) 1,1-Dichloroethane	7.81	63	228670	20.4306	ug/L	99
28) Ethyl-Tert-Butyl ether	8.22	59	1624622	93.8642	ug/L	99
29) 2-Butanone	8.37	43	28382	18.6940	ug/L	97
30) Propionitrile	8.45	54	43833	85.8105	ug/L	98
31) 2,2-Dichloropropane	8.58	77	210151	21.8229	ug/L	99
32) cis-1,2-Dichloroethene	8.65	96	152729	21.0710	ug/L	97
33) Chloroform	8.85	83	246432	21.3634	ug/L	99
34) 1-Bromopropane	8.99	122	35684	24.3283	ug/L	99
35) Bromochloromethane	9.07	130	97934	20.9787	ug/L	100
36) Tetrahydrofuran	9.11	42	86566	84.1330	ug/L	98
38) 1,1,1-Trichloroethane	9.39	97	246550	23.5222	ug/L	100
39) Cyclohexane	9.44	56	200109	19.3234	ug/L	100
40) 1,1-Dichloropropene	9.60	75	196199	21.7314	ug/L	99
41) Tert-Amyl-Methyl ether	9.72	73	1317970	93.0507	ug/L	96
42) Carbon Tetrachloride	9.73	117	238093	24.2798	ug/L	99
45) 1,2-Dichloroethane	9.90	62	159861	22.5225	ug/L	98

(#) = qualifier out of range (m) = manual integration
8M379018.D 8260WT.M Sat May 12 09:44:10 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\051212\8M379018.D Vial: 5
Acq On : 12 May 2012 9:21 Operator: ADC
Sample : WG397815-02 20ug/L LCS 8260 Inst : HPMS8
Misc : 1,1 STD51372 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 12 09:44:09 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

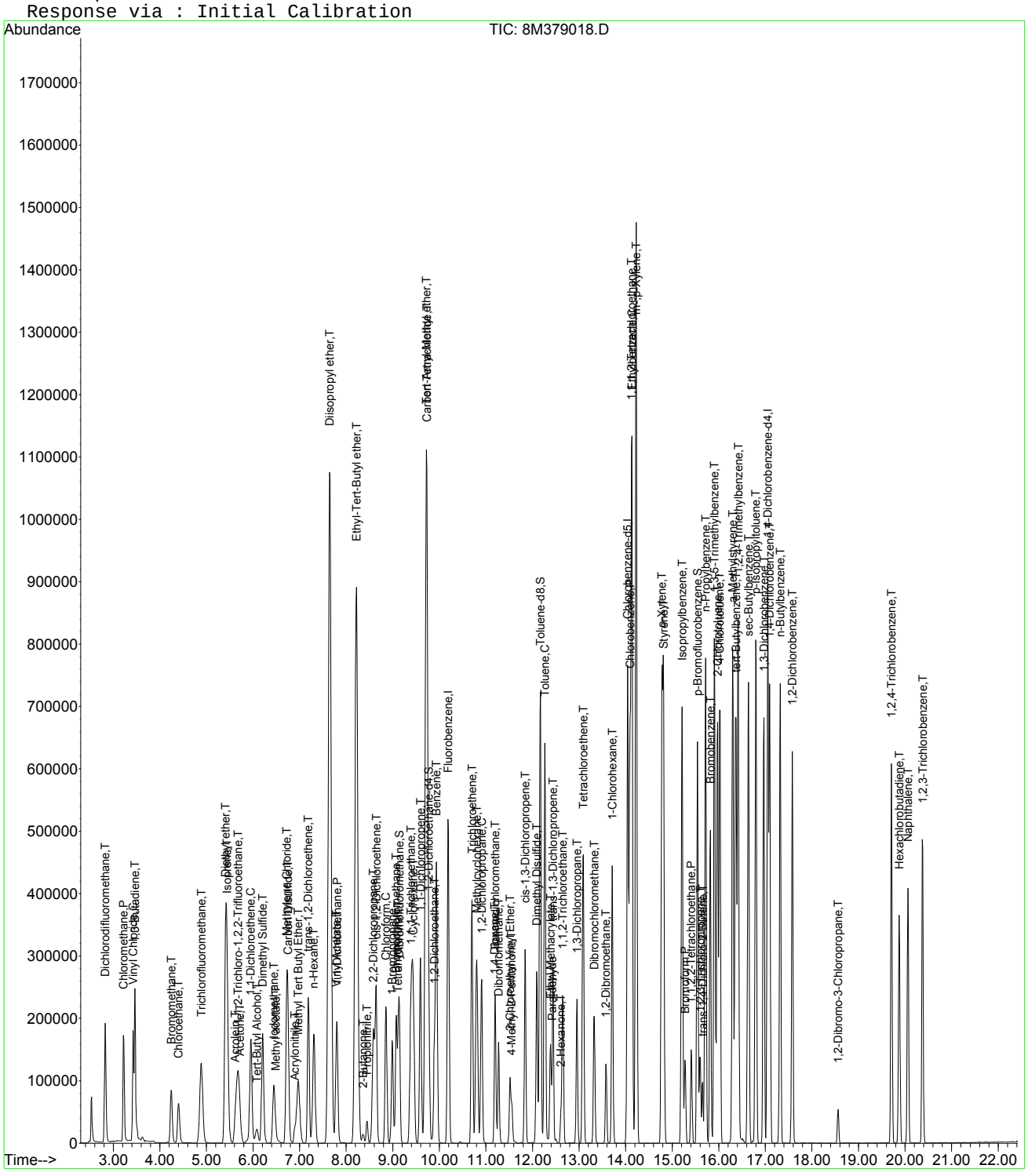
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
46)	Benzene	9.94	78	541968	20.4532	ug/L	97
47)	Trichloroethene	10.70	130	192157	21.9360	ug/L	99
48)	Methylcyclohexane	10.81	83	193357	19.0981	ug/L	97
49)	1,2-Dichloropropane	10.91	63	129719	20.1205	ug/L	88
50)	Bromodichloromethane	11.20	83	190171	22.8668	ug/L	99
51)	1,4-Dioxane	11.19	88	6000	162.3434	ug/L	86
52)	Dibromomethane	11.27	93	69086	20.6989	ug/L	98
53)	2-Chloroethyl Vinyl Ether	11.52	63	51186	17.3024	ug/L	99
54)	4-Methyl-2-Pentanone	11.55	58	22959	17.1526	ug/L	97
55)	cis-1,3-Dichloropropene	11.84	75	210941	21.5506	ug/L	99
56)	Dimethyl Disulfide	12.09	94	214219	19.7640	ug/L	98
59)	Toluene	12.26	91	643014	19.2318	ug/L	99
60)	Ethyl Methacrylate	12.39	69	101217	17.3542	ug/L	94
61)	Paraldehyde	12.42	89	6952	67.6234	ug/L	69
62)	trans-1,3-Dichloropropene	12.44	75	169877	18.3130	ug/L	98
63)	1,1,2-Trichloroethane	12.65	97	101556	19.6485	ug/L	99
64)	2-Hexanone	12.61	58	21700	16.7402	ug/L	88
65)	1,3-Dichloropropane	12.96	76	160827	19.0045	ug/L	93
66)	Tetrachloroethene	13.09	164	160531	21.3021	ug/L	97
67)	Dibromochloromethane	13.33	129	163324	21.4992	ug/L	100
68)	1,2-Dibromoethane	13.58	107	106229	19.0784	ug/L	99
69)	1-Chlorohexane	13.71	91	193310	17.3101	ug/L	94
70)	Chlorobenzene	14.09	112	463579	19.8440	ug/L	97
71)	1,1,1,2-Tetrachloroethane	14.13	131	183583	21.5924	ug/L	100
72)	Ethylbenzene	14.14	106	252629	20.3581	ug/L	96
73)	m-,p-Xylene	14.23	106	620444	40.9535	ug/L	96
74)	o-Xylene	14.78	106	302936	19.9054	ug/L	95
75)	Styrene	14.82	104	507750	18.6364	ug/L	96
76)	Bromoform	15.27	173	91348	20.9604	ug/L	98
77)	Isopropylbenzene	15.21	105	707192	18.4868	ug/L	99
79)	1,1,2,2-Tetrachloroethane	15.41	83	95102	17.9246	ug/L	100
81)	1,2,3-Trichloropropane	15.60	110	35387	20.1615	ug/L	92
82)	trans-1,4-Dichloro-2-Buten	15.66	53	28156	18.3318	ug/L	87
83)	n-Propylbenzene	15.72	91	862921	20.1816	ug/L	98
84)	Bromobenzene	15.82	156	222332	20.9168	ug/L	97
85)	1,3,5-Trimethylbenzene	15.90	105	667254	20.9254	ug/L	97
86)	2-Chlorotoluene	15.98	91	557931	20.5131	ug/L	98
87)	4-Chlorotoluene	16.02	91	514826	20.0235	ug/L	100
88)	a-Methylstyrene	16.30	118	378131	19.9432	ug/L	100
89)	tert-Butylbenzene	16.37	134	144439	20.4873	ug/L	88
90)	1,2,4-Trimethylbenzene	16.42	105	703431	22.6182	ug/L	97
91)	sec-Butylbenzene	16.64	105	779960	20.0035	ug/L	99
92)	p-Isopropyltoluene	16.79	119	717505	20.3888	ug/L	99
93)	1,3-Dichlorobenzene	16.97	146	422702	20.1499	ug/L	99
94)	1,4-Dichlorobenzene	17.09	146	417658	19.8385	ug/L	99
95)	n-Butylbenzene	17.32	91	562094	20.4322	ug/L	100
96)	1,2-Dichlorobenzene	17.58	146	370889	19.8340	ug/L	100
97)	1,2-Dibromo-3-Chloropropan	18.56	75	17466	19.1247	ug/L	92
98)	1,2,4-Trichlorobenzene	19.71	182	247131	19.6254	ug/L	99
99)	Hexachlorobutadiene	19.87	225	106840	23.8791	ug/L	98
100)	Naphthalene	20.06	128	451288	18.3133	ug/L	99
101)	1,2,3-Trichlorobenzene	20.38	180	216334	20.0458	ug/L	99

(#) = qualifier out of range (m) = manual integration
8M379018.D 8260WT.M Sat May 12 09:44:10 2012 Page 2

Quantitation Report (Not Reviewed)

Data File : C:\MSDchem\1\data\051212\8M379018.D Vial: 5
Acq On : 12 May 2012 9:21 Operator: ADC
Sample : WG397815-02 20ug/L LCS 8260 Inst : HPMS8
Misc : 1,1 STD51372 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 12 9:44 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

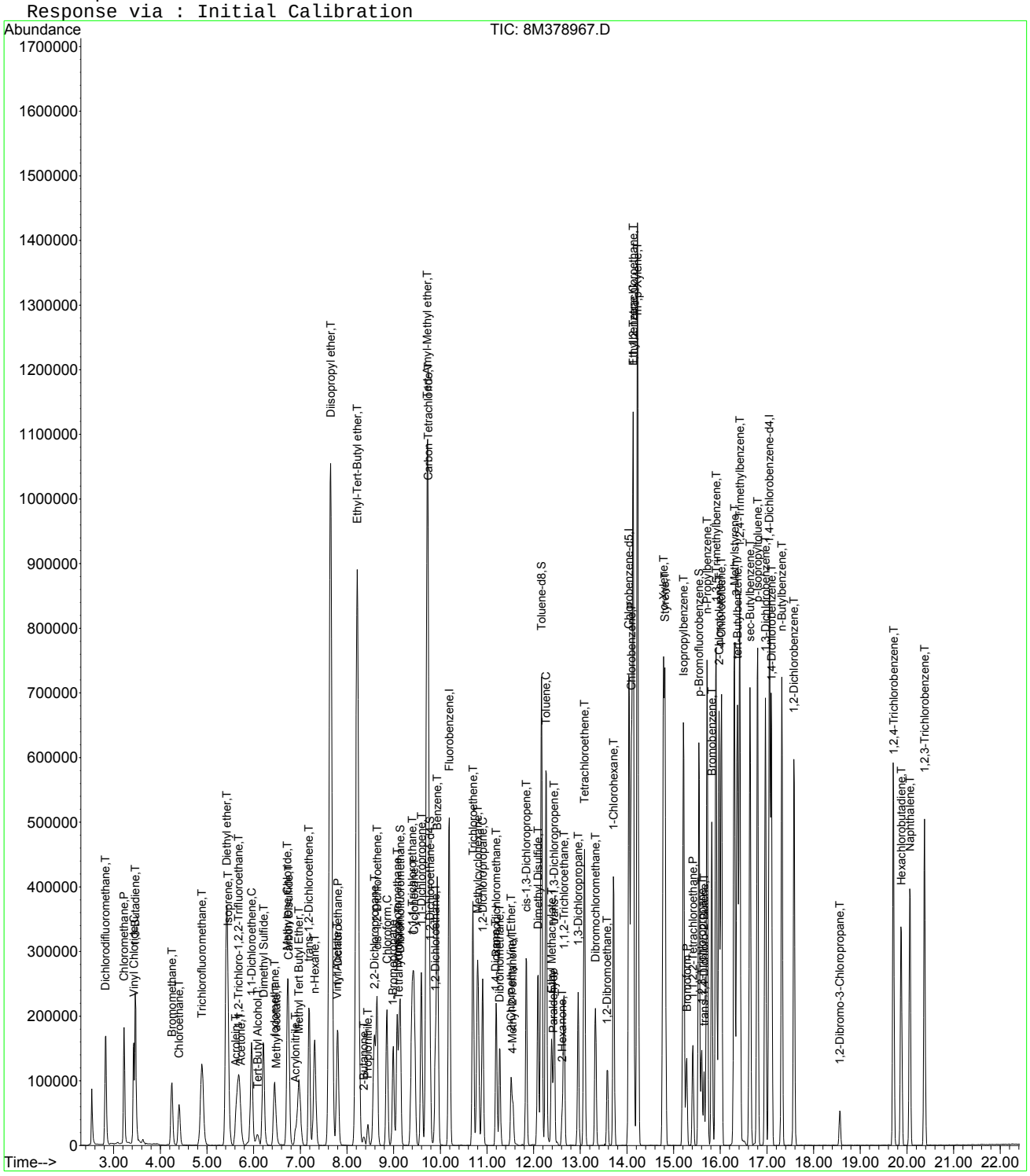
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
46)	Benzene	9.94	78	506488	19.5755	ug/L	98
47)	Trichloroethene	10.70	130	183218	21.4203	ug/L	99
48)	Methylcyclohexane	10.80	83	188395	19.0570	ug/L	98
49)	1,2-Dichloropropane	10.91	63	120686	19.1711	ug/L	89
50)	Bromodichloromethane	11.20	83	179769	22.1377	ug/L	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: L12050171
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: Recoveries out of range were observed for the following analytes: Methane. Please see the applicable QC report for a detailed presentation of the failures.

SAMPLES

Samples: Samples 01, 07, required dilution analyses.

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: 46164
Approved By: Michael Albertson



Certificate of Analysis

Sample #: L12050171-01 **PrePrep Method:** N/A **Instrument:** HP16
Client ID: MW-12-050412 **Prep Method:** 5021 **Prep Date:** N/A
Matrix: Water **Analytical Method:** RSK175 **Cal Date:** 04/30/2012 15:04
Workgroup #: WG397366 **Analyst:** FJB **Run Date:** 05/08/2012 18:51
Collect Date: 05/04/2012 10:30 **Dilution:** 1 **File ID:** 16G32334
Sample Tag: 01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	4730	E	5.00	1.00
Carbon Dioxide	124-38-9	46600		10000	2500

E	Semiquantitative result (out of calibration range)

Sample #: L12050171-01 **PrePrep Method:** N/A **Instrument:** HP16
Client ID: MW-12-050412 **Prep Method:** 5021 **Prep Date:** N/A
Matrix: Water **Analytical Method:** RSK175 **Cal Date:** 04/30/2012 15:04
Workgroup #: WG397514 **Analyst:** MDA **Run Date:** 05/09/2012 15:51
Collect Date: 05/04/2012 10:30 **Dilution:** 20 **File ID:** 16G32365
Sample Tag: DL01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	4180		100	20.0
Carbon Dioxide	124-38-9	52200		200000	50000

Sample #: L12050171-03 **PrePrep Method:** N/A **Instrument:** HP16
Client ID: MW-12-050412 **Prep Method:** 5021 **Prep Date:** N/A
Matrix: Water **Analytical Method:** RSK175 **Cal Date:** 04/30/2012 15:04
Workgroup #: WG397366 **Analyst:** FJB **Run Date:** 05/08/2012 19:00
Collect Date: 05/04/2012 10:30 **Dilution:** 1 **File ID:** 16G32335
Sample Tag: 01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	4710	E	5.00	1.00
Carbon Dioxide	124-38-9	61300		10000	2500

E	Semiquantitative result (out of calibration range)

Certificate of Analysis

Sample #: L12050171-05 **PrePrep Method:** N/A **Instrument:** HP16
Client ID: MW-12-050412 **Prep Method:** 5021 **Prep Date:** N/A
Matrix: Water **Analytical Method:** RSK175 **Cal Date:** 04/30/2012 15:04
Workgroup #: WG397366 **Analyst:** FJB **Run Date:** 05/08/2012 19:09
Collect Date: 05/04/2012 10:30 **Dilution:** 1 **File ID:** 16G32336
Sample Tag: 01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	4710	E	5.00	1.00
Carbon Dioxide	124-38-9	68800		10000	2500

E	Semiquantitative result (out of calibration range)

Sample #: L12050171-07 **PrePrep Method:** N/A **Instrument:** HP16
Client ID: PZ-01-050412 **Prep Method:** 5021 **Prep Date:** N/A
Matrix: Water **Analytical Method:** RSK175 **Cal Date:** 04/30/2012 15:04
Workgroup #: WG397366 **Analyst:** FJB **Run Date:** 05/08/2012 19:28
Collect Date: 05/04/2012 12:07 **Dilution:** 1 **File ID:** 16G32338
Sample Tag: 01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	2450	E	5.00	1.00
Carbon Dioxide	124-38-9	55900		10000	2500

E	Semiquantitative result (out of calibration range)

Sample #: L12050171-07 **PrePrep Method:** N/A **Instrument:** HP16
Client ID: PZ-01-050412 **Prep Method:** 5021 **Prep Date:** N/A
Matrix: Water **Analytical Method:** RSK175 **Cal Date:** 04/30/2012 15:04
Workgroup #: WG397514 **Analyst:** MDA **Run Date:** 05/09/2012 16:00
Collect Date: 05/04/2012 12:07 **Dilution:** 20 **File ID:** 16G32366
Sample Tag: DL01 **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
Methane	74-82-8	4470		100	20.0
Carbon Dioxide	124-38-9	95800		200000	50000

2.1.2.2 QC Summary Data

RSK-175 - Example Calculation for Methane

1.0 Linear Calibration Models

Option A - Average RF Method

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

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

Option B - Agilent Linear Regression Constant

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

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

2.0 Calculate the concentration in extract, Cx

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

3.0 Calculate the concentration in sample

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

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

RSK-175 - Example Calculation for Carbon Dioxide

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

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

Step 1 - Calculate the concentration in extract, Cx

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

Step 2 - Calculate the concentration in sample

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

Where:

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

Other Notes:

Temperature of headspace = 40 C = 313 K

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

Microbac Laboratories Inc.

Instrument Run Log

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

Maintenance Log ID:

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

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

Comments: files 16G63290 and 16G32099 not used

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

Approved: May 01, 2012



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Microbac Laboratories Inc.

Instrument Run Log

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

Maintenance Log ID:

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

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

Comments: files 16G63290 and 16G32099 not used

Comments

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

Approved: May 01, 2012

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Microbac Laboratories Inc.

Instrument Run Log

Instrument: HP16 Dataset: 050812
Analyst1: FJB Analyst2: NA
Method: RSK175 SOP: RSK01 Rev: 16
Method: 5021 SOP: RSK01 Rev: 16

Maintenance Log ID: 41645

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

Column 1 ID: RTQBOND Column 2 ID: RTQBOND
Workgroups: WG397365, WG397366

Comments:

File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
16G32300	WG397364-01 133umol/mol CCV RSK175	NA	1	1	STD38726	05/08/12 13:41
16G32301	WG397365-01 BLANK RSK175	NA	1	1		05/08/12 13:52
16G32302	WG397365-02 67umol/mol LCS RSK175	NA	1	1	STD45308	05/08/12 14:01
16G32303	WG397365-03 67umol/mol LCSD RSK175	NA	1	1	STD45308	05/08/12 14:10
16G32304	L12050052-17 20X B RSK175 D1	4	1	20		05/08/12 14:19
16G32305	L12050051-08 B RSK175 A1	<2	1	1		05/08/12 14:28
16G32306	L12050089-01 20X B RSK175 D1	4	1	20		05/08/12 14:37
16G32307	L12050089-02 10X B RSK175 D1	<2	1	10		05/08/12 14:47
16G32308	L12050089-03 50X B RSK175 D1	<2	1	50		05/08/12 14:56
16G32309	L12050089-04 20X B RSK175 D1	<2	1	20		05/08/12 15:05
16G32310	L12050089-05 50X B RSK175 D1	<2	1	50		05/08/12 15:14
16G32311	WG397364-02 133umol/mol CCV RSK175	NA	1	1	STD38726	05/08/12 15:23
16G32312	L12050089-06 50X B RSK175 D1	<2	1	50		05/08/12 15:32
16G32313	L12050089-07 20X B RSK175 D1	<2	1	20		05/08/12 15:41
16G32314	L12050089-08 50X B RSK175 D1	<2	1	50		05/08/12 15:50
16G32315	L12050089-09 50X B RSK175 D1	5	1	50		05/08/12 15:59
16G32316	L12050089-10 20X B RSK175 D1	<2	1	20		05/08/12 16:08
16G32317	L12050089-11 50X B RSK175 D1	<2	1	50		05/08/12 16:18
16G32318	L12050089-12 10X B RSK175 D1	<2	1	10		05/08/12 16:26
16G32319	L12050089-13 10X B RSK175 D1	<2	1	10		05/08/12 16:36
16G32320	L12050089-14 50X B RSK175 D1	<2	1	50		05/08/12 16:45
16G32321	L12050151-01 10X B RSK175 D1	<2	1	10		05/08/12 16:54
16G32322	WG397364-03 133umol/mol CCV RSK175	NA	1	1	STD38726	05/08/12 17:03
16G32323	L12050151-02 10X B RSK175 D1	<2	1	10		05/08/12 17:12
16G32324	L12050151-03 10X B RSK175 D1	<2	1	10		05/08/12 17:21
16G32325	L12050151-04 50X B RSK175 D1	<2	1	50		05/08/12 17:30
16G32326	WG397364-04 133umol/mol CCV RSK175	NA	1	1	STD38726	05/08/12 17:39
16G32327	WG397366-01 BLANK RSK175	NA	1	1		05/08/12 17:48
16G32328	WG397366-02 67umol/mol LCS RSK175	NA	1	1	STD45308	05/08/12 17:57
16G32329	L12050151-05 50X B RSK175	<2	1	50		05/08/12 18:06
16G32330	L12050187-01 A RSK175	<2	1	1		05/08/12 18:15
16G32331	L12050195-01 A RSK175	<2	1	1		05/08/12 18:24
16G32332	L12050203-01 A RSK175	<2	1	1		05/08/12 18:33
16G32333	L12050208-01 A RSK175	<2	1	1		05/08/12 18:42

Approved: May 09, 2012

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Microbac Laboratories Inc.

Instrument Run Log

Instrument: HP16 Dataset: 050812
Analyst1: FJB Analyst2: NA
Method: RSK175 SOP: RSK01 Rev: 16
Method: 5021 SOP: RSK01 Rev: 16

Maintenance Log ID: 41645

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

Column 1 ID: RTQBOND Column 2 ID: RTQBOND
Workgroups: WG397365, WG397366

Comments:

File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
16G32334	L12050171-01 REF A RSK175	7	1	1		05/08/12 18:51
16G32335	L12050171-03 MS A RSK175	7	1	1	STD45308	05/08/12 19:00
16G32336	L12050171-05 MSD A RSK175	7	1	1	STD45308	05/08/12 19:09
16G32337	WG397364-05 133umol/mol CCV RSK175	NA	1	1	STD38726	05/08/12 19:18
16G32338	L12050171-07 A RSK175	7	1	1		05/08/12 19:28
16G32339	L12050210-01 A RSK175	<2	1	1		05/08/12 19:37
16G32340	L12050210-02 A RSK175	<2	1	1		05/08/12 19:46
16G32341	L12050210-03 A RSK175	<2	1	1		05/08/12 19:55
16G32342	L12050210-04 A RSK175	<2	1	1		05/08/12 20:04
16G32343	L12050210-05 A RSK175	<2	1	1		05/08/12 20:13
16G32344	L12050210-06 A RSK175	<2	1	1		05/08/12 20:23
16G32345	L12050210-07 A RSK175	<2	1	1		05/08/12 20:32
16G32346	L12050151-06 20X A RSK175	<2	1	20		05/08/12 20:42
16G32347	L12050151-07 10X A RSK175	<2	1	10		05/08/12 20:51
16G32348	WG397364-06 133umol/mol CCV RSK175	NA	1	1	STD38726	05/08/12 21:00
16G32349	L12050151-08 10X A RSK175	<2	1	10		05/08/12 21:10
16G32350	L12050151-09 10X A RSK175	<2	1	10		05/08/12 21:19
16G32351	WG397364-07 133umol/mol CCV RSK175	NA	1	1	STD38726	05/08/12 21:28

Comments

Seq.	Rerun	Dil.	Reason	Analytes
53				
File ID: 16G32334				
			rr 20x methane	
39				
File ID: 16G32338				
			rr 10x methane	
40				
File ID: 16G32339				
			dnr rr st	
48				
File ID: 16G32347				
			rr 50x methane	
50				

Approved: May 09, 2012

Page: 2

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HP16 Dataset: 050812
Analyst1: FJB Analyst2: NA
Method: RSK175 SOP: RSK01 Rev: 16
Method: 5021 SOP: RSK01 Rev: 16

Maintenance Log ID: 41645

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

Column 1 ID: RTQBOND Column 2 ID: RTQBOND
Workgroups: WG397365, WG397366

Comments:

Comments

Seq.	Rerun	Dil.	Reason	Analytes
File ID: 16G32349				
	rr 50x methane			
51				
File ID: 16G32350				
	rr 50x methane			

Approved: May 09, 2012

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HP16 Dataset: 050912
Analyst1: MDA Analyst2: NA
Method: RSK175 SOP: RSK01 Rev: 16
Method: 5021 SOP: RSK01 Rev: 16

Maintenance Log ID: 41659

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

Column 1 ID: RTQBOND Column 2 ID: RTQBOND
Workgroups: WG397514, WG397528

Comments: samples in WG397528 need reanalyzed due to failing ccv

File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
16G32352	WG397513-01 133umol/mol CCV RSK175	NA	1	1	STD38726	05/09/12 13:51
16G32353	WG397514-01 BLANK RSK175	NA	1	1		05/09/12 14:01
16G32354	WG397514-02 67umol/mol LCS RSK175	NA	1	1	STD45308	05/09/12 14:10
16G32355	WG397514-03 67umol/mol LCSD RSK175	NA	1	1	STD45308	05/09/12 14:19
16G32356	L12050151-07 B 50X RSK175EXT	<2	1	50		05/09/12 14:28
16G32357	L12050151-08 B 50X RSK175EXT	<2	1	50		05/09/12 14:37
16G32358	L12050151-09 B 50X RSK175EXT	<2	1	50		05/09/12 14:46
16G32359	L12050151-10 A 20X RSK175EXT	<2	1	20		05/09/12 14:56
16G32360	L12050151-11 A 20X RSK175EXT	<2	1	20		05/09/12 15:05
16G32361	L12050151-12 A 20X RSK175EXT	<2	1	20		05/09/12 15:14
16G32362	L12050151-13 A 20X RSK175EXT	<2	1	20		05/09/12 15:23
16G32363	WG397513-02 133umol/mol CCV RSK175	NA	1	1		05/09/12 15:33
16G32364	L12050151-14 A 20X RSK175EXT	<2	1	20		05/09/12 15:42
16G32365	L12050171-01 B 20X RSK175EXT	<2	1	20		05/09/12 15:51
16G32366	L12050171-07 B 20X RSK175EXT	<2	1	20		05/09/12 16:00
16G32367	L12050245-04 A RSK175	<2	1	1		05/09/12 16:09
16G32368	L12050245-12 A RSK175	<2	1	1		05/09/12 16:18
16G32369	L12050245-14 A RSK175	<2	1	1		05/09/12 16:28
16G32370	L12050226-05 A RSK175	7	1	1		05/09/12 16:37
16G32371	L12050226-03 A RSK175	7	1	1		05/09/12 16:46
16G32372	L12050226-01 A RSK175	7	1	1		05/09/12 16:56
16G32373	L12050226-07 A RSK175	7	1	1		05/09/12 17:05
16G32374	WG397513-03 133umol/mol CCV RSK175	NA	1	1	STD38726	05/09/12 17:14
16G32375	L12050210-01 B RSK175	<2	1	1		05/09/12 17:23
16G32376	L12050257-01 A RSK175	<2	1	1		05/09/12 17:32
16G32377	L12050257-03 A RSK175	<2	1	1		05/09/12 17:42
16G32378	WG397513-04 133umol/mol CCV RSK175	NA	1	1	STD38726	05/09/12 17:51
16G32379	WG397528-01 BLANK RSK175	NA	1	1		05/09/12 18:00
16G32380	WG397528-02 67umol/mol LCS RSK175	NA	1	1	STD45308	05/09/12 18:10
16G32381	WG397528-03 67umol/mol LCSD RSK175	NA	1	1	STD45308	05/09/12 18:19
16G32382	L12050257-05 A RSK175	<2	1	1		05/09/12 18:28
16G32383	L12050257-07 A RSK175	<2	1	1		05/09/12 18:37
16G32384	L12050257-09 A RSK175	<2	1	1		05/09/12 18:47
16G32385	L12050257-11 A RSK175	<2	1	1		05/09/12 18:56

Approved: May 10, 2012



Microbac

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HP16 Dataset: 050912
Analyst1: MDA Analyst2: NA
Method: RSK175 SOP: RSK01 Rev: 16
Method: 5021 SOP: RSK01 Rev: 16

Maintenance Log ID: 41659

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

Column 1 ID: RTQBOND Column 2 ID: RTQBOND
Workgroups: WG397514, WG397528

Comments: samples in WG397528 need reanalyzed due to failing ccv

File ID	Sample Information	pH	Mat	Dil	Reference	Date/Time
16G32386	L12050257-13 A RSK175	<2	1	1		05/09/12 19:06
16G32387	WG397513-05 133umol/mol CCV RSK175	NA	1	1	STD38726	05/09/12 19:15

Comments

Seq.	Rerun	Dil.	Reason	Analytes
8				
File ID: 16G32359				
	rr 5x			
9				
File ID: 16G32360				
	rr 5x			
10				
File ID: 16G32361				
	rr 5x			
11				
File ID: 16G32362				
	rr 5x			
16				
File ID: 16G32367				
	rr 100x			
17				
File ID: 16G32368				
	rr			
18				
File ID: 16G32369				
	rr 100x			
19				
File ID: 16G32370				
	rr			
20				
File ID: 16G32371				
	rr			
21				
File ID: 16G32372				
	rr 20x			
22				

Approved: May 10, 2012

Page: 2

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HP16 Dataset: 050912
Analyst1: MDA Analyst2: NA
Method: RSK175 SOP: RSK01 Rev: 16
Method: 5021 SOP: RSK01 Rev: 16

Maintenance Log ID: 41659

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

Column 1 ID: RTQBOND Column 2 ID: RTQBOND
Workgroups: WG397514, WG397528

Comments: samples in WG397528 need reanalyzed due to failing ccv

Comments

Seq.	Rerun	Dil.	Reason	Analytes
File ID: 16G32373				
	rr			
25				
File ID: 16G32376				
	rr 20x			
26				
File ID: 16G32377				
	rr			

Approved: May 10, 2012

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 #: B154426

	Initial Amount		Nominal Amount		Spike Amount		Surrogate Spike Amount		Final Amount		Final Nominal Amount		Temp (C)
WG397364-01	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397364-02	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397364-03	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397364-04	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397364-05	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397364-06	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397364-07	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050089-07	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050171-03	15	mL	15	mL	.1	mL			5.47	mL	5.47	mL	40
L12050171-07	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050089-09	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050052-17	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050187-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050195-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050210-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050210-06	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397365-01	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397365-02	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
L12050089-13	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050151-03	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050151-05	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050203-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050171-05	15	mL	15	mL	.1	mL			5.47	mL	5.47	mL	40
L12050210-04	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050089-03	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050089-06	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050089-14	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050151-04	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397366-03	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050210-02	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050210-03	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050089-05	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050151-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050210-05	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050210-07	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050151-06	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397365-03	15	mL	15	mL	.1	mL			5.47	mL	5.47	mL	40
L12050208-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050171-01	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397366-04	15	mL	15	mL	.1	mL			5.47	mL	5.47	mL	40
L12050151-08	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050151-09	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050089-02	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050089-04	15	mL	15	mL					5.47	mL	5.47	mL	40

Batch #: B154426

L12050151-07	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050089-10	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050089-11	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
WG397366-01	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397366-05	15	mL	15	mL	.1	mL			5.47	mL	5.47	mL	40
L12050051-08	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050089-08	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397366-02	15	mL	15	mL	.1	mL			5.47	mL	5.47	mL	40

Microbac Laboratories Inc.
UPLOAD BATCH EXTRACTION INFORMATION

Batch #: B154457

	Initial Amount		Nominal Amount		Spike Amount		Surrogate Spike Amount		Final Amount		Final Nominal Amount		Temp (C)
WG397513-01	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397513-02	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397513-03	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397513-04	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397513-05	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050151-14	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050171-07	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050226-05	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397528-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050257-13	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050151-10	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050151-13	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050257-11	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050151-11	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050210-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050257-03	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397514-03	15	mL	15	mL	.1	mL			5.47	mL	5.47	mL	40
WG397366-03	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050245-12	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050226-03	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050226-01	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397514-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050226-07	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397528-02	15	mL	15	mL	.1	mL			5.47	mL	5.47	mL	40
L12050257-09	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050151-08	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050171-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050245-14	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050257-01	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050151-07	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050151-12	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397514-02	15	mL	15	mL	.1	mL			5.47	mL	5.47	mL	40
L12050257-07	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050257-05	15	mL	15	mL					5.47	mL	5.47	mL	40
WG397528-03	15	mL	15	mL	.1	mL			5.47	mL	5.47	mL	40
L12050151-09	15	mL	15	mL					5.47	mL	5.47	mL	40
L12050245-04	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: 08-MAY-2012
Analyst: FJB
Analyst: NA
Method: RSK175
Instrument: HP16
Curve Workgroup: NA
Runlog ID: 46633
Analytical Workgroups: WG397365, WG397366

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	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	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:
09-MAY-2012

Secondary Reviewer:
09-MAY-2012

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-09-2012 11:07:48

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: RSK175 **AAB#:** WG397366

Login Number: L12050171

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-12-050412	01	05/04/12							7		05/08/12	4.3	7	
MW-12-050412	03	05/04/12							7		05/08/12	4.4	7	
MW-12-050412	05	05/04/12							7		05/08/12	4.4	7	
PZ-01-050412	07	05/04/12							7		05/08/12	4.3	7	

*** = SEE PROJECT QAPP REQUIREMENTS**

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2407009
Report generated 05/11/2012 08:08

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: RSK175 **AAB#:** WG397514

Login Number: L12050171

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-12-050412	01	05/04/12							7		05/09/12	5.2	7	
PZ-01-050412	07	05/04/12							7		05/09/12	5.2	7	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2407009
Report generated 05/11/2012 08:08

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12050171
Blank File ID: 16G32327
Prep Date: 05/08/12 17:48
Analyzed Date: 05/08/12 17:48
Analyst: FJB

Work Group: WG397366
Blank Sample ID: WG397366-01
Instrument ID: HP16
Method: RSK175

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG397366-02	16G32328	05/08/12 17:57	01
MW-12-050412	L12050171-01	16G32334	05/08/12 18:51	01
MW-12-050412	L12050171-03	16G32335	05/08/12 19:00	01
MW-12-050412	L12050171-05	16G32336	05/08/12 19:09	01
PZ-01-050412	L12050171-07	16G32338	05/08/12 19:28	01

Report Name: BLANK_SUMMARY
PDF File ID: 2410507
Report generated 05/11/2012 08:08

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number:	L12050171	Work Group:	WG397514
Blank File ID:	16G32353	Blank Sample ID:	WG397514-01
Prep Date:	05/09/12 14:01	Instrument ID:	HP16
Analyzed Date:	05/09/12 14:01	Method:	RSK175
Analyst:	MDA		

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG397514-02	16G32354	05/09/12 14:10	01
LCS2	WG397514-03	16G32355	05/09/12 14:19	01
MW-12-050412	L12050171-01	16G32365	05/09/12 15:51	DL01
PZ-01-050412	L12050171-07	16G32366	05/09/12 16:00	DL01

Report Name: BLANK_SUMMARY
PDF File ID: 2410507
Report generated 05/11/2012 08:08

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050171 Prep Date: 05/08/12 17:48 Sample ID: WG397366-01
Instrument ID: HP16 Run Date: 05/08/12 17:48 Prep Method: 5021
File ID: 16G32327 Analyst: FJB Method: RSK175
Workgroup (AAB#): WG397366 Matrix: Water Units: ug/L
Contract #: Cal ID: HP16-30-APR-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
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: 2407010
11-MAY-2012 08:08

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050171 Prep Date: 05/09/12 14:01 Sample ID: WG397514-01
Instrument ID: HP16 Run Date: 05/09/12 14:01 Prep Method: 5021
File ID: 16G32353 Analyst: MDA Method: RSK175
Workgroup (AAB#): WG397514 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

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: 2407010
11-MAY-2012 08:08

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050171 **Run Date:** 05/08/2012 **Sample ID:** WG397366-02
Instrument ID: HP16 **Run Time:** 17:57 **Prep Method:** 5021
File ID: 16G32328 **Analyst:** FJB **Method:** RSK175
Workgroup (AAB#): WG397366 **Matrix:** Water **Units:** ug/L
QC Key: WATERLOO **Lot#:** STD45308 **Cal ID:** HP16 - 30-APR-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Carbon Dioxide	31300	23700	75.5	10 - 200	

LCS - Modified 03/06/2008
PDF File ID: 2407002
Report generated: 05/09/2012 11:29

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050171 **Analyst:** MDA **Prep Method:** 5021
Instrument ID: HP16 **Matrix:** Water **Method:** RSK175
Workgroup (AAB#): WG397514 **Units:** ug/L
QC Key: WATERLOO **Lot #:** STD45308

Sample ID: WG397514-02 LCS **File ID:** 16G32354 **Run Date:** 05/09/2012 14:10
Sample ID: WG397514-03 LCS2 **File ID:** 16G32355 **Run Date:** 05/09/2012 14:19

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Methane	116	108	92.9	116	102	87.3	6.17	56 - 140	40	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 2410508
Report generated: 05/11/2012 08:08

Microbac Laboratories Inc.

MS/MSD REPORT

Loginnum:L12050171 Cal ID:HP16- 30-APR-12 Worknum:WG397366

Instrument ID:HP16 Contract #: Prep Method:5021

Parent ID:L12050171-01 File ID:16G32334 Dil:1 Method:RSK175

Sample ID:L12050171-03 MS File ID:16G32335 Dil:1 Matrix:Water

Sample ID:L12050171-05 MSD File ID:16G32336 Dil:1 Units:ug/L

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Methane	4730	116	4710	-11.7	116	4710	-15.8	0.103	56 - 140	40	*
Carbon Dioxide	46600	31300	61300	46.8	31300	68800	71	11.7	10 - 200	40	

* FAILS %REC LIMIT

FAILS RPD LIMIT

MS_MSD - Modified 03/06/2008

PDF File ID: 2407011

Report generated 05/11/2012 08:08

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: L12050171 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: 2410509
Report generated 05/11/2012 08:08

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050171 Run Date: 05/08/2012 Sample ID: WG397364-04

Instrument ID: HP16 Run Time: 17:39 Method: RSK175

File ID: 16G32326 Analyst: FJB QC Key: WATERLOO

Workgroup (AAB#): WG397366 Cal ID: HP16 - 30-APR-12

Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
carbon dioxide		62700	62700	ug/L	5710	0.0786	30	

* Exceeds %D Criteria

CCV - Modified 03/05/2008

PDF File ID: 2407012

Report generated 05/11/2012 08:08

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050171 Run Date: 05/08/2012 Sample ID: WG397364-05
Instrument ID: HP16 Run Time: 19:18 Method: RSK175
File ID: 16G32337 Analyst: FJB QC Key: WATERLOO
Workgroup (AAB#): WG397366 Cal ID: HP16 - 30-APR-12
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
carbon dioxide		62700	52200	ug/L	4760	16.6	30	

* Exceeds %D Criteria

CCV - Modified 03/05/2008
PDF File ID: 2407012
Report generated 05/11/2012 08:08

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050171 Run Date: 05/08/2012 Sample ID: WG397364-06

Instrument ID: HP16 Run Time: 21:00 Method: RSK175

File ID: 16G32348 Analyst: FJB QC Key: WATERLOO

Workgroup (AAB#): WG397366 Cal ID: HP16 - 30-APR-12

Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
carbon dioxide		62700	51800	ug/L	4720	17.4	30	

* Exceeds %D Criteria

CCV - Modified 03/05/2008

PDF File ID: 2407012

Report generated 05/11/2012 08:08

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050171 Run Date: 05/09/2012 Sample ID: WG397513-01

Instrument ID: HP16 Run Time: 13:51 Method: RSK175

File ID: 16G32352 Analyst: MDA QC Key: WATERLOO

Workgroup (AAB#): WG397514 Cal ID: HP16 - 30-APR-12

Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
methane		228	222	ug/L	177000	2.40	20	

* Exceeds %D Criteria

CCV - Modified 03/05/2008

PDF File ID: 2407012

Report generated 05/11/2012 08:08

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050171 Run Date: 05/09/2012 Sample ID: WG397513-02

Instrument ID: HP16 Run Time: 15:33 Method: RSK175

File ID: 16G32363 Analyst: MDA QC Key: WATERLOO

Workgroup (AAB#): WG397514 Cal ID: HP16 - 30-APR-12

Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
methane		228	239	ug/L	190000	4.77	20	

* Exceeds %D Criteria

CCV - Modified 03/05/2008

PDF File ID: 2407012

Report generated 05/11/2012 08:08

2.1.2.3 Sample Data

Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\050812\16G32334.D\FID1A.CH Vial: 35
Signal #2 : C:\MSDchem\1\DATA\050812\16G32334.D\TCD2B.CH
Acq On : 08 May 2012 18:51 Operator: FJB
Sample : L12050171-01 REF A RSK175 Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 08 18:56:59 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 :

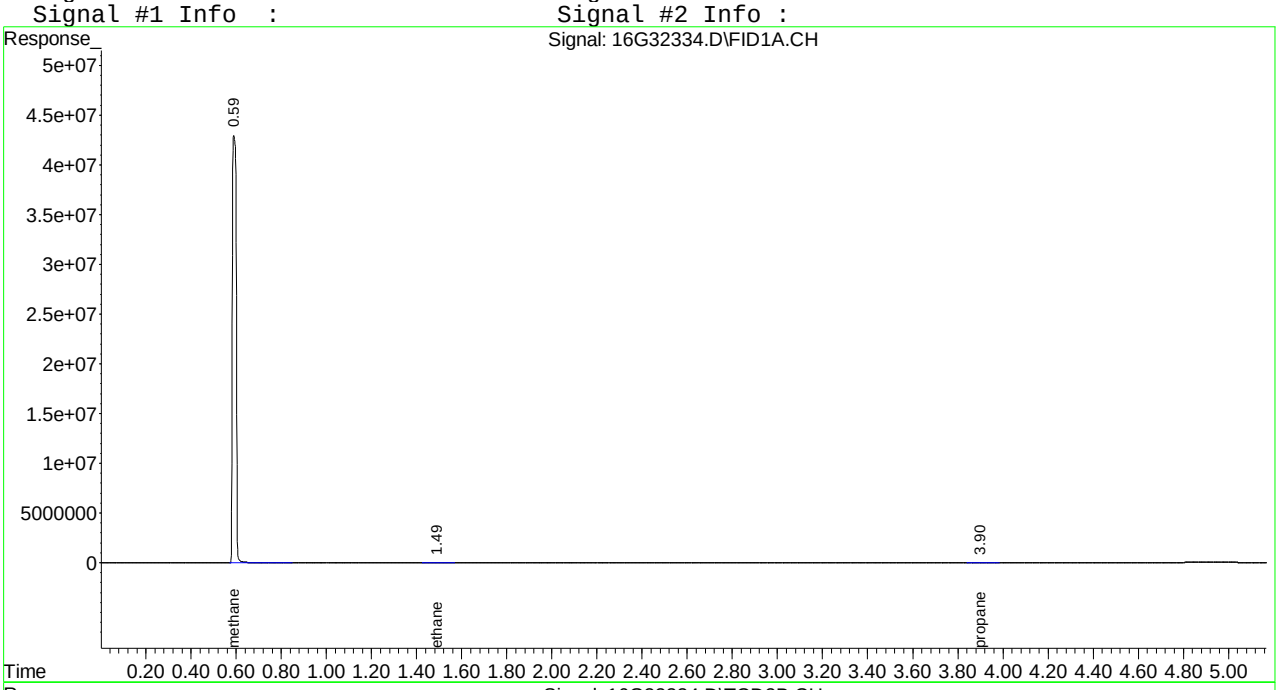
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.59	500307998	2759.089	umol/
2) T	ethene	0.00	0	N.D.	umol/
3) T	acetylene	0.00	0	N.D.	umol/
4) T	ethane	1.49	22739	0.075	umol/
5) T	propane	3.90	35355	0.081	umol/
7) T	carbon dioxide	0.20	56599003	9915.133	umol/

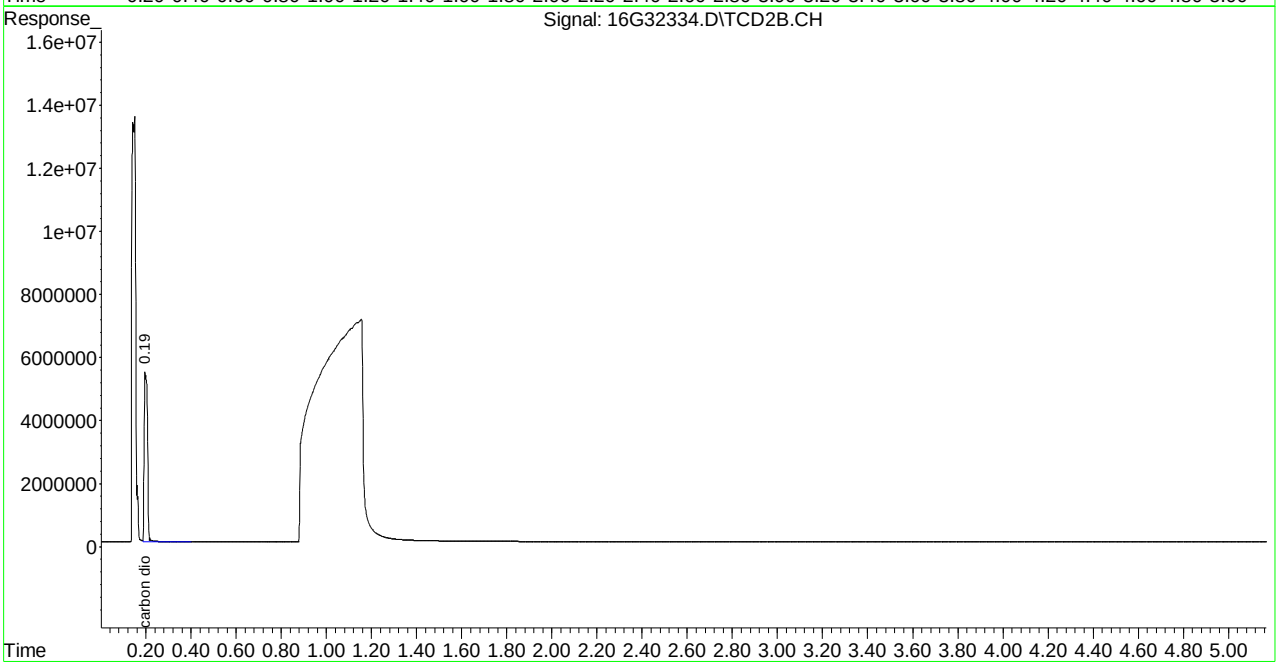
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32334.D RSK2EXT.M Tue May 08 18:56:59 2012 Page 1

Signal #1 : C:\MSDchem\1\DATA\050812\16G32334.D\FID1A.CH Vial: 35
Signal #2 : C:\MSDchem\1\DATA\050812\16G32334.D\TCD2B.CH
Acq On : 08 May 2012 18:51 Operator: FJB
Sample : L12050171-01 REF A RSK175 Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 18:56 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\050912\16G32365.D\FID1A.CH Vial: 14
Signal #2 : C:\MSDchem\1\DATA\050912\16G32365.D\TCD2B.CH
Acq On : 09 May 2012 15:51 Operator: MDA
Sample : L12050171-01 B 20X RSK175EXT Inst : HP16
Misc : 1,20 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 15:56:58 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 :

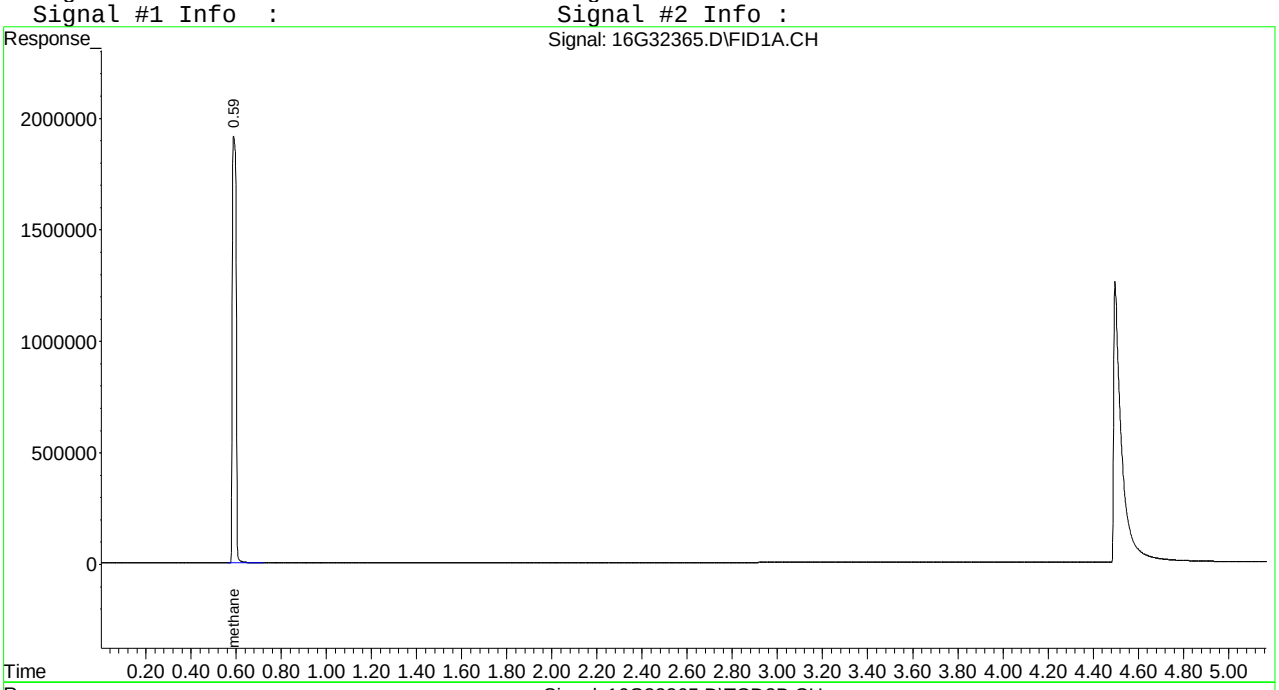
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.59	22132735	122.057	umol/
2) T	ethene	0.00	0	N.D.	umol/
3) T	acetylene	0.00	0	N.D.	umol/
4) T	ethane	0.00	0	N.D.	umol/
5) T	propane	0.00	0	N.D.	umol/
7) T	carbon dioxide	0.20	3172700	555.800	umol/

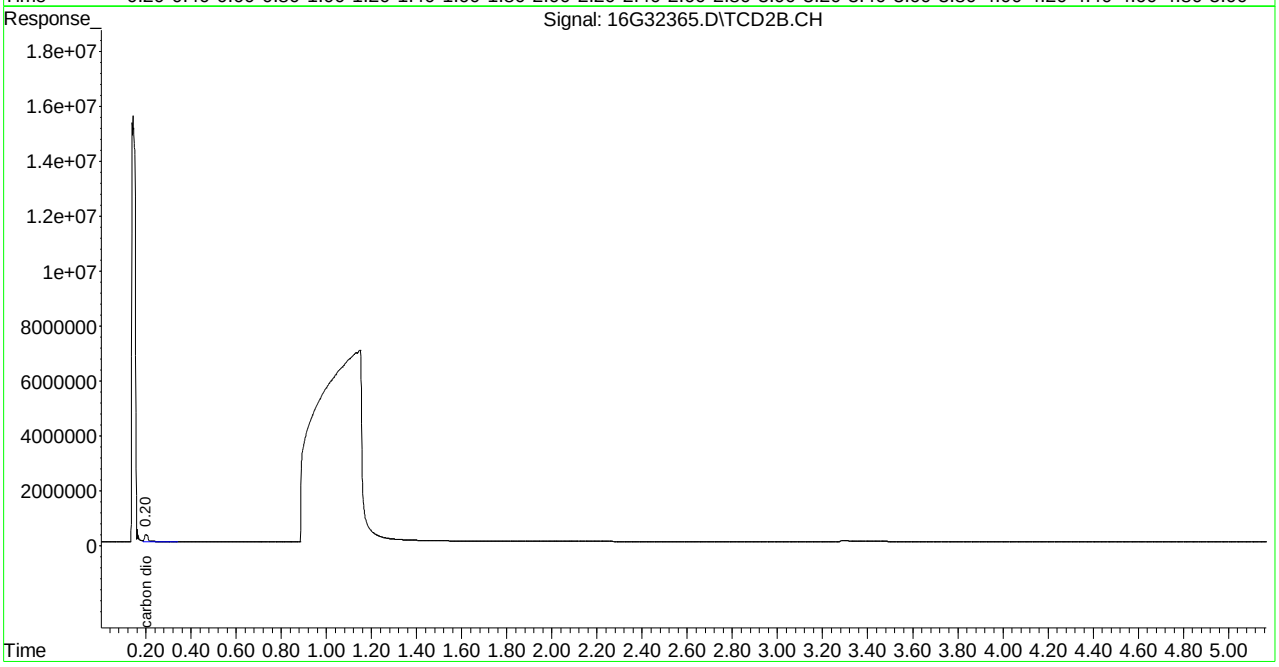
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32365.D RSK2EXT.M Wed May 09 15:56:58 2012 Page 1

Signal #1 : C:\MSDchem\1\DATA\050912\16G32365.D\FID1A.CH Vial: 14
Signal #2 : C:\MSDchem\1\DATA\050912\16G32365.D\TCD2B.CH
Acq On : 09 May 2012 15:51 Operator: MDA
Sample : L12050171-01 B 20X RSK175EXT Inst : HP16
Misc : 1,20 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 15:56 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\050812\16G32335.D\FID1A.CH Vial: 36
Signal #2 : C:\MSDchem\1\DATA\050812\16G32335.D\TCD2B.CH
Acq On : 08 May 2012 19:00 Operator: FJB
Sample : L12050171-03 MS A RSK175 Inst : HP16
Misc : 1,1 STD45308 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 08 19:06:06 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 : Initial Calibration
DataAcq Meth : RSK2EXT.M

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

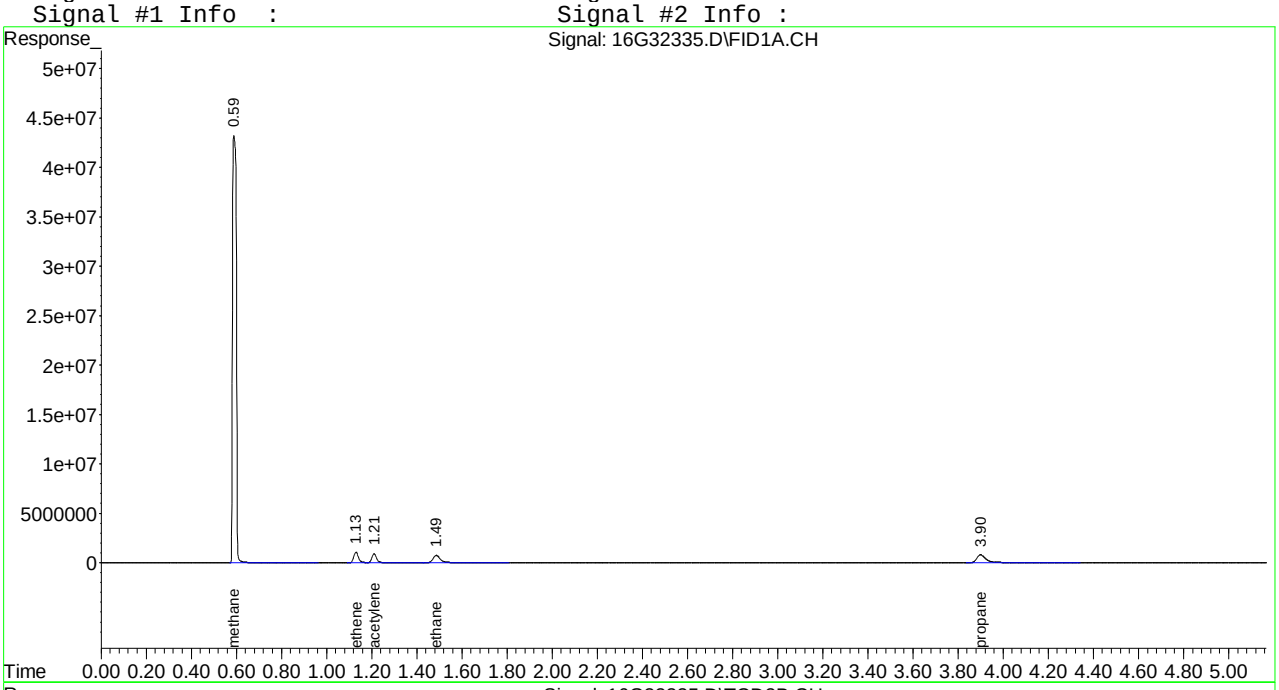
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.59	498868077	2751.149	umol/
2) T	ethene	1.13	15015858	50.659	umol/
3) T	acetylene	1.21	12918384	44.611	umol/
4) T	ethane	1.49	16115396	53.019	umol/
5) T	propane	3.90	21973719	50.068	umol/
7) T	carbon dioxide	0.20	74410413	13035.374	umol/

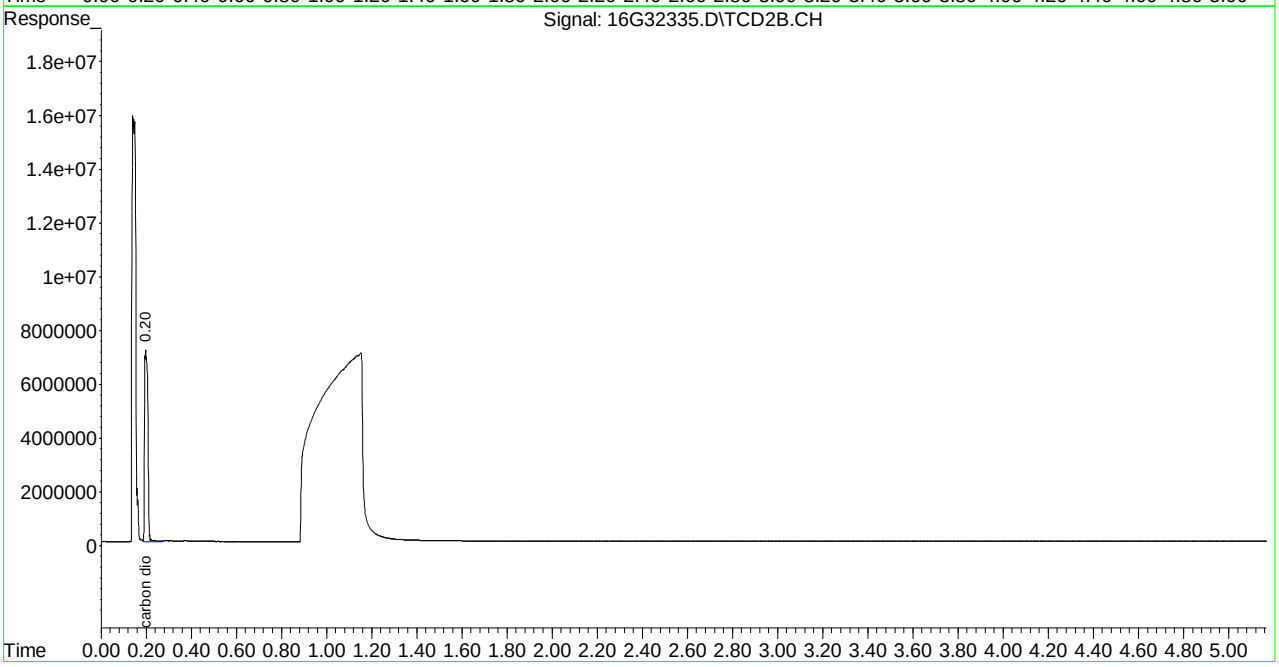
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32335.D RSK2EXT.M Tue May 08 19:06:07 2012 Page 1

Signal #1 : C:\MSDchem\1\DATA\050812\16G32335.D\FID1A.CH Vial: 36
Signal #2 : C:\MSDchem\1\DATA\050812\16G32335.D\TCD2B.CH
Acq On : 08 May 2012 19:00 Operator: FJB
Sample : L12050171-03 MS A RSK175 Inst : HP16
Misc : 1,1 STD45308 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 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 :





Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\050812\16G32336.D\FID1A.CH Vial: 37
Signal #2 : C:\MSDchem\1\DATA\050812\16G32336.D\TCD2B.CH
Acq On : 08 May 2012 19:09 Operator: FJB
Sample : L12050171-05 MSD A RSK175 Inst : HP16
Misc : 1,1 STD45308 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 08 19:15:06 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 : Initial Calibration
DataAcq Meth : RSK2EXT.M

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

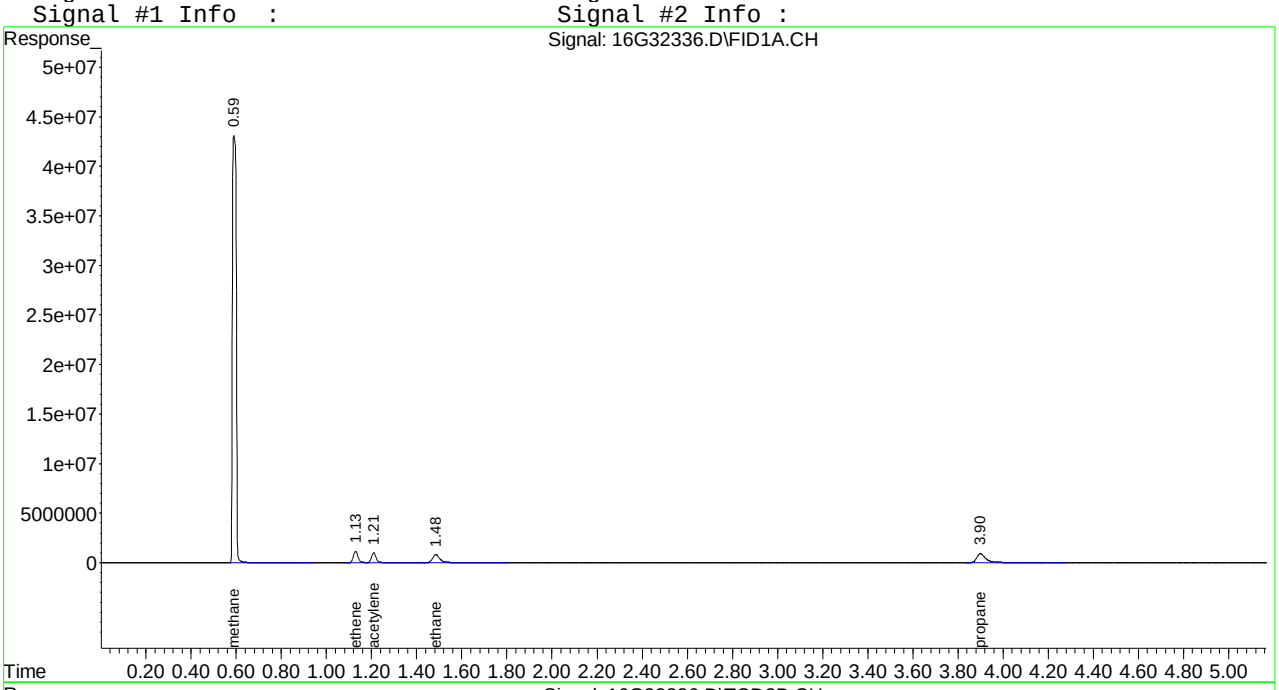
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.59	498357379	2748.332	umol/
2) T	ethene	1.13	16355399	55.178	umol/
3) T	acetylene	1.21	14068586	48.582	umol/
4) T	ethane	1.48	17643823	58.047	umol/
5) T	propane	3.90	24917515	56.776	umol/
7) T	carbon dioxide	0.20	83624799	14649.569	umol/

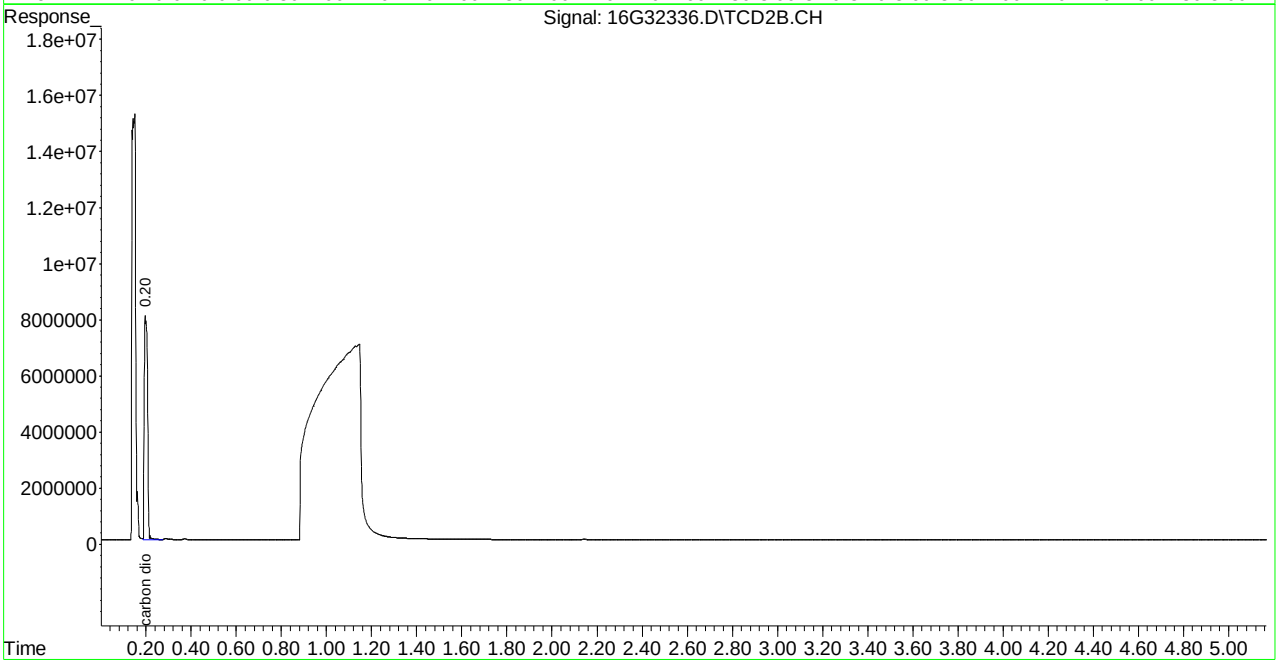
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32336.D RSK2EXT.M Tue May 08 19:15:07 2012 Page 1

Signal #1 : C:\MSDchem\1\DATA\050812\16G32336.D\FID1A.CH Vial: 37
Signal #2 : C:\MSDchem\1\DATA\050812\16G32336.D\TCD2B.CH
Acq On : 08 May 2012 19:09 Operator: FJB
Sample : L12050171-05 MSD A RSK175 Inst : HP16
Misc : 1,1 STD45308 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 19:15 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\050812\16G32338.D\FID1A.CH Vial: 39
Signal #2 : C:\MSDchem\1\DATA\050812\16G32338.D\TCD2B.CH
Acq On : 08 May 2012 19:28 Operator: FJB
Sample : L12050171-07 A RSK175 Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 08 19:33:22 2012 Quant Results File: RSK2EXT.RES

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

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

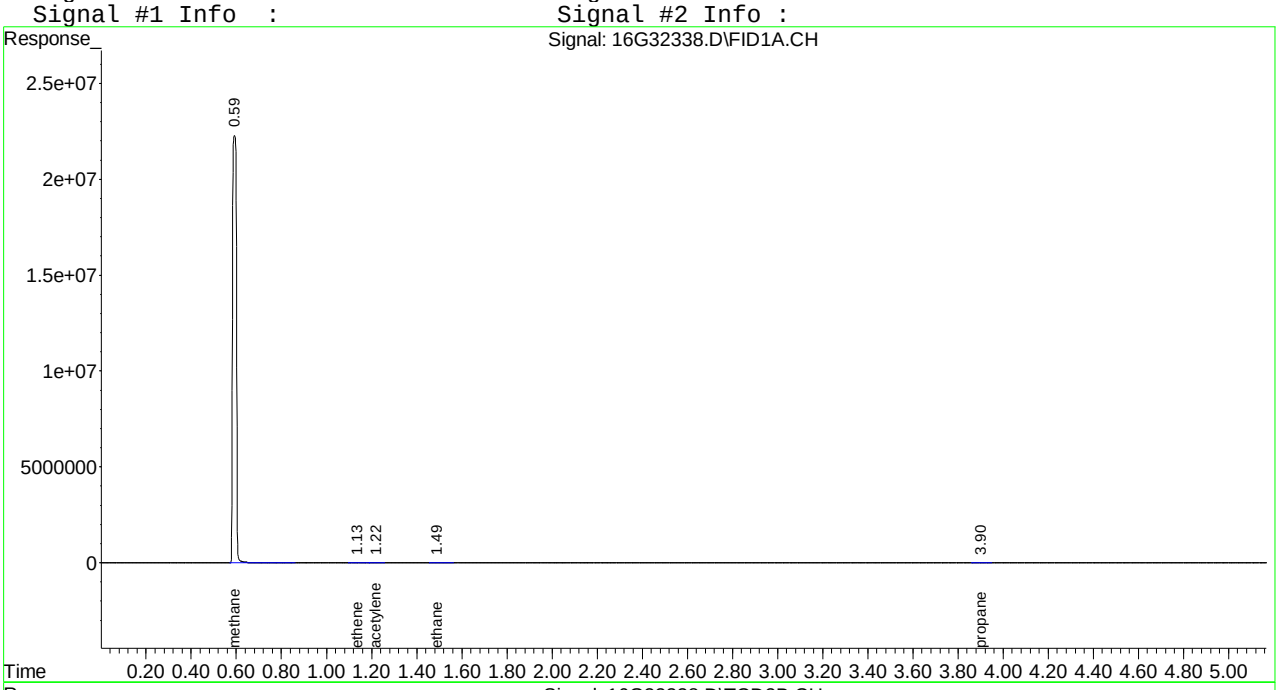
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.59	259483119	1430.993	umol/
2) T	ethene	1.13	35103	0.118	umol/
3) T	acetylene	1.22	4465	0.015	umol/
4) T	ethane	1.49	29465	0.097	umol/
5) T	propane	3.90	10227	0.023	umol/
7) T	carbon dioxide	0.20	67855792	11887.121	umol/

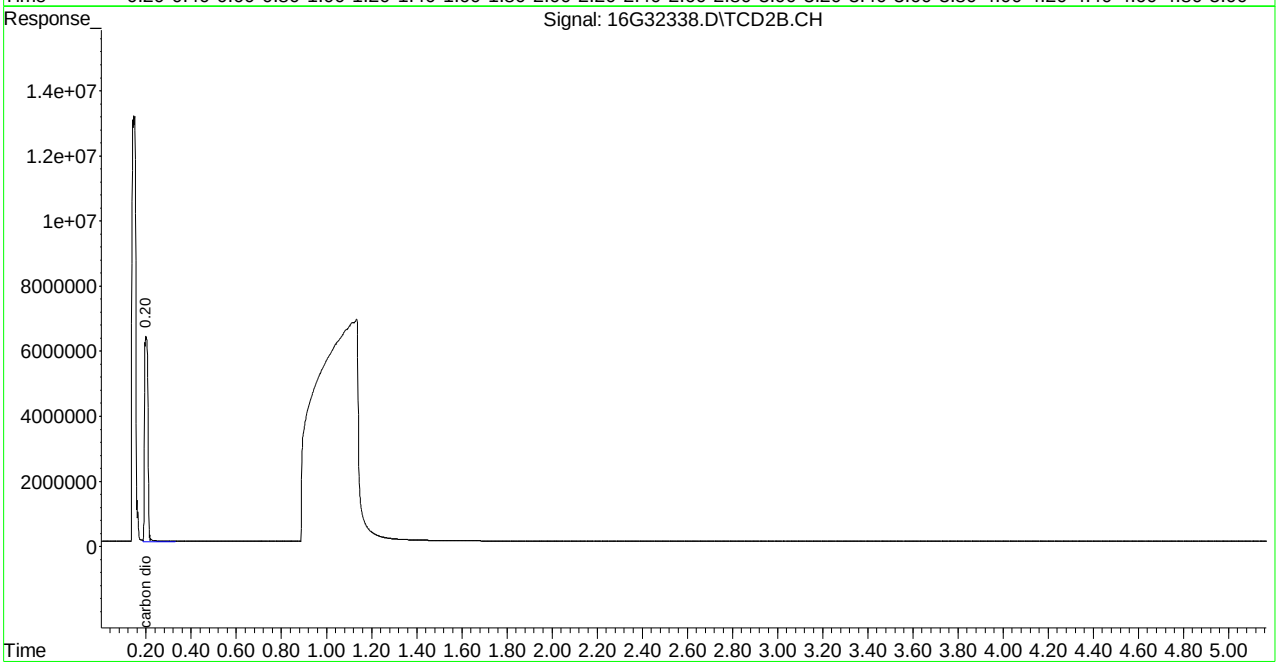
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32338.D RSK2EXT.M Tue May 08 19:33:22 2012 Page 1

Signal #1 : C:\MSDchem\1\DATA\050812\16G32338.D\FID1A.CH Vial: 39
Signal #2 : C:\MSDchem\1\DATA\050812\16G32338.D\TCD2B.CH
Acq On : 08 May 2012 19:28 Operator: FJB
Sample : L12050171-07 A RSK175 Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 19:33 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 043012
Last Update : Mon Apr 30 15:17:04 2012
Response via : 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\050912\16G32366.D\FID1A.CH Vial: 15
Signal #2 : C:\MSDchem\1\DATA\050912\16G32366.D\TCD2B.CH
Acq On : 09 May 2012 16:00 Operator: MDA
Sample : L12050171-07 B 20X RSK175EXT Inst : HP16
Misc : 1,20 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 16:06:06 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 : Initial Calibration
DataAcq Meth : RSK2EXT.M

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

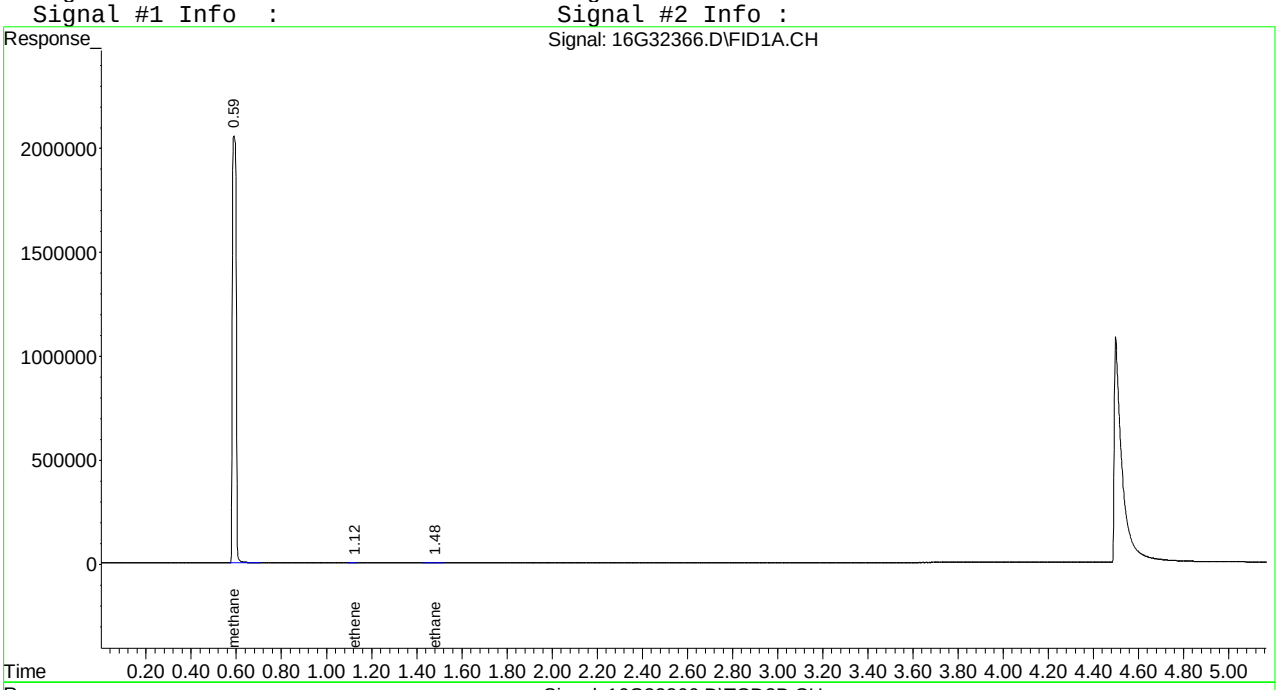
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.59	23655472	130.455	umol/
2) T	ethene	1.13	3174	0.011	umol/
3) T	acetylene	0.00	0	N.D.	umol/
4) T	ethane	1.48	4139	0.014	umol/
5) T	propane	0.00	0	N.D.	umol/
7) T	carbon dioxide	0.20	5818991	1019.383	umol/

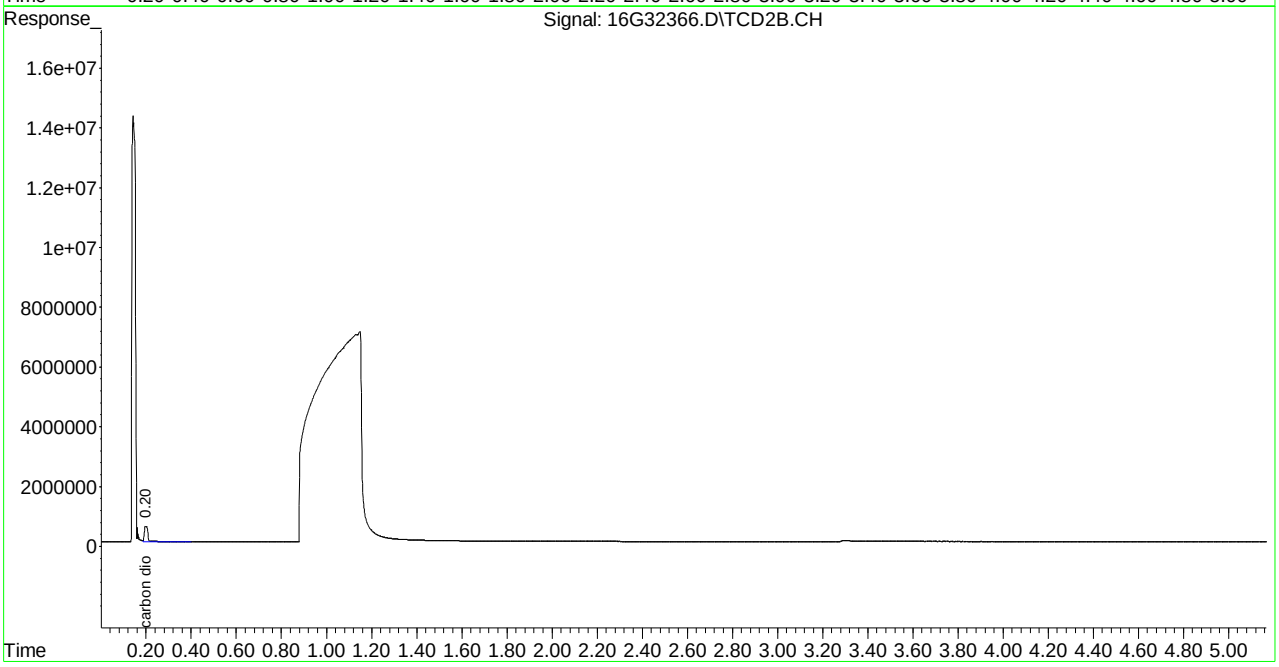
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32366.D RSK2EXT.M Wed May 09 16:06:06 2012 Page 1

Signal #1 : C:\MSDchem\1\DATA\050912\16G32366.D\FID1A.CH Vial: 15
Signal #2 : C:\MSDchem\1\DATA\050912\16G32366.D\TCD2B.CH
Acq On : 09 May 2012 16:00 Operator: MDA
Sample : L12050171-07 B 20X RSK175EXT Inst : HP16
Misc : 1,20 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 16:06 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 :

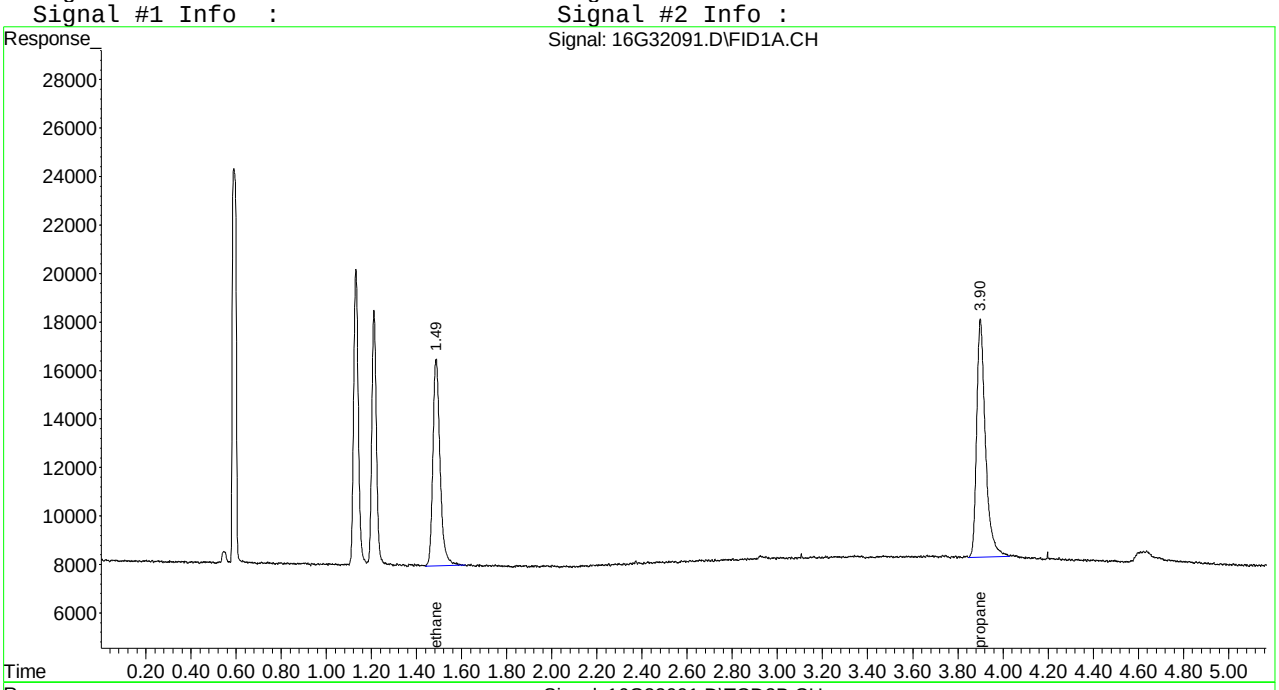
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.00	0	N.D.	umol/d
2) T	ethene	0.00	0	N.D.	umol/d
3) T	acetylene	0.00	0	N.D.	umol/d
4) T	ethane	1.49	188654	0.648	umol/
5) T	propane	3.90	265941	0.638	umol/
7) T	carbon dioxide	0.00	0	N.D.	umol/d

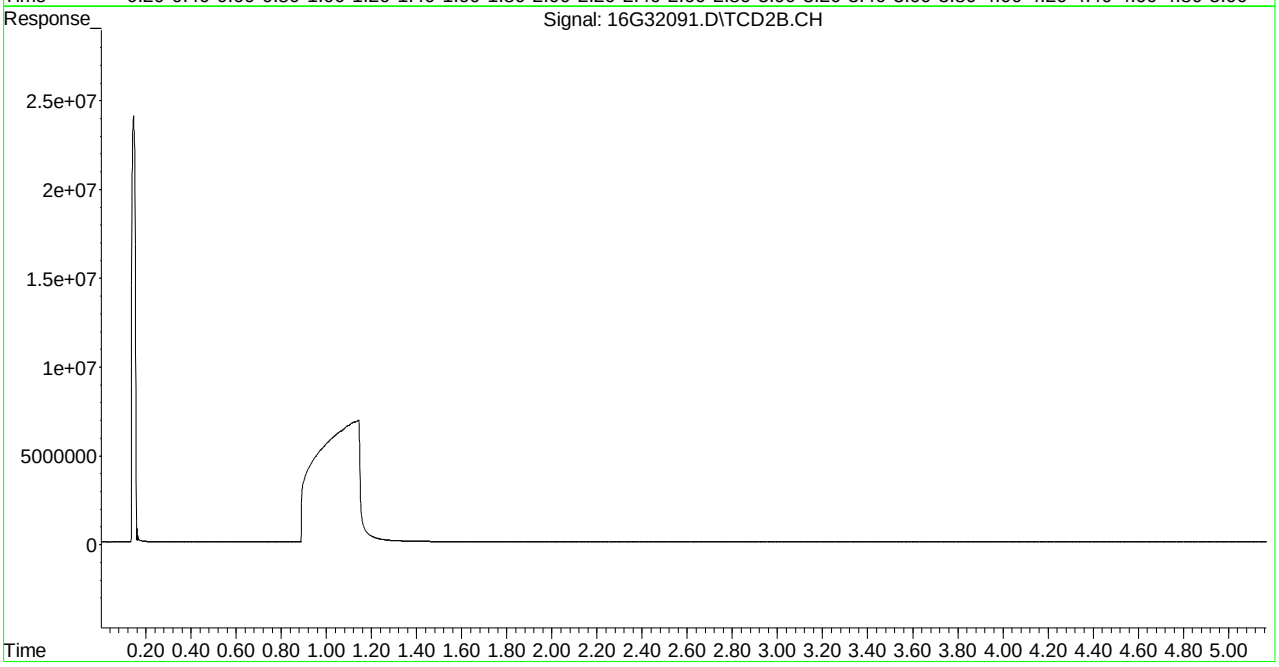
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32091.D RSK2EXT.M Mon Apr 30 14:45:33 2012 Page 1

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 :

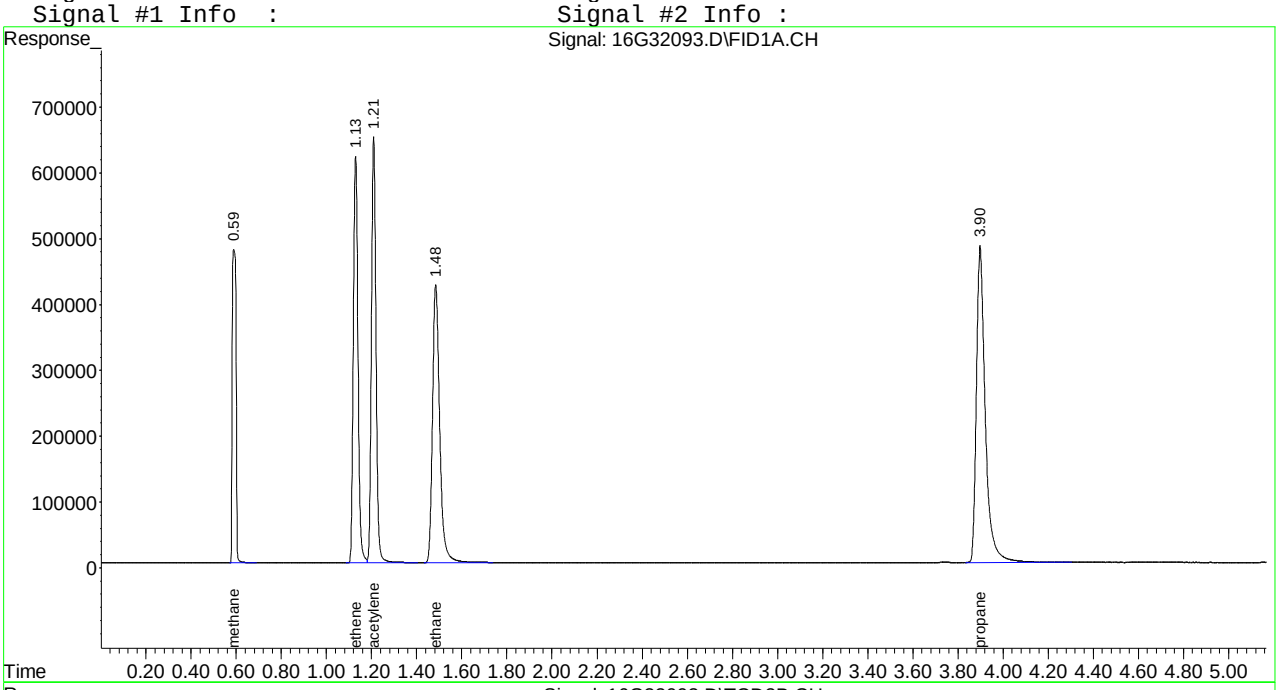
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.59	5543604	28.647	umol/
2) T	ethene	1.13	8839249	28.434	umol/
3) T	acetylene	1.21	9213469	29.702	umol/
4) T	ethane	1.48	9301672	29.165	umol/
5) T	propane	3.90	13193792	28.593	umol/
7) T	carbon dioxide	0.20	20541926	3441.116	umol/

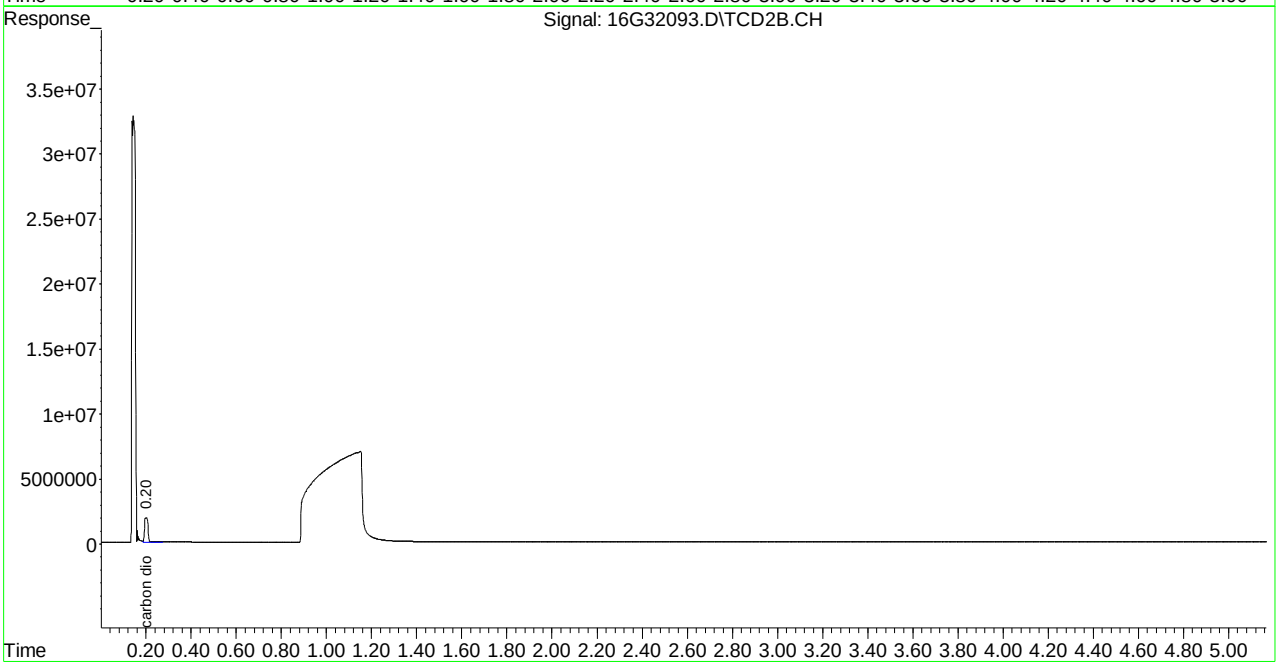
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32093.D RSK2EXT.M Mon Apr 30 14:04:00 2012 Page 1

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 :

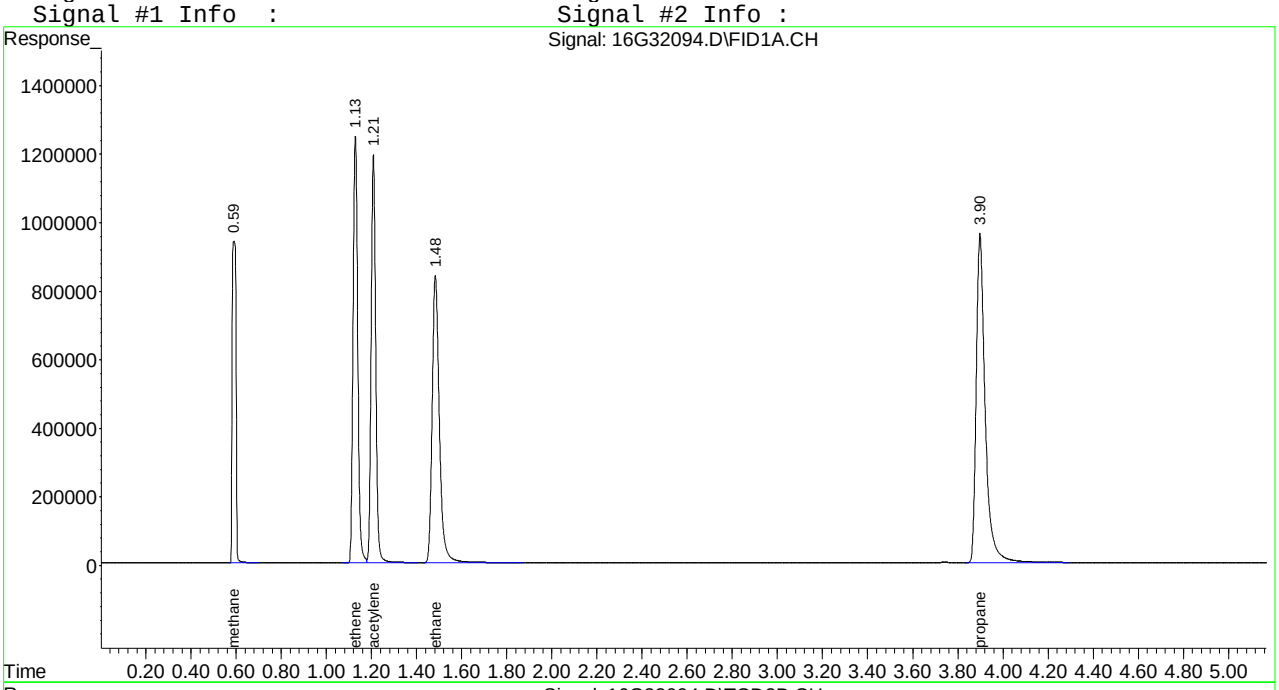
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.59	10967402	56.675	umol/
2) T	ethene	1.13	17874985	57.501	umol/
3) T	acetylene	1.21	17012722	54.845	umol/
4) T	ethane	1.48	18525237	58.085	umol/
5) T	propane	3.90	26527253	57.489	umol/
7) T	carbon dioxide	0.20	34639522	5802.700	umol/

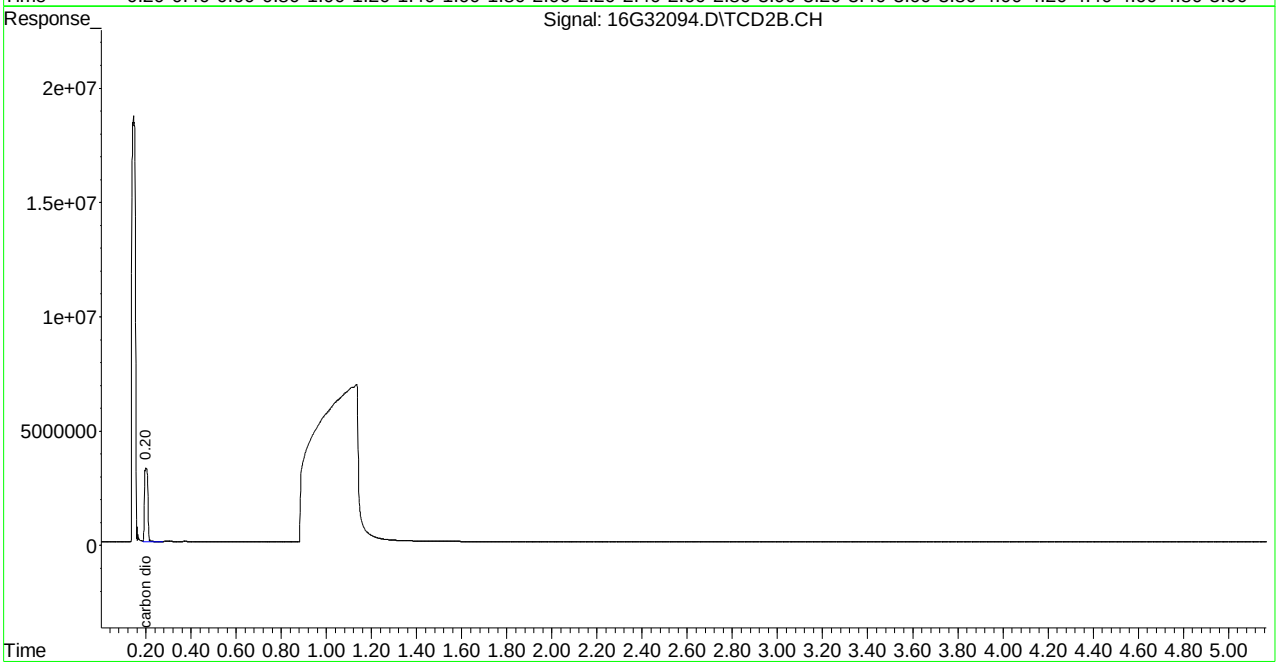
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32094.D RSK2EXT.M Mon Apr 30 14:13:09 2012 Page 1

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 :

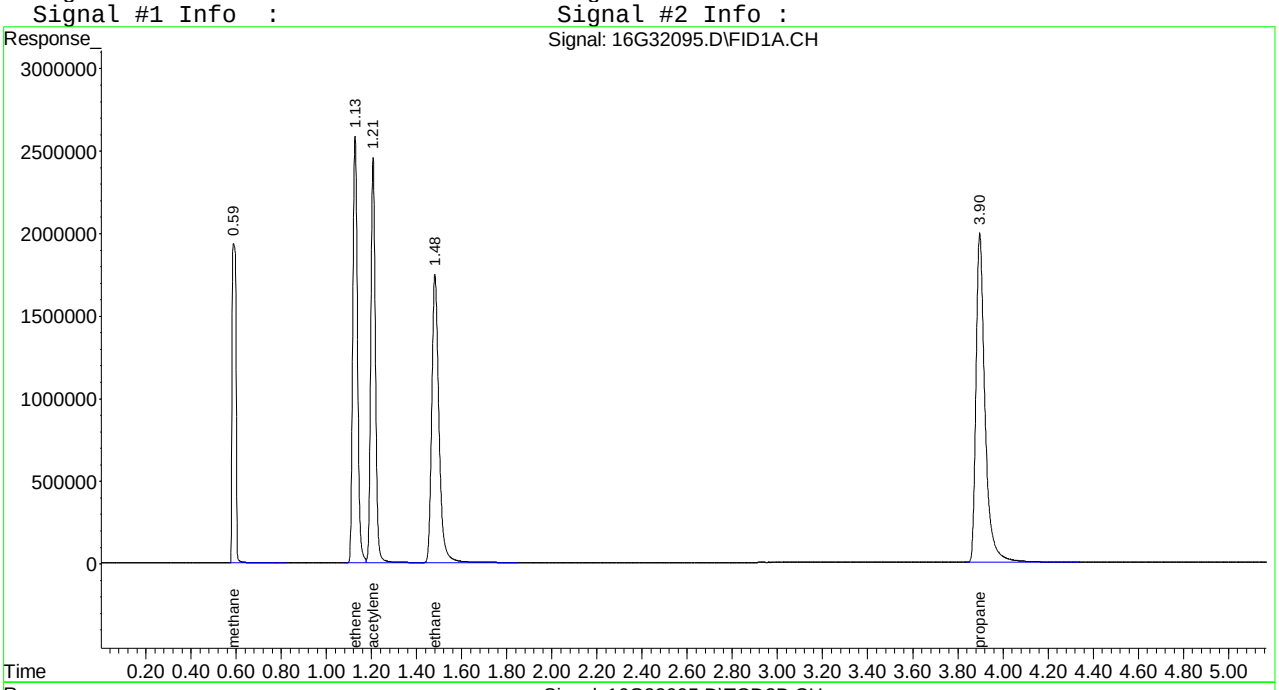
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1) T	methane	0.59	22928576	118.486 umol/
2) T	ethene	1.13	37444591	120.453 umol/
3) T	acetylene	1.21	35336293	113.917 umol/
4) T	ethane	1.48	38718775	121.400 umol/
5) T	propane	3.90	55608118	120.511 umol/
7) T	carbon dioxide	0.20	73011522	12230.652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

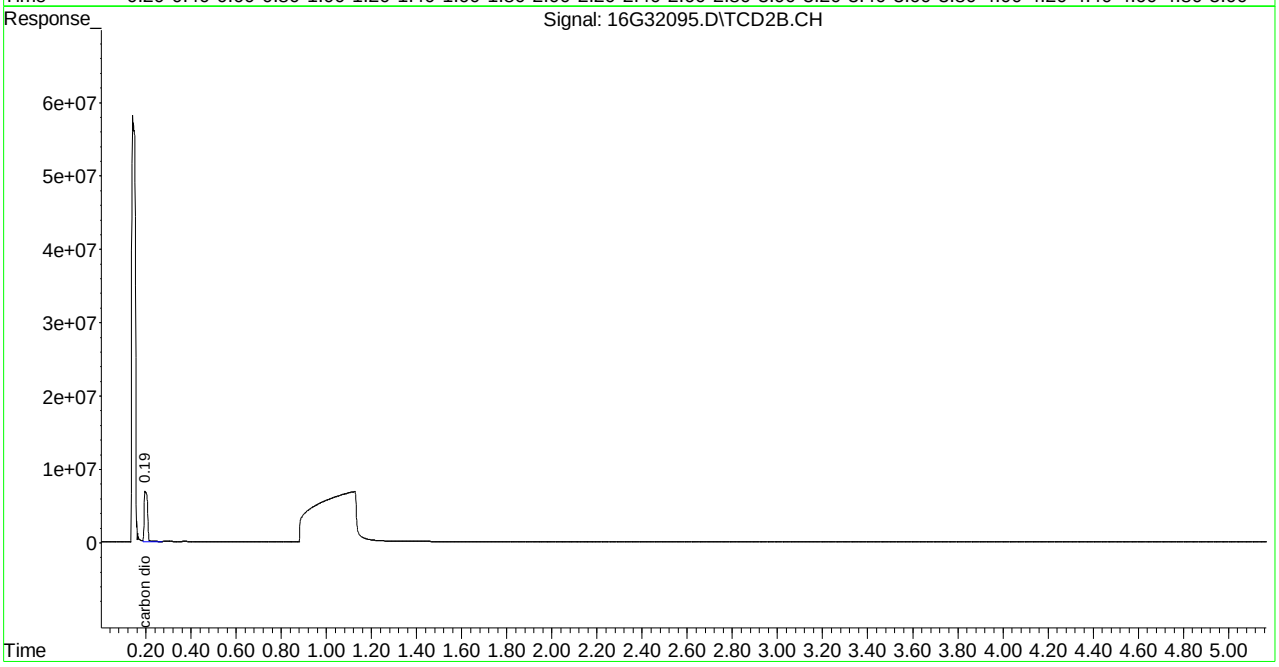
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32095.D RSK2EXT.M Mon Apr 30 14:22:09 2012 Page 1

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 :

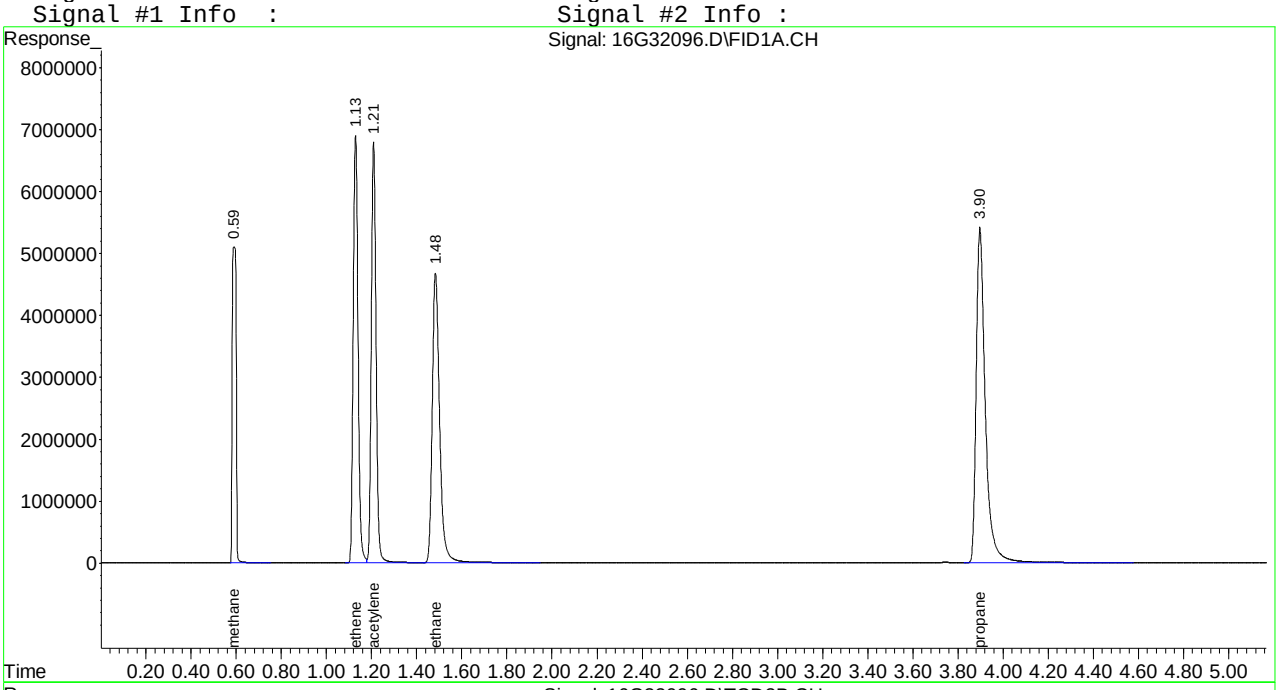
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1) T	methane	0.59	61151880	316.010 umol/
2) T	ethene	1.13	102124387	328.518 umol/
3) T	acetylene	1.21	100384614	323.619 umol/
4) T	ethane	1.48	105345556	330.304 umol/
5) T	propane	3.90	152068426	329.556 umol/
7) T	carbon dioxide	0.20	190381445	31892.078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

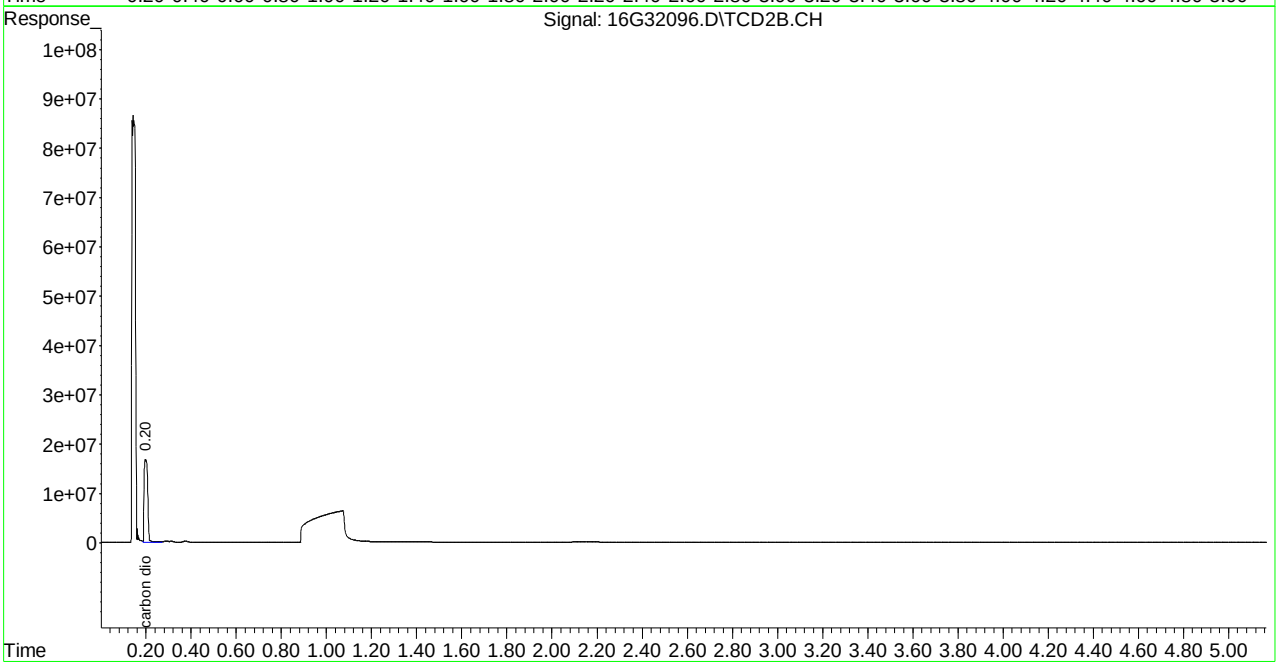
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32096.D RSK2EXT.M Mon Apr 30 14:31:51 2012 Page 1

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 :

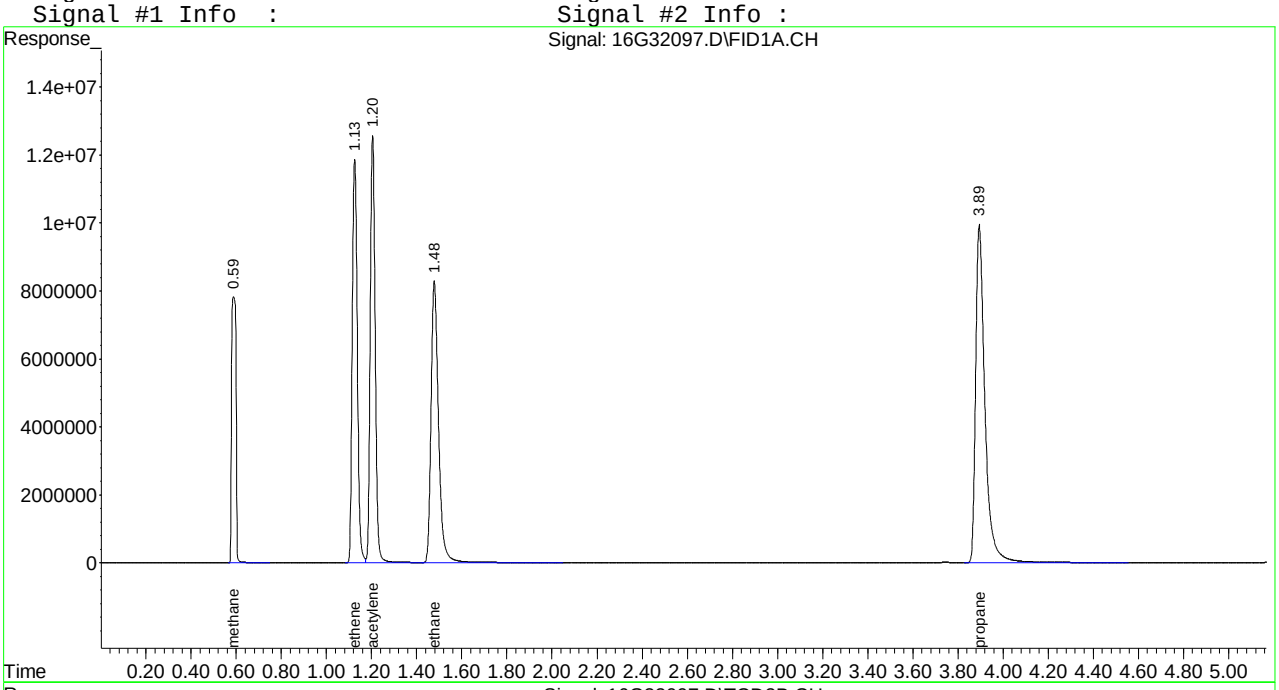
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1) T	methane	0.59	105407837	544.709 umol/
2) T	ethene	1.13	184568763	593.729 umol/
3) T	acetylene	1.20	194109593	625.769 umol/
4) T	ethane	1.48	190467929	597.199 umol/
5) T	propane	3.89	283665394	614.747 umol/
7) T	carbon dioxide	0.19	351812796	58934.531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

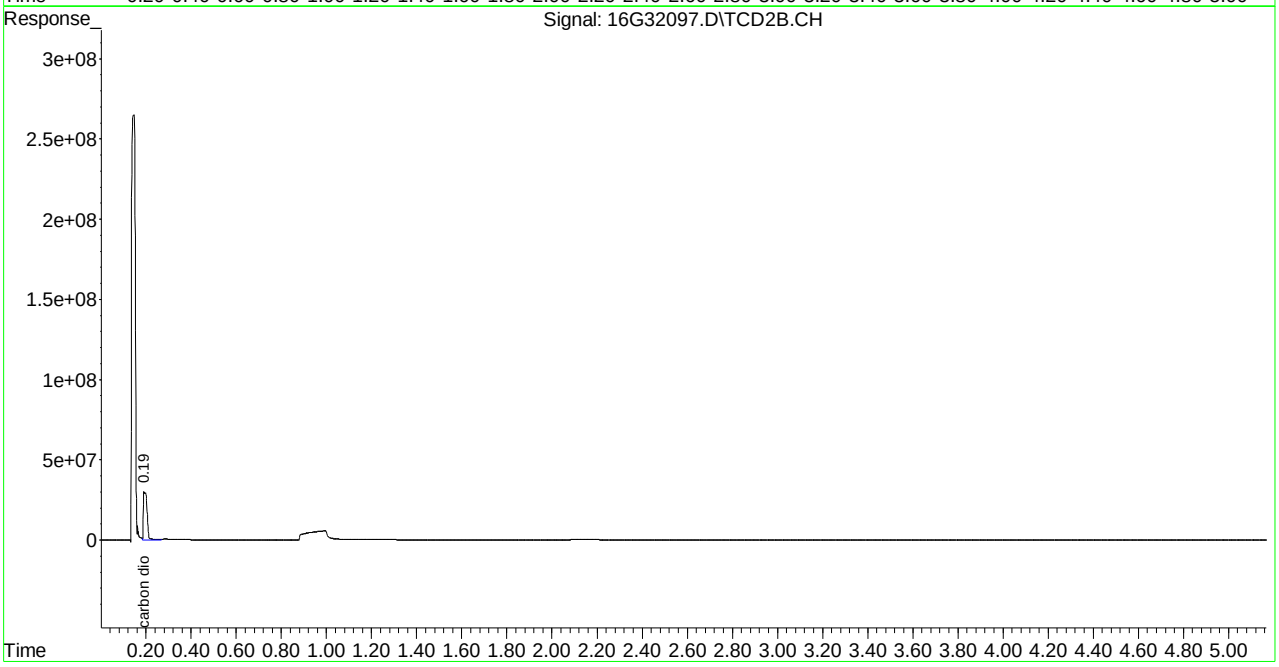
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32097.D RSK2EXT.M Mon Apr 30 14:40:49 2012 Page 1

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 :

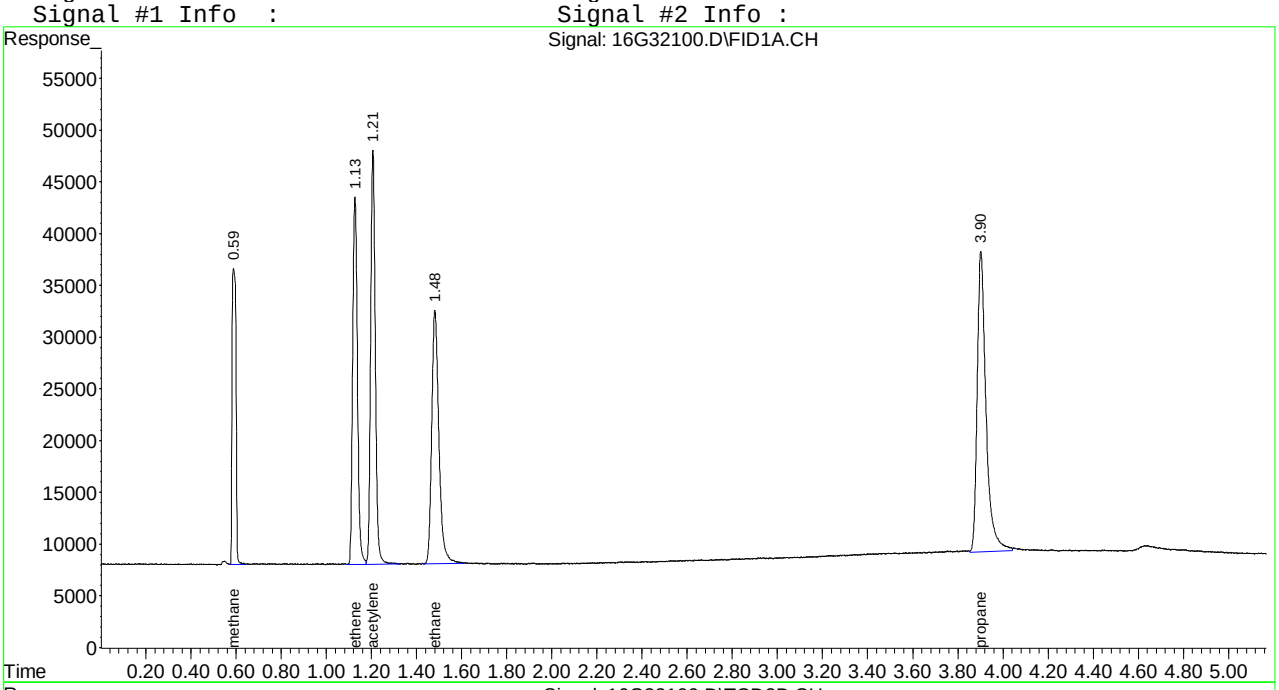
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1) T	methane	0.59	339694	1.927 umol/
2) T	ethene	1.13	518903	1.845 umol/
3) T	acetylene	1.21	583229	2.112 umol/
4) T	ethane	1.48	539701	1.855 umol/
5) T	propane	3.90	789587	1.895 umol/
7) T	carbon dioxide	0.20	13063496	2368.342 umol/

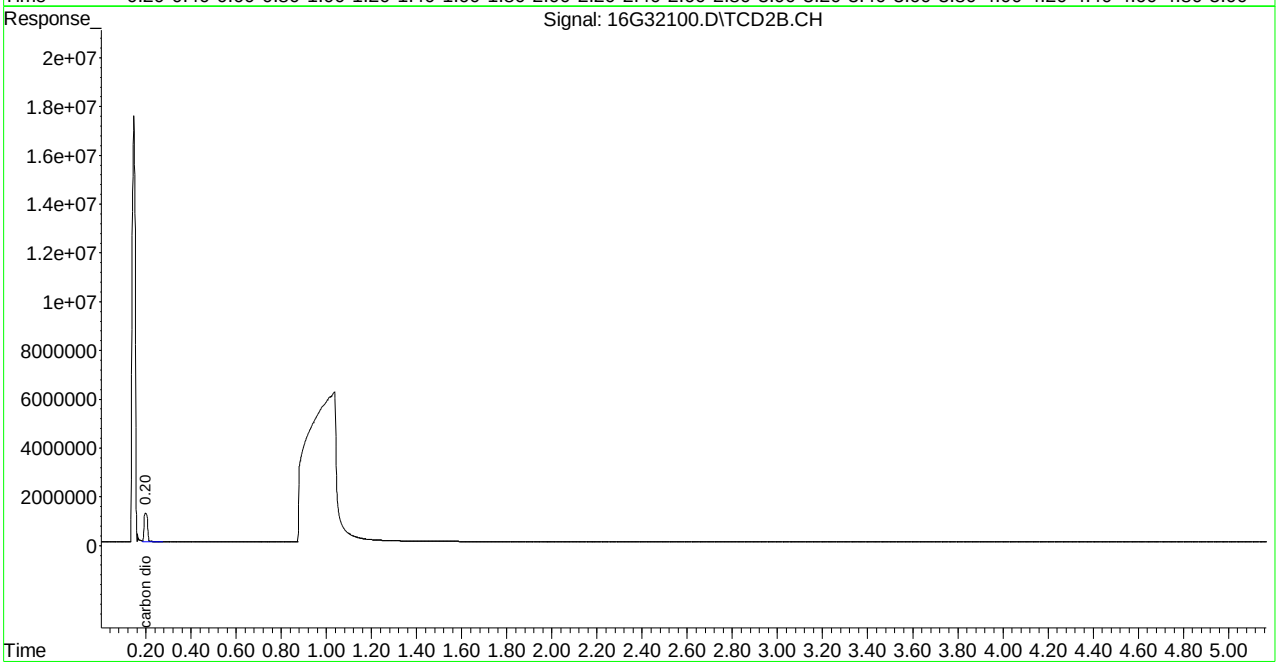
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32100.D RSK2EXT.M Mon Apr 30 15:09:45 2012 Page 1

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 :

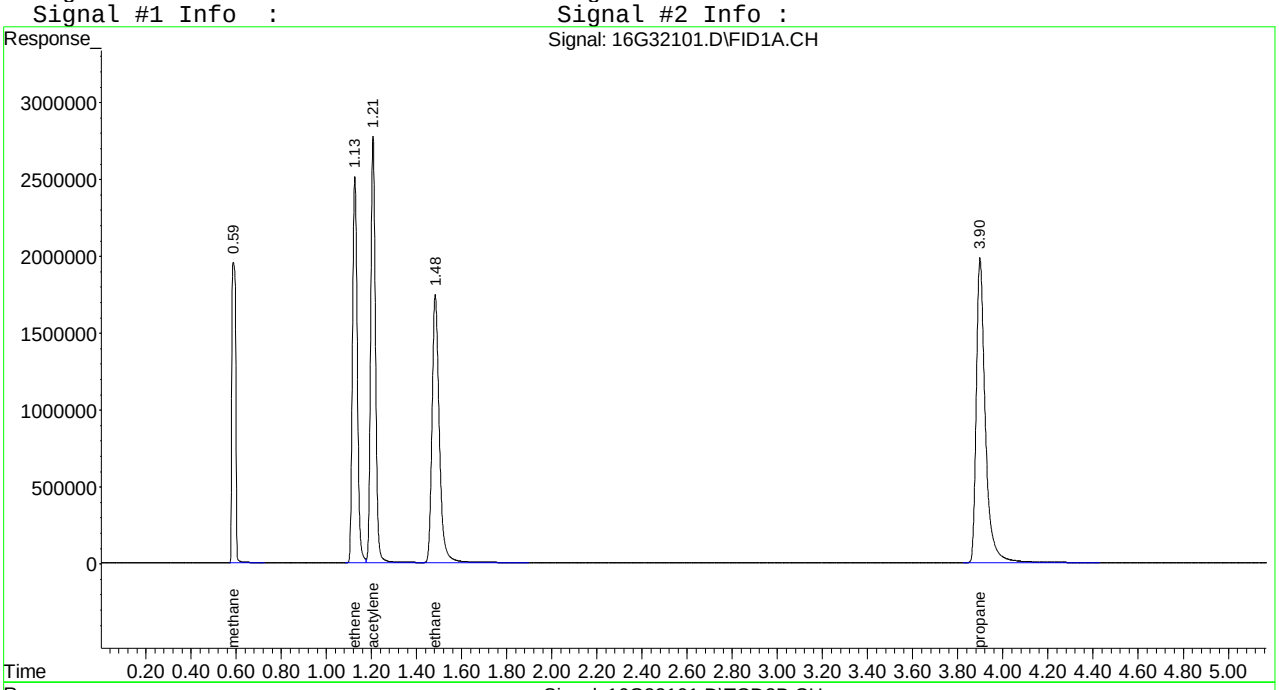
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1) T	methane	0.59	22836049	125.936 umol/
2) T	ethene	1.13	37088559	125.126 umol/
3) T	acetylene	1.21	41185177	142.223 umol/
4) T	ethane	1.48	38937915	128.104 umol/
5) T	propane	3.90	55298984	126.002 umol/
7) T	carbon dioxide	0.20	70387680	12330.663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

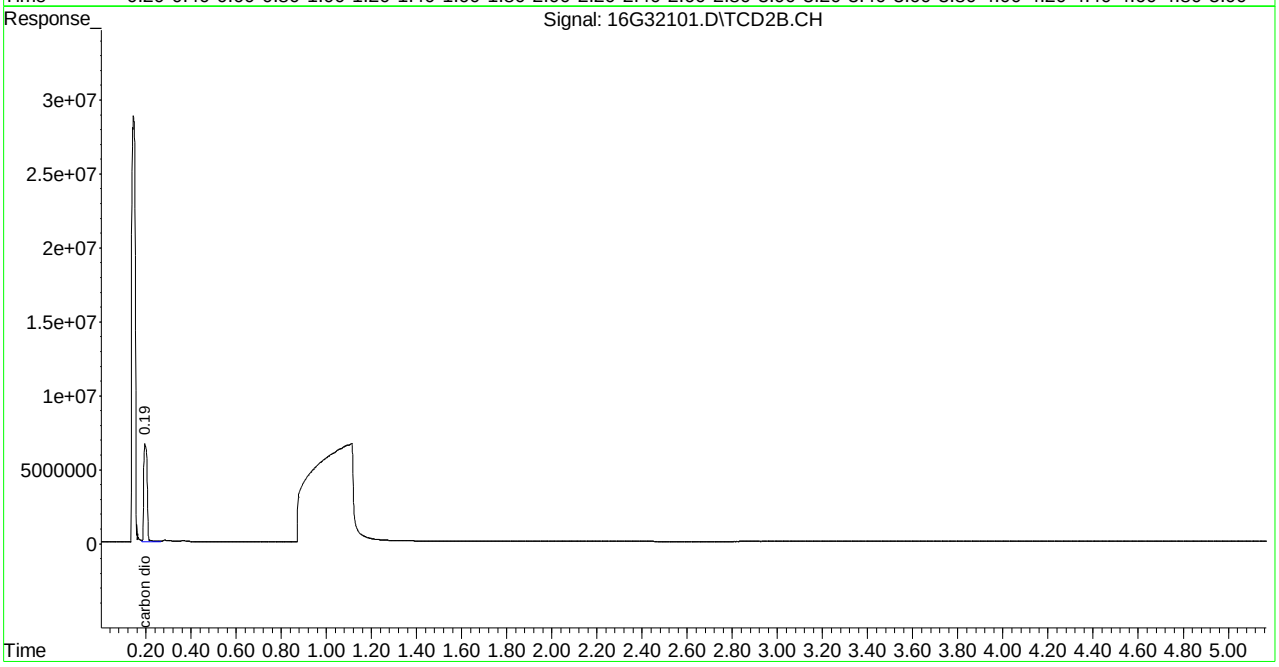
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32101.D RSK2EXT.M Mon Apr 30 15:29:41 2012 Page 1

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 :





Evaluate Continuing Calibration Report

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

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

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	T	methane	133.000	125.936	5.3	100	0.00
2	T	ethene	133.000	125.126	5.9	99	0.00
3	T	acetylene	133.000	142.223	-6.9	117	0.00
4	T	ethane	133.000	128.104	3.7	101	0.00
5	T	propane	133.000	126.002	5.3	99	0.00
		Signal #2					
7	T	carbon dioxide	13333.000	12330.663	7.5	96	0.00

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

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

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

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

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

Signal #2

(#) = Out of Range SPCC's out = 0 CCC's out = 0
16G32101.D RSK2EXT.M Mon Apr 30 15:31:36 2012 Page 2

Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\050812\16G32326.D\FID1A.CH Vial: 27
Signal #2 : C:\MSDchem\1\DATA\050812\16G32326.D\TCD2B.CH
Acq On : 08 May 2012 17:39 Operator: FJB
Sample : WG397364-04 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 08 17:44:21 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	22133395	122.061 umol/
2) T	ethene	1.13	36634737	123.595 umol/
3) T	acetylene	1.21	37091535	128.087 umol/
4) T	ethane	1.48	37665488	123.917 umol/
5) T	propane	3.90	54033170	123.118 umol/
7) T	carbon dioxide	0.20	76169215	13343.484 umol/

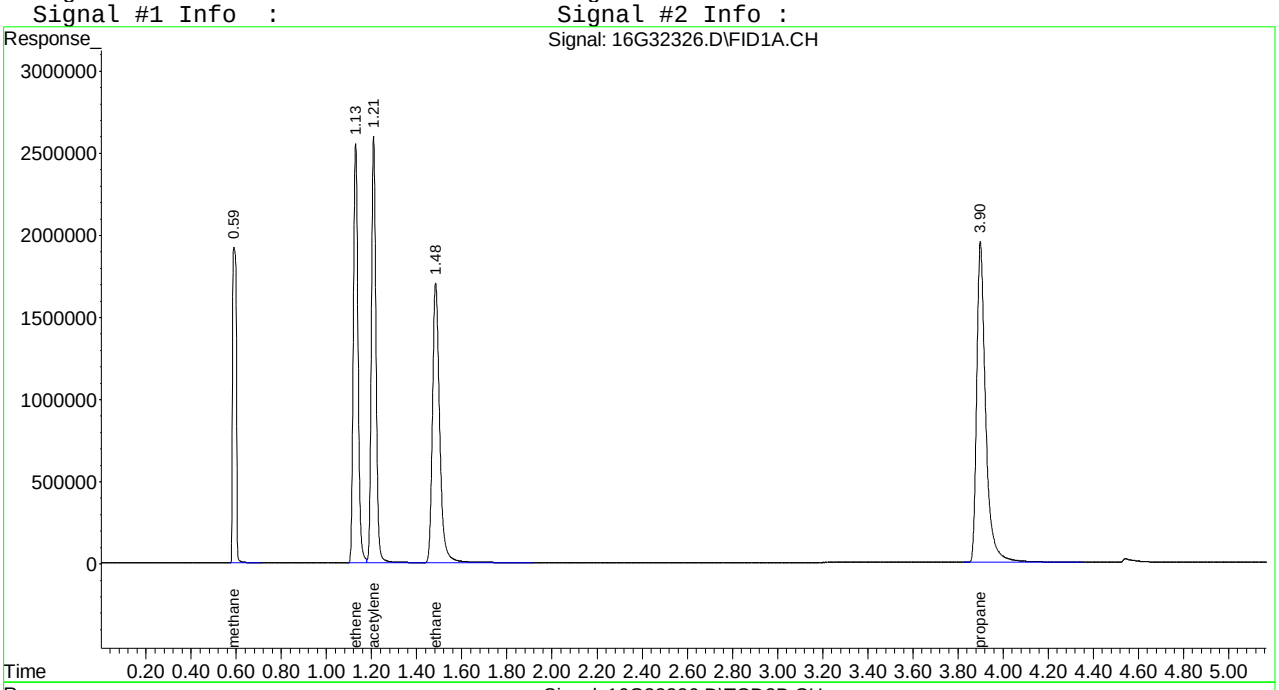
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32326.D RSK2EXT.M Tue May 08 17:44:21 2012 Page 1

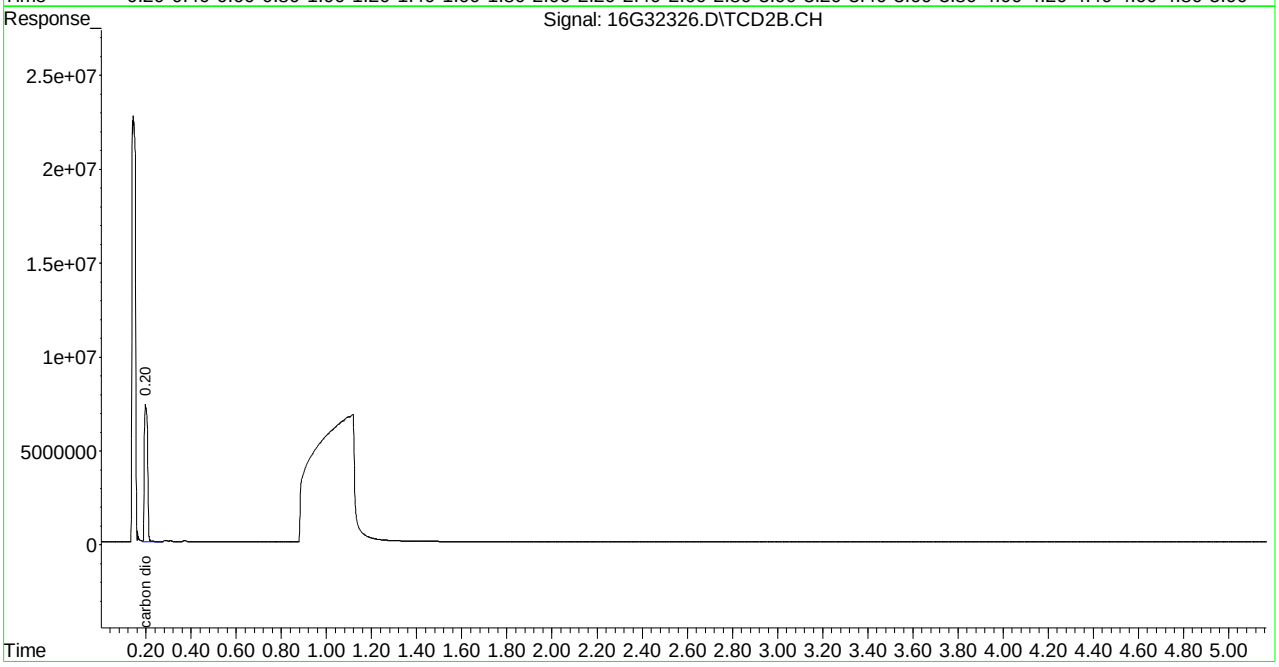
Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\050812\16G32326.D\FID1A.CH Vial: 27
Signal #2 : C:\MSDchem\1\DATA\050812\16G32326.D\TCD2B.CH
Acq On : 08 May 2012 17:39 Operator: FJB
Sample : WG397364-04 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 8 17:44 2012 Quant Results File: RSK2EXT.RES

Quant Method : C:\MSDCHEM\1\METHODS\RSK2EXT.M (Chemstation Integrator)
Title : RSK175 HP16 (SOP: OVL RSK01) 043012
Last Update : Mon Apr 30 15:17:04 2012
Response via : 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\050812\16G32326.D\FID1A.CH Vial: 27
Signal #2 : C:\MSDCHEM\1\DATA\050812\16G32326.D\TCD2B.CH
Acq On : 08 May 2012 17:39 Operator: FJB
Sample : WG397364-04 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	122.061	8.2	97	0.00
2	T	ethene	133.000	123.595	7.1	98	0.00
3	T	acetylene	133.000	128.087	3.7	105	0.00
4	T	ethane	133.000	123.917	6.8	97	0.00
5	T	propane	133.000	123.118	7.4	97	0.00
		Signal #2					
7	T	carbon dioxide	13333.000	13343.484	-0.1	104	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
16G32326.D RSK2EXT.M Wed May 09 08:42:42 2012 Page 1

Signal #1 : C:\MSDCHEM\1\DATA\050812\16G32326.D\FID1A.CH Vial: 27
Signal #2 : C:\MSDCHEM\1\DATA\050812\16G32326.D\TCD2B.CH
Acq On : 08 May 2012 17:39 Operator: FJB
Sample : WG397364-04 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

Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\050812\16G32337.D\FID1A.CH Vial: 38
Signal #2 : C:\MSDchem\1\DATA\050812\16G32337.D\TCD2B.CH
Acq On : 08 May 2012 19:18 Operator: FJB
Sample : WG397364-05 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 08 19:24:09 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 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 :

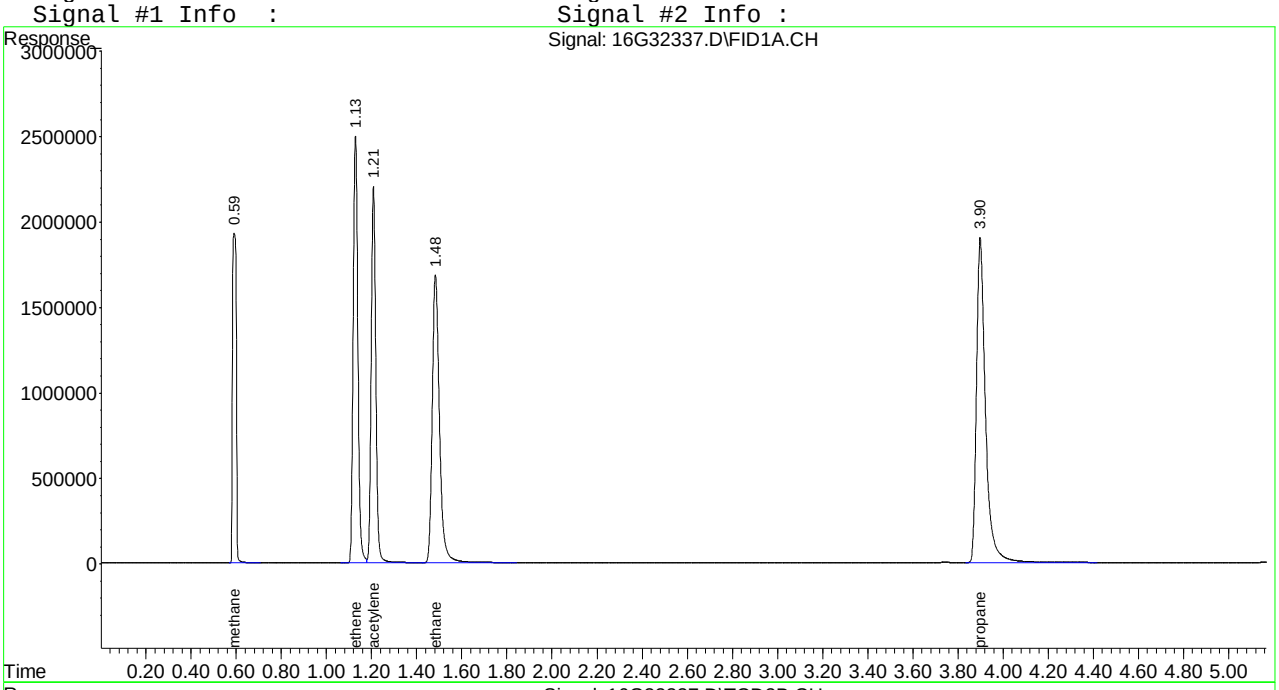
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1) T	methane	0.59	22386065	123.454 umol/
2) T	ethene	1.13	35890973	121.086 umol/
3) T	acetylene	1.21	31492812	108.753 umol/
4) T	ethane	1.48	37306225	122.735 umol/
5) T	propane	3.90	52877664	120.485 umol/
7) T	carbon dioxide	0.20	63458672	11116.825 umol/

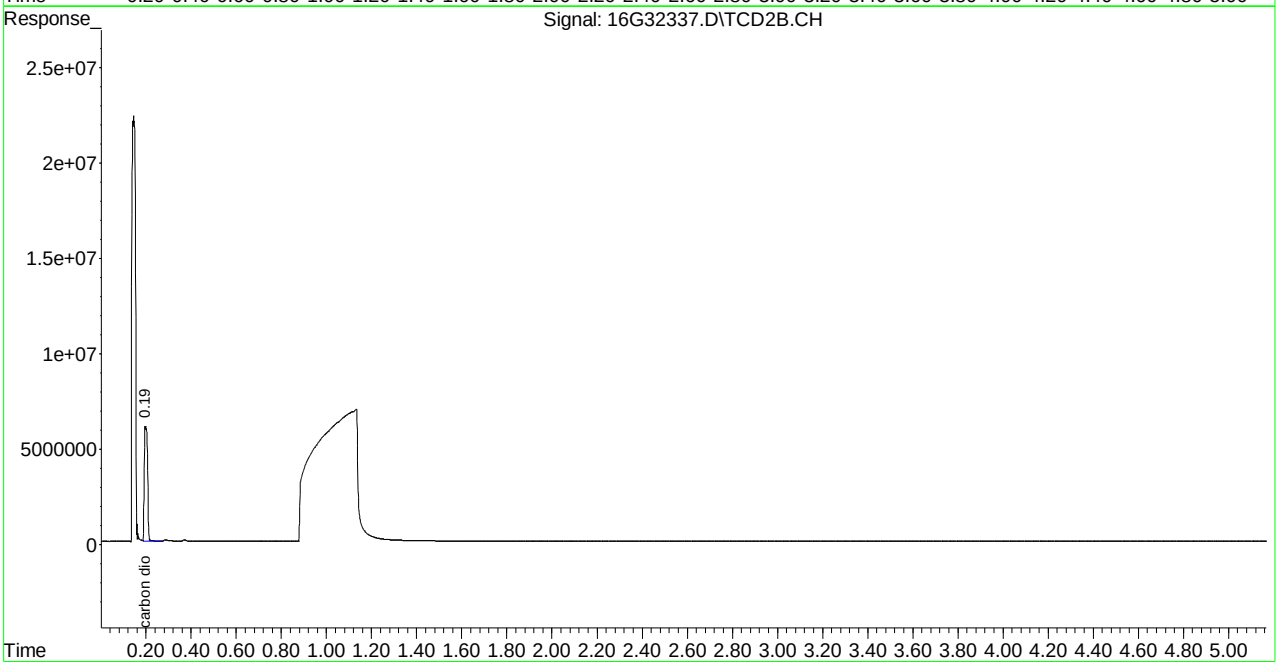
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32337.D RSK2EXT.M Tue May 08 19:24:09 2012 Page 1

Signal #1 : C:\MSDchem\1\DATA\050812\16G32337.D\FID1A.CH Vial: 38
Signal #2 : C:\MSDchem\1\DATA\050812\16G32337.D\TCD2B.CH
Acq On : 08 May 2012 19:18 Operator: FJB
Sample : WG397364-05 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 8 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\050812\16G32337.D\FID1A.CH Vial: 38
Signal #2 : C:\MSDCHEM\1\DATA\050812\16G32337.D\TCD2B.CH
Acq On : 08 May 2012 19:18 Operator: FJB
Sample : WG397364-05 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	123.454	7.2	98	0.00
2	T	ethene	133.000	121.086	9.0	96	0.00
3	T	acetylene	133.000	108.753	18.2#	89	0.00
4	T	ethane	133.000	122.735	7.7	96	0.00
5	T	propane	133.000	120.485	9.4	95	0.00
		Signal #2					
7	T	carbon dioxide	13333.000	11116.825	16.6#	87	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
16G32337.D RSK2EXT.M Wed May 09 08:42:47 2012 Page 1

Signal #1 : C:\MSDCHEM\1\DATA\050812\16G32337.D\FID1A.CH Vial: 38
Signal #2 : C:\MSDCHEM\1\DATA\050812\16G32337.D\TCD2B.CH
Acq On : 08 May 2012 19:18 Operator: FJB
Sample : WG397364-05 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\050812\16G32348.D\FID1A.CH Vial: 49
Signal #2 : C:\MSDchem\1\DATA\050812\16G32348.D\TCD2B.CH
Acq On : 08 May 2012 21:00 Operator: FJB
Sample : WG397364-06 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 08 21:05:48 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	22924265	126.422 umol/
2) T	ethene	1.13	37113190	125.209 umol/
3) T	acetylene	1.21	31870101	110.056 umol/
4) T	ethane	1.49	38793104	127.627 umol/
5) T	propane	3.90	55374710	126.175 umol/
7) T	carbon dioxide	0.20	62874115	11014.421 umol/

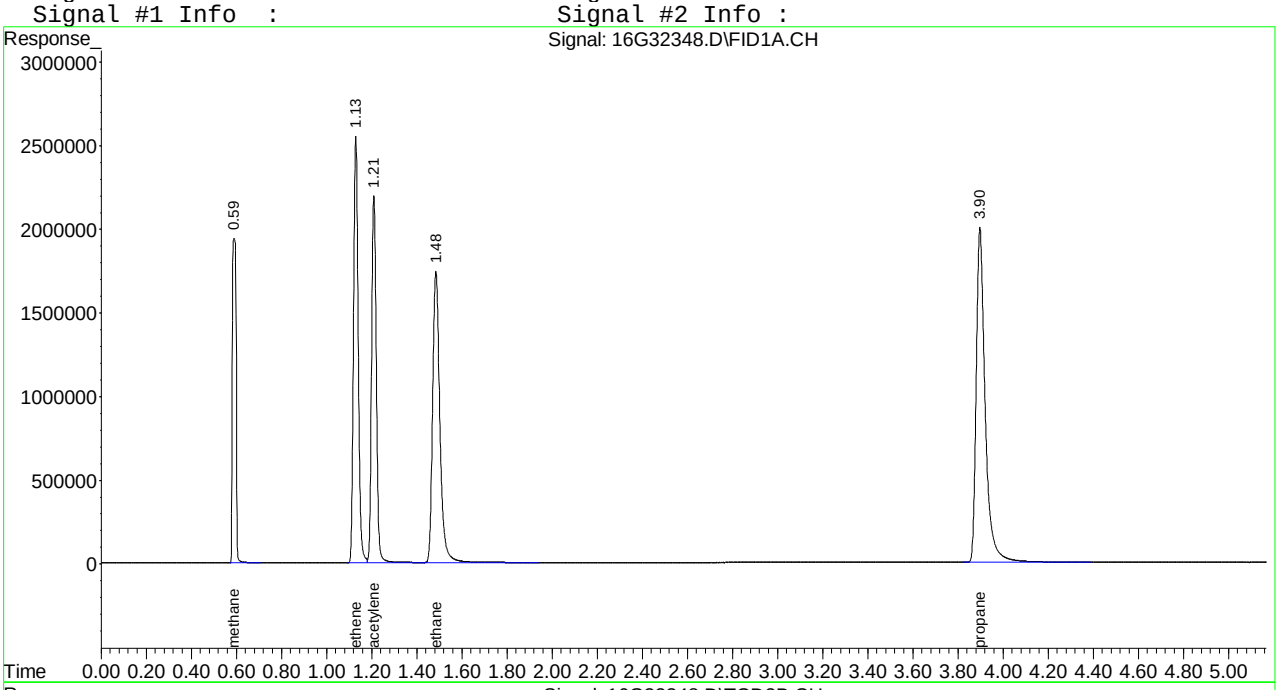
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32348.D RSK2EXT.M Tue May 08 21:05:48 2012 Page 1

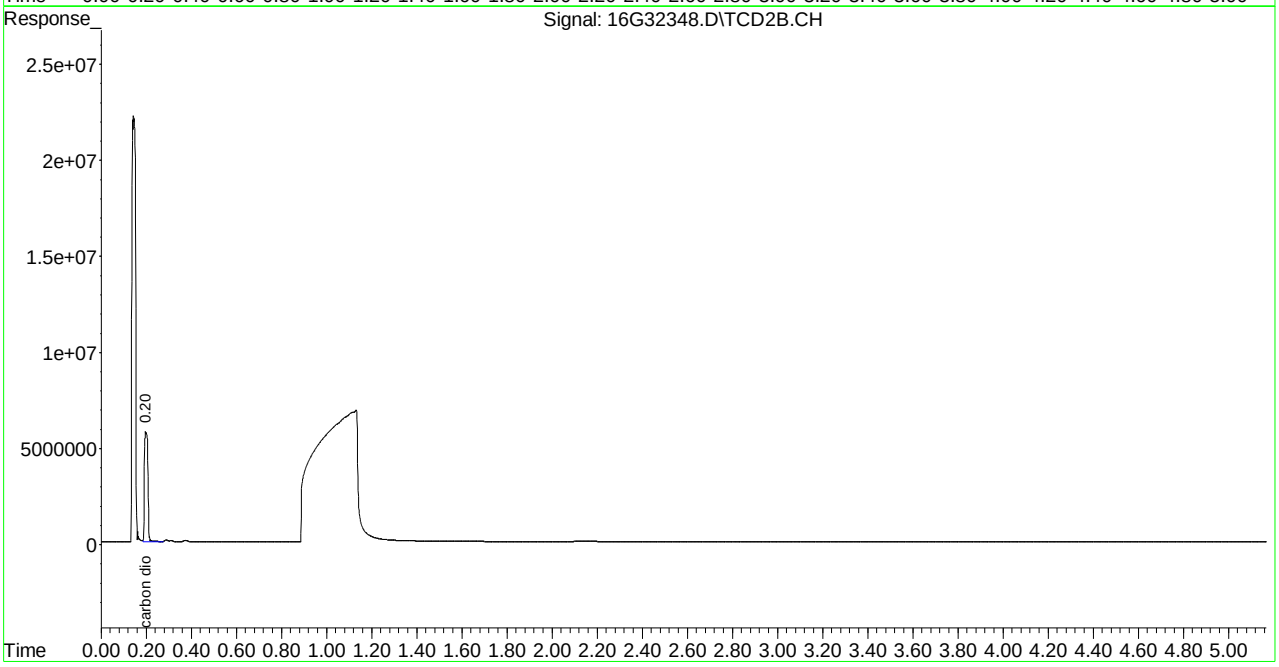
Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\050812\16G32348.D\FID1A.CH Vial: 49
Signal #2 : C:\MSDchem\1\DATA\050812\16G32348.D\TCD2B.CH
Acq On : 08 May 2012 21:00 Operator: FJB
Sample : WG397364-06 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 8 21:05 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 : 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\050812\16G32348.D\FID1A.CH Vial: 49
Signal #2 : C:\MSDCHEM\1\DATA\050812\16G32348.D\TCD2B.CH
Acq On : 08 May 2012 21:00 Operator: FJB
Sample : WG397364-06 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	126.422	4.9	100	0.00
2	T	ethene	133.000	125.209	5.9	99	0.00
3	T	acetylene	133.000	110.056	17.3#	90	0.00
4	T	ethane	133.000	127.627	4.0	100	0.00
5	T	propane	133.000	126.175	5.1	100	0.00
		Signal #2					
7	T	carbon dioxide	13333.000	11014.421	17.4#	86	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
16G32348.D RSK2EXT.M Wed May 09 08:42:53 2012 Page 1

Signal #1 : C:\MSDCHEM\1\DATA\050812\16G32348.D\FID1A.CH Vial: 49
Signal #2 : C:\MSDCHEM\1\DATA\050812\16G32348.D\TCD2B.CH
Acq On : 08 May 2012 21:00 Operator: FJB
Sample : WG397364-06 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\050912\16G32352.D\FID1A.CH Vial: 1
Signal #2 : C:\MSDchem\1\DATA\050912\16G32352.D\TCD2B.CH
Acq On : 09 May 2012 13:51 Operator: MDA
Sample : WG397513-01 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 09 13:56:58 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 :

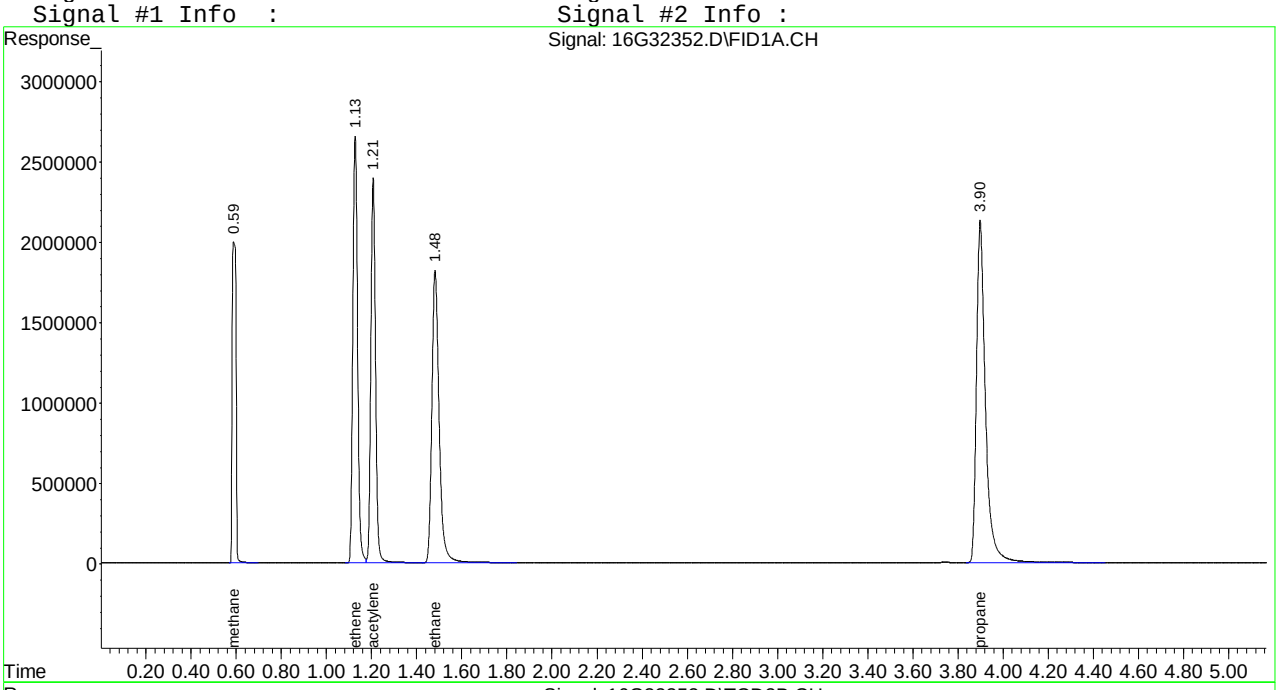
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1) T	methane	0.59	23538262	129.808 umol/
2) T	ethene	1.13	38820954	130.971 umol/
3) T	acetylene	1.21	34917933	120.581 umol/
4) T	ethane	1.48	40511809	133.282 umol/
5) T	propane	3.90	59051026	134.551 umol/
7) T	carbon dioxide	0.20	78687066	13784.567 umol/

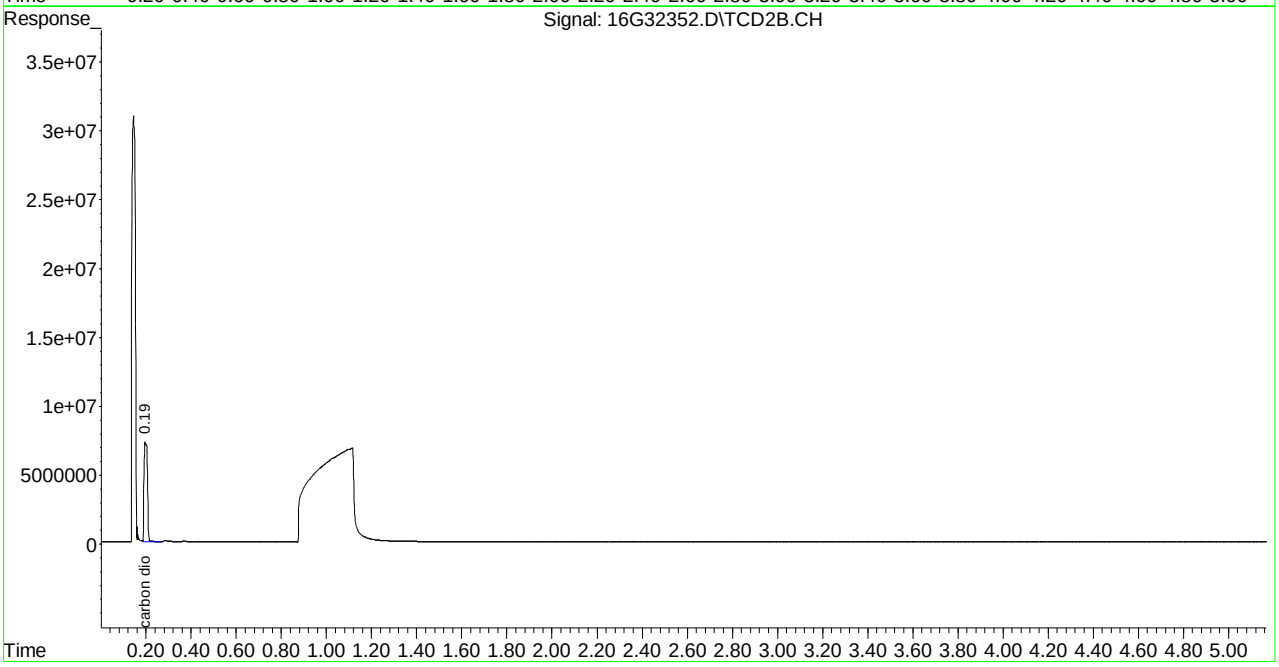
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32352.D RSK2EXT.M Wed May 09 13:56:58 2012 Page 1

Signal #1 : C:\MSDchem\1\DATA\050912\16G32352.D\FID1A.CH Vial: 1
Signal #2 : C:\MSDchem\1\DATA\050912\16G32352.D\TCD2B.CH
Acq On : 09 May 2012 13:51 Operator: MDA
Sample : WG397513-01 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 9 13:56 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\050912\16G32352.D\FID1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\050912\16G32352.D\TCD2B.CH
Acq On : 09 May 2012 13:51 Operator: MDA
Sample : WG397513-01 133umol/mol CCV RSK175 Inst : HP16
Misc : 1,1 STD38726 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e

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

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	T	methane	133.000	129.808	2.4	103	0.00
2	T	ethene	133.000	130.971	1.5	104	0.00
3	T	acetylene	133.000	120.581	9.3	99	0.00
4	T	ethane	133.000	133.282	-0.2	105	0.00
5	T	propane	133.000	134.551	-1.2	106	0.00
		Signal #2					
7	T	carbon dioxide	13333.000	13784.567	-3.4	108	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
16G32352.D RSK2EXT.M Wed May 09 13:57:55 2012 Page 1

Signal #1 : C:\MSDCHEM\1\DATA\050912\16G32352.D\FID1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\050912\16G32352.D\TCD2B.CH
Acq On : 09 May 2012 13:51 Operator: MDA
Sample : WG397513-01 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\050912\16G32363.D\FID1A.CH Vial: 12
Signal #2 : C:\MSDchem\1\DATA\050912\16G32363.D\TCD2B.CH
Acq On : 09 May 2012 15:33 Operator: MDA
Sample : WG397513-02 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 09 15:38:55 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 :

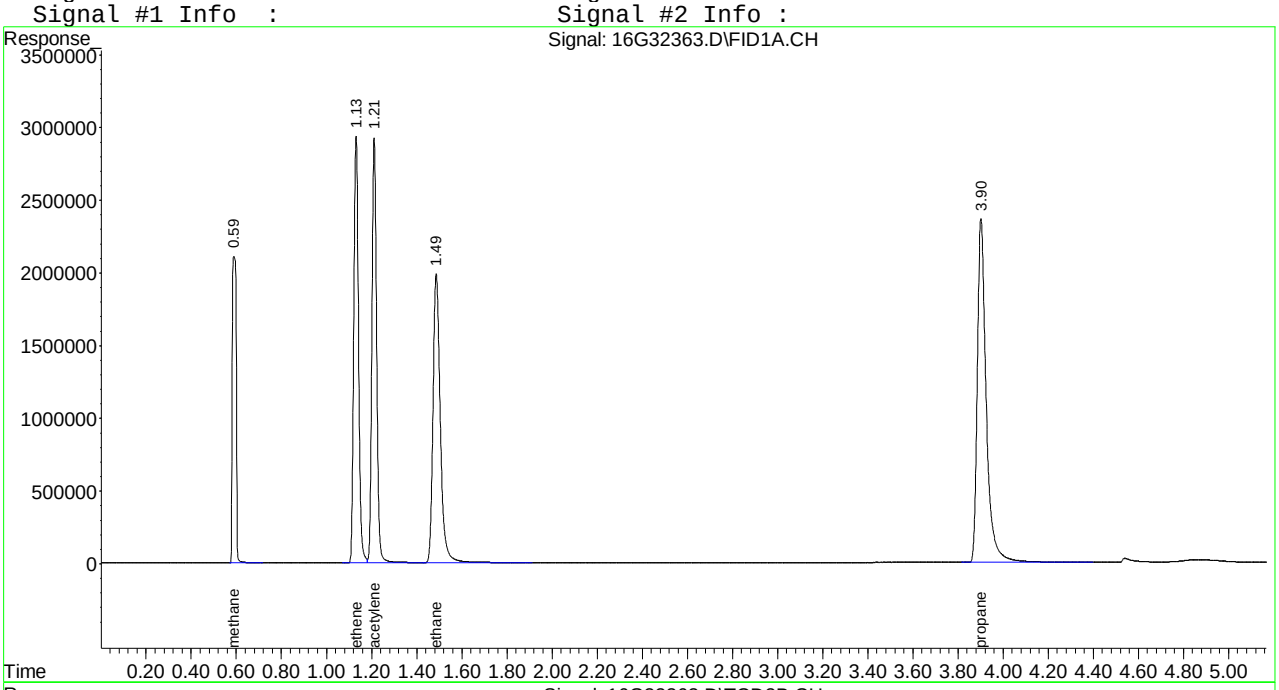
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1) T	methane	0.59	25268070	139.348 umol/
2) T	ethene	1.13	43102010	145.414 umol/
3) T	acetylene	1.21	42807869	147.827 umol/
4) T	ethane	1.49	44436459	146.194 umol/
5) T	propane	3.90	65223474	148.616 umol/
7) T	carbon dioxide	0.20	78794187	13803.332 umol/

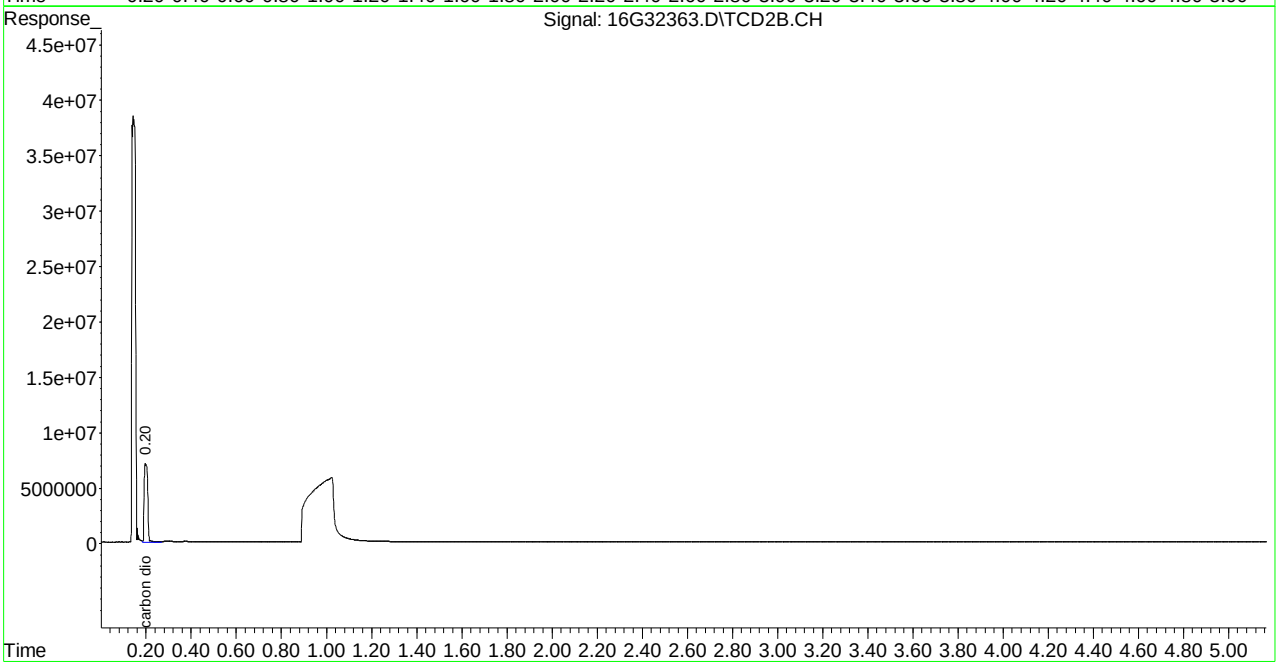
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32363.D RSK2EXT.M Wed May 09 15:38:56 2012 Page 1

Signal #1 : C:\MSDchem\1\DATA\050912\16G32363.D\FID1A.CH Vial: 12
Signal #2 : C:\MSDchem\1\DATA\050912\16G32363.D\TCD2B.CH
Acq On : 09 May 2012 15:33 Operator: MDA
Sample : WG397513-02 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 9 15:38 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 :





Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\050912\16G32363.D\FID1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\050912\16G32363.D\TCD2B.CH
Acq On : 09 May 2012 15:33 Operator: MDA
Sample : WG397513-02 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	139.348	-4.8	110	0.00
2	T	ethene	133.000	145.414	-9.3	115	0.00
3	T	acetylene	133.000	147.827	-11.1	121	0.00
4	T	ethane	133.000	146.194	-9.9	115	0.00
5	T	propane	133.000	148.616	-11.7	117	0.00
		Signal #2					
7	T	carbon dioxide	13333.000	13803.332	-3.5	108	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
16G32363.D RSK2EXT.M Wed May 09 15:40:51 2012 Page 1

Signal #1 : C:\MSDCHEM\1\DATA\050912\16G32363.D\FID1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\050912\16G32363.D\TCD2B.CH
Acq On : 09 May 2012 15:33 Operator: MDA
Sample : WG397513-02 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

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

Microbac Laboratories Inc.
Daily Retention Time Window Determination

Login #: L12050171 **Run Date:** 05/08/2012 **Sample ID:** WG397364-04
Instrument: HP16 **Run Time:** 17:39 **Method:** RSK175
Workgroup (AAB#): WG397366 **File ID:** 16G32326

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: 2407003
Report generated 05/11/2012 08:08

Microbac Laboratories Inc.
Daily Retention Time Window Determination

Login #: L12050171 **Run Date:** 05/09/2012 **Sample ID:** WG397513-01
Instrument: HP16 **Run Time:** 13:51 **Method:** RSK175
Workgroup (AAB#): WG397514 **File ID:** 16G32352

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: 2407003
Report generated 05/11/2012 08:08

2.1.2.5 Raw QC Data

Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\050812\16G32327.D\FID1A.CH Vial: 28
Signal #2 : C:\MSDCHEM\1\DATA\050812\16G32327.D\TCD2B.CH
Acq On : 08 May 2012 17:48 Operator: FJB
Sample : WG397366-01 BLANK RSK175 Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 08 17:53:31 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 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 :

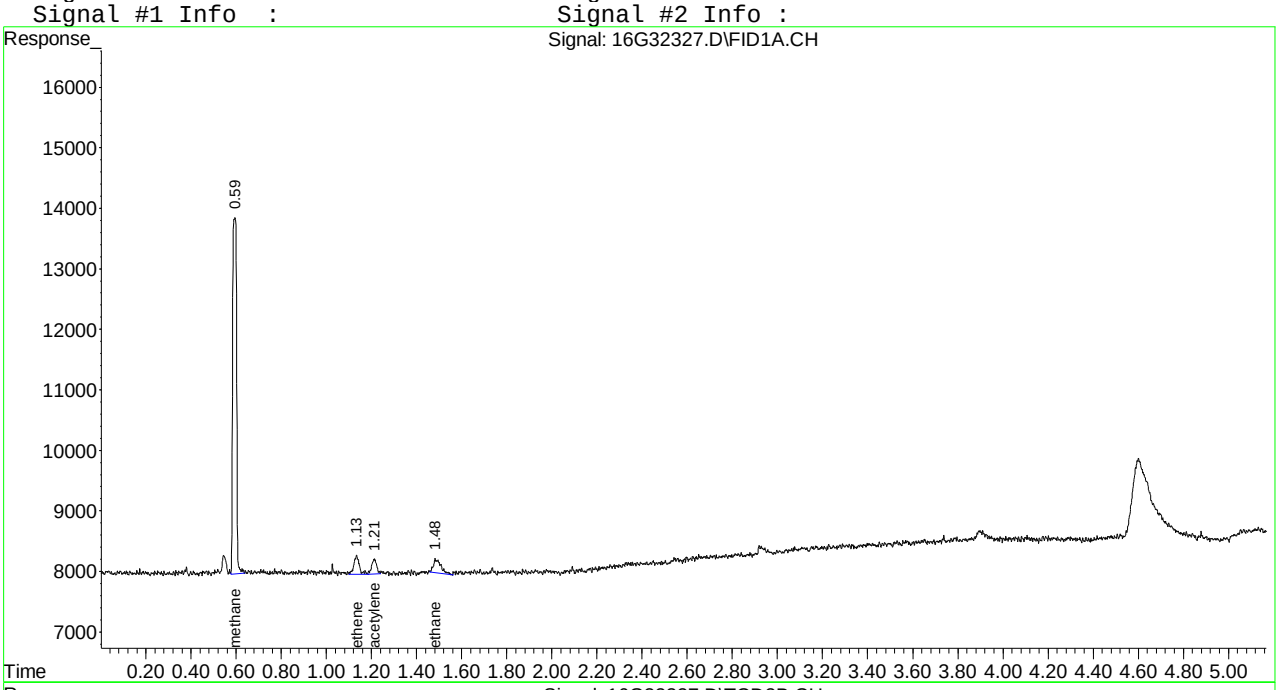
	Compound	R.T.	Response	Conc	Units
	Target Compounds				
1) T	methane	0.59	69956	0.386	umol/
2) T	ethene	1.13	5068	0.017	umol/
3) T	acetylene	1.21	3705	0.013	umol/
4) T	ethane	1.48	5115	0.017	umol/
5) T	propane	0.00	0	N.D.	umol/
7) T	carbon dioxide	0.00	0	N.D.	umol/

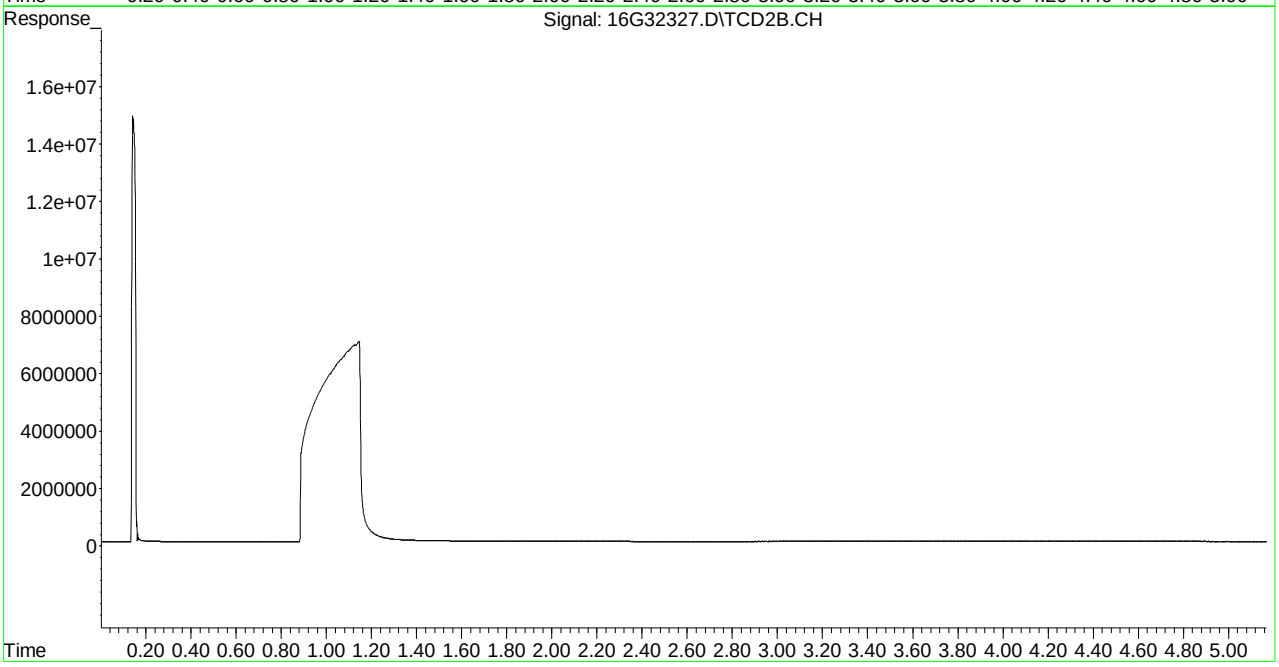
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32327.D RSK2EXT.M Wed May 09 08:47:10 2012 Page 1

Signal #1 : C:\MSDCHEM\1\DATA\050812\16G32327.D\FID1A.CH Vial: 28
Signal #2 : C:\MSDCHEM\1\DATA\050812\16G32327.D\TCD2B.CH
Acq On : 08 May 2012 17:48 Operator: FJB
Sample : WG397366-01 BLANK RSK175 Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 8 17:53 2012 Quant Results File: RSK2EXT.RES

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

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





Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\050912\16G32353.D\FID1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\050912\16G32353.D\TCD2B.CH
Acq On : 09 May 2012 14:01 Operator: MDA
Sample : WG397514-01 BLANK RSK175 Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 09 14:06:17 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 : 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	66138	0.365	umol/
2) T	ethene	1.13	4346	0.015	umol/
3) T	acetylene	0.00	0	N.D.	umol/
4) T	ethane	1.48	5220	0.017	umol/
5) T	propane	3.90	2687	0.006	umol/
7) T	carbon dioxide	0.00	0	N.D.	umol/

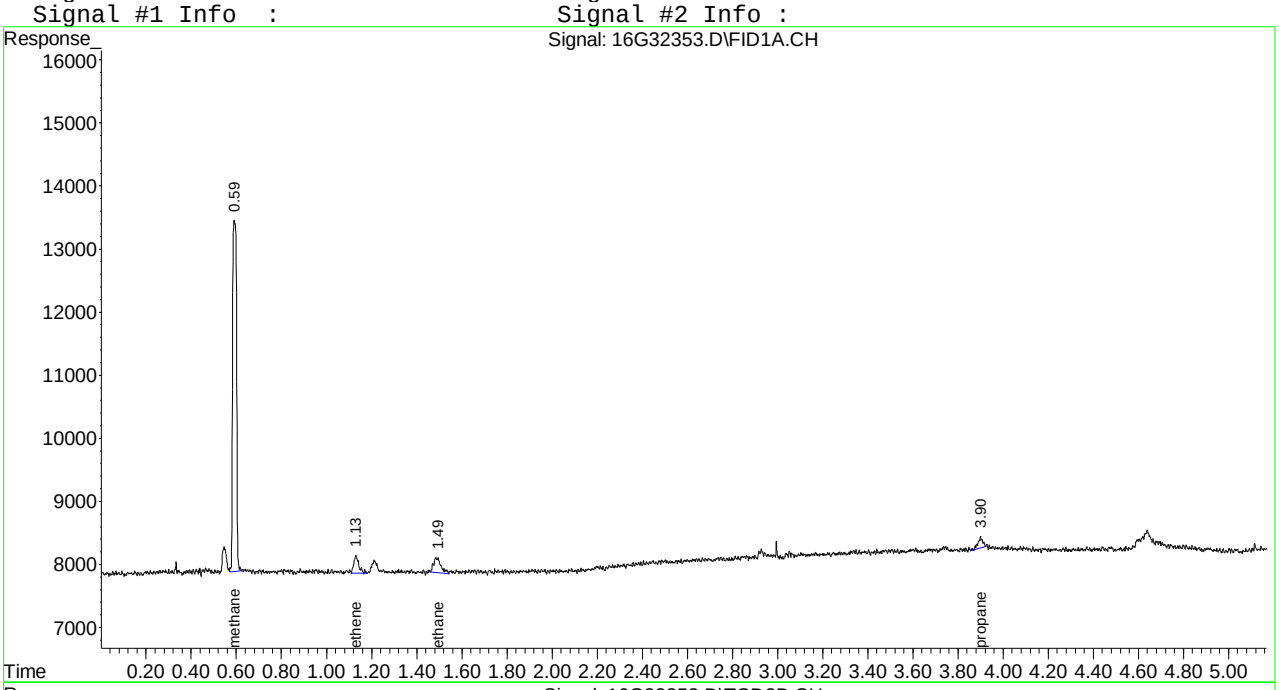
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32353.D RSK2EXT.M Wed May 09 14:07:31 2012 Page 1

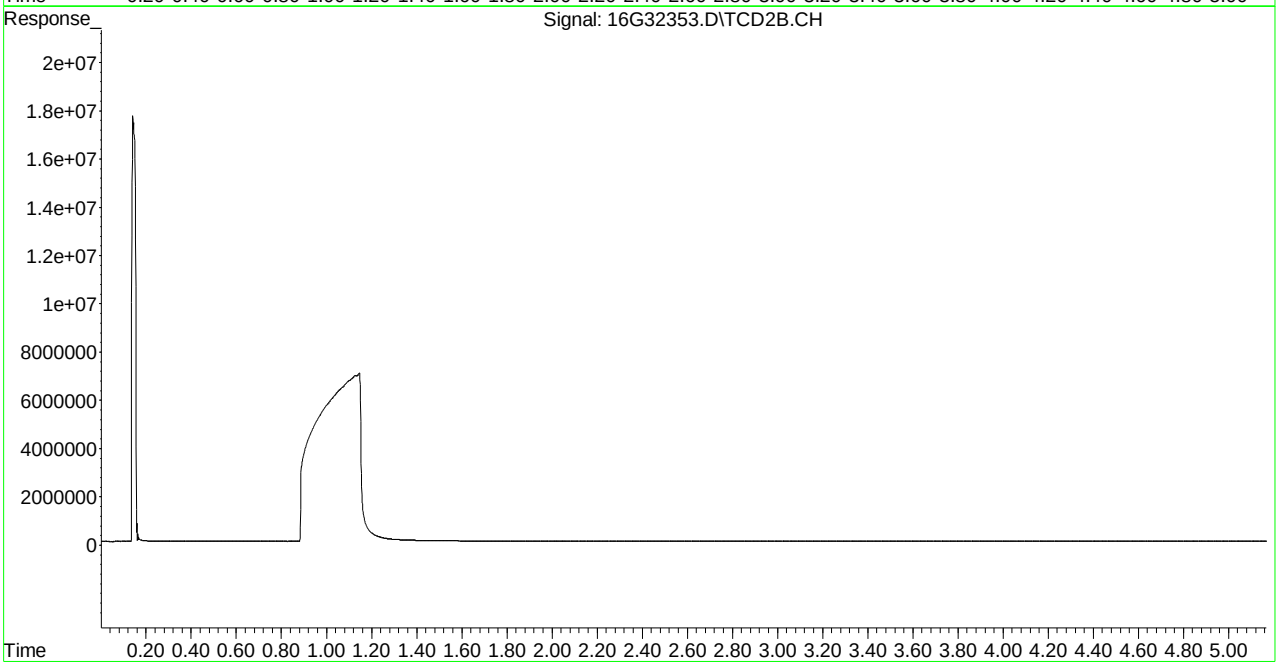
Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\050912\16G32353.D\FID1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\050912\16G32353.D\TCD2B.CH
Acq On : 09 May 2012 14:01 Operator: MDA
Sample : WG397514-01 BLANK RSK175 Inst : HP16
Misc : 1,1 Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: events2.e
Quant Time: May 9 14:06 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 :





Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\050812\16G32328.D\FID1A.CH Vial: 29
Signal #2 : C:\MSDchem\1\DATA\050812\16G32328.D\TCD2B.CH
Acq On : 08 May 2012 17:57 Operator: FJB
Sample : WG397366-02 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 08 18:02:37 2012 Quant Results File: RSK2EXT.RES

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

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

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1) T	methane	0.59	10898070	60.100 umol/
2) T	ethene	1.13	17067099	57.579 umol/
3) T	acetylene	1.21	16907790	58.387 umol/
4) T	ethane	1.49	18034601	59.333 umol/
5) T	propane	3.90	25113605	57.223 umol/
7) T	carbon dioxide	0.20	28741788	5035.047 umol/

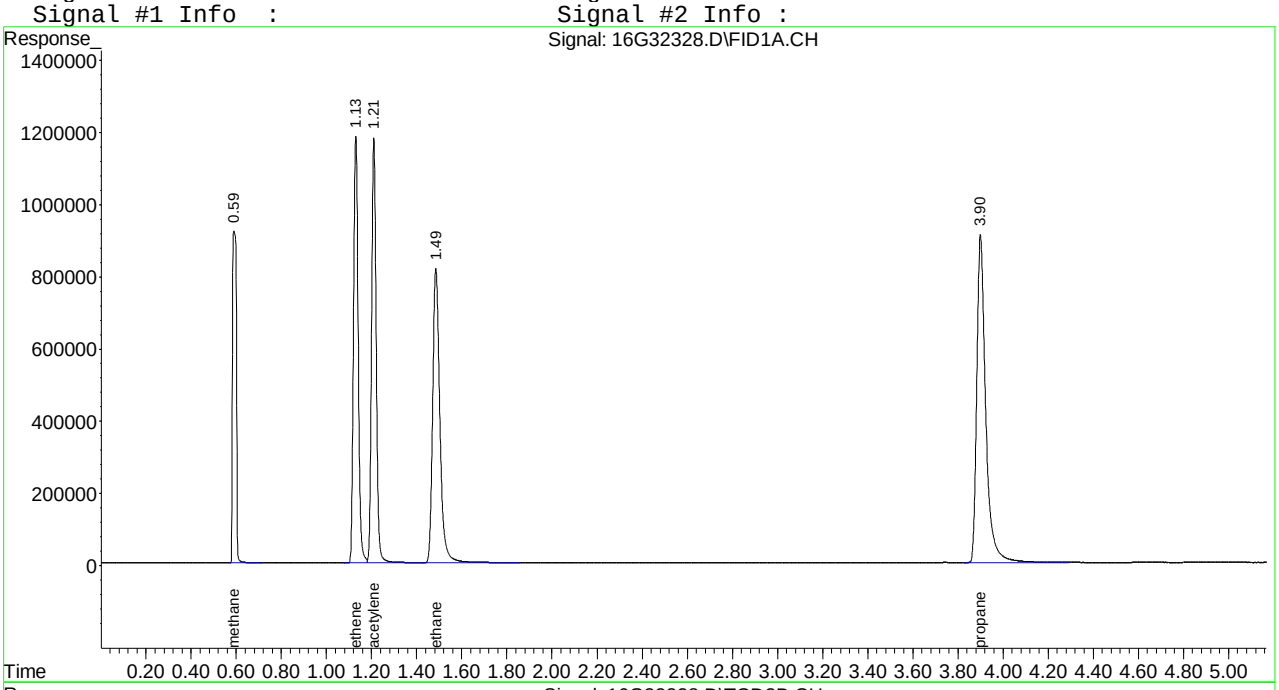
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32328.D RSK2EXT.M Tue May 08 18:02:37 2012 Page 1

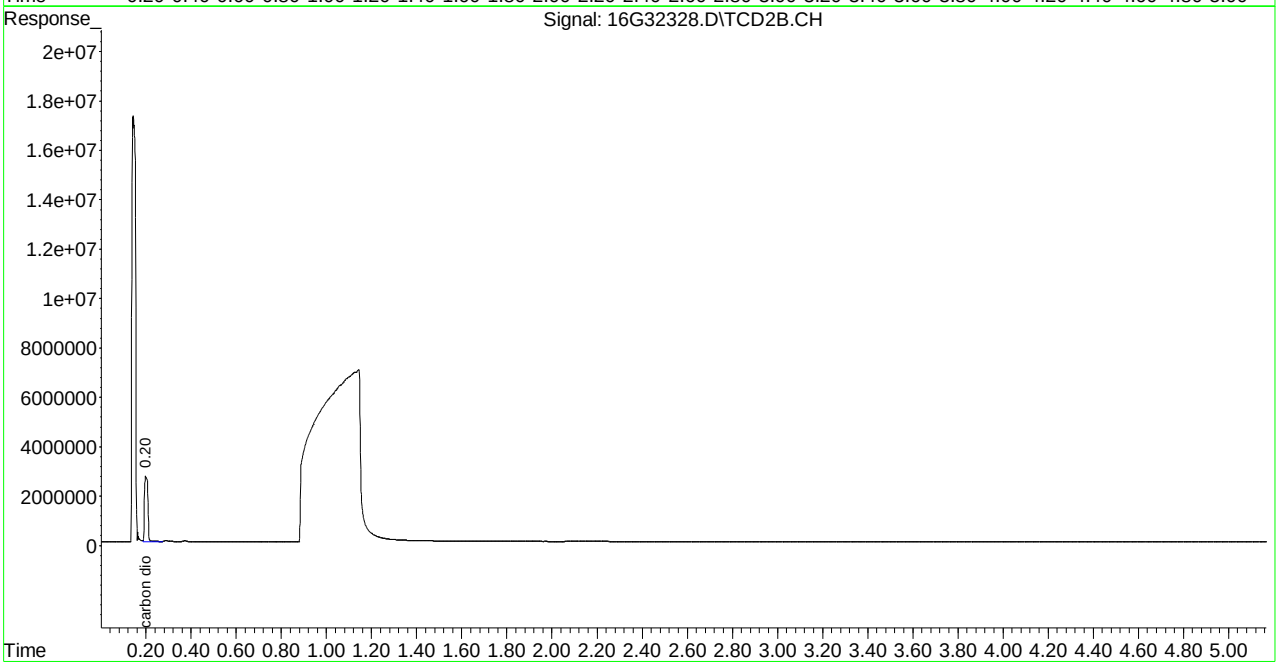
Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\050812\16G32328.D\FID1A.CH Vial: 29
Signal #2 : C:\MSDchem\1\DATA\050812\16G32328.D\TCD2B.CH
Acq On : 08 May 2012 17:57 Operator: FJB
Sample : WG397366-02 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 8 18:02 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\050912\16G32354.D\FID1A.CH Vial: 3
Signal #2 : C:\MSDchem\1\DATA\050912\16G32354.D\TCD2B.CH
Acq On : 09 May 2012 14:10 Operator: MDA
Sample : WG397514-02 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 09 14:15:27 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 :

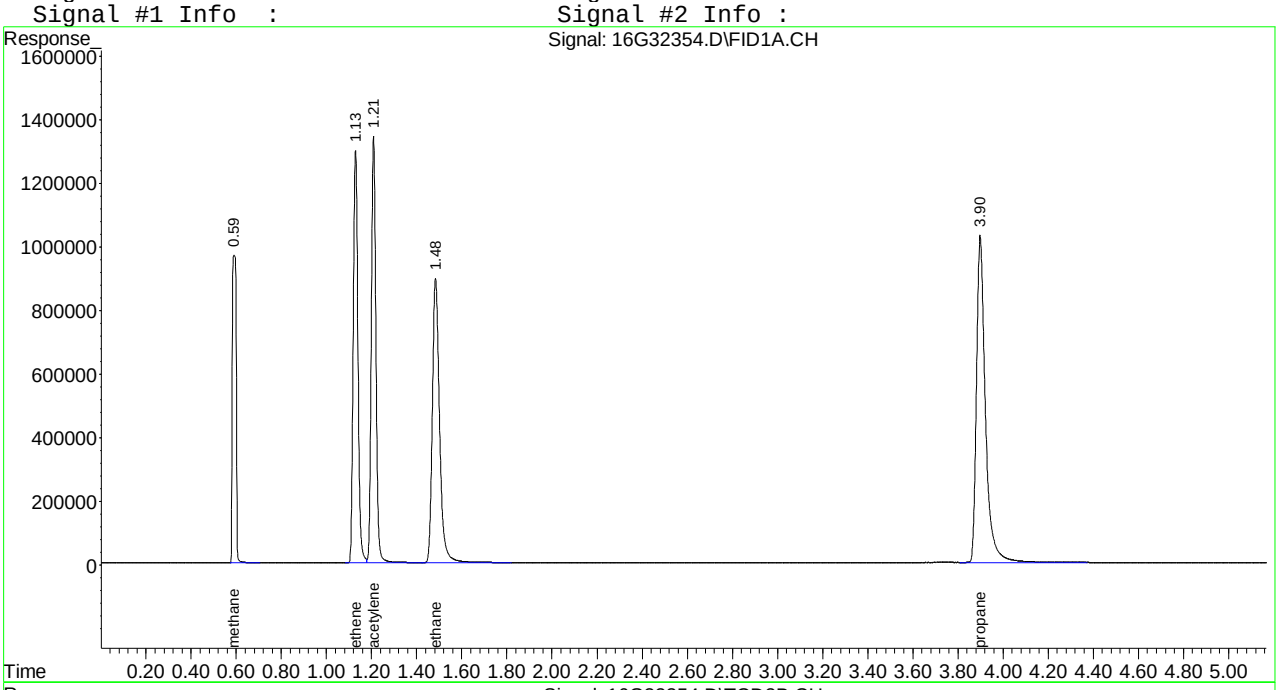
	Compound	R.T.	Response	Conc Units
	Target Compounds			
1) T	methane	0.59	11450682	63.148 umol/
2) T	ethene	1.13	18665251	62.971 umol/
3) T	acetylene	1.21	19180633	66.236 umol/
4) T	ethane	1.48	19741093	64.947 umol/
5) T	propane	3.90	28352894	64.604 umol/
7) T	carbon dioxide	0.20	33663666	5897.272 umol/

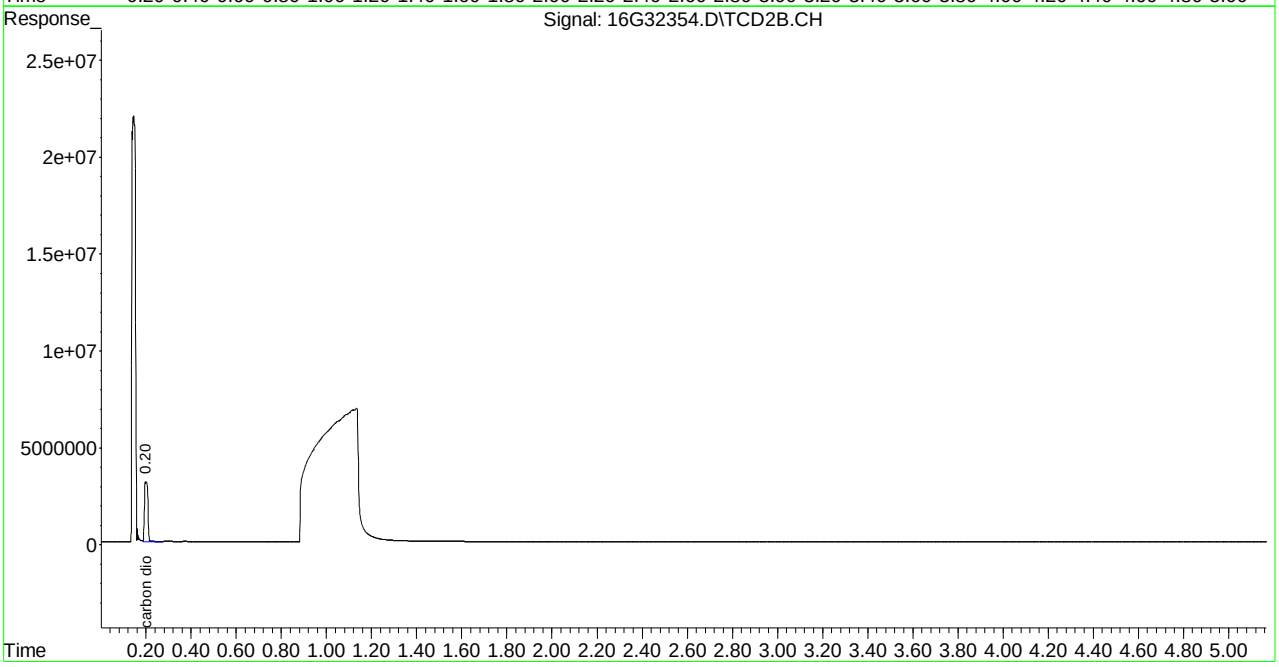
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32354.D RSK2EXT.M Wed May 09 14:15:27 2012 Page 1

Signal #1 : C:\MSDchem\1\DATA\050912\16G32354.D\FID1A.CH Vial: 3
Signal #2 : C:\MSDchem\1\DATA\050912\16G32354.D\TCD2B.CH
Acq On : 09 May 2012 14:10 Operator: MDA
Sample : WG397514-02 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 9 14:15 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\050912\16G32355.D\FID1A.CH Vial: 4
Signal #2 : C:\MSDchem\1\DATA\050912\16G32355.D\TCD2B.CH
Acq On : 09 May 2012 14:19 Operator: MDA
Sample : WG397514-03 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 09 14:24:27 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	10764791	59.365 umol/
2) T	ethene	1.13	16718622	56.404 umol/
3) T	acetylene	1.21	15401639	53.186 umol/
4) T	ethane	1.48	17939478	59.020 umol/
5) T	propane	3.90	25308393	57.667 umol/
7) T	carbon dioxide	0.20	31632869	5541.513 umol/

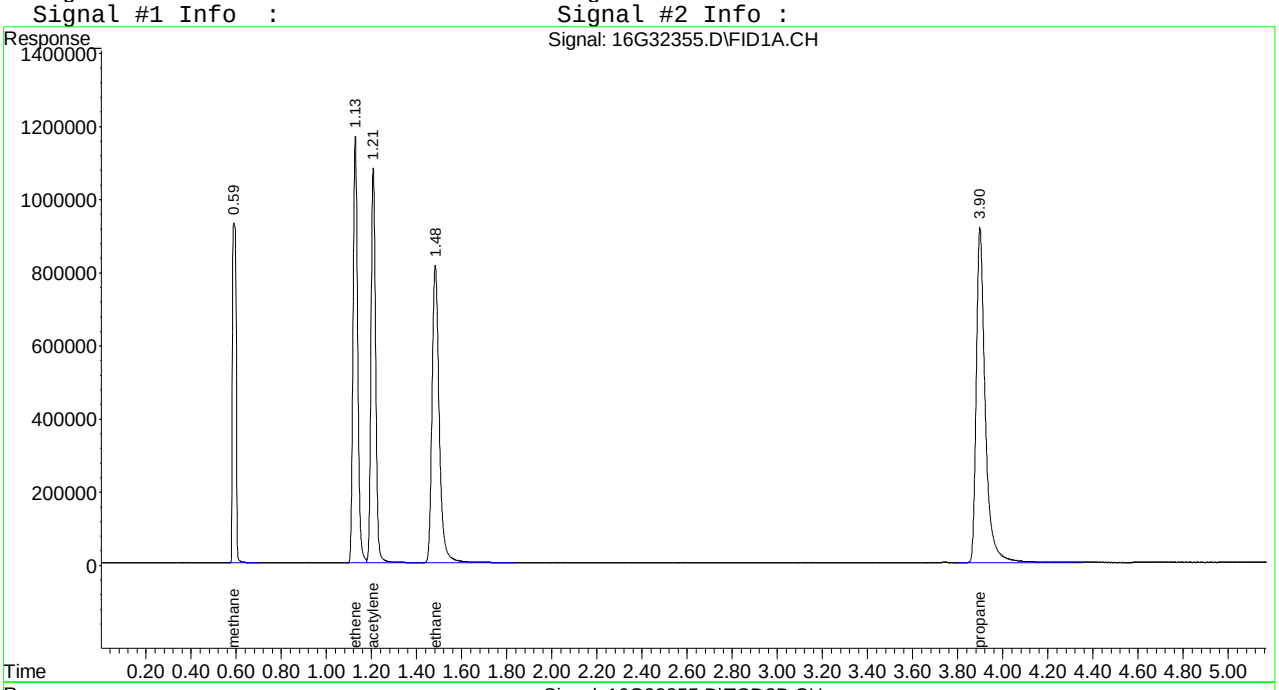
(f)=RT Delta > 1/2 Window (m)=manual int.
16G32355.D RSK2EXT.M Wed May 09 14:24:28 2012 Page 1

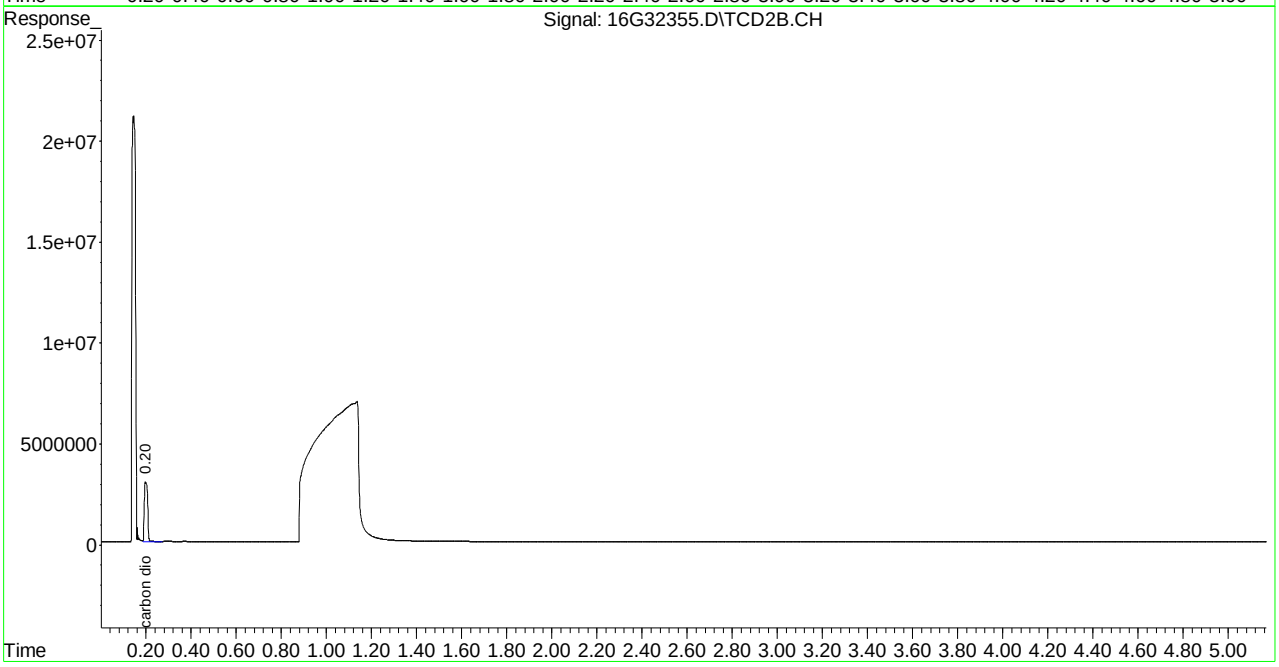
Quantitation Report (Not Reviewed)

Signal #1 : C:\MSDchem\1\DATA\050912\16G32355.D\FID1A.CH Vial: 4
Signal #2 : C:\MSDchem\1\DATA\050912\16G32355.D\TCD2B.CH
Acq On : 09 May 2012 14:19 Operator: MDA
Sample : WG397514-03 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 9 14:24 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 :





2.2 Semivolatiles Data

2.2.1 Semivolatiles GC/MS Data (8270)

2.2.1.1 Summary Data

Login Number: L12050171
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, 3,3'-Dichlorobenzidine, 3-Nitroaniline. 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 above the reporting limit in the samples associated with the LCS.

Matrix Spikes: Recoveries out of range were observed for the following analytes: 3-Nitroaniline, Hexachlorocyclopentadiene. Please see the applicable QC report for a detailed presentation of the failures.

The MS/MSD pair exceeded % RPD criteria for six (6) analytes, however the recoveries for both the MS and MSD are within specified limits.

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: 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: 46419
Approved By: Mike Cochran



Certificate of Analysis

Sample #:	L12050171-01	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-12-050412	**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:**	05/14/2012 15:41
Collect Date:	05/04/2012 10:30	**Dilution:**	1	**File ID:**	4M60873
Sample Tag:	01	**Units:**	ug/L		

Analyte	CAS #	Result	Qual	RL	MDL
unknown		5.96		0.000	0.000
unknown		10.3		0.000	0.000
unknown		4.59		0.000	0.000
unknown		7.13		0.000	0.000
unknown		11.0		0.000	0.000
unknown		6.56		0.000	0.000
unknown		9.33		0.000	0.000

Sample #:	L12050171-01	**PrePrep Method:**	N/A	**Instrument:**	HPMS4
Client ID:	MW-12-050412	**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:**	05/14/2012 15:41
Collect Date:	05/04/2012 10:30	**Dilution:**	1	**File ID:**	4M60873
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

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
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
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	5.36		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

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
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	93.6	10	123	
2-Fluorobiphenyl	66.8	43	116	
2-Fluorophenol	61.2	21	100	
Nitrobenzene-d5	69.8	35	114	
p-Terphenyl-d14	108	33	141	
Phenol-d5	67.0	10	94	

U	Not detected at or above adjusted sample detection limit.

Sample #: L12050171-03
Client ID: MW-12-050412
Matrix: Water
Workgroup #: WG397604
Collect Date: 05/04/2012 10:30
Sample Tag: 01

PrePrep Method: N/A
Prep Method: 3520C
Analytical Method: 8270C
Analyst: CAA
Dilution: 1
Units: ug/L

Instrument: HPMS4
Prep Date: 05/07/2012 11:00
Cal Date: 04/19/2012 13:23
Run Date: 05/14/2012 16:17
File ID: 4M60874

Analyte	CAS #	Result	Qual	RL	MDL
1,1'-Biphenyl	92-52-4	43.3		22.2	2.78
1,3,5-Trinitrobenzene	99-35-4	59.7		5.56	2.78
1,3-Dinitrobenzene	99-65-0	56.5		5.56	2.78
1,4-Dioxane	123-91-1	31.5		11.1	5.56
2,4,5-Trichlorophenol	95-95-4	58.4		5.56	2.78
2,4,6-Trichlorophenol	88-06-2	52.9		5.56	2.78
2,4-Dichlorophenol	120-83-2	49.0		5.56	2.78
2,4-Dimethylphenol	105-67-9	46.0		5.56	2.78
2,4-Dinitrophenol	51-28-5	55.6		27.8	13.9
2,4-Dinitrotoluene	121-14-2	61.6		5.56	2.78
2,6-Dinitrotoluene	606-20-2	57.3		5.56	2.78
2-Chloronaphthalene	91-58-7	52.5		5.56	2.78
2-Chlorophenol	95-57-8	43.7		5.56	2.78
2-Methylnaphthalene	91-57-6	41.9		5.56	2.78
2-Methylphenol	95-48-7	45.2		5.56	2.78
2-Nitroaniline	88-74-4	45.5		27.8	13.9
2-Nitrophenol	88-75-5	46.6		5.56	2.78
3-Nitroaniline	99-09-2	76.0		27.8	13.9
3,3'-Dichlorobenzidine	91-94-1	42.9		5.56	2.78

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
3-,4-Methylphenol	106-44-5	51.5		5.56	2.78
4-Bromophenyl-phenylether	101-55-3	51.0		5.56	2.78
4-Chloroaniline	106-47-8	47.5		5.56	2.78
4-Nitrophenol	100-02-7	56.8		27.8	13.9
Acenaphthene	83-32-9	47.2		5.56	2.78
Acenaphthylene	208-96-8	49.6		5.56	2.78
Anthracene	120-12-7	46.4		5.56	2.78
Benzo(a)anthracene	56-55-3	45.5		5.56	2.78
Benzo(a)pyrene	50-32-8	46.6		5.56	2.78
Benzo(b)fluoranthene	205-99-2	48.2		5.56	2.78
Benzo(g,h,i)Perylene	191-24-2	29.9		5.56	2.78
Benzo(k)fluoranthene	207-08-9	46.6		5.56	2.78
Benzoic acid	65-85-0	17.0		22.2	11.1
Benzyl alcohol	100-51-6	46.4		5.56	2.78
Bis(2-Chloroethyl)ether	111-44-4	43.5		5.56	2.78
Bis(2-Chloroethoxy)Methane	111-91-1	52.3		5.56	2.78
bis(2-Ethylhexyl)phthalate	117-81-7	54.1		5.56	2.78
Butylbenzylphthalate	85-68-7	56.6		5.56	2.78
Carbazole	86-74-8	58.6		22.2	2.78
Chrysene	218-01-9	47.3		5.56	2.78
Di-N-Butylphthalate	84-74-2	53.5		5.56	2.78
Di-n-octylphthalate	117-84-0	57.4		5.56	2.78
Dibenzo(a,h)Anthracene	53-70-3	35.1		5.56	2.78
Dibenzofuran	132-64-9	51.0		5.56	2.78
Diethylphthalate	84-66-2	61.3		5.56	2.78
Dimethylphthalate	131-11-3	58.8		5.56	2.78
Fluoranthene	206-44-0	47.4		5.56	2.78
Fluorene	86-73-7	51.9		5.56	2.78
Hexachlorobenzene	118-74-1	46.2		5.56	2.78
Hexachlorobutadiene	87-68-3	26.0		5.56	2.78
Hexachlorocyclopentadiene	77-47-4	3.91		5.56	2.78
Hexachloroethane	67-72-1	19.9		5.56	2.78
Indeno(1,2,3-cd)pyrene	193-39-5	34.5		5.56	2.78
Isophorone	78-59-1	48.9		5.56	2.78
N-Nitrosodiphenylamine	86-30-6	96.3		5.56	2.78
Naphthalene	91-20-3	41.4		5.56	2.78
Nitrobenzene	98-95-3	53.9		5.56	2.78
Pentachlorophenol	87-86-5	59.7		27.8	13.9
Phenanthrene	85-01-8	52.7		5.56	2.78

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Phenol	108-95-2	45.6		5.56	2.78
Pyrene	129-00-0	51.2		5.56	2.78

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2,4,6-Tribromophenol	104	10	123	
2-Fluorobiphenyl	84.2	43	116	
2-Fluorophenol	77.8	21	100	
Nitrobenzene-d5	84.7	35	114	
p-Terphenyl-d14	109	33	141	
Phenol-d5	83.6	10	94	

Sample #: L12050171-05
Client ID: MW-12-050412
Matrix: Water
Workgroup #: WG397604
Collect Date: 05/04/2012 10:30
Sample Tag: 01

PrePrep Method: N/A
Prep Method: 3520C
Analytical Method: 8270C
Analyst: CAA
Dilution: 1
Units: ug/L

Instrument: HPMS4
Prep Date: 05/07/2012 11:00
Cal Date: 04/19/2012 13:23
Run Date: 05/14/2012 16:51
File ID: 4M60875

Analyte	CAS #	Result	Qual	RL	MDL
1,1'-Biphenyl	92-52-4	48.1		22.7	2.84
1,3,5-Trinitrobenzene	99-35-4	57.6		5.68	2.84
1,3-Dinitrobenzene	99-65-0	56.9		5.68	2.84
1,4-Dioxane	123-91-1	42.4		11.4	5.68
2,4,5-Trichlorophenol	95-95-4	59.2		5.68	2.84
2,4,6-Trichlorophenol	88-06-2	55.8		5.68	2.84
2,4-Dichlorophenol	120-83-2	53.5		5.68	2.84
2,4-Dimethylphenol	105-67-9	51.2		5.68	2.84
2,4-Dinitrophenol	51-28-5	54.6		28.4	14.2
2,4-Dinitrotoluene	121-14-2	61.4		5.68	2.84
2,6-Dinitrotoluene	606-20-2	58.2		5.68	2.84
2-Chloronaphthalene	91-58-7	60.2		5.68	2.84
2-Chlorophenol	95-57-8	50.4		5.68	2.84
2-Methylnaphthalene	91-57-6	48.0		5.68	2.84
2-Methylphenol	95-48-7	50.9		5.68	2.84
2-Nitroaniline	88-74-4	47.5		28.4	14.2
2-Nitrophenol	88-75-5	53.1		5.68	2.84
3-Nitroaniline	99-09-2	77.1		28.4	14.2
3,3'-Dichlorobenzidine	91-94-1	54.9		5.68	2.84
3-,4-Methylphenol	106-44-5	57.4		5.68	2.84
4-Bromophenyl-phenylether	101-55-3	57.8		5.68	2.84
4-Chloroaniline	106-47-8	53.1		5.68	2.84

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
4-Nitrophenol	100-02-7	57.5		28.4	14.2
Acenaphthene	83-32-9	51.6		5.68	2.84
Acenaphthylene	208-96-8	54.1		5.68	2.84
Anthracene	120-12-7	51.5		5.68	2.84
Benzo(a)anthracene	56-55-3	58.0		5.68	2.84
Benzo(a)pyrene	50-32-8	61.7		5.68	2.84
Benzo(b)fluoranthene	205-99-2	66.8		5.68	2.84
Benzo(g,h,i)Perylene	191-24-2	41.1		5.68	2.84
Benzo(k)fluoranthene	207-08-9	63.1		5.68	2.84
Benzoic acid	65-85-0	19.0		22.7	11.4
Benzyl alcohol	100-51-6	51.6		5.68	2.84
Bis(2-Chloroethyl)ether	111-44-4	49.8		5.68	2.84
Bis(2-Chloroethoxy)Methane	111-91-1	59.4		5.68	2.84
bis(2-Ethylhexyl)phthalate	117-81-7	66.9		5.68	2.84
Butylbenzylphthalate	85-68-7	68.6		5.68	2.84
Carbazole	86-74-8	58.2		22.7	2.84
Chrysene	218-01-9	60.8		5.68	2.84
Di-N-Butylphthalate	84-74-2	60.2		5.68	2.84
Di-n-octylphthalate	117-84-0	75.9		5.68	2.84
Dibenzo(a,h)Anthracene	53-70-3	48.5		5.68	2.84
Dibenzofuran	132-64-9	54.7		5.68	2.84
Diethylphthalate	84-66-2	61.6		5.68	2.84
Dimethylphthalate	131-11-3	59.7		5.68	2.84
Fluoranthene	206-44-0	56.3		5.68	2.84
Fluorene	86-73-7	55.4		5.68	2.84
Hexachlorobenzene	118-74-1	56.7		5.68	2.84
Hexachlorobutadiene	87-68-3	37.1		5.68	2.84
Hexachlorocyclopentadiene	77-47-4	4.09		5.68	2.84
Hexachloroethane	67-72-1	26.7		5.68	2.84
Indeno(1,2,3-cd)pyrene	193-39-5	47.2		5.68	2.84
Isophorone	78-59-1	54.7		5.68	2.84
N-Nitrosodiphenylamine	86-30-6	97.7		5.68	2.84
Naphthalene	91-20-3	47.5		5.68	2.84
Nitrobenzene	98-95-3	61.5		5.68	2.84
Pentachlorophenol	87-86-5	59.1		28.4	14.2
Phenanthrene	85-01-8	56.8		5.68	2.84
Phenol	108-95-2	51.7		5.68	2.84
Pyrene	129-00-0	61.4		5.68	2.84

Surrogate	Recovery	Lower Limit	Upper Limit	Q

Certificate of Analysis

2,4,6-Tribromophenol	100	10	123	
2-Fluorobiphenyl	92.2	43	116	
2-Fluorophenol	89.5	21	100	
Nitrobenzene-d5	95.0	35	114	
p-Terphenyl-d14	111	33	141	
Phenol-d5	92.6	10	94	

Sample #: L12050171-07
Client ID: PZ-01-050412
Matrix: Water
Workgroup #: WG397604
Collect Date: 05/04/2012 12:07
Sample Tag: 01

PrePrep Method: N/A
Prep Method: 3520C
Analytical Method: 8270C
Analyst: CAA
Dilution: 1
Units: ug/L

Instrument: HPMS4
Prep Date: 05/07/2012 11:00
Cal Date: 04/19/2012 13:23
Run Date: 05/14/2012 17:26
File ID: 4M60876

Analyte	CAS #	Result	Qual	RL	MDL
1,1'-Biphenyl	92-52-4		U	25.3	3.16
1,3,5-Trinitrobenzene	99-35-4		U	6.33	3.16
1,3-Dinitrobenzene	99-65-0		U	6.33	3.16
1,4-Dioxane	123-91-1		U	12.7	6.33
2,4,5-Trichlorophenol	95-95-4		U	6.33	3.16
2,4,6-Trichlorophenol	88-06-2		U	6.33	3.16
2,4-Dichlorophenol	120-83-2		U	6.33	3.16
2,4-Dimethylphenol	105-67-9		U	6.33	3.16
2,4-Dinitrophenol	51-28-5		U	31.6	15.8
2,4-Dinitrotoluene	121-14-2		U	6.33	3.16
2,6-Dinitrotoluene	606-20-2		U	6.33	3.16
2-Chloronaphthalene	91-58-7		U	6.33	3.16
2-Chlorophenol	95-57-8		U	6.33	3.16
2-Methylnaphthalene	91-57-6		U	6.33	3.16
2-Methylphenol	95-48-7		U	6.33	3.16
2-Nitroaniline	88-74-4		U	31.6	15.8
2-Nitrophenol	88-75-5		U	6.33	3.16
3-Nitroaniline	99-09-2		U	31.6	15.8
3,3'-Dichlorobenzidine	91-94-1		U	6.33	3.16
3-,4-Methylphenol	106-44-5		U	6.33	3.16
4-Bromophenyl-phenylether	101-55-3		U	6.33	3.16
4-Chloroaniline	106-47-8		U	6.33	3.16
4-Nitrophenol	100-02-7		U	31.6	15.8
Acenaphthene	83-32-9		U	6.33	3.16
Acenaphthylene	208-96-8		U	6.33	3.16
Anthracene	120-12-7		U	6.33	3.16

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Benzo(a)anthracene	56-55-3		U	6.33	3.16
Benzo(a)pyrene	50-32-8		U	6.33	3.16
Benzo(b)fluoranthene	205-99-2		U	6.33	3.16
Benzo(g,h,i)Perylene	191-24-2		U	6.33	3.16
Benzo(k)fluoranthene	207-08-9		U	6.33	3.16
Benzoic acid	65-85-0		U	25.3	12.7
Benzyl alcohol	100-51-6		U	6.33	3.16
Bis(2-Chloroethyl)ether	111-44-4		U	6.33	3.16
Bis(2-Chloroethoxy)Methane	111-91-1		U	6.33	3.16
bis(2-Ethylhexyl)phthalate	117-81-7	3.85		6.33	3.16
Butylbenzylphthalate	85-68-7		U	6.33	3.16
Carbazole	86-74-8		U	25.3	3.16
Chrysene	218-01-9		U	6.33	3.16
Di-N-Butylphthalate	84-74-2		U	6.33	3.16
Di-n-octylphthalate	117-84-0		U	6.33	3.16
Dibenzo(a,h)Anthracene	53-70-3		U	6.33	3.16
Dibenzofuran	132-64-9		U	6.33	3.16
Diethylphthalate	84-66-2		U	6.33	3.16
Dimethylphthalate	131-11-3		U	6.33	3.16
Fluoranthene	206-44-0		U	6.33	3.16
Fluorene	86-73-7		U	6.33	3.16
Hexachlorobenzene	118-74-1		U	6.33	3.16
Hexachlorobutadiene	87-68-3		U	6.33	3.16
Hexachlorocyclopentadiene	77-47-4		U	6.33	3.16
Hexachloroethane	67-72-1		U	6.33	3.16
Indeno(1,2,3-cd)pyrene	193-39-5		U	6.33	3.16
Isophorone	78-59-1		U	6.33	3.16
N-Nitrosodiphenylamine	86-30-6		U	6.33	3.16
Naphthalene	91-20-3		U	6.33	3.16
Nitrobenzene	98-95-3		U	6.33	3.16
Pentachlorophenol	87-86-5		U	31.6	15.8
Phenanthrene	85-01-8		U	6.33	3.16
Phenol	108-95-2		U	6.33	3.16
Pyrene	129-00-0		U	6.33	3.16

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2,4,6-Tribromophenol	92.8	10	123	
2-Fluorobiphenyl	78.8	43	116	
2-Fluorophenol	76.7	21	100	
Nitrobenzene-d5	80.4	35	114	

Certificate of Analysis

p-Terphenyl-d14	60.7	33	141	
Phenol-d5	78.9	10	94	

U	Not detected at or above adjusted sample detection limit.

Sample #: L12050171-07
Client ID: PZ-01-050412
Matrix: Water
Workgroup #: WG397604
Collect Date: 05/04/2012 12:07
Sample Tag: 01

PrePrep Method: N/A
Prep Method: 3520C
Analytical Method: 8270C
Analyst: CAA
Dilution: 1
Units: ug/L

Instrument: HPMS4
Prep Date: 05/07/2012 11:00
Cal Date: 04/19/2012 13:23
Run Date: 05/14/2012 17:26
File ID: 4M60876

Analyte	CAS #	Result	Qual	RL	MDL
2-Propanone, 1-chloro-		8.86		0.000	0.000
2-Butanone, 4-hydroxy-		18.3		0.000	0.000
unknown		49.1		0.000	0.000
unknown		5.29		0.000	0.000
unknown		12.8		0.000	0.000
unknown		5.28		0.000	0.000
unknown		19.3		0.000	0.000
unknown		7.48		0.000	0.000
unknown		10.6		0.000	0.000

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.
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

Methylene Chloride Lot #: COA16058
1:1 H2SO4 Lot #: RGT17192
10N NaOH Lot #: RGT17312
Sodium Sulfate,Anhydrous,Granular (Lot # COA15998

	SAMPLE #	Type	Reference	pH	Prod	Init Amnt	Surr Amnt	Spike Amnt	Spike Sol	Final Vol	Color
1	L12050011-01	SAMP		<2>12	27-SPE-DIO	1000 mL	.5 mL			1 mL	Transparent
2	L12050011-03	SAMP		<2>12	27-SPE-DIO	1000 mL	.5 mL			1 mL	Transparent
3	L12050011-05	SAMP		<2>12	27-SPE-DIO	890 mL	.5 mL			1 mL	Transparent
4	L12050050-01	SAMP		<2>12	27-SPE-DIO	1000 mL	.5 mL			1 mL	Transparent
5	L12050050-03	SAMP		<2>12	27-SPE-DIO	1000 mL	.5 mL			1 mL	Transparent
6	L12050050-05	SAMP		<2>12	27-SPE-DIO	840 mL	.5 mL			1 mL	Colored
7	L12050050-07	SAMP		<2>12	27-SPE-DIO	840 mL	.5 mL			1 mL	Transparent
8	L12050099-01	SAMP		<2>12	27-SPE-DIO	980 mL	.5 mL			1 mL	Transparent
9	L12050099-03	SAMP		<2>12	27-SPE-DIO	850 mL	.5 mL			1 mL	Transparent
10	L12050099-05	SAMP		<2>12	27-SPE-DIO	900 mL	.5 mL			1 mL	Transparent
11	L12050099-07	SAMP		<2>12	27-SPE-DIO	870 mL	.5 mL			1 mL	Transparent
12	L12050099-09	SAMP		<2>12	27-SPE-DIO	890 mL	.5 mL			1 mL	Transparent
13	L12050153-01	SAMP		<2>12	27-SPE-DIO	900 mL	.5 mL			1 mL	Transparent
14	L12050153-03	SAMP		<2>12	27-SPE-DIO	1000 mL	.5 mL			1 mL	Transparent
15	L12050153-05	SAMP		<2>12	27-SPE-DIO	900 mL	.5 mL			1 mL	Colored
16	L12050153-07	SAMP		<2>12	27-SPE-DIO	1000 mL	.5 mL			1 mL	Colored
17	L12050171-01	RS01		<2>12	27-SPE-DIO	900 mL	.5 mL			1 mL	Colored
18	L12050171-03	MS01	L12050171-01	<2>12	27-SPE-DIO	900 mL	.5 mL	1 mL	STD51286	1 mL	Colored
19	L12050171-05	SD01	L12050171-01	<2>12	27-SPE-DIO	880 mL	.5 mL	1 mL	STD51286	1 mL	Colored
20	L12050171-07	SAMP		<2>12	27-SPE-DIO	790 mL	.5 mL			1 mL	Transparent
21	WG397140-01	REF	L12050171-01	<2>12	27-SPE-DIO	900 mL	.5 mL			1 mL	Colored
22	WG397140-02	BLANK		<2>12	27-SPE-DIO	1000 mL	.5 mL			1 mL	Transparent
23	WG397140-03	LCS		<2>12	27-SPE-DIO	1000 mL	.5 mL	1 mL	STD51286	1 mL	Colored
24	WG397140-04	MS	L12050171-01	<2>12	27-SPE-DIO	900 mL	.5 mL	1 mL	STD51286	1 mL	Colored
25	WG397140-05	MSD	L12050171-01	<2>12	27-SPE-DIO	880 mL	.5 mL	1 mL	STD51286	1 mL	Colored

Analyst: Chris Hill

Reviewer: Cheryl A. Flowers

EXTRACT - Modified 10/22/2008
PDF ID: 2408524
Report generated: 05/15/2012 13:13

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: 051412
Analyst1: CAA Analyst2: NA
Method: 8270C SOP: MSS01 Rev: 19

Maintenance Log ID: 41727 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: Samples were analyzed at a dilution due to extract appearance unless otherwise noted.

Seq.	File ID	Sample Information	Mat	Dil	Reference	Date/Time
1	4M60860	WG397858-01 50PPM DFTPP STD	1	1	STD50659	05/14/12 08:24
2	4M60861	WG397858-02 50PPM Megamix STD	1	1	STD50886	05/14/12 08:44
3	4M60862	WG397859-01 50PPM TCL STD	1	1	STD51428	05/14/12 09:19
4	4M60863	L12050256-47	7	1	SOIL	05/14/12 09:53
5	4M60864	L12050256-48	7	1	SOIL	05/14/12 10:28
6	4M60865	L12050256-50	7	1	SOIL	05/14/12 11:02
7	4M60866	L12050256-51	7	1	SOIL	05/14/12 11:36
8	4M60867	L12050256-22	7	1	SOIL	05/14/12 12:10
9	4M60868	L12050256-44	7	1	SOIL	05/14/12 12:45
10	4M60869	L12050256-45	7	1	SOIL	05/14/12 13:20
11	4M60870	L12050256-21	7	1	SOIL	05/14/12 13:55
12	4M60871	L12050134-08 (5/08 ext)	1	1		05/14/12 14:30
13	4M60872	L12050256-46	7	1	SOIL	05/14/12 15:05
14	4M60873	L12050171-01 REF	1	1		05/14/12 15:41
15	4M60874	L12050171-03 MS	1	1		05/14/12 16:17
16	4M60875	L12050171-05 MSD	1	1		05/14/12 16:51
17	4M60876	L12050171-07	1	1		05/14/12 17:26
18	4M60877	L12050226-05	1	1		05/14/12 18:02
19	4M60878	L12050226-03 2X	1	2		05/14/12 18:36
20	4M60879	L12050226-07 2X	1	2		05/14/12 19:11
21	4M60880	L12050226-10 2X	1	2		05/14/12 19:46
22	4M60881	L12050226-01 10X	1	10		05/14/12 20:21
23	4M60882	BNA SPIKE check	1	1		05/14/12 20:55

Comments

Seq.	Rerun	Dil.	Reason	Analytes
13	X	5	Over Calibration Range	#129
	L12050256-46			
22				
	L12050226-01 10X - Istd 1 low - SMI; SS 2FP, PHL high - SMI; SS TPH low. Sample was analyzed at a dilution due to extract viscosity.			

Page: 1 Approved: 15-MAY-12

Microbac Laboratories Inc.

Data Checklist

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

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

Primary Reviewer:
20-APR-2012

Secondary Reviewer:
20-APR-2012

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

Microbac Laboratories Inc.

Data Checklist

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

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

Primary Reviewer:
02-MAY-2012

Secondary Reviewer:
03-MAY-2012

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-03-2012 14:47:41

Microbac Laboratories Inc.

Data Checklist

Date: 12-MAY-2012
Analyst: CAA
Analyst: NA
Method: 8270
Instrument: HPMS4
Curve Workgroup: NA
Runlog ID: 46726
Analytical Workgroups: L12050134, L12050011, L12050050, L12050099, L12050153

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

Primary Reviewer:
14-MAY-2012

Secondary Reviewer:
14-MAY-2012

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-14-2012 15:19:10

Microbac Laboratories Inc.

Data Checklist

Date: 14-MAY-2012
Analyst: CAA
Analyst: NA
Method: 8270
Instrument: HPMS4
Curve Workgroup: NA
Runlog ID: 46750
Analytical Workgroups: L12050256, L12050134, L12050171, L12050226

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	NA
TCL hits	NA
Surrogate recoveries	NA
LCS/LCSD (Laboratory Control Sample)	NA
Recoveries	NA
Surrogate recoveries	NA
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	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:
15-MAY-2012

Secondary Reviewer:
15-MAY-2012

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-15-2012 14:54:45

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

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

Login Number: L12050171

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-12-050412	01	05/04/12					05/07/12	3	7		05/14/12	7.2	40	
MW-12-050412	03	05/04/12					05/07/12	3	7		05/14/12	7.2	40	
MW-12-050412	05	05/04/12					05/07/12	3	7		05/14/12	7.2	40	
PZ-01-050412	07	05/04/12					05/07/12	3	7		05/14/12	7.3	40	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2415746
Report generated 05/15/2012 16:00

Microbac Laboratories Inc.
SURROGATE STANDARDS

Login Number: L12050171
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
L12050171-01	1.00	01	93.6	66.8	61.2	69.8	108	67.0
L12050171-03	1.00	01	104	84.2	77.8	84.7	109	83.6
L12050171-05	1.00	01	100	92.2	89.5	95.0	111	92.6
L12050171-07	1.00	01	92.8	78.8	76.7	80.4	60.7	78.9
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: 2414653
Report generated: 05/15/2012 16:01

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number:	L12050171	Work Group:	WG397604
Blank File ID:	4M60821	Blank Sample ID:	WG397140-02
Prep Date:	05/07/12 11:00	Instrument ID:	HPMS4
Analyzed Date:	05/12/12 13:42	Method:	8270C
Analyst:	CAA		

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-12-050412	L12050171-01	4M60873	05/14/12 15:41	01
MW-12-050412	L12050171-03	4M60874	05/14/12 16:17	01
MW-12-050412	L12050171-05	4M60875	05/14/12 16:51	01
PZ-01-050412	L12050171-07	4M60876	05/14/12 17:26	01

Report Name: BLANK_SUMMARY
PDF File ID: 2415747
Report generated 05/15/2012 16:00

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number:L12050171 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: 2414650
15-MAY-2012 16:00

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050171 Prep Date: 05/07/12 11:00 Sample ID: WG397140-02
Instrument ID: HPMS4 Run Date: 05/12/12 13:42 Prep Method: 3520C
File ID: 4M60821 Analyst: CAA Method: 8270C
Workgroup (AAB#): WG397604 Matrix: Water Units: ug/L
Contract #: Cal ID: HPMS4-19-APR-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Dibenzofuran	2.50	5.00	2.50	1	U
Diethylphthalate	2.50	5.00	2.50	1	U
Dimethylphthalate	2.50	5.00	2.50	1	U
Fluoranthene	2.50	5.00	2.50	1	U
Fluorene	2.50	5.00	2.50	1	U
Hexachlorobenzene	2.50	5.00	2.50	1	U
Hexachlorobutadiene	2.50	5.00	2.50	1	U
Hexachlorocyclopentadiene	2.50	5.00	2.50	1	U
Hexachloroethane	2.50	5.00	2.50	1	U
Indeno(1,2,3-cd)pyrene	2.50	5.00	2.50	1	U
Isophorone	2.50	5.00	2.50	1	U
N-Nitrosodiphenylamine	2.50	5.00	2.50	1	U
Naphthalene	2.50	5.00	2.50	1	U
Nitrobenzene	2.50	5.00	2.50	1	U
Pentachlorophenol	12.5	25.0	12.5	1	U
Phenanthrene	2.50	5.00	2.50	1	U
Phenol	2.50	5.00	2.50	1	U
Pyrene	2.50	5.00	2.50	1	U

Surrogates	% Recovery	Surrogate Limits			Qualifier
2,4,6-Tribromophenol	106	10	-	123	PASS
2-Fluorobiphenyl	91.7	43	-	116	PASS
2-Fluorophenol	85.3	21	-	100	PASS
Nitrobenzene-d5	96.8	35	-	114	PASS
p-Terphenyl-d14	125	33	-	141	PASS
Phenol-d5	90.8	10	-	94	PASS

MDL Method Detection Limit
RL Reporting/Practical Quantitation Limit
ND Analyte Not detected at or above reporting limit
* |Analyte concentration| > RL

Report Name:BLANK
PDF ID: 2414650
15-MAY-2012 16:00

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number:L12050171 Run Date:05/12/2012 Sample ID:WG397140-03
Instrument ID:HPMS4 Run Time:14:17 Prep Method:3520C
File ID:4M60822 Analyst:CAA Method:8270C
Workgroup (AAB#):WG397604 Matrix:Water Units:ug/L
QC Key:WATERLOO Lot#:STD51286 Cal ID: HPMS4-19-APR-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
1,1'-Biphenyl	50.0	46.9	93.8	40 - 140	
1,3,5-Trinitrobenzene	50.0	67.9	136	10 - 120	*
1,3-Dinitrobenzene	50.0	59.7	119	30 - 130	
1,4-Dioxane	50.0	37.4	74.8	50 - 150	
2,4,5-Trichlorophenol	50.0	61.3	123	35 - 120	*
2,4,6-Trichlorophenol	50.0	57.4	115	30 - 120	
2,4-Dichlorophenol	50.0	52.9	106	20 - 110	
2,4-Dimethylphenol	50.0	50.5	101	20 - 120	
2,4-Dinitrophenol	50.0	57.1	114	20 - 140	
2,4-Dinitrotoluene	50.0	65.3	131	50 - 139	
2,6-Dinitrotoluene	50.0	61.5	123	50 - 120	*
2-Chloronaphthalene	50.0	61.9	124	25 - 120	*
2-Chlorophenol	50.0	48.2	96.4	25 - 110	
2-Methylnaphthalene	50.0	50.3	101	25 - 120	
2-Methylphenol	50.0	49.3	98.5	20 - 110	
2-Nitroaniline	50.0	58.2	116	45 - 115	*
2-Nitrophenol	50.0	50.3	101	20 - 115	
3-Nitroaniline	50.0	84.7	169	40 - 120	*
3,3'-Dichlorobenzidine	50.0	89.3	179	30 - 140	*
3-,4-Methylphenol	50.0	56.7	113	20 - 110	*
4-Bromophenyl-phenylether	50.0	62.6	125	40 - 115	*
4-Chloroaniline	50.0	55.2	110	25 - 120	
4-Nitrophenol	50.0	57.5	115	10 - 132	
Acenaphthene	50.0	54.4	109	30 - 120	
Acenaphthylene	50.0	57.7	115	30 - 120	
Anthracene	50.0	56.0	112	55 - 130	
Benzo(a)anthracene	50.0	61.5	123	60 - 130	
Benzo(a)pyrene	50.0	65.1	130	55 - 135	
Benzo(b)fluoranthene	50.0	68.3	137	45 - 125	*
Benzo(g,h,i)Perylene	50.0	66.2	132	45 - 140	
Benzo(k)fluoranthene	50.0	63.3	127	55 - 140	
Benzoic acid	50.0		0	10 - 100	*
Benzyl alcohol	50.0	51.0	102	20 - 110	
Bis(2-Chloroethyl)ether	50.0	48.4	96.8	25 - 110	
Bis(2-Chloroethoxy)Methane	50.0	58.0	116	20 - 105	*
bis(2-Ethylhexyl)phthalate	50.0	68.0	136	50 - 150	
Butylbenzylphthalate	50.0	70.1	140	55 - 150	
Carbazole	50.0	63.0	126	50 - 130	
Chrysene	50.0	63.5	127	55 - 130	
Di-N-Butylphthalate	50.0	64.7	129	55 - 118	*
Di-n-octylphthalate	50.0	71.4	143	40 - 146	

LCS - Modified 03/06/2008
PDF File ID: 2414651
Report generated: 05/15/2012 16:00

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050171 Run Date: 05/12/2012 Sample ID: WG397140-03
Instrument ID: HPMS4 Run Time: 14:17 Prep Method: 3520C
File ID: 4M60822 Analyst: CAA Method: 8270C
Workgroup (AAB#): WG397604 Matrix: Water Units: ug/L
QC Key: WATERLOO Lot#: STD51286 Cal ID: HPMS4-19-APR-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Dibenzo(a,h)Anthracene	50.0	68.0	136	45 - 125	*
Dibenzofuran	50.0	57.5	115	35 - 115	
Diethylphthalate	50.0	64.8	130	45 - 120	*
Dimethylphthalate	50.0	63.1	126	25 - 112	*
Fluoranthene	50.0	61.7	123	50 - 137	
Fluorene	50.0	58.2	116	40 - 120	
Hexachlorobenzene	50.0	61.6	123	50 - 130	
Hexachlorobutadiene	50.0	41.5	82.9	24 - 105	
Hexachlorocyclopentadiene	50.0	30.3	60.6	20 - 143	
Hexachloroethane	50.0	30.0	60.0	25 - 95	
Indeno(1,2,3-cd)pyrene	50.0	67.6	135	50 - 135	
Isophorone	50.0	53.9	108	30 - 110	
N-Nitrosodiphenylamine	100	105	105	40 - 110	
Naphthalene	50.0	48.5	97.1	25 - 110	
Nitrobenzene	50.0	54.3	109	30 - 110	
Pentachlorophenol	50.0	61.6	123	40 - 140	
Phenanthrene	50.0	61.7	123	55 - 120	*
Phenol	50.0	49.6	99.3	10 - 120	
Pyrene	50.0	63.6	127	55 - 130	

Surrogates	% Recovery	Surrogate Limits	Qualifier
2,4,6-Tribromophenol	124	10 - 123	FAIL
2-Fluorobiphenyl	106	43 - 116	PASS
2-Fluorophenol	98.3	21 - 100	PASS
Nitrobenzene-d5	106	35 - 114	PASS
p-Terphenyl-d14	134	33 - 141	PASS
Phenol-d5	103	10 - 94	FAIL

* EXCEEDS %REC LIMIT

LCS - Modified 03/06/2008
PDF File ID: 2414651
Report generated: 05/15/2012 16:00

Microbac Laboratories Inc.

MS/MSD REPORT

Loginnum:L12050171 Cal ID:HPMS4- 19-APR-12 Worknum:WG397604

Instrument ID:HPMS4 Contract #: Prep Method:3520C

Parent ID:L12050171-01 File ID:4M60873 Dil:1 Method:8270C

Sample ID:L12050171-03 MS File ID:4M60874 Dil:1 Matrix:Water

Sample ID:L12050171-05 MSD File ID:4M60875 Dil:1 Units:ug/L

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
1,1'-Biphenyl	U	55.6	43.3	77.9	56.8	48.1	84.6	10.4	40 - 140	30	
1,3,5-Trinitrobenzene	U	55.6	59.7	108	56.8	57.6	101	3.61	10 - 120	30	
1,3-Dinitrobenzene	U	55.6	56.5	102	56.8	56.9	100	0.745	30 - 130	30	
1,4-Dioxane	U	55.6	31.5	56.7	56.8	42.4	74.7	29.5	50 - 150	30	
2,4,5-Trichlorophenol	U	55.6	58.4	105	56.8	59.2	104	1.45	35 - 120	30	
2,4,6-Trichlorophenol	U	55.6	52.9	95.3	56.8	55.8	98.2	5.27	30 - 120	30	
2,4-Dichlorophenol	U	55.6	49.0	88.3	56.8	53.5	94.1	8.67	20 - 110	30	
2,4-Dimethylphenol	U	55.6	46.0	82.9	56.8	51.2	90.2	10.7	20 - 120	30	
2,4-Dinitrophenol	U	55.6	55.6	100	56.8	54.6	96.2	1.78	20 - 140	30	
2,4-Dinitrotoluene	U	55.6	61.6	111	56.8	61.4	108	0.413	50 - 139	30	
2,6-Dinitrotoluene	U	55.6	57.3	103	56.8	58.2	102	1.52	50 - 120	30	
2-Chloronaphthalene	U	55.6	52.5	94.5	56.8	60.2	106	13.7	25 - 120	30	
2-Chlorophenol	U	55.6	43.7	78.7	56.8	50.4	88.6	14.1	25 - 110	30	
2-Methylnaphthalene	U	55.6	41.9	75.3	56.8	48.0	84.5	13.8	25 - 120	30	
2-Methylphenol	U	55.6	45.2	81.3	56.8	50.9	89.5	11.9	20 - 110	30	
2-Nitroaniline	U	55.6	45.5	82	56.8	47.5	83.6	4.27	45 - 115	30	
2-Nitrophenol	U	55.6	46.6	83.9	56.8	53.1	93.4	13.0	20 - 115	30	
3-Nitroaniline	U	55.6	76.0	137	56.8	77.1	136	1.48	40 - 120	30	*
3,3'-Dichlorobenzidine	U	55.6	42.9	77.2	56.8	54.9	96.7	24.6	30 - 140	30	
3-,4-Methylphenol	U	55.6	51.5	92.7	56.8	57.4	101	10.8	20 - 110	30	
4-Bromophenyl-phenylether	U	55.6	51.0	91.8	56.8	57.8	102	12.5	40 - 115	30	
4-Chloroaniline	U	55.6	47.5	85.6	56.8	53.1	93.4	11.0	25 - 120	30	
4-Nitrophenol	U	55.6	56.8	102	56.8	57.5	101	1.31	10 - 132	30	
Acenaphthene	U	55.6	47.2	85	56.8	51.6	90.8	8.85	30 - 120	30	
Acenaphthylene	U	55.6	49.6	89.3	56.8	54.1	95.2	8.59	30 - 120	30	
Anthracene	U	55.6	46.4	83.5	56.8	51.5	90.7	10.5	55 - 130	30	
Benzo(a)anthracene	U	55.6	45.5	81.9	56.8	58.0	102	24.2	60 - 130	30	
Benzo(a)pyrene	U	55.6	46.6	84	56.8	61.7	109	27.7	55 - 135	30	
Benzo(b)fluoranthene	U	55.6	48.2	86.8	56.8	66.8	118	32.3	45 - 125	30	#
Benzo(g,h,i)Perylene	U	55.6	29.9	53.8	56.8	41.1	72.4	31.6	45 - 140	30	#
Benzo(k)fluoranthene	U	55.6	46.6	83.8	56.8	63.1	111	30.1	55 - 140	30	#
Benzoic acid	U	55.6	17.0	30.5	56.8	19.0	33.4	11.2	10 - 100	30	
Benzyl alcohol	U	55.6	46.4	83.6	56.8	51.6	90.8	10.5	20 - 110	30	
Bis(2-Chloroethyl)ether	U	55.6	43.5	78.3	56.8	49.8	87.6	13.4	25 - 110	30	
Bis(2-Chloroethoxy)Methane	U	55.6	52.3	94.2	56.8	59.4	105	12.8	20 - 105	30	
bis(2-Ethylhexyl)phthalate	5.36	55.6	54.1	87.7	56.8	66.9	108	21.2	50 - 150	30	
Butylbenzylphthalate	U	55.6	56.6	102	56.8	68.6	121	19.2	55 - 150	30	
Carbazole	U	55.6	58.6	105	56.8	58.2	103	0.555	50 - 130	30	
Chrysene	U	55.6	47.3	85.2	56.8	60.8	107	24.9	55 - 130	30	
Di-N-Butylphthalate	U	55.6	53.5	96.3	56.8	60.2	106	11.8	55 - 118	30	
Di-n-octylphthalate	U	55.6	57.4	103	56.8	75.9	134	27.6	40 - 146	30	

MS_MSD - Modified 03/06/2008

PDF File ID: 2414652

Report generated 05/15/2012 16:00

Microbac Laboratories Inc.

MS/MSD REPORT

Loginnum:L12050171 Cal ID:HPMS4 19-APR-12 Worknum:WG397604

Instrument ID:HPMS4 Contract #: Prep Method:3520C

Parent ID:L12050171-01 File ID:4M60873 Dil:1 Method:8270C

Sample ID:L12050171-03 MS File ID:4M60874 Dil:1 Matrix:Water

Sample ID:L12050171-05 MSD File ID:4M60875 Dil:1 Units:ug/L

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Dibenzo(a,h)Anthracene	U	55.6	35.1	63.2	56.8	48.5	85.3	32.0	45 - 125	30	#
Dibenzofuran	U	55.6	51.0	91.8	56.8	54.7	96.3	7.04	35 - 115	30	
Diethylphthalate	U	55.6	61.3	110	56.8	61.6	108	0.418	45 - 120	30	
Dimethylphthalate	U	55.6	58.8	106	56.8	59.7	105	1.54	25 - 112	30	
Fluoranthene	U	55.6	47.4	85.3	56.8	56.3	99.1	17.2	50 - 137	30	
Fluorene	U	55.6	51.9	93.4	56.8	55.4	97.4	6.52	40 - 120	30	
Hexachlorobenzene	U	55.6	46.2	83.1	56.8	56.7	99.9	20.5	50 - 130	30	
Hexachlorobutadiene	U	55.6	26.0	46.8	56.8	37.1	65.3	35.2	24 - 105	30	#
Hexachlorocyclopentadiene	U	55.6	3.91	7.04	56.8	4.09	7.2	4.49	20 - 143	30	*
Hexachloroethane	U	55.6	19.9	35.8	56.8	26.7	46.9	29.1	25 - 95	30	
Indeno(1,2,3-cd)pyrene	U	55.6	34.5	62.1	56.8	47.2	83.1	31.1	50 - 135	30	#
Isophorone	U	55.6	48.9	88	56.8	54.7	96.2	11.2	30 - 110	30	
N-Nitrosodiphenylamine	U	111	96.3	86.7	114	97.7	86	1.45	40 - 110	30	
Naphthalene	U	55.6	41.4	74.4	56.8	47.5	83.7	13.9	25 - 110	30	
Nitrobenzene	U	55.6	53.9	97	56.8	61.5	108	13.1	30 - 110	30	
Pentachlorophenol	U	55.6	59.7	107	56.8	59.1	104	1.10	40 - 140	30	
Phenanthrene	U	55.6	52.7	94.9	56.8	56.8	100	7.50	55 - 120	30	
Phenol	U	55.6	45.6	82.1	56.8	51.7	91	12.6	10 - 120	30	
Pyrene	U	55.6	51.2	92.2	56.8	61.4	108	18.1	55 - 130	30	

* FAILS %REC LIMIT

FAILS RPD LIMIT

MS_MSD - Modified 03/06/2008

PDF File ID: 2414652

Report generated 05/15/2012 16:00

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

DFTPP

Login Number: L12050171
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: 2415749
Report generated 05/15/2012 16:01

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

DFTPP

Login Number: L12050171
Instrument: HPMS4
Analyst: CAA
Workgroup: WG396671

Tune ID: WG396671-01
Run Date: 05/01/2012
Run Time: 13:11
File ID: 4M60600
Cal ID: HPMS4-19-APR-12

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51.0	198	30.0	60.0	36.0	62456	PASS
68.0	69.0	0	2.00	0	0	PASS
69.0	198	0	100	39.0	67664	PASS
70.0	69.0	0	2.00	0	0	PASS
127	198	40.0	60.0	50.1	86805	PASS
197	198	0	1.00	0	0	PASS
198	198	100	100	100	173418	PASS
199	198	5.00	9.00	6.70	11620	PASS
275	198	10.0	30.0	24.6	42746	PASS
365	198	1.00	100	2.76	4791	PASS
441	443	0.0100	100	80.8	27090	PASS
442	198	40.0	100	97.5	169160	PASS
443	442	17.0	23.0	19.8	33546	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG396709-01	STD-CCV	01	05/01/2012 14:05	
WG396709-02	STD	01	05/01/2012 14:39	
WG396709-03	STD	01	05/01/2012 15:13	
WG396709-04	STD	01	05/01/2012 15:47	
WG396709-05	STD	01	05/01/2012 16:22	
WG396709-06	STD	01	05/01/2012 16:57	
WG396709-07	SSCV	01	05/01/2012 17:31	

* Sample past 12 hour tune limit

TUNE - Modified 03/06/2008
PDF File ID: 2415749
Report generated 05/15/2012 16:01

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

DFTPP

Login Number: L12050171
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	

* Sample past 12 hour tune limit

TUNE - Modified 03/06/2008
PDF File ID: 2415749
Report generated 05/15/2012 16:01

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

DFTPP

Login Number: L12050171
Instrument: HPMS4
Analyst: CAA
Workgroup: WG397858

Tune ID: WG397858-01
Run Date: 05/14/2012
Run Time: 08:24
File ID: 4M60860
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	34.9	68800	PASS
68.0	69.0	0	2.00	0	0	PASS
69.0	198	0	100	38.3	75621	PASS
70.0	69.0	0	2.00	0.530	401	PASS
127	198	40.0	60.0	48.9	96472	PASS
197	198	0	1.00	0.218	430	PASS
198	198	100	100	100	197354	PASS
199	198	5.00	9.00	6.55	12926	PASS
275	198	10.0	30.0	24.5	48296	PASS
365	198	1.00	100	3.03	5982	PASS
441	443	0.0100	100	82.8	31128	PASS
442	198	40.0	100	99.5	196416	PASS
443	442	17.0	23.0	19.1	37605	PASS

This check relates to the following samples:

Lab ID	Client ID	Tag	Date Analyzed	Q
WG397858-02	CCV	01	05/14/2012 08:44	
WG397859-01	CCV	01	05/14/2012 09:19	
L12050171-01	MW-12-050412	01	05/14/2012 15:41	
L12050171-03	MW-12-050412	01	05/14/2012 16:17	
L12050171-05	MW-12-050412	01	05/14/2012 16:51	
L12050171-07	PZ-01-050412	01	05/14/2012 17:26	

* Sample past 12 hour tune limit

TUNE - Modified 03/06/2008
PDF File ID: 2415749
Report generated 05/15/2012 16:01

Microbac Laboratories Inc.
INITIAL CALIBRATION SUMMARY

Login Number: L12050171
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		

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Microbac Laboratories Inc.
INITIAL CALIBRATION SUMMARY

Login Number: L12050171
Analytical Method: 8270C
ICAL Workgroup: WG395394
Instrument ID: HPMS4
Initial Calibration Date: 19-APR-12 13:23
Column ID: F

Analyte		AVG RF	% RSD	LINEAR (R)	QUAD (R^2)
Fluorene		1.344	8.89		
Hexachlorobenzene		0.2212	7.78		
Hexachloroethane		0.5705	3.33		
Indeno[1,2,3-cd]pyrene		1.175	1.51		
Isophorone		0.6155	6.91		
Naphthalene		1.059	9.10		
Nitrobenzene		0.3372	5.94		
Phenanthrene		1.061	9.08		
Pyrene		1.196	7.44		
Sym-Trinitrobenzene		0.1582	11.2		
bis(2-Chloroethoxy)methane		0.4677	9.37		
bis(2-Chloroethyl)ether		0.9490	7.24		
bis(2-Ethylhexyl)phthalate		0.7426	4.79		

R = Correlation coefficient; 0.995 minimum
R^2 = Coefficient of determination; 0.99 minimum

If the %RSD is greater than the limit specified by the method or project QAP, then linear or quadratic equations will be used.

INT_CAL - Modified 03/06/2008
PDF File ID: 2415748
Report generated 05/15/2012 16:00

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L12050171
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: 2415748
Report generated 05/15/2012 16:00

Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L12050171 **Instrument ID:** HPMS4

Analytical Method: 8270C **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: L12050171
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: L12050171 **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

INT_CAL - Modified 03/06/2008
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Report generated 05/15/2012 16:00

Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L12050171
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

INT_CAL - Modified 03/06/2008
PDF File ID: 2415748
Report generated 05/15/2012 16:00

Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L12050171 **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

INT_CAL - Modified 03/06/2008
PDF File ID: 2415748
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Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L12050171 **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

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

INITIAL CALIBRATION DATA

Login Number: L12050171
Analytical Method: 8270C
Instrument ID: HPMS4
Initial Calibration Date: 01-MAY-12 16:57
Column ID: F

Analyte	WG396709-01			WG396709-02			WG396709-03		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1'-Biphenyl	50.0	861006.000	1.619	3.00	52218.0000	1.758	10.0	178056.000	1.725

INT_CAL - Modified 03/06/2008
PDF File ID: 2415748
Report generated 05/15/2012 16:00

Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L12050171
Analytical Method: 8270C
Instrument ID: HPMS4
Initial Calibration Date: 01-MAY-12 16:57
Column ID: F

Analyte	WG396709-04			WG396709-05			WG396709-06		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
1,1'-Biphenyl	25.0	424267.000	1.719	80.0	1307719.00	1.536	100	1556681.00	1.495

INT_CAL - Modified 03/06/2008
PDF File ID: 2415748
Report generated 05/15/2012 16:00

Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number:L12050171 Run Date:04/19/2012 Sample ID:WG395394-10
Instrument ID:HPMS4 Run Time:13:58 Method:8270C
File ID:4M60447 Analyst:CAA QC Key:WATERLOO
ICal Workgroup:WG395394 Cal ID: HPMS4 - 19-APR-12

Analyte		Expected	Found	Units	RF	%D	UCL	Q
2,4,6-Trichlorophenol	CCC	50000	57700	ug/L	0.424	15.5	25	
2,4-Dichlorophenol	CCC	50000	53800	ug/L	0.307	7.50	25	
2-Nitrophenol	CCC	50000	58700	ug/L	0.233	17.4	25	
Acenaphthene	CCC	50000	56400	ug/L	1.33	12.9	25	
Benzo[a]pyrene	CCC	50000	56200	ug/L	1.19	12.4	25	
Di-n-Octyl Phthalate	CCC	50000	58500	ug/L	1.51	17.0	25	
Fluoranthene	CCC	50000	53900	ug/L	1.20	7.90	25	
Hexachlorobutadiene	CCC	50000	55500	ug/L	0.184	10.9	25	
n-Nitrosodiphenylamine	CCC	50000	55300	ug/L	0.715	10.5	25	
Pentachlorophenol	CCC	50000	65800	ug/L	0.184	31.6	25	*
Phenol	CCC	50000	55000	ug/L	1.67	10.1	25	
2,4-Dinitrophenol	SPCC	50000	77300	ug/L	0.258	54.6	25	*
4-Nitrophenol	SPCC	50000	58600	ug/L	0.273	17.1	25	
Hexachlorocyclopentadiene	SPCC	50000	55500	ug/L	0.301	11.0	25	
n-Nitrosodipropylamine	SPCC	50000	56200	ug/L	0.960	12.4	25	
1,3-Dinitrobenzene		50000	52900	ug/L	0.257	5.70	25	
2,4,5-Trichlorophenol		50000	58300	ug/L	0.441	16.7	25	
2,4-Dimethylphenol		50000	51900	ug/L	0.355	3.90	25	
2,4-Dinitrotoluene		50000	57000	ug/L	0.459	14.0	25	
2,6-Dinitrotoluene		50000	57700	ug/L	0.365	15.4	25	
2-Chloronaphthalene		50000	64600	ug/L	1.46	29.3	25	*
2-Chlorophenol		50000	55800	ug/L	1.51	11.5	25	
2-Methylnaphthalene		50000	54300	ug/L	0.748	8.60	25	
2-Methylphenol		50000	54700	ug/L	1.14	9.30	25	
2-Nitroaniline		50000	58000	ug/L	0.375	16.0	25	
3-Nitroaniline		50000	39600	ug/L	0.185	20.8	25	
3,3'-Dichlorobenzidine		50000	52000	ug/L	0.231	4.00	25	
3-,4-Methylphenol		50000	54100	ug/L	1.47	8.20	25	
4-Bromophenyl Phenyl Ether		50000	53200	ug/L	0.215	6.30	25	
4-Chloroaniline		50000	48900	ug/L	0.381	2.20	25	
Acenaphthylene		50000	57000	ug/L	2.07	14.0	25	
Anthracene		50000	55100	ug/L	1.20	10.2	25	
Benzo[a]anthracene		50000	54200	ug/L	1.15	8.40	25	
Benzo[b]fluoranthene		50000	54600	ug/L	1.26	9.10	25	
Benzo[ghi]perylene		50000	54600	ug/L	1.06	9.10	25	
Benzo[k]fluoranthene		50000	51500	ug/L	1.10	3.00	25	
Benzoic Acid		50000	59700	ug/L	0.281	19.3	25	
Benzyl Alcohol		50000	58800	ug/L	1.03	17.5	25	
bis(2-Chloroethyl)ether		50000	54000	ug/L	1.03	8.10	25	
bis(2-Chloroethoxy)methane		50000	56800	ug/L	0.531	13.5	25	
bis(2-Ethylhexyl)phthalate		50000	56700	ug/L	0.842	13.4	25	
Butyl Benzyl Phthalate		50000	58500	ug/L	0.637	17.0	25	

ALT - Modified 09/06/2007
Version 1.5 PDF File ID: 2415745
Report generated 05/15/2012 15:59

Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12050171 Run Date: 04/19/2012 Sample ID: WG395394-10
Instrument ID: HPMS4 Run Time: 13:58 Method: 8270C
File ID: 4M60447 Analyst: CAA QC Key: WATERLOO
ICal Workgroup: WG395394 Cal ID: HPMS4 - 19-APR-12

Analyte		Expected	Found	Units	RF	%D	UCL	Q
Carbazole		50000	53700	ug/L	1.02	7.40	25	
Chrysene		50000	56500	ug/L	1.12	12.9	25	
Di-n-Butyl Phthalate		50000	54500	ug/L	1.29	8.90	25	
Dibenz[ah]anthracene		50000	55500	ug/L	1.09	11.0	25	
Dibenzofuran		50000	56700	ug/L	1.79	13.4	25	
Diethylphthalate		50000	56200	ug/L	1.42	12.4	25	
Dimethylphthalate		50000	55300	ug/L	1.40	10.6	25	
Fluorene		50000	55600	ug/L	1.50	11.3	25	
Hexachlorobenzene		50000	52000	ug/L	0.230	3.90	25	
Hexachloroethane		50000	54700	ug/L	0.624	9.30	25	
Indeno[1,2,3-cd]pyrene		50000	55600	ug/L	1.31	11.2	25	
Isophorone		50000	52700	ug/L	0.649	5.50	25	
Naphthalene		50000	54200	ug/L	1.15	8.40	25	
Nitrobenzene		50000	54200	ug/L	0.366	8.40	25	
Phenanthrene		50000	55400	ug/L	1.17	10.7	25	
Pyrene		50000	56100	ug/L	1.34	12.2	25	

* Exceeds %D Limit

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

ALT - Modified 09/06/2007
Version 1.5 PDF File ID: 2415745
Report generated 05/15/2012 15:59

Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12050171 Run Date: 04/19/2012 Sample ID: WG395394-11
Instrument ID: HPMS4 Run Time: 14:33 Method: 8270C
File ID: 4M60448 Analyst: CAA QC Key: WATERLOO
ICal Workgroup: WG395394 Cal ID: HPMS4 - 19-APR-12

Analyte		Expected	Found	Units	RF	%D	UCL	Q
1,4-Dioxane		50000	59900	ug/L	0.598	19.9	25	

* Exceeds %D Limit

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

ALT - Modified 09/06/2007
Version 1.5 PDF File ID: 2415745
Report generated 05/15/2012 15:59

Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12050171 Run Date: 05/01/2012 Sample ID: WG396709-07
Instrument ID: HPMS4 Run Time: 17:31 Method: 8270C
File ID: 4M60608 Analyst: CAA QC Key: WATERLOO
ICal Workgroup: WG396709 Cal ID: HPMS4 - 01-MAY-12

Analyte		Expected	Found	Units	RF	%D	UCL	Q
1,1'-Biphenyl		50000	47400	ug/L	1.56	5.20	25	

* Exceeds %D Limit

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

ALT - Modified 09/06/2007
Version 1.5 PDF File ID: 2415745
Report generated 05/15/2012 15:59

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050171 Run Date: 05/12/2012 Sample ID: WG397824-02
Instrument ID: HPMS4 Run Time: 11:22 Method: 8270C
File ID: 4M60817 Analyst: CAA QC Key: WATERLOO
Workgroup (AAB#): WG397604 Cal ID: HPMS4 - 19-APR-12
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
2,4,6-Trichlorophenol	CCC	50000	52100	ug/L	0.383	4.14	20	
2,4-Dichlorophenol	CCC	50000	51400	ug/L	0.294	2.83	20	
2-Nitrophenol	CCC	50000	53000	ug/L	0.211	6.03	20	
Acenaphthene	CCC	50000	49100	ug/L	1.16	1.77	20	
Benzo[a]pyrene	CCC	50000	51800	ug/L	1.09	3.58	20	
Di-n-Octyl Phthalate	CCC	50000	53800	ug/L	1.39	7.60	20	
Fluoranthene	CCC	50000	49300	ug/L	1.10	1.30	20	
Hexachlorobutadiene	CCC	50000	52500	ug/L	0.175	5.10	20	
n-Nitrosodiphenylamine	CCC	50000	49800	ug/L	0.645	0.416	20	
Pentachlorophenol	CCC	50000	47100	ug/L	0.132	5.81	20	
Phenol	CCC	50000	48900	ug/L	1.48	2.25	20	
1,4-Dichlorobenzene	CCC	50000	48900	ug/L	1.51	2.12	20	
4-Chloro-3-Methylphenol	CCC	50000	50200	ug/L	0.291	0.474	20	
2,4-Dinitrophenol	SPCC	50000	46900	ug/L	0.147	6.11	20	
4-Nitrophenol	SPCC	50000	48800	ug/L	0.227	2.50	20	
Hexachlorocyclopentadiene	SPCC	50000	51000	ug/L	0.277	1.98	20	
n-Nitrosodipropylamine	SPCC	50000	49600	ug/L	0.848	0.797	20	
Sym-Trinitrobenzene		50000	56200	ug/L	0.178	12.3	20	
1,3-Dinitrobenzene		50000	53400	ug/L	0.259	6.78	20	
1,4-Dioxane		50000	45400	ug/L	0.453	9.17	20	
2,4,5-Trichlorophenol		50000	52000	ug/L	0.393	4.02	20	
2,4-Dimethylphenol		50000	46400	ug/L	0.317	7.22	20	
2,4-Dinitrotoluene		50000	52400	ug/L	0.422	4.84	20	
2,6-Dinitrotoluene		50000	52000	ug/L	0.329	4.05	20	
2-Chloronaphthalene		50000	51300	ug/L	1.16	2.58	20	
2-Chlorophenol		50000	49000	ug/L	1.33	1.93	20	
2-Methylnaphthalene		50000	49500	ug/L	0.681	0.997	20	
2-Methylphenol		50000	47200	ug/L	0.986	5.66	20	
2-Nitroaniline		50000	50700	ug/L	0.329	1.49	20	
3-Nitroaniline		50000	47100	ug/L	0.220	5.87	20	
3,3'-Dichlorobenzidine		50000	57400	ug/L	0.255	14.7	20	
3-,4-Methylphenol		50000	47500	ug/L	1.29	5.04	20	
4-Bromophenyl Phenyl Ether		50000	51200	ug/L	0.207	2.45	20	
4-Chloroaniline		50000	55000	ug/L	0.429	10.1	20	
Acenaphthylene		50000	49500	ug/L	1.80	1.02	20	
Anthracene		50000	48700	ug/L	1.06	2.64	20	
Benzo[a]anthracene		50000	49900	ug/L	1.06	0.179	20	
Benzo[b]fluoranthene		50000	54700	ug/L	1.27	9.39	20	
Benzo[ghi]perylene		50000	53200	ug/L	1.03	6.37	20	
Benzo[k]fluoranthene		50000	49900	ug/L	1.07	0.273	20	
Benzoic Acid		50000	11200	ug/L	0.0526	77.6	20	*
Benzyl Alcohol		50000	48500	ug/L	0.853	2.99	20	

CCV - Modified 03/05/2008
PDF File ID: 2415750
Report generated 05/15/2012 16:01

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050171 Run Date: 05/12/2012 Sample ID: WG397824-02
Instrument ID: HPMS4 Run Time: 11:22 Method: 8270C
File ID: 4M60817 Analyst: CAA QC Key: WATERLOO
Workgroup (AAB#): WG397604 Cal ID: HPMS4 - 19-APR-12
Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
bis(2-Chloroethyl)ether		50000	46700	ug/L	0.887	6.54	20	
bis(2-Chloroethoxy)methane		50000	51200	ug/L	0.479	2.45	20	
bis(2-Ethylhexyl)phthalate		50000	51700	ug/L	0.767	3.34	20	
Butyl Benzyl Phthalate		50000	51600	ug/L	0.561	3.14	20	
Carbazole		50000	49900	ug/L	0.950	0.240	20	
Chrysene		50000	49300	ug/L	0.983	1.37	20	
Di-n-Butyl Phthalate		50000	50300	ug/L	1.19	0.573	20	
Dibenz[ah]anthracene		50000	55200	ug/L	1.08	10.4	20	
Dibenzofuran		50000	49800	ug/L	1.57	0.440	20	
Diethylphthalate		50000	51000	ug/L	1.28	1.91	20	
Dimethylphthalate		50000	50500	ug/L	1.28	0.941	20	
Fluorene		50000	49700	ug/L	1.34	0.689	20	
Hexachlorobenzene		50000	52600	ug/L	0.233	5.12	20	
Hexachloroethane		50000	49600	ug/L	0.566	0.869	20	
Indeno[1,2,3-cd]pyrene		50000	54500	ug/L	1.28	9.08	20	
Isophorone		50000	49700	ug/L	0.612	0.578	20	
Naphthalene		50000	49000	ug/L	1.04	2.01	20	
Nitrobenzene		50000	51400	ug/L	0.347	2.80	20	
Phenanthrene		50000	48300	ug/L	1.02	3.48	20	
Pyrene		50000	50500	ug/L	1.21	0.959	20	

* Exceeds %D Criteria

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

CCV - Modified 03/05/2008
PDF File ID: 2415750
Report generated 05/15/2012 16:01

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050171 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: 2415750
Report generated 05/15/2012 16:01

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050171 Run Date: 05/14/2012 Sample ID: WG397858-02
Instrument ID: HPMS4 Run Time: 08:44 Method: 8270C
File ID: 4M60861 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	51800	ug/L	0.381	3.65	20	
2,4-Dichlorophenol	CCC	50000	50500	ug/L	0.289	0.956	20	
2-Nitrophenol	CCC	50000	50800	ug/L	0.202	1.55	20	
Acenaphthene	CCC	50000	48300	ug/L	1.14	3.37	20	
Benzo[a]pyrene	CCC	50000	51400	ug/L	1.09	2.88	20	
Di-n-Octyl Phthalate	CCC	50000	53400	ug/L	1.38	6.77	20	
Fluoranthene	CCC	50000	49700	ug/L	1.11	0.609	20	
Hexachlorobutadiene	CCC	50000	52300	ug/L	0.174	4.62	20	
n-Nitrosodiphenylamine	CCC	50000	50100	ug/L	0.649	0.264	20	
Pentachlorophenol	CCC	50000	47100	ug/L	0.132	5.79	20	
Phenol	CCC	50000	48800	ug/L	1.48	2.37	20	
1,4-Dichlorobenzene	CCC	50000	49100	ug/L	1.51	1.83	20	
4-Chloro-3-Methylphenol	CCC	50000	50000	ug/L	0.290	0.0954	20	
2,4-Dinitrophenol	SPCC	50000	46400	ug/L	0.145	7.27	20	
4-Nitrophenol	SPCC	50000	46700	ug/L	0.218	6.58	20	
Hexachlorocyclopentadiene	SPCC	50000	50500	ug/L	0.274	0.925	20	
n-Nitrosodipropylamine	SPCC	50000	49500	ug/L	0.846	0.995	20	
Sym-Trinitrobenzene		50000	57600	ug/L	0.182	15.2	20	
1,3-Dinitrobenzene		50000	53400	ug/L	0.259	6.72	20	
1,4-Dioxane		50000	48900	ug/L	0.487	2.30	20	
2,4,5-Trichlorophenol		50000	51400	ug/L	0.389	2.77	20	
2,4-Dimethylphenol		50000	46100	ug/L	0.315	7.77	20	
2,4-Dinitrotoluene		50000	52300	ug/L	0.421	4.66	20	
2,6-Dinitrotoluene		50000	51800	ug/L	0.328	3.66	20	
2-Chloronaphthalene		50000	51200	ug/L	1.16	2.33	20	
2-Chlorophenol		50000	49000	ug/L	1.33	2.01	20	
2-Methylnaphthalene		50000	49200	ug/L	0.678	1.54	20	
2-Methylphenol		50000	47500	ug/L	0.993	4.97	20	
2-Nitroaniline		50000	51500	ug/L	0.333	2.95	20	
3-Nitroaniline		50000	67200	ug/L	0.313	34.3	20	*
3,3'-Dichlorobenzidine		50000	66100	ug/L	0.292	32.1	20	*
3-,4-Methylphenol		50000	47600	ug/L	1.29	4.88	20	
4-Bromophenyl Phenyl Ether		50000	51000	ug/L	0.207	2.03	20	
4-Chloroaniline		50000	54800	ug/L	0.428	9.63	20	
Acenaphthylene		50000	49200	ug/L	1.78	1.64	20	
Anthracene		50000	48900	ug/L	1.06	2.29	20	
Benzo[a]anthracene		50000	50100	ug/L	1.06	0.160	20	
Benzo[b]fluoranthene		50000	52900	ug/L	1.22	5.87	20	
Benzo[ghi]perylene		50000	51300	ug/L	0.999	2.69	20	
Benzo[k]fluoranthene		50000	51000	ug/L	1.09	2.04	20	
Benzoic Acid		50000	12500	ug/L	0.0590	74.9	20	*
Benzyl Alcohol		50000	48500	ug/L	0.853	2.98	20	

CCV - Modified 03/05/2008
PDF File ID: 2415750
Report generated 05/15/2012 16:01

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050171 Run Date: 05/14/2012 Sample ID: WG397858-02
Instrument ID: HPMS4 Run Time: 08:44 Method: 8270C
File ID: 4M60861 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	47100	ug/L	0.893	5.89	20	
bis(2-Chloroethoxy)methane		50000	50900	ug/L	0.476	1.73	20	
bis(2-Ethylhexyl)phthalate		50000	51400	ug/L	0.763	2.74	20	
Butyl Benzyl Phthalate		50000	50700	ug/L	0.552	1.46	20	
Carbazole		50000	51700	ug/L	0.985	3.35	20	
Chrysene		50000	49400	ug/L	0.984	1.23	20	
Di-n-Butyl Phthalate		50000	50400	ug/L	1.19	0.722	20	
Dibenz[ah]anthracene		50000	54100	ug/L	1.06	8.14	20	
Dibenzofuran		50000	49400	ug/L	1.56	1.21	20	
Diethylphthalate		50000	51400	ug/L	1.30	2.76	20	
Dimethylphthalate		50000	50600	ug/L	1.28	1.17	20	
Fluorene		50000	49200	ug/L	1.32	1.62	20	
Hexachlorobenzene		50000	52600	ug/L	0.233	5.29	20	
Hexachloroethane		50000	50600	ug/L	0.577	1.14	20	
Indeno[1,2,3-cd]pyrene		50000	53300	ug/L	1.25	6.54	20	
Isophorone		50000	49200	ug/L	0.606	1.55	20	
Naphthalene		50000	48800	ug/L	1.03	2.40	20	
Nitrobenzene		50000	50600	ug/L	0.341	1.16	20	
Phenanthrene		50000	48600	ug/L	1.03	2.74	20	
Pyrene		50000	50000	ug/L	1.20	0.0870	20	

* Exceeds %D Criteria

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

CCV - Modified 03/05/2008
PDF File ID: 2415750
Report generated 05/15/2012 16:01

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050171 Run Date: 05/14/2012 Sample ID: WG397859-01
Instrument ID: HPMS4 Run Time: 09:19 Method: 8270C
File ID: 4M60862 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	49600	ug/L	1.63	0.891	20	

* Exceeds %D Criteria

CCC Calibration Check Compounds
SPCC System Performance Check Compounds

CCV - Modified 03/05/2008
PDF File ID: 2415750
Report generated 05/15/2012 16:01

Microbac Laboratories Inc.

INTERNAL STANDARD AREA SUMMARY
(COMPARED TO CCV)

Login Number: L12050171 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
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: 2415751
Report generated 05/15/2012 16:01

Microbac Laboratories Inc.

INTERNAL STANDARD AREA SUMMARY
(COMPARED TO CCV)

Login Number: L12050171
Instrument ID: HPMS4
Workgroup (AAB#): WG397604

CCV Number: WG397858-02
CAL ID: HPMS4-19-APR-12
Matrix: WATER

Sample Number	Dilution	Tag	IS-1	IS-2	IS-3	IS-4	IS-5	IS-6
WG397858-02	NA	NA	391649	836475	1421927	1487779	1334047	1516822
Upper Limit	NA	NA	783298	1672950	2843854	2975558	2668094	3033644
Lower Limit	NA	NA	195825	418238	710964	743890	667024	758411
L12050171-01	1.00	01	308176	646330	1030674	1152724	923529	1146381
L12050171-03	1.00	01	312259	676258	1094748	1186584	920188	1232154
L12050171-05	1.00	01	336107	705162	1137616	1259867	952093	1277209
L12050171-07	1.00	01	323817	677383	1089480	1210331	988452	1200935

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: 2415751
Report generated 05/15/2012 16:01

Microbac Laboratories Inc.

INTERNAL STANDARD RETENTION TIME SUMMARY
(COMPARED TO CCV)

Login Number: L12050171 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
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: 2415752
Report generated 05/15/2012 16:01

Microbac Laboratories Inc.

INTERNAL STANDARD RETENTION TIME SUMMARY
(COMPARED TO CCV)

Login Number: L12050171 CCV Number: WG397858-02

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
WG397858-02	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
L12050171-01	1.00	01	7.24	10.32	15.6	8.51	18.33	11.92
L12050171-03	1.00	01	7.24	10.32	15.6	8.52	18.33	11.92
L12050171-05	1.00	01	7.24	10.32	15.6	8.51	18.33	11.92
L12050171-07	1.00	01	7.23	10.32	15.6	8.51	18.33	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: 2415752
Report generated 05/15/2012 16:01

2.2.1.3 Sample Data

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051412\4M60873.D Vial: 14
Acq On : 14 May 2012 15:41 Operator: CAA
Sample : L12050171-01 REF Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 10:59:33 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 : Tue May 15 10:59:15 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

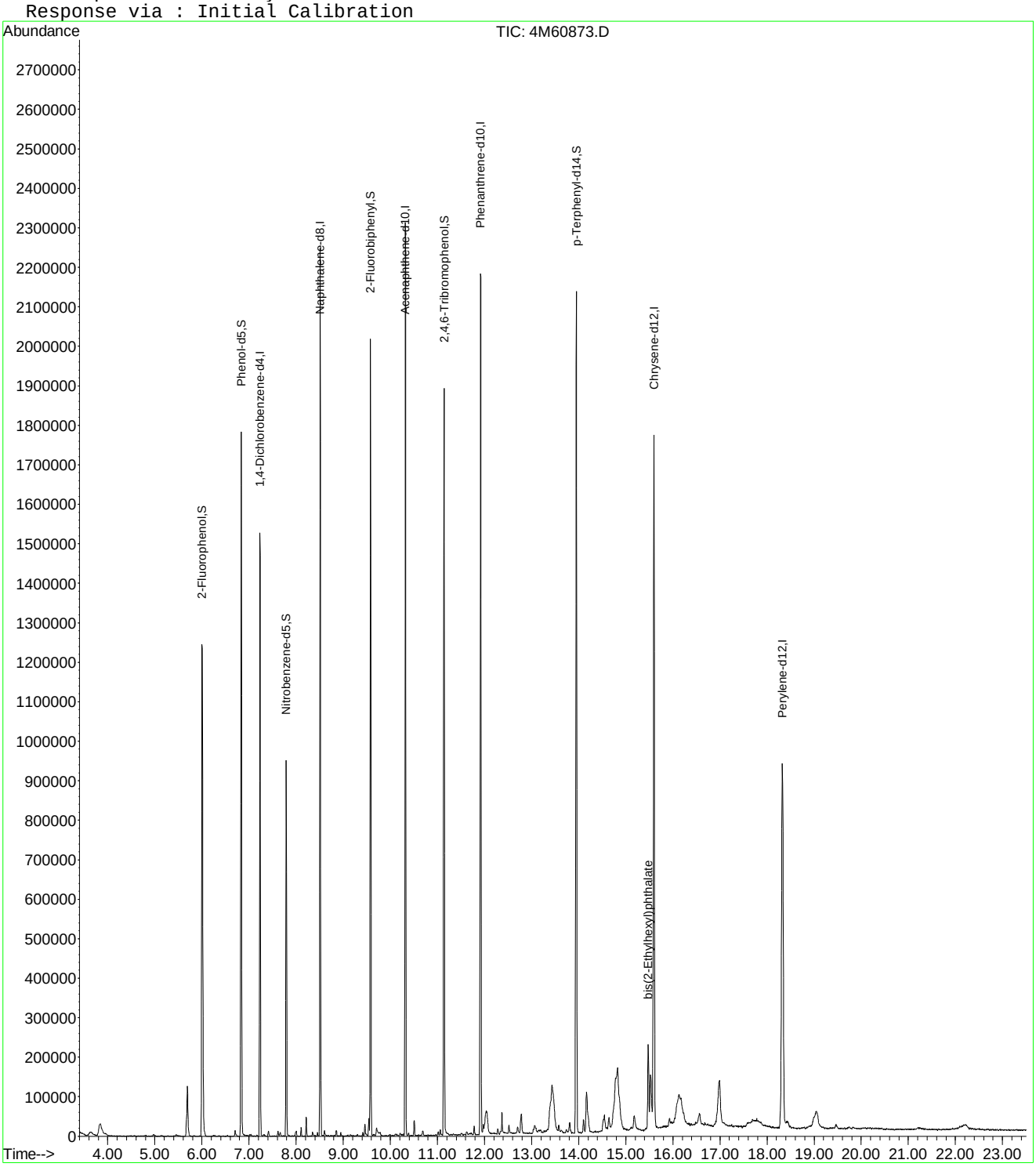
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.24	152	308176	40.00	ug/ml	0.00
30) Naphthalene-d8	8.51	136	1152724	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.32	164	646330	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.92	188	1146381	40.00	ug/ml	0.00
113) Chrysene-d12	15.60	240	1030674	40.00	ug/ml	0.00
128) Perylene-d12	18.33	264	923529	40.00	ug/ml	-0.01
System Monitoring Compounds						
8) 2-Fluorophenol	6.01	112	572272	61.2466	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 61.25%			
12) Phenol-d5	6.83	99	732835	67.0139	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 67.01%			
31) Nitrobenzene-d5	7.79	82	340091	34.8827	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 69.76%			
59) 2-Fluorobiphenyl	9.58	172	721159	33.4142	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 66.82%			
86) 2,4,6-Tribromophenol	11.14	330	269787	93.6040	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 93.60%			
117) p-Terphenyl-d14	13.95	244	1027139	54.0699	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 108.14%			
Target Compounds						Qvalue
97) Dimethoate	11.62	87	178	Below Cal	#	20
110) Methapyrilene	13.06	58	855	Below Cal	#	1
124) bis(2-Ethylhexyl)phthalate	15.48	149	92291	4.8232	ug/ml	99

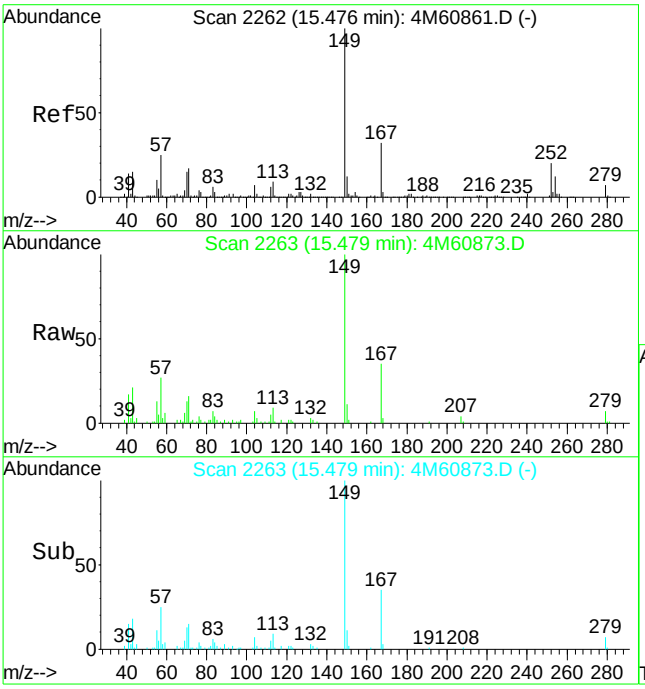
(#) = qualifier out of range (m) = manual integration
4M60873.D MEGAMIX.M Tue May 15 11:36:17 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051412\4M60873.D Vial: 14
Acq On : 14 May 2012 15:41 Operator: CAA
Sample : L12050171-01 REF Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 10:59 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

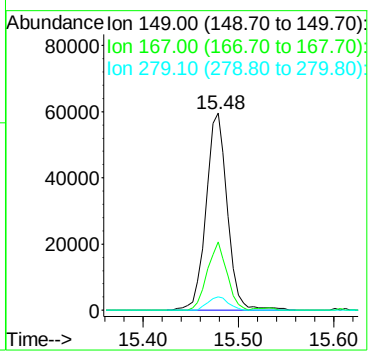




#124
bis(2-Ethylhexyl)phthalate
Concen: 4.82 ug/ml
RT: 15.48 min Scan# 2263
Delta R.T. -0.00 min
Lab File: 4M60873.D
Acq: 14 May 2012 15:41

Tgt Ion:149 Resp: 92291

Ion	Ratio	Lower	Upper
149	100		
167	32.1	25.4	38.0
279	6.6	6.2	9.2



Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\051412\4M60873.D Vial: 14
Acq On : 14 May 2012 15:41 Operator: CAA
Sample : L12050171-01 REF Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 13:06:07 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 : Tue May 15 13:05:17 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.24	152	308176	40.00	ug/mL	0.00
3) Naphthalene-d8	8.51	136	1152724	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.32	164	646330	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.92	188	1146381	40.00	ug/mL	0.00

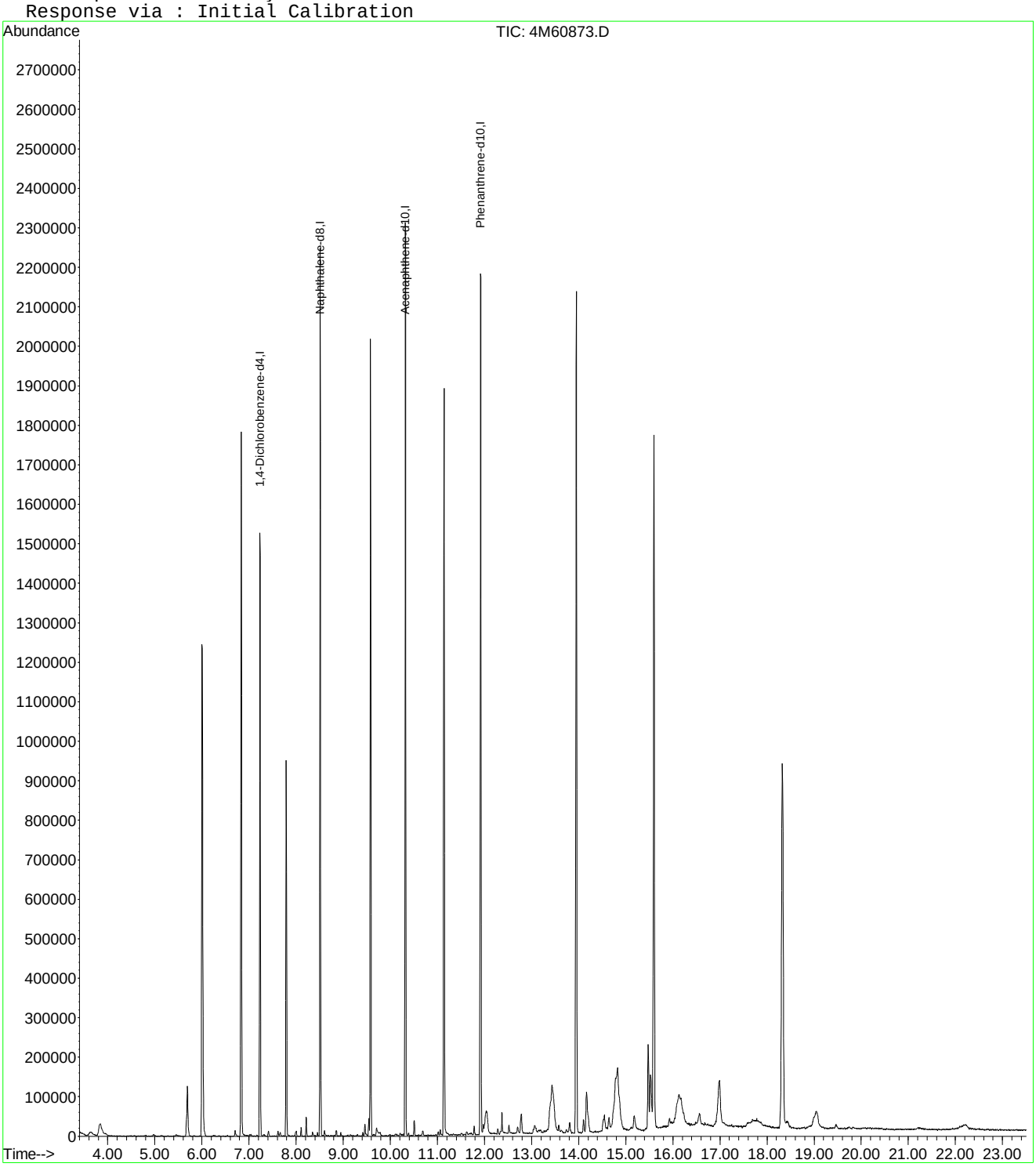
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
4M60873.D TCL.M Tue May 15 13:06:07 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\051412\4M60873.D Vial: 14
Acq On : 14 May 2012 15:41 Operator: CAA
Sample : L12050171-01 REF Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 13:06 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 : Tue May 15 13:05:17 2012
Response via : Initial Calibration



LSC Area Percent Report

Data File : I:\MSDCHEM\1\DATA\051412\4M60873.D Vial: 14
Acq On : 14 May 2012 15:41 Operator: CAA
Sample : L12050171-01 REF 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

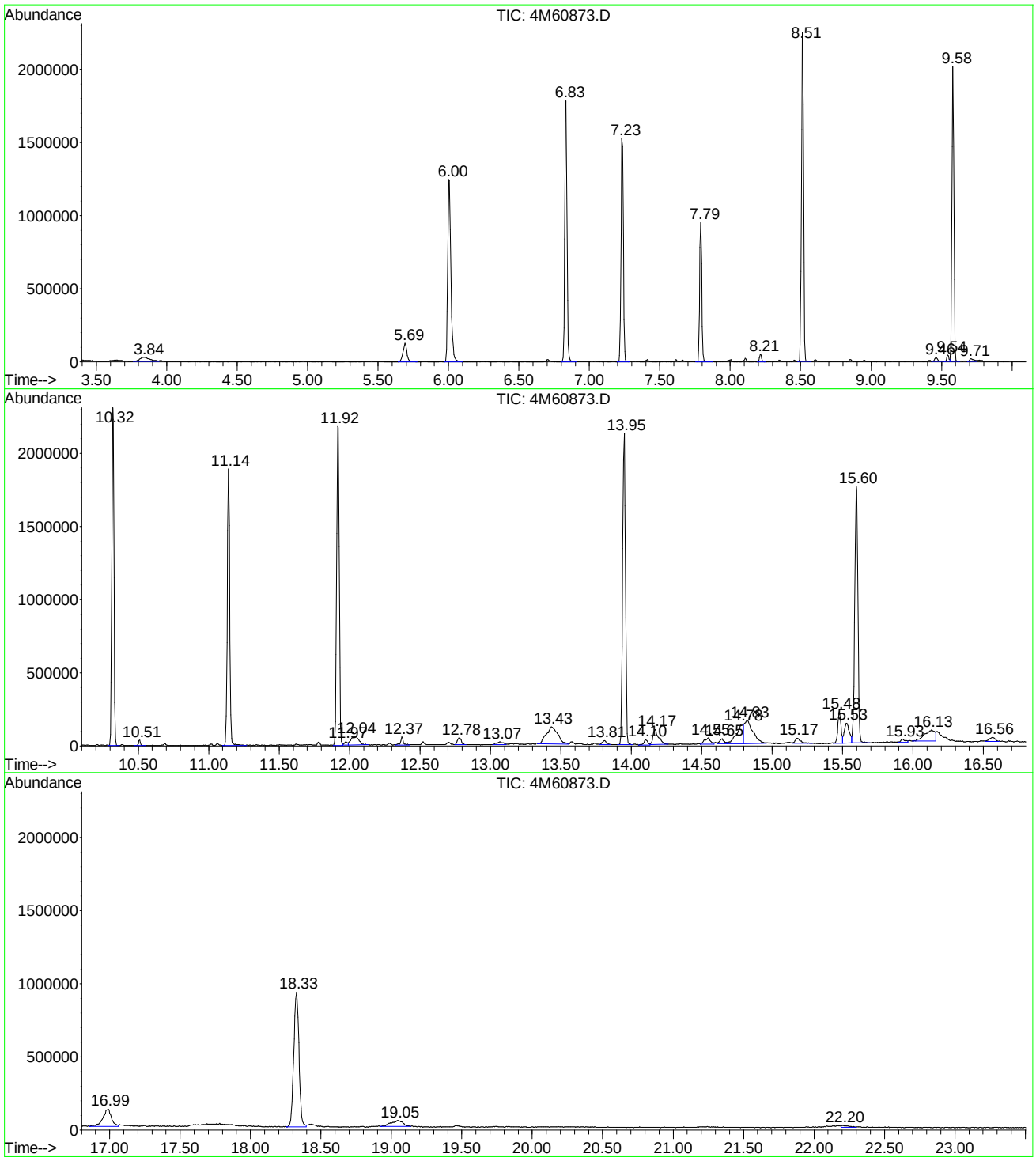
If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.843	70	85	104	rBV4	29096	142883	4.79%	0.445%
2	5.692	422	431	446	rBB2	127084	233831	7.84%	0.729%
3	6.002	483	489	507	rBB	1245880	1879723	63.01%	5.859%
4	6.835	638	645	659	rBV	1784067	2013686	67.50%	6.276%
5	7.230	713	719	728	rBB	1527904	1744845	58.49%	5.439%
6	7.791	817	824	839	rVB	952084	1011632	33.91%	3.153%
7	8.213	899	903	909	rBB	49280	51684	1.73%	0.161%
8	8.512	953	959	970	rBV	2247985	2302133	77.17%	7.176%
9	9.463	1131	1137	1148	rBV2	29953	43328	1.45%	0.135%
10	9.543	1148	1152	1155	rBV	44788	48691	1.63%	0.152%
11	9.581	1155	1159	1167	rVB	2017620	2022565	67.80%	6.304%
12	9.709	1178	1183	1191	rBV4	20341	45300	1.52%	0.141%
13	10.318	1292	1297	1305	rBV	2312924	2531808	84.87%	7.891%
14	10.510	1325	1333	1340	rBV	38705	40951	1.37%	0.128%
15	11.141	1443	1451	1474	rVB	1892339	2208800	74.04%	6.885%
16	11.915	1590	1596	1603	rBV	2180465	2778960	93.15%	8.662%
17	11.974	1603	1607	1610	rVV	25516	35665	1.20%	0.111%
18	12.038	1610	1619	1636	rVB4	58986	229406	7.69%	0.715%
19	12.369	1672	1681	1691	rBV3	56299	85934	2.88%	0.268%
20	12.781	1752	1758	1766	rVB	48358	91025	3.05%	0.284%
21	13.069	1802	1812	1820	rBV5	20201	65033	2.18%	0.203%
22	13.433	1862	1880	1903	rVV2	116282	646936	21.69%	2.016%
23	13.812	1944	1951	1958	rVB3	28213	57598	1.93%	0.180%
24	13.951	1968	1977	1987	rBV	2131266	2983328	100.00%	9.299%
25	14.100	1996	2005	2011	rBV3	35554	67879	2.28%	0.212%
26	14.170	2011	2018	2034	rVB2	102325	280099	9.39%	0.873%
27	14.549	2078	2089	2096	rBV4	42651	120726	4.05%	0.376%
28	14.645	2101	2107	2113	rVV6	34074	72800	2.44%	0.227%
29	14.784	2114	2133	2135	rVV2	132623	435246	14.59%	1.357%
30	14.827	2135	2141	2165	rVB	157750	669247	22.43%	2.086%
31	15.174	2200	2206	2226	rVB3	35321	95449	3.20%	0.298%
32	15.479	2255	2263	2267	rBV	213955	339553	11.38%	1.058%
33	15.527	2267	2272	2279	rVV	136656	336449	11.28%	1.049%
34	15.596	2279	2285	2302	rVB	1755550	2711792	90.90%	8.452%
35	15.927	2341	2347	2354	rBV4	20781	47041	1.58%	0.147%
36	16.130	2360	2385	2391	rBV3	74723	400182	13.41%	1.247%
37	16.563	2457	2466	2474	rVB6	27493	74072	2.48%	0.231%
38	16.990	2521	2546	2559	rBV5	117575	496801	16.65%	1.548%
39	18.326	2783	2796	2809	rBV	924318	2365911	79.30%	7.374%
40	19.047	2908	2931	2947	rBV8	38499	226641	7.60%	0.706%
41	22.204	3520	3522	3539	rVB8	12371	47404	1.59%	0.148%

Sum of corrected areas: 32083037

```
File       : I:\MSDCHEM\1\DATA\051412\4M60873.D
Operator   : CAA
Acquired   : 14 May 2012  15:41     using AcqMethod BNATEST
Instrument :   HPMS4
Sample Name: L12050171-01 REF
Misc Info  : 1,1
Vial Number: 14
Quant File :MEGAMIX.RES (RTE Integrator)
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Data File : I:\MSDCHEM\1\DATA\051412\4M60873.D Vial: 14
Acq On : 14 May 2012 15:41 Operator: CAA
Sample : L12050171-01 REF Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

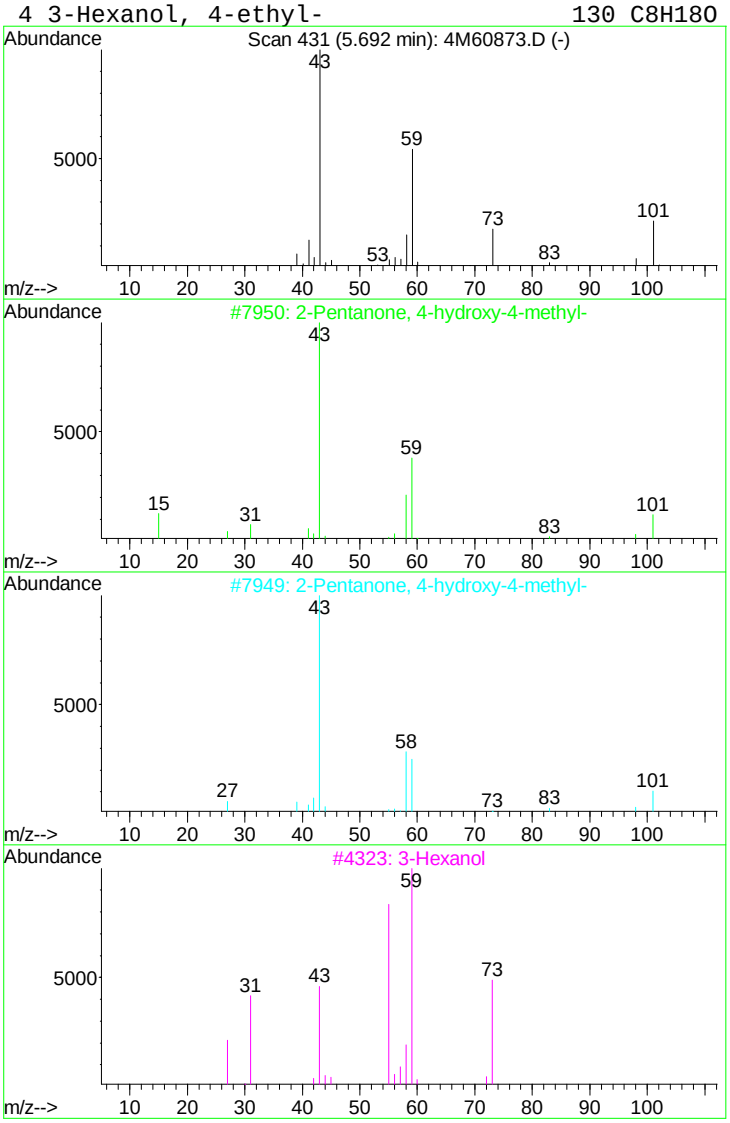
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Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
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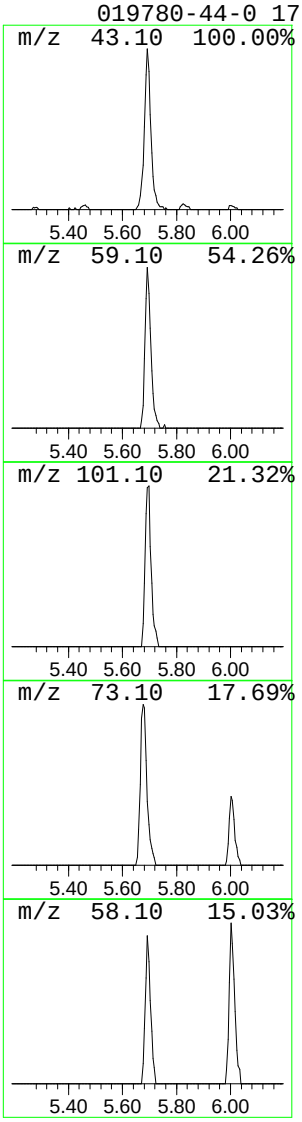
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Peak Number 1 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.69	5.36 ug/ml	233831	1,4-Dichlorobenzene-d4	7.24

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	42
2	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	33
3	3-Hexanol	102	C6H14O	000623-37-0	28
4	3-Hexanol, 4-ethyl-	130	C8H18O	019780-44-0	17





Data File : I:\MSDCHEM\1\DATA\051412\4M60873.D Vial: 14
Acq On : 14 May 2012 15:41 Operator: CAA
Sample : L12050171-01 REF Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

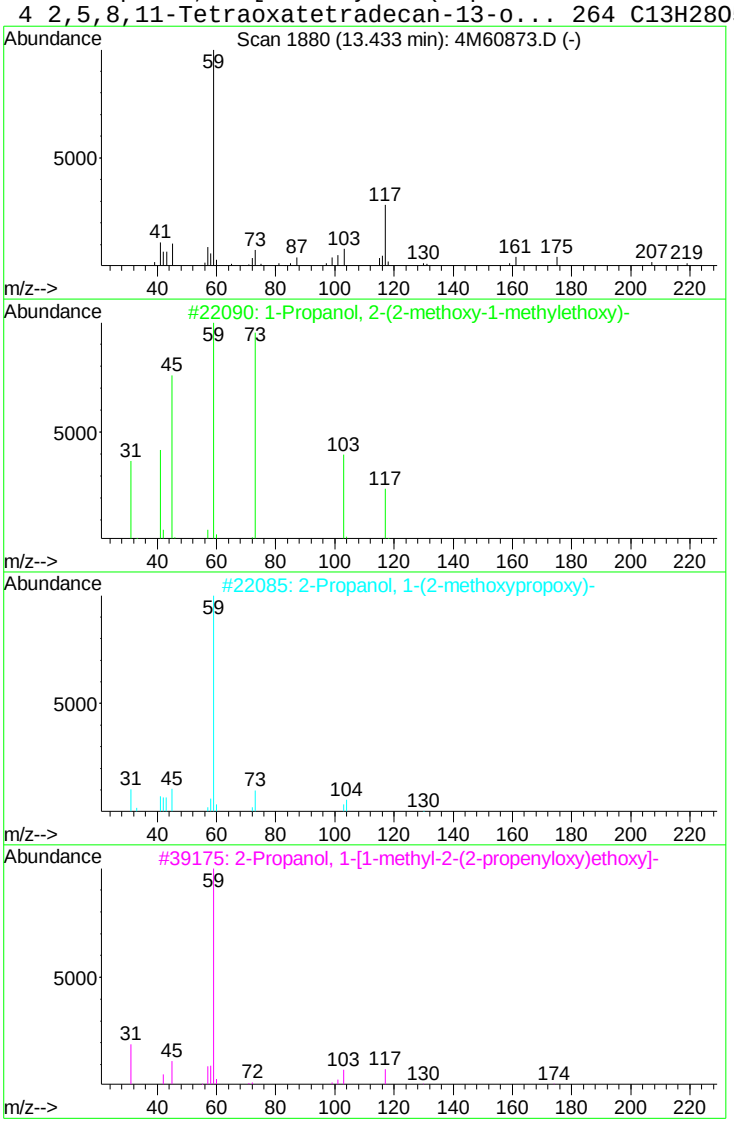
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Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

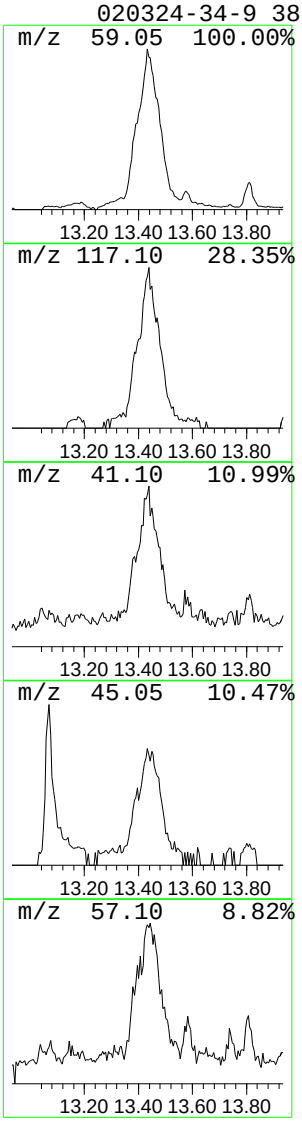
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Peak Number 2 1-Propanol, 2-(2-methoxy-1-... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.43	9.31 ug/ml	646936	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	53
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	42
4	2,5,8,11-Tetraoxatetradecan-13-o...	264	C13H28O5	020324-34-9	38





Data File : I:\MSDCHEM\1\DATA\051412\4M60873.D Vial: 14
Acq On : 14 May 2012 15:41 Operator: CAA
Sample : L12050171-01 REF Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

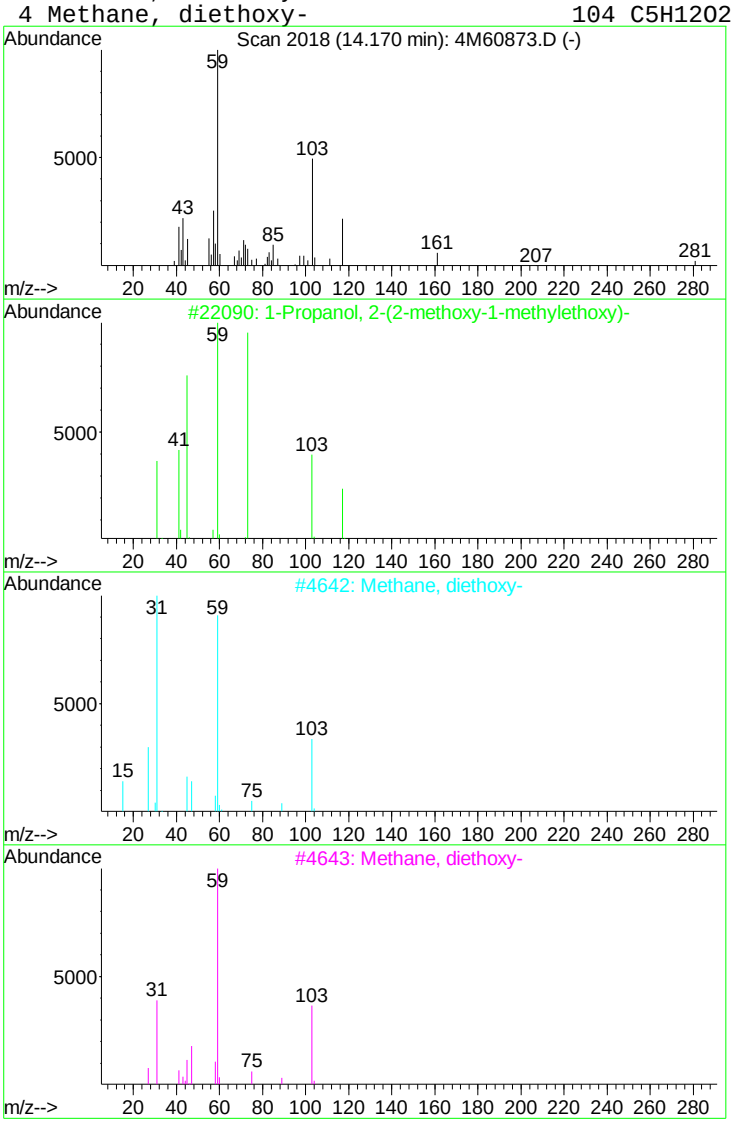
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Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

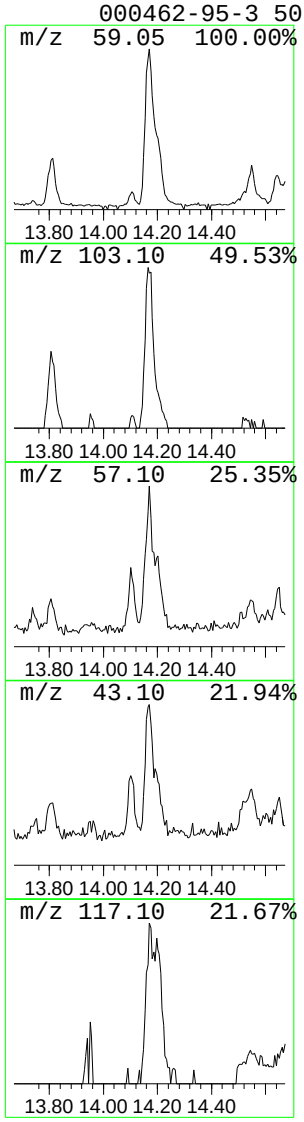
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Peak Number 3 1-Propanol, 2-(2-methoxy-1-... Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.17	4.13 ug/ml	280099	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	64
2	Methane, diethoxy-	104	C5H12O2	000462-95-3	50
3	Methane, diethoxy-	104	C5H12O2	000462-95-3	50
4	Methane, diethoxy-	104	C5H12O2	000462-95-3	50





Data File : I:\MSDCHEM\1\DATA\051412\4M60873.D Vial: 14
Acq On : 14 May 2012 15:41 Operator: CAA
Sample : L12050171-01 REF Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

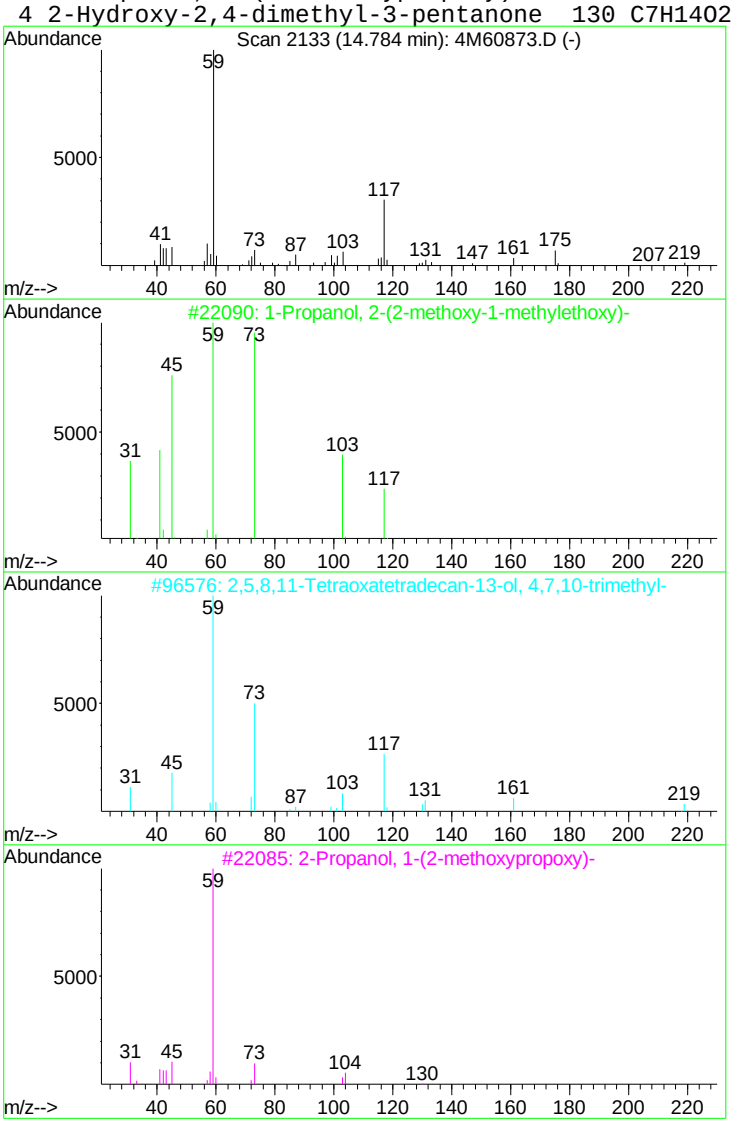
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

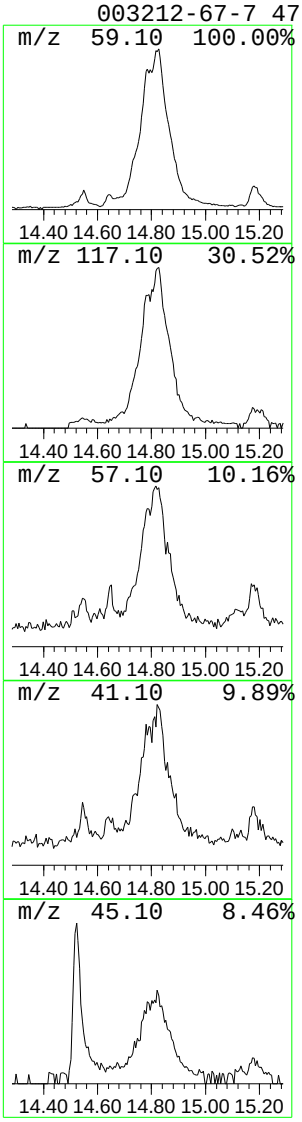
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Peak Number 4 1-Propanol, 2-(2-methoxy-1-... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.78	6.42 ug/ml	435246	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	2,5,8,11-Tetraoxatetradecan-13-o...	264	C13H28O5	020324-34-9	50
3	2-Propanol, 1-(2-methoxypropoxy)-	148	C7H16O3	013429-07-7	47
4	2-Hydroxy-2,4-dimethyl-3-pentanone	130	C7H14O2	003212-67-7	47





Data File : I:\MSDCHEM\1\DATA\051412\4M60873.D Vial: 14
Acq On : 14 May 2012 15:41 Operator: CAA
Sample : L12050171-01 REF Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

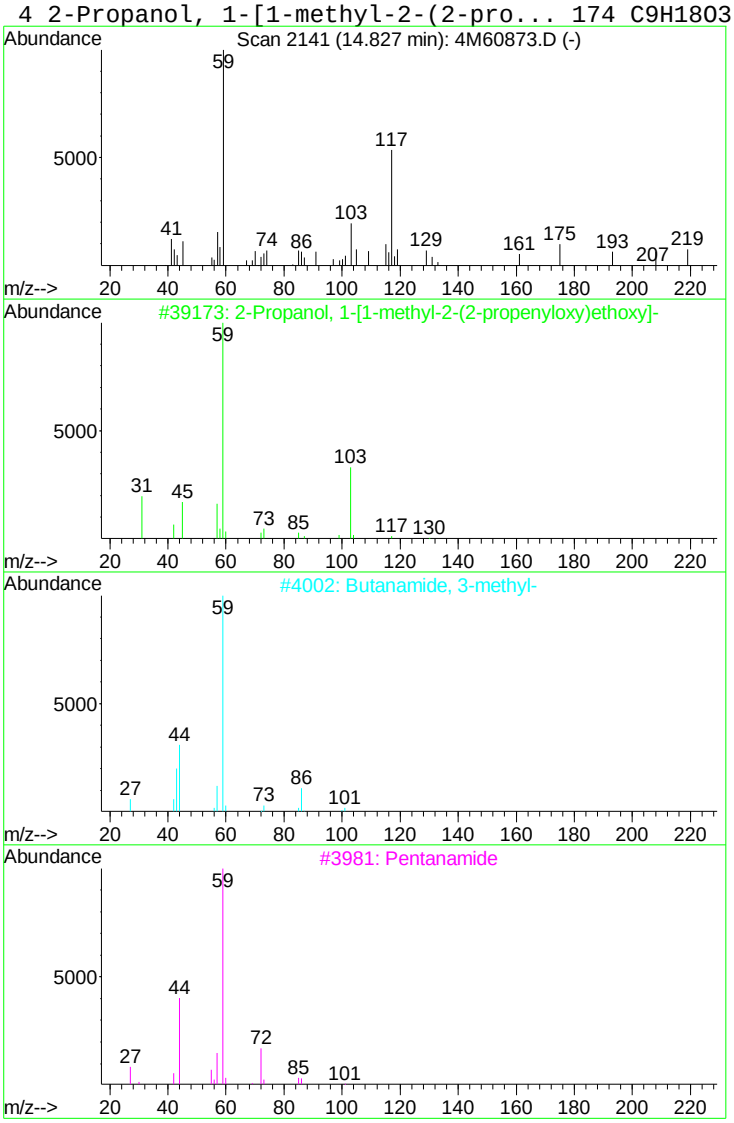
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Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

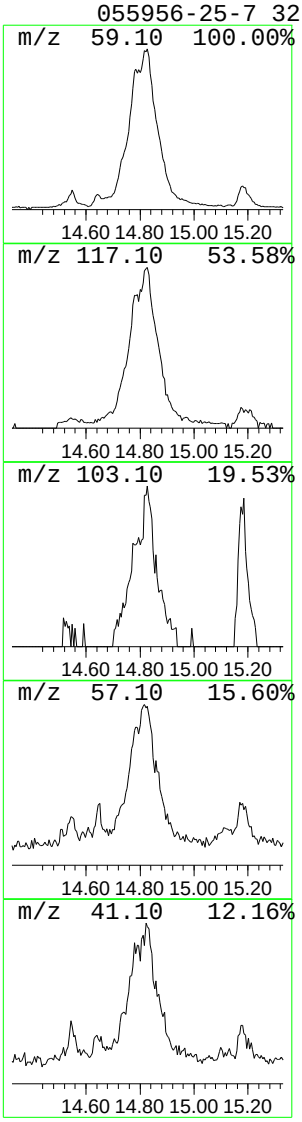
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Peak Number 5 2-Propanol, 1-[1-methyl-2-(... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.83	9.87 ug/ml	669247	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	43
2	Butanamide, 3-methyl-	101	C5H11NO	000541-46-8	35
3	Pentanamide	101	C5H11NO	000626-97-1	35
4	2-Propanol, 1-[1-methyl-2-(2-pro...	174	C9H18O3	055956-25-7	32





Data File : I:\MSDCHEM\1\DATA\051412\4M60873.D Vial: 14
Acq On : 14 May 2012 15:41 Operator: CAA
Sample : L12050171-01 REF Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

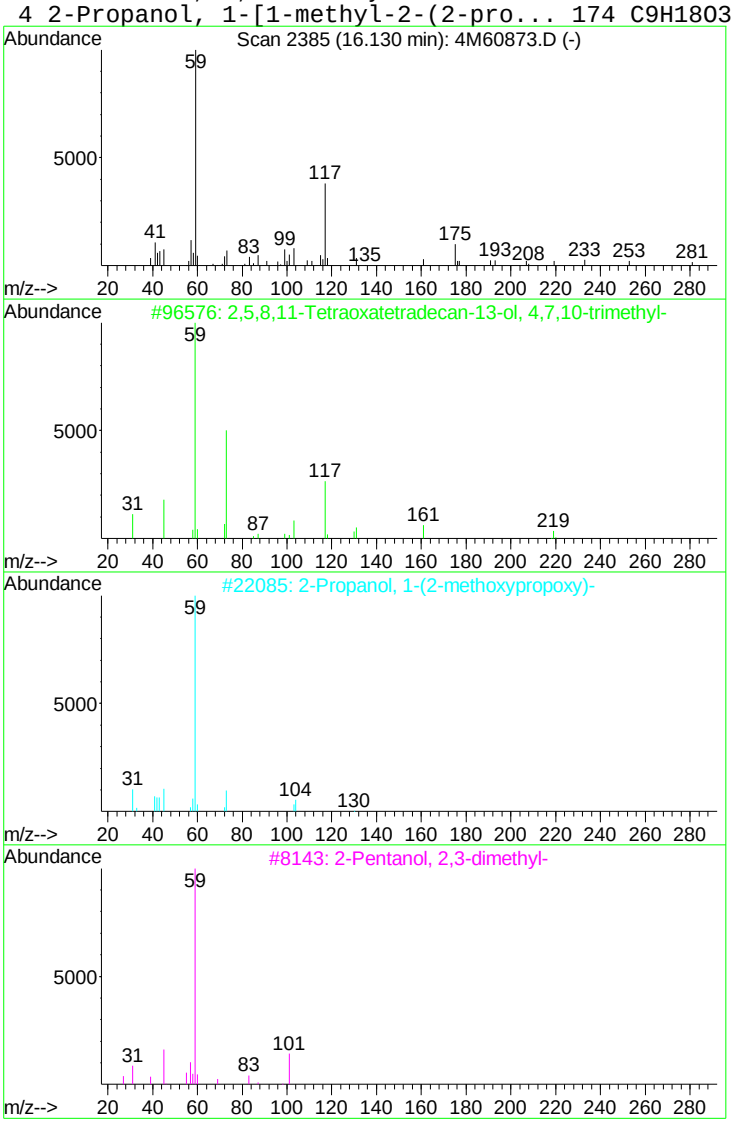
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Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

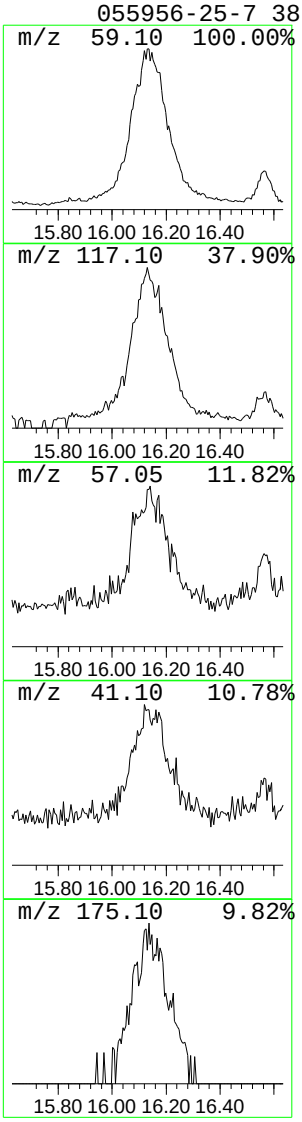
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Peak Number 6 2,5,8,11-Tetraoxatetradecan... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.13	5.90 ug/ml	400182	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	43
3	2-Pentanol, 2,3-dimethyl-	116	C7H16O	004911-70-0	38
4	2-Propanol, 1-[1-methyl-2-(2-pro...	174	C9H18O3	055956-25-7	38





Data File : I:\MSDCHEM\1\DATA\051412\4M60873.D Vial: 14
Acq On : 14 May 2012 15:41 Operator: CAA
Sample : L12050171-01 REF Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

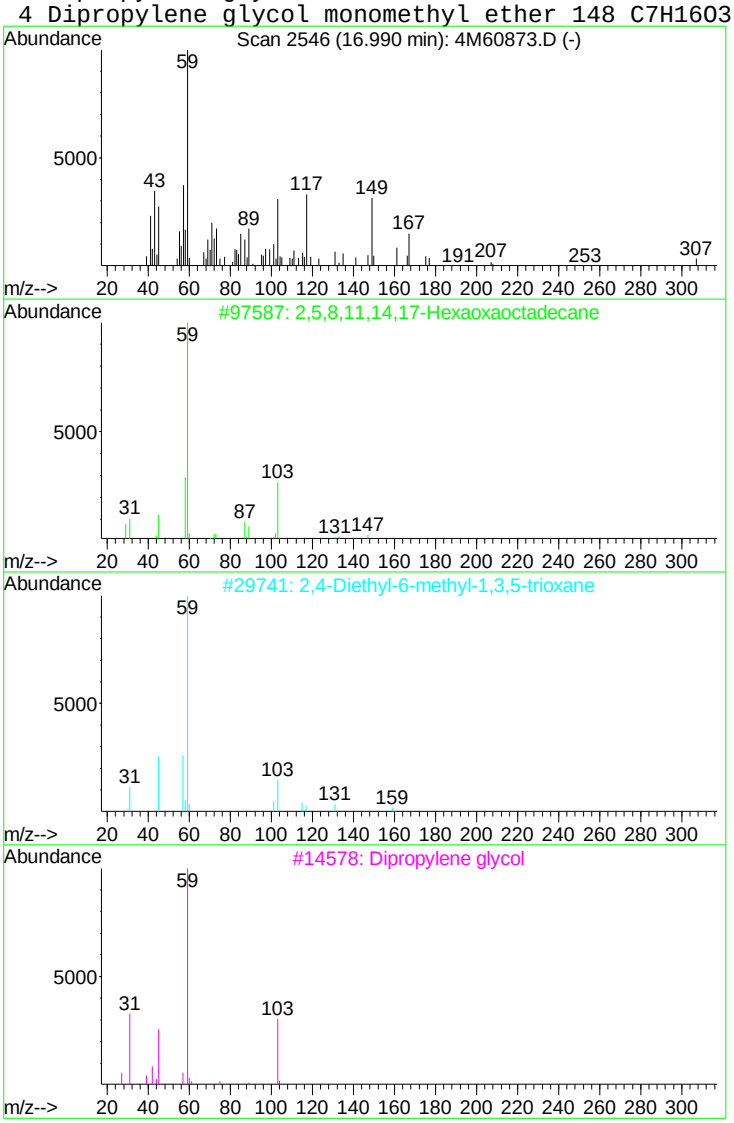
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

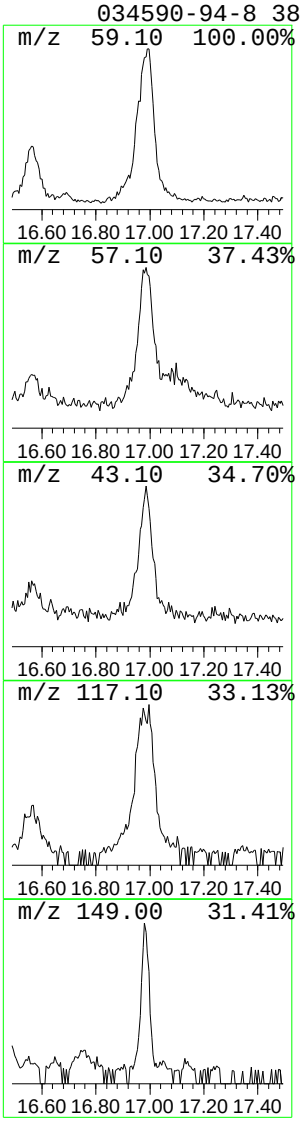
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Peak Number 7 2,5,8,11,14,17-Hexaoxaoctad... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.99	8.40 ug/ml	496801	Perylene-d12	18.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,5,8,11,14,17-Hexaoxaoctadecane	266	C12H26O6	001191-87-3	38
2	2,4-Diethyl-6-methyl-1,3,5-trioxane	160	C8H16O3	117888-04-7	38
3	Dipropylene glycol	134	C6H14O3	025265-71-8	38
4	Dipropylene glycol monomethyl ether	148	C7H16O3	034590-94-8	38





Tentatively Identified Compound (LSC) summary

Operator ID: CAA Date Acquired: 14 May 2012 15:41
Data File: I:\MSDCHEM\1\DATA\051412\4M60873.D
Name: L12050171-01 REF
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	5.4	ug/ml	233831	1	7.24	1744850	40.0
1-Propanol, 2-(2-...	13.43	9.3	ug/ml	646936	4	11.92	2778960	40.0
1-Propanol, 2-(2-...	14.17	4.1	ug/ml	280099	5	15.60	2711790	40.0
1-Propanol, 2-(2-...	14.78	6.4	ug/ml	435246	5	15.60	2711790	40.0
2-Propanol, 1-[1-...	14.83	9.9	ug/ml	669247	5	15.60	2711790	40.0
2,5,8,11-Tetraoxa...	16.13	5.9	ug/ml	400182	5	15.60	2711790	40.0
2,5,8,11,14,17-He...	16.99	8.4	ug/ml	496801	6	18.33	2365910	40.0

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051412\4M60874.D Vial: 15
Acq On : 14 May 2012 16:17 Operator: CAA
Sample : L12050171-03 MS Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 10:59:33 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 : Tue May 15 10:59:15 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.24	152	312259	40.00	ug/ml	0.00
30) Naphthalene-d8	8.52	136	1186584	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.32	164	676258	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.92	188	1232154	40.00	ug/ml	0.00
113) Chrysene-d12	15.60	240	1094748	40.00	ug/ml	0.00
128) Perylene-d12	18.33	264	920188	40.00	ug/ml	-0.01
System Monitoring Compounds						
8) 2-Fluorophenol	6.01	112	736373	77.7788	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 77.78%			
12) Phenol-d5	6.84	99	926287	83.5966	ug/ml	0.01
Spiked Amount 100.000	Range 10 - 94		Recovery = 83.60%			
31) Nitrobenzene-d5	7.80	82	424991	42.3469	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 84.70%			
59) 2-Fluorobiphenyl	9.59	172	950465	42.0899	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 84.18%			
86) 2,4,6-Tribromophenol	11.15	330	314679	104.3477	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 104.35%			
117) p-Terphenyl-d14	13.95	244	1097992	54.4168	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 108.84%			
Target Compounds						Qvalue
2) 1,4-Dioxane	4.23	88	110390	28.3651	ug/ml#	98
3) n-Nitrosodimethylamine	4.66	74	216820	37.6248	ug/ml	99
4) Pyridine	4.67	79	273758	26.7951	ug/ml	90
5) 2-Picoline	5.46	93	361610	32.5274	ug/ml	99
6) n-Nitrosomethylethylamine	5.57	88	172655	36.0033	ug/ml	90
7) Methyl Methanesulfonate	5.86	80	212815	39.0875	ug/ml	97
9) n-Nitrosodiethylamine	6.24	102	187812	36.5304	ug/ml	96
10) Ethyl Methanesulfonate	6.49	79	260901	36.5864	ug/ml	97
11) Aniline	6.93	93	495488	30.2604	ug/ml	87
13) Phenol	6.85	94	485574	41.0413	ug/ml	93
14) bis(2-Chloroethyl)ether	6.95	63	290138	39.1640	ug/ml#	32
15) Pentachloroethane	6.97	167	101623	25.4660	ug/ml	97
16) 2-Chlorophenol	7.06	128	416780	39.3378	ug/ml	98
17) 1,3-Dichlorobenzene	7.20	146	280149	23.7563	ug/ml	99
18) 1,4-Dichlorobenzene	7.25	146	301206	25.0428	ug/ml	100
19) Benzyl Alcohol	7.34	108	286596	41.7780	ug/ml	93
20) 1,2-Dichlorobenzene	7.44	146	294695	26.3830	ug/ml	99
21) 2-Methylphenol	7.44	107	331663	40.6530	ug/ml	97
22) bis(2-Chloroisopropyl)ethe	7.48	45	506113	33.2758	ug/ml	92
23) 3-,4-Methylphenol	7.57	107	491717	46.3665	ug/ml	91
24) n-Nitrosopyrrolidine	7.62	100	202273	42.2470	ug/ml	98
25) n-Nitrosodipropylamine	7.62	70	304012	45.5723	ug/ml	93
26) Acetophenone	7.63	105	1033121	78.7484	ug/ml	98
27) n-Nitrosomorpholine	7.63	56	230624	37.0569	ug/ml	95
28) o-Toluidine	7.67	106	537481	32.4063	ug/ml	99
29) Hexachloroethane	7.75	117	79672	17.8886	ug/ml	98
32) Nitrobenzene	7.81	77	485265	48.5138	ug/ml	97
33) n-Nitrosopiperidine	7.96	114	209700	39.1643	ug/ml	97
34) Isophorone	8.03	82	803156	43.9902	ug/ml	99
35) 2-Nitrophenol	8.13	139	247326	41.9454	ug/ml	95
36) 2,4-Dimethylphenol	8.10	122	419538	41.4366	ug/ml	97
37) 0,0,0-Triethyl Phosphoroth	8.20	198	220183	43.5593	ug/ml	97
38) bis(2-Chloroethoxy)methane	8.20	93	653211	47.0775	ug/ml	99

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051412\4M60874.D Vial: 15
Acq On : 14 May 2012 16:17 Operator: CAA
Sample : L12050171-03 MS Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 10:59:33 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 : Tue May 15 10:59:15 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39)	Benzoic Acid	8.14	105	106540m	15.2683 ug/ml	
40)	2,4-Dichlorophenol	8.36	162	374036	44.1292 ug/ml	99
41)	a,a-Dimethylphenethylamine	8.36	58	1085312	75.7376 ug/ml	98
42)	1,2,4-Trichlorobenzene	8.46	180	275765	28.6527 ug/ml	99
43)	Naphthalene	8.54	128	1169797	37.2250 ug/ml	99
44)	4-Chloroaniline	8.57	127	495261	42.7926 ug/ml	100
45)	2,6-Dichlorophenol	8.59	162	377265	43.1344 ug/ml	100
46)	Hexachloropropene	8.65	213	39498	7.3225 ug/ml	99
47)	Hexachlorobutadiene	8.68	225	115232	23.3866 ug/ml	99
48)	n-Nitrosodi-n-Butylamine	8.88	84	374589	44.3892 ug/ml	93
49)	p-Phenylenediamine	9.00	108	33826	46.3247 ug/ml	98
50)	4-Chloro-3-Methylphenol	9.00	107	418300	48.6332 ug/ml	99
51)	Safrole	9.09	162	312178	38.1623 ug/ml	99
52)	2-Methylnaphthalene	9.22	142	769006	37.6665 ug/ml	99
53)	1-Methylnaphthalene	9.34	142	690391	35.7672 ug/ml	100
55)	1,2,4,5-Tetrachlorobenzene	9.44	216	329456	37.1761 ug/ml	99
56)	Hexachlorocyclopentadiene	9.44	237	16138	3.5206 ug/ml	99
57)	2,4,6-Trichlorophenol	9.52	196	295757	47.6275 ug/ml	99
58)	2,4,5-Trichlorophenol	9.56	196	335941	52.5541 ug/ml	100
60)	Isosafrole	9.62	162	589875	69.0251 ug/ml	99
61)	2-Chloronaphthalene	9.73	162	902413	47.2570 ug/ml	99
62)	1-Chloronaphthalene	9.77	162	695112	38.4430 ug/ml	99
63)	2-Nitroaniline	9.83	65	224303	40.9790 ug/ml	98
64)	1,4-Naphthoquinone	9.90	158	331546	43.9667 ug/ml	97
65)	Dimethylphthalate	9.99	163	1131436	52.8811 ug/ml	99
66)	1,3-Dinitrobenzene	10.05	168	208710	50.8706 ug/ml	97
67)	2,6-Dinitrotoluene	10.09	165	275609	51.5665 ug/ml	98
68)	Acenaphthylene	10.17	152	1369237	44.6578 ug/ml	99
69)	3-Nitroaniline	10.24	138	269528	68.3679 ug/ml	98
70)	2,4-Dinitrophenol	10.35	184	133789	50.0621 ug/ml	77
71)	Acenaphthene	10.36	154	848765	42.5010 ug/ml	100
72)	4-Nitrophenol	10.36	65	201187	51.0796 ug/ml	97
73)	2,4-Dinitrotoluene	10.50	165	377073	55.4470 ug/ml	97
74)	Pentachlorobenzene	10.54	250	314150	39.3712 ug/ml	98
75)	Dibenzofuran	10.51	168	1227572	45.9072 ug/ml	99
76)	2,3,4,6-Tetrachlorophenol	10.66	232	240195	48.7237 ug/ml	97
77)	1-Naphthylamine	10.59	143	391051	67.9978 ug/ml#	75
78)	2-Naphthylamine	10.66	143	496385	141.7999 ug/ml#	58
79)	Diethylphthalate	10.70	149	1176363	55.2058 ug/ml	99
80)	Thionazin	10.80	107	189940	53.5706 ug/ml	94
81)	Fluorene	10.87	166	1060955	46.6831 ug/ml	100
82)	4-Chlorophenyl Phenyl Ethe	10.82	204	488179	45.7137 ug/ml	100
83)	4-Nitroaniline	10.88	138	234076	47.9665 ug/ml	97
84)	5-Nitro-o-Toluidine	10.87	152	310818	57.9283 ug/ml	96
85)	1,2-Diphenylhydrazine	10.99	77	990402	47.7903 ug/ml	99
88)	4,6-Dinitro-2-Methylphenol	10.93	198	199877	52.1093 ug/ml	76
89)	n-Nitrosodiphenylamine	10.94	169	1728388	86.6944 ug/ml	99
90)	Sulfotepp	11.14	322	171141	48.0479 ug/ml	98
91)	Sym-Trinitrobenzene	11.23	75	262060	53.7672 ug/ml	97
92)	Diallate	11.26	86	703095	86.4770 ug/ml#	81
93)	Phenacetin	11.25	108	545770	52.2533 ug/ml	96
94)	Phorate	11.28	75	624031	48.1095 ug/ml#	99
95)	4-Bromophenyl Phenyl Ether	11.35	248	285998	45.8773 ug/ml	98
96)	Hexachlorobenzene	11.56	284	283265	41.5673 ug/ml	99

(#) = qualifier out of range (m) = manual integration
4M60874.D MEGAMIX.M Tue May 15 11:03:37 2012 Page 2

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051412\4M60874.D Vial: 15
Acq On : 14 May 2012 16:17 Operator: CAA
Sample : L12050171-03 MS Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 10:59:33 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 : Tue May 15 10:59:15 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

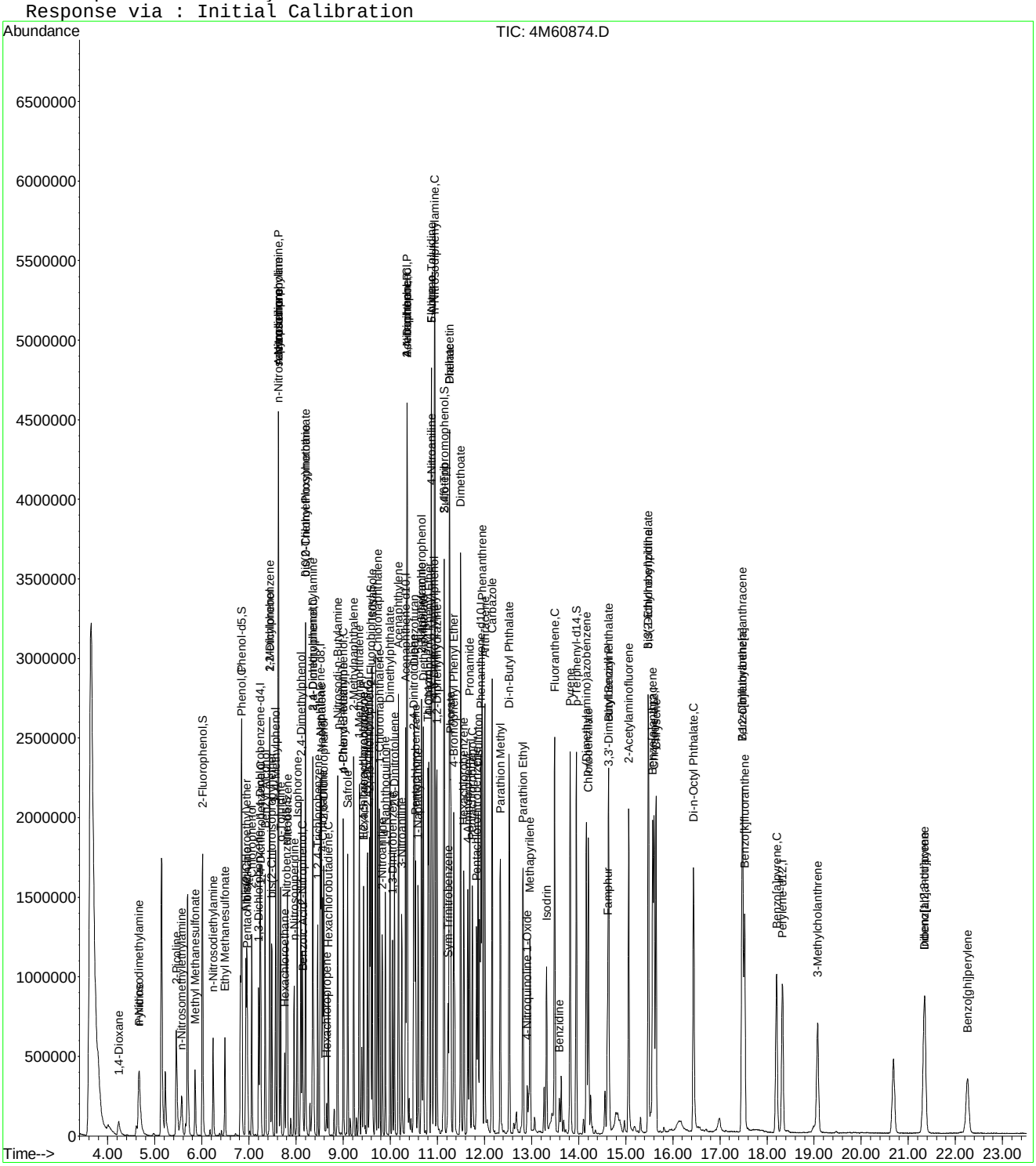
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.49	87	444023	67.0149	ug/ml	98
98)	4-Aminobiphenyl	11.65	169	765826	83.6488	ug/ml	100
99)	Pentachlorophenol	11.74	266	231557	53.7349	ug/ml	99
100)	Pronamide	11.69	173	510470	50.9627	ug/ml	99
101)	Pentachloronitrobenzene	11.83	237	107767	45.6295	ug/ml	95
102)	Disulfoton	11.86	88	519839	46.6289	ug/ml	98
103)	Phenanthrene	11.95	178	1550473	47.4410	ug/ml	100
104)	Anthracene	12.01	178	1399231	41.7545	ug/ml	100
105)	Carbazole	12.16	167	1546776	52.7142	ug/ml	100
106)	Parathion Methyl	12.34	109	400659	58.7452	ug/ml	100
107)	Di-n-Butyl Phthalate	12.52	149	1755244	48.1479	ug/ml	100
108)	Parathion Ethyl	12.82	97	226918	54.6478	ug/ml	96
109)	4-Nitroquinoline 1-Oxide	12.91	190	47099	15.8284	ug/ml	89
110)	Methapyrilene	12.97	58	420360	70.8261	ug/ml	89
111)	Isodrin	13.32	193	119742	34.1106	ug/ml	96
112)	Fluoranthene	13.49	202	1460614	42.6490	ug/ml	99
114)	Benzidine	13.59	184	135684	88.9237	ug/ml	100
115)	Pyrene	13.82	202	1509847	46.1109	ug/ml	100
118)	p-(Dimethylamino)azobenzen	14.16	225	351311	51.9653	ug/ml	98
119)	Chlorobenzilate	14.21	251	461795	51.8242	ug/ml	97
120)	Famphur	14.61	218	270972	698.0574	ug/ml#	26
121)	Butyl Benzyl Phthalate	14.63	149	758733	50.9437	ug/ml	99
122)	3,3'-Dimethylbenzidine	14.65	212	193629	18.7143	ug/ml	98
123)	2-Acetylaminofluorene	15.06	181	697122	54.7154	ug/ml	99
124)	bis(2-Ethylhexyl)phthalate	15.48	149	988801	48.6514	ug/ml	99
125)	3,3'-Dichlorobenzidine	15.48	252	237300	38.6076	ug/ml	100
126)	Benzo[a]anthracene	15.57	228	1189138	40.9445	ug/ml	100
127)	Chrysene	15.64	228	1161297	42.5976	ug/ml	100
129)	Di-n-Octyl Phthalate	16.44	149	1536496	51.7048	ug/ml	97
130)	7,12-Dimethylbenz[a]anthra	17.48	256	489959	41.1151	ug/ml	99
131)	Benzo[b]fluoranthene	17.48	252	1155295	43.4168	ug/ml	97
132)	Benzo[k]fluoranthene	17.52	252	1033685	41.9076	ug/ml	97
133)	Benzo[a]pyrene	18.20	252	1019266	41.9848	ug/ml	98
134)	3-Methylcholanthrene	19.08	268	468506	35.5436	ug/ml	99
135)	Indeno[1,2,3-cd]pyrene	21.34	276	839332	31.0434	ug/ml	97
136)	Dibenz[ah]anthracene	21.34	278	712008	31.5758	ug/ml	98
137)	Benzo[ghi]perylene	22.26	276	601722	26.9027	ug/ml	98

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051412\4M60874.D Vial: 15
Acq On : 14 May 2012 16:17 Operator: CAA
Sample : L12050171-03 MS Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 11:02 2012 Quant Results File: MEGAMIX.RES

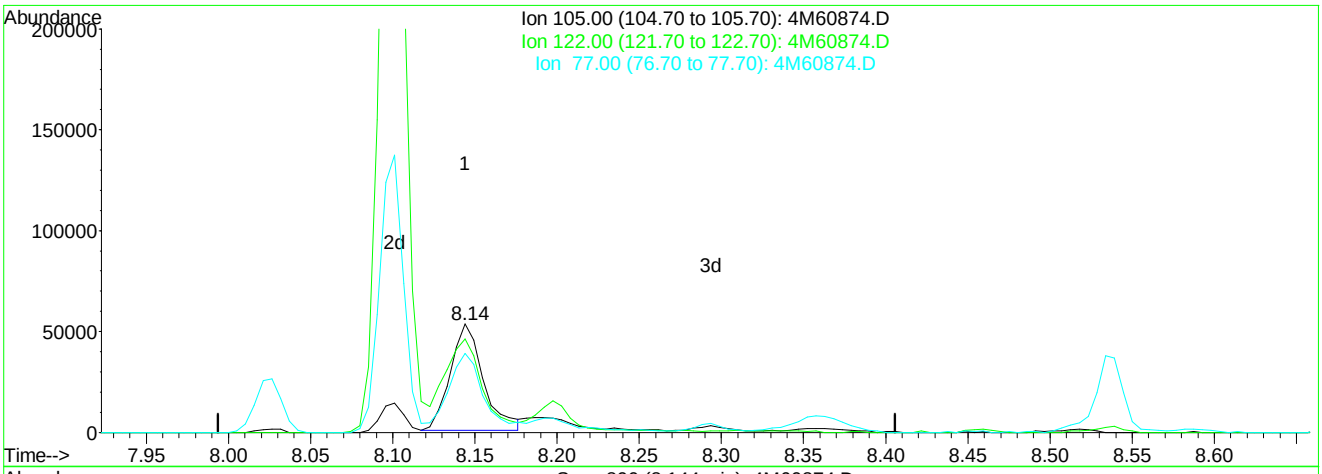
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Tue May 15 10:59:15 2012
Response via : Initial Calibration

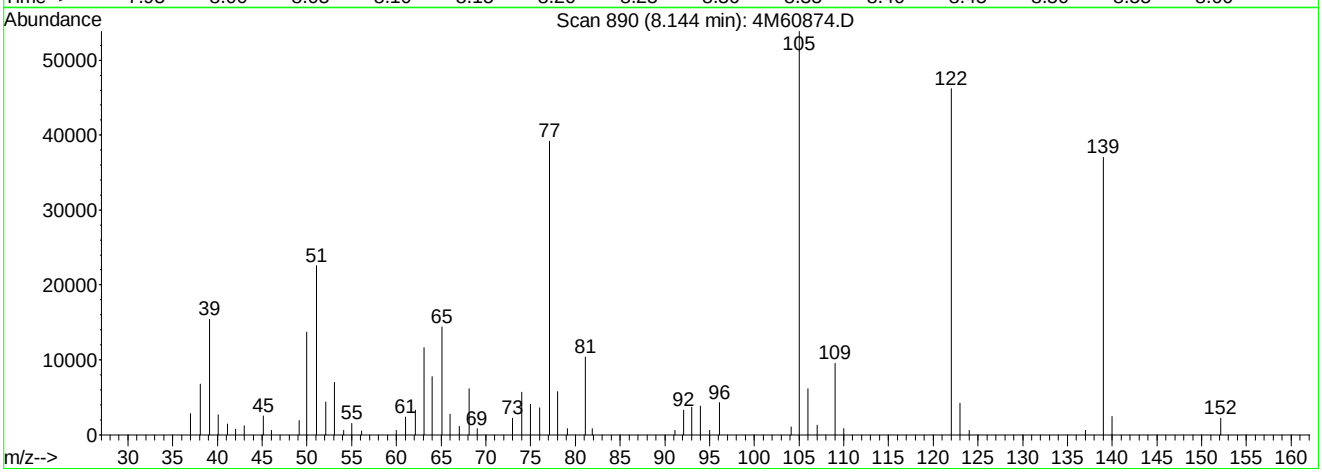


Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\051412\4M60874.D Vial: 15
Acq On : 14 May 2012 16:17 Operator: CAA
Sample : L12050171-03 MS Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 10:59 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: 4M60874.D

(39) Benzoic Acid

8.14min 10.63ug/ml

response 74194

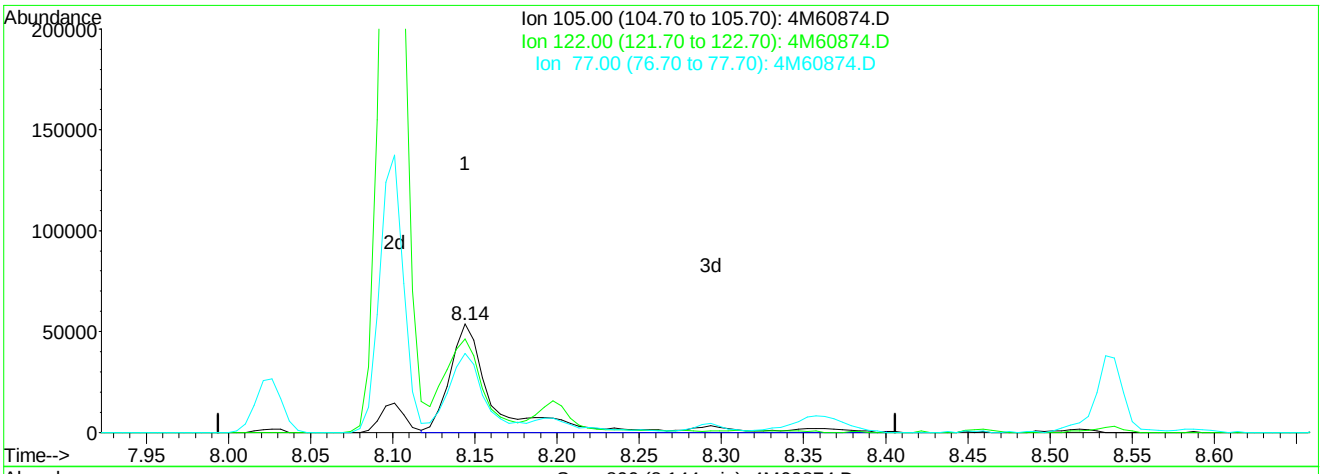
Ion	Exp%	Act%
105.00	100	100
122.00	87.10	98.35
77.00	70.40	77.69
0.00	0.00	0.00

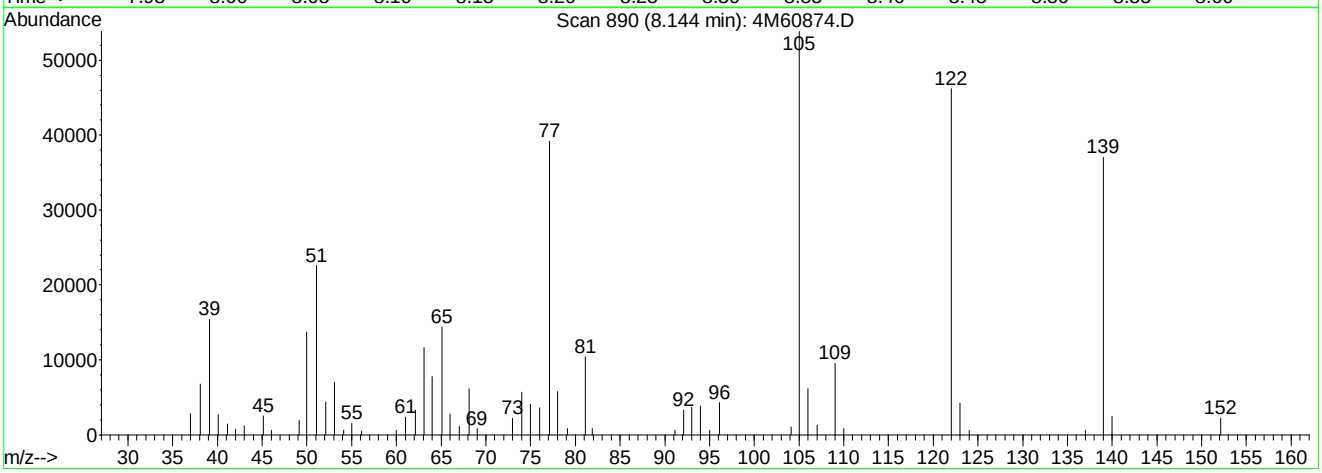
4M60874.D MEGAMIX.M Tue May 15 11:02:07 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\051412\4M60874.D Vial: 15
Acq On : 14 May 2012 16:17 Operator: CAA
Sample : L12050171-03 MS Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 11:02 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: 4M60874.D

(39) Benzoic Acid

8.14min 15.27ug/ml mint

response 106540

Ion	Exp%	Act%
105.00	100	100
122.00	87.10	68.49
77.00	70.40	54.11
0.00	0.00	0.00

4M60874.D MEGAMIX.M Tue May 15) 2012

Analyst: 05/15/2012 13:40 Supervisor: 05/15/2012 14:58

#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\051412\4M60874.D Vial: 15
Acq On : 14 May 2012 16:17 Operator: CAA
Sample : L12050171-03 MS Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 13:06:18 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 : Tue May 15 13:05:17 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

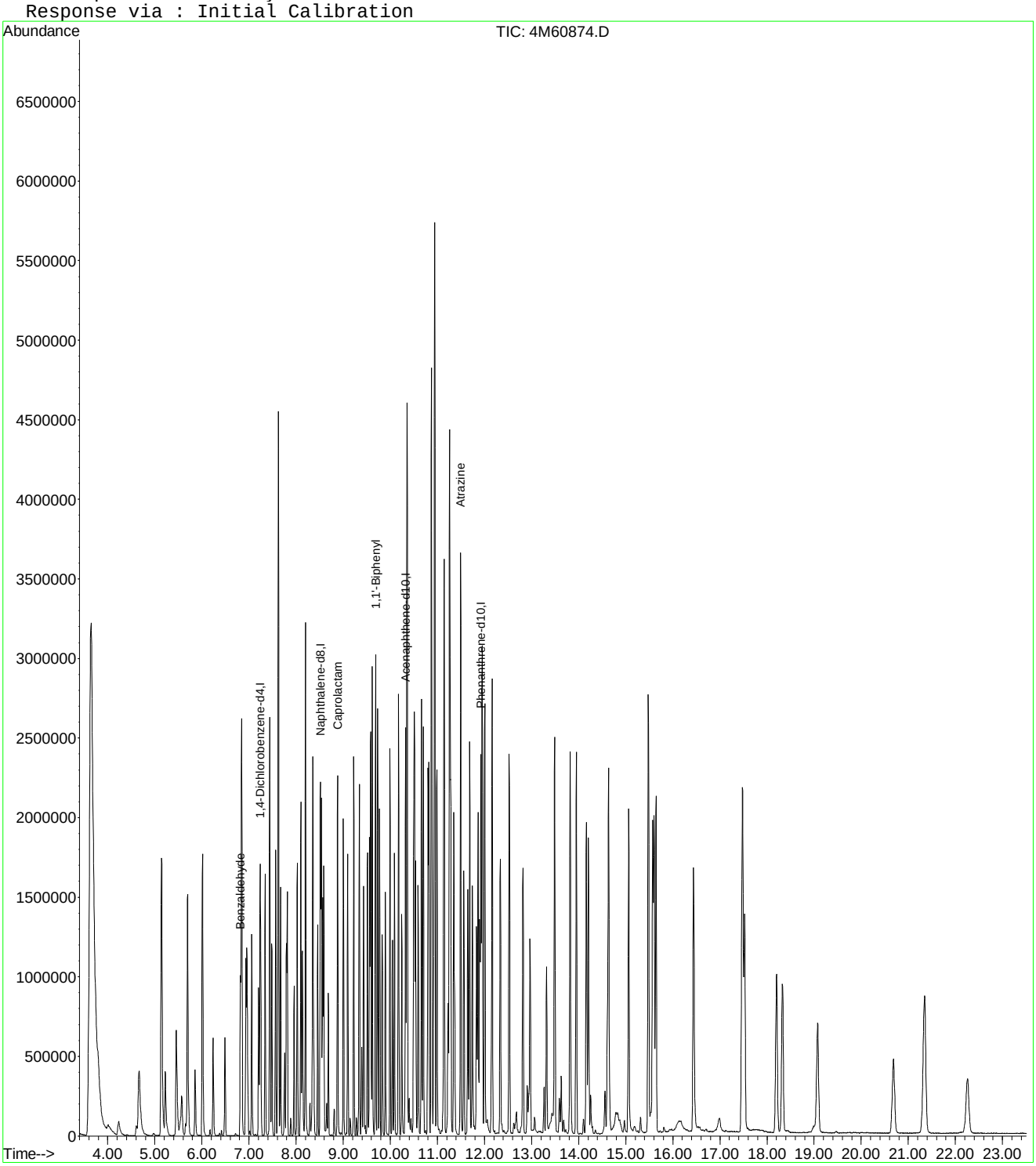
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.24	152	312259	40.00	ug/mL	0.00
3) Naphthalene-d8	8.52	136	1186584	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.32	164	676258	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.92	188	1232154	40.00	ug/mL	0.00
Target Compounds						Qvalue
2) Benzaldehyde	6.82	105	241418	29.0258	ug/L	99
4) Caprolactam	8.89	55	218236	56.3185	ug/L	90
6) 1,1'-Biphenyl	9.69	154	1081760	38.9747	ug/L	100
8) Atrazine	11.49	200	303978	44.5704	ug/L	99

(#) = qualifier out of range (m) = manual integration
4M60874.D TCL.M Tue May 15 13:06:19 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\051412\4M60874.D Vial: 15
Acq On : 14 May 2012 16:17 Operator: CAA
Sample : L12050171-03 MS Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 13:06 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 : Tue May 15 13:05:17 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051412\4M60875.D Vial: 16
Acq On : 14 May 2012 16:51 Operator: CAA
Sample : L12050171-05 MSD Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 10:59:34 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 10:59:15 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.24	152	336107	40.00	ug/ml	0.00
30) Naphthalene-d8	8.51	136	1259867	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.32	164	705162	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.92	188	1277209	40.00	ug/ml	0.00
113) Chrysene-d12	15.60	240	1137616	40.00	ug/ml	0.00
128) Perylene-d12	18.33	264	952093	40.00	ug/ml	-0.01
System Monitoring Compounds						
8) 2-Fluorophenol	6.01	112	911889	89.4835	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 89.48%			
12) Phenol-d5	6.84	99	1104987	92.6483	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 92.65%			
31) Nitrobenzene-d5	7.79	82	506193	47.5041	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 95.00%			
59) 2-Fluorobiphenyl	9.58	172	1085298	46.0908	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 92.18%			
86) 2,4,6-Tribromophenol	11.15	330	315839	100.4395	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 100.44%			
117) p-Terphenyl-d14	13.95	244	1168629	55.7351	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 111.48%			
Target Compounds						Qvalue
2) 1,4-Dioxane	4.23	88	156426	37.3423	ug/ml#	95
3) n-Nitrosodimethylamine	4.65	74	274245	44.2131	ug/ml	100
4) Pyridine	4.67	79	331391	30.1347	ug/ml	89
5) 2-Picoline	5.45	93	427514	35.7271	ug/ml	99
6) n-Nitrosomethylethylamine	5.57	88	210025	40.6885	ug/ml	91
7) Methyl Methanesulfonate	5.85	80	260994	44.5352	ug/ml	96
9) n-Nitrosodiethylamine	6.24	102	227931	41.1882	ug/ml	95
10) Ethyl Methanesulfonate	6.49	79	312818	40.7542	ug/ml	98
11) Aniline	6.93	93	584378	33.1568	ug/ml	89
13) Phenol	6.85	94	579672	45.5182	ug/ml	94
14) bis(2-Chloroethyl)ether	6.95	63	349253	43.7985	ug/ml#	31
15) Pentachloroethane	6.97	167	132846	30.9282	ug/ml	96
16) 2-Chlorophenol	7.06	128	505365	44.3145	ug/ml	98
17) 1,3-Dichlorobenzene	7.20	146	367769	28.9736	ug/ml	99
18) 1,4-Dichlorobenzene	7.25	146	395915	30.5815	ug/ml	100
19) Benzyl Alcohol	7.34	108	335121	45.3854	ug/ml	94
20) 1,2-Dichlorobenzene	7.44	146	382097	31.7806	ug/ml	100
21) 2-Methylphenol	7.44	107	393140	44.7693	ug/ml	98
22) bis(2-Chloroisopropyl)ethe	7.48	45	605437	36.9818	ug/ml	92
23) 3-,4-Methylphenol	7.57	107	576767	50.5274	ug/ml	91
24) n-Nitrosopyrrolidine	7.61	100	231199	44.8623	ug/ml	98
25) n-Nitrosodipropylamine	7.62	70	350721	48.8438	ug/ml	94
26) Acetophenone	7.62	105	1216098	86.1185	ug/ml	99
27) n-Nitrosomorpholine	7.62	56	266389	39.7666	ug/ml	94
28) o-Toluidine	7.67	106	601140	33.6728	ug/ml	100
29) Hexachloroethane	7.75	117	112455	23.4577	ug/ml	99
32) Nitrobenzene	7.81	77	574519	54.0959	ug/ml	97
33) n-Nitrosopiperidine	7.96	114	244824	43.0645	ug/ml	97
34) Isophorone	8.02	82	932833	48.1209	ug/ml	99
35) 2-Nitrophenol	8.13	139	292434	46.7107	ug/ml	96
36) 2,4-Dimethylphenol	8.10	122	484636	45.0819	ug/ml	98
37) 0,0,0-Triethyl Phosphoroth	8.20	198	259246	48.3040	ug/ml	97
38) bis(2-Chloroethoxy)methane	8.20	93	770550	52.3039	ug/ml	99

(#) = qualifier out of range (m) = manual integration
4M60875.D MEGAMIX.M Tue May 15 11:03:38 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051412\4M60875.D Vial: 16
Acq On : 14 May 2012 16:51 Operator: CAA
Sample : L12050171-05 MSD Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 10:59:34 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 10:59:15 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39)	Benzoic Acid	8.14	105	123733m	16.7008 ug/ml	
40)	2,4-Dichlorophenol	8.35	162	423509	47.0597 ug/ml	99
41)	a,a-Dimethylphenethylamine	8.36	58	1187396	78.0416 ug/ml	97
42)	1,2,4-Trichlorobenzene	8.46	180	350719	34.3210 ug/ml	99
43)	Naphthalene	8.53	128	1395936	41.8372 ug/ml	98
44)	4-Chloroaniline	8.56	127	573789	46.6939 ug/ml	97
45)	2,6-Dichlorophenol	8.59	162	429426	46.2423 ug/ml	99
46)	Hexachloropropene	8.65	213	67823	11.8423 ug/ml	98
47)	Hexachlorobutadiene	8.68	225	170818	32.6514 ug/ml	100
48)	n-Nitrosodi-n-Butylamine	8.88	84	412755	46.0669 ug/ml	94
49)	p-Phenylenediamine	9.00	108	35737	46.0950 ug/ml	99
50)	4-Chloro-3-Methylphenol	9.00	107	443647	48.5799 ug/ml	100
51)	Safrole	9.09	162	359873	41.4339 ug/ml	98
52)	2-Methylnaphthalene	9.22	142	916279	42.2695 ug/ml	100
53)	1-Methylnaphthalene	9.34	142	820260	40.0235 ug/ml	99
55)	1,2,4,5-Tetrachlorobenzene	9.43	216	405823	43.9164 ug/ml	99
56)	Hexachlorocyclopentadiene	9.44	237	17209	3.6004 ug/ml	98
57)	2,4,6-Trichlorophenol	9.51	196	317876	49.0912 ug/ml	99
58)	2,4,5-Trichlorophenol	9.56	196	347525	52.1379 ug/ml	99
60)	Isosafrole	9.62	162	660630	74.1359 ug/ml	99
61)	2-Chloronaphthalene	9.73	162	1055245	52.9954 ug/ml	99
62)	1-Chloronaphthalene	9.77	162	812566	43.0968 ug/ml	99
63)	2-Nitroaniline	9.83	65	238677	41.8177 ug/ml	99
64)	1,4-Naphthoquinone	9.89	158	339833	43.2184 ug/ml	98
65)	Dimethylphthalate	9.99	163	1171440	52.5066 ug/ml	100
66)	1,3-Dinitrobenzene	10.04	168	214386	50.1122 ug/ml	96
67)	2,6-Dinitrotoluene	10.09	165	285294	51.1906 ug/ml	97
68)	Acenaphthylene	10.17	152	1521276	47.5829 ug/ml	99
69)	3-Nitroaniline	10.24	138	278901	67.8456 ug/ml	99
70)	2,4-Dinitrophenol	10.35	184	133129	48.0853 ug/ml	94
71)	Acenaphthene	10.35	154	945522	45.4053 ug/ml	99
72)	4-Nitrophenol	10.35	65	207822	50.6014 ug/ml	96
73)	2,4-Dinitrotoluene	10.49	165	382867	53.9913 ug/ml	97
74)	Pentachlorobenzene	10.54	250	382843	46.0135 ug/ml	98
75)	Dibenzofuran	10.51	168	1342947	48.1633 ug/ml	99
76)	2,3,4,6-Tetrachlorophenol	10.66	232	242692	47.2123 ug/ml	96
77)	1-Naphthylamine	10.59	143	428130	71.3938 ug/ml#	75
78)	2-Naphthylamine	10.66	143	552506	151.3623 ug/ml#	59
79)	Diethylphthalate	10.70	149	1204404	54.2049 ug/ml	99
80)	Thionazin	10.80	107	197739	53.4843 ug/ml	94
81)	Fluorene	10.87	166	1154675	48.7243 ug/ml	99
82)	4-Chlorophenyl Phenyl Ethe	10.82	204	556579	49.9825 ug/ml	100
83)	4-Nitroaniline	10.88	138	244433	48.0357 ug/ml	96
84)	5-Nitro-o-Toluidine	10.87	152	310714	55.5353 ug/ml	94
85)	1,2-Diphenylhydrazine	10.99	77	1053923	48.7709 ug/ml	98
88)	4,6-Dinitro-2-Methylphenol	10.92	198	193545	48.6786 ug/ml	72
89)	n-Nitrosodiphenylamine	10.94	169	1777324	86.0042 ug/ml	99
90)	Sulfotepp	11.14	322	183940	49.8196 ug/ml	95
91)	Sym-Trinitrobenzene	11.23	75	256191	50.7088 ug/ml	96
92)	Diallate	11.26	86	766579	90.9592 ug/ml#	80
93)	Phenacetin	11.25	108	549785	50.7809 ug/ml	93
94)	Phorate	11.28	75	682632	50.7709 ug/ml#	100
95)	4-Bromophenyl Phenyl Ether	11.34	248	328539	50.8423 ug/ml	98
96)	Hexachlorobenzene	11.56	284	352679	49.9276 ug/ml	97

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051412\4M60875.D Vial: 16
Acq On : 14 May 2012 16:51 Operator: CAA
Sample : L12050171-05 MSD Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 10:59:34 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 10:59:15 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

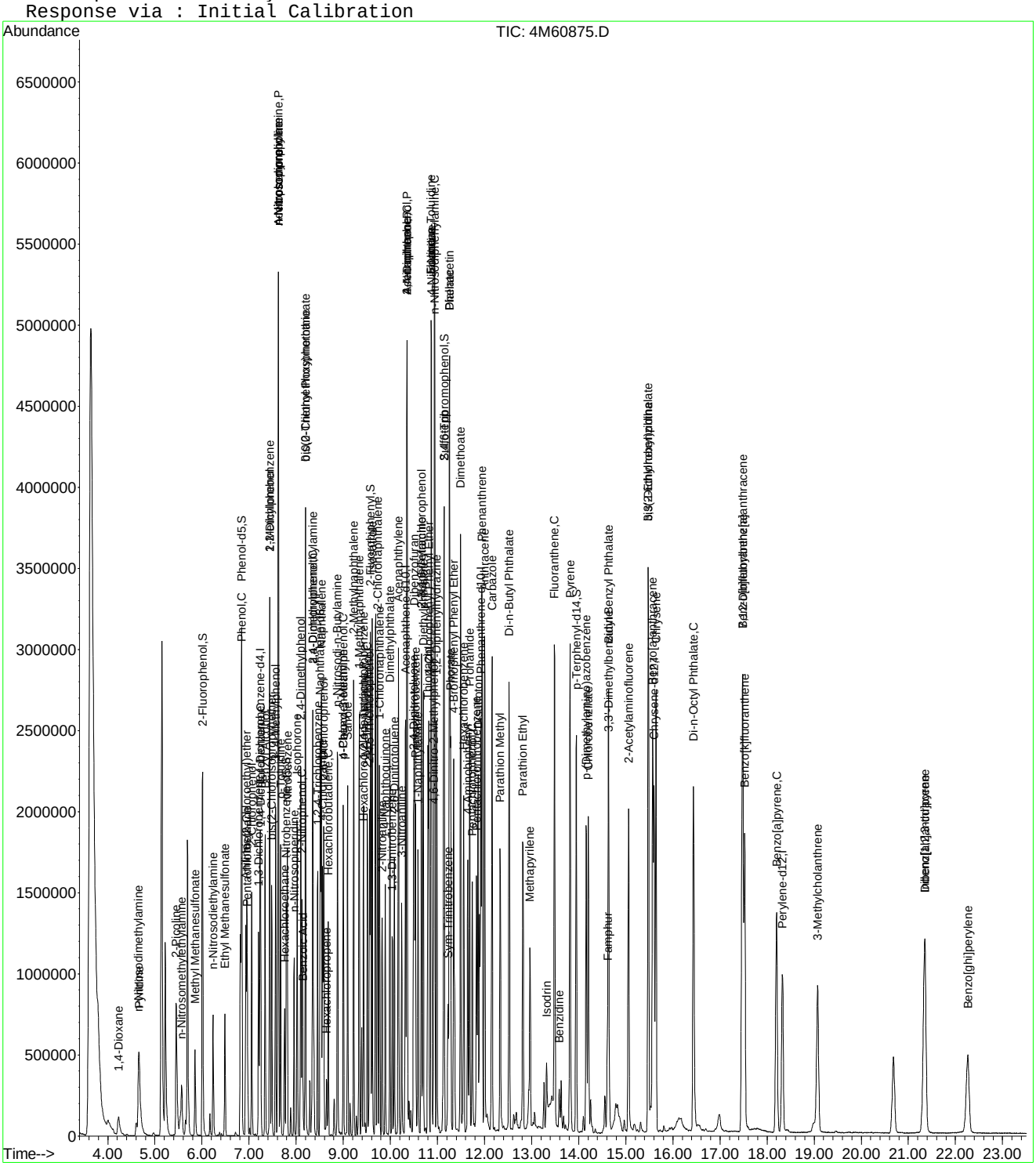
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.49	87	448387	64.7599	ug/ml	98
98)	4-Aminobiphenyl	11.64	169	775334	82.4774	ug/ml	99
99)	Pentachlorophenol	11.74	266	232114	51.9641	ug/ml	100
100)	Pronamide	11.69	173	511290	49.2439	ug/ml	98
101)	Pentachloronitrobenzene	11.83	237	127648	52.1407	ug/ml	97
102)	Disulfoton	11.86	88	576398	49.8783	ug/ml	97
103)	Phenanthrene	11.95	178	1693834	49.9993	ug/ml	99
104)	Anthracene	12.00	178	1575344	45.3516	ug/ml	100
105)	Carbazole	12.16	167	1559028	51.2575	ug/ml	100
106)	Parathion Methyl	12.33	109	405242	57.3212	ug/ml	99
107)	Di-n-Butyl Phthalate	12.52	149	2002913	53.0036	ug/ml	100
108)	Parathion Ethyl	12.81	97	244950	56.9094	ug/ml	97
110)	Methapyrilene	12.97	58	400592	61.6642	ug/ml	88
111)	Isodrin	13.31	193	91581	25.1682	ug/ml	95
112)	Fluoranthene	13.49	202	1758696	49.5413	ug/ml	99
114)	Benzidine	13.59	184	147341	92.9246	ug/ml	100
115)	Pyrene	13.82	202	1839833	54.0714	ug/ml	100
118)	p-(Dimethylamino)azobenzen	14.16	225	335539	47.7621	ug/ml	96
119)	Chlorobenzilate	14.21	251	493092	53.2513	ug/ml	96
120)	Famphur	14.61	218	177679	440.4751	ug/ml#	31
121)	Butyl Benzyl Phthalate	14.63	149	934231	60.3634	ug/ml	98
122)	3,3'-Dimethylbenzidine	14.64	212	218819	20.3520	ug/ml	99
123)	2-Acetylaminofluorene	15.06	181	709575	53.5942	ug/ml	99
124)	bis(2-Ethylhexyl)phthalate	15.48	149	1243191	58.8630	ug/ml	99
125)	3,3'-Dichlorobenzidine	15.48	252	306362	48.3303	ug/ml	99
126)	Benzo[a]anthracene	15.57	228	1540573	51.0463	ug/ml	100
127)	Chrysene	15.64	228	1514924	53.4750	ug/ml	100
129)	Di-n-Octyl Phthalate	16.44	149	2052727	66.7617	ug/ml	97
130)	7,12-Dimethylbenz[a]anthra	17.48	256	651356	52.8272	ug/ml	99
131)	Benzo[b]fluoranthene	17.48	252	1619033	58.8055	ug/ml	99
132)	Benzo[k]fluoranthene	17.52	252	1416304	55.4956	ug/ml	97
133)	Benzo[a]pyrene	18.20	252	1363046	54.2640	ug/ml	98
134)	3-Methylcholanthrene	19.07	268	612504	44.9110	ug/ml	98
135)	Indeno[1,2,3-cd]pyrene	21.35	276	1161824	41.5311	ug/ml	98
136)	Dibenz[ah]anthracene	21.35	278	995207	42.6560	ug/ml	98
137)	Benzo[ghi]perylene	22.26	276	837372	36.1839	ug/ml	99

(#) = qualifier out of range (m) = manual integration
4M60875.D MEGAMIX.M Tue May 15 11:03:38 2012 Page 3

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051412\4M60875.D Vial: 16
Acq On : 14 May 2012 16:51 Operator: CAA
Sample : L12050171-05 MSD Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 11:02 2012 Quant Results File: MEGAMIX.RES

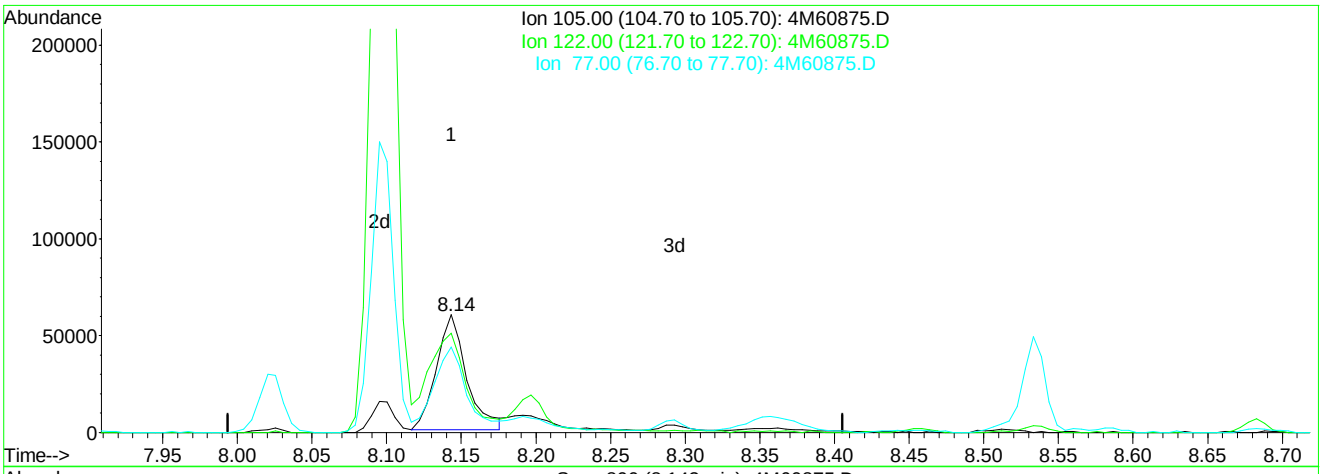
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Tue May 15 10:59:15 2012
Response via : Initial Calibration

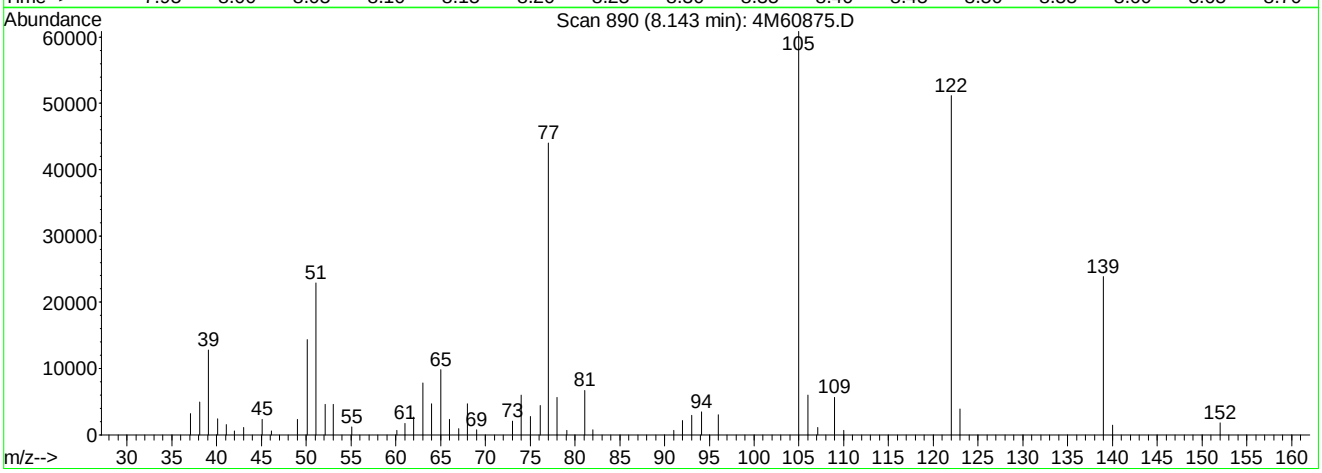


Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\051412\4M60875.D Vial: 16
Acq On : 14 May 2012 16:51 Operator: CAA
Sample : L12050171-05 MSD Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 10:59 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: 4M60875.D

(39) Benzoic Acid

8.14min 11.17ug/ml

response 82791

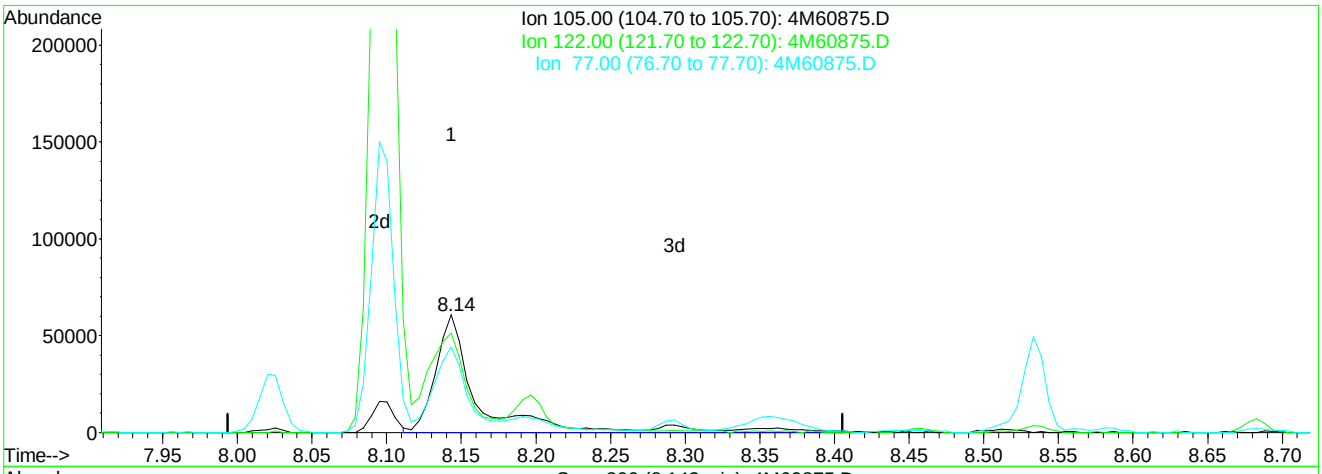
Ion	Exp%	Act%
105.00	100	100
122.00	87.10	101.57
77.00	70.40	77.76
0.00	0.00	0.00

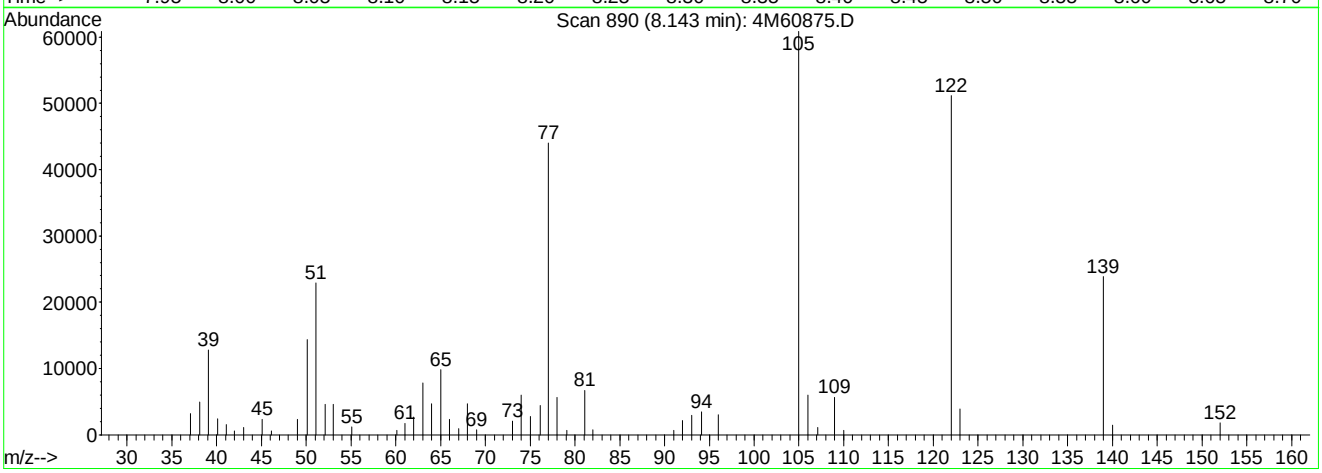
4M60875.D MEGAMIX.M Tue May 15 11:02:31 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\051412\4M60875.D Vial: 16
Acq On : 14 May 2012 16:51 Operator: CAA
Sample : L12050171-05 MSD Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 11:02 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: 4M60875.D

(39) Benzoic Acid

8.14min 16.70ug/ml mint

response 123733

Ion	Exp%	Act%
105.00	100	100
122.00	87.10	67.96
77.00	70.40	52.03
0.00	0.00	0.00

4M60875.D MEGAMIX.M Tue May 15 [illegible] 2012

Analyst: 05/15/2012 13:40 Supervisor: 05/15/2012 14:58

#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\051412\4M60875.D Vial: 16
Acq On : 14 May 2012 16:51 Operator: CAA
Sample : L12050171-05 MSD Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 13:06:19 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 : Tue May 15 13:05:17 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

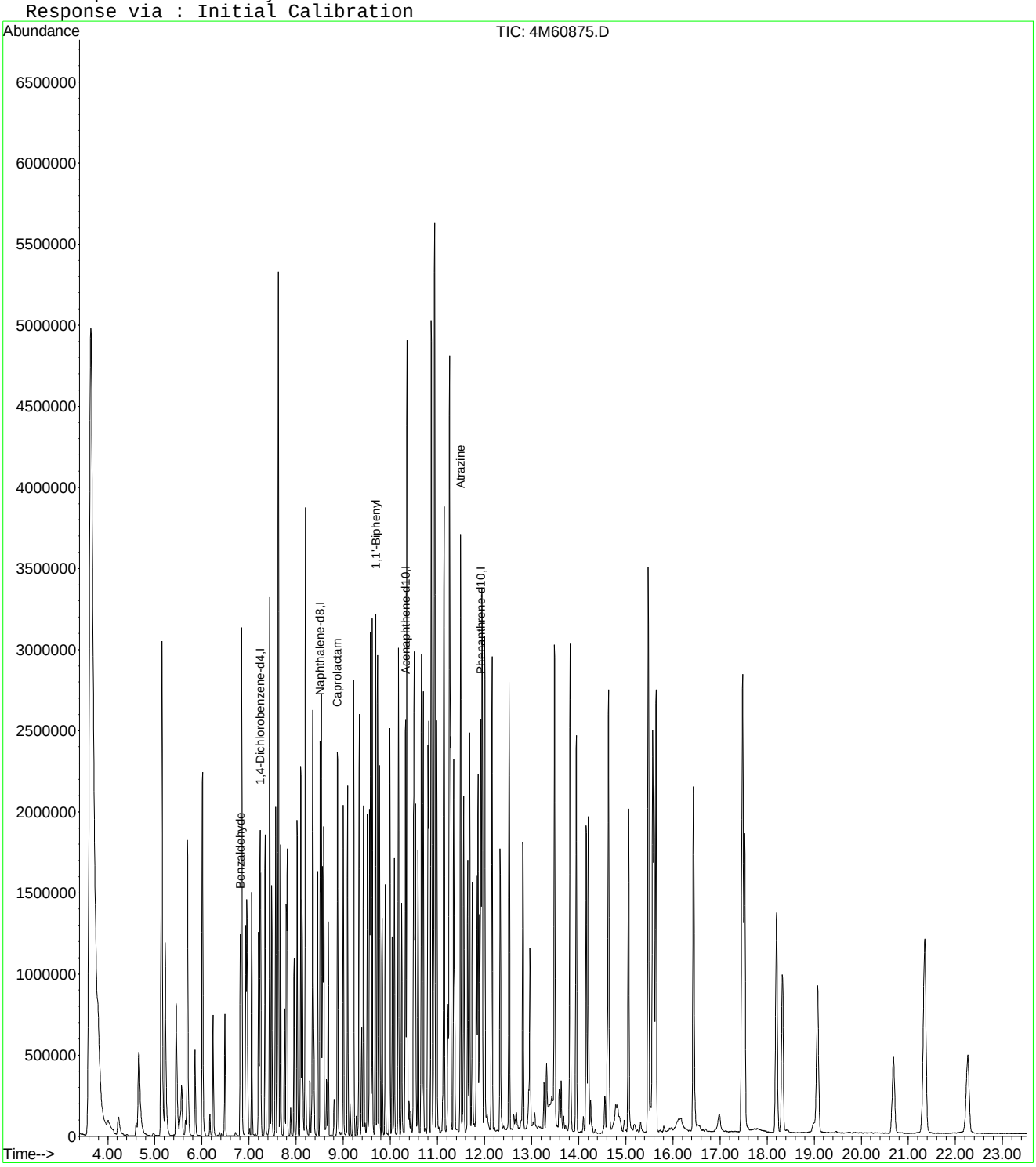
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.24	152	336107	40.00	ug/mL	0.00
3) Naphthalene-d8	8.51	136	1259867	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.32	164	705162	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.92	188	1277209	40.00	ug/mL	0.00
Target Compounds						Qvalue
2) Benzaldehyde	6.81	105	297843	33.2690	ug/L	98
4) Caprolactam	8.88	55	229727	55.8355	ug/L	90
6) 1,1'-Biphenyl	9.69	154	1224381	42.3050	ug/L	99
8) Atrazine	11.49	200	304759	43.1086	ug/L	99

(#) = qualifier out of range (m) = manual integration
4M60875.D TCL.M Tue May 15 13:06:19 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\051412\4M60875.D Vial: 16
Acq On : 14 May 2012 16:51 Operator: CAA
Sample : L12050171-05 MSD Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 13:06 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 : Tue May 15 13:05:17 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051412\4M60876.D Vial: 17
Acq On : 14 May 2012 17:26 Operator: CAA
Sample : L12050171-07 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 10:59:34 2012 Quant Results File: MEGAMIX.RES

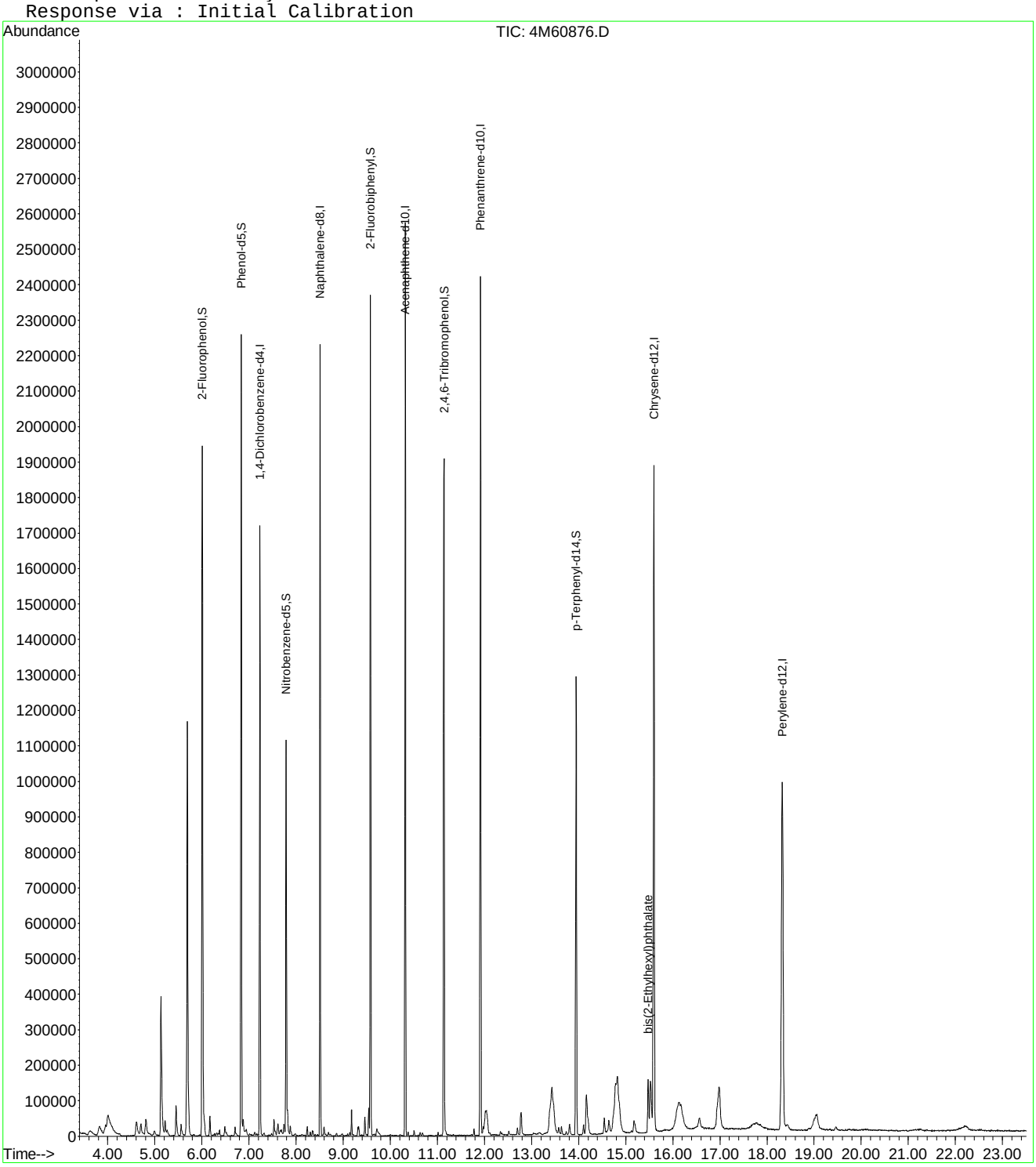
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Tue May 15 10:59:15 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

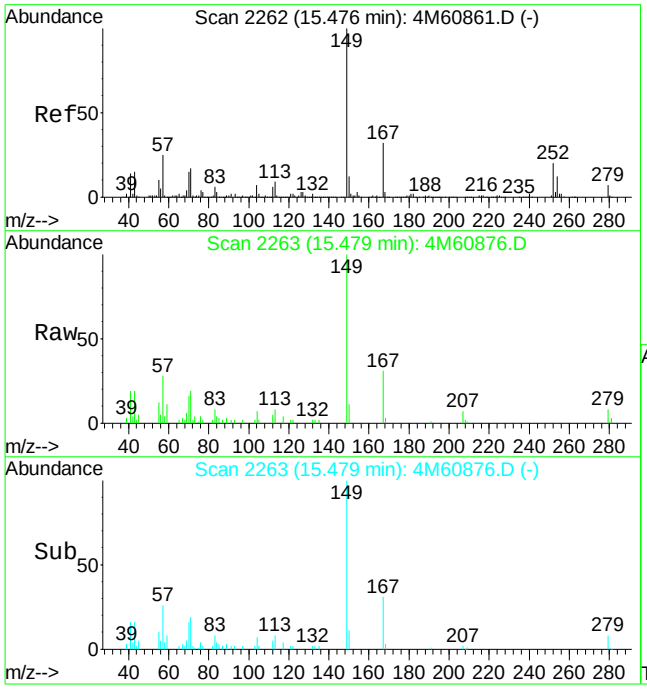
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.23	152	323817	40.00	ug/ml	0.00
30) Naphthalene-d8	8.51	136	1210331	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.32	164	677383	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.92	188	1200935	40.00	ug/ml	0.00
113) Chrysene-d12	15.60	240	1089480	40.00	ug/ml	-0.01
128) Perylene-d12	18.33	264	988452	40.00	ug/ml	-0.01
System Monitoring Compounds						
8) 2-Fluorophenol	6.01	112	753094	76.7058	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 76.71%			
12) Phenol-d5	6.84	99	906055	78.8520	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 78.85%			
31) Nitrobenzene-d5	7.79	82	411276	40.1762	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 80.36%			
59) 2-Fluorobiphenyl	9.58	172	891469	39.4118	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 78.82%			
86) 2,4,6-Tribromophenol	11.14	330	280217	92.7658	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 92.77%			
117) p-Terphenyl-d14	13.95	244	609533	30.3547	ug/ml	-0.01
Spiked Amount 50.000	Range 33 - 141		Recovery = 60.70%			
Target Compounds						Qvalue
124) bis(2-Ethylhexyl)phthalate	15.48	149	61566	3.0438	ug/ml	99

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

Data File : I:\MSDCHEM\1\DATA\051412\4M60876.D Vial: 17
Acq On : 14 May 2012 17:26 Operator: CAA
Sample : L12050171-07 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 10:59 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

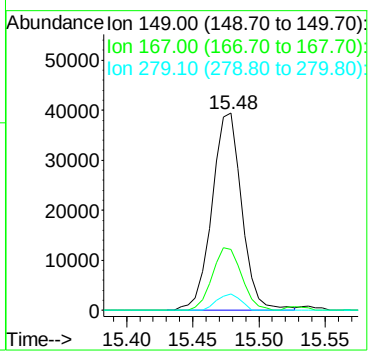




#124
bis(2-Ethylhexyl)phthalate
Concen: 3.04 ug/ml
RT: 15.48 min Scan# 2263
Delta R.T. -0.00 min
Lab File: 4M60876.D
Acq: 14 May 2012 17:26

Tgt Ion:149 Resp: 61566

Ion	Ratio	Lower	Upper
149	100		
167	31.4	25.4	38.0
279	6.5	6.2	9.2



Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\051412\4M60876.D Vial: 17
Acq On : 14 May 2012 17:26 Operator: CAA
Sample : L12050171-07 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 13:06:29 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 : Tue May 15 13:05:17 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.23	152	323817	40.00	ug/mL	0.00
3) Naphthalene-d8	8.51	136	1210331	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.32	164	677383	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.92	188	1200935	40.00	ug/mL	0.00

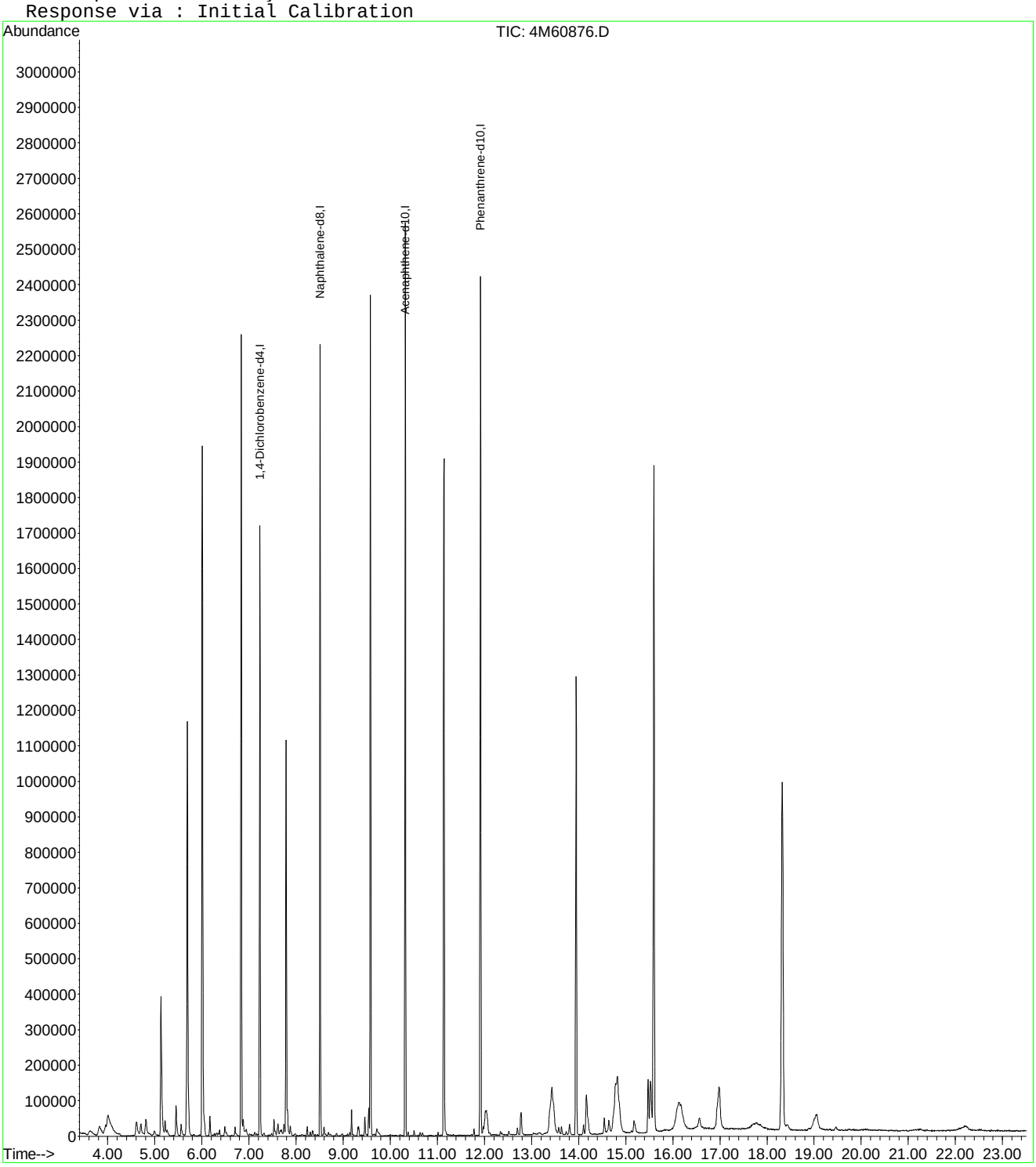
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
4M60876.D TCL.M Tue May 15 13:06:30 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\051412\4M60876.D Vial: 17
Acq On : 14 May 2012 17:26 Operator: CAA
Sample : L12050171-07 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 13:06 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 : Tue May 15 13:05:17 2012
Response via : Initial Calibration



4M60876.D TCL.M Tue May 15 13:06:30 2012 Page 2

LSC Area Percent Report

Data File : I:\MSDCHEM\1\DATA\051412\4M60876.D Vial: 17
Acq On : 14 May 2012 17:26 Operator: CAA
Sample : L12050171-07 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

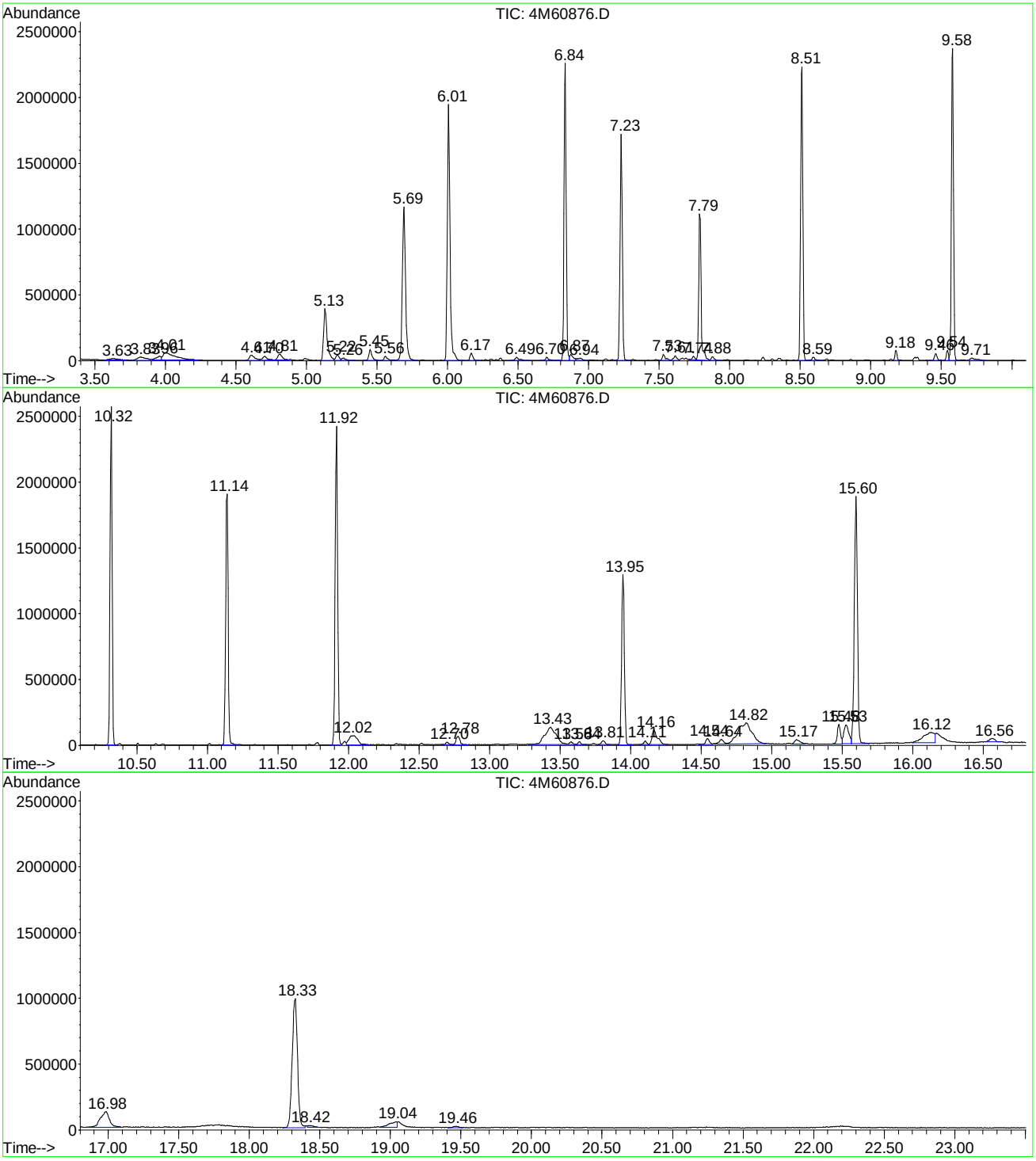
Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.630	33	45	62	rBV6	11104	53407	1.83%	0.142%
2	3.827	69	82	95	rBV3	24179	101487	3.48%	0.271%
3	3.956	97	106	109	rVV2	28909	73348	2.51%	0.196%
4	4.009	109	116	157	rVB2	53677	327635	11.23%	0.874%
5	4.613	221	229	239	rBV3	38804	102913	3.53%	0.275%
6	4.704	239	246	259	rVV	30676	67242	2.30%	0.179%
7	4.805	259	265	277	rVV2	42961	96332	3.30%	0.257%
8	5.131	320	326	338	rBV	393166	677191	23.20%	1.807%
9	5.216	338	342	347	rVV2	42967	71675	2.46%	0.191%
10	5.264	347	351	365	rVB2	16944	34811	1.19%	0.093%
11	5.451	377	386	397	rBV	84615	134223	4.60%	0.358%
12	5.558	401	406	417	rBV	33117	55012	1.88%	0.147%
13	5.692	420	431	448	rVB	1167033	1816324	62.23%	4.846%
14	6.007	484	490	510	rVB	1945230	2524486	86.49%	6.735%
15	6.167	515	520	530	rVB2	56000	76937	2.64%	0.205%
16	6.488	572	580	596	rVB3	27033	54014	1.85%	0.144%
17	6.701	611	620	635	rVB2	24920	41546	1.42%	0.111%
18	6.835	635	645	650	rBV	2259030	2478558	84.92%	6.612%
19	6.872	650	652	659	rVV4	46403	74335	2.55%	0.198%
20	6.942	659	665	674	rVB4	18125	43326	1.48%	0.116%
21	7.230	710	719	730	rVB	1718771	1871914	64.14%	4.994%
22	7.529	771	775	784	rBV3	46468	70764	2.42%	0.189%
23	7.615	784	791	796	rBV3	32716	53385	1.83%	0.142%
24	7.743	809	815	818	rBV3	26361	32506	1.11%	0.087%
25	7.786	818	823	837	rVV	1111814	1321679	45.28%	3.526%
26	7.877	837	840	850	rVB3	26924	38954	1.33%	0.104%
27	8.512	953	959	965	rBV	2231353	2424441	83.07%	6.468%
28	8.593	967	974	985	rVB5	24517	39774	1.36%	0.106%
29	9.180	1080	1084	1088	rBV	72663	77093	2.64%	0.206%
30	9.458	1128	1136	1142	rBV	52462	66441	2.28%	0.177%
31	9.543	1147	1152	1154	rBV	78539	81090	2.78%	0.216%
32	9.581	1154	1159	1166	rVB	2369062	2520316	86.35%	6.724%
33	9.714	1178	1184	1201	rVB4	19950	59619	2.04%	0.159%
34	10.318	1289	1297	1303	rBV	2574927	2668038	91.41%	7.118%
35	11.141	1443	1451	1464	rBV	1908632	2314780	79.31%	6.175%
36	11.915	1588	1596	1602	rBV	2421573	2918659	100.00%	7.787%
37	12.017	1609	1615	1639	rVB4	69724	304667	10.44%	0.813%
38	12.701	1735	1743	1749	rBV3	19584	29206	1.00%	0.078%
39	12.775	1749	1757	1770	rVB2	63621	124426	4.26%	0.332%
40	13.433	1851	1880	1901	rBV2	131901	735526	25.20%	1.962%
41	13.577	1903	1907	1914	rVV3	20665	36158	1.24%	0.096%
42	13.636	1914	1918	1927	rVB2	23654	33073	1.13%	0.088%

43	13.807	1943	1950	1958	rBV2	30253	54255	1.86%	0.145%
44	13.945	1968	1976	1989	rVB	1292971	1756212	60.17%	4.685%
45	14.106	1998	2006	2010	rBV3	28715	42909	1.47%	0.114%
46	14.164	2010	2017	2034	rVB3	111024	298868	10.24%	0.797%
47	14.544	2077	2088	2095	rBV2	45640	85319	2.92%	0.228%
48	14.640	2097	2106	2114	rVV7	36932	85501	2.93%	0.228%
49	14.822	2115	2140	2165	rVB2	158264	1093011	37.45%	2.916%
50	15.174	2200	2206	2218	rBV3	33465	82888	2.84%	0.221%
51	15.479	2250	2263	2267	rBV	150795	250344	8.58%	0.668%
52	15.527	2267	2272	2279	rVV2	143897	350641	12.01%	0.935%
53	15.596	2279	2285	2302	rVB	1878374	2865220	98.17%	7.644%
54	16.120	2360	2383	2390	rBV2	75417	423649	14.52%	1.130%
55	16.563	2458	2466	2477	rVB5	24715	70367	2.41%	0.188%
56	16.980	2523	2544	2566	rVB6	119538	532293	18.24%	1.420%
57	18.326	2780	2796	2809	rBV	980729	2533851	86.82%	6.760%
58	18.422	2812	2814	2827	rVB9	14214	39405	1.35%	0.105%
59	19.036	2908	2929	2931	rBV9	40555	159601	5.47%	0.426%
60	19.464	2999	3009	3018	rBV8	10634	31858	1.09%	0.085%

Sum of corrected areas: 37483503

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File       : I:\MSDCHEM\1\DATA\051412\4M60876.D
Operator   : CAA
Acquired   : 14 May 2012  17:26     using AcqMethod BNATEST
Instrument :   HPMS4
Sample Name: L12050171-07
Misc Info  : 1,1
Vial Number: 17
Quant File :MEGAMIX.RES (RTE Integrator)
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Data File : I:\MSDCHEM\1\DATA\051412\4M60876.D Vial: 17
Acq On : 14 May 2012 17:26 Operator: CAA
Sample : L12050171-07 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

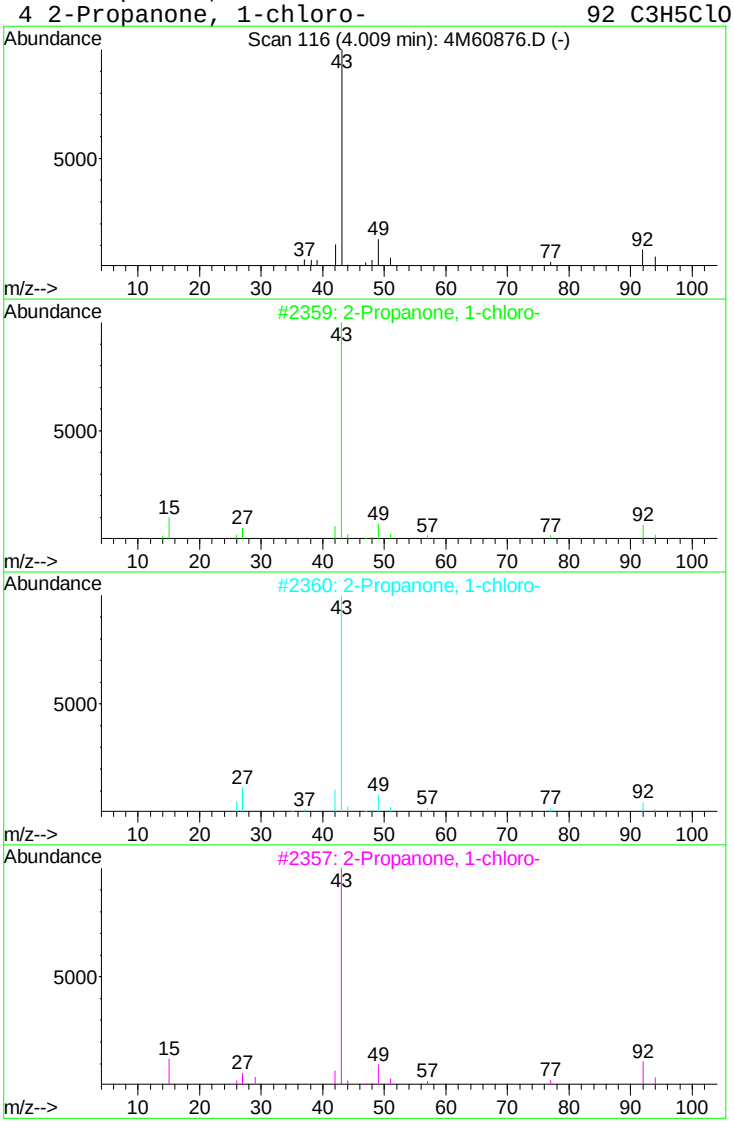
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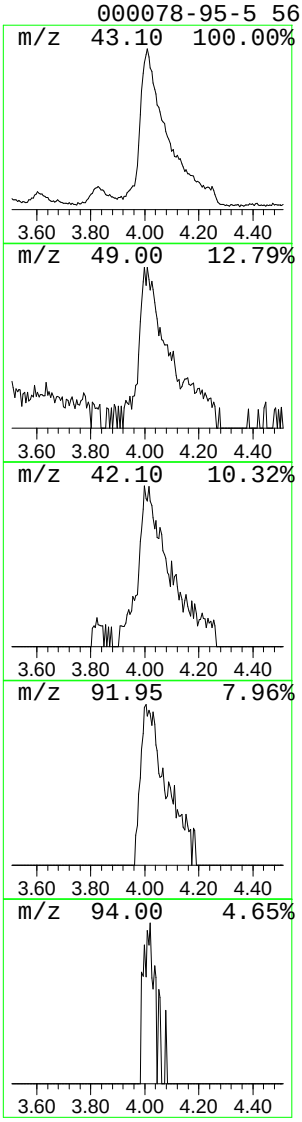
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Peak Number 1 2-Propanone, 1-chloro- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.01	7.00 ug/ml	327635	1,4-Dichlorobenzene-d4	7.23

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Propanone, 1-chloro-	92	C3H5ClO	000078-95-5	80
2	2-Propanone, 1-chloro-	92	C3H5ClO	000078-95-5	80
3	2-Propanone, 1-chloro-	92	C3H5ClO	000078-95-5	72
4	2-Propanone, 1-chloro-	92	C3H5ClO	000078-95-5	56





Data File : I:\MSDCHEM\1\DATA\051412\4M60876.D Vial: 17
Acq On : 14 May 2012 17:26 Operator: CAA
Sample : L12050171-07 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

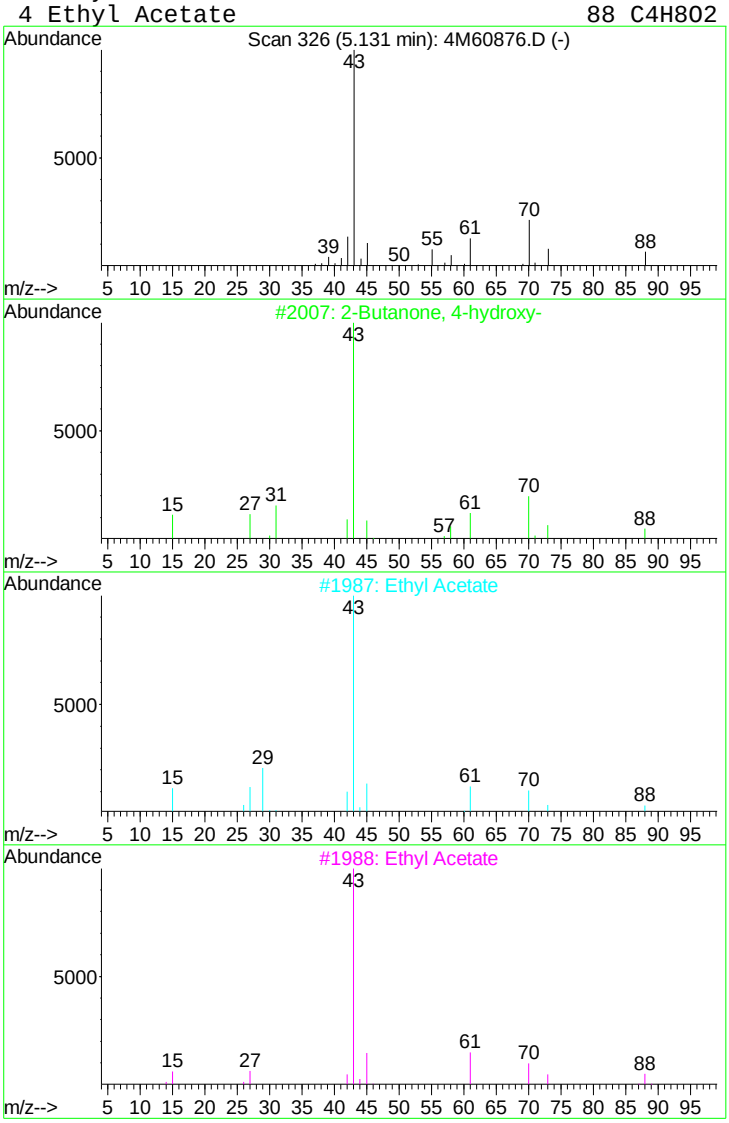
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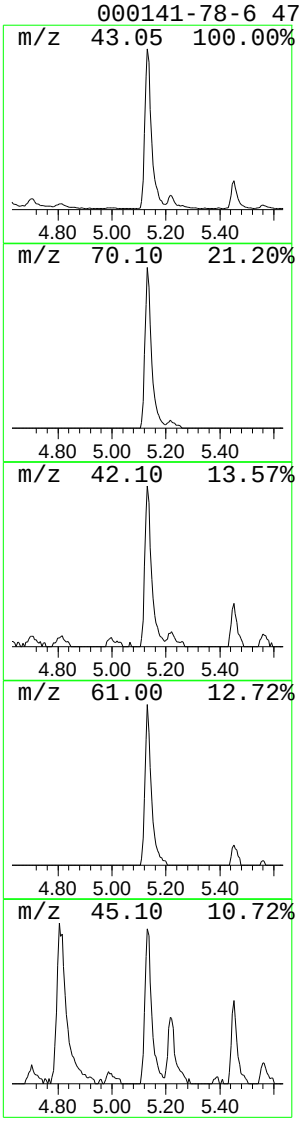
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Peak Number 2 2-Butanone, 4-hydroxy- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.13	14.47 ug/ml	677191	1,4-Dichlorobenzene-d4	7.23

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Butanone, 4-hydroxy-	88	C4H8O2	000590-90-9	87
2	Ethyl Acetate	88	C4H8O2	000141-78-6	50
3	Ethyl Acetate	88	C4H8O2	000141-78-6	47
4	Ethyl Acetate	88	C4H8O2	000141-78-6	47





Data File : I:\MSDCHEM\1\DATA\051412\4M60876.D Vial: 17
Acq On : 14 May 2012 17:26 Operator: CAA
Sample : L12050171-07 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

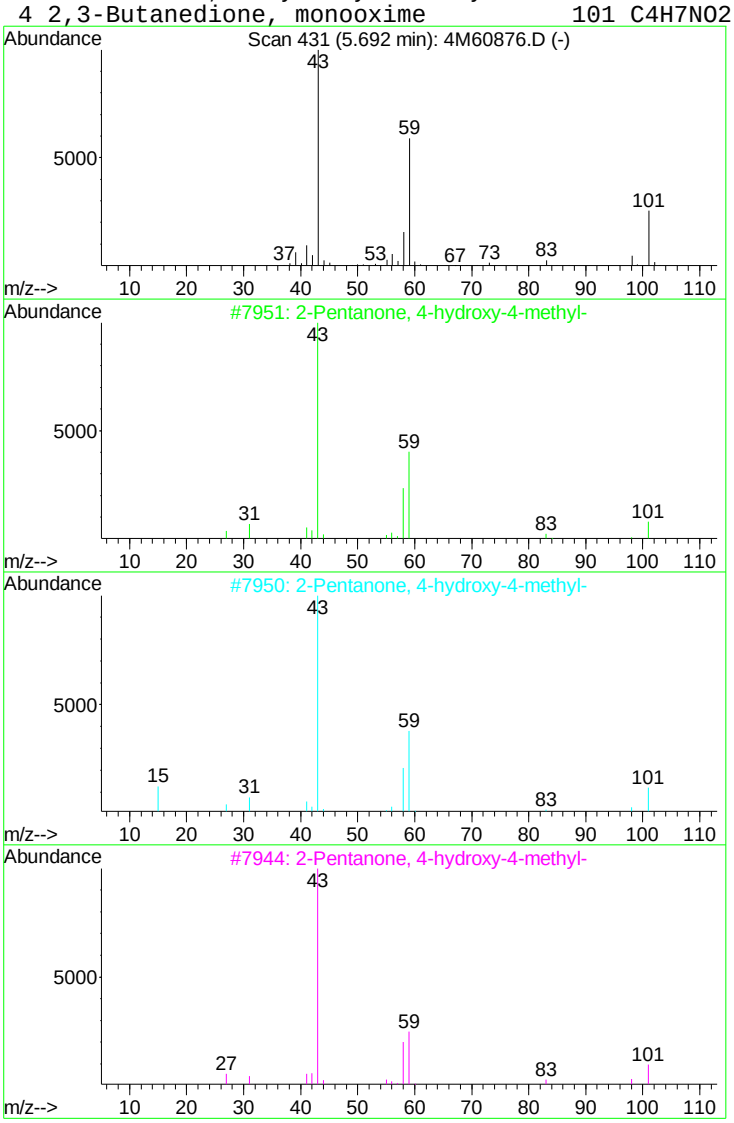
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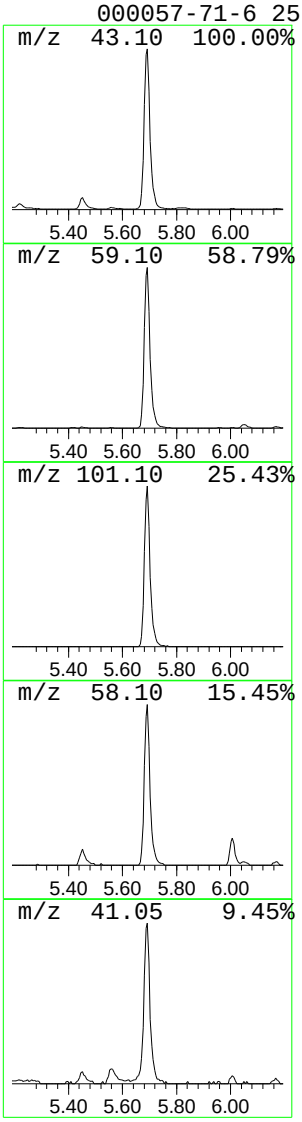
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Peak Number 3 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.69	38.81 ug/ml	1816320	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	56
2	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	38
3	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	28
4	2,3-Butanedione, monooxime	101	C4H7NO2	000057-71-6	25





Data File : I:\MSDCHEM\1\DATA\051412\4M60876.D Vial: 17
Acq On : 14 May 2012 17:26 Operator: CAA
Sample : L12050171-07 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

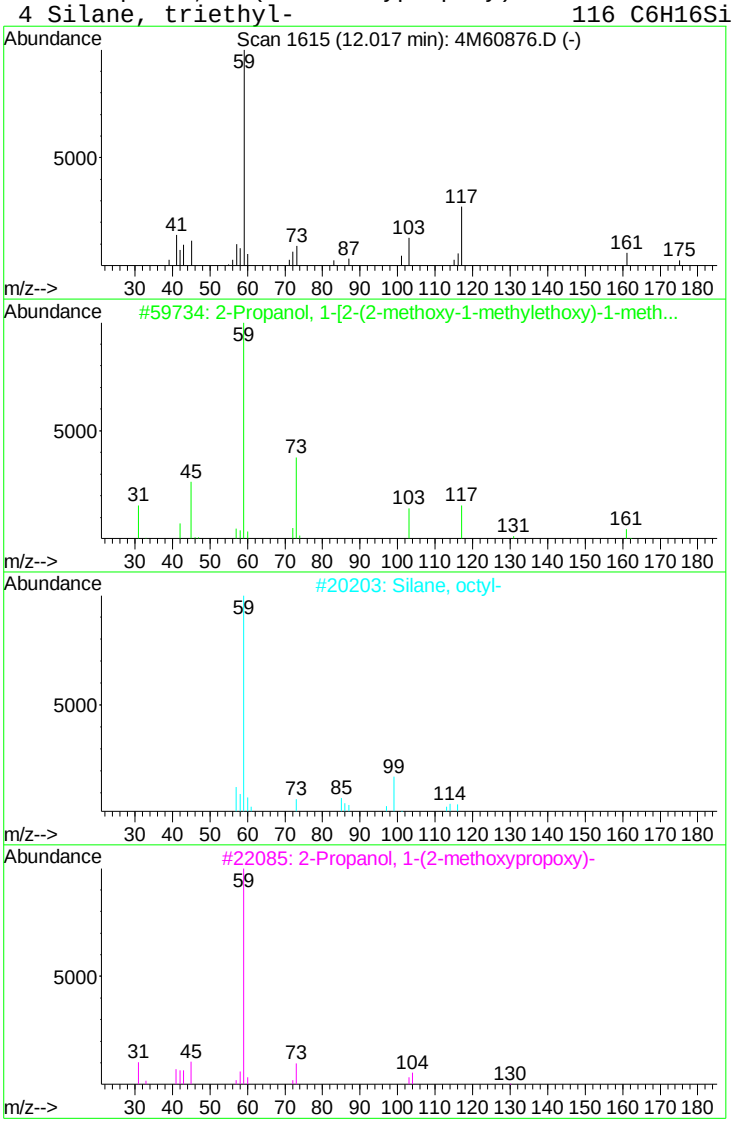
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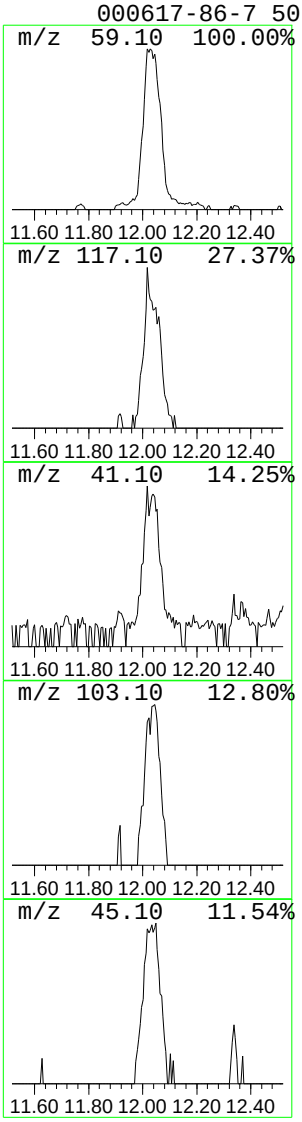
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Peak Number 4 2-Propanol, 1-[2-(2-methoxy... Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.02	4.18 ug/ml	304667	Phenanthrene-d10	11.92

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	Silane, octyl-	144	C8H20Si	000871-92-1	53
3	2-Propanol, 1-(2-methoxypropoxy)-	148	C7H16O3	013429-07-7	50
4	Silane, triethyl-	116	C6H16Si	000617-86-7	50





Data File : I:\MSDCHEM\1\DATA\051412\4M60876.D Vial: 17
Acq On : 14 May 2012 17:26 Operator: CAA
Sample : L12050171-07 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

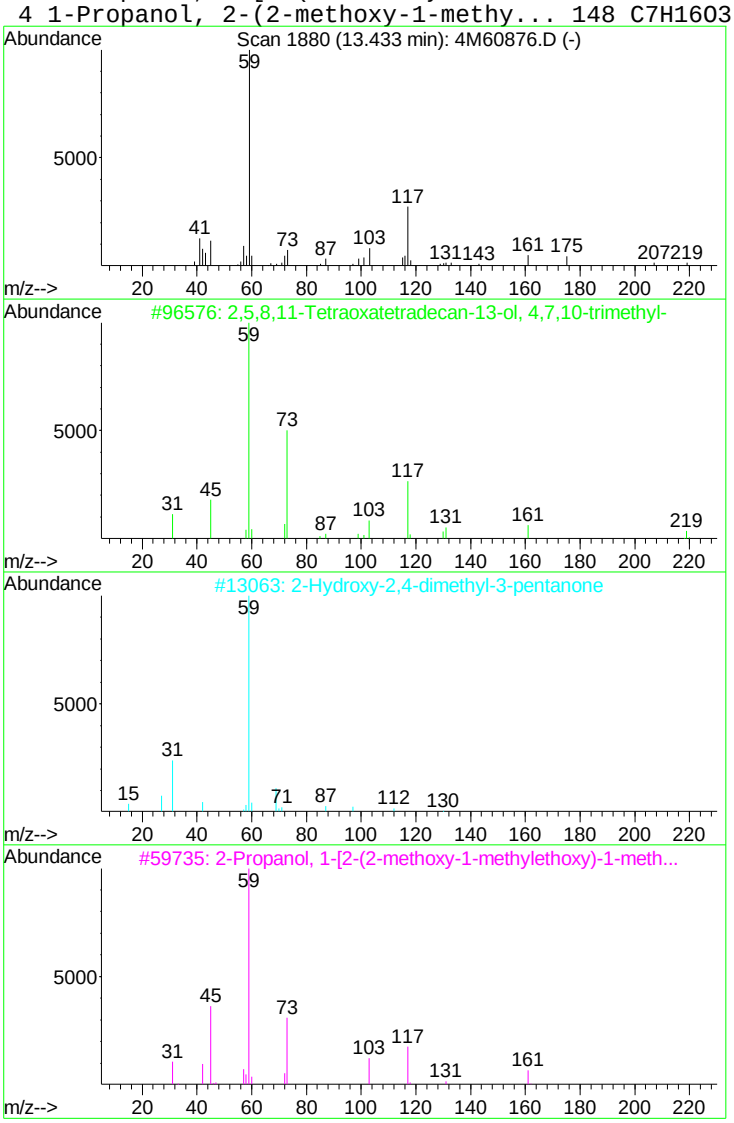
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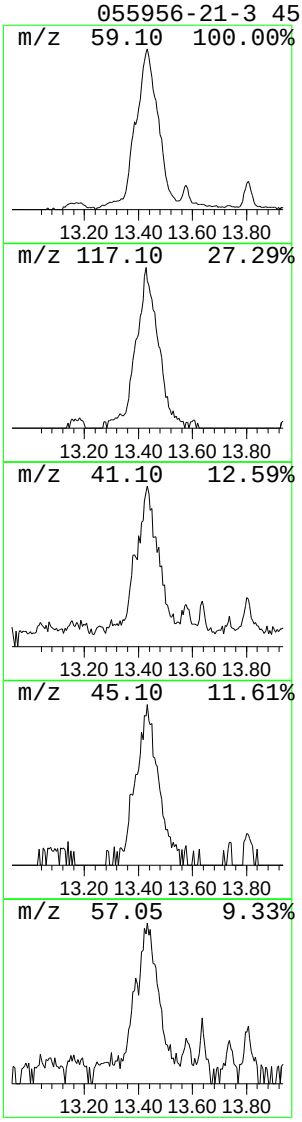
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Peak Number 5 2,5,8,11-Tetraoxatetradecan... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.43	10.08 ug/ml	735526	Phenanthrene-d10	11.92

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-Hydroxy-2,4-dimethyl-3-pentanone	130	C7H14O2	003212-67-7	47
3	2-Propanol, 1-[2-(2-methoxy-1-me...	206	C10H22O4	020324-33-8	45
4	1-Propanol, 2-(2-methoxy-1-methy...	148	C7H16O3	055956-21-3	45





Data File : I:\MSDCHEM\1\DATA\051412\4M60876.D Vial: 17
Acq On : 14 May 2012 17:26 Operator: CAA
Sample : L12050171-07 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

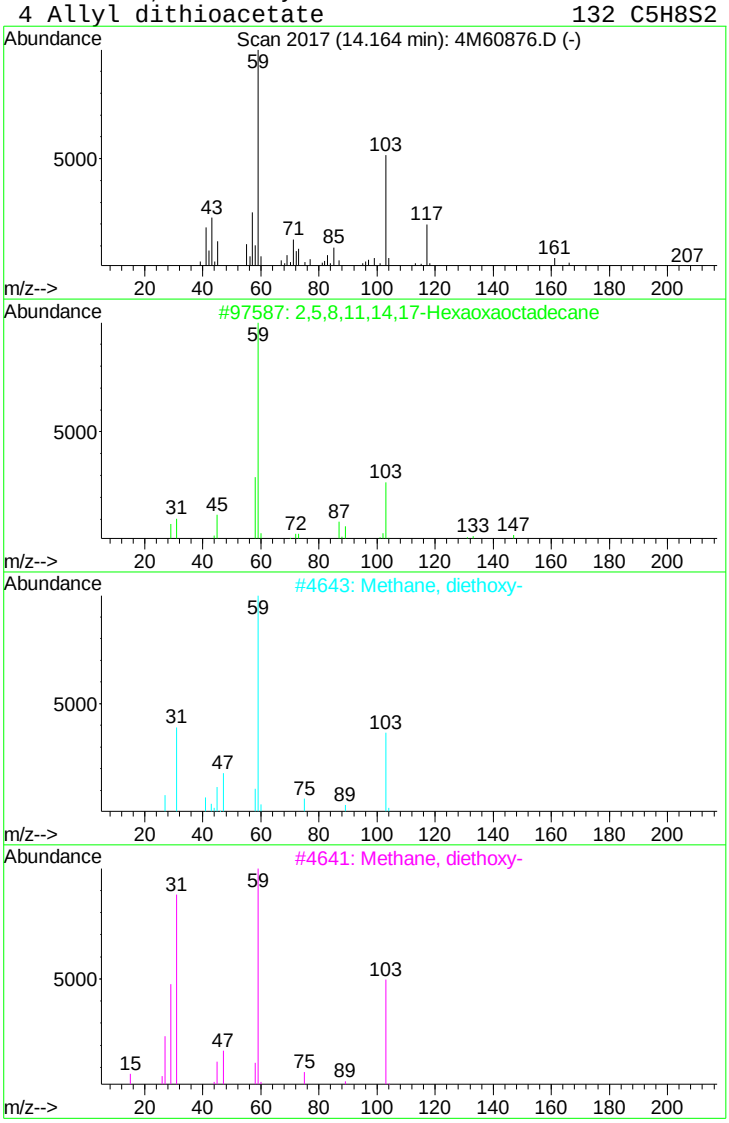
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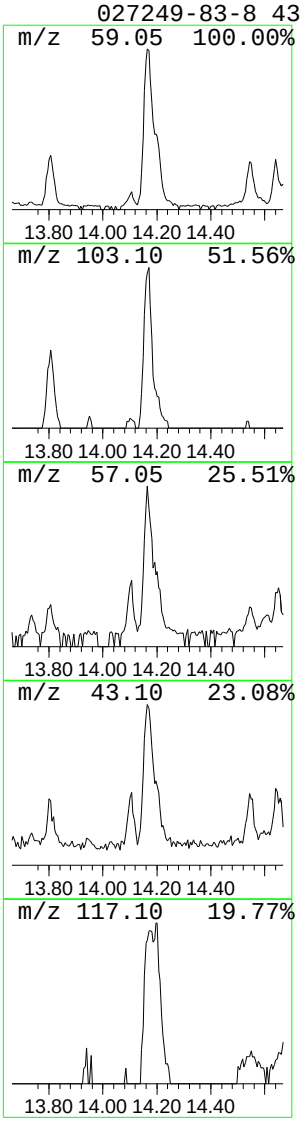
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Peak Number 6 2,5,8,11,14,17-Hexaoxaoctad... Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.16	4.17 ug/ml	298868	Chrysene-d12	15.60

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,5,8,11,14,17-Hexaoxaoctadecane	266	C12H26O6	001191-87-3	59
2	Methane, diethoxy-	104	C5H12O2	000462-95-3	53
3	Methane, diethoxy-	104	C5H12O2	000462-95-3	50
4	Allyl dithioacetate	132	C5H8S2	027249-83-8	43





Data File : I:\MSDCHEM\1\DATA\051412\4M60876.D Vial: 17
Acq On : 14 May 2012 17:26 Operator: CAA
Sample : L12050171-07 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

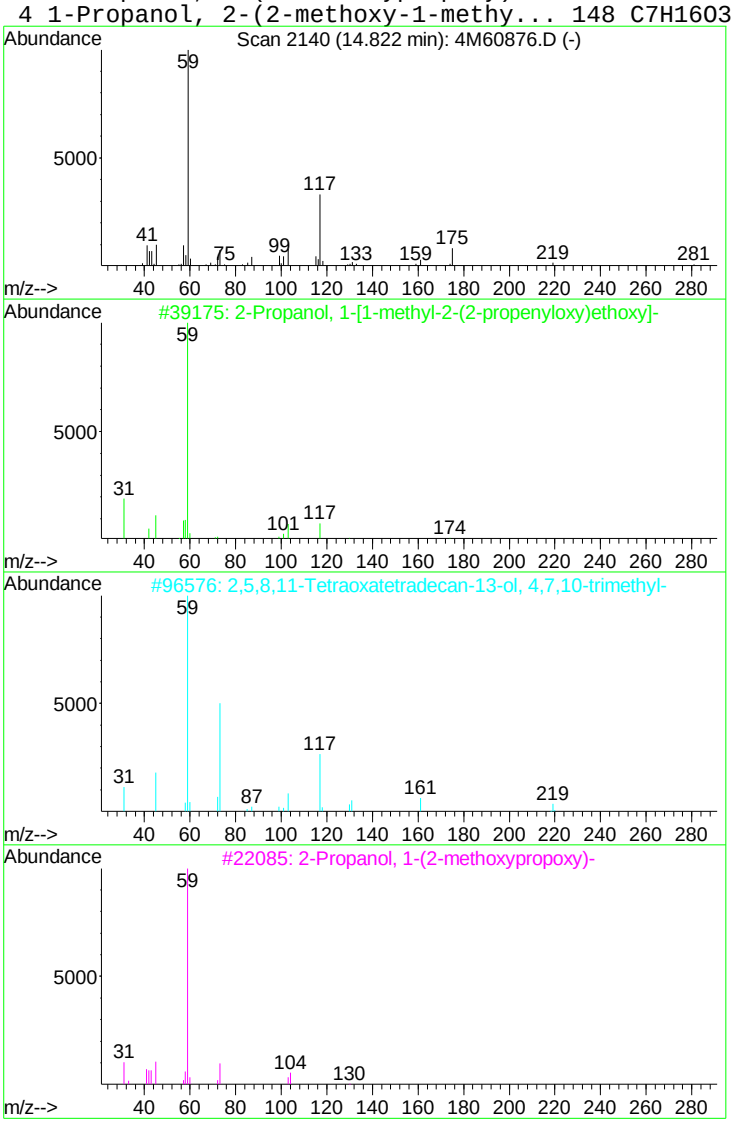
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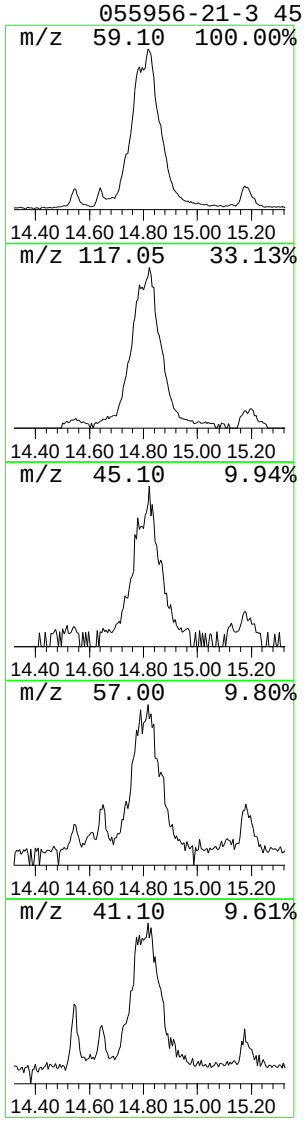
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Peak Number 7 2-Propanol, 1-[1-methyl-2-(... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.82	15.26 ug/ml	1093010	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	64
2	2,5,8,11-Tetraoxatetradecan-13-o...	264	C13H28O5	020324-34-9	50
3	2-Propanol, 1-(2-methoxypropoxy)-	148	C7H16O3	013429-07-7	50
4	1-Propanol, 2-(2-methoxy-1-methy...	148	C7H16O3	055956-21-3	45





Data File : I:\MSDCHEM\1\DATA\051412\4M60876.D Vial: 17
Acq On : 14 May 2012 17:26 Operator: CAA
Sample : L12050171-07 Inst : HPMS4
Misc : 1,1 Multiplr: 1.00
MS Integration Params: LSCINT.P

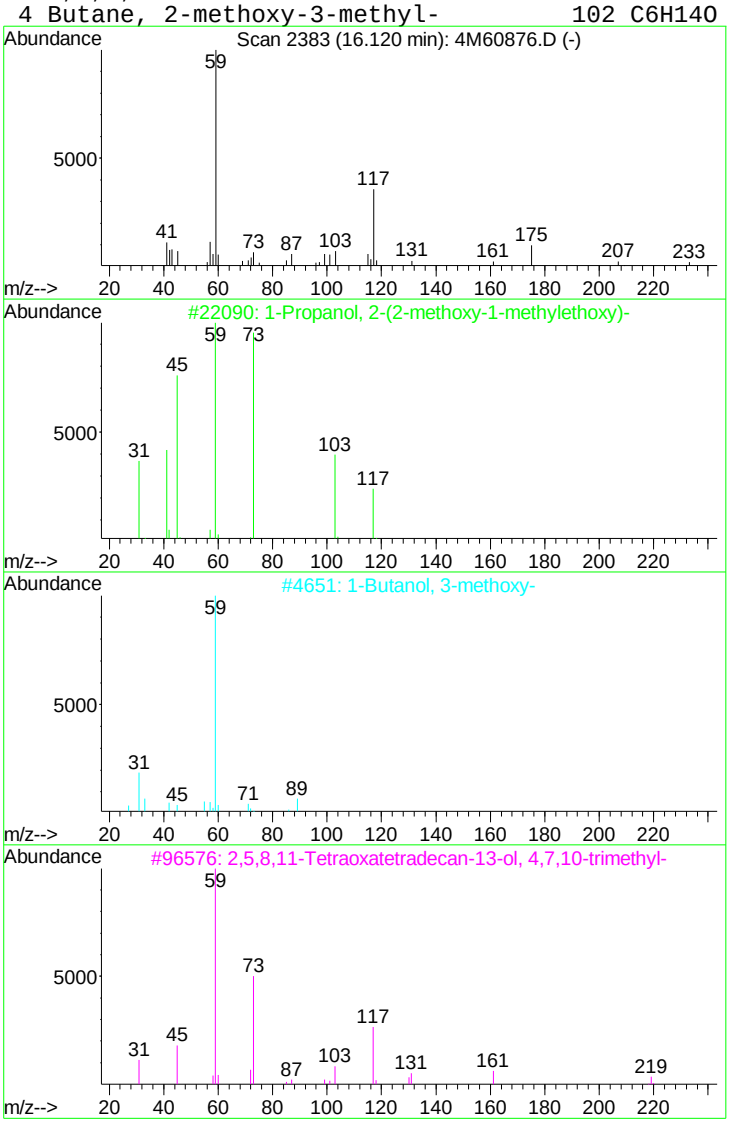
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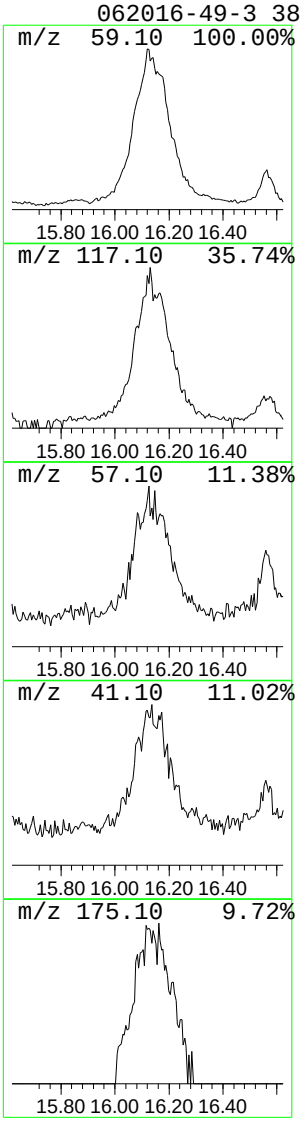
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Peak Number 8 1-Propanol, 2-(2-methoxy-1-... Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.12	5.91 ug/ml	423649	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	42
2	1-Butanol, 3-methoxy-	104	C5H12O2	002517-43-3	38
3	2,5,8,11-Tetraoxatetradecan-13-o...	264	C13H28O5	020324-34-9	38
4	Butane, 2-methoxy-3-methyl-	102	C6H14O	062016-49-3	38





Data File : I:\MSDCHEM\1\DATA\051412\4M60876.D Vial: 17
Acq On : 14 May 2012 17:26 Operator: CAA
Sample : L12050171-07 Inst : HPMS4
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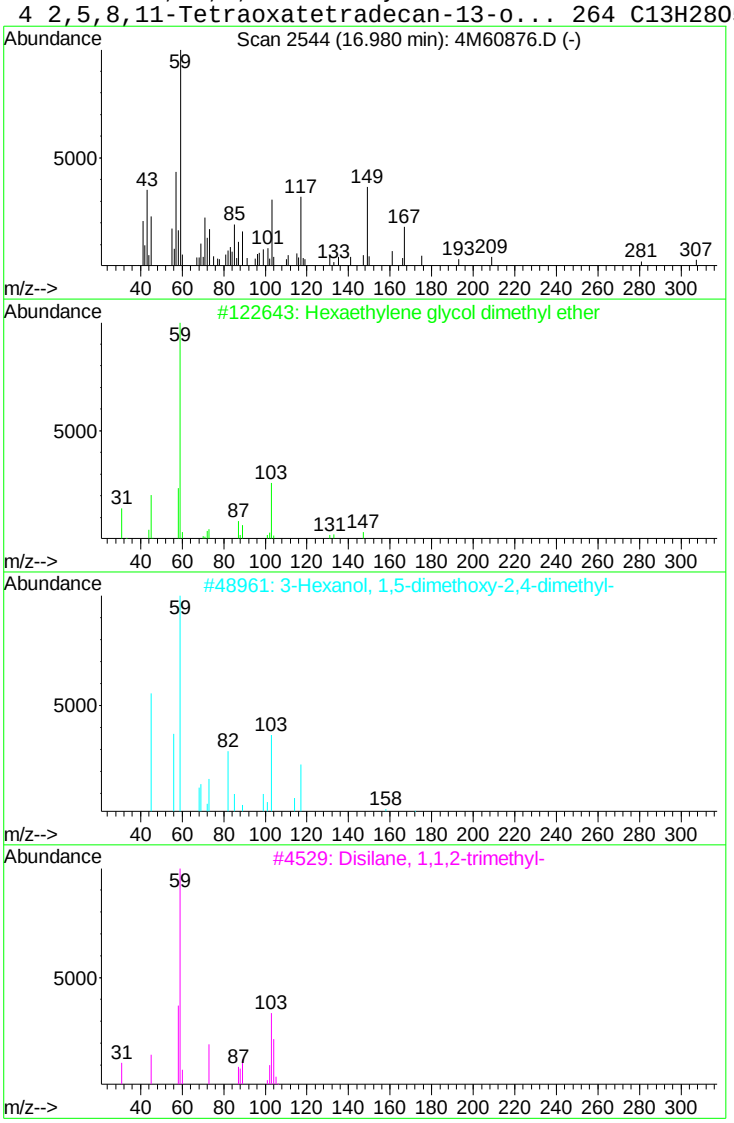
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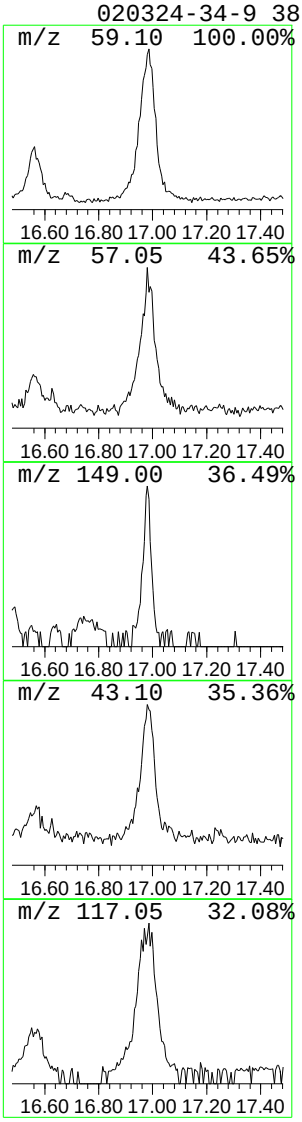
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Peak Number 9 Hexaethylene glycol dimethy... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.98	8.40 ug/ml	532293	Perylene-d12	18.33

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexaethylene glycol dimethyl ether	310	C14H30O7	001072-40-8	43
2	3-Hexanol, 1,5-dimethoxy-2,4-dim...	190	C10H22O3	013897-22-8	40
3	Disilane, 1,1,2-trimethyl-	104	C3H12Si2	000814-74-4	38
4	2,5,8,11-Tetraoxatetradecan-13-o...	264	C13H28O5	020324-34-9	38





Tentatively Identified Compound (LSC) summary

Operator ID: CAA Date Acquired: 14 May 2012 17:26
Data File: I:\MSDCHEM\1\DATA\051412\4M60876.D
Name: L12050171-07
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
2-Propanone, 1-ch...	4.01	7.0	ug/ml	327635	1	7.23	1871910	40.0
2-Butanone, 4-hyd...	5.13	14.5	ug/ml	677191	1	7.23	1871910	40.0
2-Pentanone, 4-hy...	5.69	38.8	ug/ml	1816320	1	7.23	1871910	40.0
2-Propanol, 1-[2-...	12.02	4.2	ug/ml	304667	4	11.92	2918660	40.0
2,5,8,11-Tetraoxa...	13.43	10.1	ug/ml	735526	4	11.92	2918660	40.0
2,5,8,11,14,17-He...	14.16	4.2	ug/ml	298868	5	15.60	2865220	40.0
2-Propanol, 1-[1-...	14.82	15.3	ug/ml	1093010	5	15.60	2865220	40.0
1-Propanol, 2-(2-...	16.12	5.9	ug/ml	423649	5	15.60	2865220	40.0
Hexaethylene glyc...	16.98	8.4	ug/ml	532293	6	18.33	2533850	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
4M60439.D MEGAMIX.M Fri Apr 20 08:18:56 2012 Page 1

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

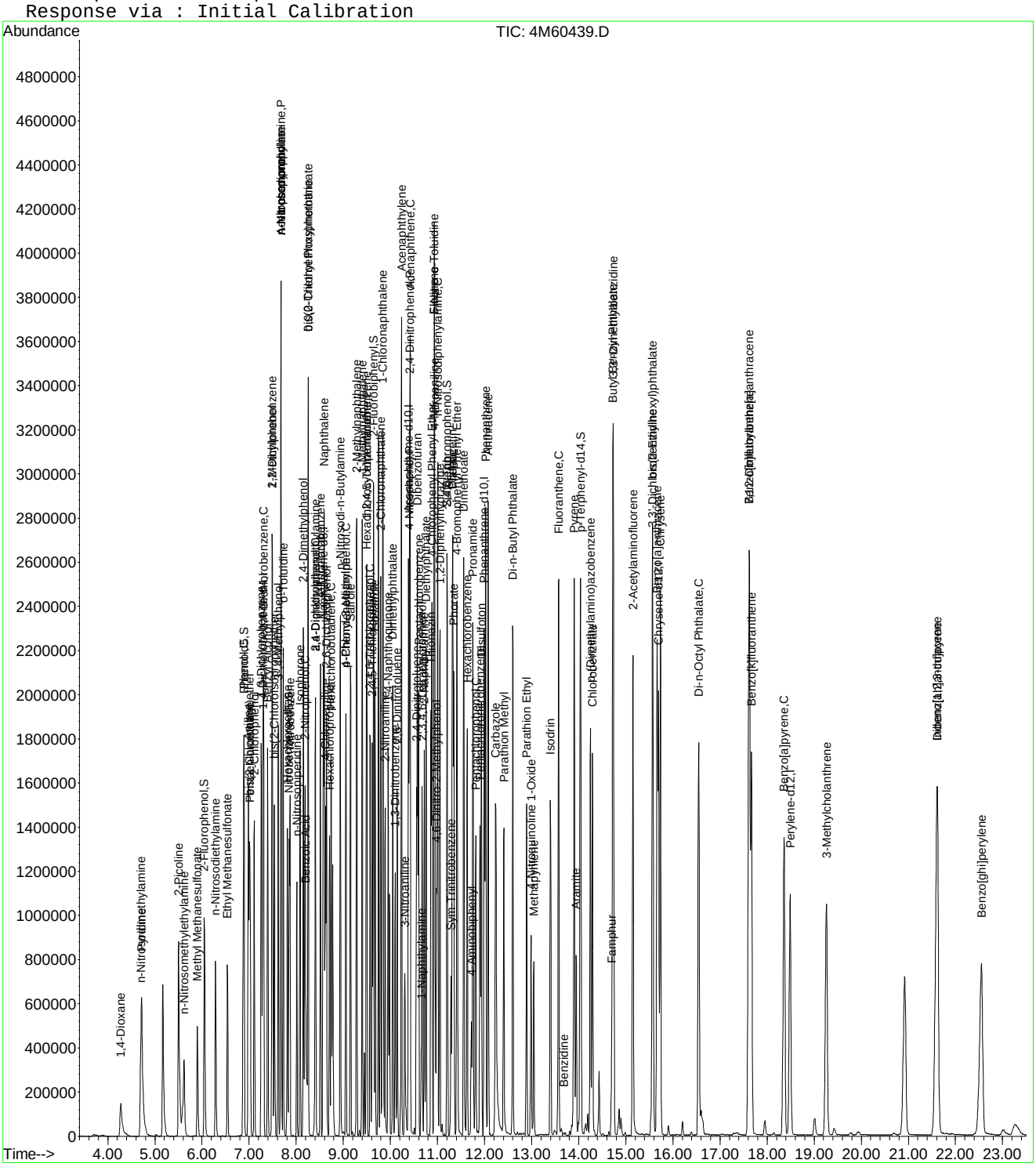
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.56	87	339058	61.7901	ug/ml	100
98)	4-Aminobiphenyl	11.72	169	362625	53.7158	ug/ml	100
99)	Pentachlorophenol	11.81	266	206843	60.4342	ug/ml	98
100)	Pronamide	11.75	173	474797	52.5004	ug/ml	99
101)	Pentachloronitrobenzene	11.90	237	112466	52.7533	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
4M60439.D MEGAMIX.M Fri Apr 20 08:18:56 2012 Page 3

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60439.D Vial: 2
Acq On : 19 Apr 2012 9:22 Operator: CAA
Sample : WG395394-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:20 2012 Quant Results File: MEGAMIX.RES

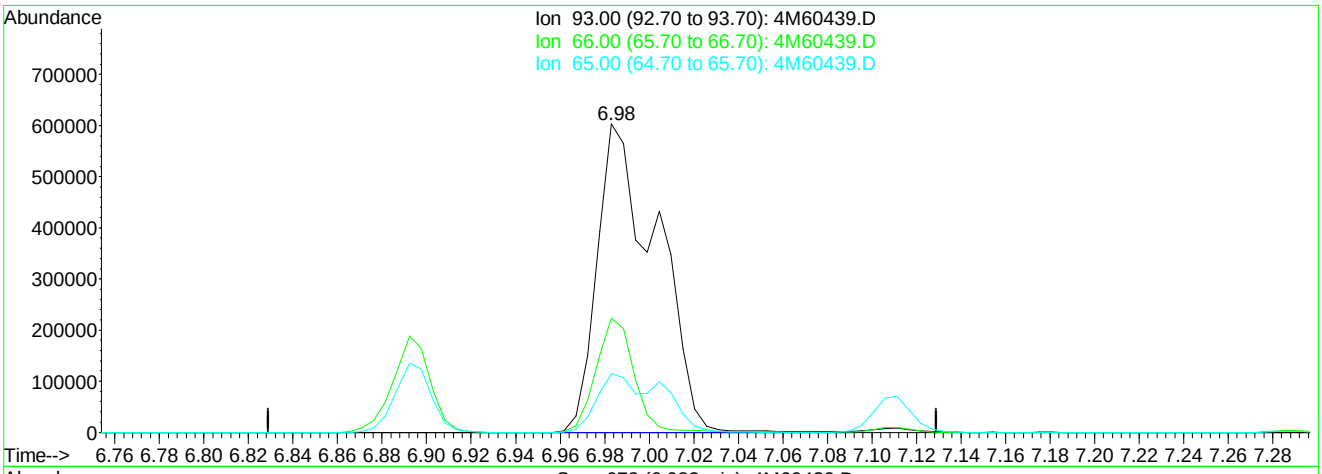
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration

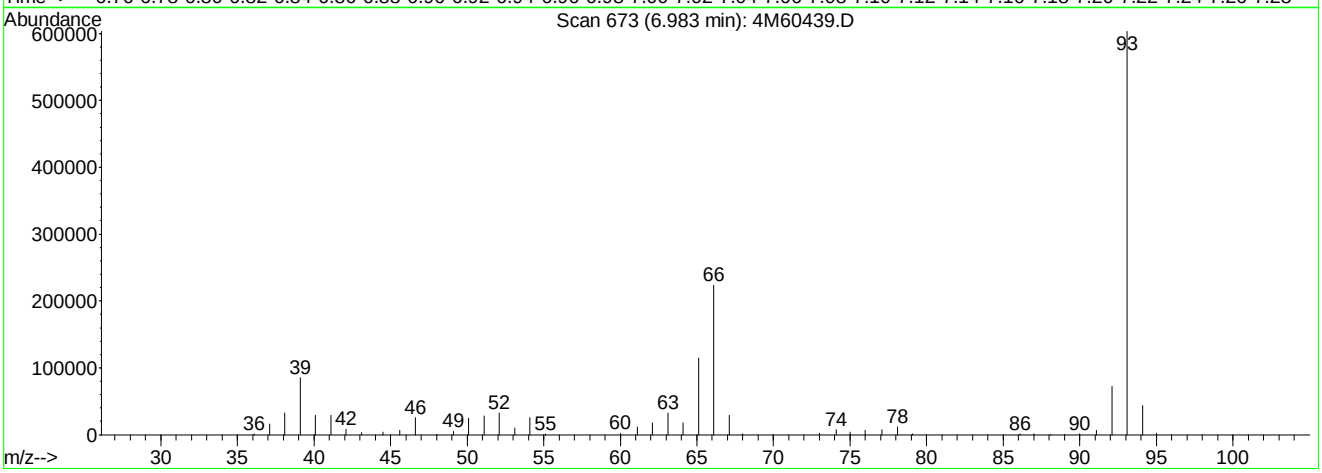


Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60439.D Vial: 2
Acq On : 19 Apr 2012 9:22 Operator: CAA
Sample : WG395394-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:19 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:19:39 2012
Response via : Multiple Level Calibration





TIC: 4M60439.D

(11) Aniline

6.98min 83.11ug/ml

response 1123623

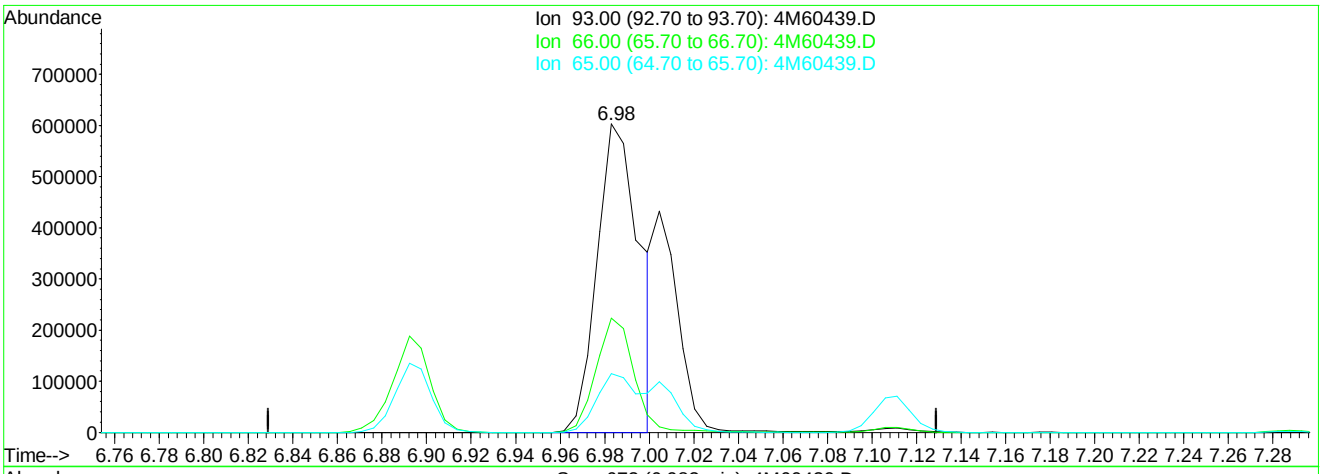
Ion	Exp%	Act%
93.00	100	100
66.00	42.70	23.58#
65.00	19.20	20.60
0.00	0.00	0.00

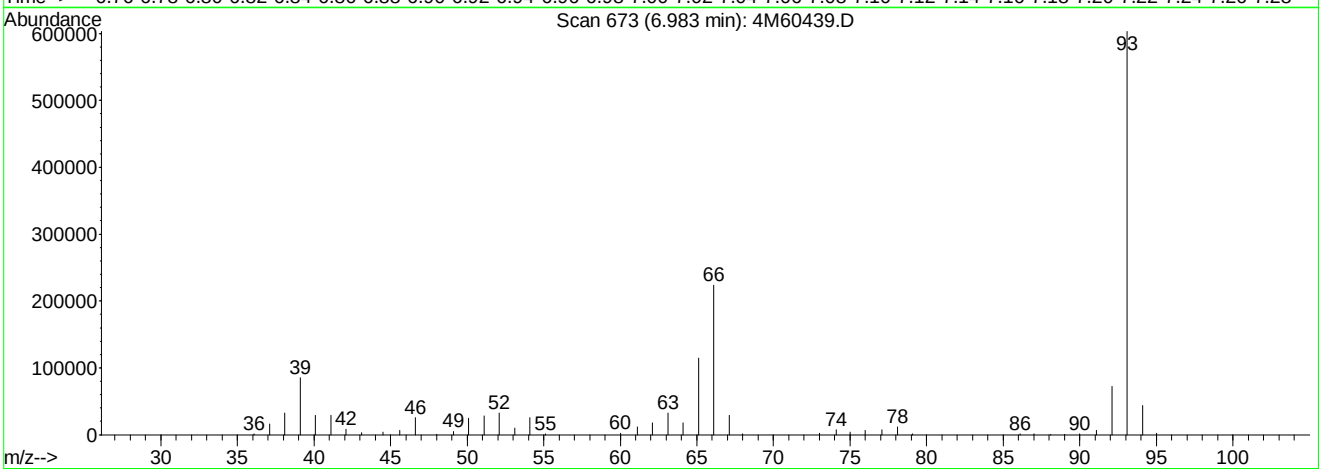
4M60439.D MEGAMIX.M Thu Apr 19 14:19:51 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\041912\4M60439.D Vial: 2
Acq On : 19 Apr 2012 9:22 Operator: CAA
Sample : WG395394-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:19 2012 Quant Results File: temp.res

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:19:39 2012
Response via : Multiple Level Calibration





TIC: 4M60439.D

(11) Aniline

6.98min 58.68ug/ml mint

response 793273

Ion	Exp%	Act%
93.00	100	100
66.00	42.70	33.40
65.00	19.20	29.18#
0.00	0.00	0.00

4M60439.D MEGAMIX.M Thu Apr 19 ; 2012

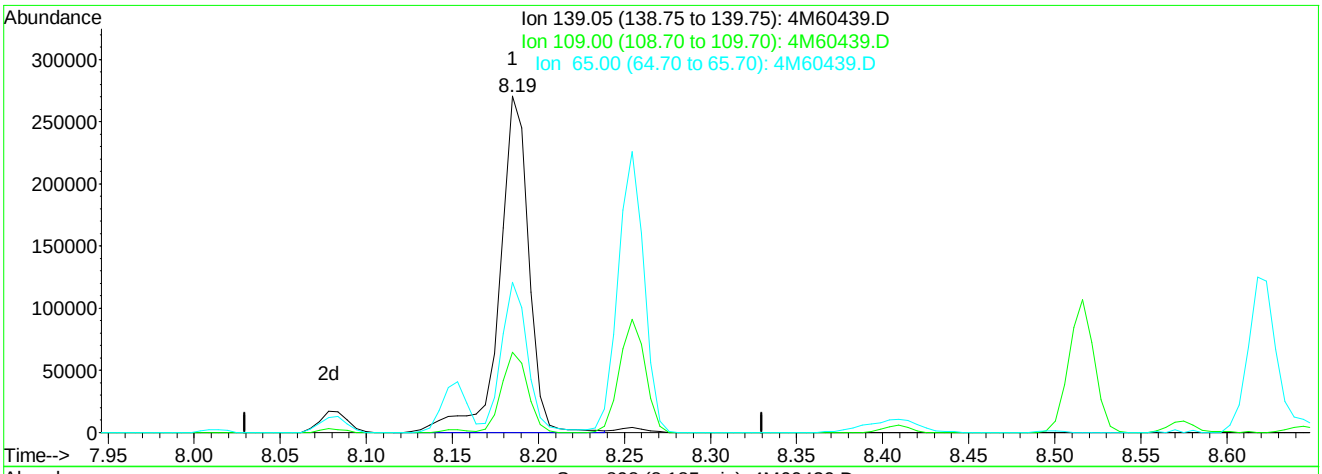
Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41

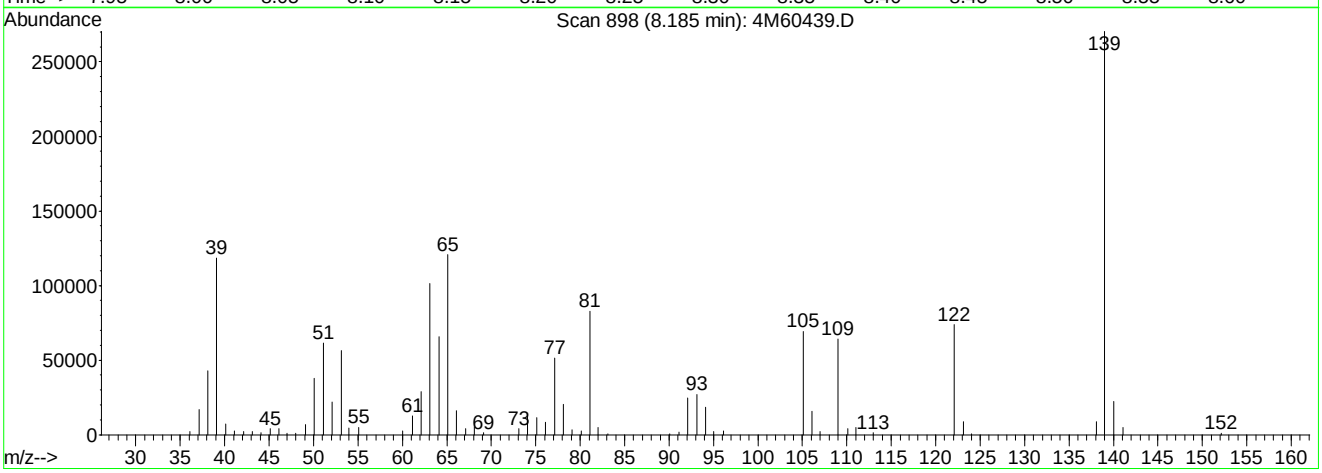
#3 - Improperly integrated isomers and/or coeluting compounds

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

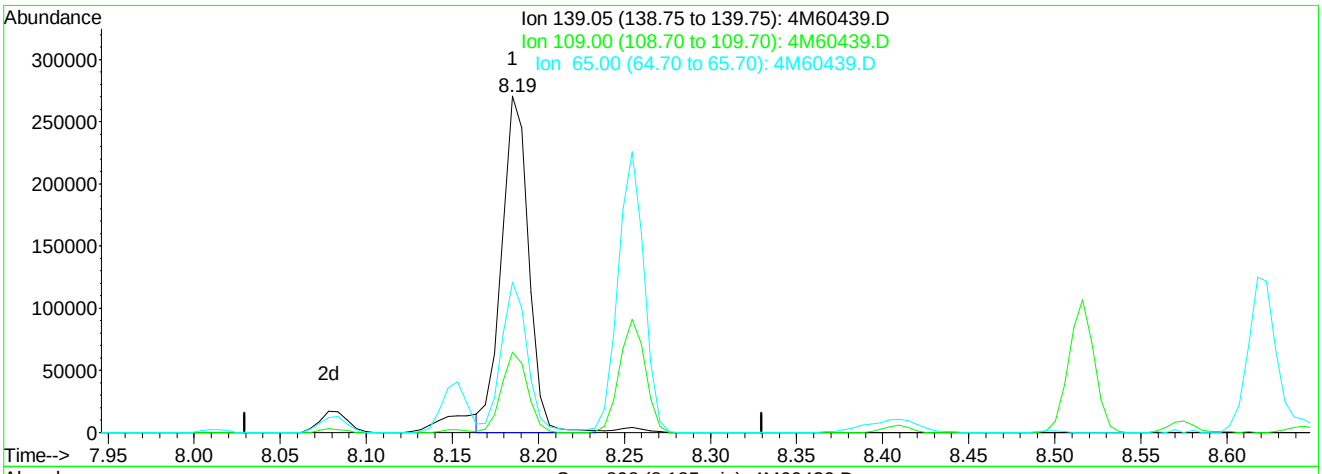
Ion	Exp%	Act%
139.05	100	100
109.00	16.10	21.09
65.00	37.90	40.29
0.00	0.00	0.00

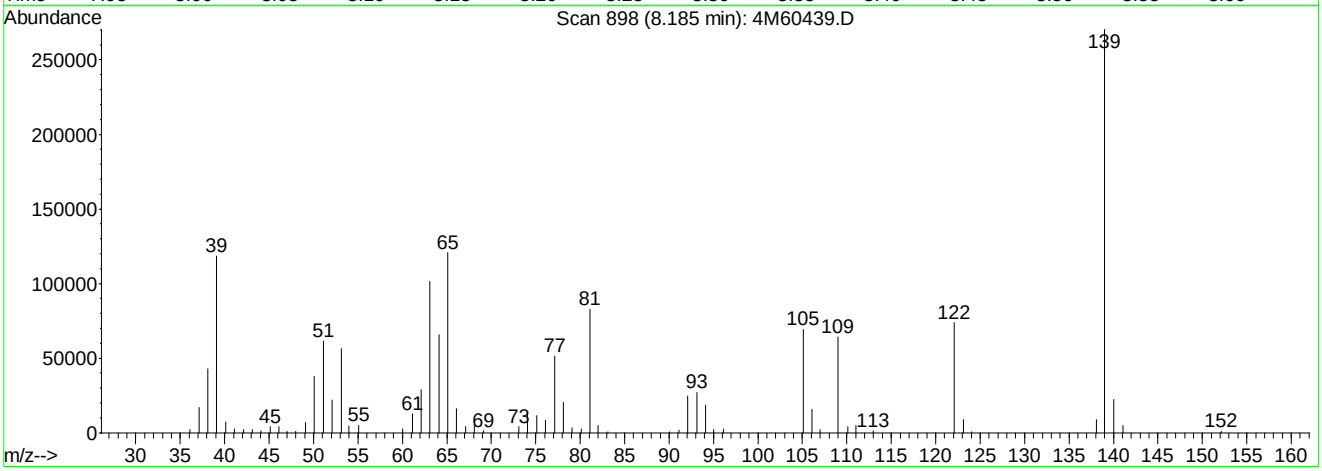
4M60439.D MEGAMIX.M Thu Apr 19 14:20:01 2012

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
4M60440.D MEGAMIX.M Fri Apr 20 08:18:57 2012 Page 1

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

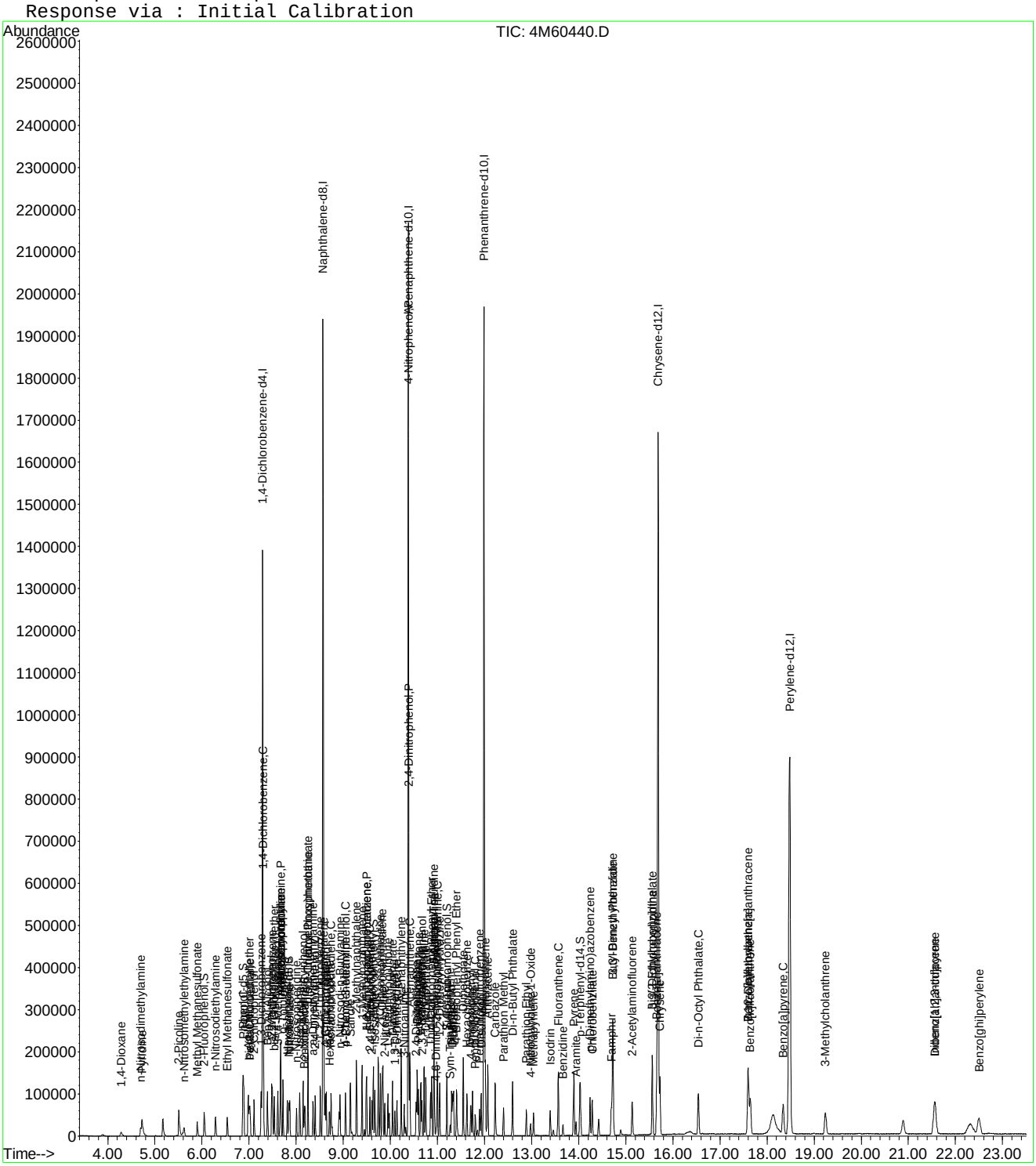
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.55	87	21420	4.5998	ug/ml	98
98)	4-Aminobiphenyl	11.71	169	41614	7.2373	ug/ml	97
99)	Pentachlorophenol	11.80	266	8880	3.0117	ug/ml	98
100)	Pronamide	11.74	173	25508	3.3192	ug/ml	97
101)	Pentachloronitrobenzene	11.90	237	5928	3.2762	ug/ml	97
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

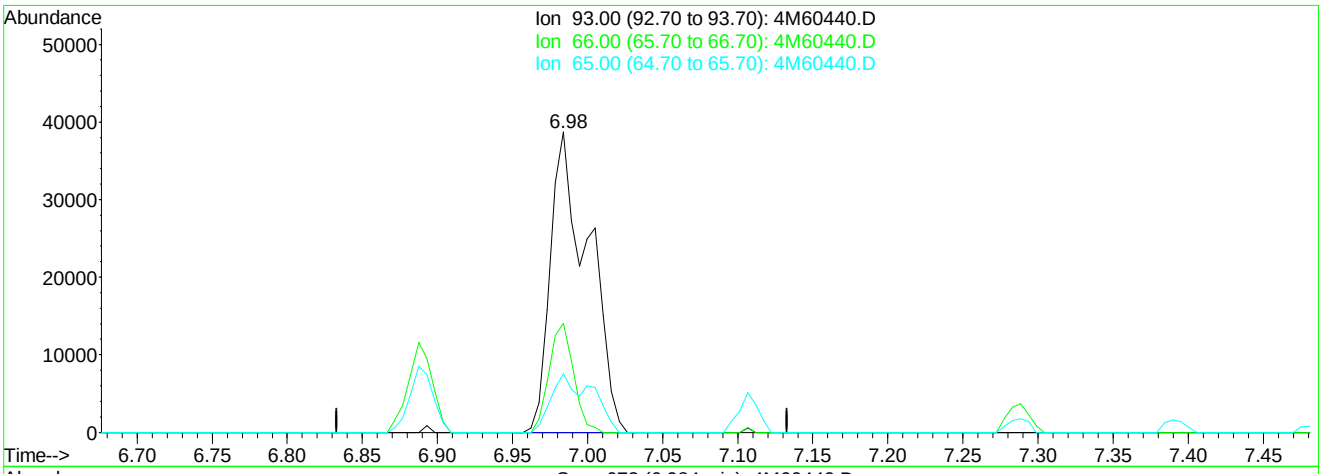


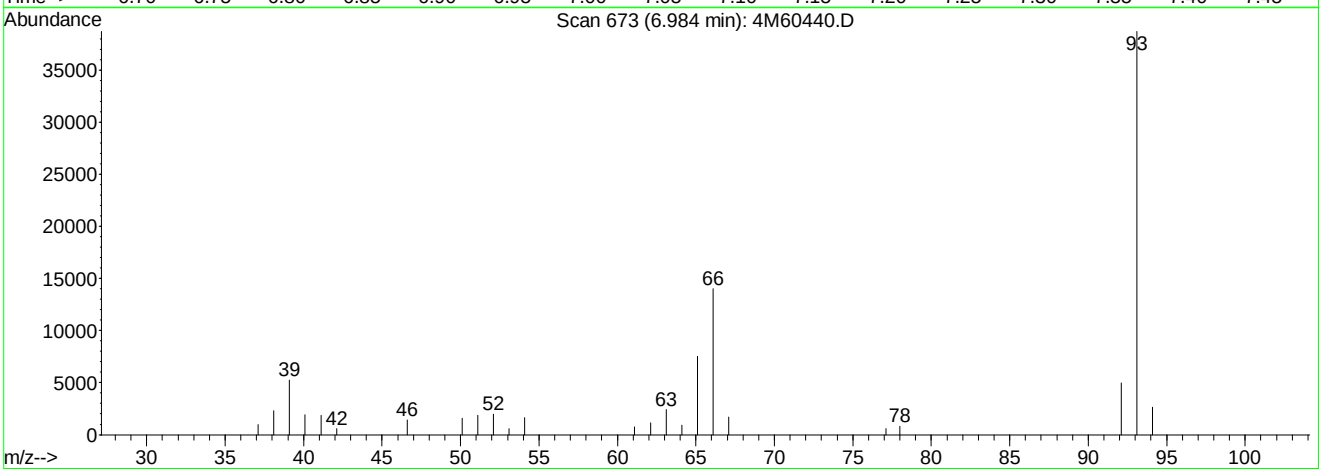
4M60440.D MEGAMIX.M Fri Apr 20 08:18:57 2012 Page 4

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

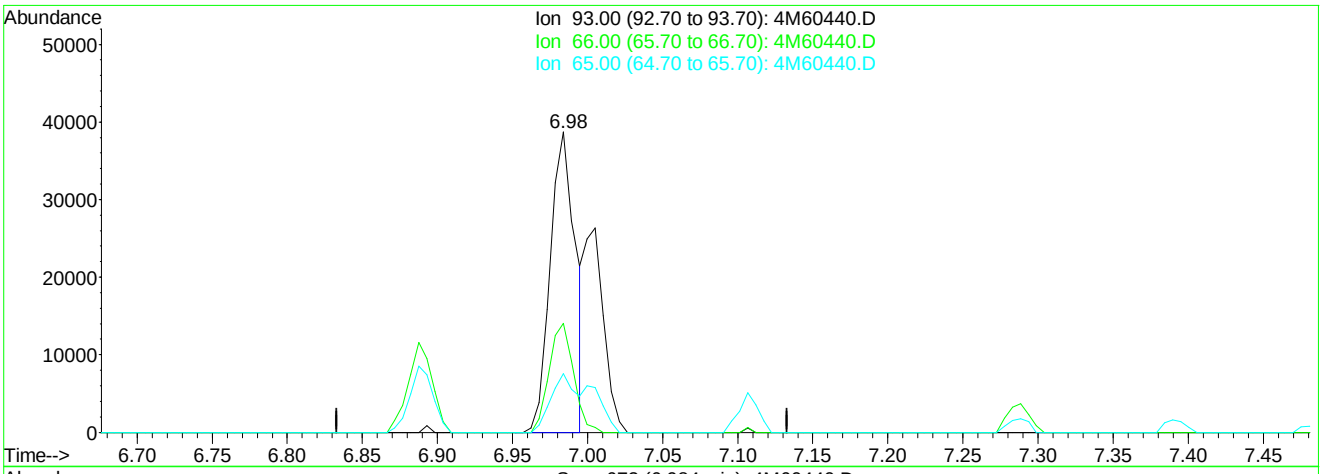
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.15
65.00	29.20	12.96#
0.00	0.00	0.00

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 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

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

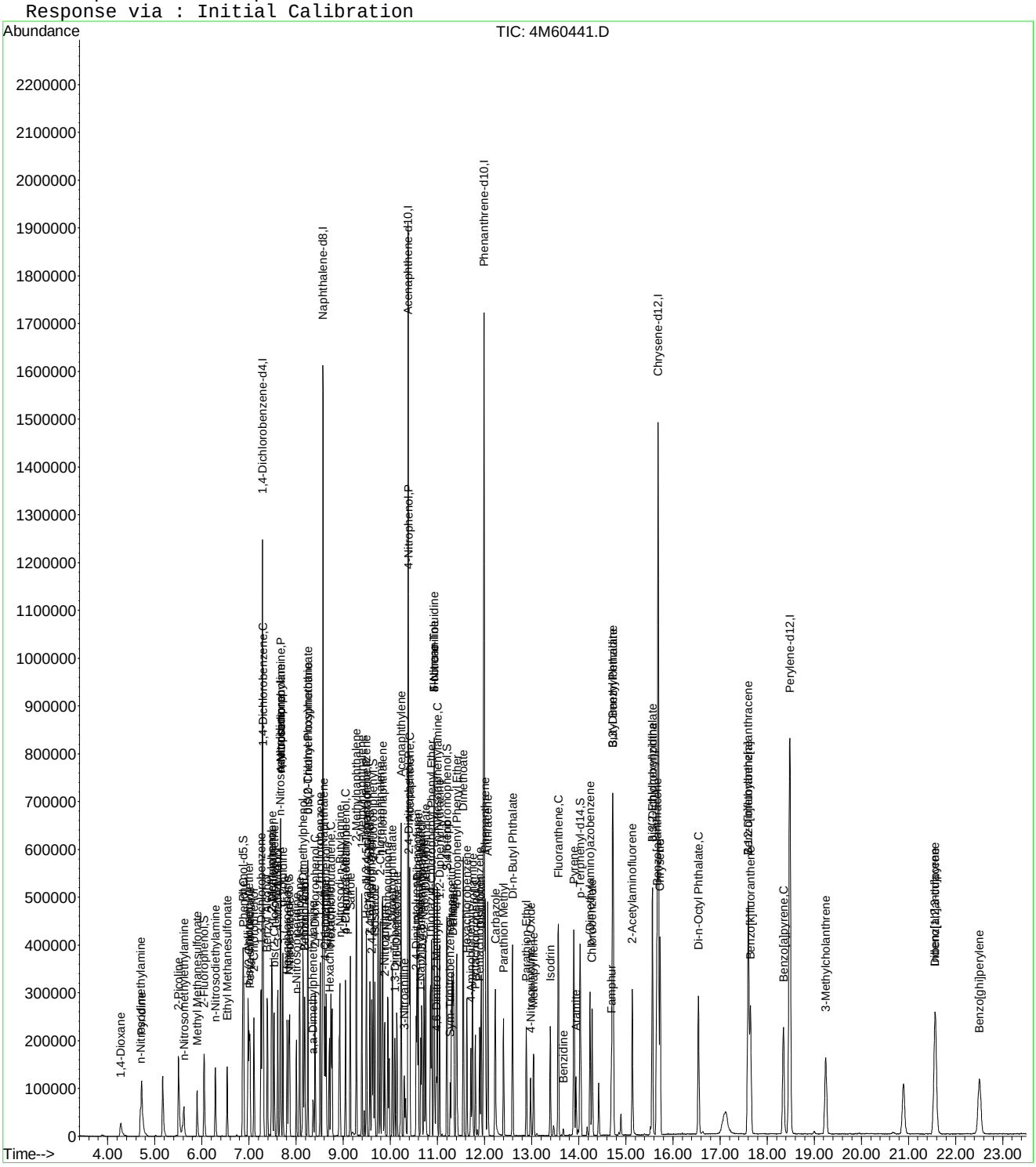
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.55	87	62939	14.8427	ug/ml	98
98)	4-Aminobiphenyl	11.71	169	98626	18.8359	ug/ml	97
99)	Pentachlorophenol	11.81	266	31968	11.9067	ug/ml	98
100)	Pronamide	11.75	173	78302	11.1894	ug/ml	99
101)	Pentachloronitrobenzene	11.90	237	18446	11.1953	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

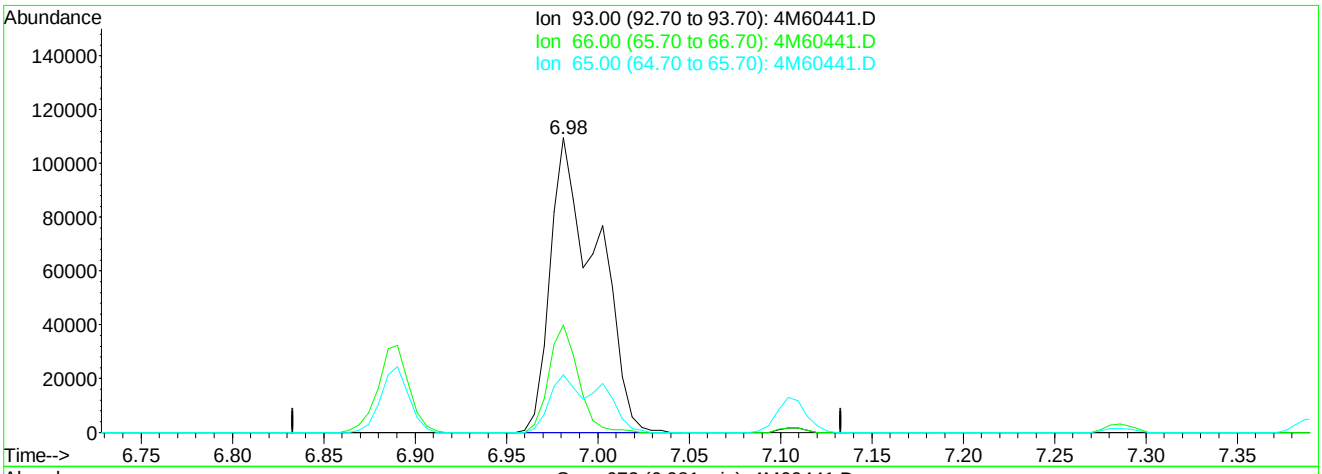


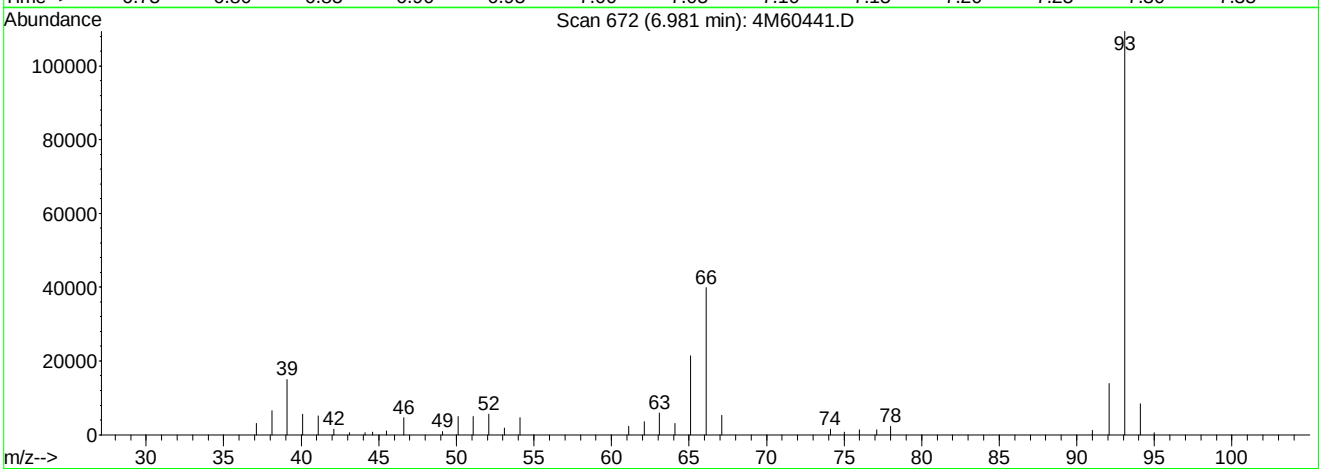
4M60441.D MEGAMIX.M Fri Apr 20 08:18:58 2012 Page 4

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

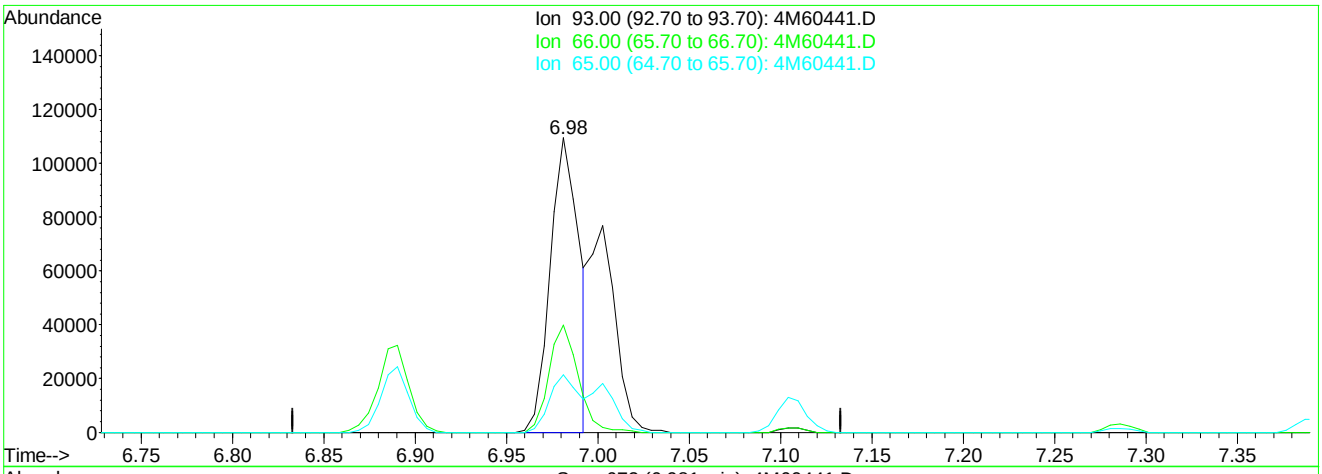
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.04
65.00	29.20	12.50#
0.00	0.00	0.00

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

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
4M60442.D MEGAMIX.M Fri Apr 20 08:18:58 2012 Page 2

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

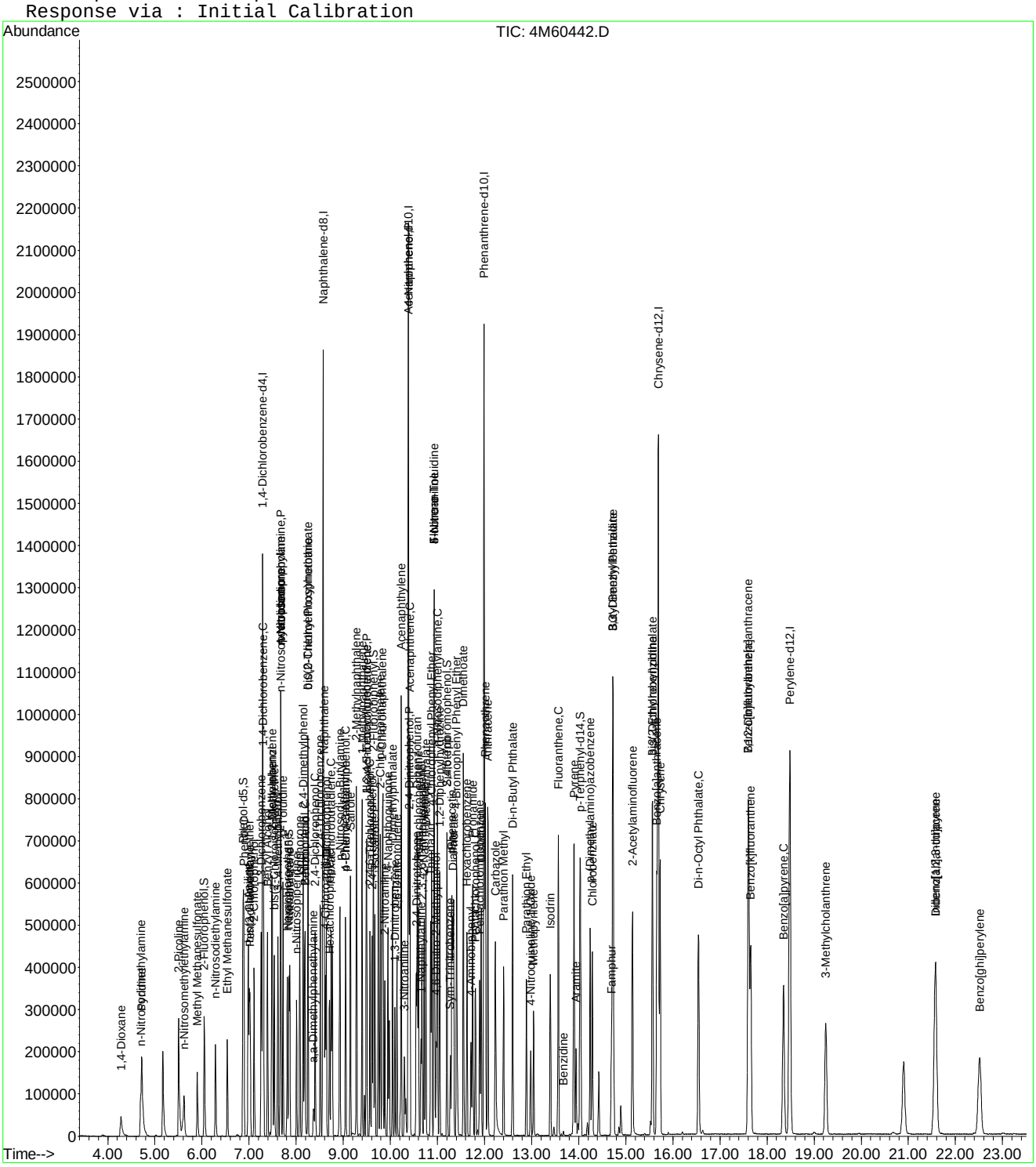
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.55	87	100546	21.7536	ug/ml	99
98)	4-Aminobiphenyl	11.71	169	125719	22.0160	ug/ml	99
99)	Pentachlorophenol	11.81	266	53277	18.1856	ug/ml	99
100)	Pronamide	11.75	173	123932	16.2463	ug/ml	99
101)	Pentachloronitrobenzene	11.90	237	29537	16.4436	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

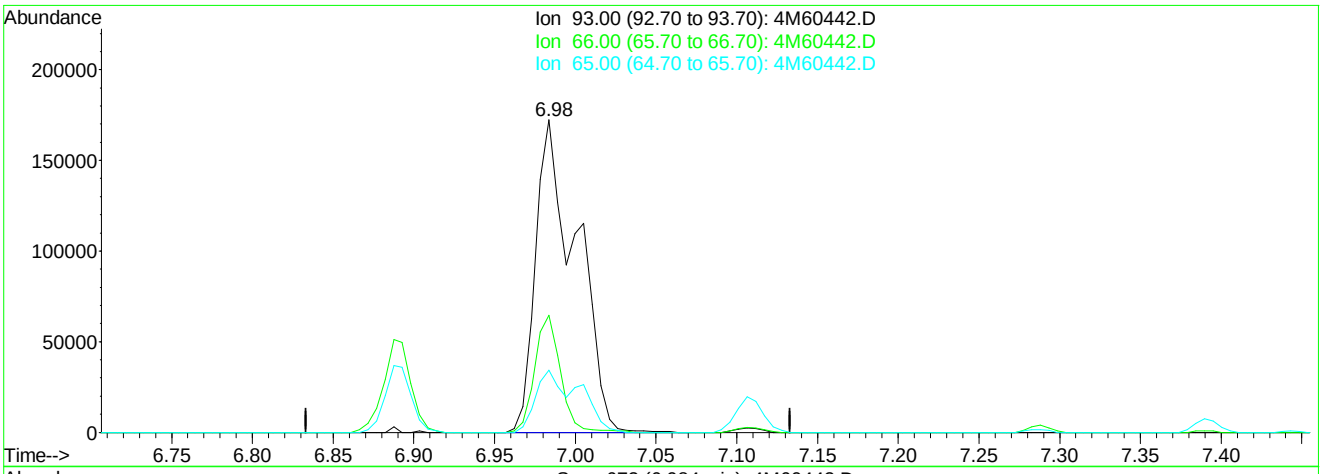
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration



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

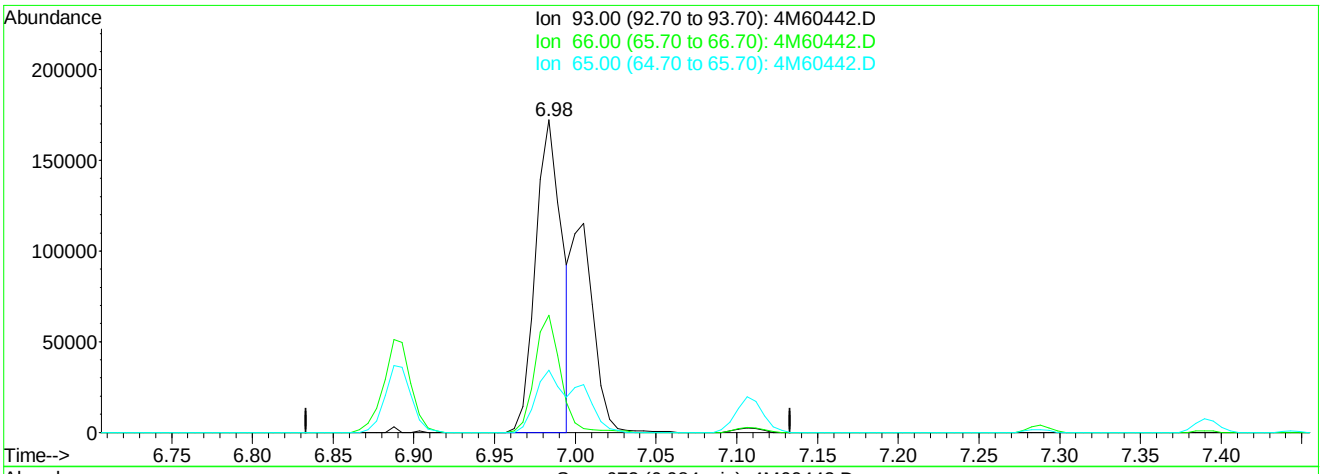
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.55
65.00	29.20	12.97#
0.00	0.00	0.00

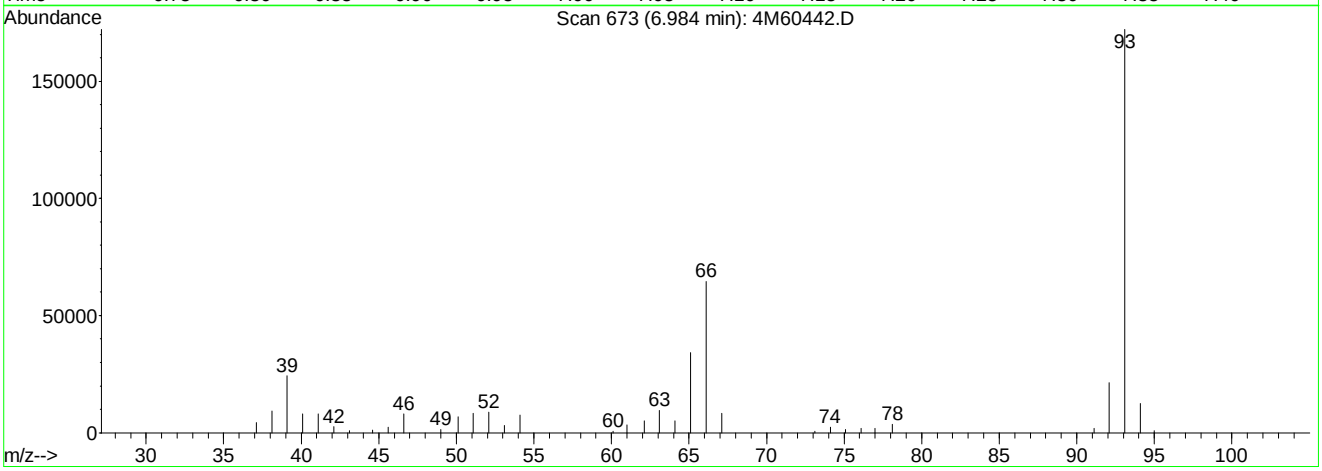
4M60442.D MEGAMIX.M Thu Apr 19 14:22:04 2012

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

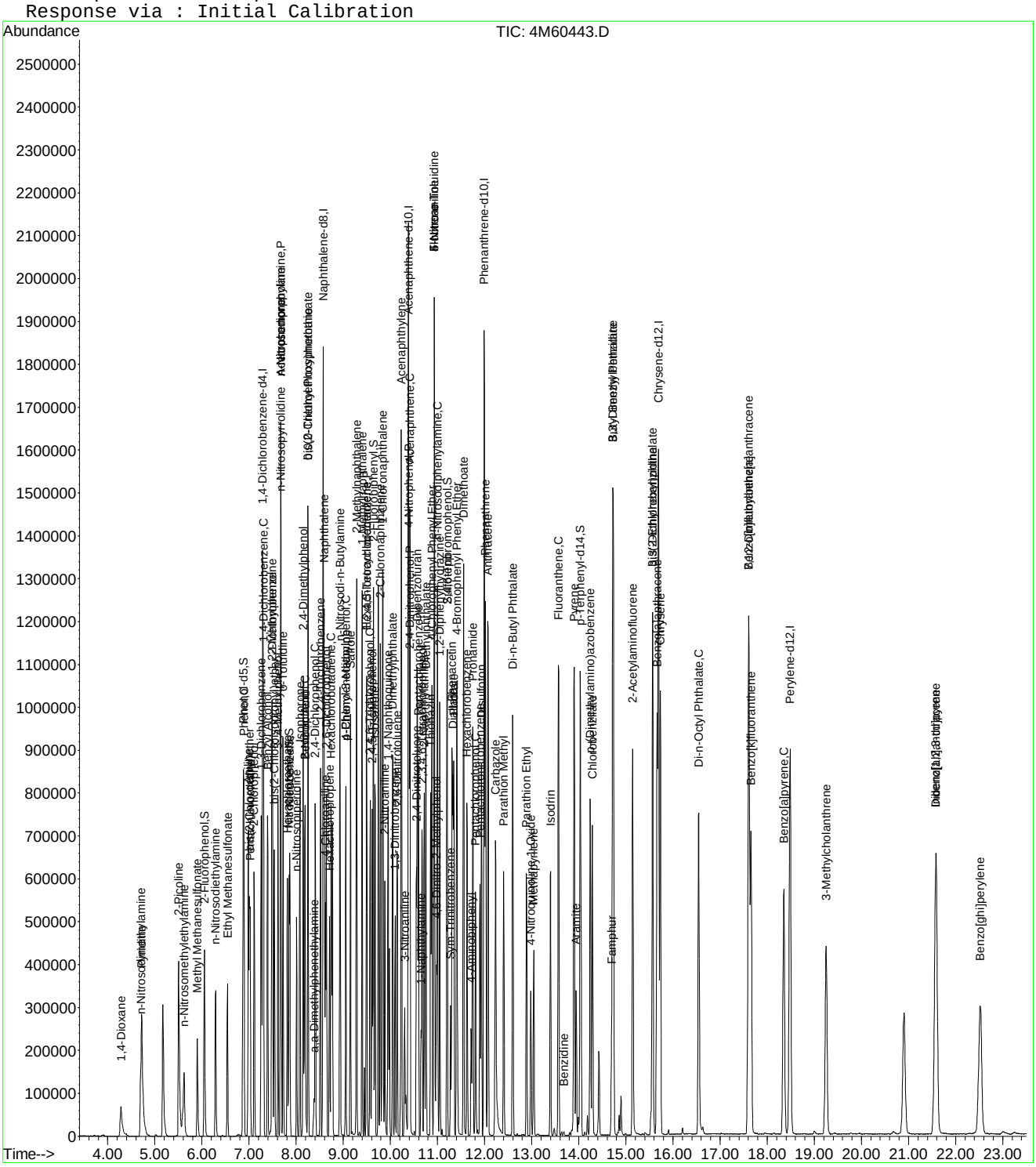
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.55	87	154209	33.4716	ug/ml	99
98)	4-Aminobiphenyl	11.71	169	167715	29.4842	ug/ml	99
99)	Pentachlorophenol	11.81	266	85623	29.2700	ug/ml	99
100)	Pronamide	11.75	173	198719	26.1362	ug/ml	99
101)	Pentachloronitrobenzene	11.90	237	47519	26.5373	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
4M60443.D MEGAMIX.M Fri Apr 20 08:18:59 2012 Page 3

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

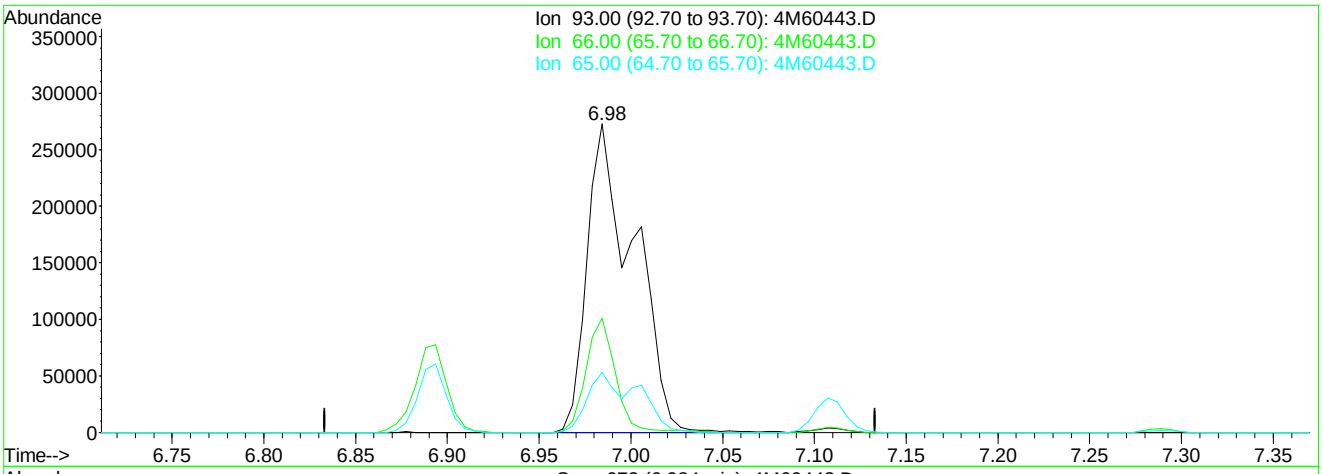
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration

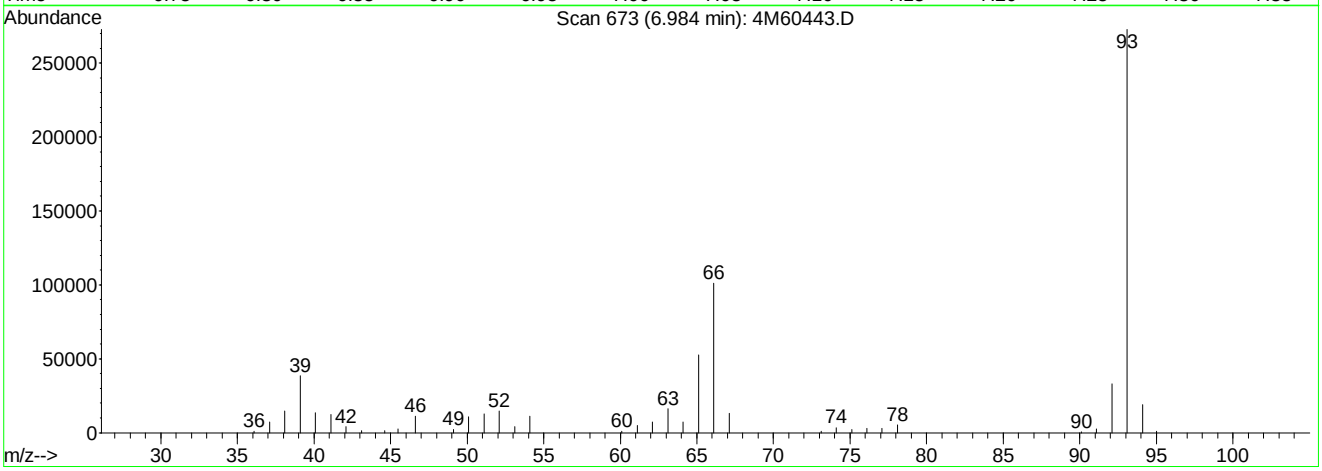

Abundance
TIC: 4M60443.D
Time-->
1,4-Dioxane
n-Nitrosodimethylamine
n-Nitrosomethylethylamine
2-Picoline
Methyl Methanesulfonate
2-Fluorophenol,S
n-Nitrosodiethylamine
Ethyl Methanesulfonate
Phenol-d5,S
Phenol,C
Aniline
Bis(2-Chloroethyl)Ether
1,4-Dichlorobenzene-d4,I
1,4-Dichlorobenzene,C
n-Nitrosopyrrolidine
Hexachloroethane
n-Nitrosodi-n-Propylamine,P
Nitrobenzene-d5,S
Isophorone
Bis(2-Chloroethoxy)Methane
2,4-Dimethylphenol
Naphthalene-d8,I
Naphthalene
Hexachlorobutadiene
4-Chloroaniline
2,4-Dichlorophenol,C
2,6-Dichlorophenol
Benzoic Acid
1,2,4-Trichlorobenzene
Benzyl Alcohol
4-Methylphenol,C
2-Methylphenol
Bis(2-Chloroisopropyl)Ether
Hexachloropropene
n-Nitrosodi-n-Butylamine
2-Nitrophenol,C
2,4-Dimethylphenol,P
Isophorone
Bis(2-Chloroethoxy)Methane
2,4-Dichlorophenol,C
Naphthalene
4-Chloroaniline
Hexachlorobutadiene
2,6-Dichlorophenol
Benzoic Acid
1,2,4-Trichlorobenzene
Benzyl Alcohol
4-Methylphenol,C
2-Methylphenol
Bis(2-Chloroisopropyl)Ether
Hexachloropropene
n-Nitrosodi-n-Butylamine
2-Nitrophenol,C
2,4-Dimethylphenol,P
Acenaphthylene
Acenaphthene-d10,I
Acenaphthene,C
4-Nitrophenol,C
2,4-Dinitrophenol,P
Dibenzofuran
2,4-Dinitrotoluene
2,6-Dinitrotoluene
Diethylphthalate
4-Chlorophenyl-Phenylether
Fluorene,C
4-Nitroaniline
4,6-Dinitro-2-Methylphenol
n-Nitrosodiphenylamine,P
Azobenzene
4-Bromophenyl-Phenylether
Hexachlorobenzene
Pentachlorophenol,C
Phenanthrene-d10,I
Phenanthrene,C
Anthracene
Carbazole
Di-n-Butyl Phthalate
Fluoranthene,C
Pyrene
p-Terphenyl-d14,S
Butylbenzylphthalate
3,3'-Dichlorobenzidine
Benzo[a]anthracene
Chrysene-d12,I
Chrysene
Bis(2-Ethylhexyl)Phthalate
Di-n-Octyl Phthalate
Benzo[b]fluoranthene,C
Benzo[k]fluoranthene
Benzo[a]pyrene,C
Perylene-d12,I
Indeno[1,2,3-cd]pyrene
Dibenz[a,h]anthracene
Benzo[ghi]perylene
3-Methylcholanthrene
Dibenz[a,j]acridine
7,12-Dimethylbenz[a]anthracene
Benzidine
Aramite
Isodrin
Parathion Ethyl
Parathion Methyl
Famphur
2-Acetylaminofluorene
4-Nitroquinoline-1-Oxide
Chlorobenzilate
4-Aminobiphenyl
Pronamide
Dimethoate
Sym-Trinitrobenzene
Diallate
Phenacetin
Safrole
Pentachloronitrobenzene
Pentachlorobenzene
Hexachlorophene
Hexachlorocyclopentadiene
Isosafrole
1,3-Dinitrobenzene
1-Naphthylamine
2-Naphthylamine
2-Chloronaphthalene
1,3,5-Trinitrobenzene
1,4-Naphthoquinone
1,4-Dinitrobenzene
Dimethylphthalate
2,6-Dichlorophenol
Benzoic Acid
1,2,4-Trichlorobenzene
Benzyl Alcohol
4-Methylphenol,C
2-Methylphenol
Bis(2-Chloroisopropyl)Ether
Hexachloropropene
n-Nitrosodi-n-Butylamine
2-Nitrophenol,C
2,4-Dimethylphenol,P
Naphthalene
4-Chloroaniline
Hexachlorobutadiene
2,4-Dichlorophenol,C

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

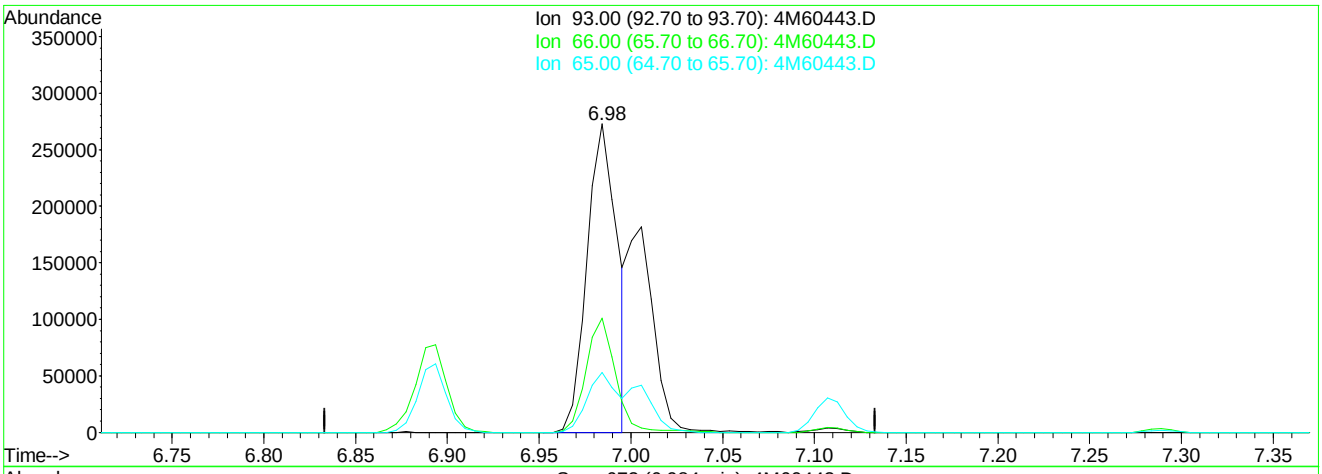
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.25
65.00	29.20	12.52#
0.00	0.00	0.00

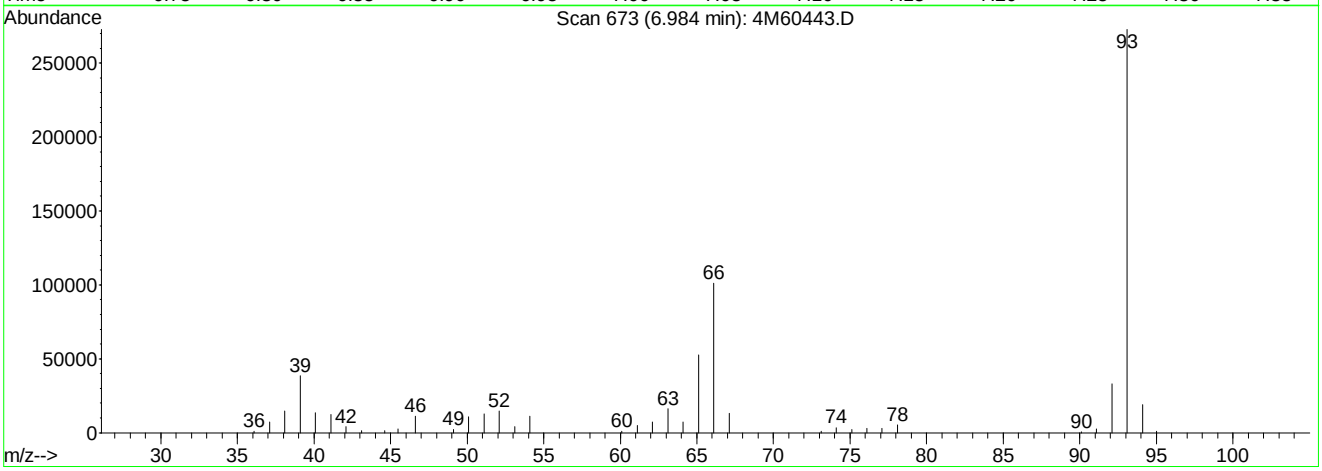
4M60443.D MEGAMIX.M Thu Apr 19 14:22:42 2012

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
4M60444.D MEGAMIX.M Fri Apr 20 08:19:00 2012 Page 2

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

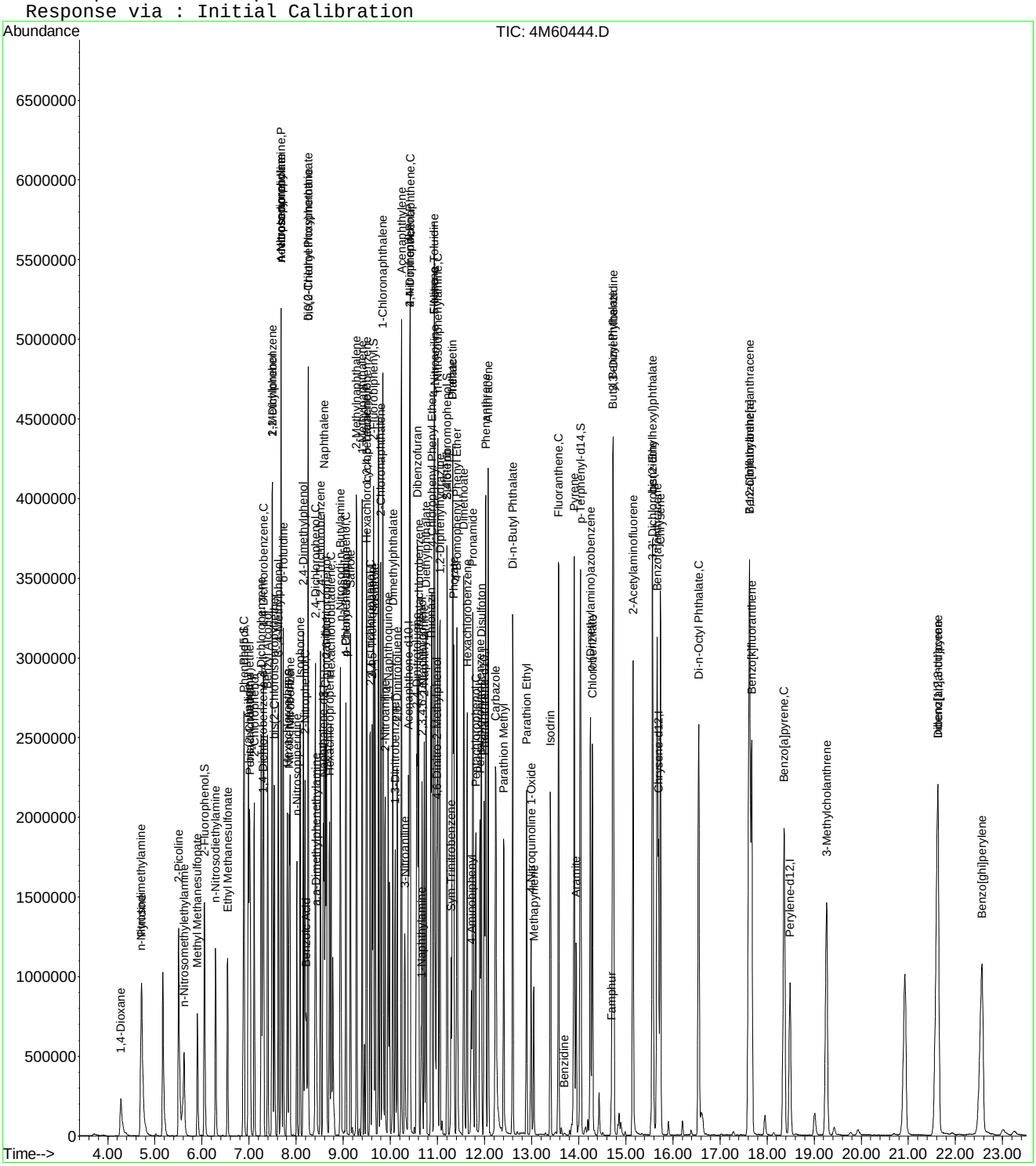
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.56	87	438351	87.6686	ug/ml	99
98)	4-Aminobiphenyl	11.72	169	583198	94.6458	ug/ml	100
99)	Pentachlorophenol	11.81	266	297153	93.2093	ug/ml	100
100)	Pronamide	11.75	173	682115	82.6482	ug/ml	99
101)	Pentachloronitrobenzene	11.90	237	162254	83.4353	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

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

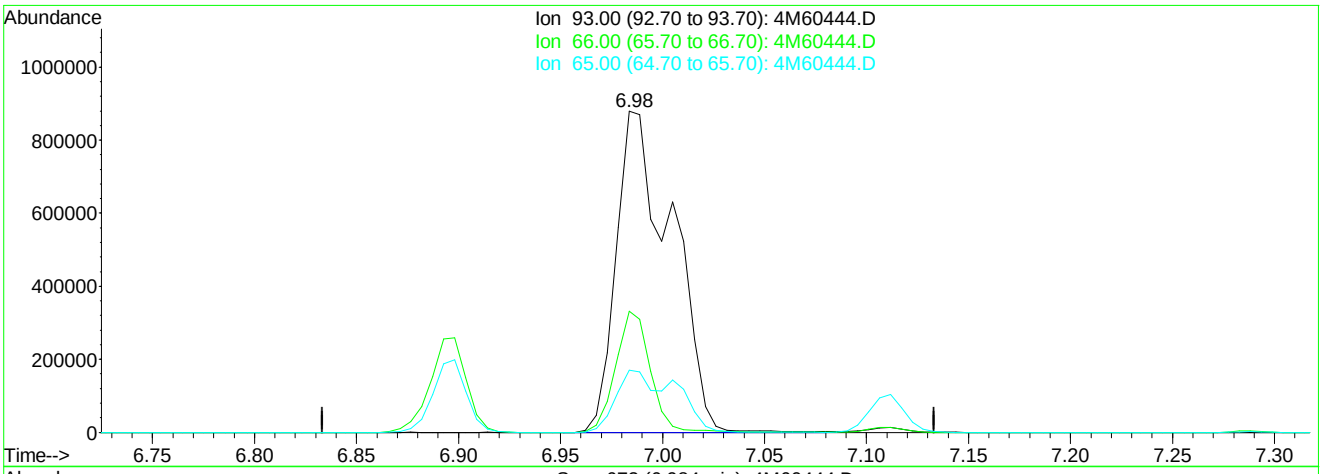
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration

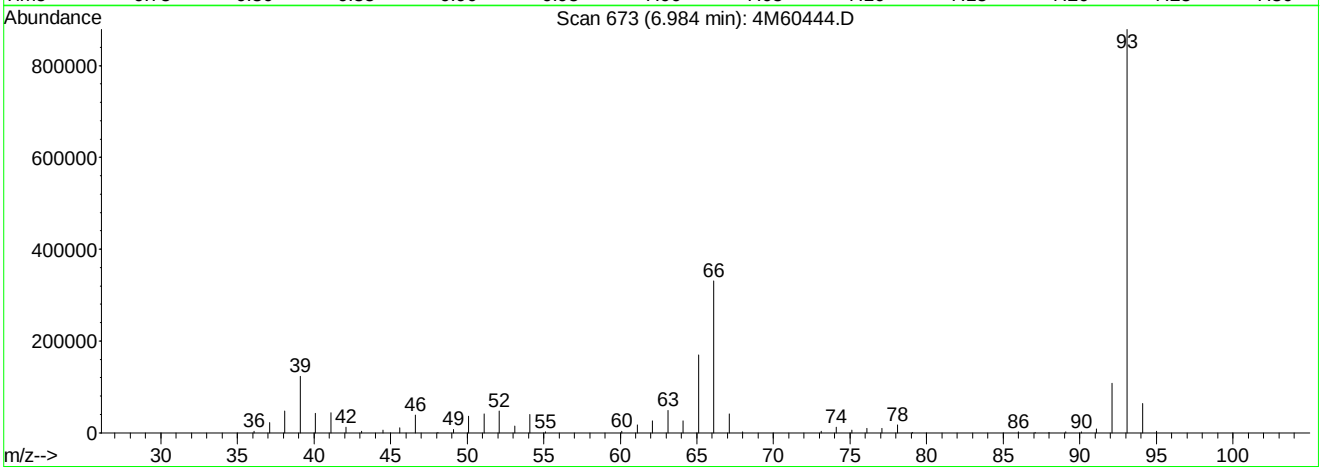


Quantitation Report (Qedit)

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

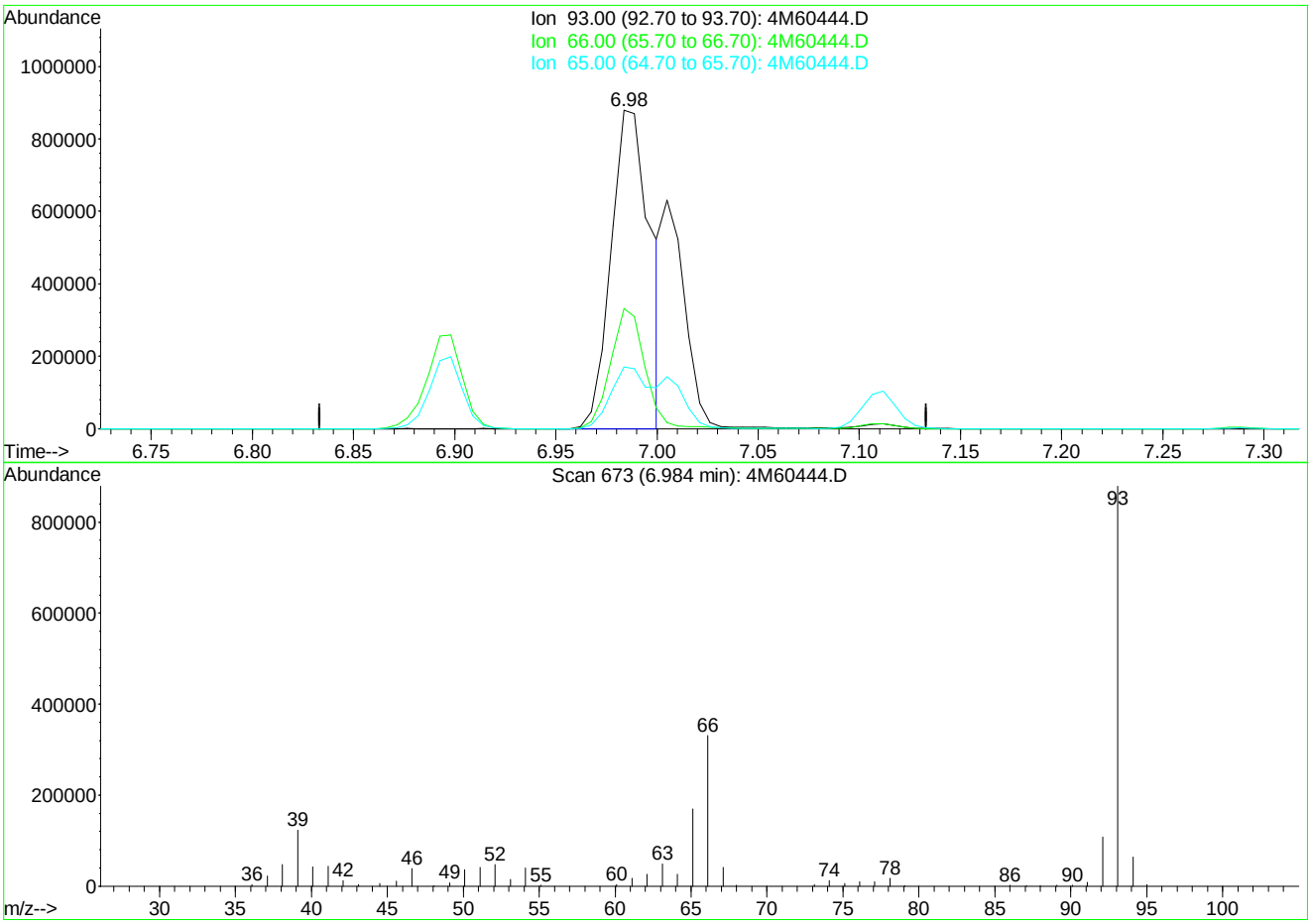
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.77
65.00	29.20	20.73
0.00	0.00	0.00

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

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

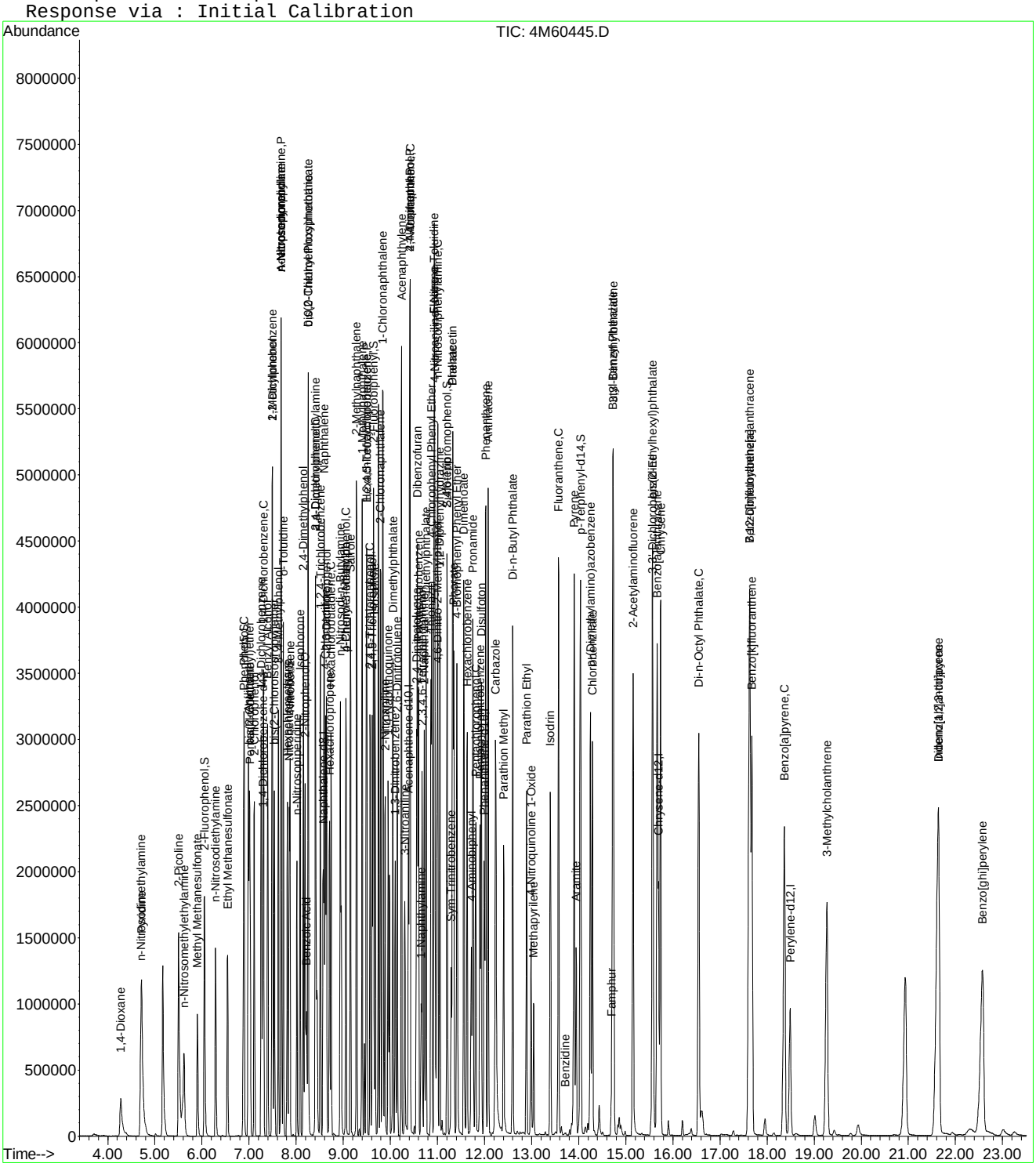
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.56	87	501935	100.9365	ug/ml	99
98)	4-Aminobiphenyl	11.72	169	862423	134.3000	ug/ml	100
99)	Pentachlorophenol	11.81	266	367513	111.8825	ug/ml	99
100)	Pronamide	11.75	173	823842	100.0678	ug/ml	100
101)	Pentachloronitrobenzene	11.90	237	193570	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

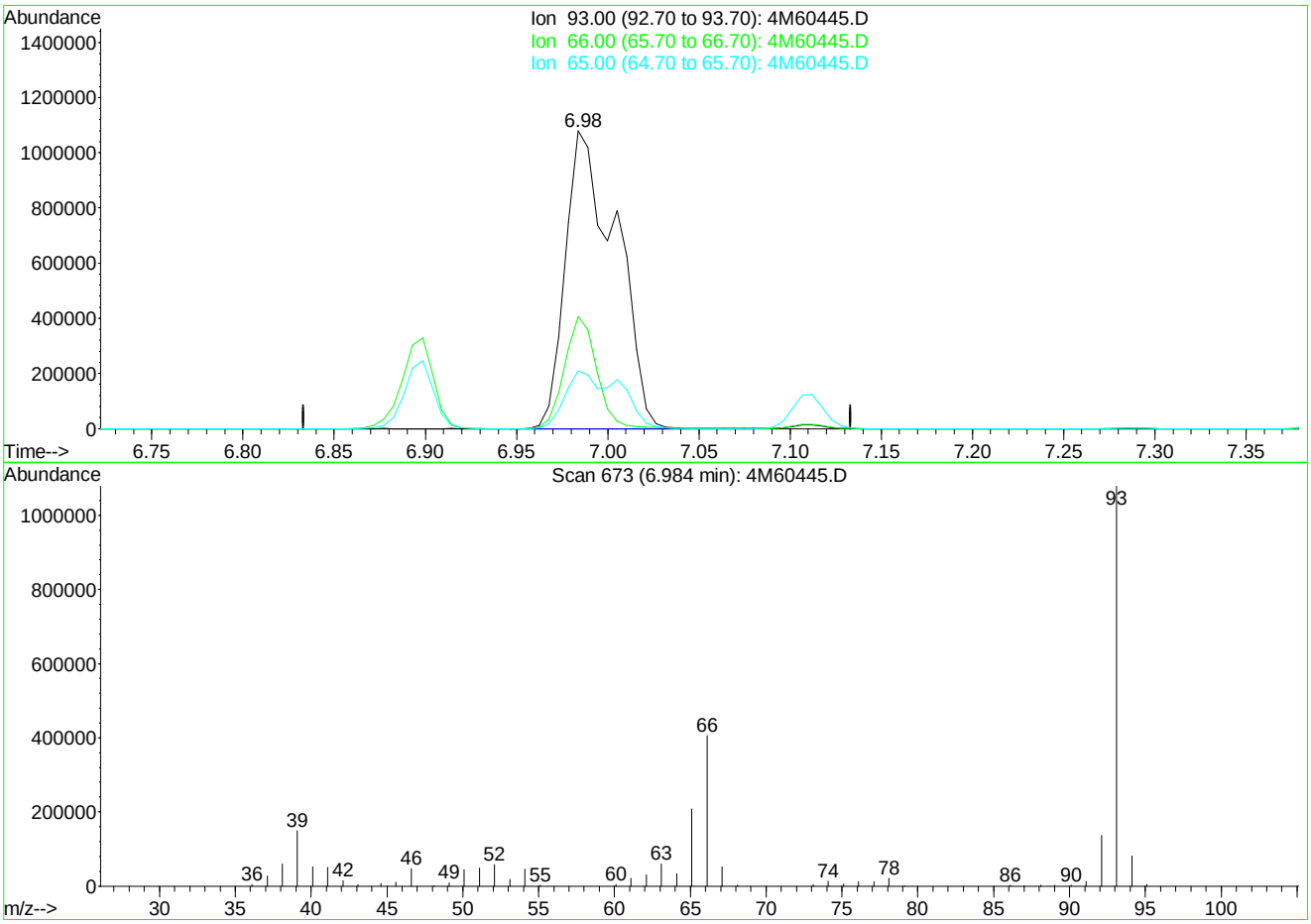
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration



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

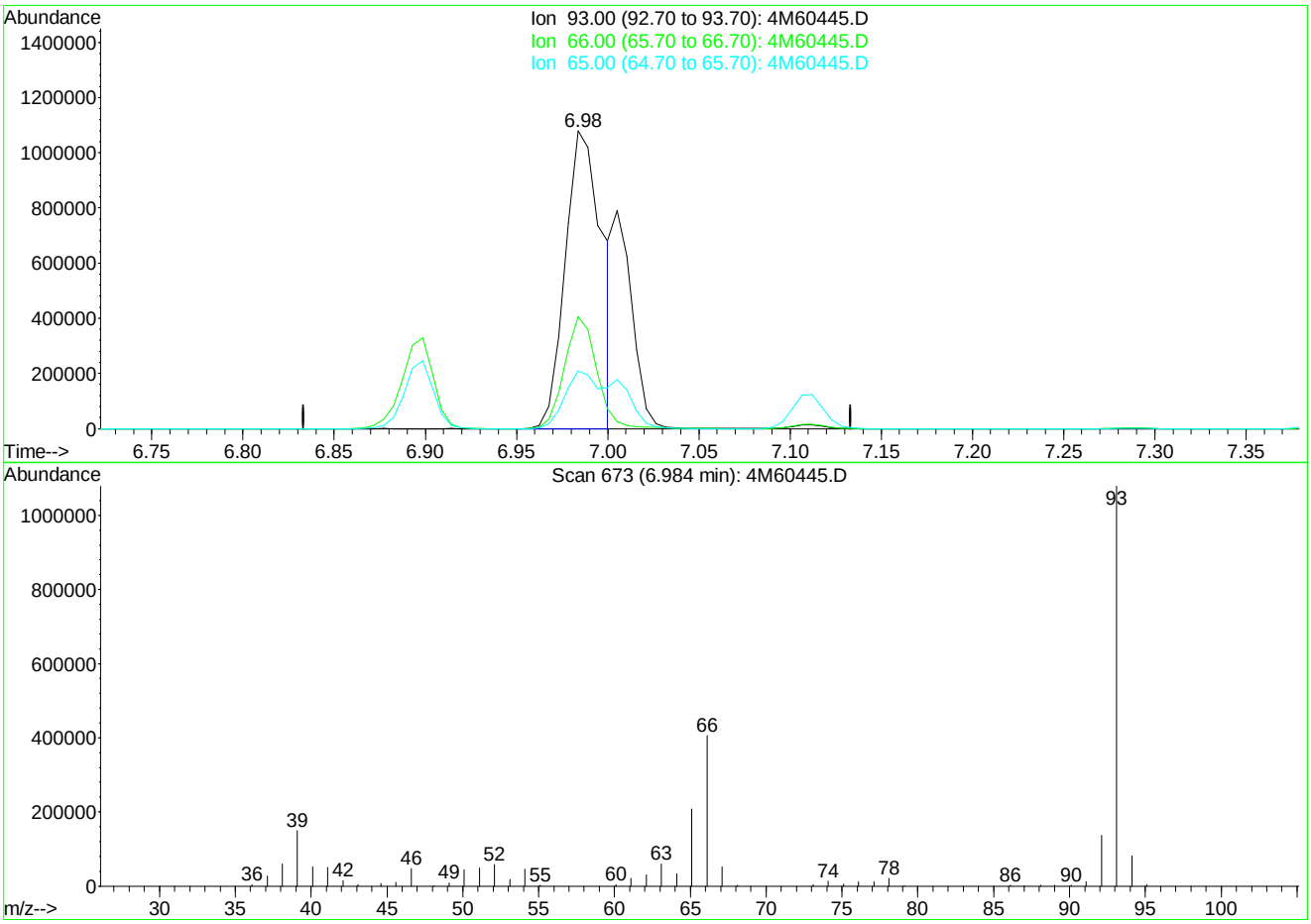
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.95
65.00	29.20	20.71
0.00	0.00	0.00

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

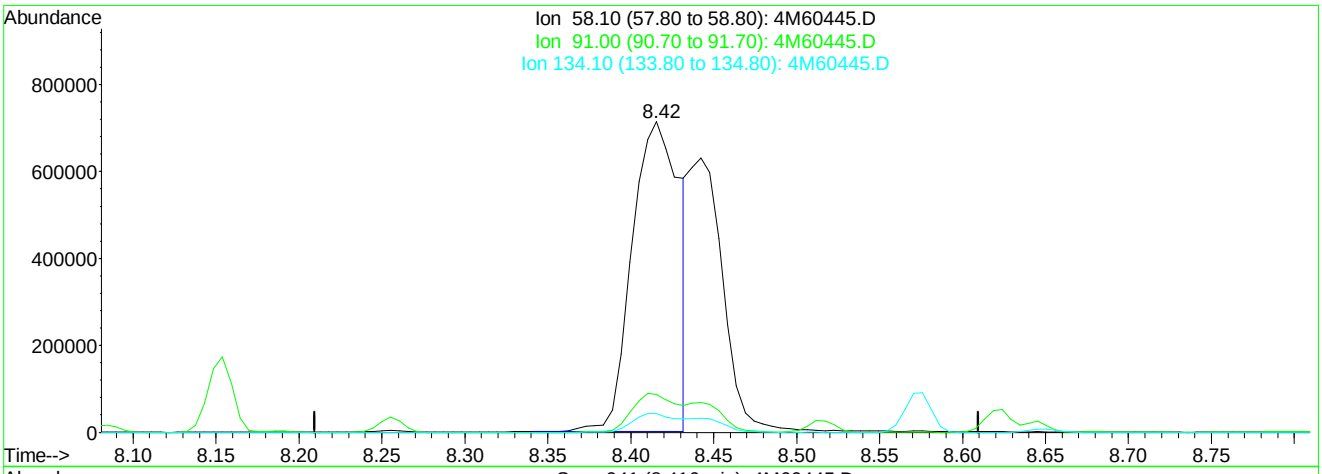
Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41

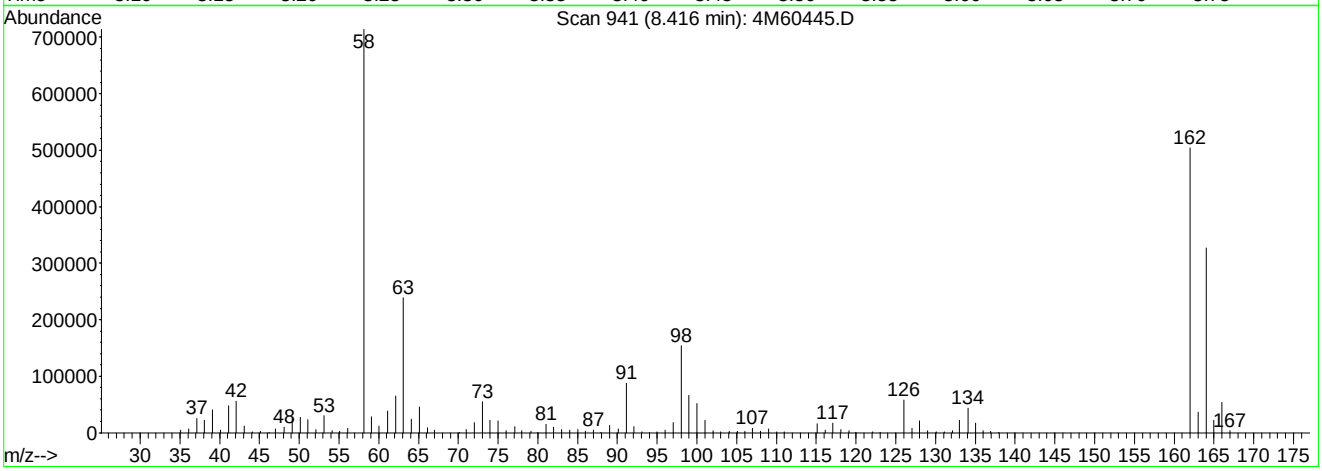
#3 - Improperly integrated isomers and/or coeluting compounds

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

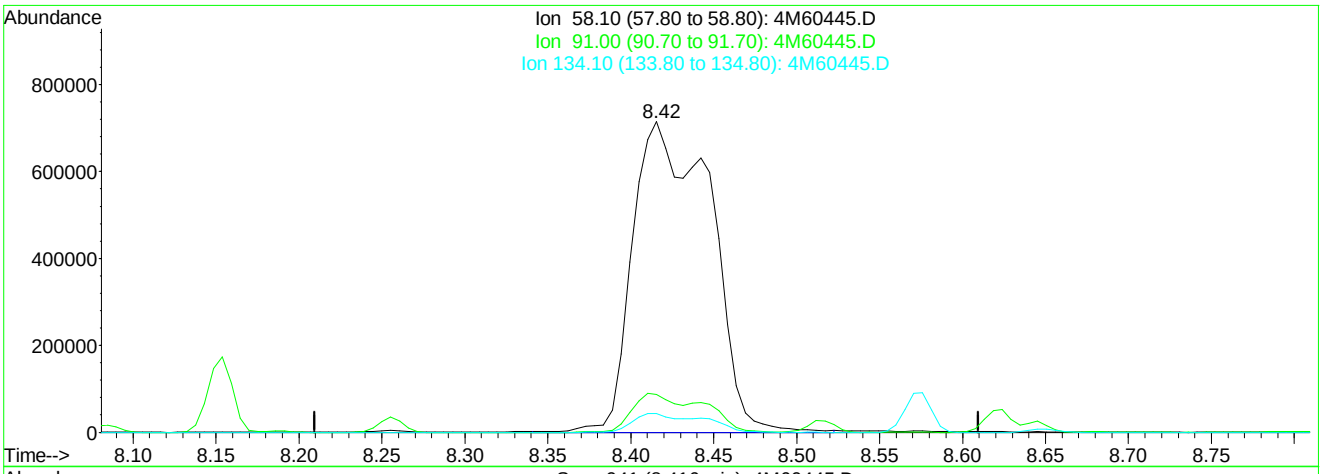
Ion	Exp%	Act%
58.10	100	100
91.00	12.60	11.82
134.10	6.20	5.67
0.00	0.00	0.00

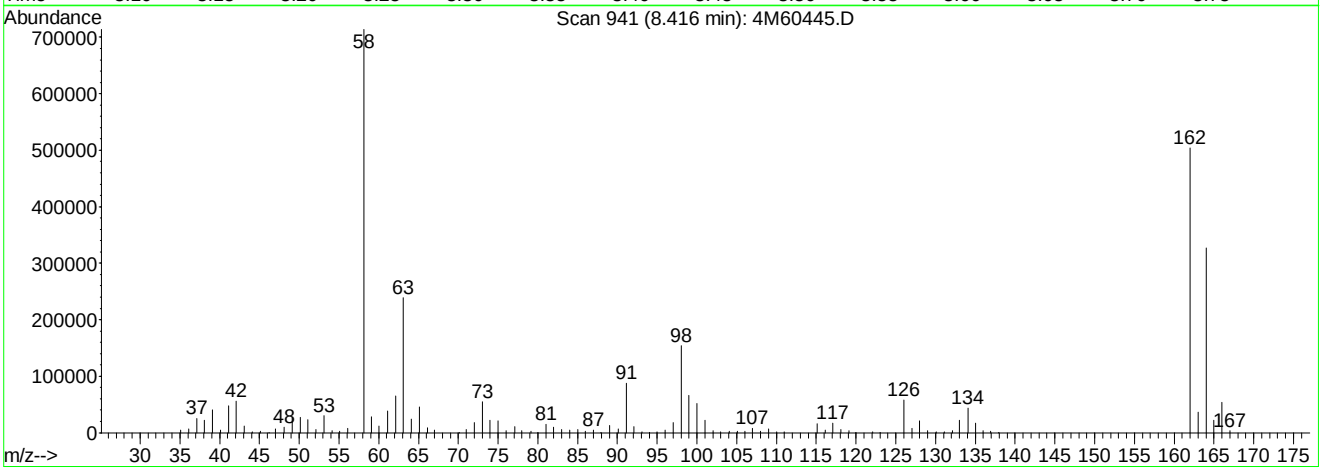
4M60445.D MEGAMIX.M Thu Apr 19 14:24:09 2012

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

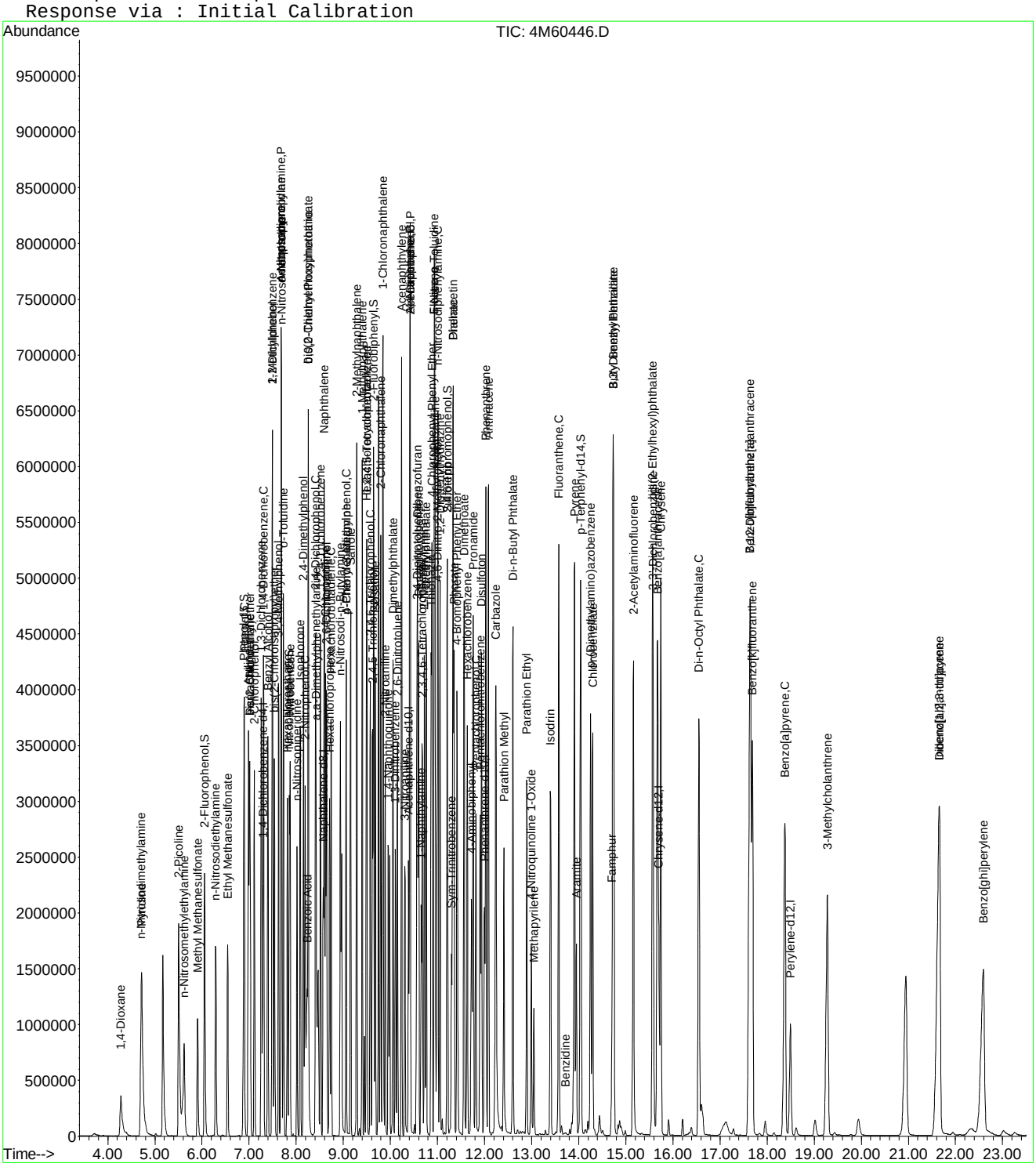
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.57	87	584529	113.1904	ug/ml	99
98)	4-Aminobiphenyl	11.72	169	1329903	179.9601	ug/ml	99
99)	Pentachlorophenol	11.82	266	458736	128.2299	ug/ml	99
100)	Pronamide	11.76	173	1019977	119.6949	ug/ml	99
101)	Pentachloronitrobenzene	11.91	237	235684	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

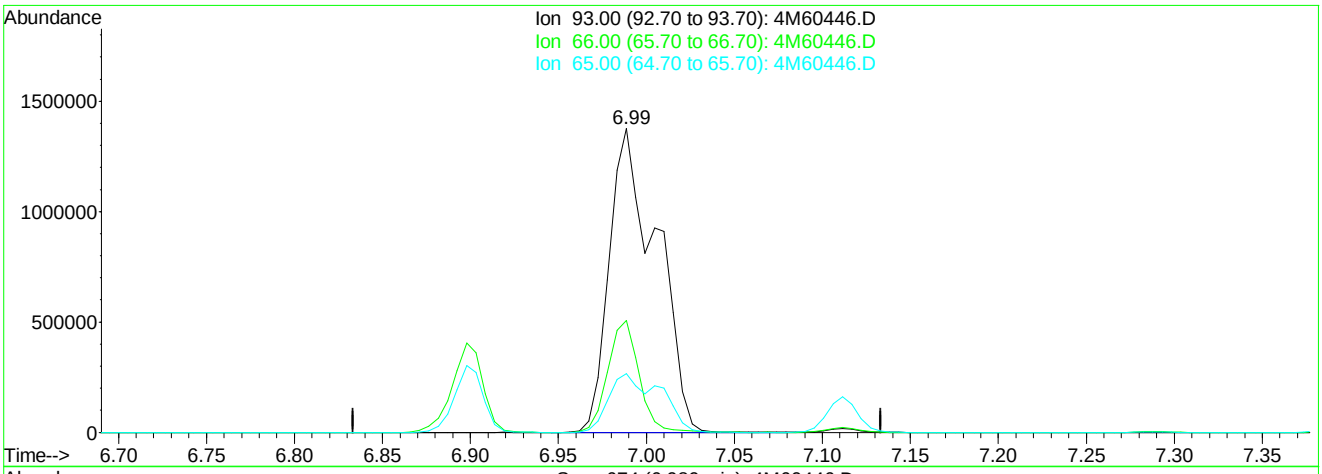
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration

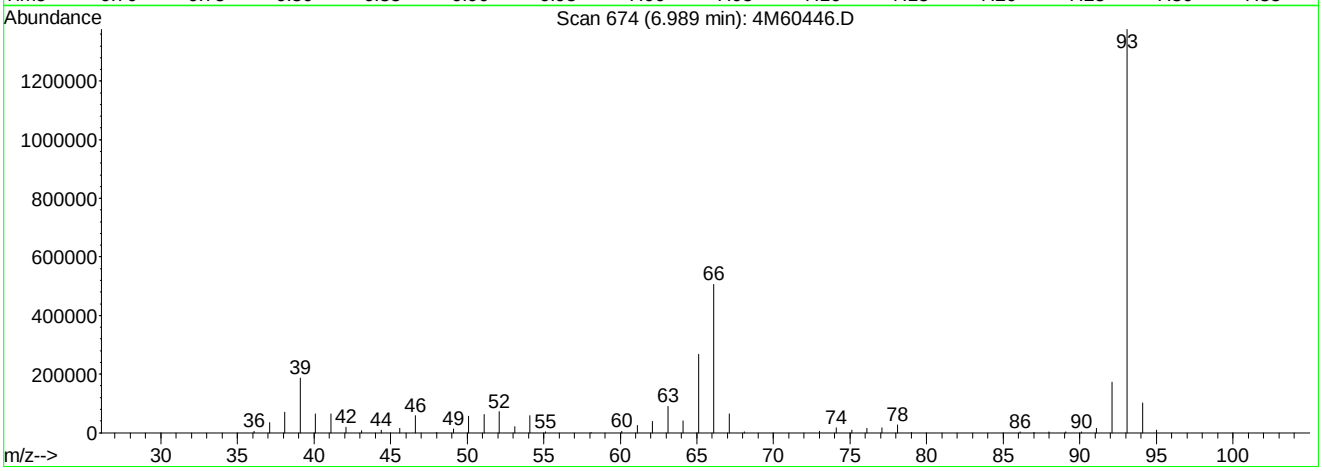


Quantitation Report (Qedit)

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

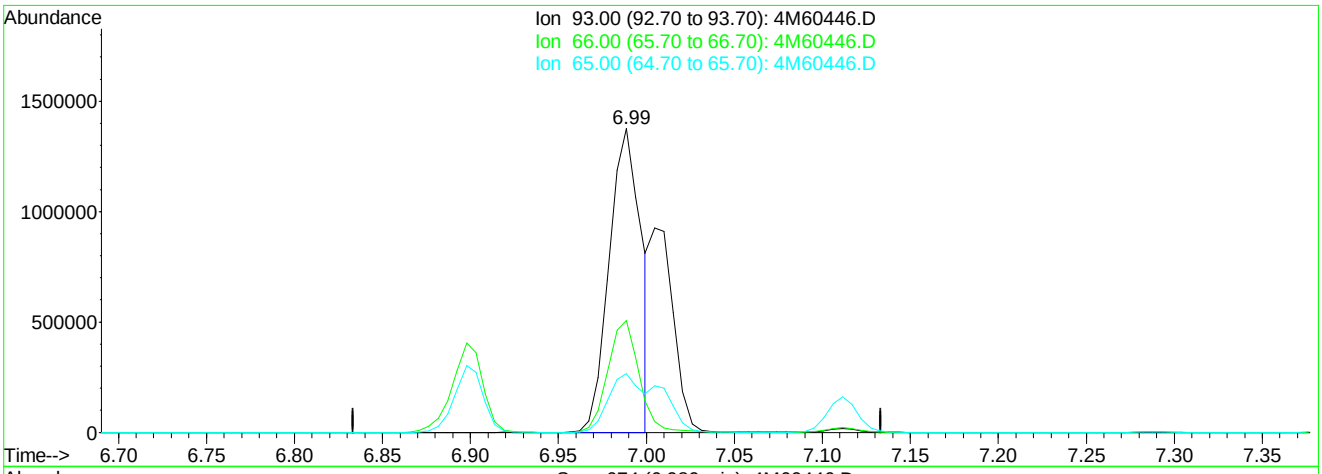
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	24.12
65.00	29.20	20.98
0.00	0.00	0.00

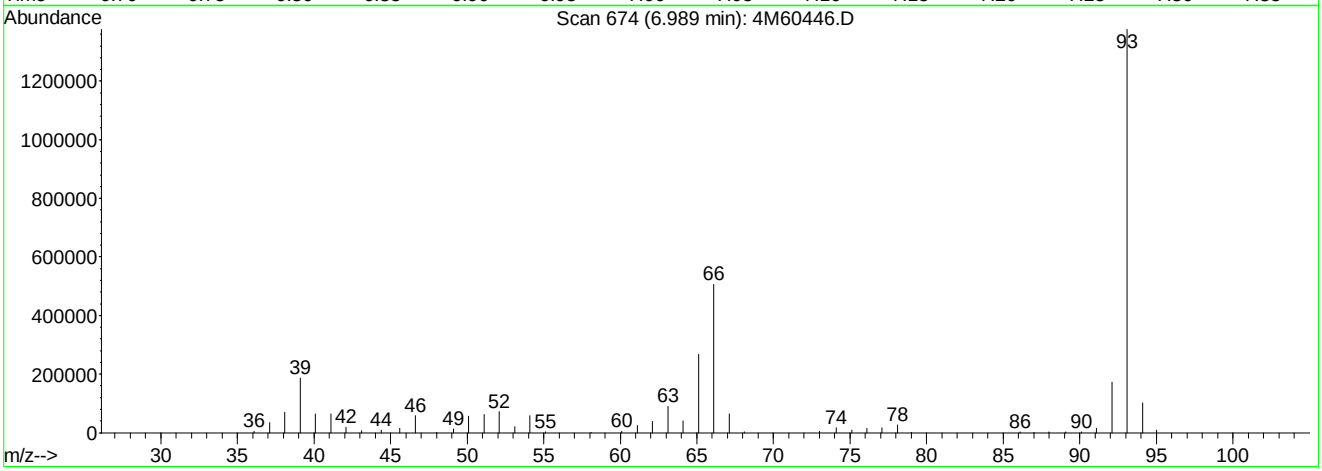
4M60446.D MEGAMIX.M Thu Apr 19 14:24:40 2012

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

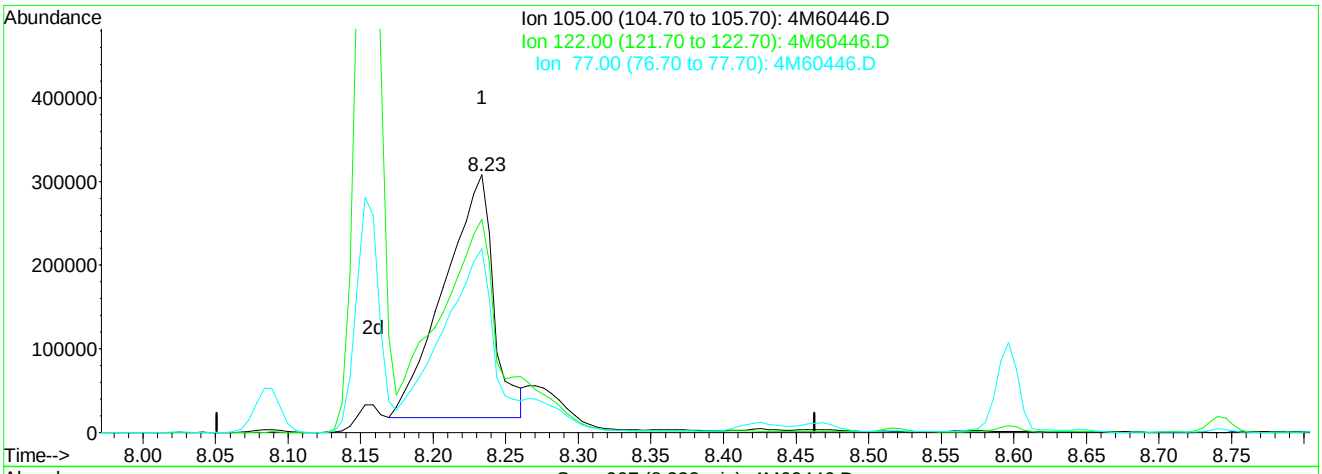
Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41

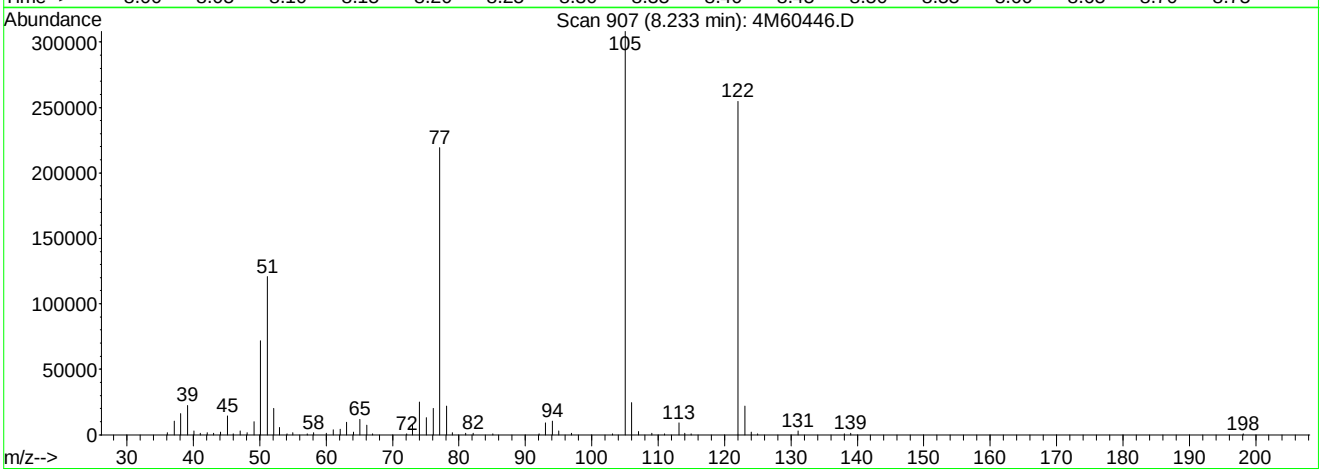
#3 - Improperly integrated isomers and/or coeluting compounds

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

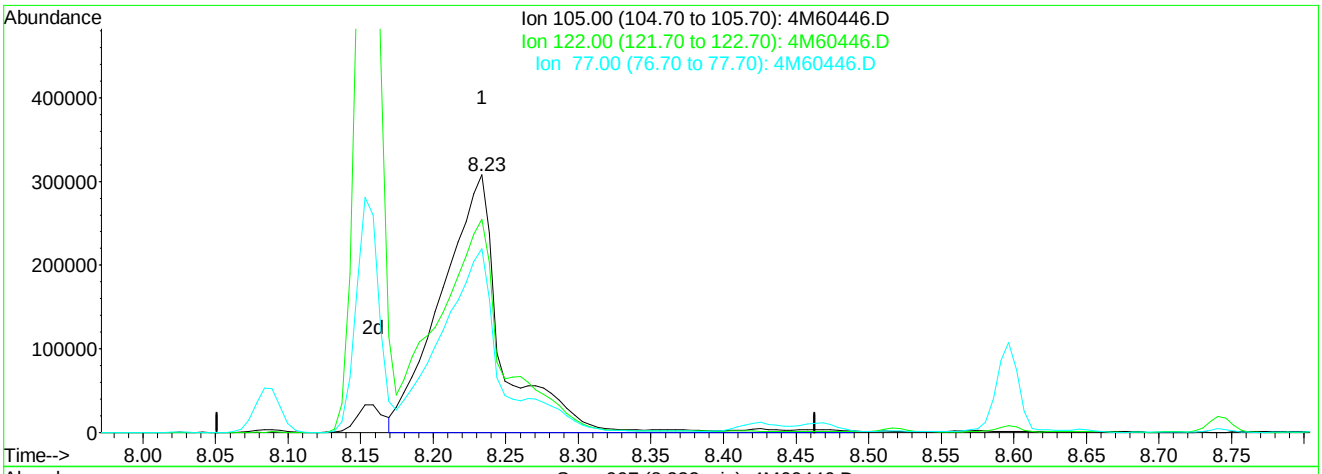
Ion	Exp%	Act%
105.00	100	100
122.00	87.10	111.94
77.00	70.40	62.20
0.00	0.00	0.00

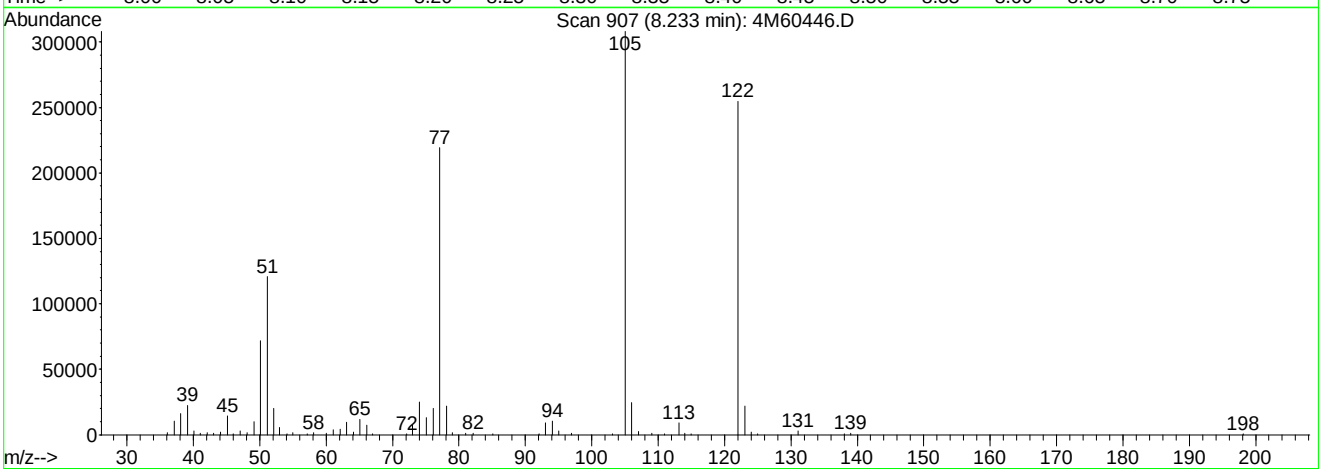
4M60446.D MEGAMIX.M Thu Apr 19 14:24:49 2012

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

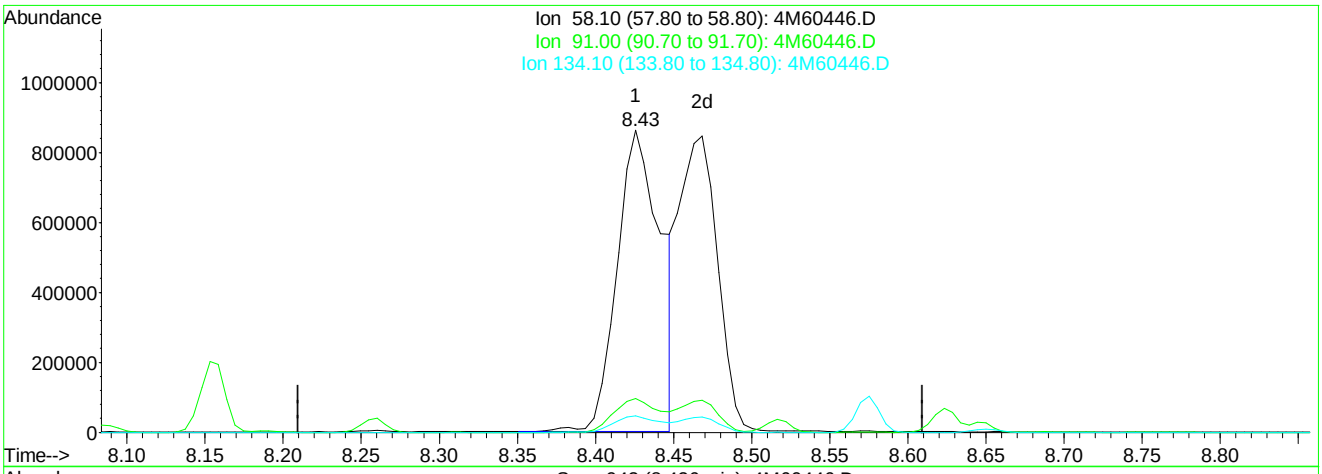
Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41

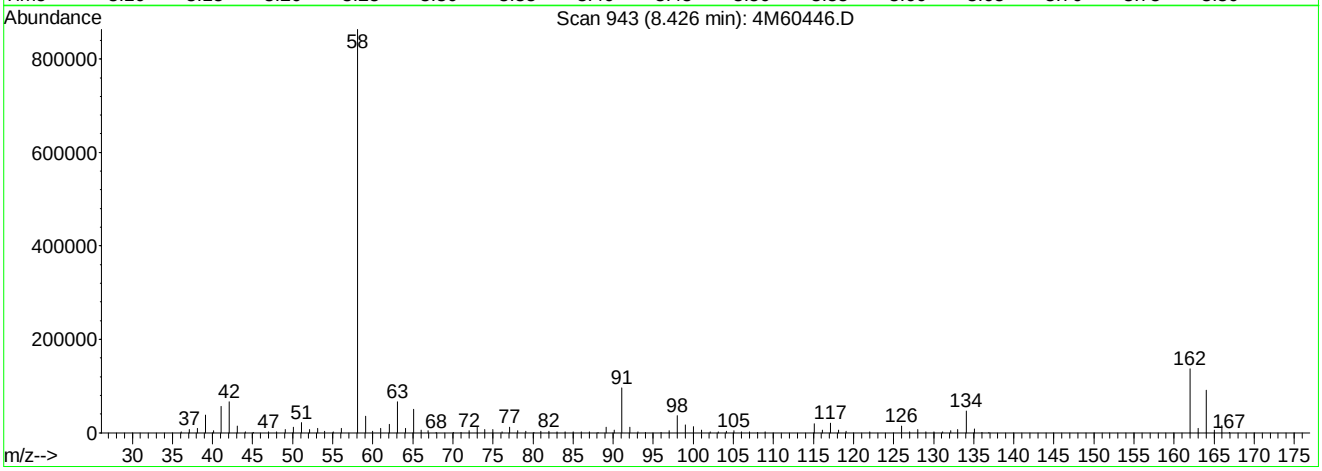
#2 - Data system splits the peak incorrectly or integrates a false peak as a rider peak

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

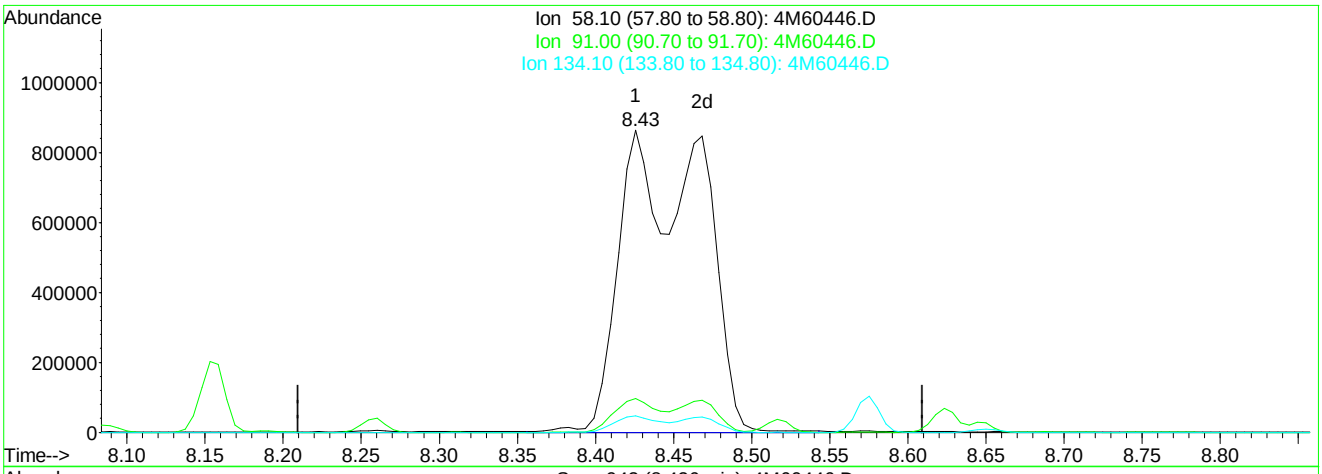
Ion	Exp%	Act%
58.10	100	100
91.00	12.60	11.80
134.10	6.20	5.71
0.00	0.00	0.00

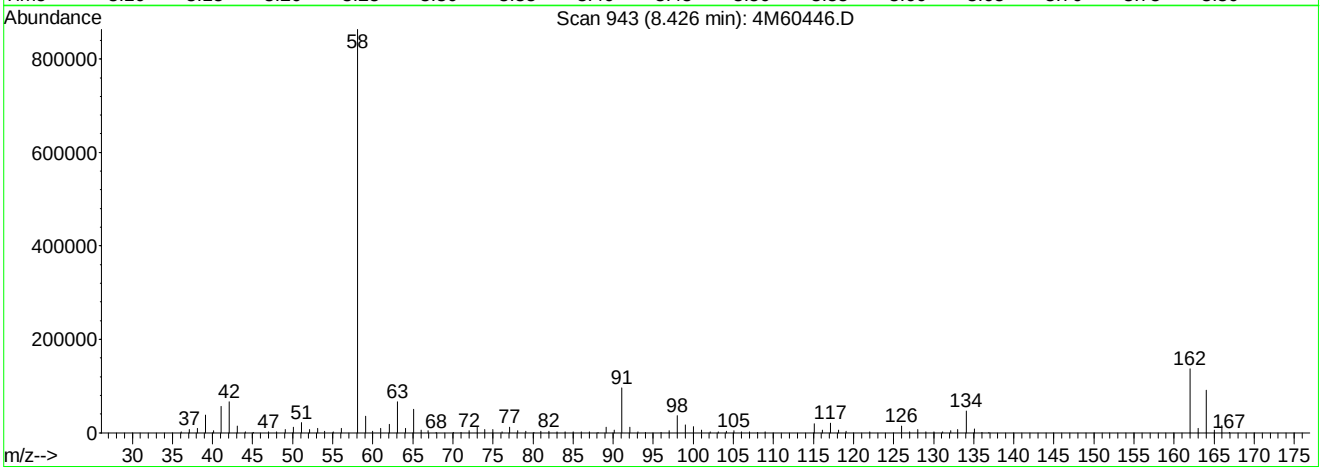
4M60446.D MEGAMIX.M Thu Apr 19 14:24:58 2012

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

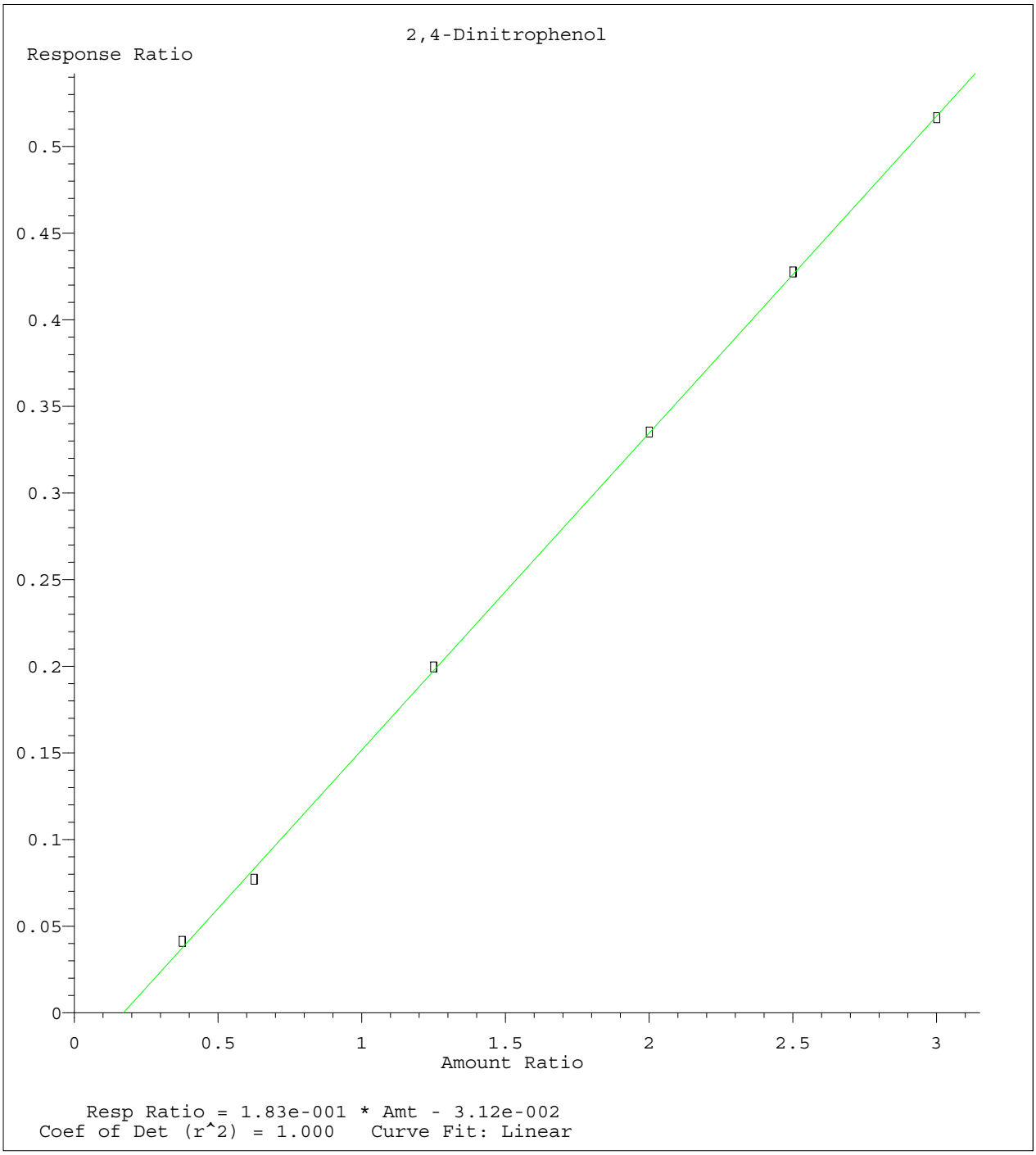
response 3126203

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

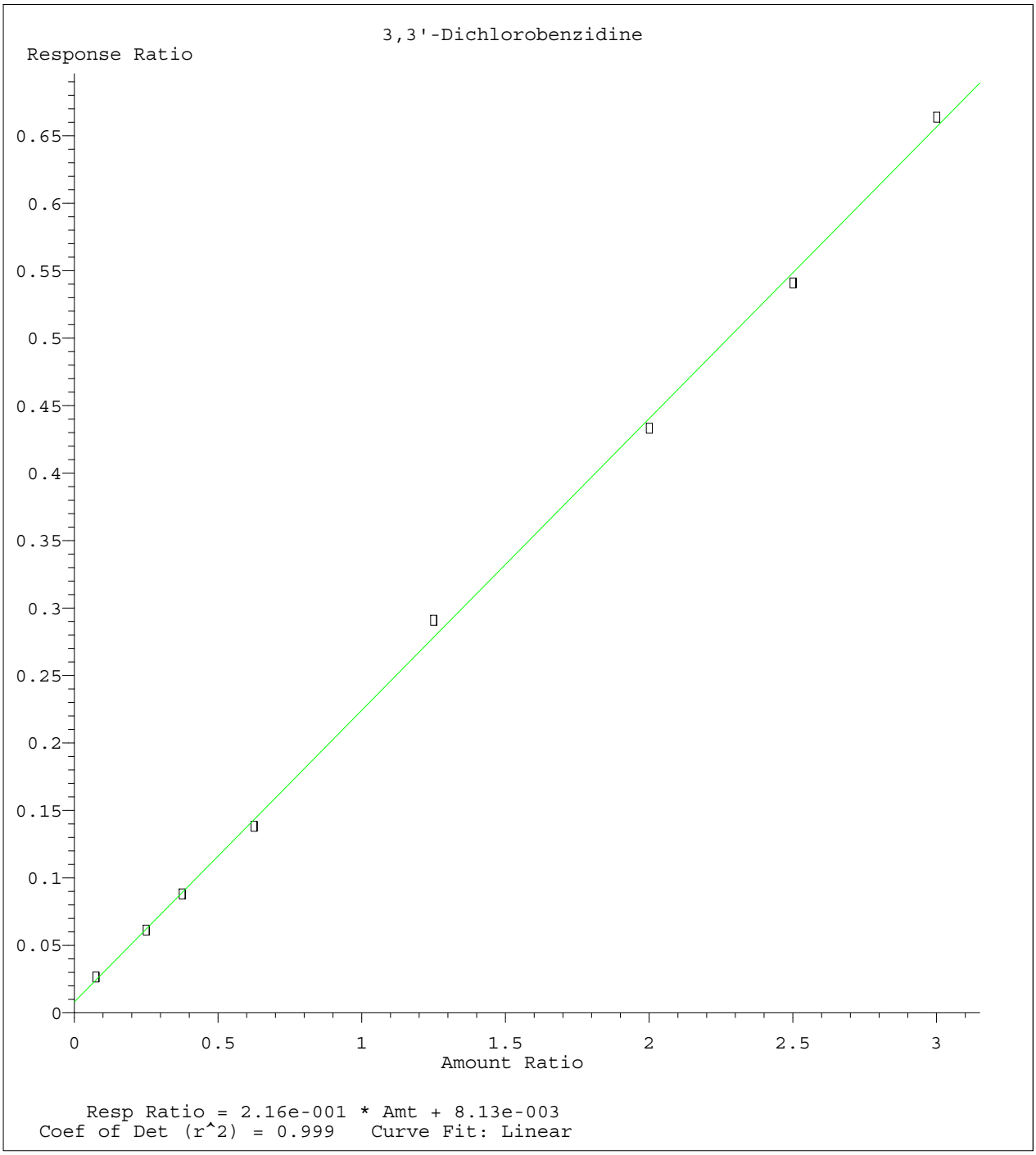
4M60446.D MEGAMIX.M Thu Apr 19 2012

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

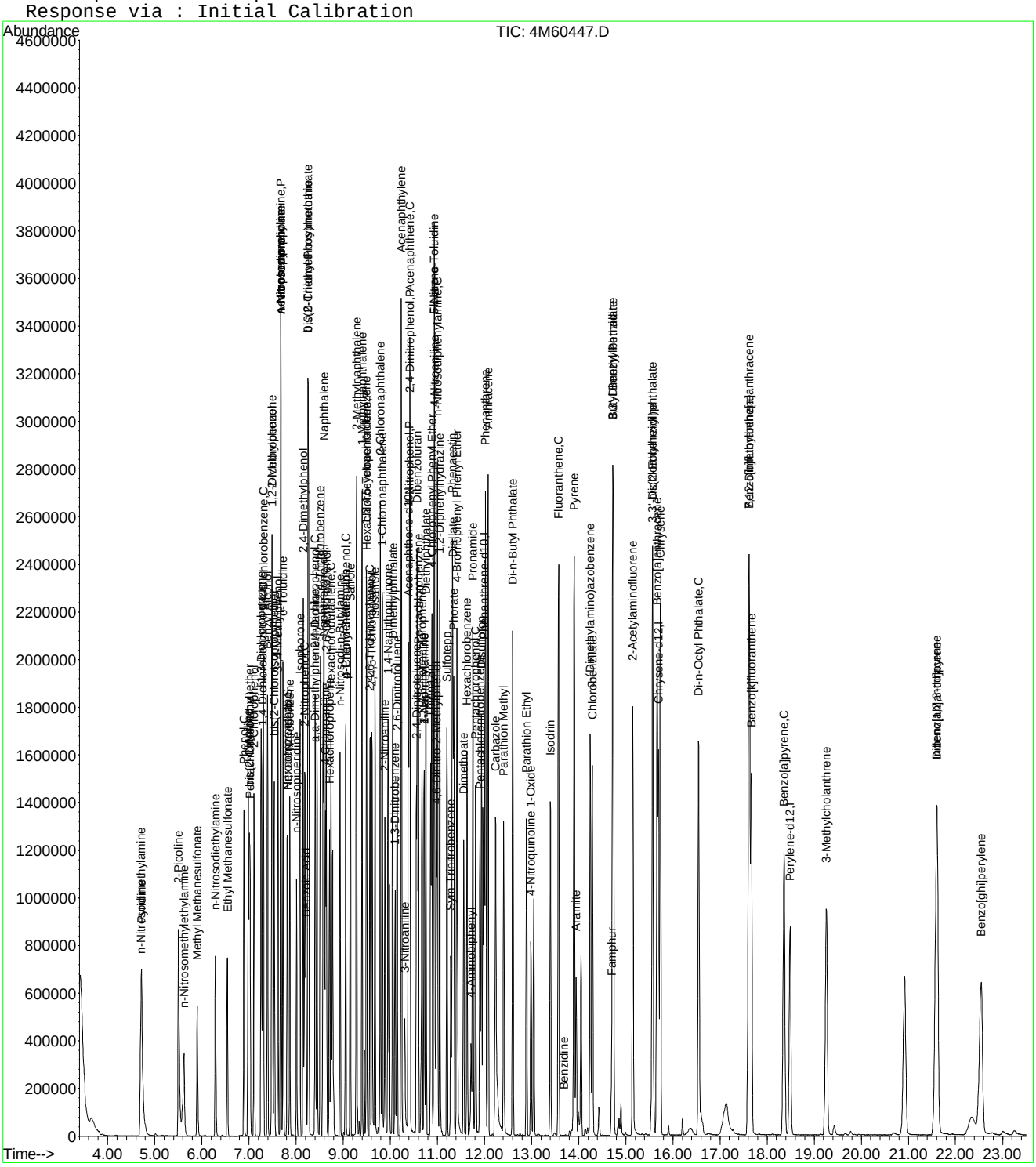
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
98)	4-Aminobiphenyl	11.72	169	299707	53.6701 ug/ml	100
99)	Pentachlorophenol	11.81	266	219981	65.8011 ug/ml	100
100)	Pronamide	11.75	173	435376	56.0268 ug/ml	100
101)	Pentachloronitrobenzene	11.90	237	100661	54.9377 ug/ml	99
102)	Disulfoton	11.93	88	465671	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

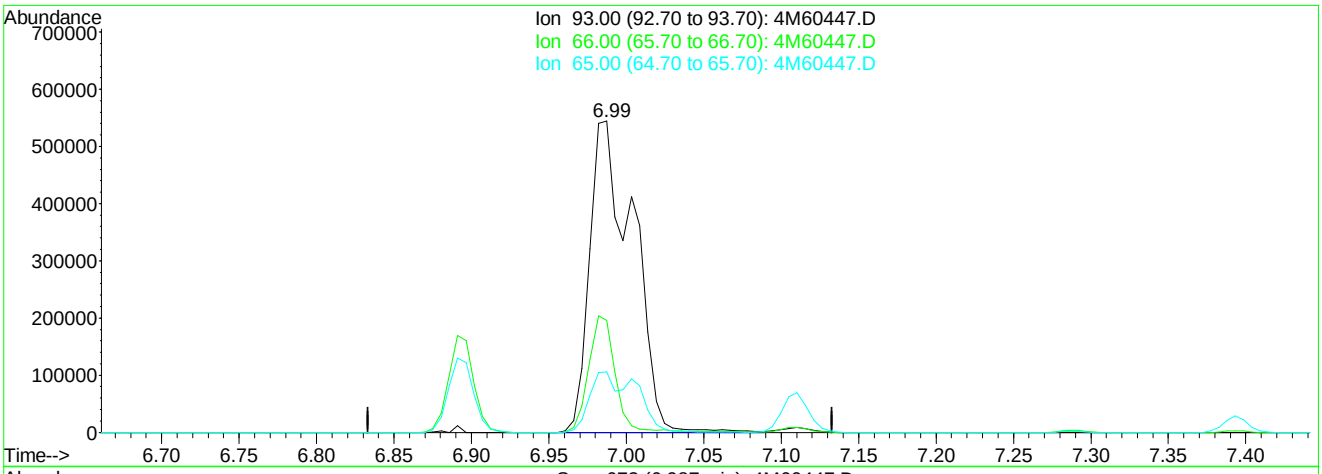
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Fri Apr 20 08:27:42 2012
Response via : Initial Calibration

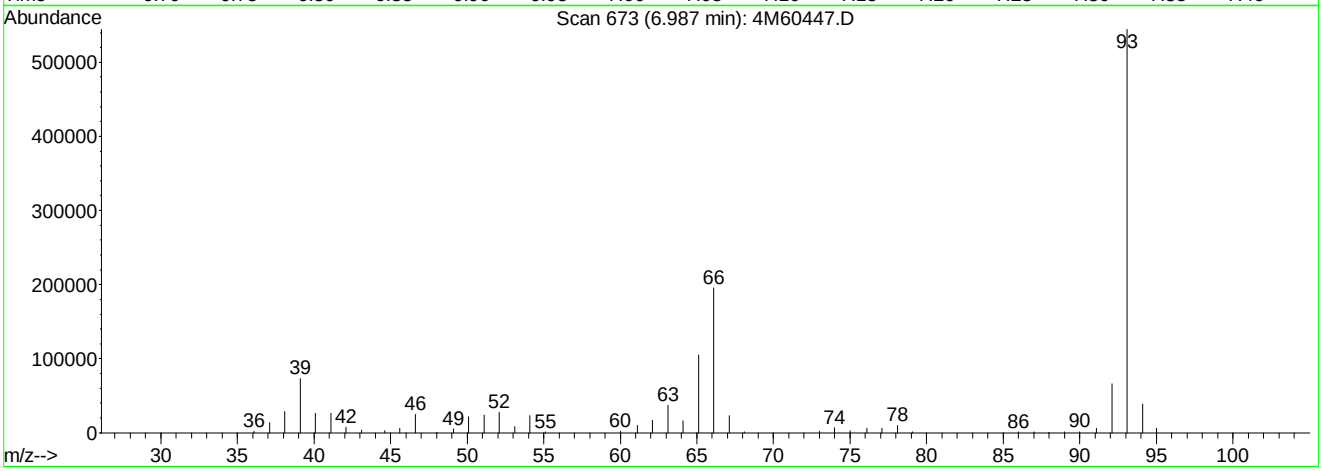


Quantitation Report (Qedit)

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

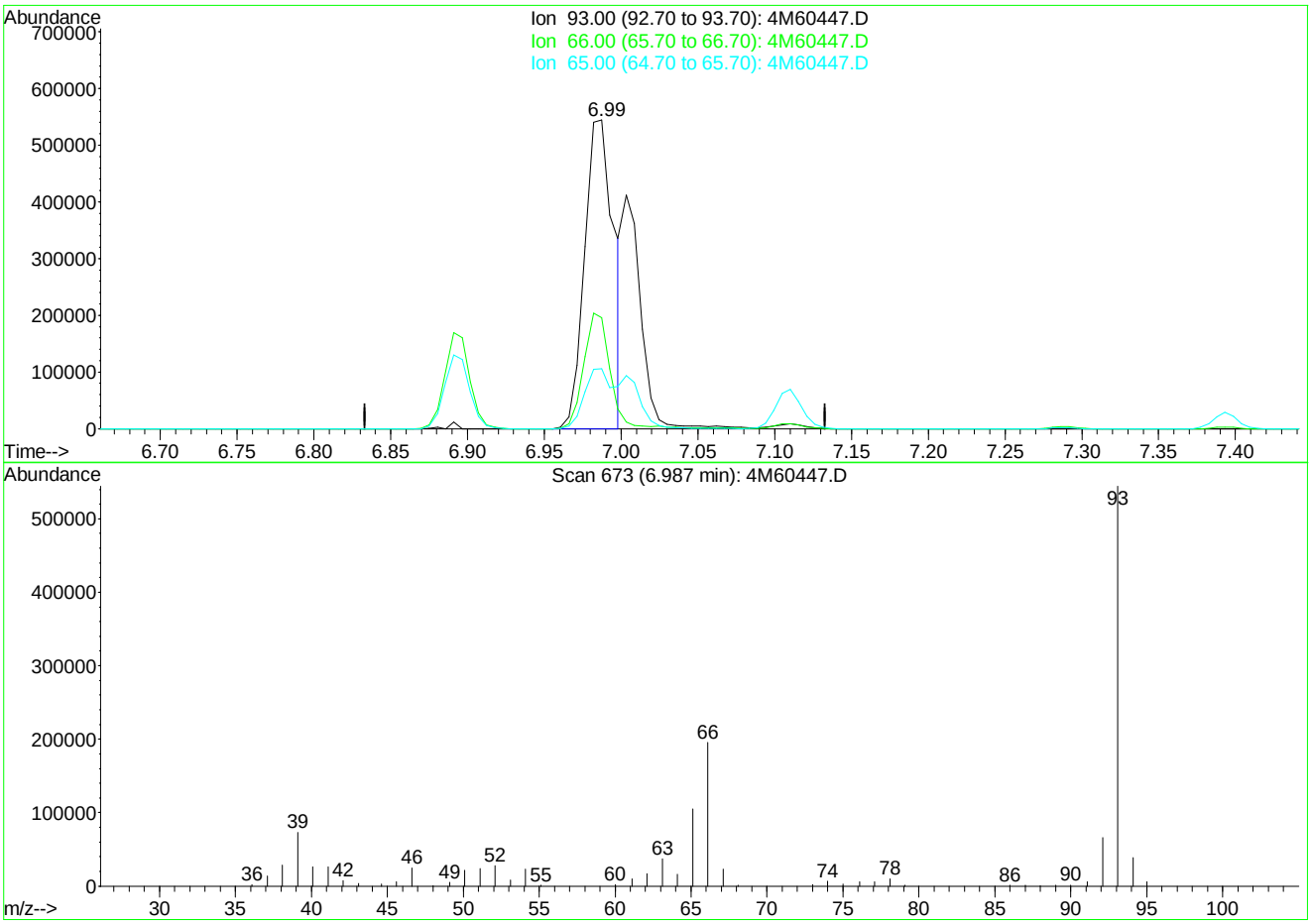
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.26
65.00	29.20	13.53#
0.00	0.00	0.00

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

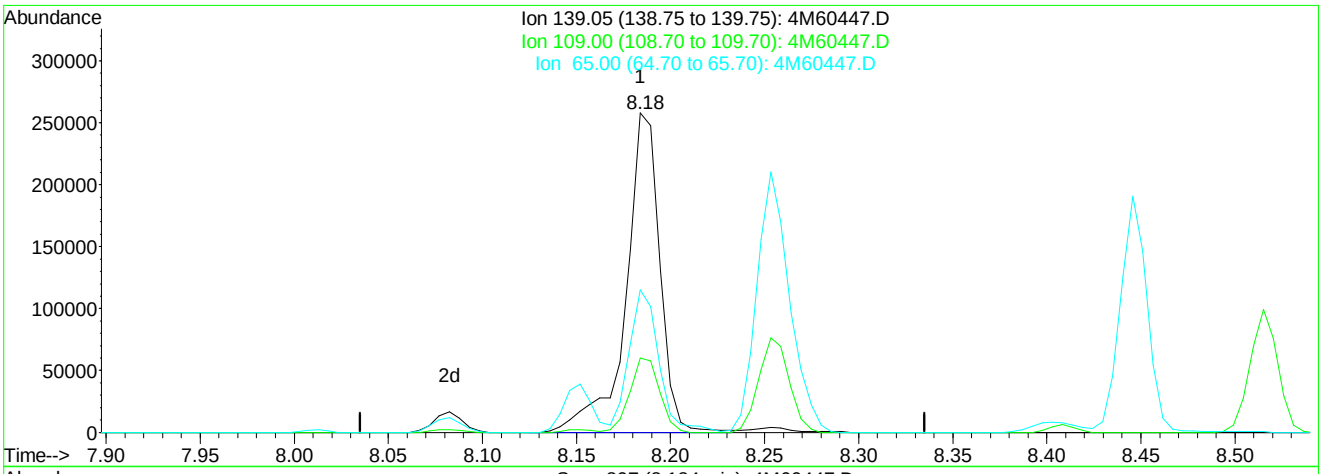
Analyst: 04/20/2012 09:30 Supervisor: 04/20/2012 11:41

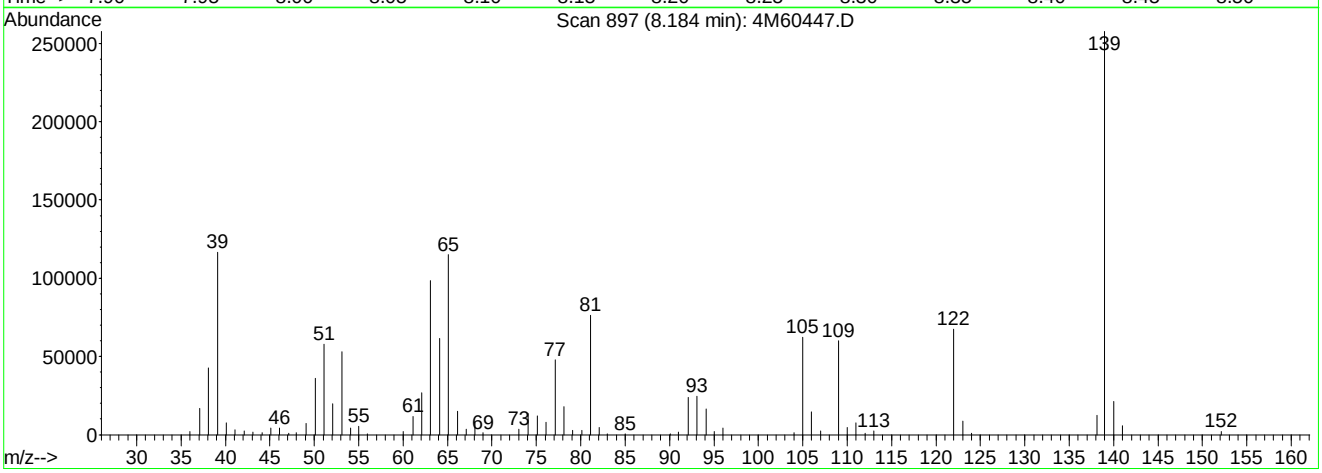
#3 - Improperly integrated isomers and/or coeluting compounds

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

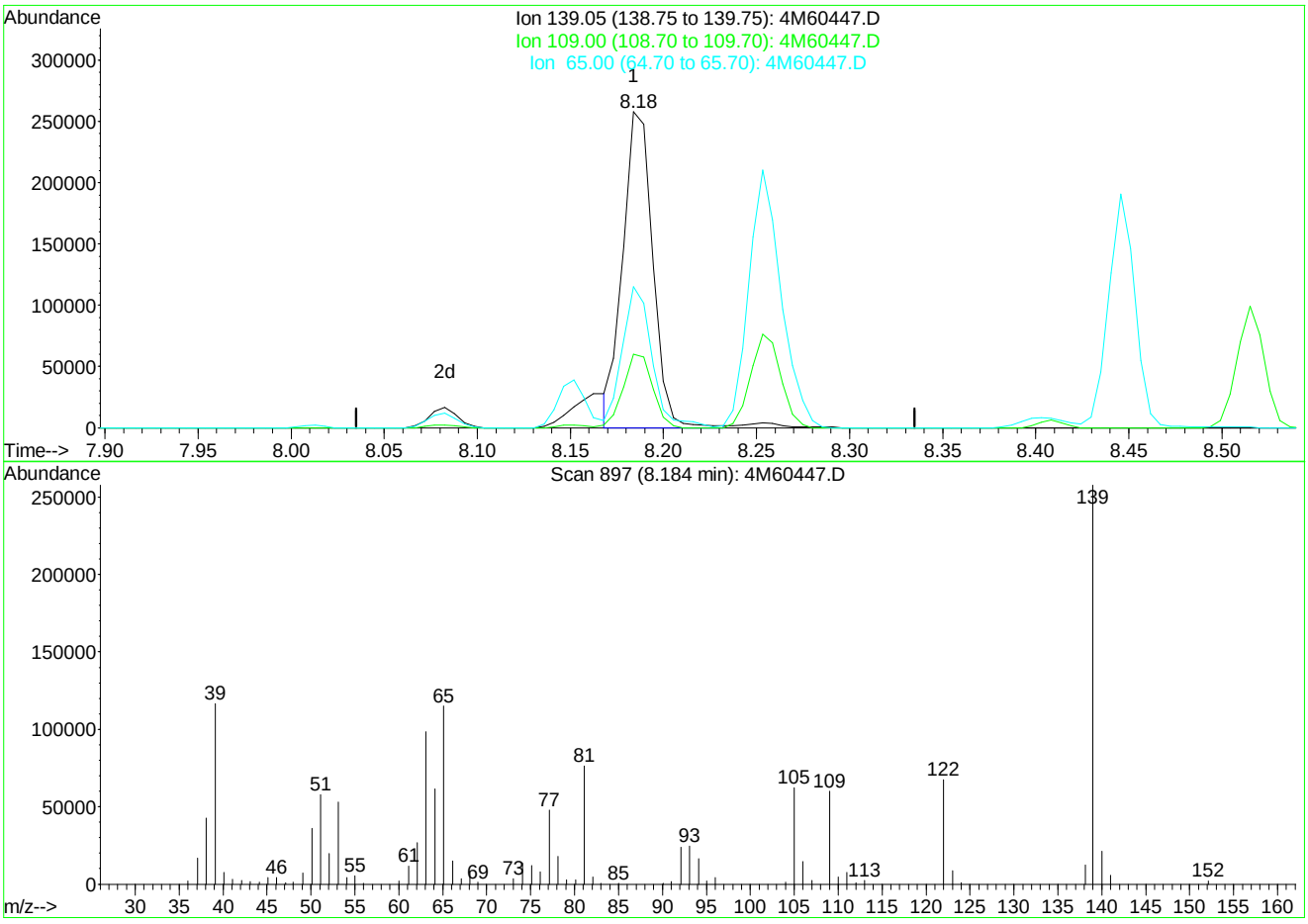
Ion	Exp%	Act%
139.05	100	100
109.00	22.80	20.32
65.00	43.50	39.41
0.00	0.00	0.00

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 3 2012

Analyst: 04/20/2012 09:31 Supervisor: 04/20/2012 11:41

#3 - Improperly integrated isomers and/or coeluting compounds

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60448.D Vial: 11
Acq On : 19 Apr 2012 14:33 Operator: CAA
Sample : WG395394-11 50PPM 1,4-Dioxane Alt Src ST Inst : HPMS4
Misc : 1,1 STD50848 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:57:16 2012 Quant Results File: MEGAMIX.RES

Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Thu Apr 19 14:27:47 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

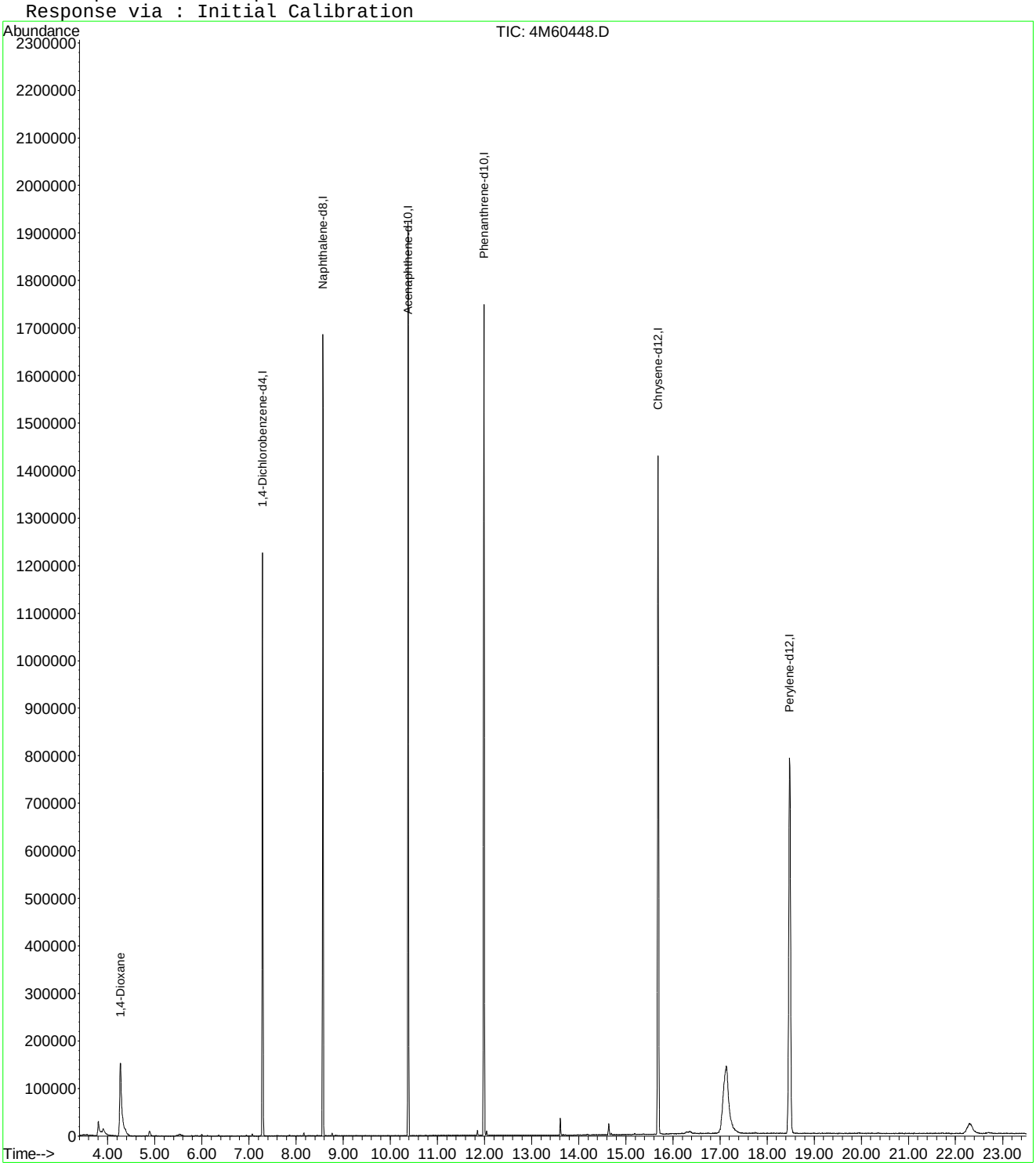
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	241408	40.00	ug/ml	0.00
30) Naphthalene-d8	8.57	136	908072	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.38	164	500473	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.99	188	872547	40.00	ug/ml	0.00
113) Chrysene-d12	15.68	240	832225	40.00	ug/ml	-0.01
128) Perylene-d12	18.48	264	818814	40.00	ug/ml	-0.01
System Monitoring Compounds						
8) 2-Fluorophenol	0.00	112	0	0.0000	ug/ml	
Spiked Amount 100.000	Range 21 - 100		Recovery =	0.00%#		
12) Phenol-d5	0.00	99	0	0.0000	ug/ml	
Spiked Amount 100.000	Range 10 - 94		Recovery =	0.00%#		
31) Nitrobenzene-d5	0.00	82	0	0.0000	ug/ml	
Spiked Amount 50.000	Range 35 - 114		Recovery =	0.00%#		
59) 2-Fluorobiphenyl	0.00	172	0	0.0000	ug/ml	
Spiked Amount 50.000	Range 43 - 116		Recovery =	0.00%#		
86) 2,4,6-Tribromophenol	0.00	330	0	0.0000	ug/ml	
Spiked Amount 100.000	Range 10 - 123		Recovery =	0.00%#		
117) p-Terphenyl-d14	0.00	244	0	0.0000	ug/ml	
Spiked Amount 50.000	Range 33 - 141		Recovery =	0.00%#		
Target Compounds						Qvalue
2) 1,4-Dioxane	4.27	88	180346	59.9411	ug/ml#	91

(#) = qualifier out of range (m) = manual integration
4M60448.D MEGAMIX.M Fri Apr 20 08:40:02 2012 Page 1

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\041912\4M60448.D Vial: 11
Acq On : 19 Apr 2012 14:33 Operator: CAA
Sample : WG395394-11 50PPM 1,4-Dioxane Alt Src ST Inst : HPMS4
Misc : 1,1 STD50848 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 14:57 2012 Quant Results File: MEGAMIX.RES

Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Fri Apr 20 08:27:42 2012
Response via : Initial Calibration



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

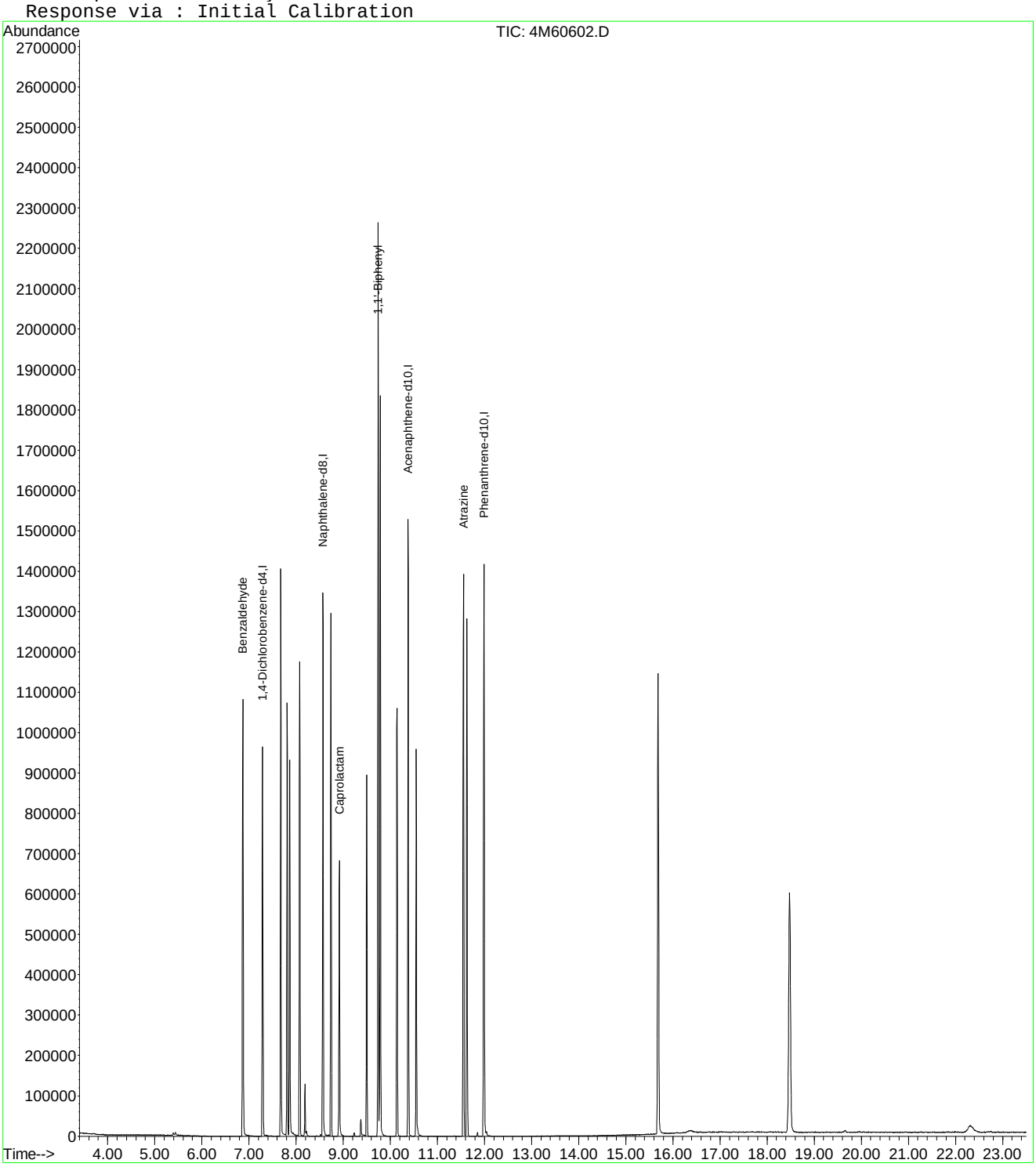
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	198785	40.00	ug/mL	0.00
3) Naphthalene-d8	8.57	136	762076	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.38	164	425534	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.99	188	753240	40.00	ug/mL	0.00
Target Compounds						Qvalue
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

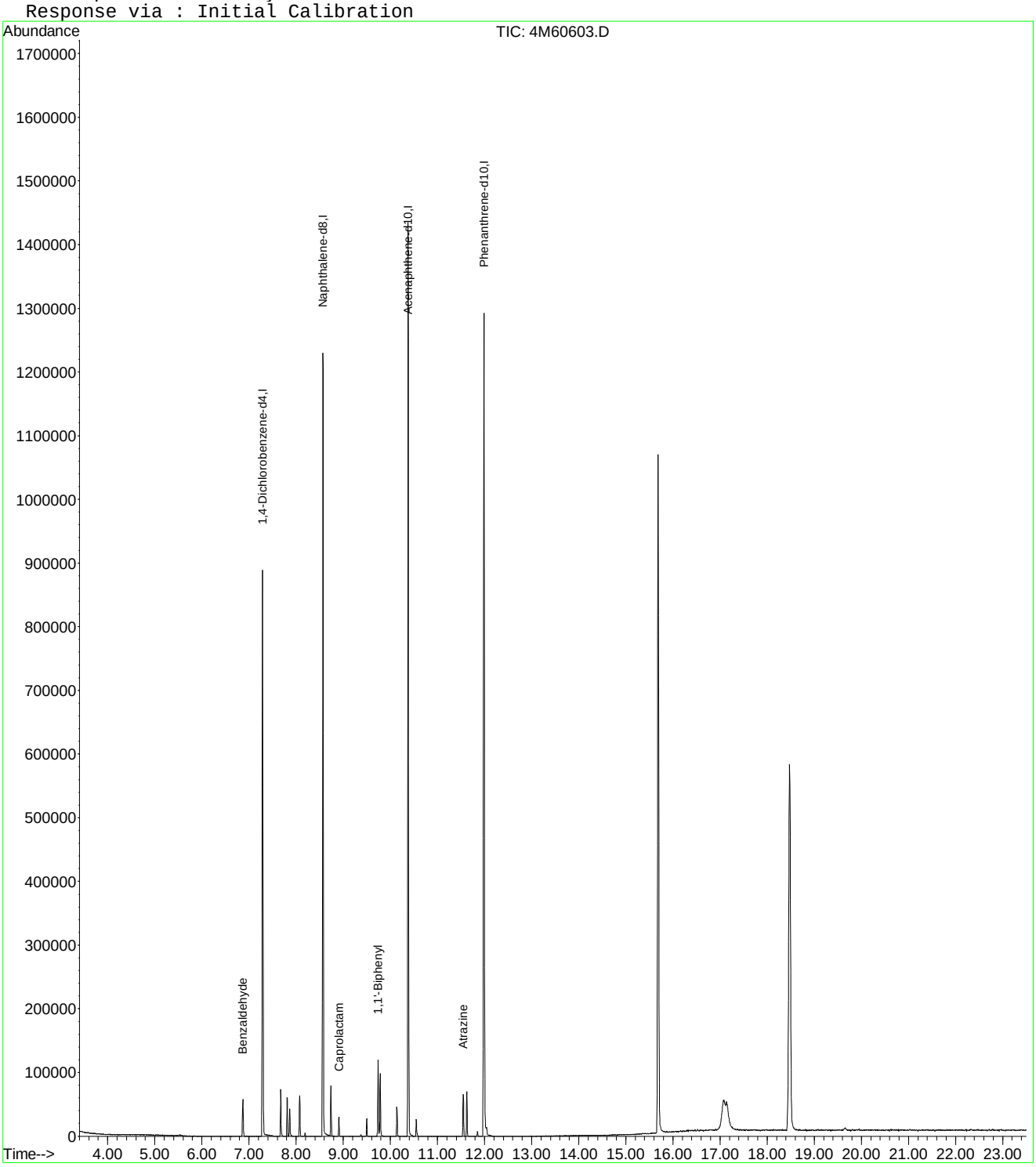
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	184318	40.00	ug/mL	0.00
3) Naphthalene-d8	8.57	136	711419	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.38	164	396131	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.99	188	705172	40.00	ug/mL	0.00
Target Compounds						Qvalue
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



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

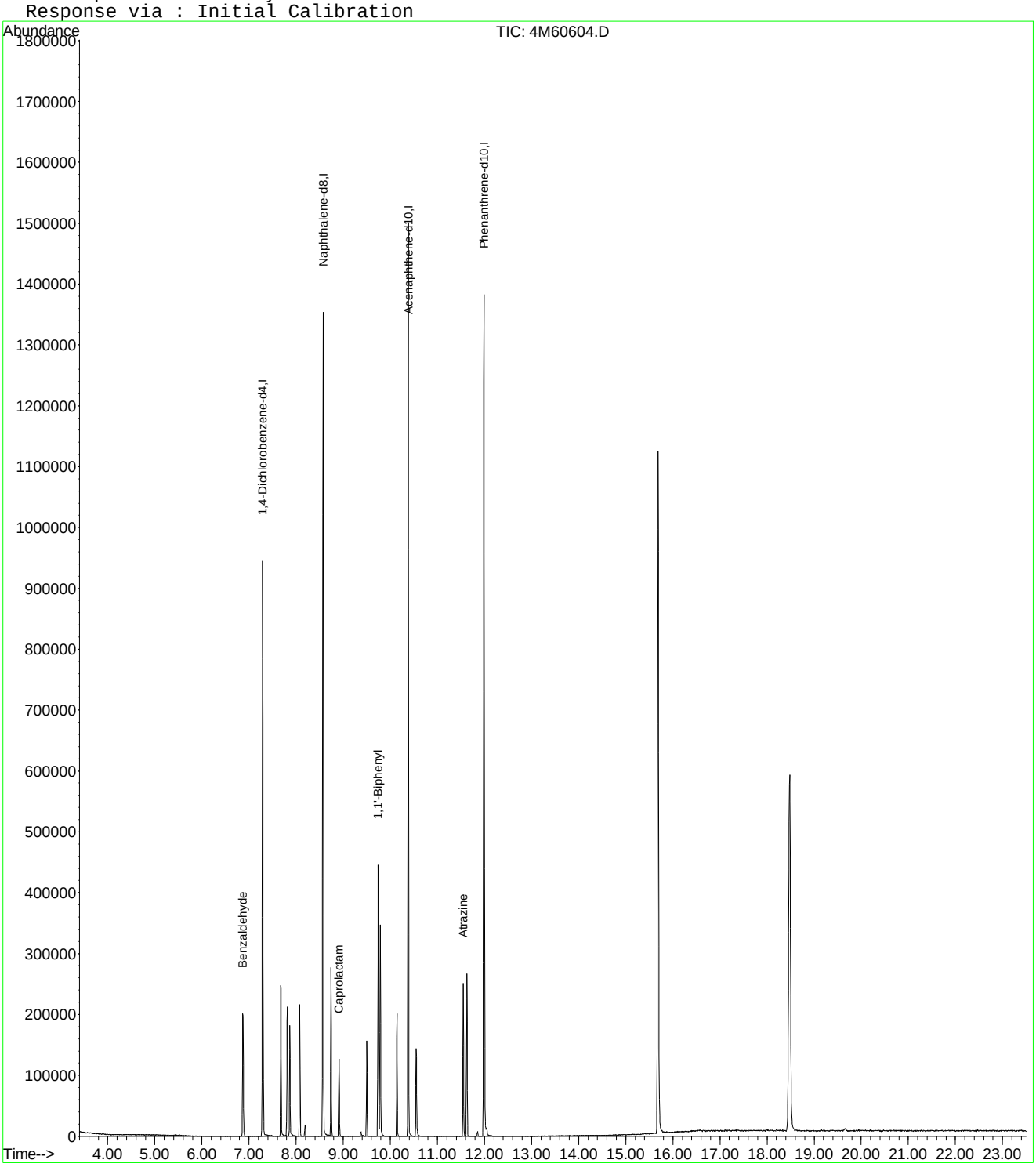
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	191577	40.00	ug/mL	0.00
3) Naphthalene-d8	8.57	136	738266	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.38	164	412816	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.99	188	727410	40.00	ug/mL	0.00
Target Compounds						Qvalue
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

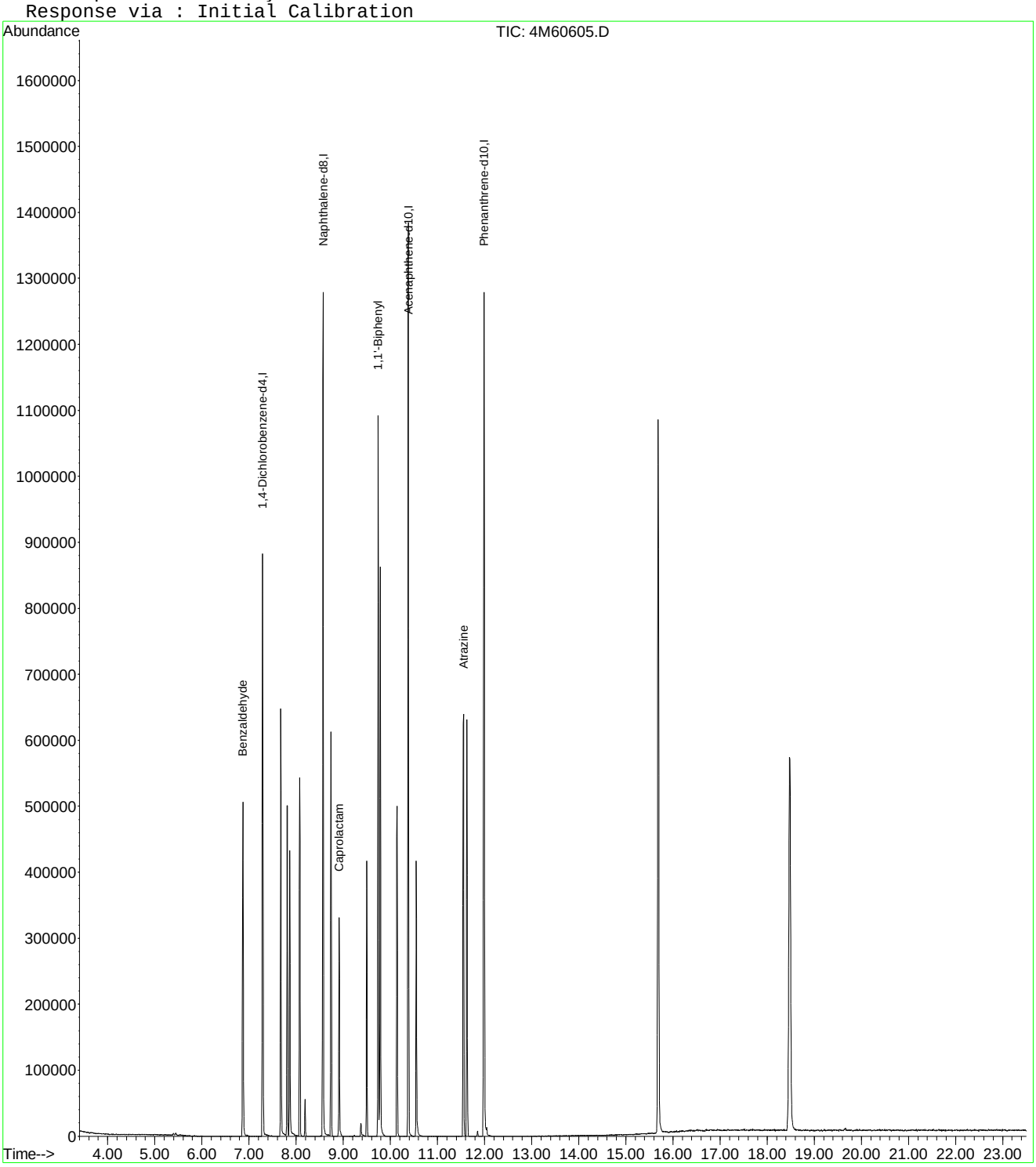
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	188543	40.00	ug/mL	0.00
3) Naphthalene-d8	8.57	136	712737	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.38	164	395022	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.99	188	719816	40.00	ug/mL	0.00
Target Compounds						Qvalue
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

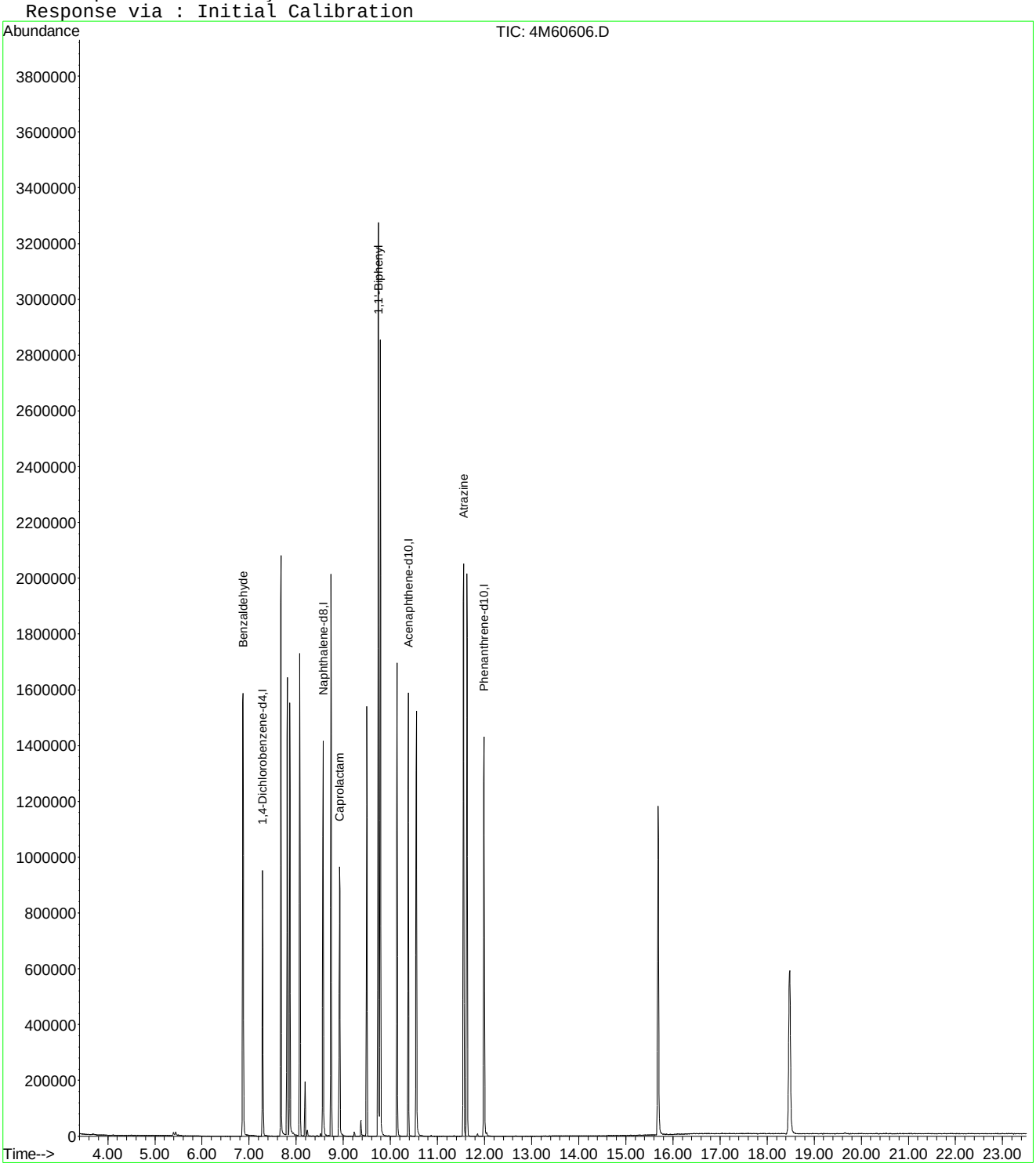
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	195973	40.00	ug/mL	0.00
3) Naphthalene-d8	8.57	136	750611	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.38	164	425817	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.99	188	761381	40.00	ug/mL	0.00
Target Compounds						Qvalue
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

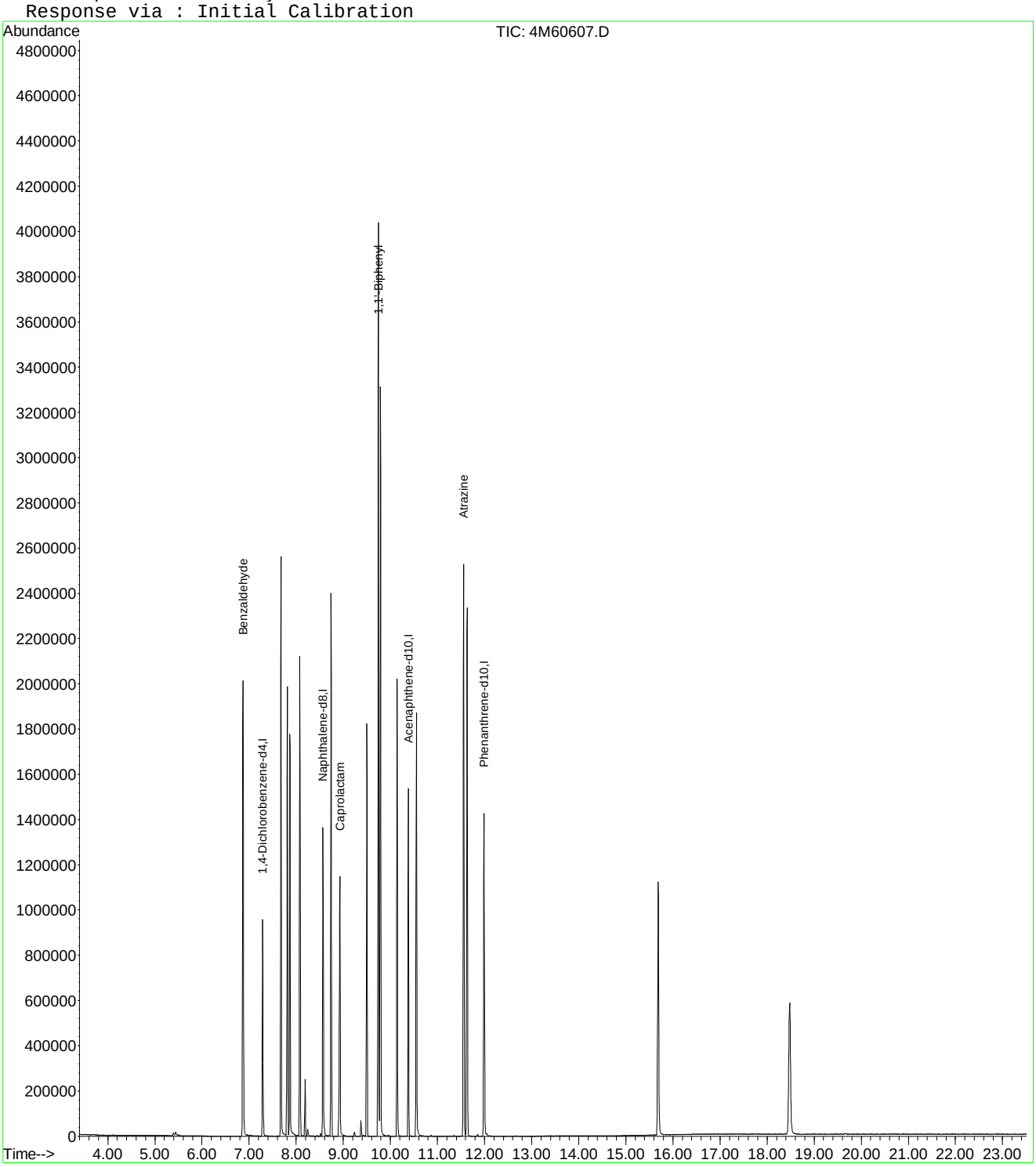
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	191003	40.00	ug/mL	0.00
3) Naphthalene-d8	8.57	136	734165	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.38	164	416593	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.99	188	754784	40.00	ug/mL	0.00
Target Compounds						Qvalue
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

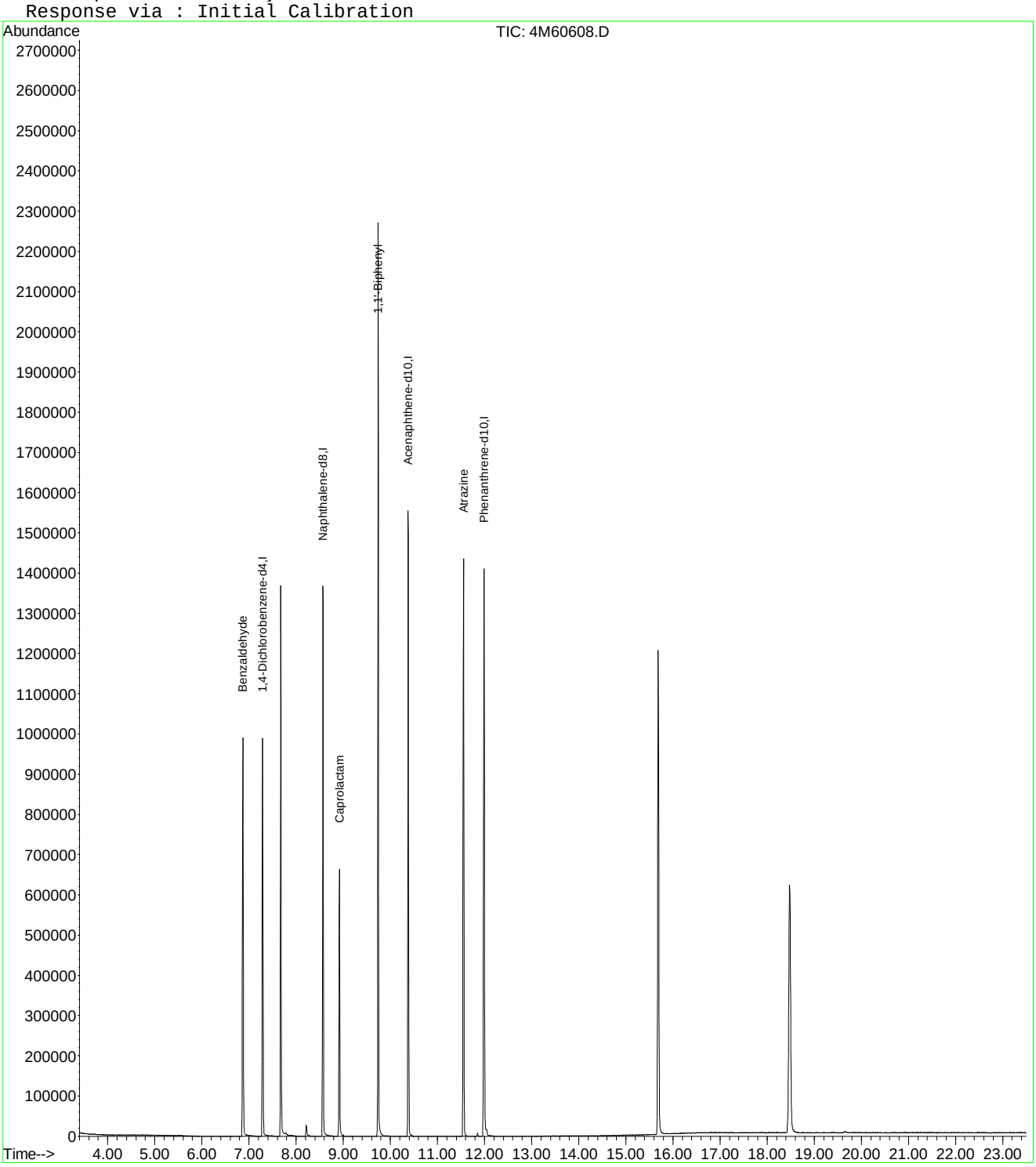
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.29	152	209920	40.00	ug/mL	0.00
3) Naphthalene-d8	8.57	136	790964	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.38	164	444492	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.99	188	786510	40.00	ug/mL	0.00
Target Compounds						Qvalue
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

Quantitation Report (Not Reviewed)

Data File : I:\MSDCHEM\1\DATA\050112\4M60608.D Vial: 9
Acq On : 1 May 2012 17:31 Operator: CAA
Sample : WG396709-07 50PPM TCL Alt Src STD Inst : HPMS4
Misc : 1,1 STD51166 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 2 13:31 2012 Quant Results File: TCL.RES

Method : I:\MSDCHEM\1\METHODS\TCL.M (RTE Integrator)
Title : OVD MSS01 827-TCL INITIAL CALIBRATION 05/01/12
Last Update : Wed May 02 13:31:17 2012
Response via : Initial Calibration



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

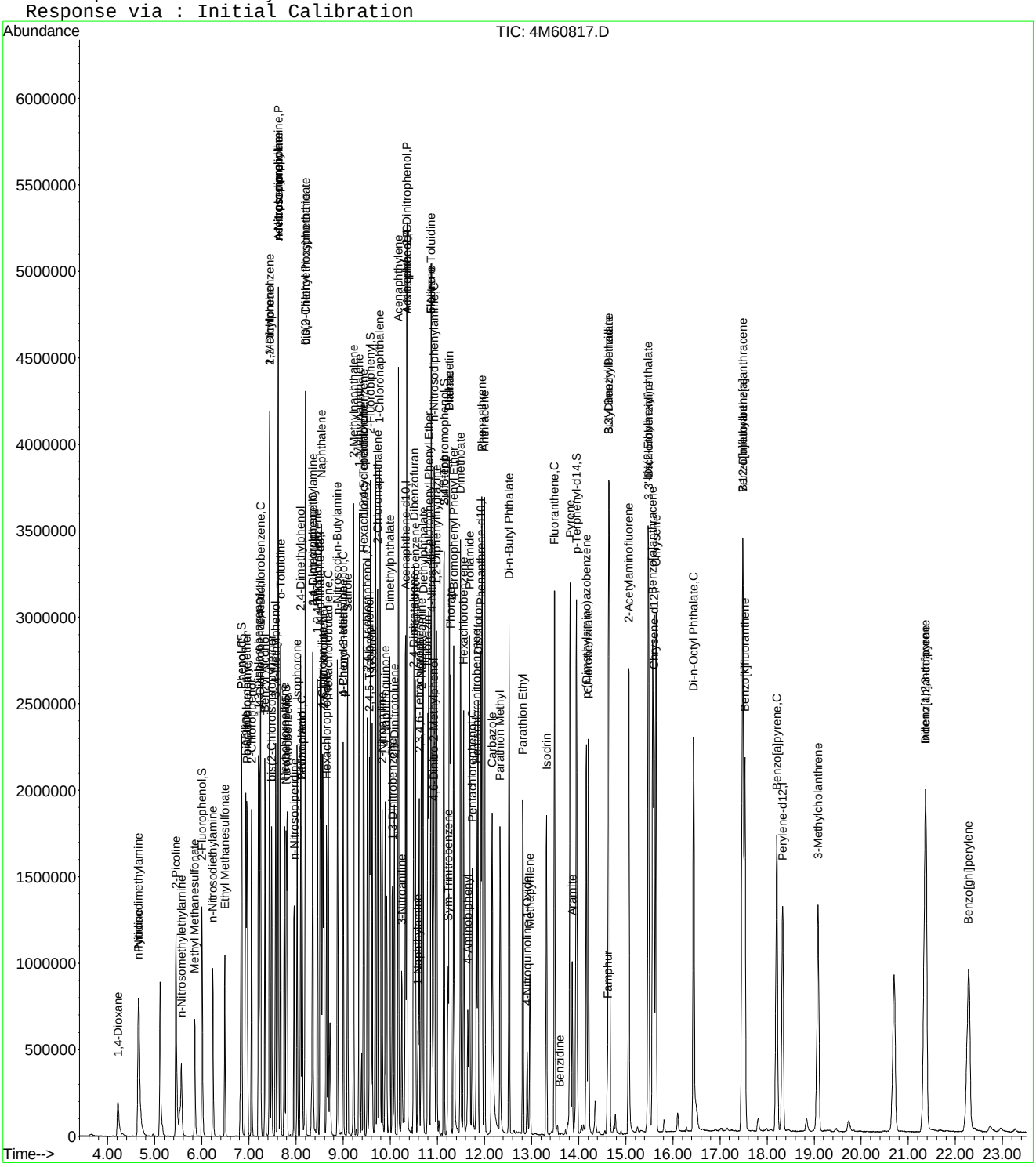
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.49	87	437047	53.6795	ug/ml	98
98)	4-Aminobiphenyl	11.65	169	511029	58.4551	ug/ml	99
99)	Pentachlorophenol	11.74	266	237796	47.0946	ug/ml	99
100)	Pronamide	11.69	173	592669	50.4965	ug/ml	99
101)	Pentachloronitrobenzene	11.83	237	153211	55.3627	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

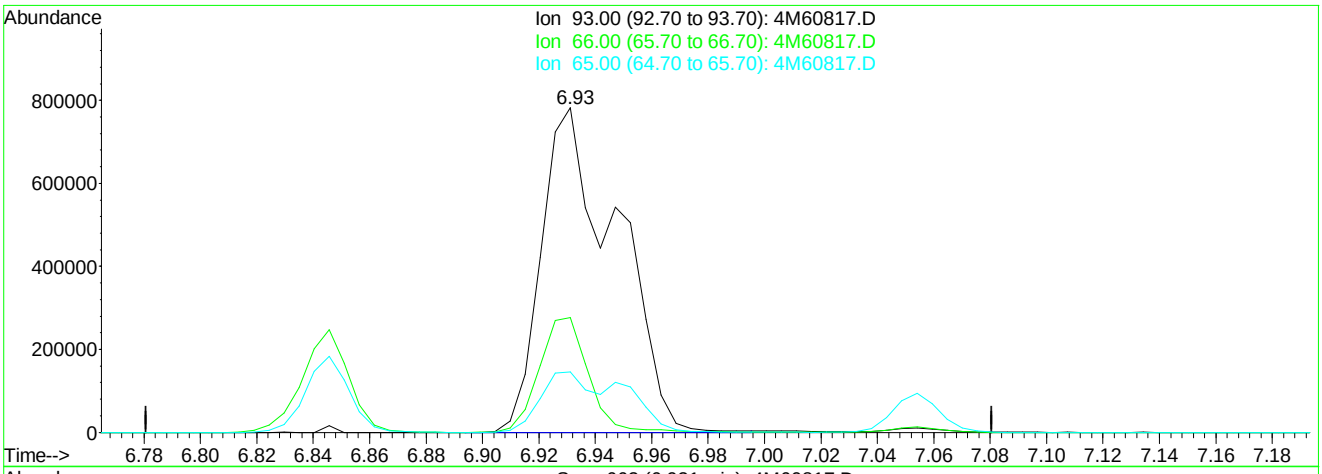
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Mon May 14 11:40:21 2012
Response via : Initial Calibration

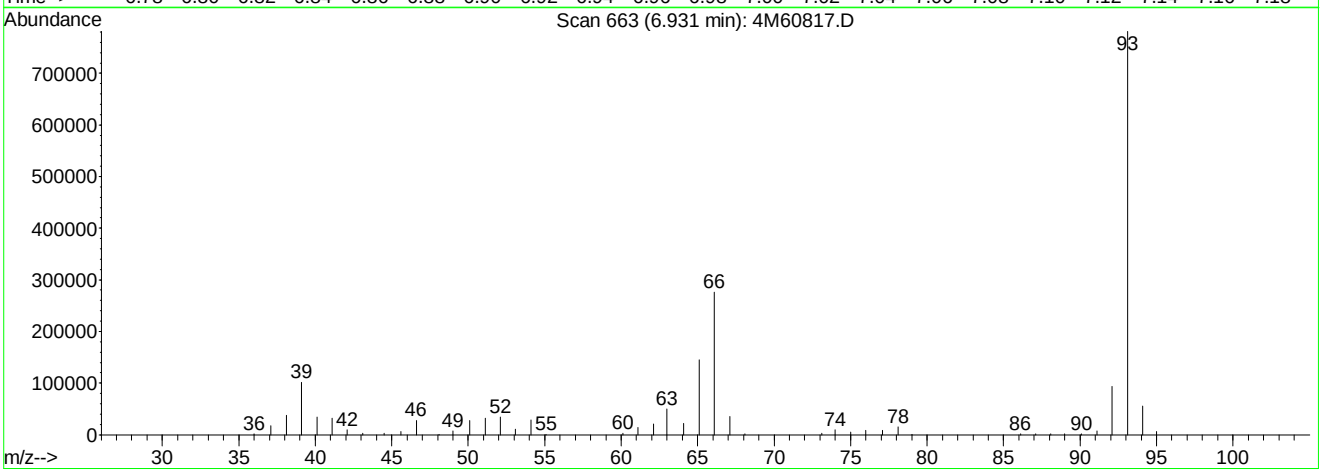


Quantitation Report (Qedit)

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

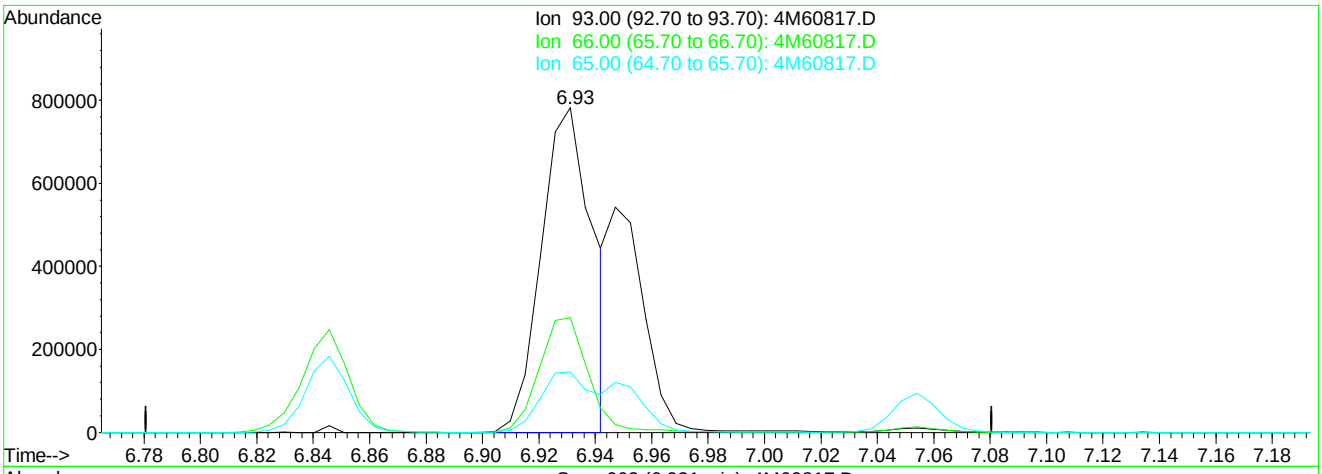
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.27
65.00	29.20	13.17#
0.00	0.00	0.00

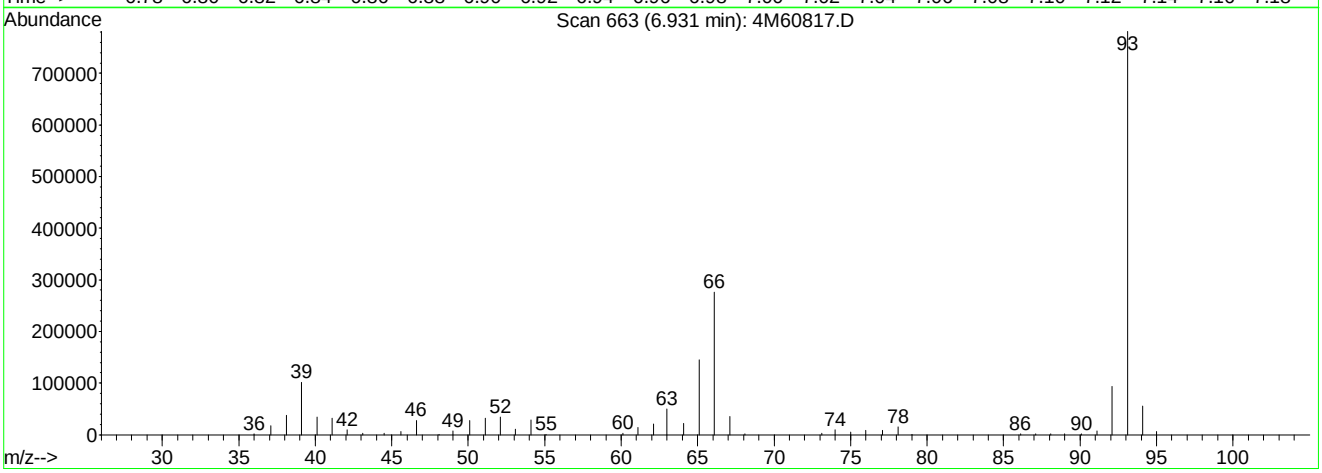
4M60817.D MEGAMIX.M Sun May 13 11:43:55 2012

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

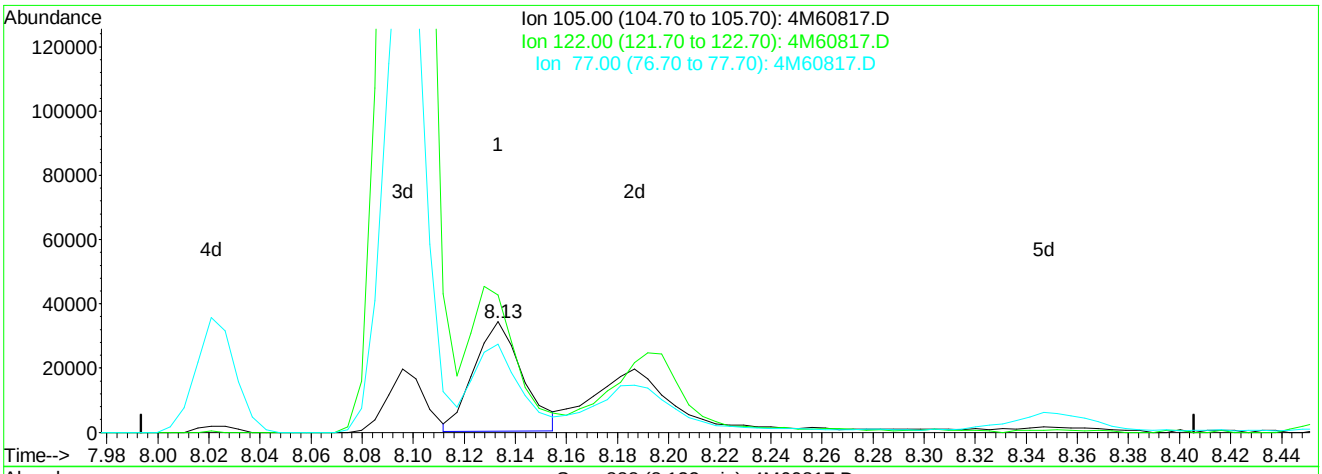
Analyst: 05/14/2012 13:56 Supervisor: 05/14/2012 15:22

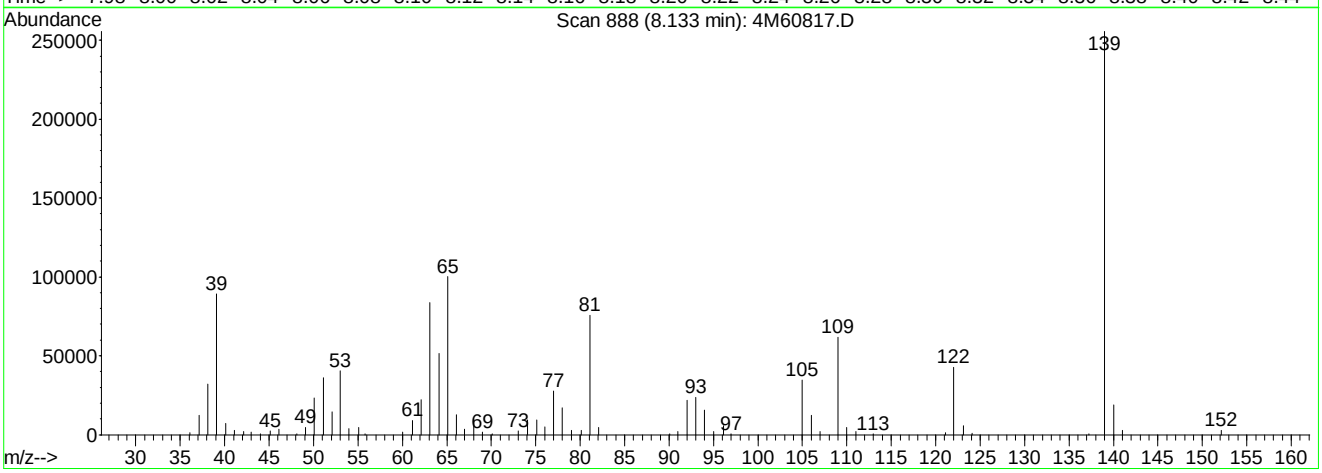
#3 - Improperly integrated isomers and/or coeluting compounds

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

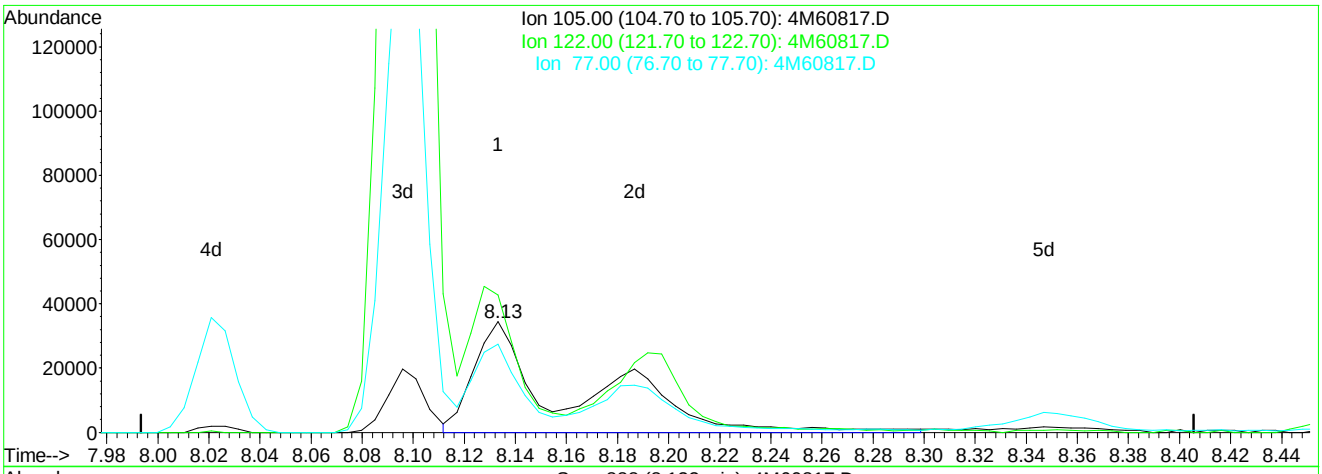
Ion	Exp%	Act%
105.00	100	100
122.00	87.10	126.40#
77.00	70.40	76.39
0.00	0.00	0.00

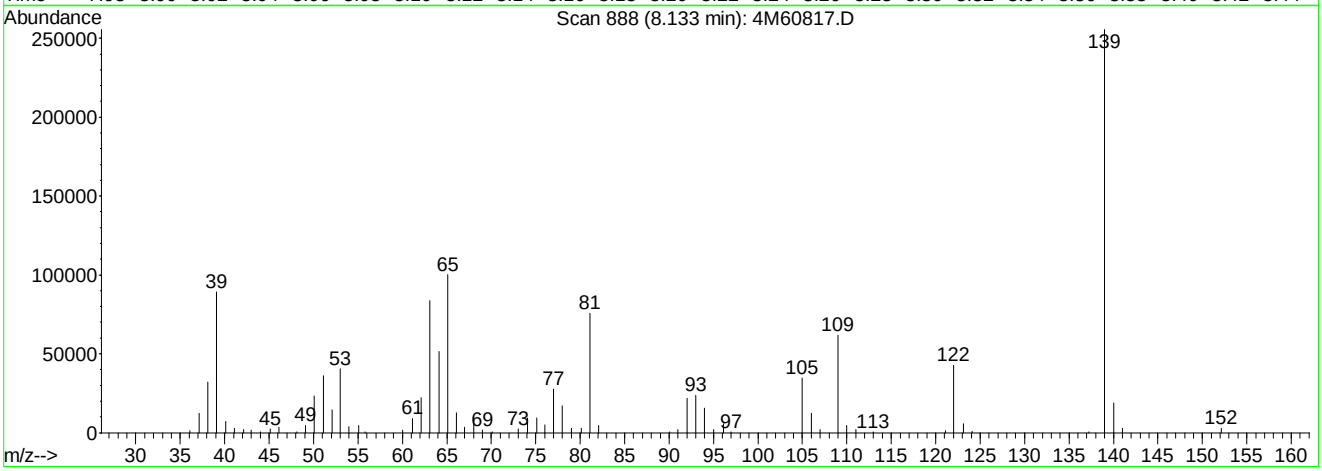
4M60817.D MEGAMIX.M Sun May 13 11:44:08 2012

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

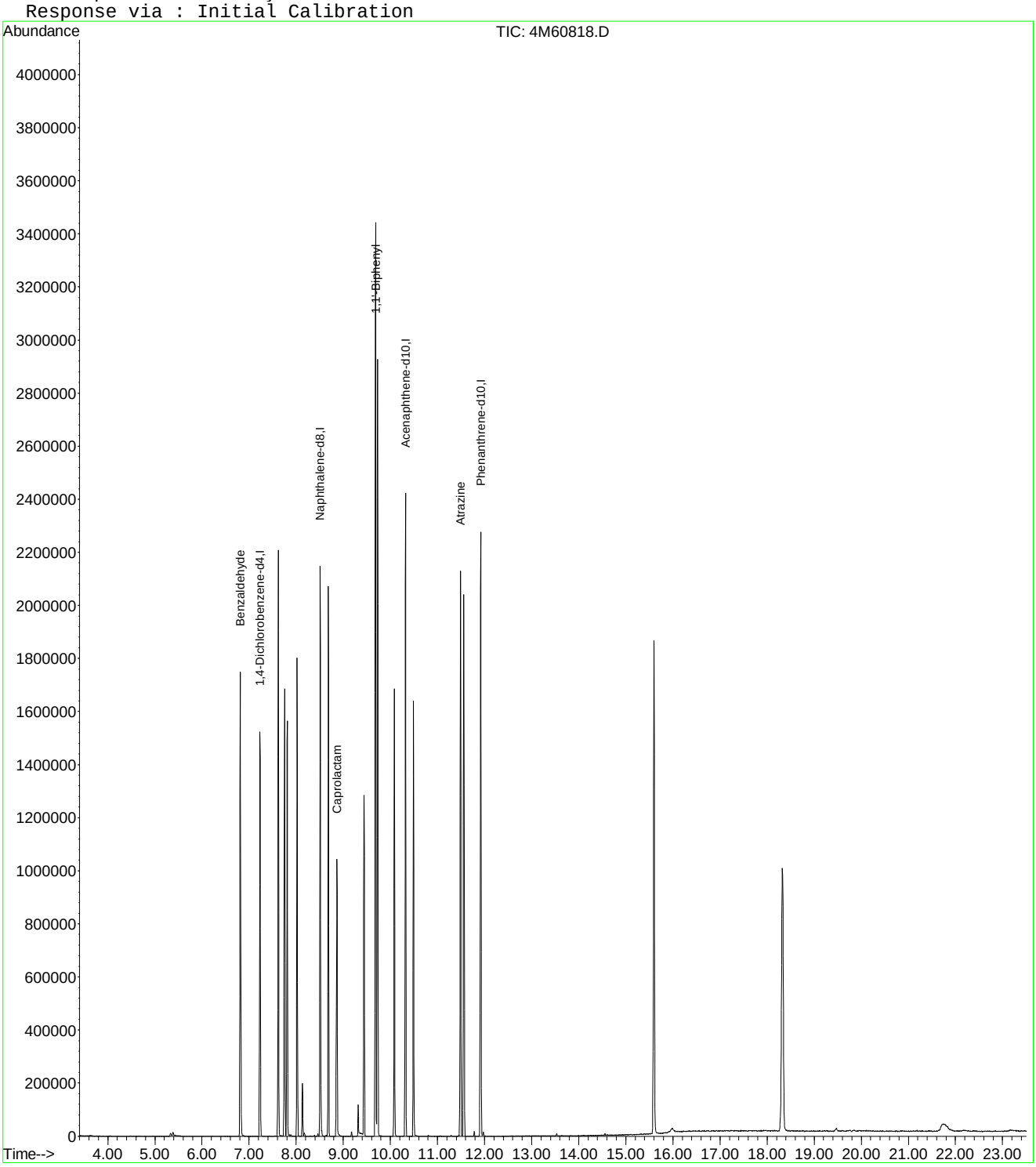
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.23	152	309271	40.00	ug/mL	0.00
3) Naphthalene-d8	8.51	136	1134960	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.32	164	640791	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.92	188	1155753	40.00	ug/mL	0.00
Target Compounds						Qvalue
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\051412\4M60861.D Vial: 2
Acq On : 14 May 2012 8:44 Operator: CAA
Sample : WG397858-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 14 09:08:45 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 09:07:57 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	391649	40.00	ug/ml	0.00
30) Naphthalene-d8	8.51	136	1487779	40.00	ug/ml	0.00
54) Acenaphthene-d10	10.32	164	836475	40.00	ug/ml	0.00
87) Phenanthrene-d10	11.92	188	1516822	40.00	ug/ml	0.00
113) Chrysene-d12	15.60	240	1421927	40.00	ug/ml	0.00
128) Perylene-d12	18.33	264	1334047	40.00	ug/ml	0.00
System Monitoring Compounds						
8) 2-Fluorophenol	6.00	112	577963	48.6723	ug/ml	0.00
Spiked Amount 100.000	Range 21 - 100		Recovery = 48.67%			
12) Phenol-d5	6.83	99	691654	49.7679	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 94		Recovery = 49.77%			
31) Nitrobenzene-d5	7.79	82	642753	51.0794	ug/ml	0.00
Spiked Amount 50.000	Range 35 - 114		Recovery = 102.16%			
59) 2-Fluorobiphenyl	9.58	172	1388444	49.7083	ug/ml	0.00
Spiked Amount 50.000	Range 43 - 116		Recovery = 99.42%			
86) 2,4,6-Tribromophenol	11.14	330	199903	53.5913	ug/ml	0.00
Spiked Amount 100.000	Range 10 - 123		Recovery = 53.59%			
117) p-Terphenyl-d14	13.95	244	1327740	50.6621	ug/ml	0.00
Spiked Amount 50.000	Range 33 - 141		Recovery = 101.32%			
Target Compounds						Qvalue
2) 1,4-Dioxane	4.23	88	238450	48.8506	ug/ml#	96
3) n-Nitrosodimethylamine	4.65	74	346768	47.9769	ug/ml	96
4) Pyridine	4.67	79	607967	47.4446	ug/ml	88
5) 2-Picoline	5.45	93	668113	47.9157	ug/ml	99
6) n-Nitrosomethylethylamine	5.57	88	290201	48.2481	ug/ml	92
7) Methyl Methanesulfonate	5.85	80	344934	50.5114	ug/ml	97
9) n-Nitrosodiethylamine	6.23	102	304481	47.2182	ug/ml	95
10) Ethyl Methanesulfonate	6.49	79	438409	49.0164	ug/ml	98
11) Aniline	6.93	93	1096057m	53.3695	ug/ml	
13) Phenol	6.85	94	724416	48.8170	ug/ml	98
14) bis(2-Chloroethyl)ether	6.95	63	437247	47.0573	ug/ml	94
15) Pentachloroethane	6.97	167	253184	50.5852	ug/ml	99
16) 2-Chlorophenol	7.06	128	651094	48.9964	ug/ml	99
17) 1,3-Dichlorobenzene	7.20	146	728414	49.2476	ug/ml	100
18) 1,4-Dichlorobenzene	7.25	146	740483	49.0854	ug/ml	100
19) Benzyl Alcohol	7.34	108	417383	48.5098	ug/ml	94
20) 1,2-Dichlorobenzene	7.44	146	672280	47.9865	ug/ml	100
21) 2-Methylphenol	7.44	107	486194	47.5142	ug/ml	98
22) bis(2-Chloroisopropyl)ethe	7.48	45	766006	40.1543	ug/ml	91
23) 3-,4-Methylphenol	7.56	107	632630	47.5617	ug/ml	98
24) n-Nitrosopyrrolidine	7.62	100	297650	49.5658	ug/ml	93
25) n-Nitrosodipropylamine	7.62	70	414190	49.5026	ug/ml	95
26) Acetophenone	7.62	105	793953	48.2506	ug/ml	98
27) n-Nitrosomorpholine	7.62	56	335672	43.0029	ug/ml	92
28) o-Toluidine	7.67	106	998941	48.0202	ug/ml	99
29) Hexachloroethane	7.75	117	282497	50.5710	ug/ml	99
32) Nitrobenzene	7.81	77	634362	50.5805	ug/ml	98
33) n-Nitrosopiperidine	7.95	114	323728	48.2206	ug/ml	95
34) Isophorone	8.02	82	1126886	49.2262	ug/ml	99
35) 2-Nitrophenol	8.13	139	375393	50.7763	ug/ml	97
36) 2,4-Dimethylphenol	8.10	122	585395	46.1129	ug/ml	98
37) 0,0,0-Triethyl Phosphoroth	8.20	198	316699	49.9694	ug/ml	97
38) bis(2-Chloroethoxy)methane	8.19	93	884946	50.8670	ug/ml	99

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051412\4M60861.D Vial: 2
Acq On : 14 May 2012 8:44 Operator: CAA
Sample : WG397858-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 14 09:08:45 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 09:07:57 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39)	Benzoic Acid	8.14	105	109777m	12.5472 ug/ml	
40)	2,4-Dichlorophenol	8.35	162	536449	50.4779 ug/ml	99
41)	a,a-Dimethylphenethylamine	8.34	58	1496698	83.3012 ug/ml	98
42)	1,2,4-Trichlorobenzene	8.46	180	614453	50.9185 ug/ml	100
43)	Naphthalene	8.54	128	1922877	48.8017 ug/ml	99
44)	4-Chloroaniline	8.56	127	795439	54.8152 ug/ml	99
45)	2,6-Dichlorophenol	8.58	162	553124	50.4382 ug/ml	99
46)	Hexachloropropene	8.65	213	380190	56.2142 ug/ml	99
47)	Hexachlorobutadiene	8.68	225	323174	52.3107 ug/ml	99
48)	n-Nitrosodi-n-Butylamine	8.88	84	534706	50.5356 ug/ml	93
49)	p-Phenylenediamine	9.00	108	56108	61.2840 ug/ml#	45
50)	4-Chloro-3-Methylphenol	9.00	107	538704	49.9523 ug/ml	99
51)	Safrole	9.09	162	514315	50.1443 ug/ml	99
52)	2-Methylnaphthalene	9.22	142	1260239	49.2310 ug/ml	99
53)	1-Methylnaphthalene	9.34	142	1190915	49.2074 ug/ml	99
55)	1,2,4,5-Tetrachlorobenzene	9.43	216	566148	51.6483 ug/ml	100
56)	Hexachlorocyclopentadiene	9.44	237	286112	50.4624 ug/ml	100
57)	2,4,6-Trichlorophenol	9.51	196	398063	51.8244 ug/ml	98
58)	2,4,5-Trichlorophenol	9.56	196	406300	51.3866 ug/ml	99
60)	Isosafrole	9.62	162	527792	49.9309 ug/ml	99
61)	2-Chloronaphthalene	9.73	162	1208469	51.1630 ug/ml	99
62)	1-Chloronaphthalene	9.77	162	1132341	50.6290 ug/ml	100
63)	2-Nitroaniline	9.82	65	348490	51.4726 ug/ml	100
64)	1,4-Naphthoquinone	9.89	158	434338	46.5658 ug/ml	98
65)	Dimethylphthalate	9.99	163	1338674	50.5830 ug/ml	99
66)	1,3-Dinitrobenzene	10.04	168	270780	53.3580 ug/ml	97
67)	2,6-Dinitrotoluene	10.09	165	342652	51.8307 ug/ml	99
68)	Acenaphthylene	10.17	152	1865113	49.1794 ug/ml	99
69)	3-Nitroaniline	10.25	138	327562	67.1740 ug/ml	99
70)	2,4-Dinitrophenol	10.35	184	151345	46.3675 ug/ml	87
71)	Acenaphthene	10.36	154	1193416	48.3129 ug/ml	98
72)	4-Nitrophenol	10.35	65	227568	46.7109 ug/ml	95
73)	2,4-Dinitrotoluene	10.50	165	440205	52.3320 ug/ml	98
74)	Pentachlorobenzene	10.53	250	511983	51.8748 ug/ml	98
75)	Dibenzofuran	10.51	168	1633704	49.3931 ug/ml	98
76)	2,3,4,6-Tetrachlorophenol	10.61	232	312701	51.2820 ug/ml	99
77)	1-Naphthylamine	10.59	143	493906	69.4329 ug/ml#	71
78)	2-Naphthylamine	10.66	143	188393	43.5092 ug/ml#	62
79)	Diethylphthalate	10.69	149	1354262	51.3813 ug/ml	100
80)	Thionazin	10.80	107	222752	50.7916 ug/ml	93
81)	Fluorene	10.87	166	1382729	49.1880 ug/ml	99
82)	4-Chlorophenyl Phenyl Ethe	10.82	204	682032	51.6335 ug/ml	99
83)	4-Nitroaniline	10.88	138	338836	56.1345 ug/ml	95
84)	5-Nitro-o-Toluidine	10.88	152	385976	58.1573 ug/ml	97
85)	1,2-Diphenylhydrazine	10.99	77	1303937	50.8679 ug/ml	99
88)	4,6-Dinitro-2-Methylphenol	10.92	198	243279	51.5214 ug/ml	93
89)	n-Nitrosodiphenylamine	10.94	169	1230368	50.1320 ug/ml	99
90)	Sulfotepp	11.14	322	233139	53.1699 ug/ml	99
91)	Sym-Trinitrobenzene	11.22	75	345489	57.5813 ug/ml	98
92)	Diallate	11.26	86	502530	50.2087 ug/ml	91
93)	Phenacetin	11.26	108	668842	52.0185 ug/ml	99
94)	Phorate	11.28	75	815383	51.0643 ug/ml#	99
95)	4-Bromophenyl Phenyl Ether	11.35	248	391512	51.0165 ug/ml	99
96)	Hexachlorobenzene	11.56	284	441629	52.6437 ug/ml	99

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051412\4M60861.D Vial: 2
Acq On : 14 May 2012 8:44 Operator: CAA
Sample : WG397858-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 14 09:08:45 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 09:07:57 2012
Response via : Initial Calibration
DataAcq Meth : BNATEST

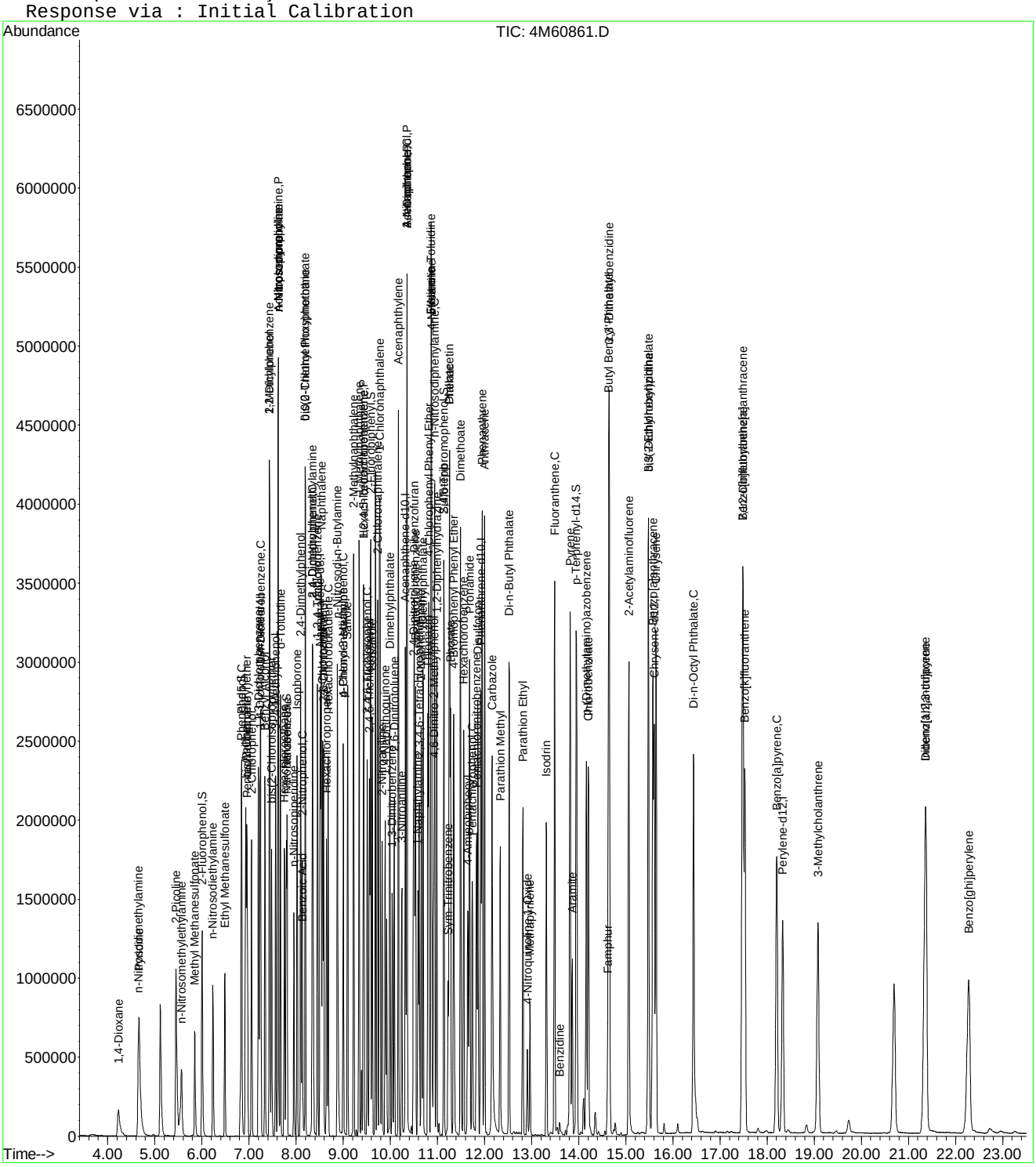
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
97)	Dimethoate	11.49	87	462415	54.1502	ug/ml	98
98)	4-Aminobiphenyl	11.65	169	901096	81.4130	ug/ml	100
99)	Pentachlorophenol	11.74	266	249873	47.1030	ug/ml	99
100)	Pronamide	11.68	173	626638	50.8193	ug/ml	99
101)	Pentachloronitrobenzene	11.83	237	161810	55.6539	ug/ml	96
102)	Disulfoton	11.86	88	696061	50.7182	ug/ml	99
103)	Phenanthrene	11.95	178	1956558	48.6310	ug/ml	99
104)	Anthracene	12.00	178	2015467	48.8563	ug/ml	100
105)	Carbazole	12.16	167	1866654	51.6767	ug/ml	99
106)	Parathion Methyl	12.33	109	425279	50.6526	ug/ml	98
107)	Di-n-Butyl Phthalate	12.52	149	2260080	50.3610	ug/ml	100
108)	Parathion Ethyl	12.82	97	276135	54.0201	ug/ml	98
109)	4-Nitroquinoline 1-Oxide	12.91	190	92358	24.9713	ug/ml	94
110)	Methapyrilene	12.96	58	291278	30.8322	ug/ml	88
111)	Isodrin	13.31	193	214137	49.5525	ug/ml	99
112)	Fluoranthene	13.49	202	2095144	49.6956	ug/ml	99
114)	Benzidine	13.60	184	84651	42.7128	ug/ml	100
115)	Pyrene	13.82	202	2128335	50.0435	ug/ml	100
116)	Aramite	13.86	185	131456	54.5857	ug/ml	99
118)	p-(Dimethylamino)azobenzen	14.16	225	454592	51.7703	ug/ml	97
119)	Chlorobenzilate	14.21	251	611172	52.8061	ug/ml	99
120)	Famphur	14.61	218	45266	89.7792	ug/ml#	69
121)	Butyl Benzyl Phthalate	14.63	149	981318	50.7280	ug/ml	99
122)	3,3'-Dimethylbenzidine	14.64	212	689561	51.3113	ug/ml#	94
123)	2-Acetylaminofluorene	15.06	181	894472	54.0511	ug/ml	98
124)	bis(2-Ethylhexyl)phthalate	15.48	149	1356092	51.3703	ug/ml	99
125)	3,3'-Dichlorobenzidine	15.49	252	519199	66.0652	ug/ml	99
126)	Benzo[a]anthracene	15.58	228	1889133	50.0798	ug/ml	99
127)	Chrysene	15.64	228	1748670	49.3840	ug/ml	100
129)	Di-n-Octyl Phthalate	16.44	149	2299908	53.3845	ug/ml	97
130)	7,12-Dimethylbenz[a]anthra	17.49	256	916929	53.0741	ug/ml	99
131)	Benzo[b]fluoranthene	17.48	252	2042057	52.9344	ug/ml	99
132)	Benzo[k]fluoranthene	17.53	252	1824470	51.0208	ug/ml	97
133)	Benzo[a]pyrene	18.21	252	1810549	51.4422	ug/ml	99
134)	3-Methylcholanthrene	19.08	268	980139	51.2908	ug/ml	99
135)	Indeno[1,2,3-cd]pyrene	21.37	276	2088111	53.2714	ug/ml	97
136)	Dibenz[ah]anthracene	21.36	278	1767512	54.0677	ug/ml	98
137)	Benzo[ghi]perylene	22.28	276	1664987	51.3471	ug/ml	99

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

Quantitation Report (QT Reviewed)

Data File : I:\MSDCHEM\1\DATA\051412\4M60861.D Vial: 2
Acq On : 14 May 2012 8:44 Operator: CAA
Sample : WG397858-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 10:58 2012 Quant Results File: MEGAMIX.RES

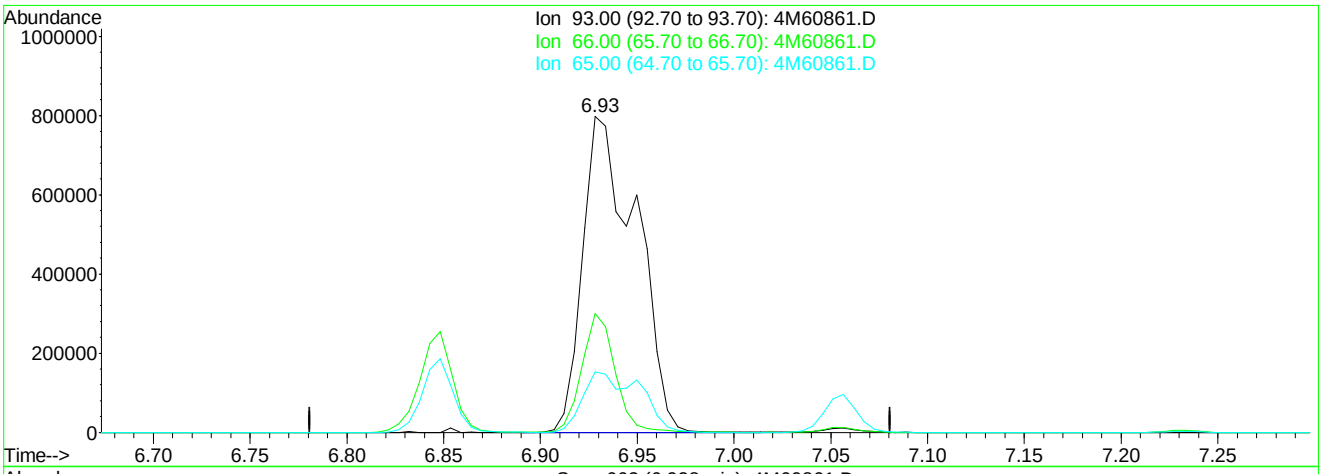
Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Last Update : Mon May 14 11:40:35 2012
Response via : Initial Calibration

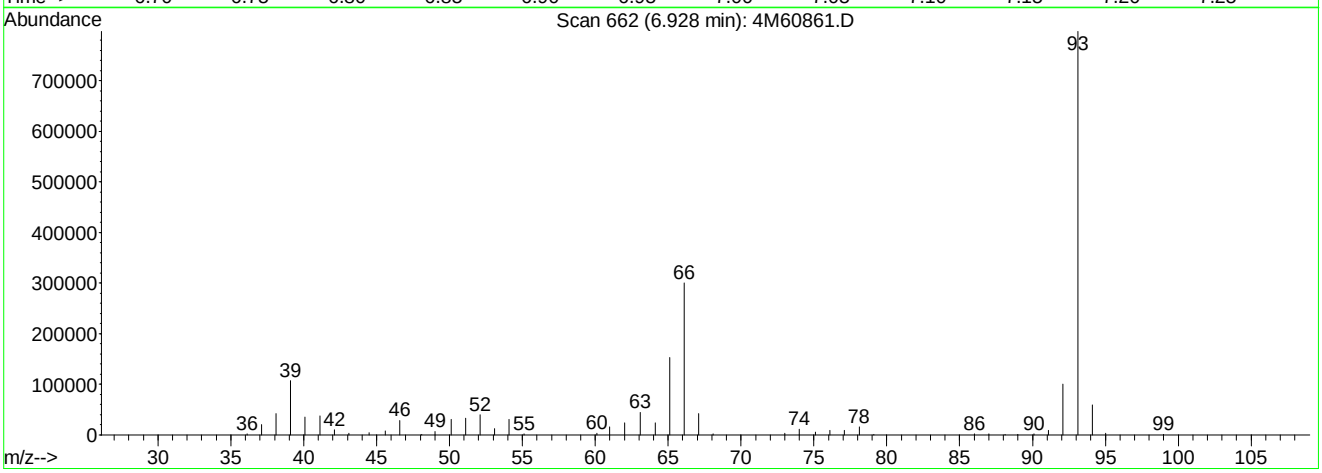


Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\051412\4M60861.D Vial: 2
Acq On : 14 May 2012 8:44 Operator: CAA
Sample : WG397858-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 14 9:08 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 : Mon May 14 11:40:35 2012
Response via : Multiple Level Calibration





TIC: 4M60861.D

(11) Aniline

6.93min 74.44ug/ml

response 1528754

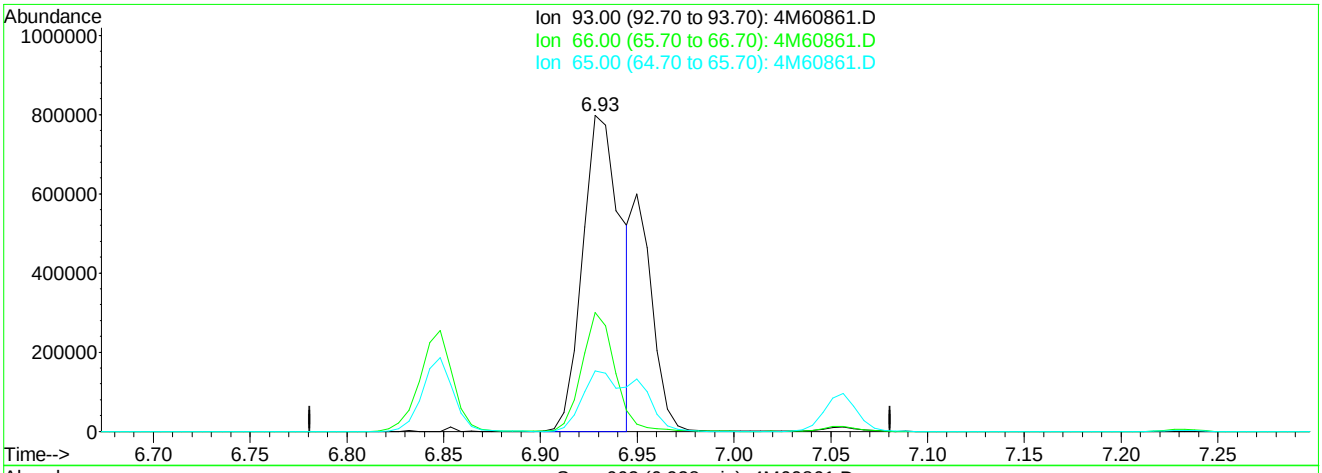
Ion	Exp%	Act%
93.00	100	100
66.00	33.40	23.34
65.00	29.20	20.28
0.00	0.00	0.00

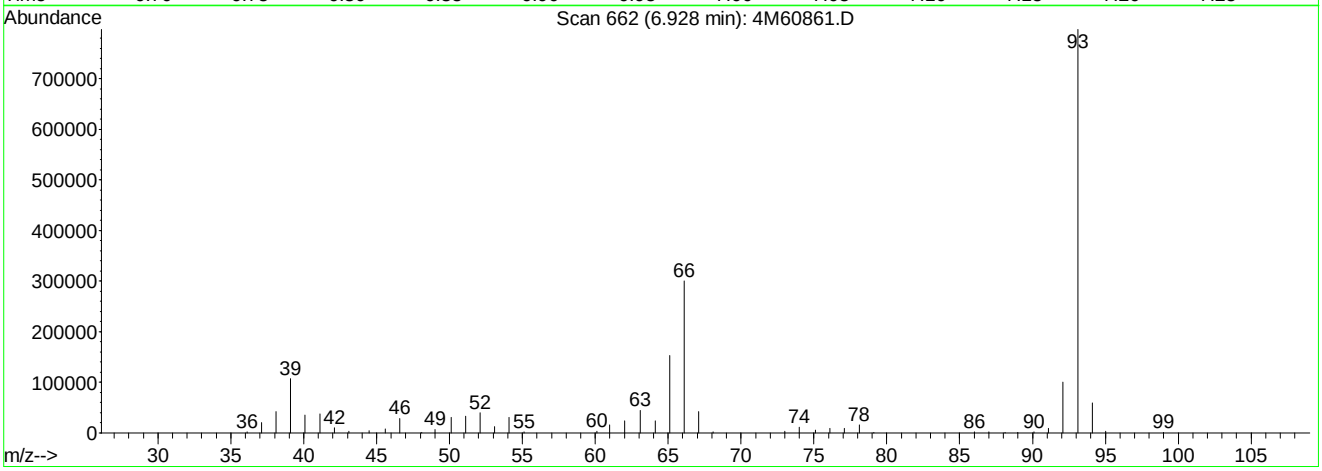
4M60861.D MEGAMIX.M Tue May 15 10:58:37 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\051412\4M60861.D Vial: 2
Acq On : 14 May 2012 8:44 Operator: CAA
Sample : WG397858-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 10:58 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 : Mon May 14 11:40:35 2012
Response via : Multiple Level Calibration





TIC: 4M60861.D

(11) Aniline

6.93min 53.37ug/ml mint

response 1096057

Ion	Exp%	Act%
93.00	100	100
66.00	33.40	32.56
65.00	29.20	28.29
0.00	0.00	0.00

4M60861.D MEGAMIX.M Tue May 15) 2012

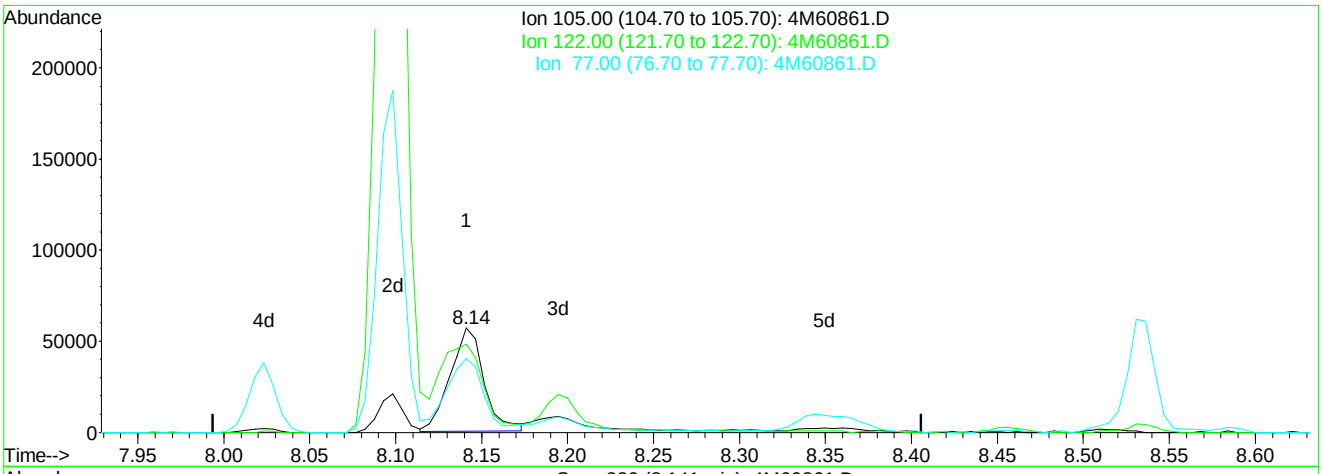
Analyst: 05/15/2012 13:40 Supervisor: 05/15/2012 14:58

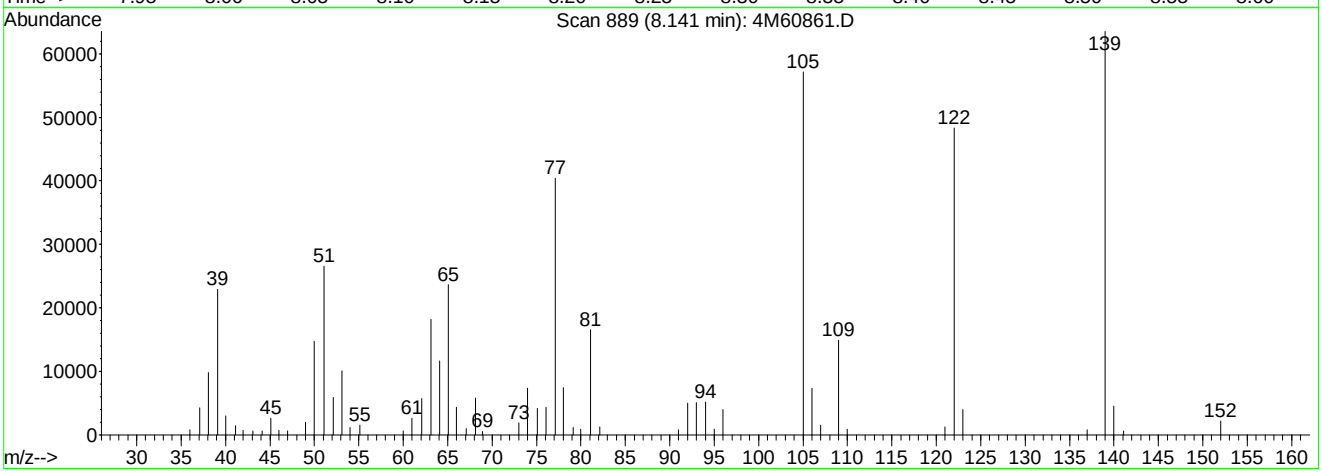
#3 - Improperly integrated isomers and/or coeluting compounds

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\051412\4M60861.D Vial: 2
Acq On : 14 May 2012 8:44 Operator: CAA
Sample : WG397858-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 10:58 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 : Mon May 14 11:40:35 2012
Response via : Single Level Calibration





TIC: 4M60861.D

(39) Benzoic Acid

8.14min 8.78ug/ml

response 76843

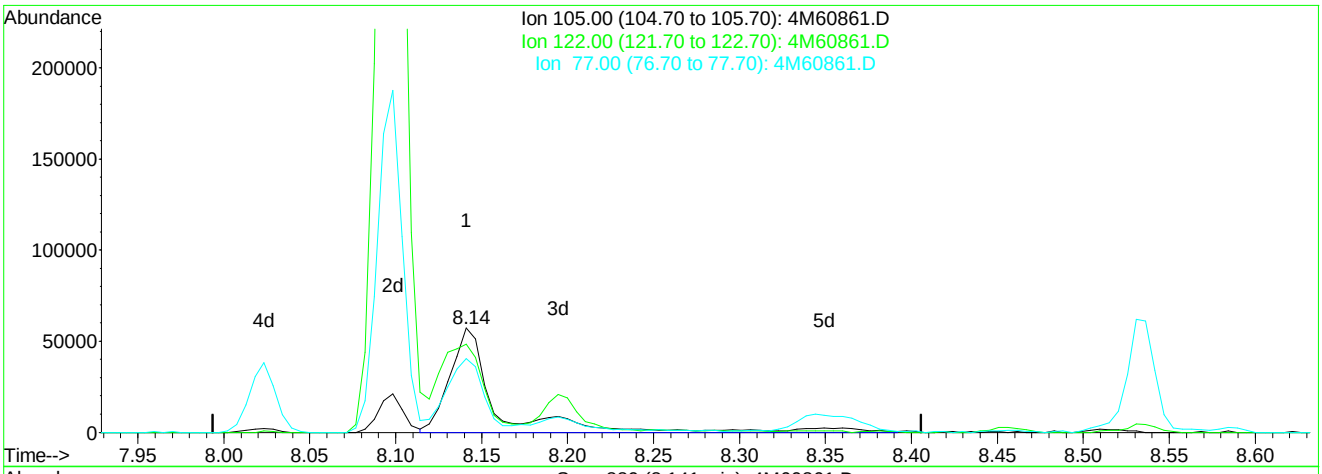
Ion	Exp%	Act%
105.00	100	100
122.00	87.10	106.42
77.00	70.40	75.50
0.00	0.00	0.00

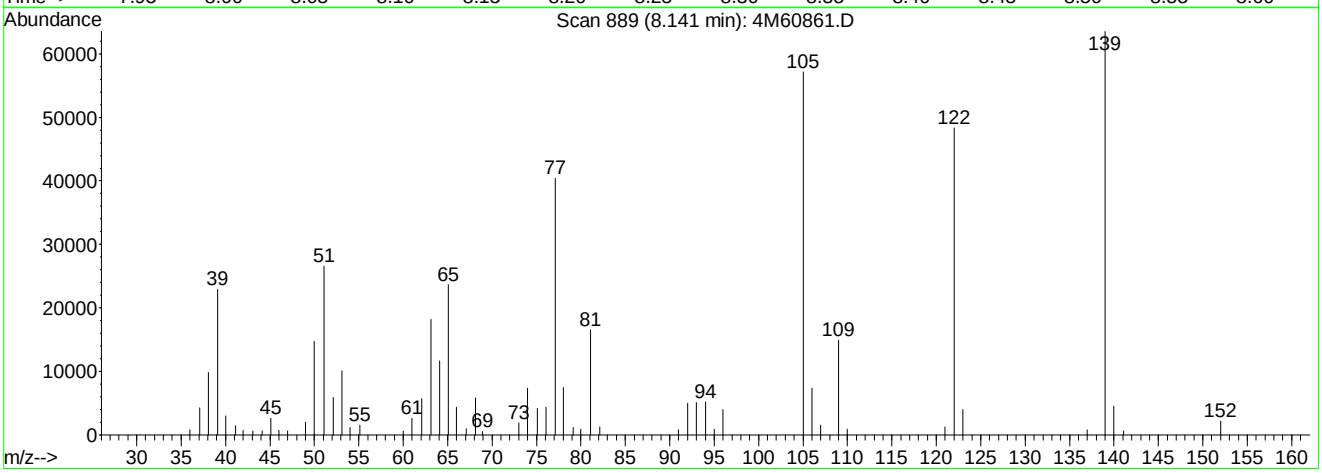
4M60861.D MEGAMIX.M Tue May 15 10:58:47 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\051412\4M60861.D Vial: 2
Acq On : 14 May 2012 8:44 Operator: CAA
Sample : WG397858-02 50PPM Megamix STD Inst : HPMS4
Misc : 1,1 STD50886 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 15 10:58 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 : Mon May 14 11:40:35 2012
Response via : Single Level Calibration





TIC: 4M60861.D

(39) Benzoic Acid

8.14min 12.55ug/ml mint

response 109777

Ion	Exp%	Act%
105.00	100	100
122.00	87.10	74.49
77.00	70.40	52.85
0.00	0.00	0.00

4M60861.D MEGAMIX.M Tue May 15 2012

Analyst: 05/15/2012 13:40 Supervisor: 05/15/2012 14:58

#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\051412\4M60862.D Vial: 3
Acq On : 14 May 2012 9:19 Operator: CAA
Sample : WG397859-01 50PPM TCL STD Inst : HPMS4
Misc : 1,1 STD51428 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 14 09:47:30 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

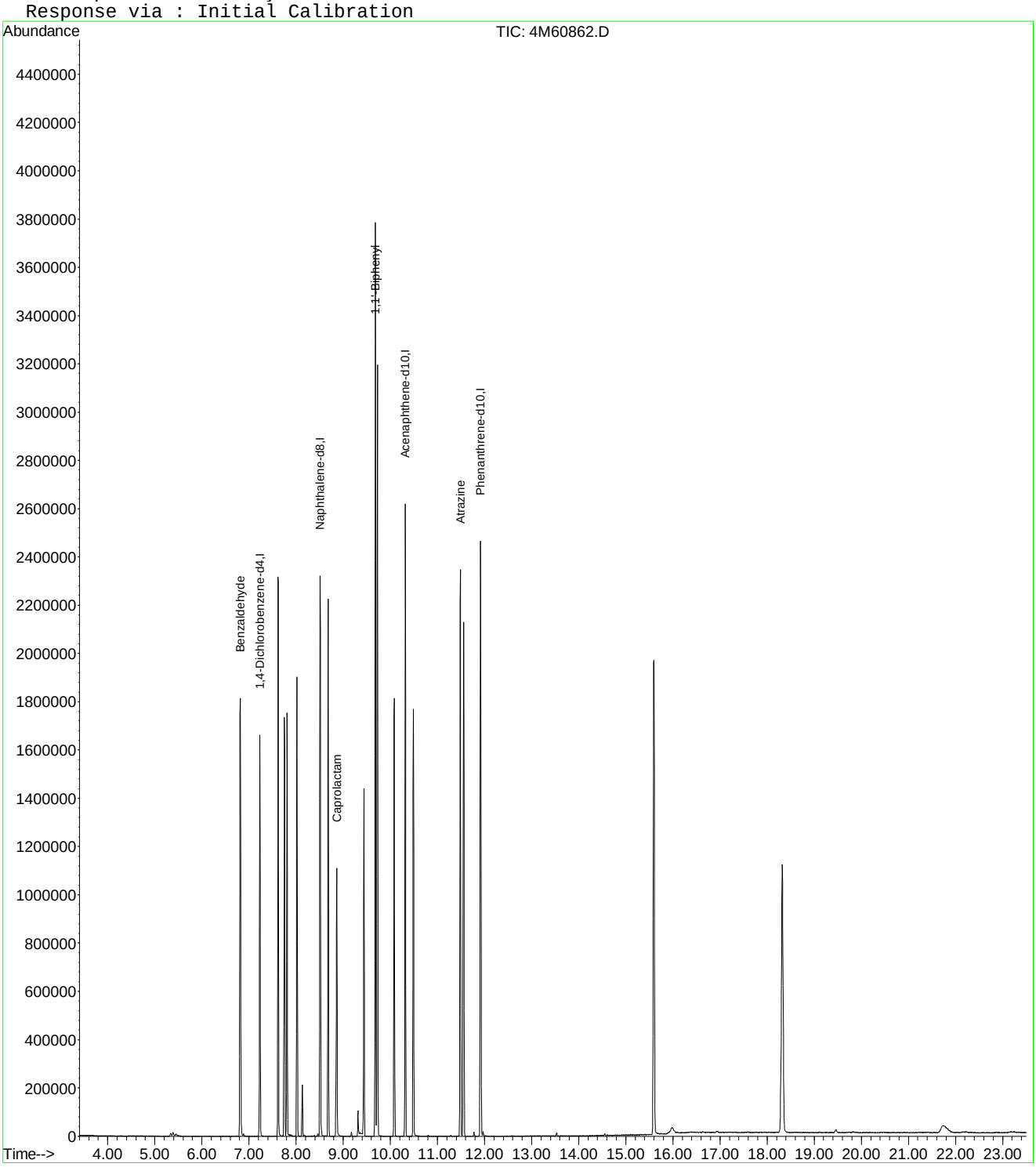
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.23	152	333539	40.00	ug/mL	0.00
3) Naphthalene-d8	8.51	136	1248696	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.32	164	697237	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.92	188	1257971	40.00	ug/mL	0.00
Target Compounds						Qvalue
2) Benzaldehyde	6.82	105	451929	50.8690	ug/L	100
4) Caprolactam	8.86	55	221802	54.3916	ug/L	100
6) 1,1'-Biphenyl	9.68	154	1418073	49.5544	ug/L	99
8) Atrazine	11.49	200	359122	51.5752	ug/L	99

(#) = qualifier out of range (m) = manual integration
4M60862.D TCL.M Tue May 15 13:05:15 2012 Page 1

Quantitation Report (Not Reviewed)

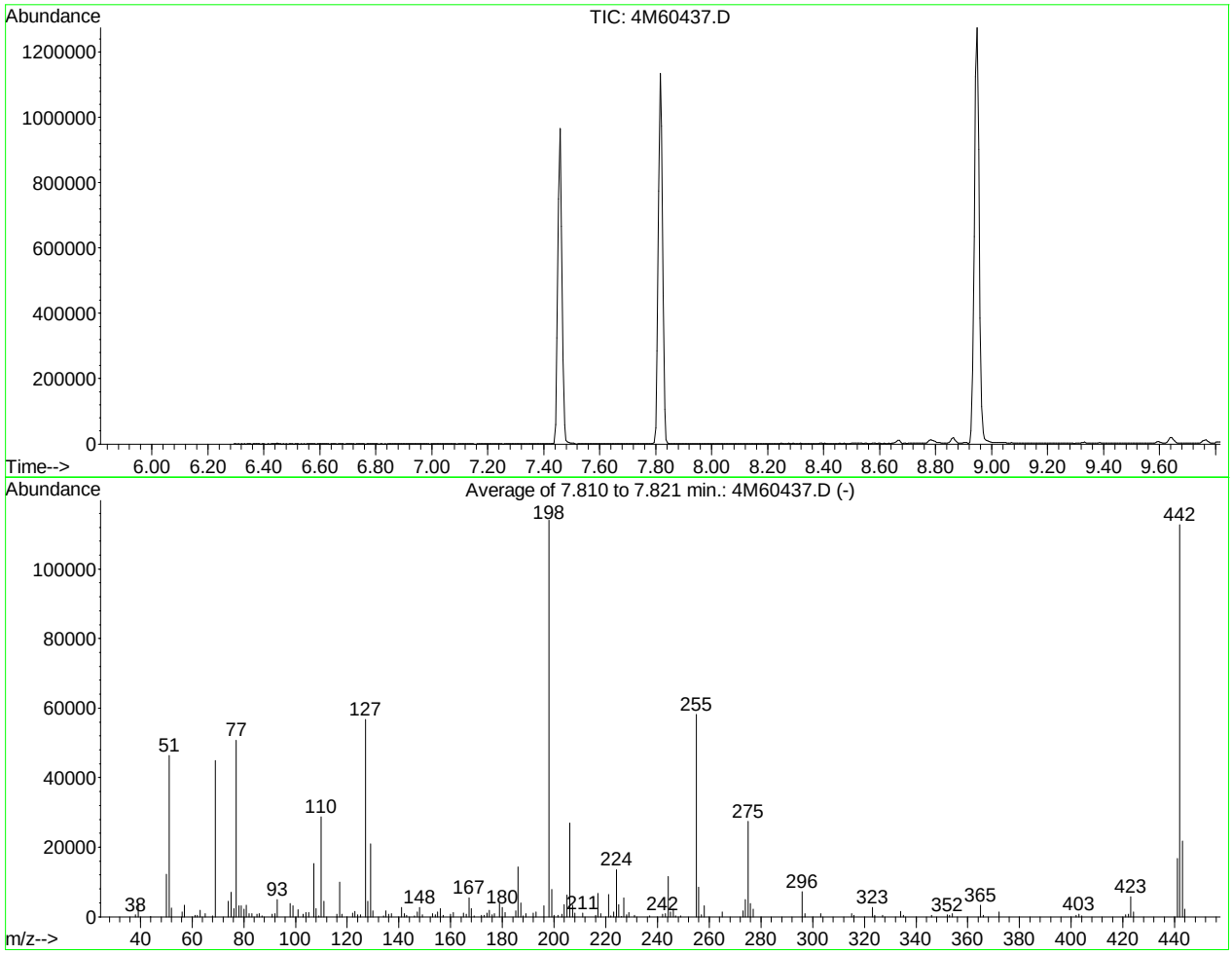
Data File : I:\MSDCHEM\1\DATA\051412\4M60862.D Vial: 3
Acq On : 14 May 2012 9:19 Operator: CAA
Sample : WG397859-01 50PPM TCL STD Inst : HPMS4
Misc : 1,1 STD51428 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 14 9:47 2012 Quant Results File: TCL.RES

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



2.2.1.5 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

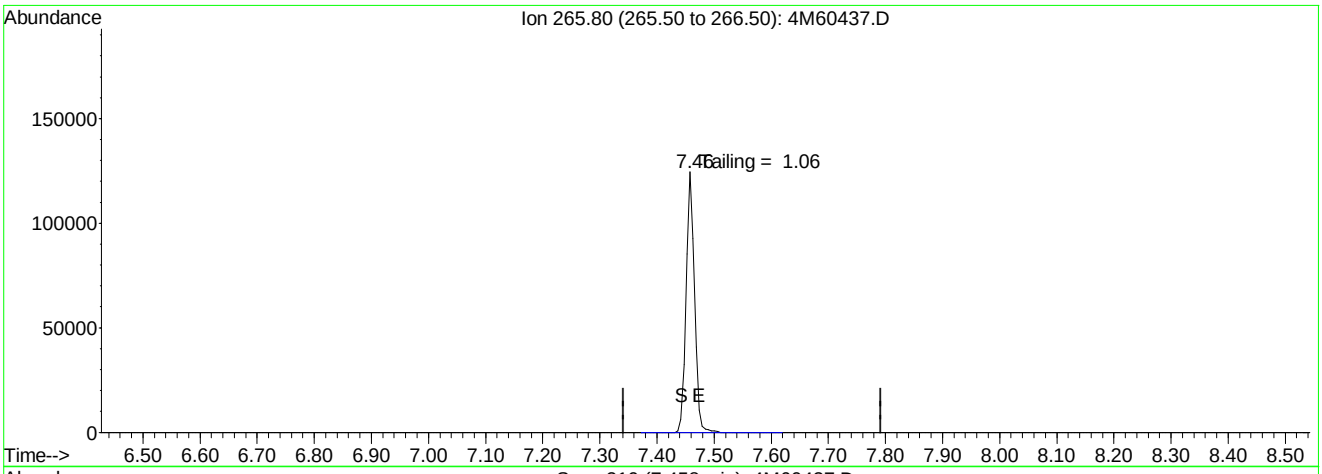
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	40.7	46389	PASS
68	69	0.00	2	0.7	296	PASS
69	198	0.00	100	39.4	44901	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	49.8	56768	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	114077	PASS
199	198	5	9	6.8	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

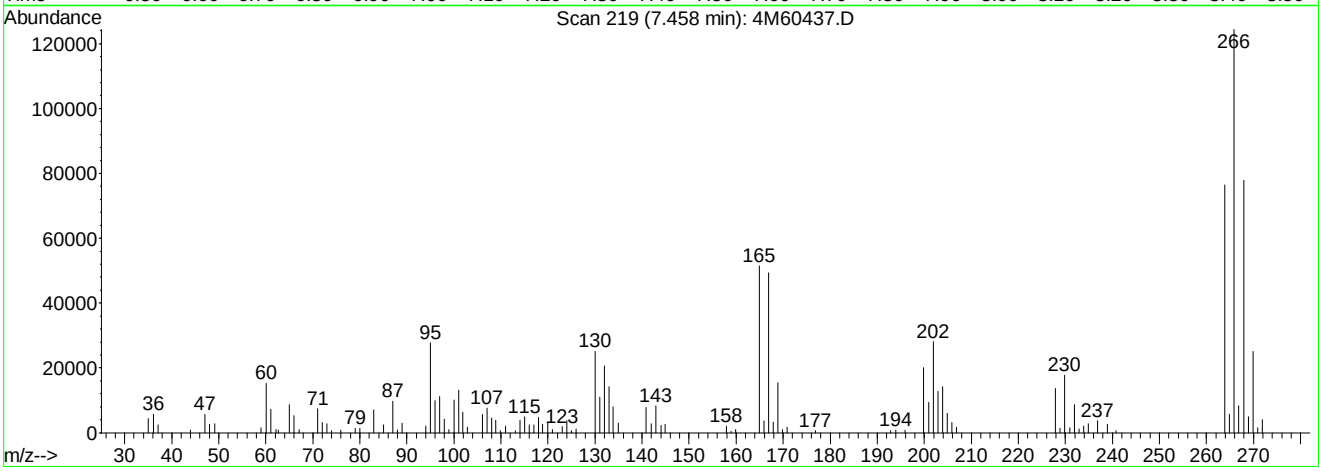
4M60437.D DFTPP.M Fri Apr 20 08:17:55 2012

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

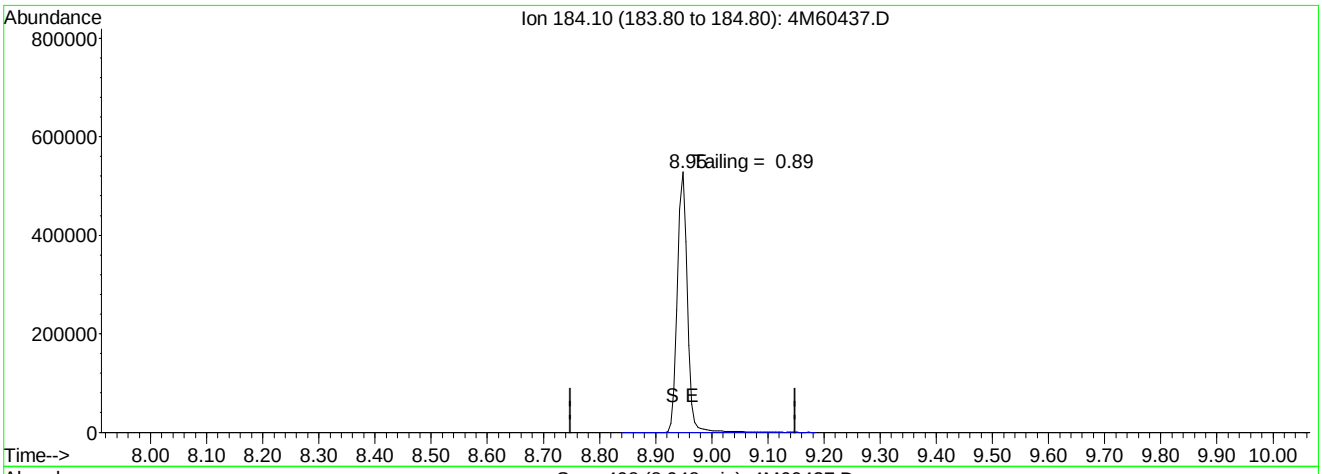
Ion	Exp%	Act%
265.80	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

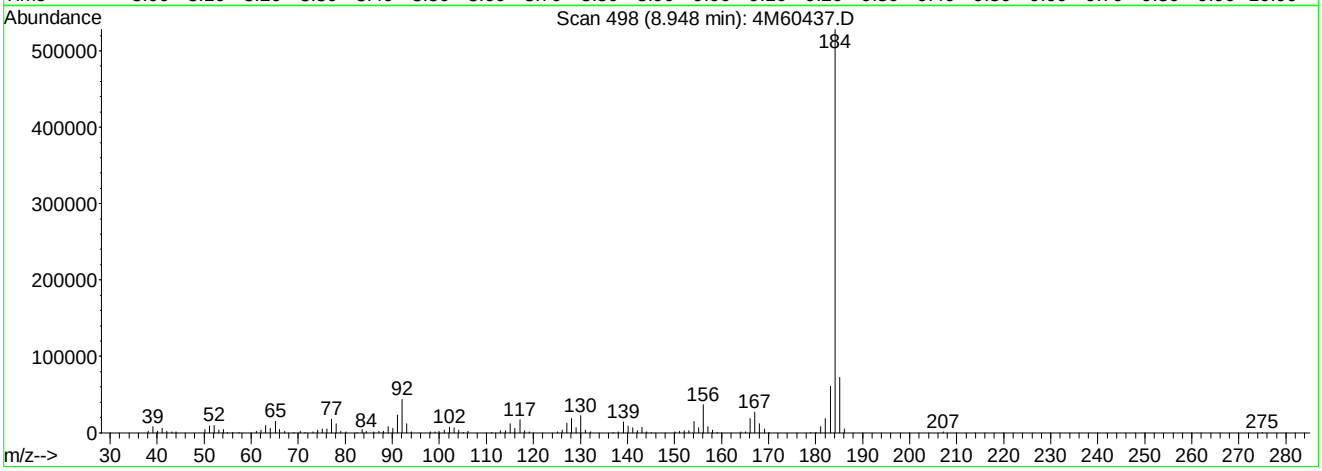
4M60437.D DFTPP.M Fri Apr 20 08:18:15 2012

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

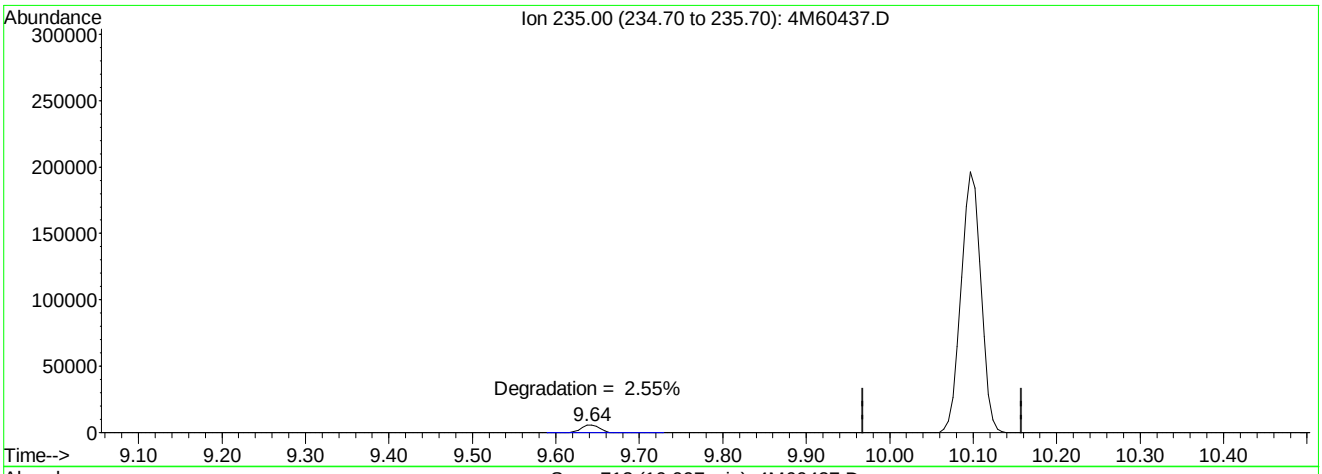
Ion	Exp%	Act%
184.10	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

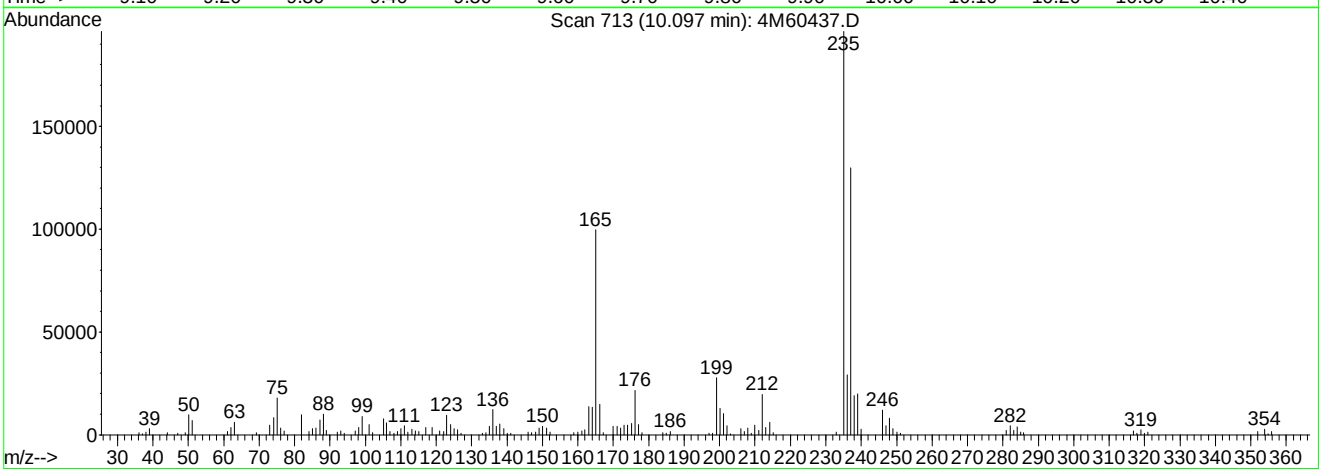
4M60437.D DFTPP.M Fri Apr 20 08:18:21 2012

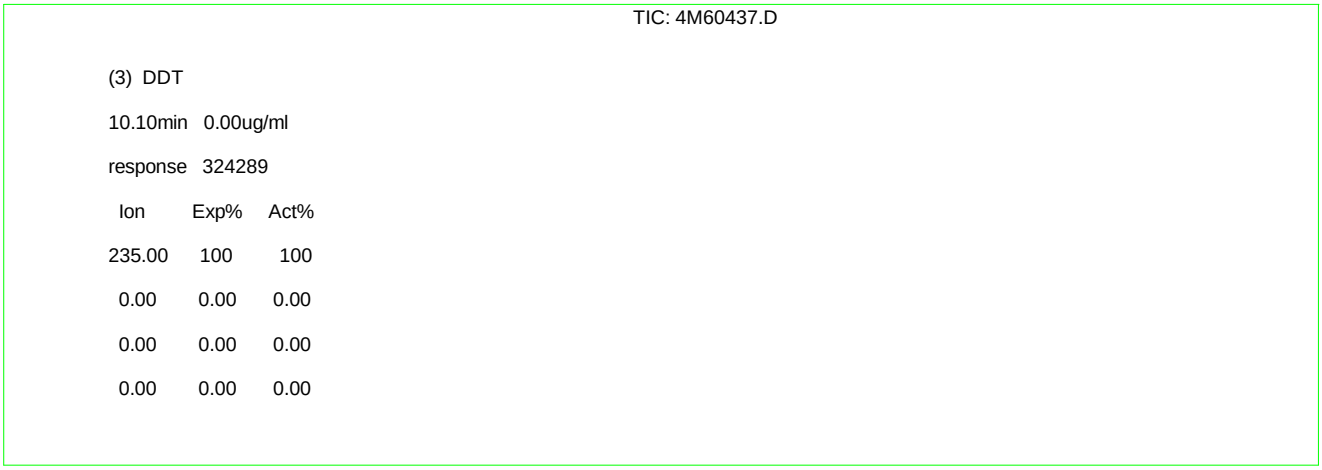
Quantitation Report (Qedit)

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







(3) DDT

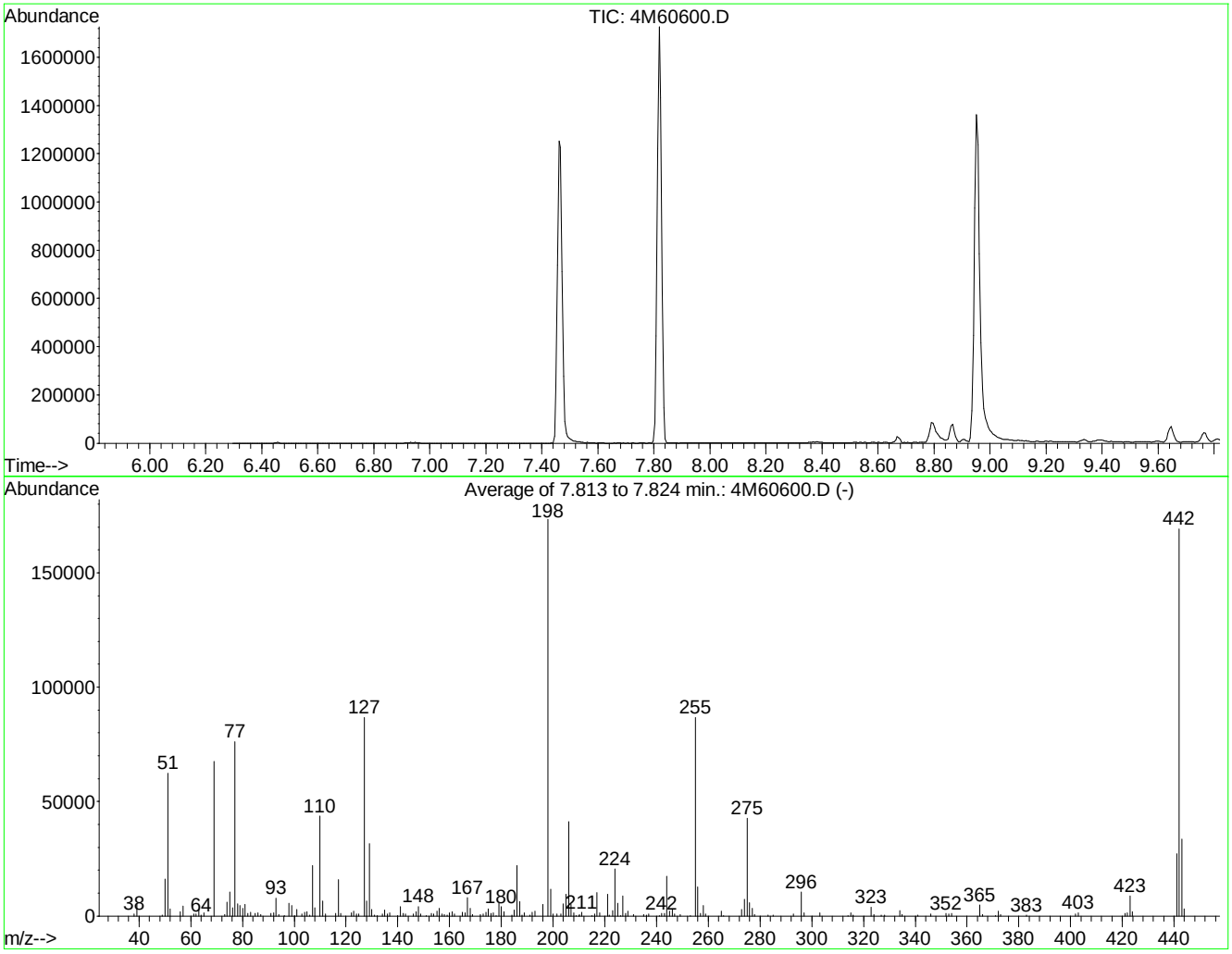
10.10min 0.00ug/ml

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

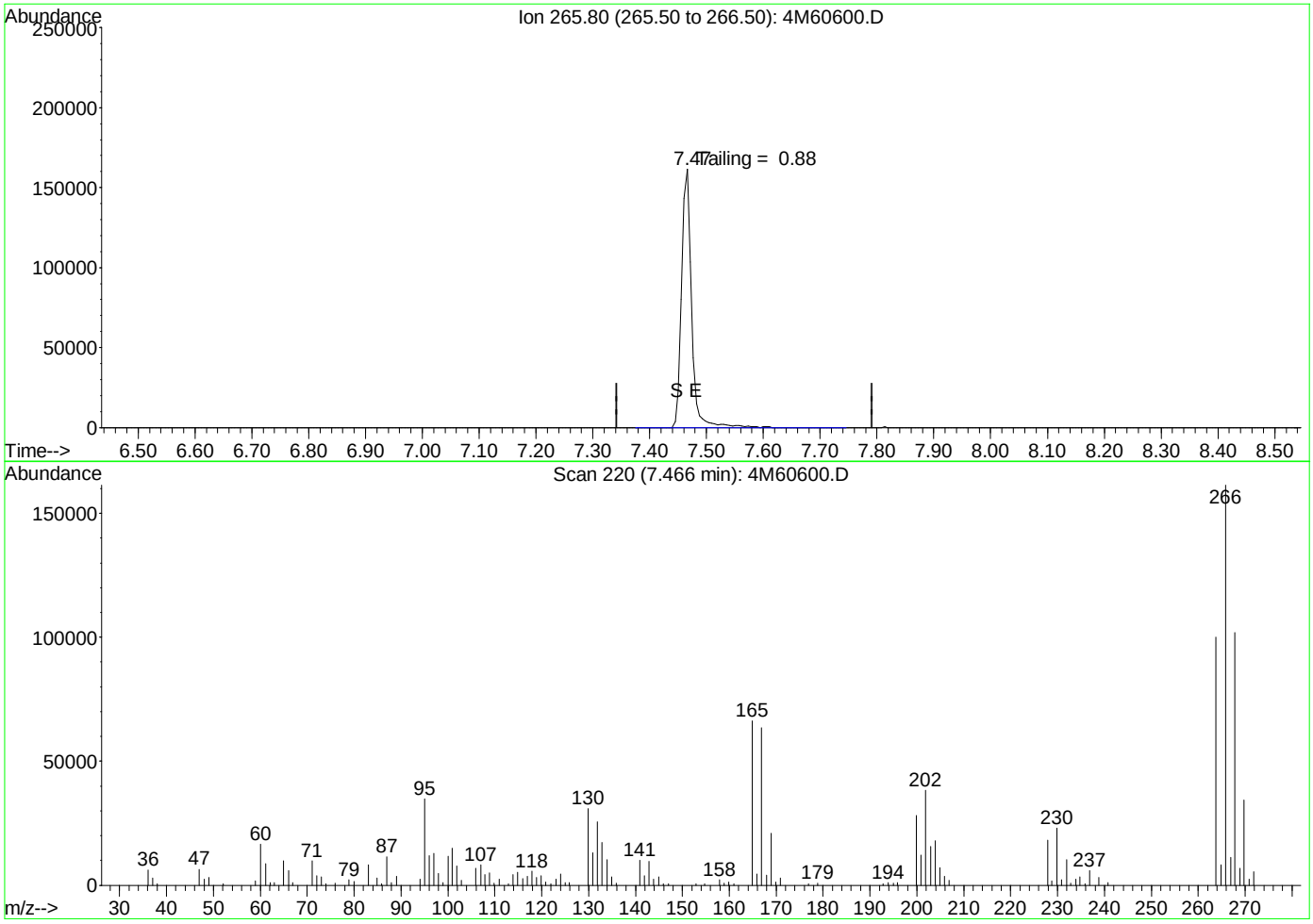
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	36.0	62456	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	39.0	67664	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	50.1	86805	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	173418	PASS
199	198	5	9	6.7	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

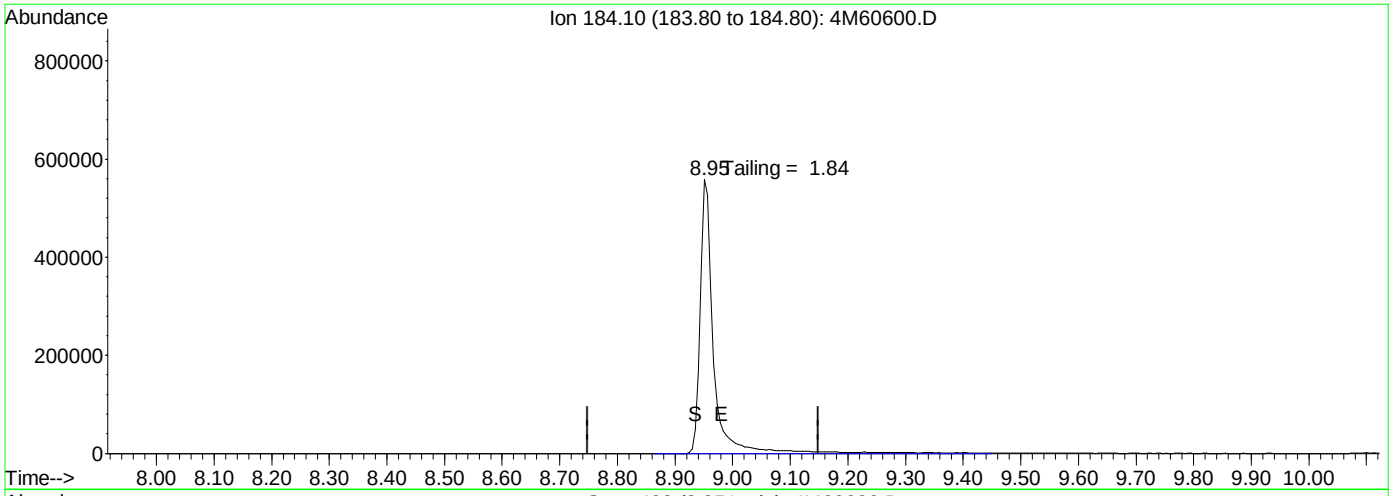
Ion	Exp%	Act%
265.80	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

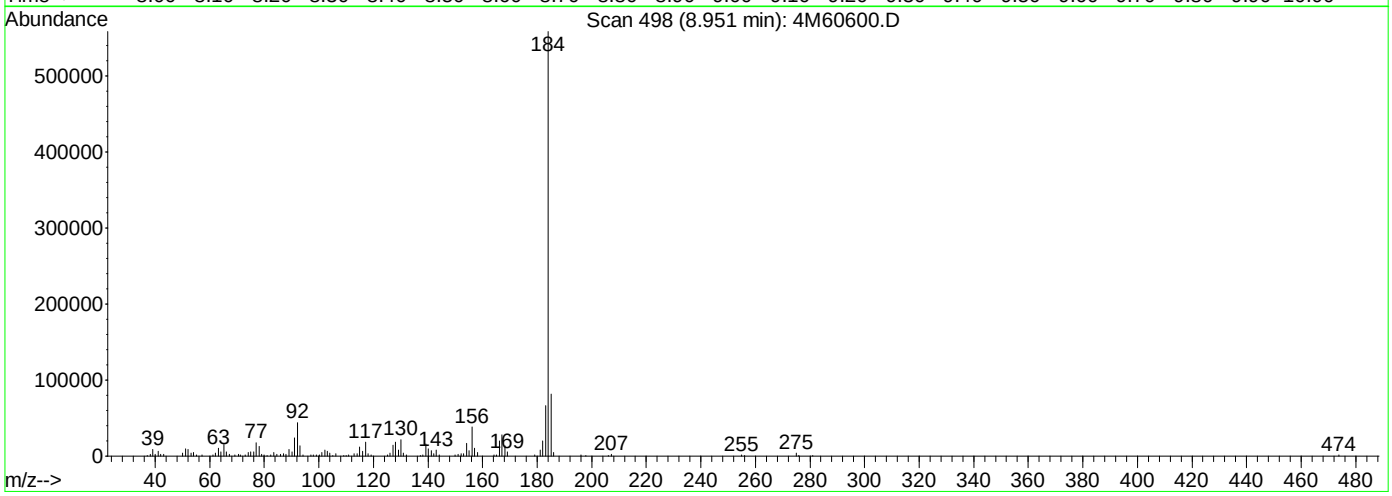
4M60600.D DFTPP.M Wed May 02 13:32:06 2012

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

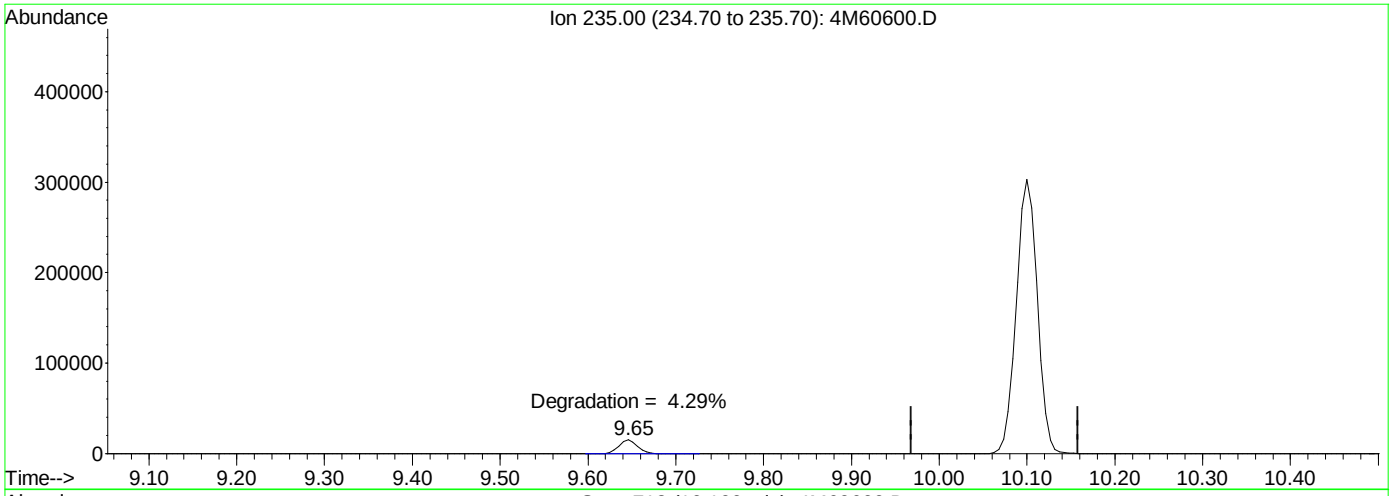
Ion	Exp%	Act%
184.10	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

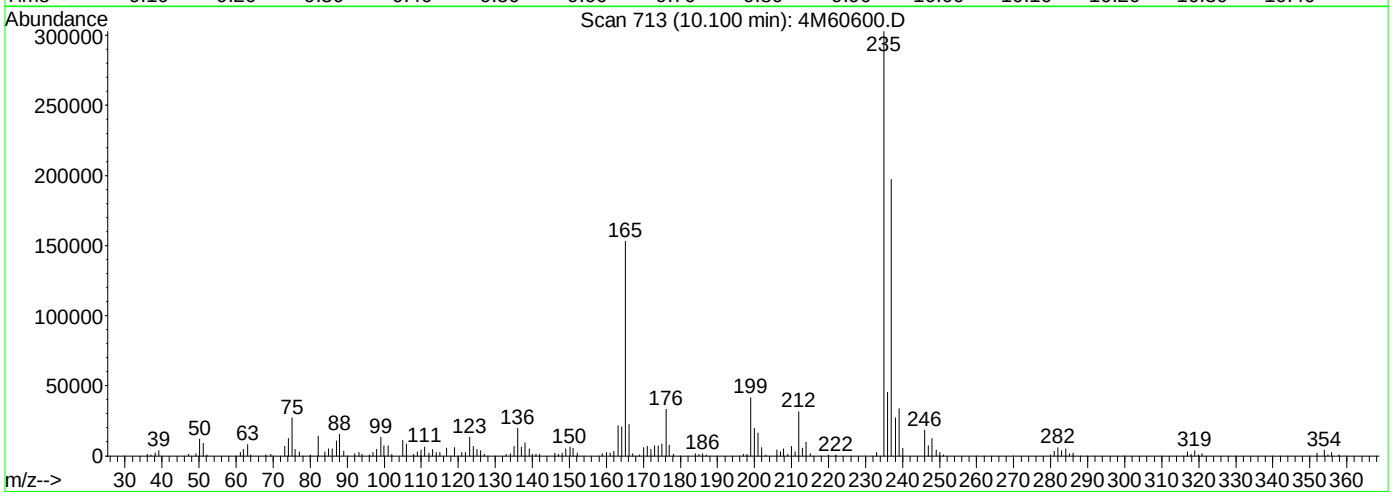
4M60600.D DFTPP.M Wed May 02 13:32:11 2012

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

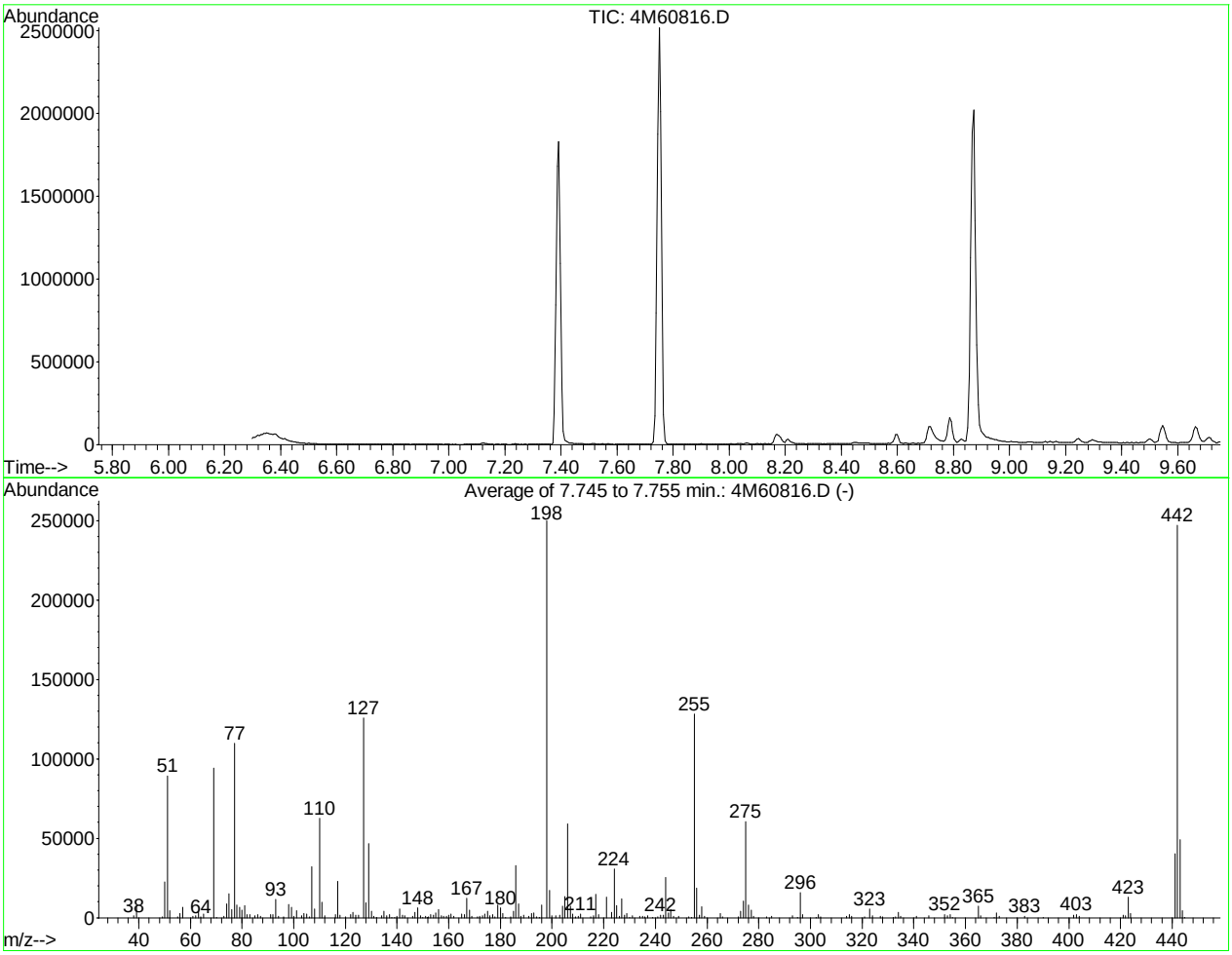
10.10min 0.00ug/ml

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

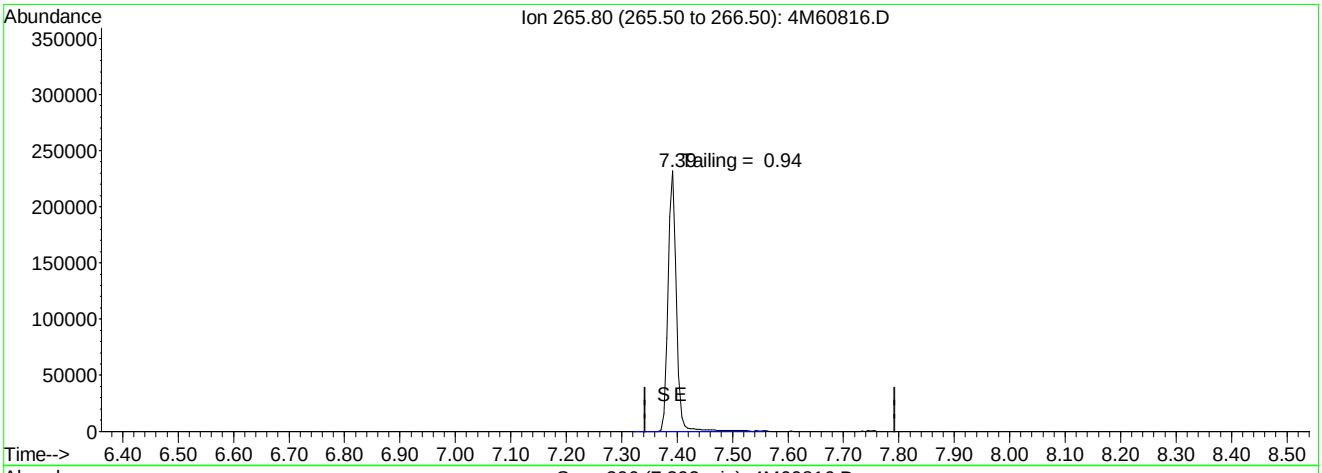
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	35.7	89354	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	37.7	94325	PASS
70	69	0.00	2	0.4	367	PASS
127	198	40	60	50.3	125853	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	249962	PASS
199	198	5	9	6.8	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

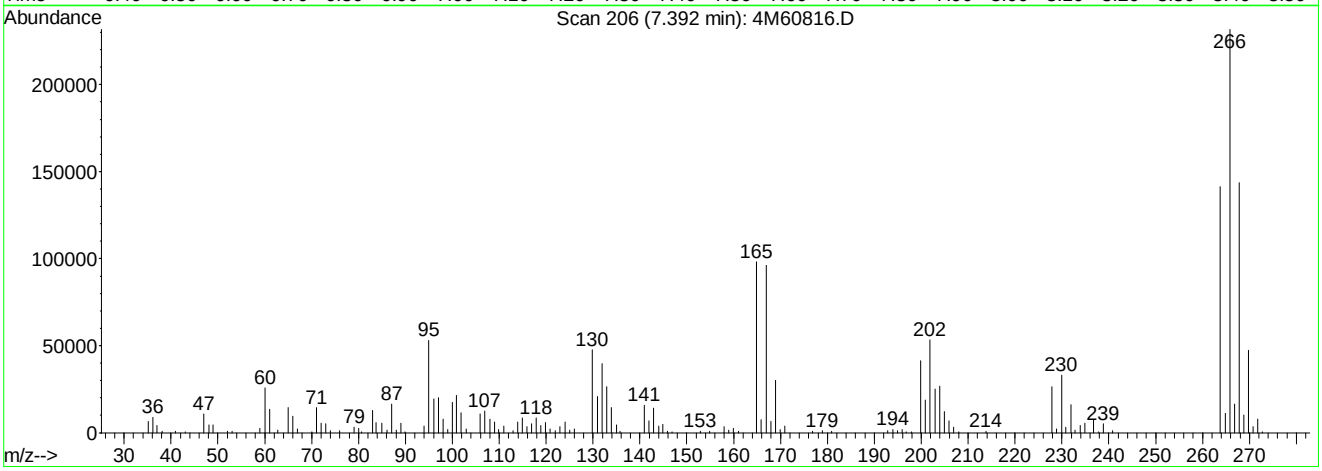
4M60816.D DFTPP.M Mon May 14 11:39:55 2012

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

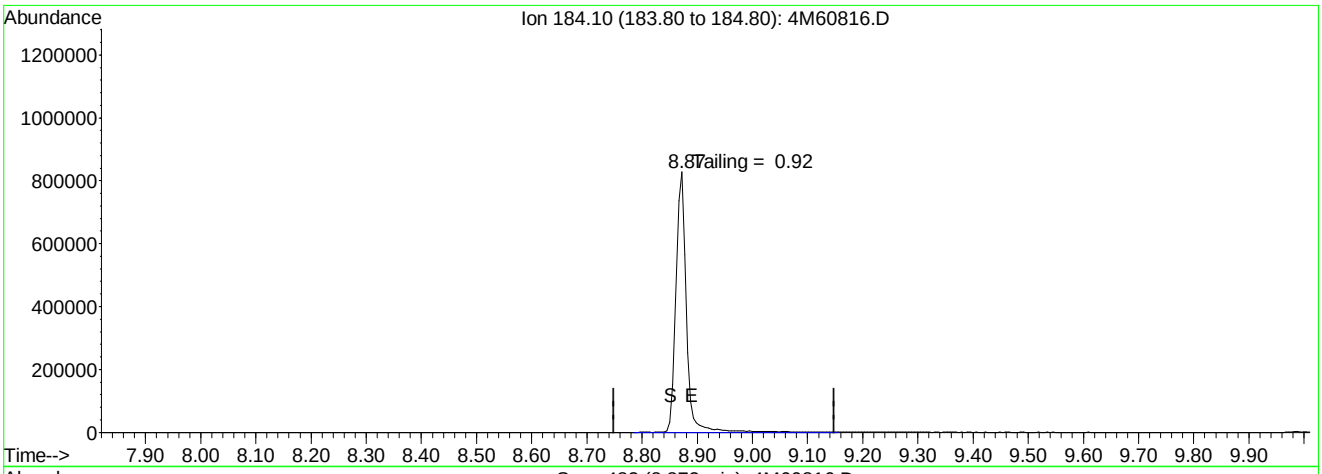
Ion	Exp%	Act%
265.80	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

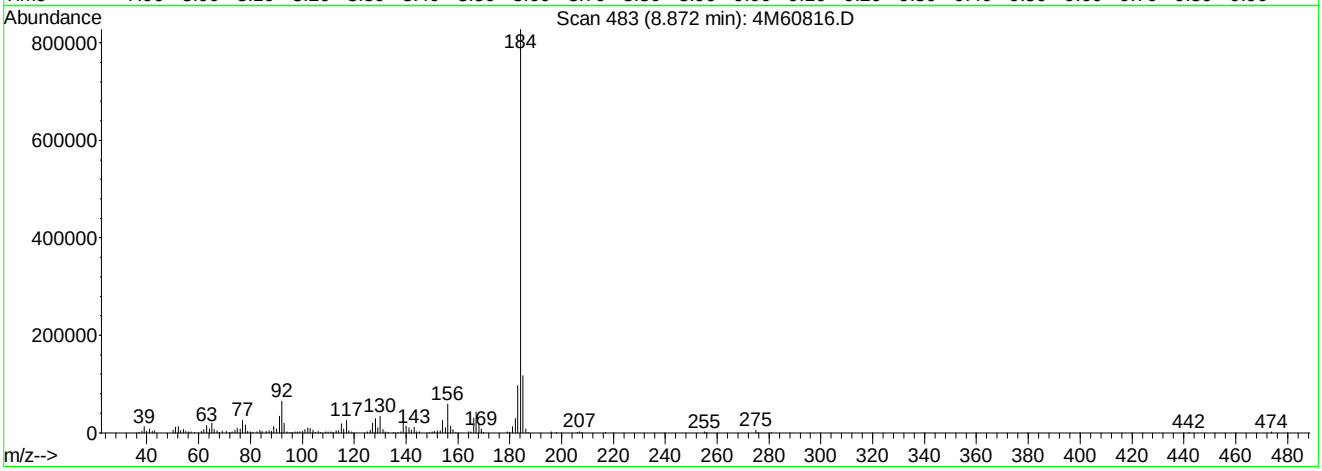
4M60816.D DFTPP.M Mon May 14 11:40:01 2012

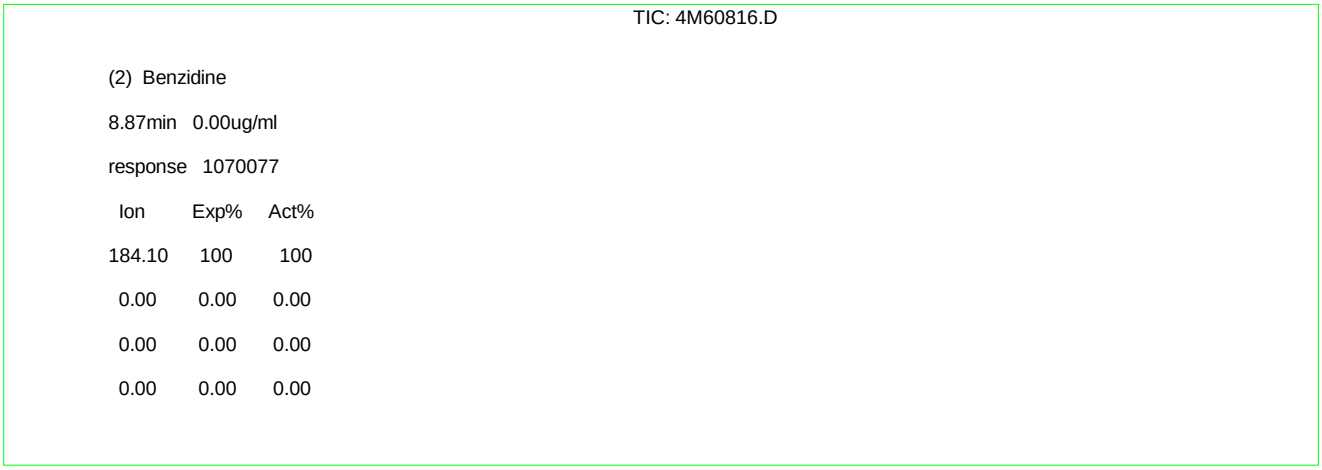
Quantitation Report (Qedit)

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







(2) Benzidine

8.87min 0.00ug/ml

response 1070077

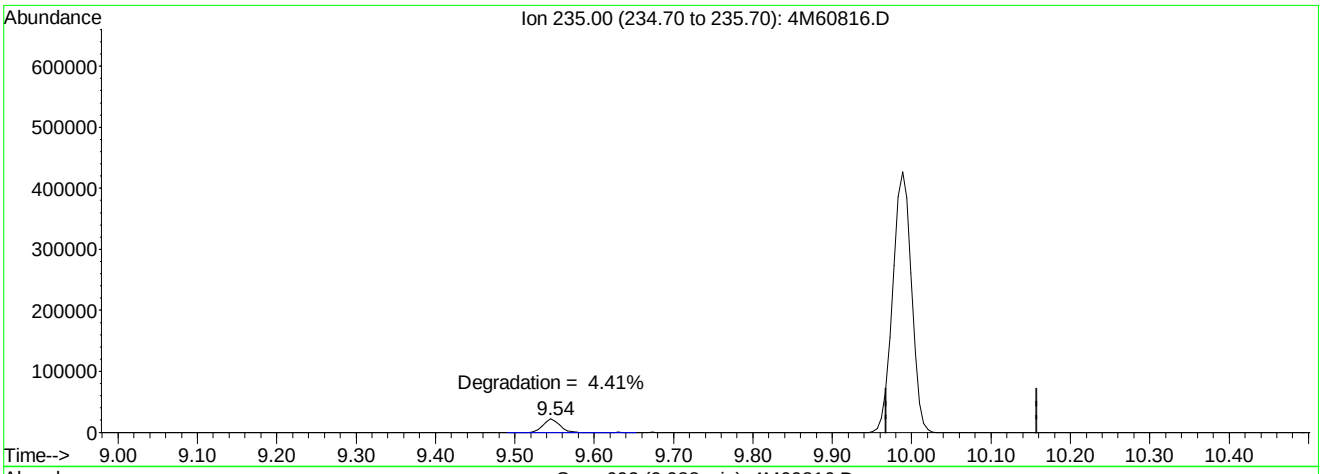
Ion	Exp%	Act%
184.10	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

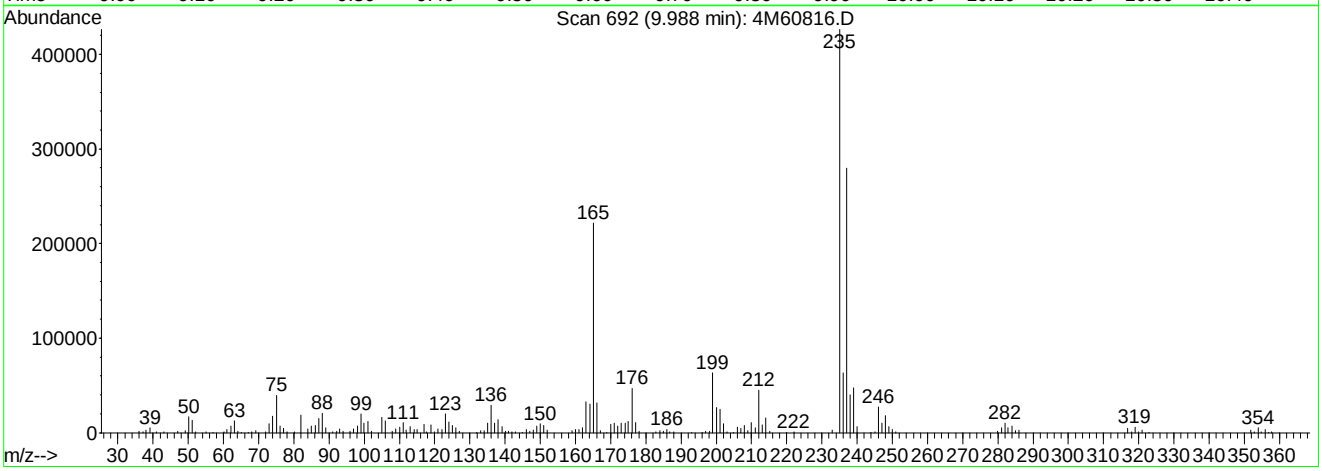
4M60816.D DFTPP.M Mon May 14 11:40:06 2012

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

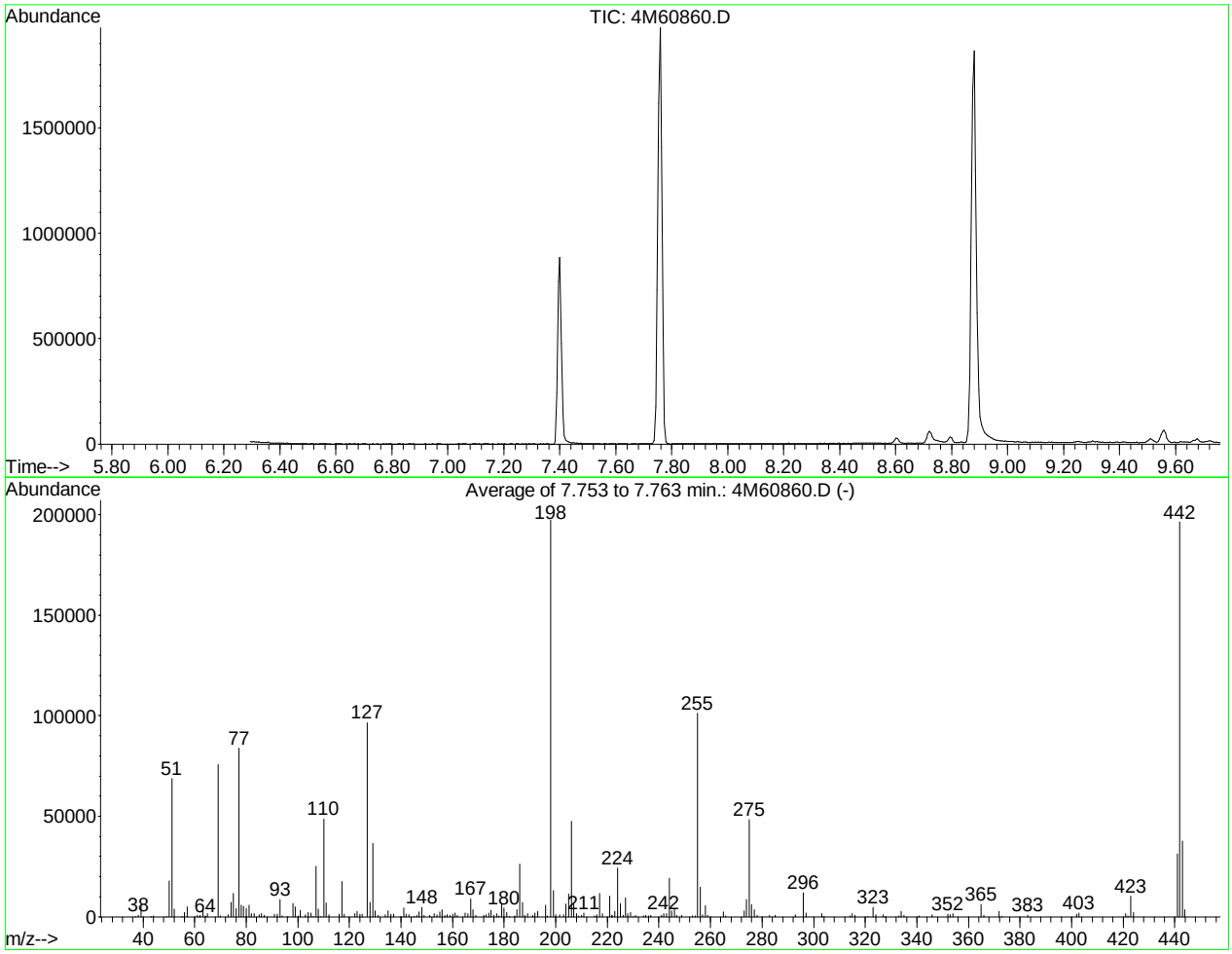
9.99min 0.00ug/ml

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\051412\4M60860.D Vial: 1
Acq On : 14 May 2012 8:24 Operator: CAA
Sample : WG397858-01 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 274, 275, 276; Background Corrected with Scan 268

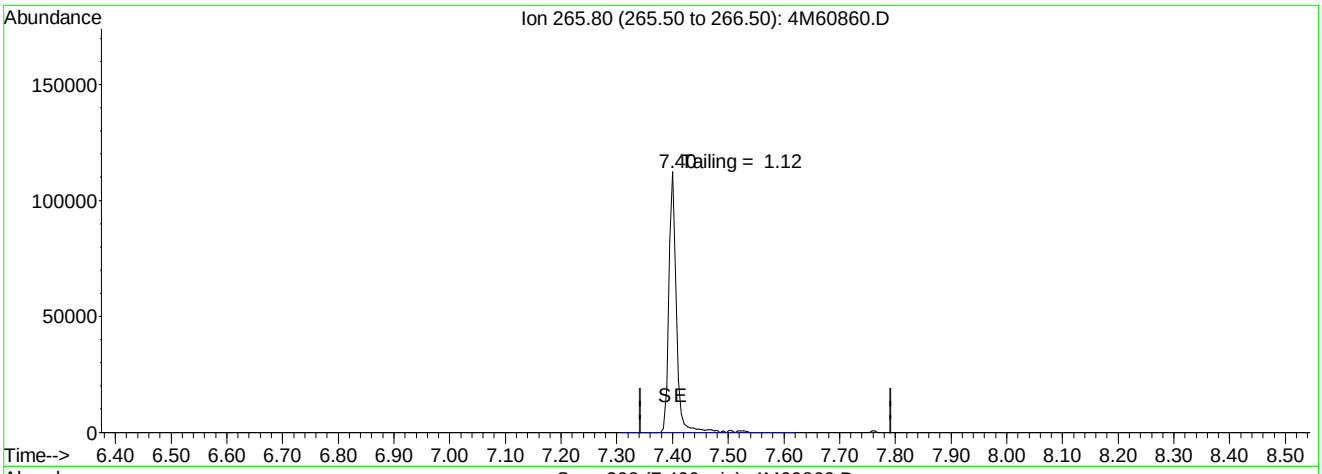
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	34.9	68800	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	38.3	75621	PASS
70	69	0.00	2	0.5	401	PASS
127	198	40	60	48.9	96472	PASS
197	198	0.00	1	0.2	430	PASS
198	198	100	100	100.0	197354	PASS
199	198	5	9	6.5	12926	PASS
275	198	10	30	24.5	48296	PASS
365	198	1	100	3.0	5982	PASS
441	443	0.01	100	82.8	31128	PASS
442	198	40	100	99.5	196416	PASS
443	442	17	23	19.1	37605	PASS

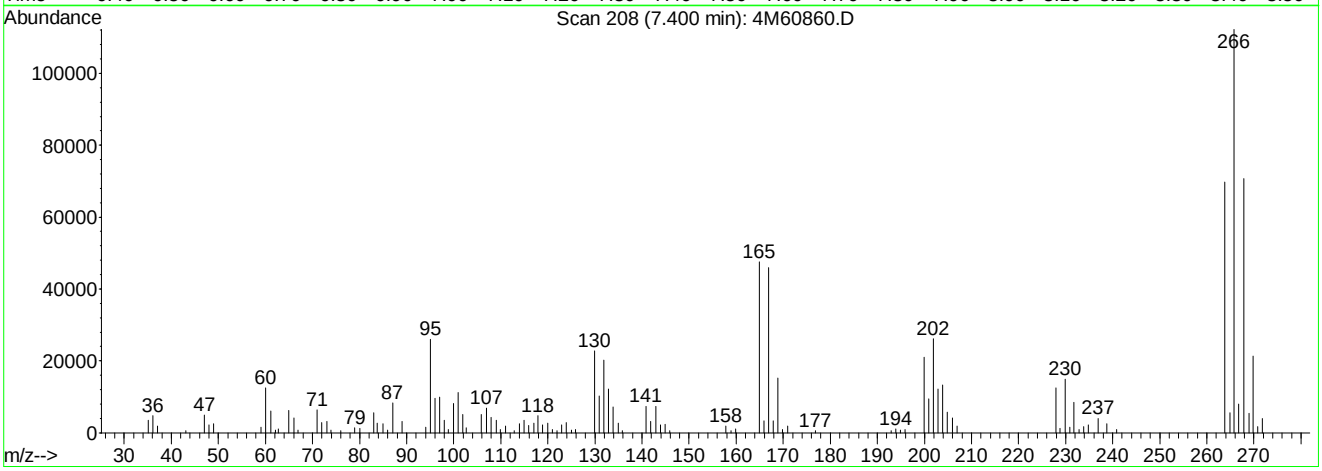
4M60860.D DFTPP.M Tue May 15 10:58:07 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\051412\4M60860.D Vial: 1
Acq On : 14 May 2012 8:24 Operator: CAA
Sample : WG397858-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 14 8:37 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: 4M60860.D

(1) Pentachlorophenol

7.40min 0.00ug/ml

response 105161

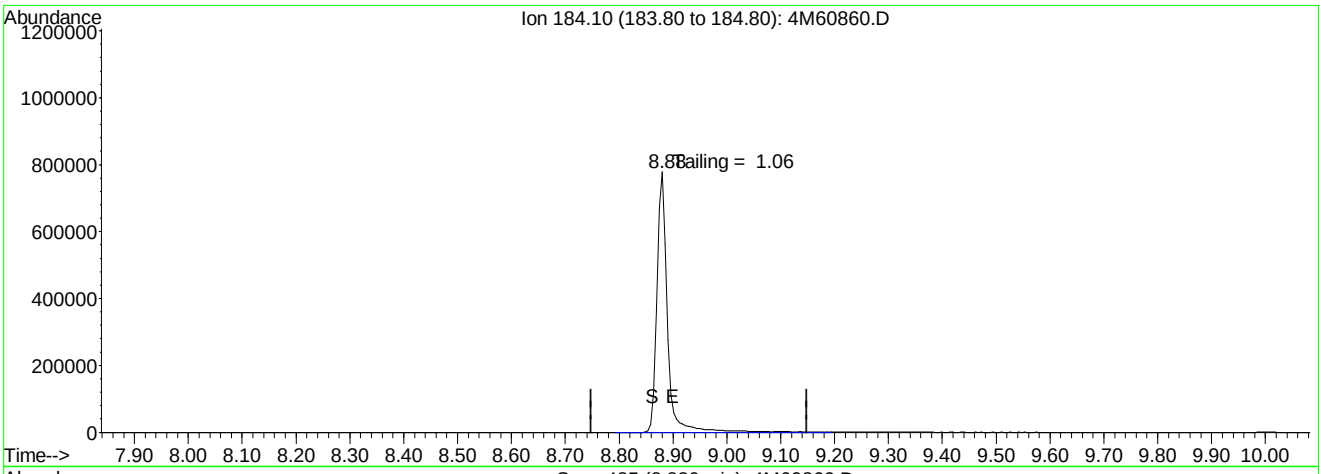
Ion	Exp%	Act%
265.80	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

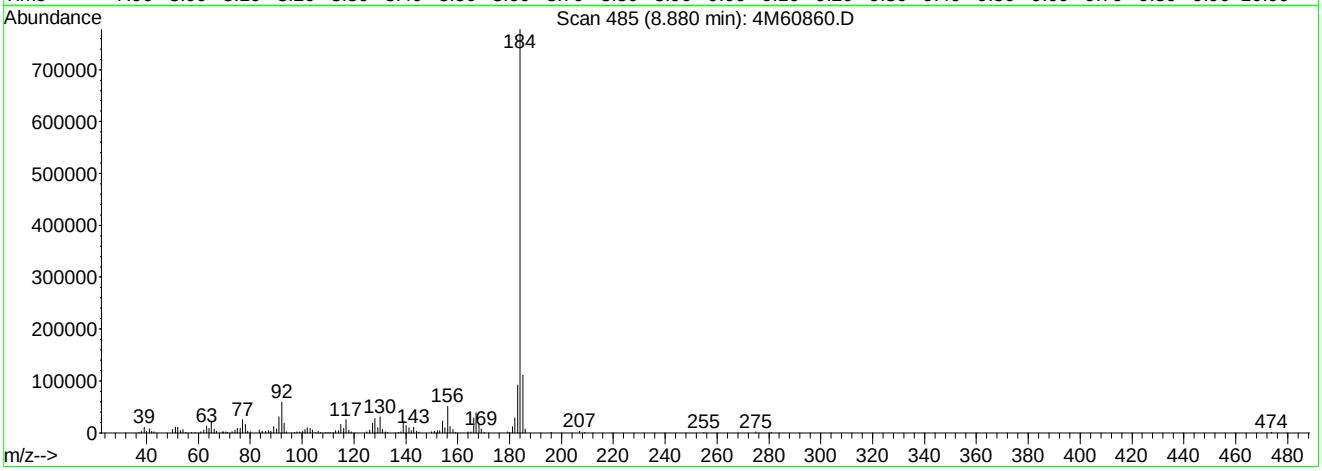
4M60860.D DFTPP.M Tue May 15 10:58:13 2012

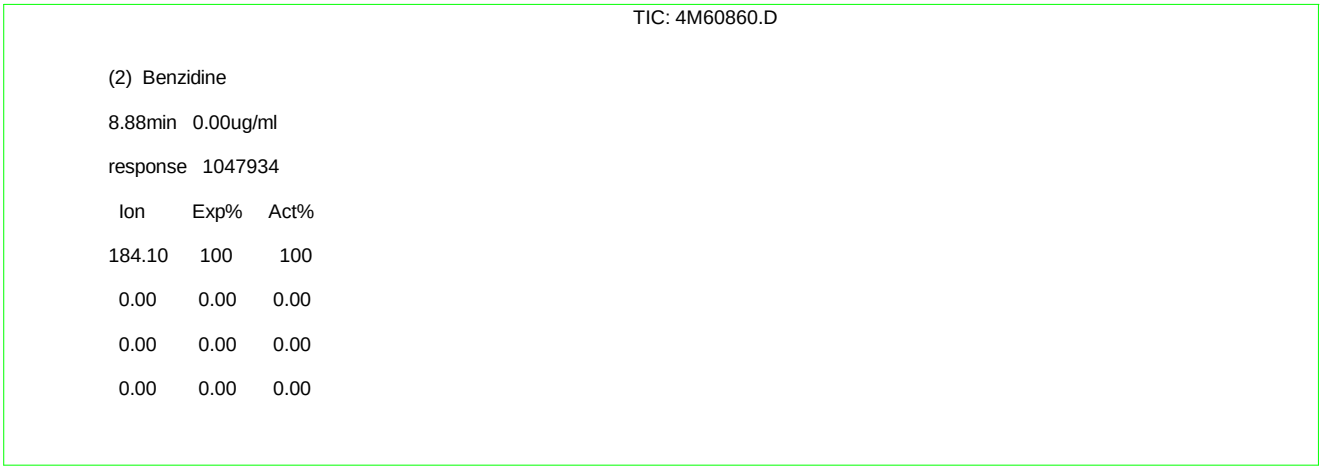
Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\051412\4M60860.D Vial: 1
Acq On : 14 May 2012 8:24 Operator: CAA
Sample : WG397858-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 14 8:37 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







(2) Benzidine

8.88min 0.00ug/ml

response 1047934

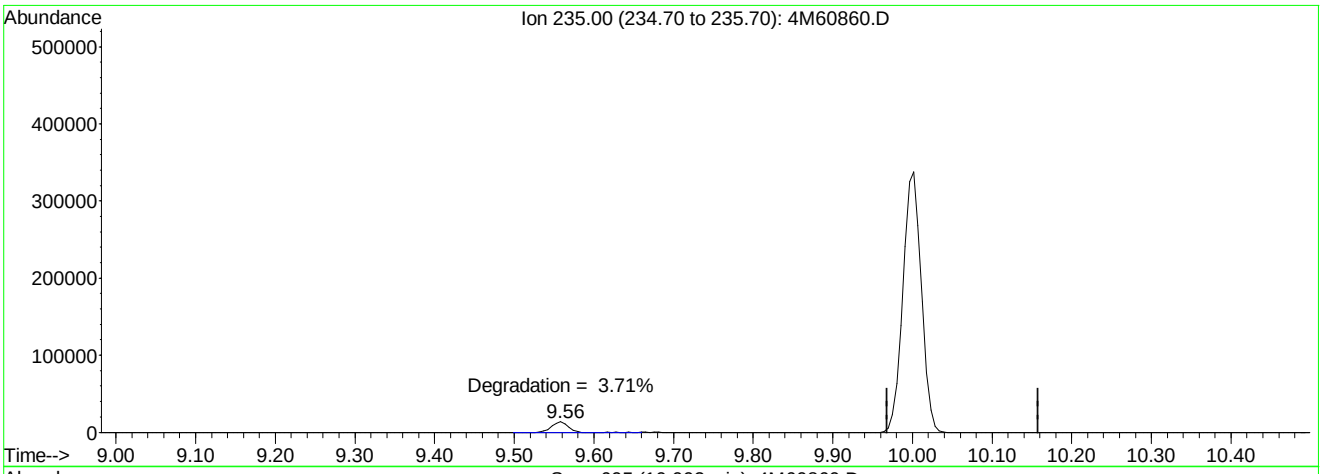
Ion	Exp%	Act%
184.10	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

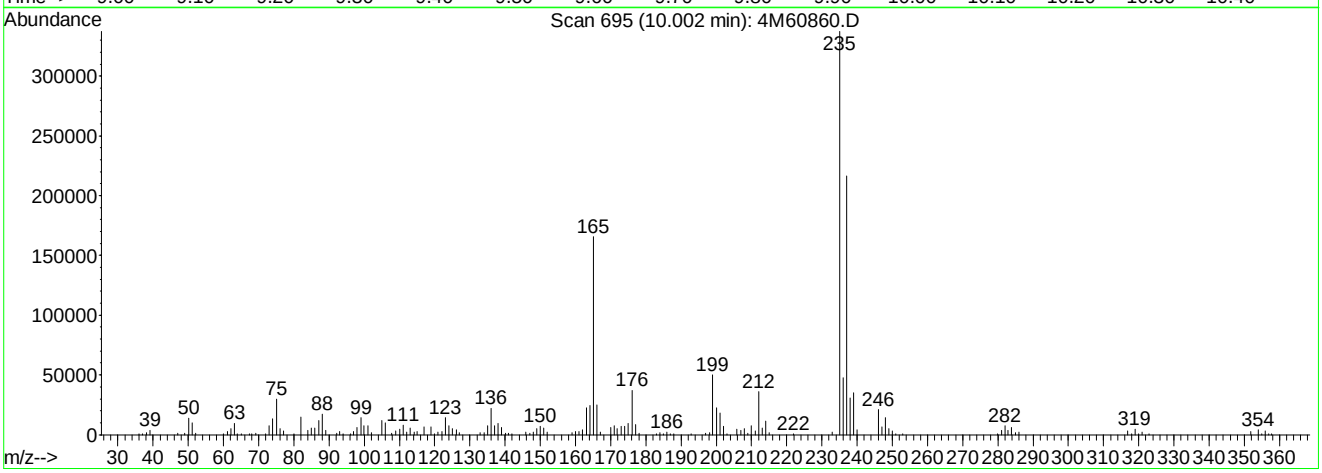
4M60860.D DFTPP.M Tue May 15 10:58:18 2012

Quantitation Report (Qedit)

Data File : I:\MSDCHEM\1\DATA\051412\4M60860.D Vial: 1
Acq On : 14 May 2012 8:24 Operator: CAA
Sample : WG397858-01 50PPM DFTPP STD Inst : HPMS4
Misc : 1,1 STD50659 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 14 8:37 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: 4M60860.D

(3) DDT

10.00min 0.00ug/ml

response 511405

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

4M60860.D DFTPP.M Tue May 15 10:58:25 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%			

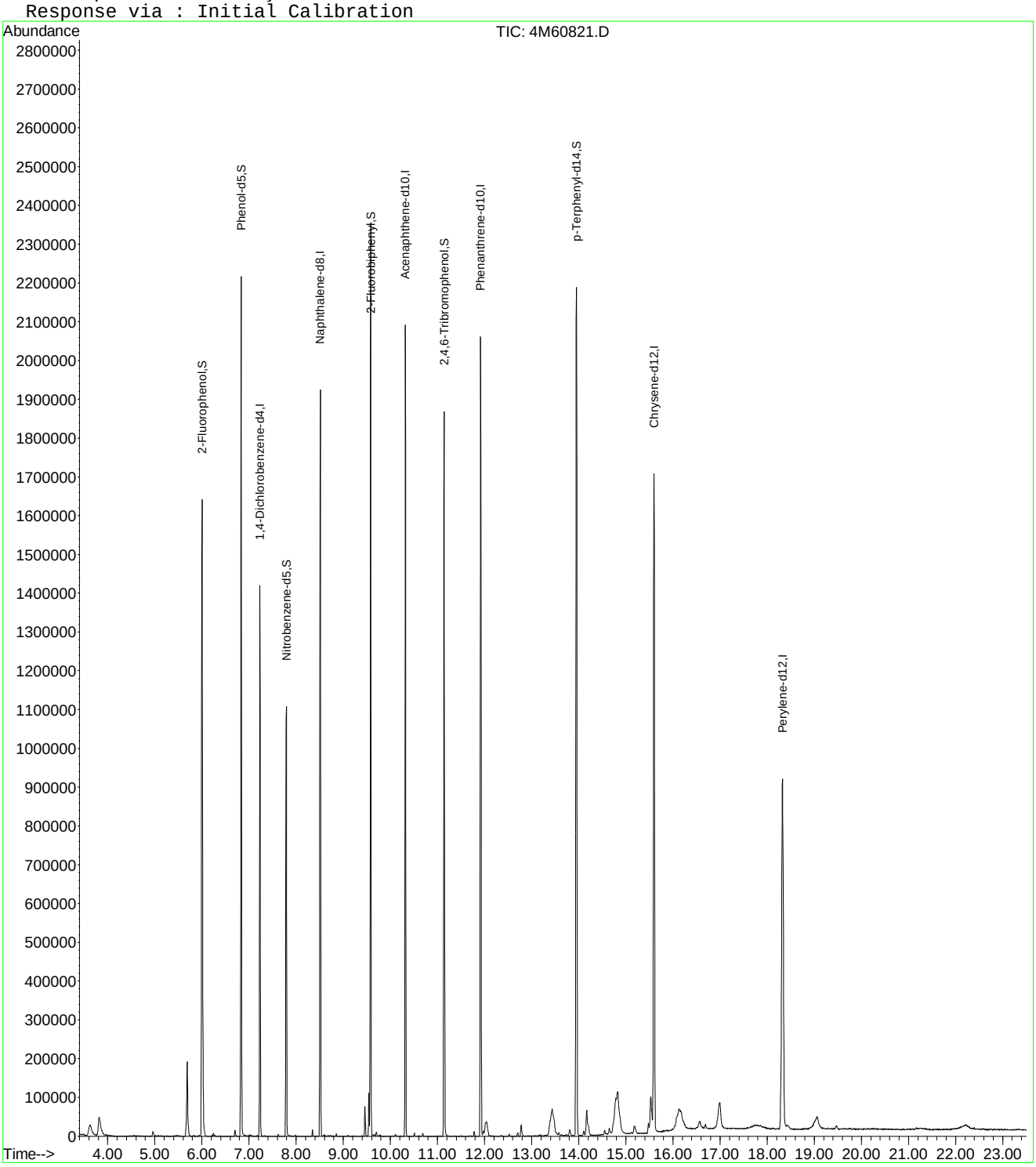
Target Compounds Qvalue

(#) = 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

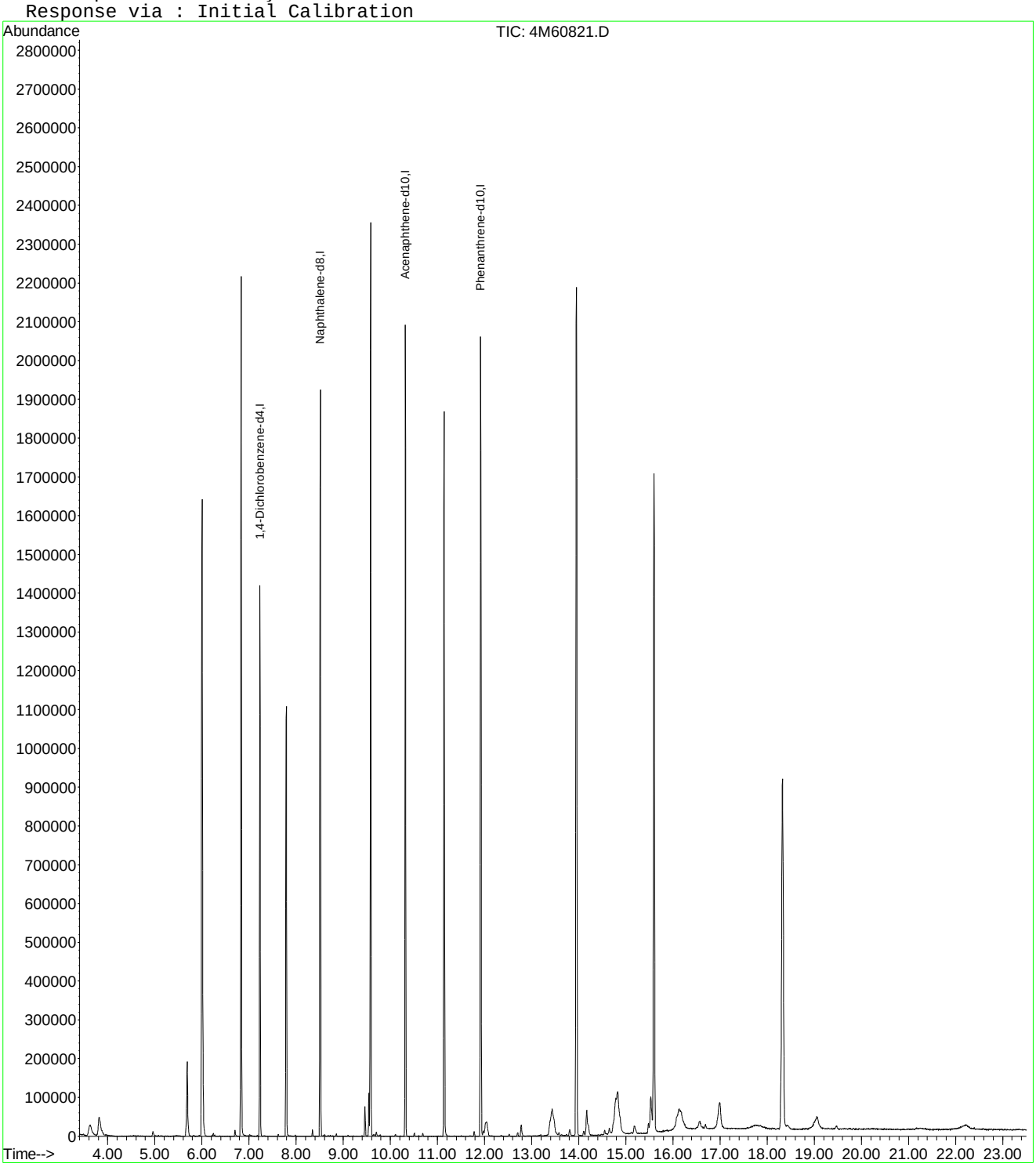
Target Compounds Qvalue

(#) = 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



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

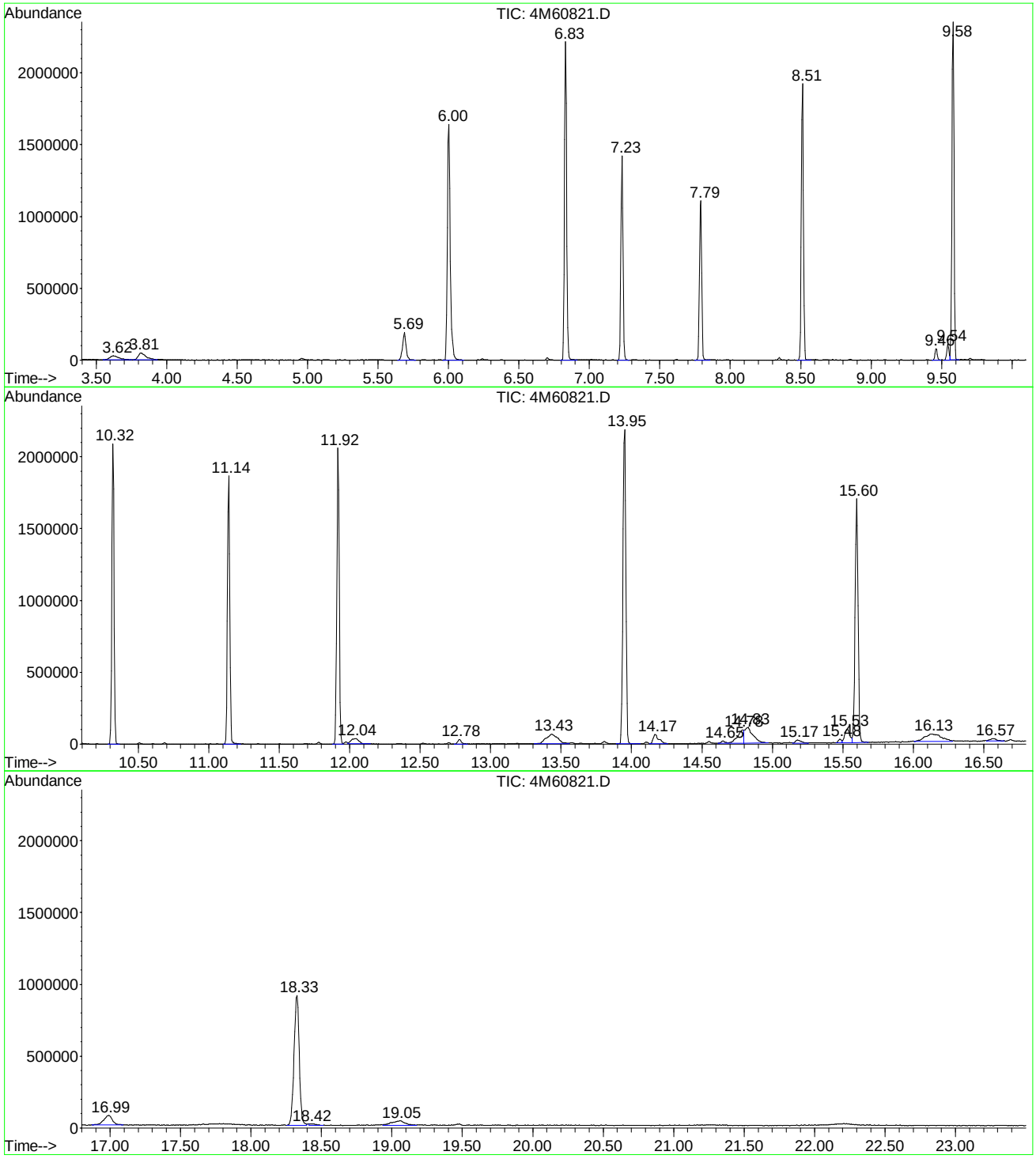
If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

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

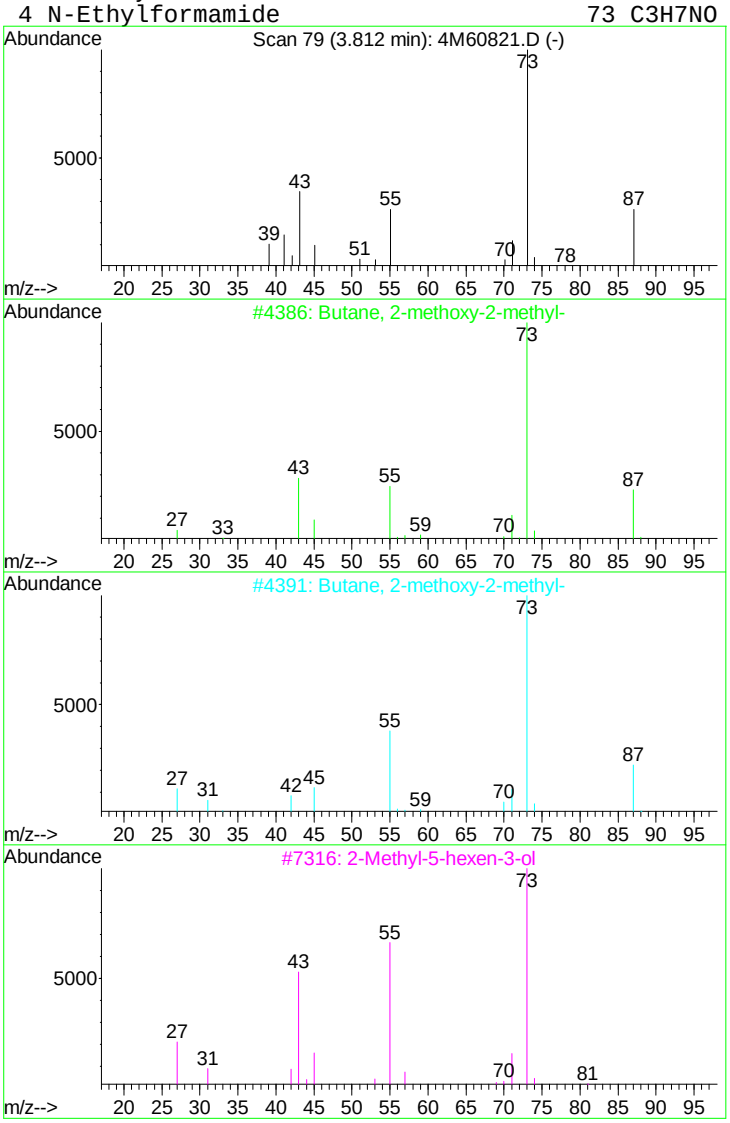
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

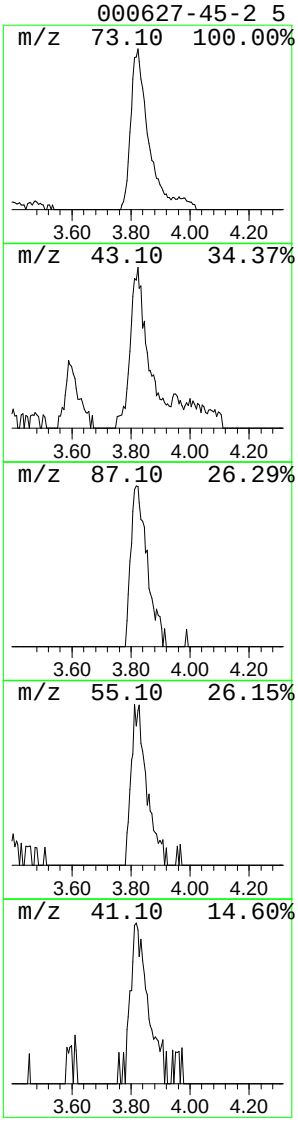
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Peak Number 1 Butane, 2-methoxy-2-methyl- Concentration Rank 6

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

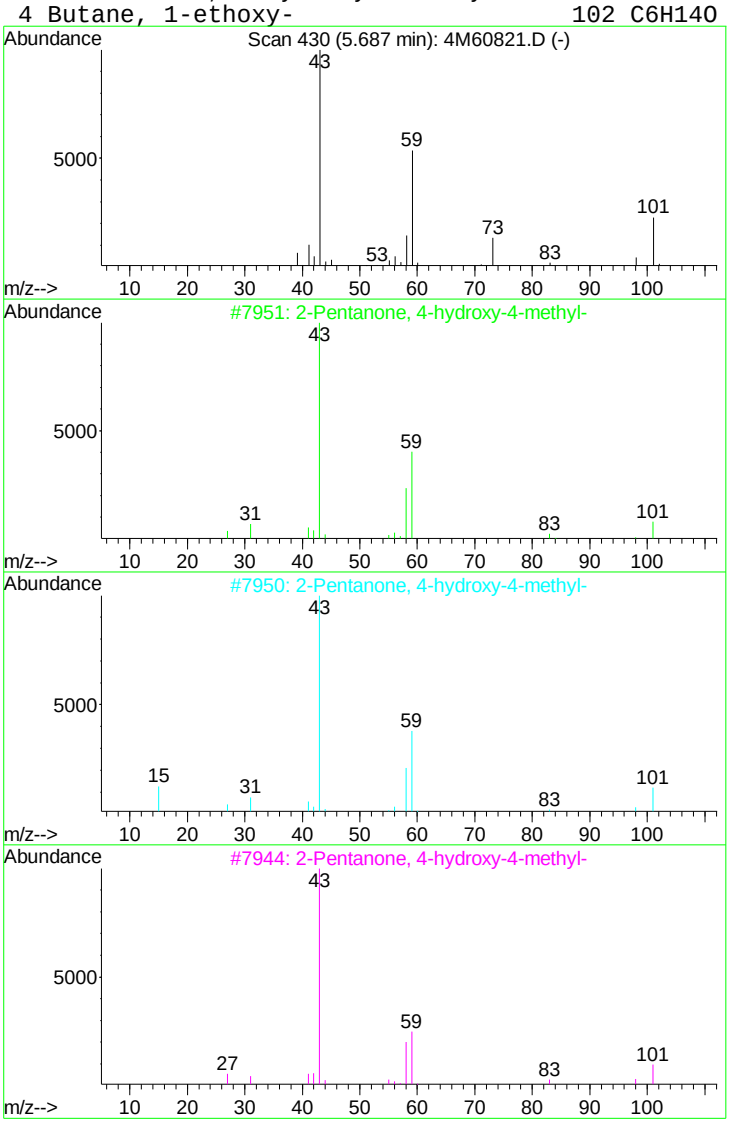
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Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

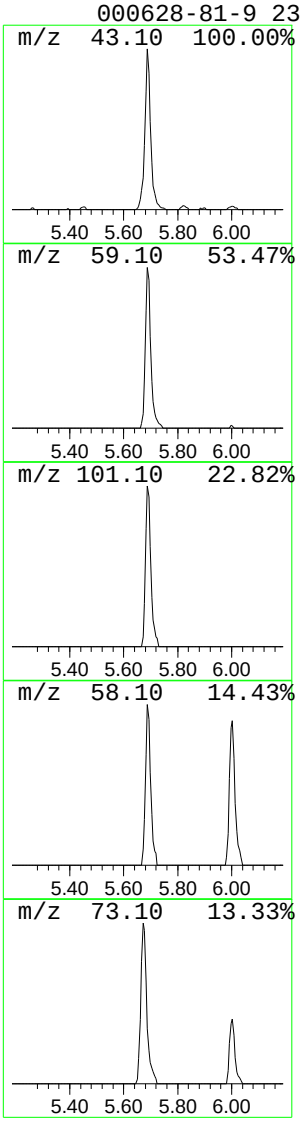
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Peak Number 2 2-Pentanone, 4-hydroxy-4-me... Concentration Rank 1

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

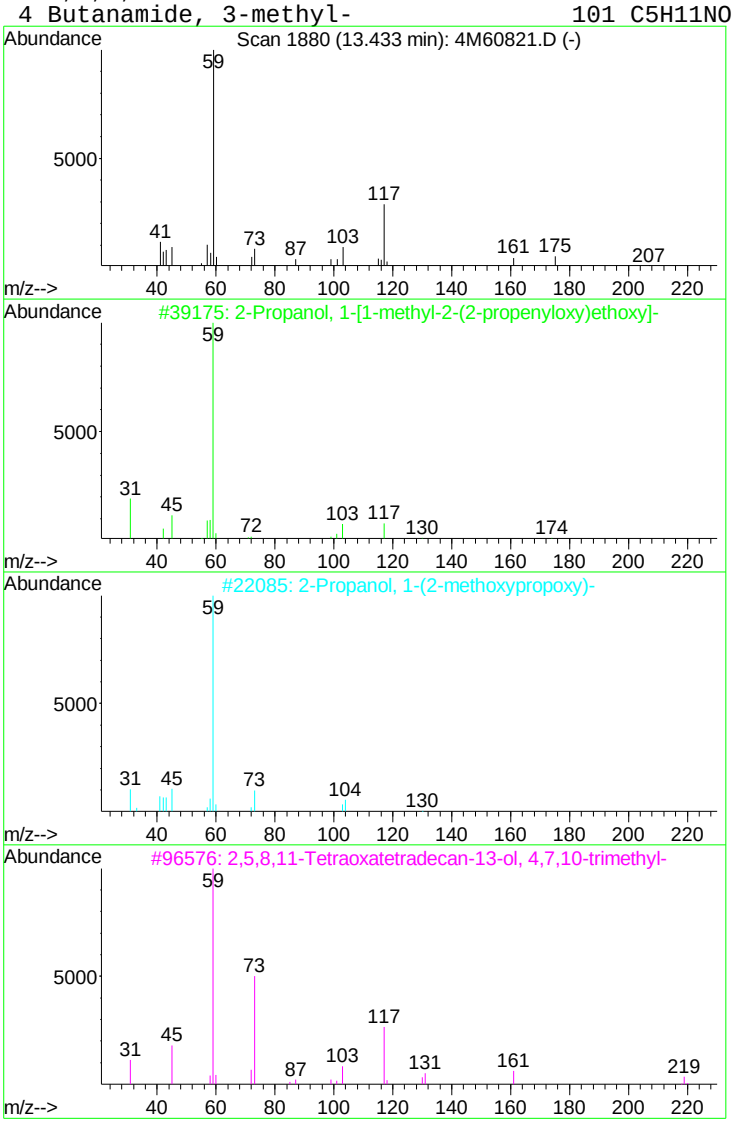
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Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

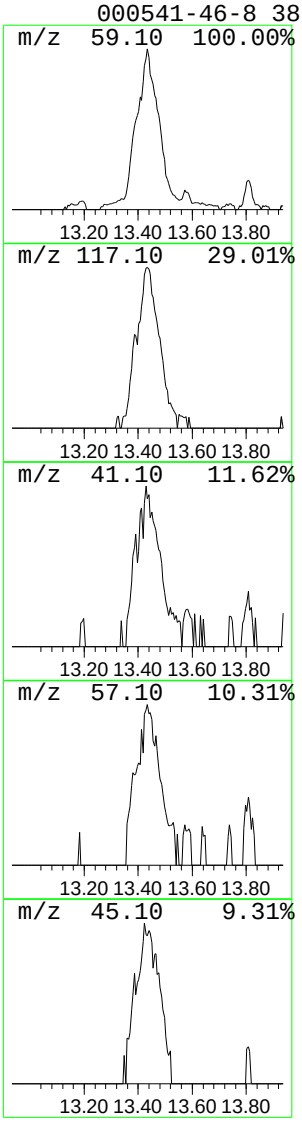
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Peak Number 3 2-Propanol, 1-[1-methyl-2-(... Concentration Rank 4

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

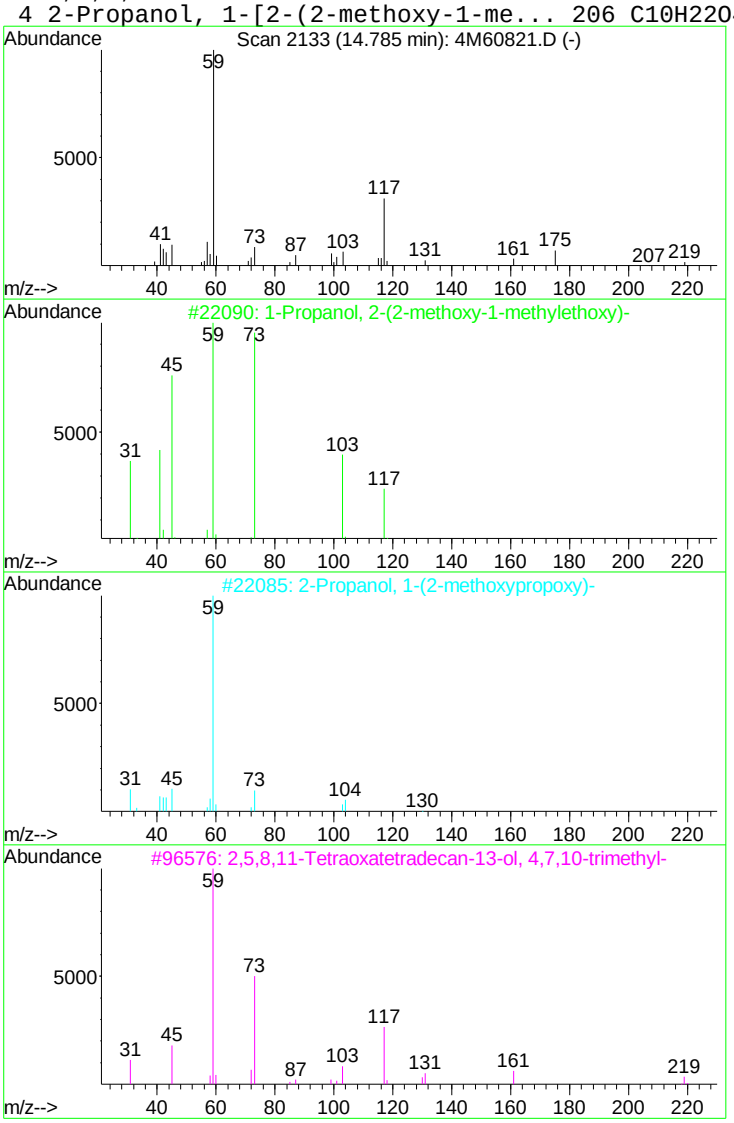
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Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

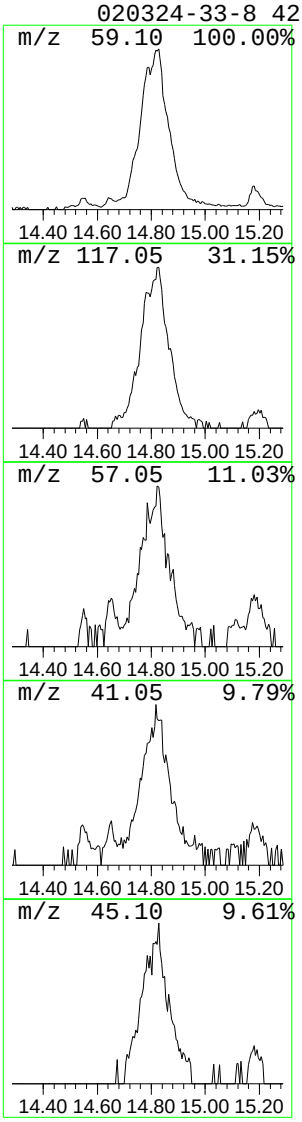
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Peak Number 4 1-Propanol, 2-(2-methoxy-1-... Concentration Rank 7

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

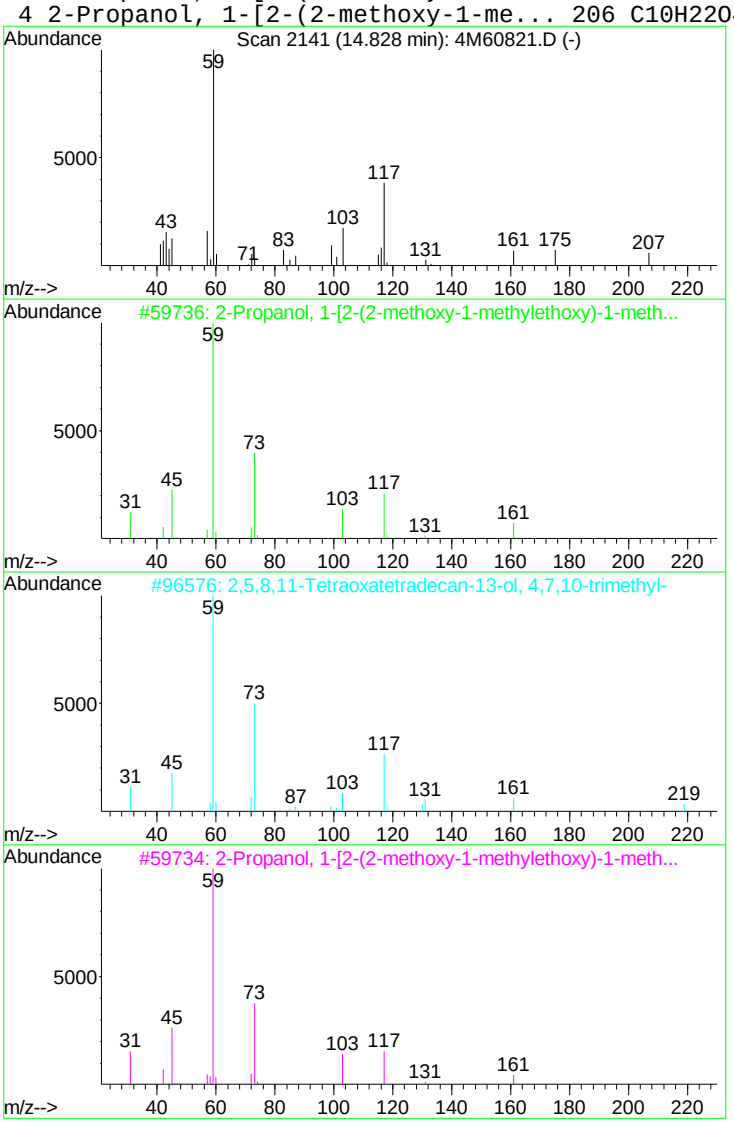
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Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

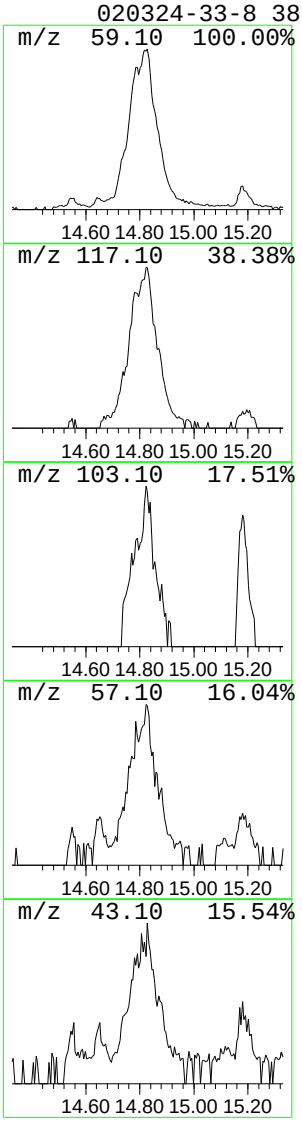
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Peak Number 5 2-Propanol, 1-[2-(2-methoxy... Concentration Rank 2

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

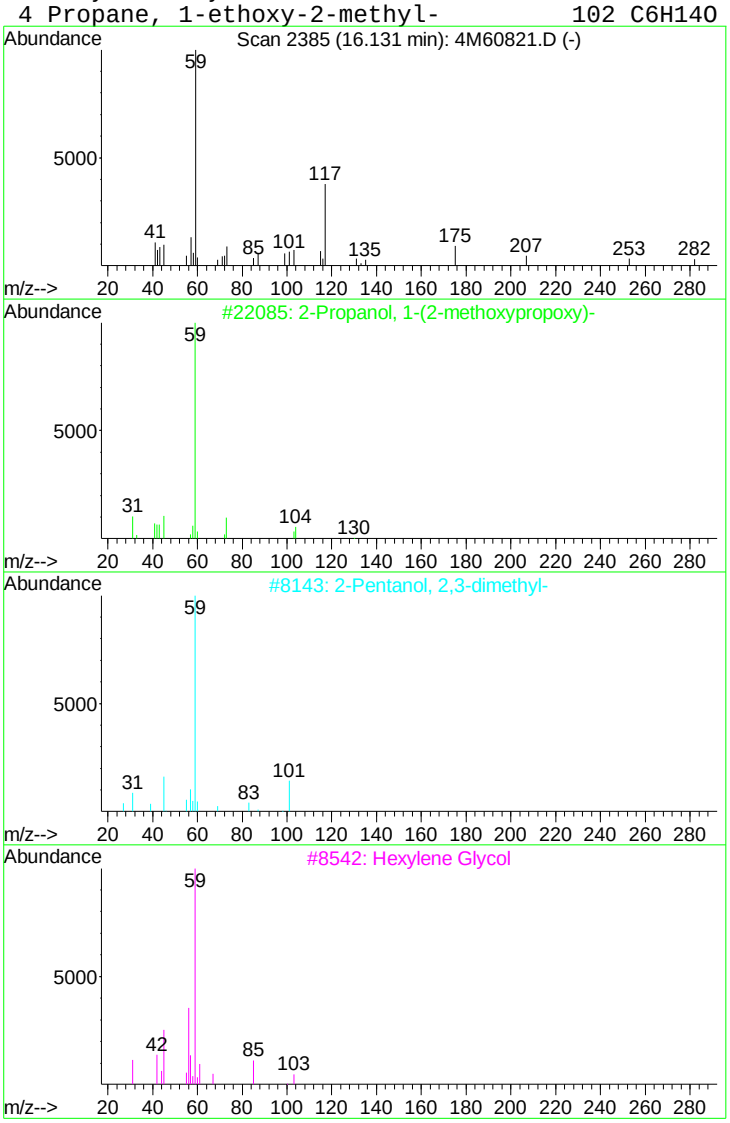
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Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

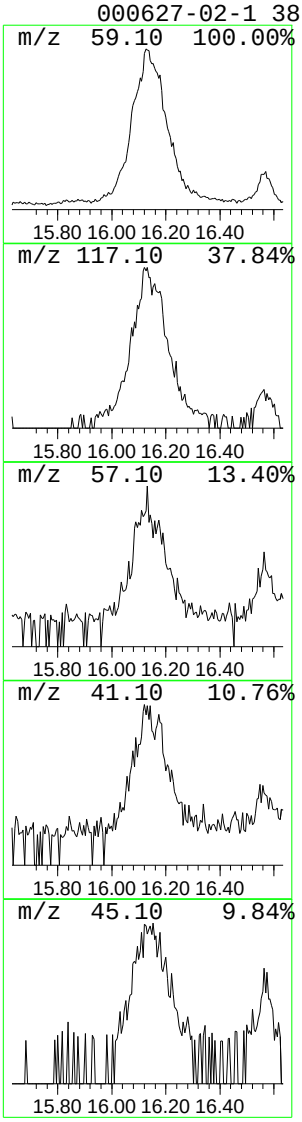
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Peak Number 6 2-Propanol, 1-(2-methoxypro... Concentration Rank 3

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

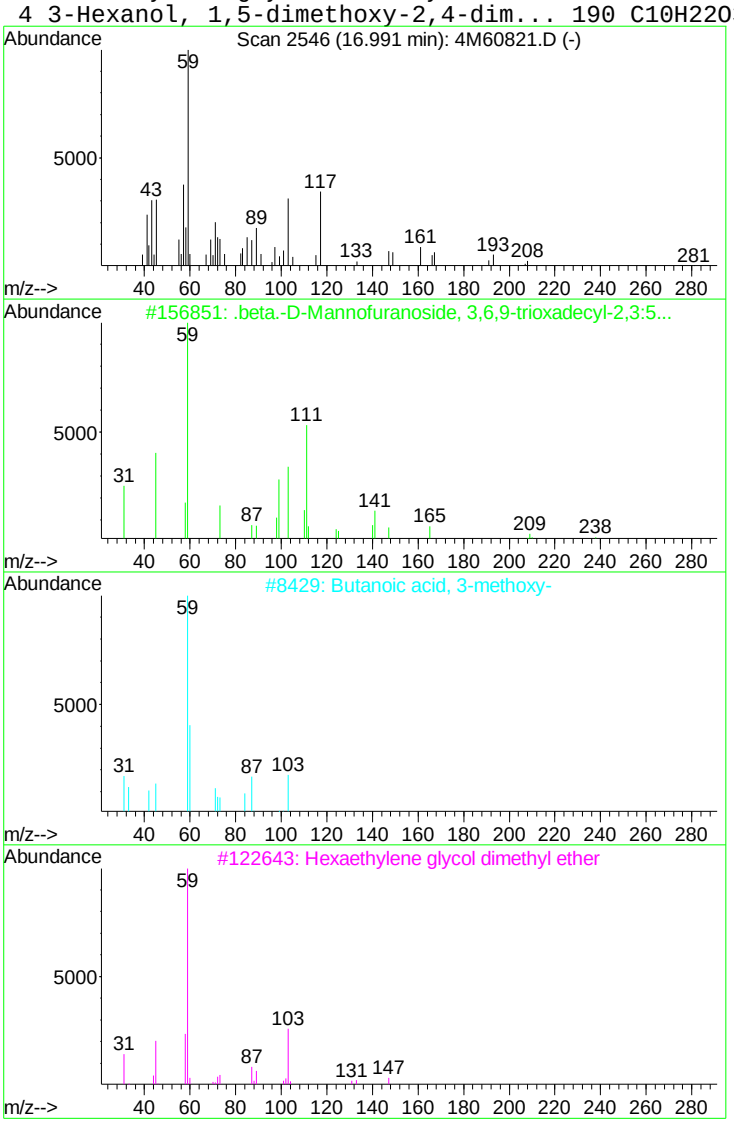
Quant Method : I:\MSDCHEM\1\METHODS\MEGAMIX.M (RTE Integrator)
Title : OVD MSS01 8270/625 Initial Calibration 04/19/12
Library : I:\DATABASE\NIST02.L

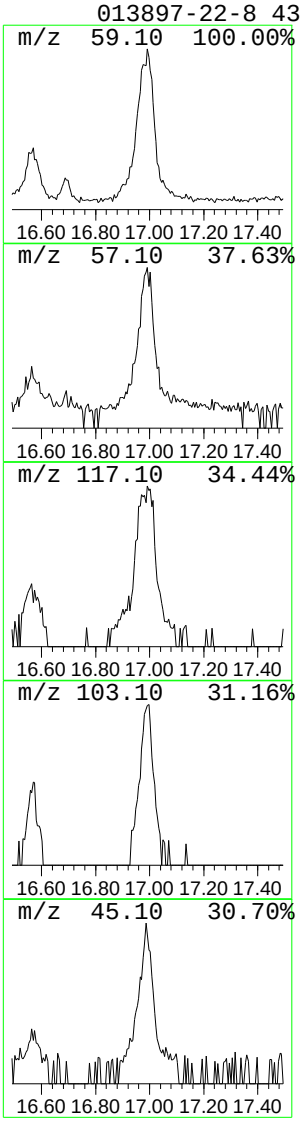
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Peak Number 7 .beta.-D-Mannofuranoside, 3... Concentration Rank 5

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

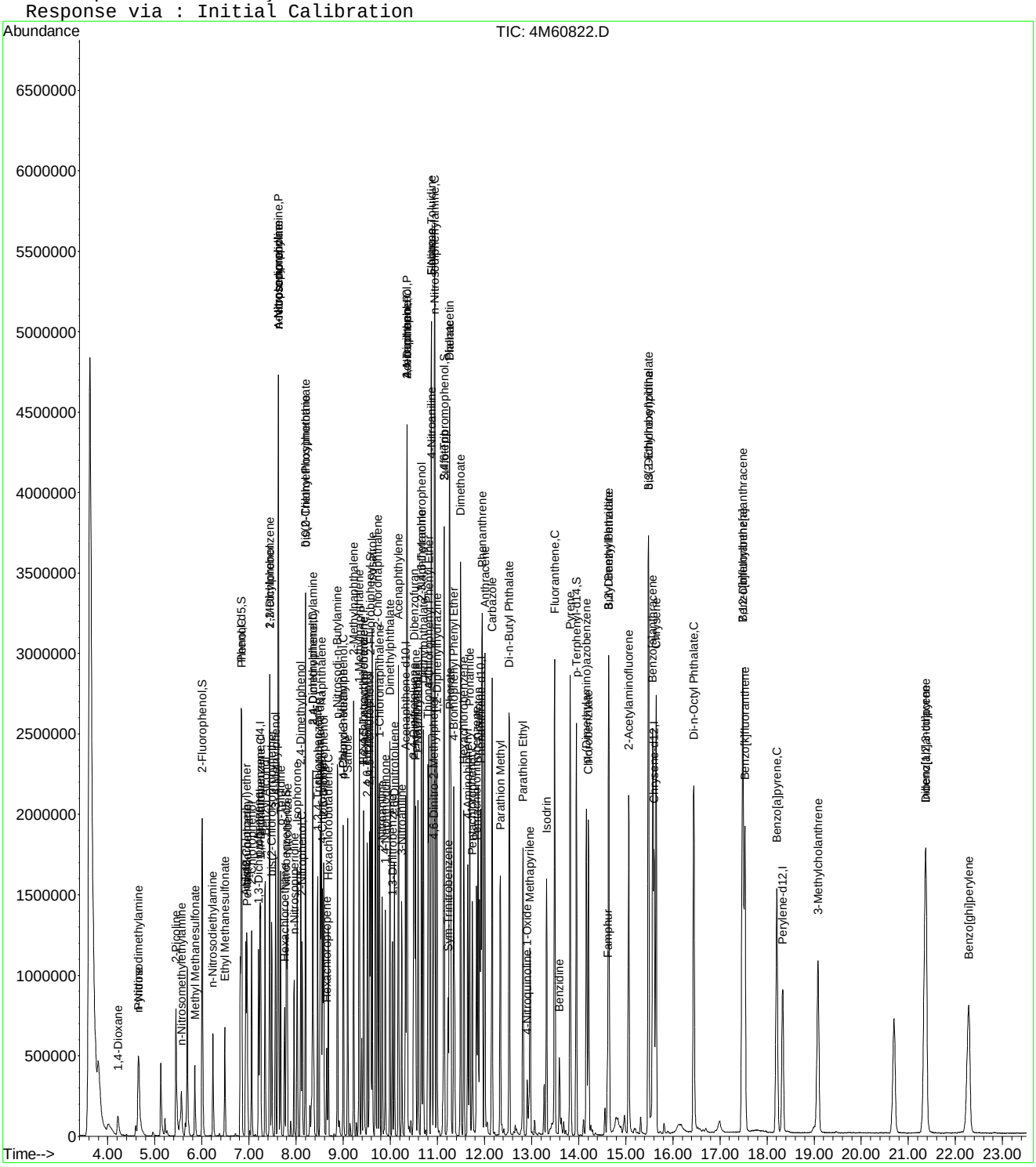
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
98)	4-Aminobiphenyl	11.64	169	803295	96.0106	ug/ml	100
99)	Pentachlorophenol	11.74	266	219941	61.5716	ug/ml	99
100)	Pronamide	11.69	173	500977	60.3358	ug/ml	100
101)	Pentachloronitrobenzene	11.83	237	124379	63.5305	ug/ml	98
102)	Disulfoton	11.86	88	570201	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

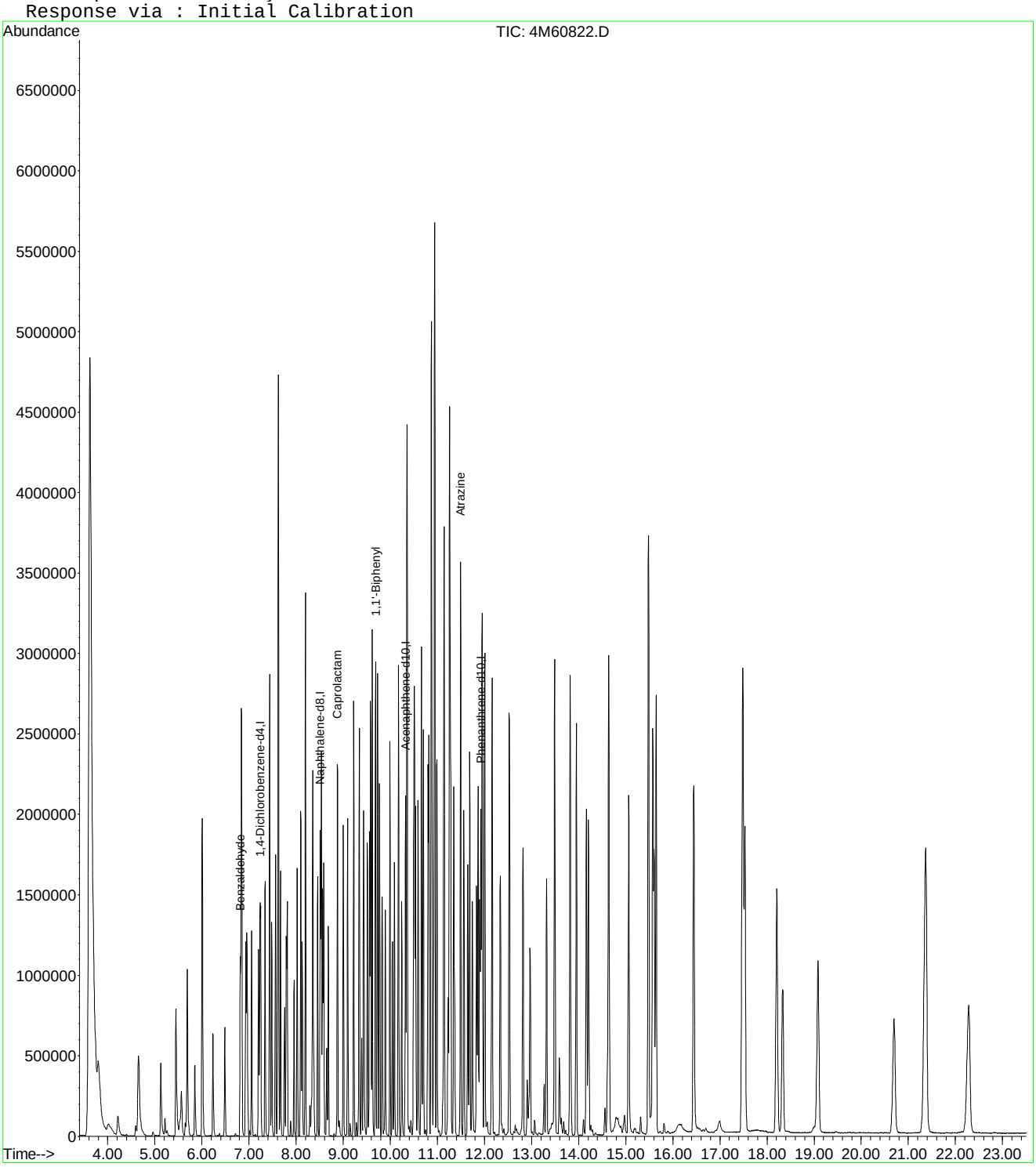
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.23	152	262198	40.00	ug/mL	0.00
3) Naphthalene-d8	8.51	136	999831	40.00	ug/mL	0.00
5) Acenaphthene-d10	10.32	164	562715	40.00	ug/mL	0.00
7) Phenanthrene-d10	11.92	188	1021385	40.00	ug/mL	0.00
Target Compounds						Qvalue
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: L12050171
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: All acceptance criteria were met.

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: 46195
Approved By: Mike Cochran



Certificate of Analysis

Sample #: L12050171-01 | **PrePrep Method:** N/A | **Instrument:** HPMS7
Client ID: MW-12-050412 | **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 15:10
Collect Date: 05/04/2012 10:30 | **Dilution:** 1 | **File ID:** 7M54965
Sample Tag: 01 | **Units:** ug/L

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

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2-Fluorobiphenyl	50.9	43	116	
Nitrobenzene-d5	55.6	35	114	
p-Terphenyl-d14	79.1	33	141	

U	Not detected at or above adjusted sample detection limit.

Sample #: L12050171-03 | **PrePrep Method:** N/A | **Instrument:** HPMS7
Client ID: MW-12-050412 | **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 15:37
Collect Date: 05/04/2012 10:30 | **Dilution:** 1 | **File ID:** 7M54966
Sample Tag: 01 | **Units:** ug/L

Analyte	CAS #	Result	Qual	RL	MDL
2-Methylnaphthalene	91-57-6	0.806		0.0575	0.0287
Acenaphthene	83-32-9	0.758		0.0575	0.0287

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Acenaphthylene	208-96-8	0.736		0.0575	0.0287
Anthracene	120-12-7	0.841		0.0575	0.0287
Benzo(a)anthracene	56-55-3	0.892		0.0575	0.0287
Benzo(a)pyrene	50-32-8	0.967		0.0575	0.0287
Benzo(b)fluoranthene	205-99-2	0.914		0.0575	0.0287
Benzo(g,h,i)perylene	191-24-2	0.874		0.0575	0.0287
Benzo(k)fluoranthene	207-08-9	0.934		0.0575	0.0287
Chrysene	218-01-9	0.978		0.0575	0.0287
Dibenzo(a,h)anthracene	53-70-3	0.888		0.0575	0.0287
Fluoranthene	206-44-0	0.986		0.0575	0.0287
Fluorene	86-73-7	0.742		0.0575	0.0287
Indeno(1,2,3-cd)pyrene	193-39-5	0.866		0.0575	0.0287
Naphthalene	91-20-3	0.736		0.0575	0.0287
Phenanthrene	85-01-8	0.790		0.0575	0.0287
Pyrene	129-00-0	0.978		0.0575	0.0287

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2-Fluorobiphenyl	57.0	43	116	
Nitrobenzene-d5	61.6	35	114	
p-Terphenyl-d14	87.1	33	141	

Sample #: L12050171-05
Client ID: MW-12-050412
Matrix: Water
Workgroup #: WG397601
Collect Date: 05/04/2012 10:30
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 16:06
File ID: 7M54967

Analyte	CAS #	Result	Qual	RL	MDL
2-Methylnaphthalene	91-57-6	0.873		0.0575	0.0287
Acenaphthene	83-32-9	0.767		0.0575	0.0287
Acenaphthylene	208-96-8	0.799		0.0575	0.0287
Anthracene	120-12-7	0.888		0.0575	0.0287
Benzo(a)anthracene	56-55-3	0.852		0.0575	0.0287
Benzo(a)pyrene	50-32-8	0.931		0.0575	0.0287
Benzo(b)fluoranthene	205-99-2	0.897		0.0575	0.0287
Benzo(g,h,i)perylene	191-24-2	0.808		0.0575	0.0287
Benzo(k)fluoranthene	207-08-9	0.952		0.0575	0.0287
Chrysene	218-01-9	0.956		0.0575	0.0287
Dibenzo(a,h)anthracene	53-70-3	0.822		0.0575	0.0287
Fluoranthene	206-44-0	0.974		0.0575	0.0287

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Fluorene	86-73-7	0.800		0.0575	0.0287
Indeno(1,2,3-cd)pyrene	193-39-5	0.816		0.0575	0.0287
Naphthalene	91-20-3	0.796		0.0575	0.0287
Phenanthrene	85-01-8	0.835		0.0575	0.0287
Pyrene	129-00-0	0.956		0.0575	0.0287

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2-Fluorobiphenyl	61.2	43	116	
Nitrobenzene-d5	65.8	35	114	
p-Terphenyl-d14	79.5	33	141	

Sample #: L12050171-07
Client ID: PZ-01-050412
Matrix: Water
Workgroup #: WG397601
Collect Date: 05/04/2012 12:07
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 16:34
File ID: 7M54968

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

Surrogate	Recovery	Lower Limit	Upper Limit	Q
2-Fluorobiphenyl	52.4	43	116	
Nitrobenzene-d5	61.2	35	114	
p-Terphenyl-d14	70.8	33	141	

U	Not detected at or above adjusted sample detection limit.

Certificate of Analysis

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: 2408567
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

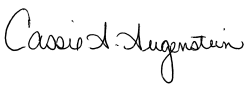
Microbac Laboratories Inc.

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: L12050171

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-12-050412	01	05/04/12					05/09/12	5	7		05/10/12	1.2	40	
MW-12-050412	03	05/04/12					05/09/12	5	7		05/10/12	1.2	40	
MW-12-050412	05	05/04/12					05/09/12	5	7		05/10/12	1.2	40	
PZ-01-050412	07	05/04/12					05/09/12	5	7		05/10/12	1.2	40	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2410470
Report generated 05/11/2012 09:49

Login Number: L12050171
Instrument Id: HPMS7
Workgroup (AAB#): WG397601

Method: 8270L
CAL ID: HPMS7-04-APR-12
Matrix: Water

Sample Number	Dilution	Tag	1	2	3
L12050171-01	1.00	01	50.9	55.6	79.1
L12050171-03	1.00	01	57.0	61.6	87.1
L12050171-05	1.00	01	61.2	65.8	79.5
L12050171-07	1.00	01	52.4	61.2	70.8
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: 2410482
Report generated: 05/11/2012 09:49

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number:	L12050171	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-12-050412	L12050171-01	7M54965	05/10/12 15:10	01
MW-12-050412	L12050171-03	7M54966	05/10/12 15:37	01
MW-12-050412	L12050171-05	7M54967	05/10/12 16:06	01
PZ-01-050412	L12050171-07	7M54968	05/10/12 16:34	01

Report Name: BLANK_SUMMARY
PDF File ID: 2410471
Report generated 05/11/2012 09:49

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050171 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: 2410472
11-MAY-2012 09:49

Login Number: L12050171 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: 2410474
Report generated: 05/11/2012 09:49

Microbac Laboratories Inc.

MS/MSD REPORT

Loginnum:L12050171 Cal ID:HPMS7- 04-APR-12 Worknum:WG397601

Instrument ID:HPMS7 Contract #: Prep Method:3510C

Parent ID:L12050171-01 File ID:7M54965 Dil:1 Method:8270C

Sample ID:L12050171-03 MS File ID:7M54966 Dil:1 Matrix:Water

Sample ID:L12050171-05 MSD File ID:7M54967 Dil:1 Units:ug/L

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
2-Methylnaphthalene	U	1.15	0.806	70.1	1.15	0.873	75.9	8.01	30 - 105	30	
Acenaphthene	U	1.15	0.758	65.9	1.15	0.767	66.7	1.13	30 - 110	30	
Acenaphthylene	U	1.15	0.736	64	1.15	0.799	69.5	8.21	30 - 115	30	
Anthracene	U	1.15	0.841	73.1	1.15	0.888	77.2	5.42	30 - 130	30	
Benzo(a)anthracene	U	1.15	0.892	77.6	1.15	0.852	74.1	4.60	50 - 150	30	
Benzo(a)pyrene	U	1.15	0.967	84.2	1.15	0.931	81	3.89	50 - 140	30	
Benzo(b)fluoranthene	U	1.15	0.914	79.5	1.15	0.897	78.1	1.83	40 - 150	30	
Benzo(g,h,i)perylene	U	1.15	0.874	76	1.15	0.808	70.3	7.84	30 - 150	30	
Benzo(k)fluoranthene	U	1.15	0.934	81.2	1.15	0.952	82.8	1.95	40 - 150	30	
Chrysene	U	1.15	0.978	85.1	1.15	0.956	83.2	2.25	45 - 145	30	
Dibenzo(a,h)anthracene	U	1.15	0.888	77.2	1.15	0.822	71.6	7.64	25 - 155	30	
Fluoranthene	U	1.15	0.986	85.7	1.15	0.974	84.7	1.21	40 - 150	30	
Fluorene	U	1.15	0.742	64.6	1.15	0.800	69.6	7.41	30 - 120	30	
Indeno(1,2,3-cd)pyrene	U	1.15	0.866	75.4	1.15	0.816	71	6.03	35 - 150	30	
Naphthalene	U	1.15	0.736	64	1.15	0.796	69.2	7.76	30 - 100	30	
Phenanthrene	U	1.15	0.790	68.7	1.15	0.835	72.6	5.51	30 - 130	30	
Pyrene	U	1.15	0.978	85.1	1.15	0.956	83.2	2.30	50 - 150	30	

* FAILS %REC LIMIT

\# FAILS RPD LIMIT

MS_MSD - Modified 03/06/2008

PDF File ID: 2410475

Report generated 05/11/2012 09:49

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

DFTPP

Login Number: L12050171
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: 2410479
Report generated 05/11/2012 09:49

Microbac Laboratories Inc.
ORGANIC INSTRUMENT CHECK

DFTPP

Login Number: L12050171
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	
L12050171-01	MW-12-050412	01	05/10/2012 15:10	
L12050171-03	MW-12-050412	01	05/10/2012 15:37	
L12050171-05	MW-12-050412	01	05/10/2012 16:06	
L12050171-07	PZ-01-050412	01	05/10/2012 16:34	

* Sample past 12 hour tune limit

TUNE - Modified 03/06/2008
PDF File ID: 2410479
Report generated 05/11/2012 09:49

Microbac Laboratories Inc.
INITIAL CALIBRATION SUMMARY

Login Number: L12050171 **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: 2410476
Report generated 05/11/2012 09:49

Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L12050171
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: 2410476
Report generated 05/11/2012 09:49

Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L12050171
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: 2410476
Report generated 05/11/2012 09:49

Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L12050171
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: 2410476
Report generated 05/11/2012 09:49

Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L12050171 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: 2410478
Report generated 05/11/2012 09:49

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050171 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: 2410480
Report generated 05/11/2012 09:49

Microbac Laboratories Inc.

INTERNAL STANDARD AREA SUMMARY
(COMPARED TO CCV)

Login Number: L12050171
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
L12050171-01	1.00	01	81644	132033	126902	121057	135794
L12050171-03	1.00	01	86016	137804	136398	126796	144767
L12050171-05	1.00	01	81036	128186	127764	117848	134564
L12050171-07	1.00	01	82440	126453	126815	116155	134997
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: 2410481
Report generated 05/11/2012 09:49

Microbac Laboratories Inc.

INTERNAL STANDARD RETENTION TIME SUMMARY
(COMPARED TO CCV)

Login Number: L12050171 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
L12050171-01	1.00	01	8.22	13.47	6.02	15.7	10.08
L12050171-03	1.00	01	8.21	13.47	6.02	15.7	10.08
L12050171-05	1.00	01	8.22	13.47	6.02	15.7	10.09
L12050171-07	1.00	01	8.22	13.47	6.03	15.7	10.09
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: 2410483
Report generated 05/11/2012 09:49

2.2.2.3 Sample Data

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\051012\7M54965.D Vial: 16
Acq On : 10 May 2012 3:10 pm Operator: CAA
Sample : L12050171-01 REF 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

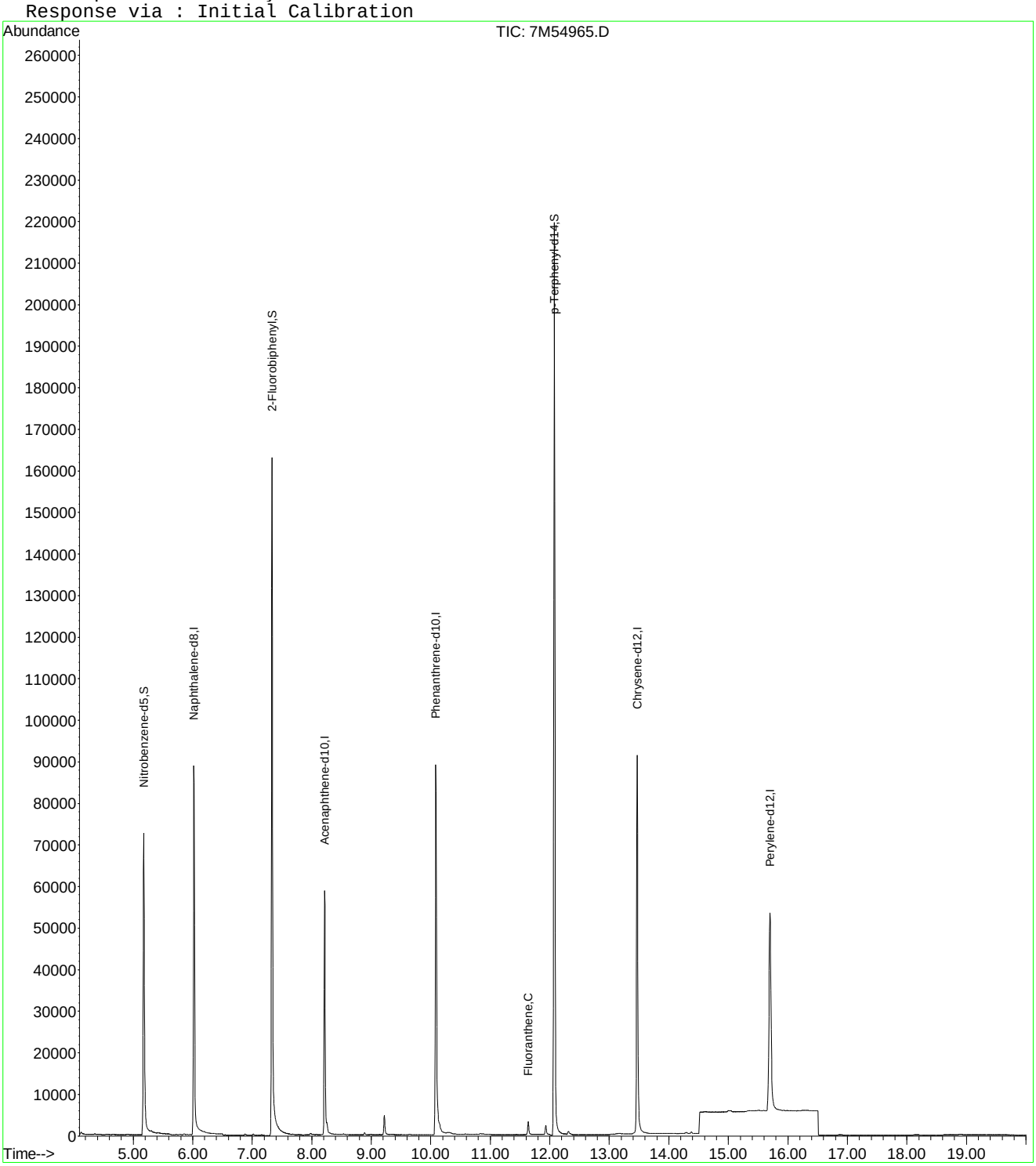
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.02	136	126902	1.00	ug/ml	-0.01
6) Acenaphthene-d10	8.22	164	81644	1.00	ug/ml	-0.02
11) Phenanthrene-d10	10.08	188	135794	1.00	ug/ml	-0.01
15) Chrysene-d12	13.47	240	132033	1.00	ug/ml	-0.01
20) Perylene-d12	15.70	264	121057	1.00	ug/ml	-0.02
System Monitoring Compounds						
2) Nitrobenzene-d5	5.18	82	73687	1.3904	ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery = 55.60%			
7) 2-Fluorobiphenyl	7.33	172	171957	1.2734	ug/ml	-0.01
Spiked Amount 2.500	Range 43 - 116		Recovery = 50.80%			
17) p-Terphenyl-d14	12.07	244	242339	1.9784	ug/ml	-0.01
Spiked Amount 2.500	Range 33 - 141		Recovery = 79.20%			
Target Compounds						Qvalue
14) Fluoranthene	11.63	202	3923	0.0222	ug/ml	96

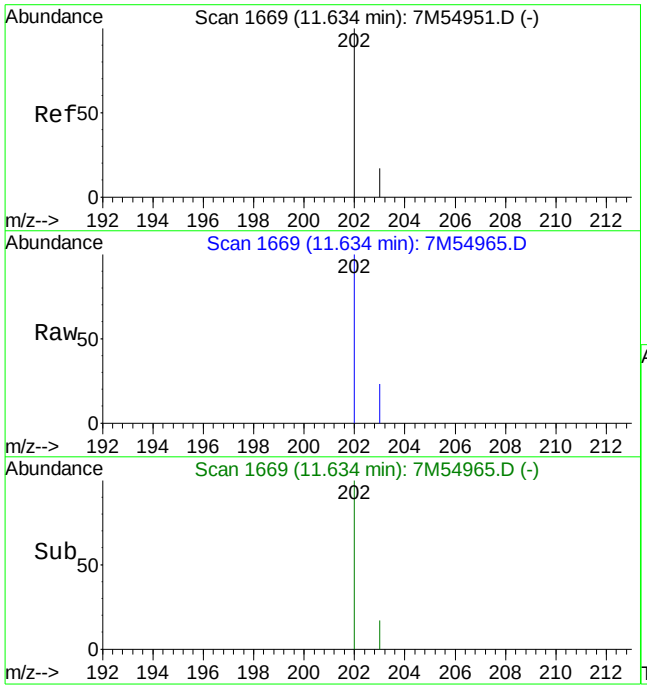
(#) = qualifier out of range (m) = manual integration
7M54965.D SIMPAHL.M Fri May 11 07:24:11 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\051012\7M54965.D Vial: 16
Acq On : 10 May 2012 3:10 pm Operator: CAA
Sample : L12050171-01 REF 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

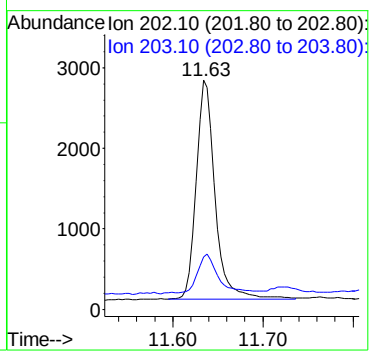




#14
Fluoranthene
Concen: 0.02 ug/ml
RT: 11.63 min Scan# 1669
Delta R.T. -0.01 min
Lab File: 7M54965.D
Acq: 10 May 2012 3:10 pm

Tgt Ion:202 Resp: 3923

Ion	Ratio	Lower	Upper
202	100		
203	19.3	10.6	24.6



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\051012\7M54966.D Vial: 17
Acq On : 10 May 2012 3:37 pm Operator: CAA
Sample : L12050171-03 MS Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 07:17:23 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

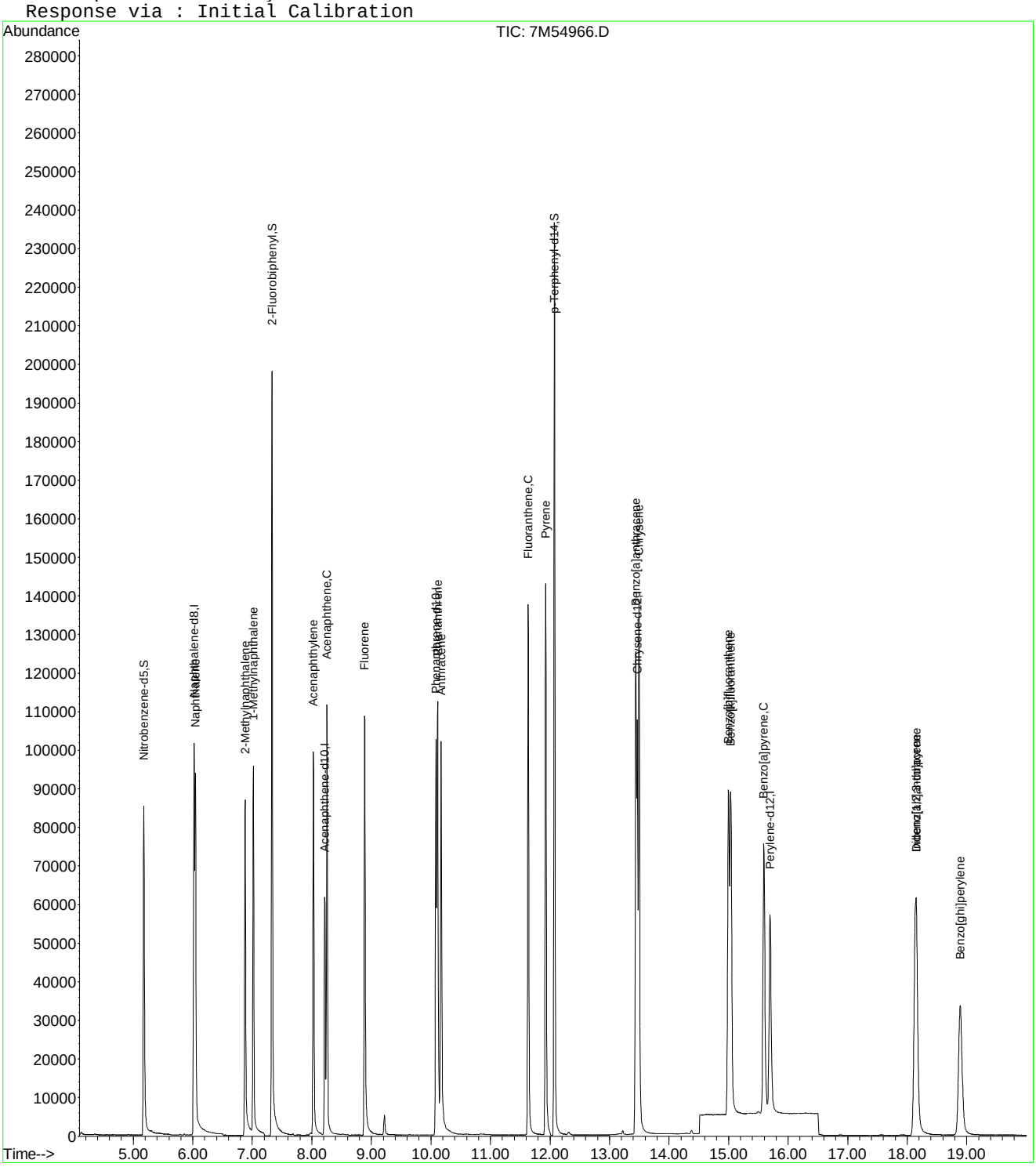
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.02	136	136398	1.00	ug/ml	-0.01
6) Acenaphthene-d10	8.21	164	86016	1.00	ug/ml	-0.02
11) Phenanthrene-d10	10.08	188	144767	1.00	ug/ml	-0.01
15) Chrysene-d12	13.47	240	137804	1.00	ug/ml	-0.01
20) Perylene-d12	15.70	264	126796	1.00	ug/ml	-0.02
System Monitoring Compounds						
2) Nitrobenzene-d5	5.17	82	87679	1.5392	ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery = 61.60%			
7) 2-Fluorobiphenyl	7.33	172	202586	1.4240	ug/ml	-0.01
Spiked Amount 2.500	Range 43 - 116		Recovery = 56.80%			
17) p-Terphenyl-d14	12.07	244	278381	2.1774	ug/ml	-0.02
Spiked Amount 2.500	Range 33 - 141		Recovery = 87.20%			
Target Compounds						Qvalue
3) Naphthalene	6.04	128	103426	0.6405	ug/ml	99
4) 2-Methylnaphthalene	6.88	142	68959	0.7008	ug/ml	100
5) 1-Methylnaphthalene	7.02	142	66182	0.6588	ug/ml	100
8) Acenaphthylene	8.02	152	121744	0.6402	ug/ml	96
9) Acenaphthene	8.25	154	71752	0.6594	ug/ml	94
10) Fluorene	8.89	166	83507	0.6459	ug/ml	99
12) Phenanthrene	10.11	178	123737	0.6871	ug/ml	100
13) Anthracene	10.17	178	132292	0.7314	ug/ml	98
14) Fluoranthene	11.63	202	161771	0.8575	ug/ml	100
16) Pyrene	11.93	202	188458	0.8509	ug/ml	99
18) Benzo[a]anthracene	13.44	228	138766	0.7761	ug/ml	99
19) Chrysene	13.50	228	151309	0.8508	ug/ml	99
21) Benzo[b]fluoranthene	15.00	252	139059	0.7950	ug/ml	96
22) Benzo[k]fluoranthene	15.04	252	134438	0.8123	ug/ml	99
23) Benzo[a]pyrene	15.59	252	137079	0.8417	ug/ml	100
24) Indeno[1,2,3-cd]pyrene	18.15	276	134319	0.7536	ug/ml	100
25) Dibenz[ah]anthracene	18.14	278	116510	0.7723	ug/ml	100
26) Benzo[ghi]perylene	18.89	276	119501	0.7603	ug/ml	99

(#) = qualifier out of range (m) = manual integration
7M54966.D SIMPAHL.M Fri May 11 07:20:55 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\051012\7M54966.D Vial: 17
Acq On : 10 May 2012 3:37 pm Operator: CAA
Sample : L12050171-03 MS 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\7M54967.D Vial: 18
Acq On : 10 May 2012 4:06 pm Operator: CAA
Sample : L12050171-05 MSD Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 07:17:23 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

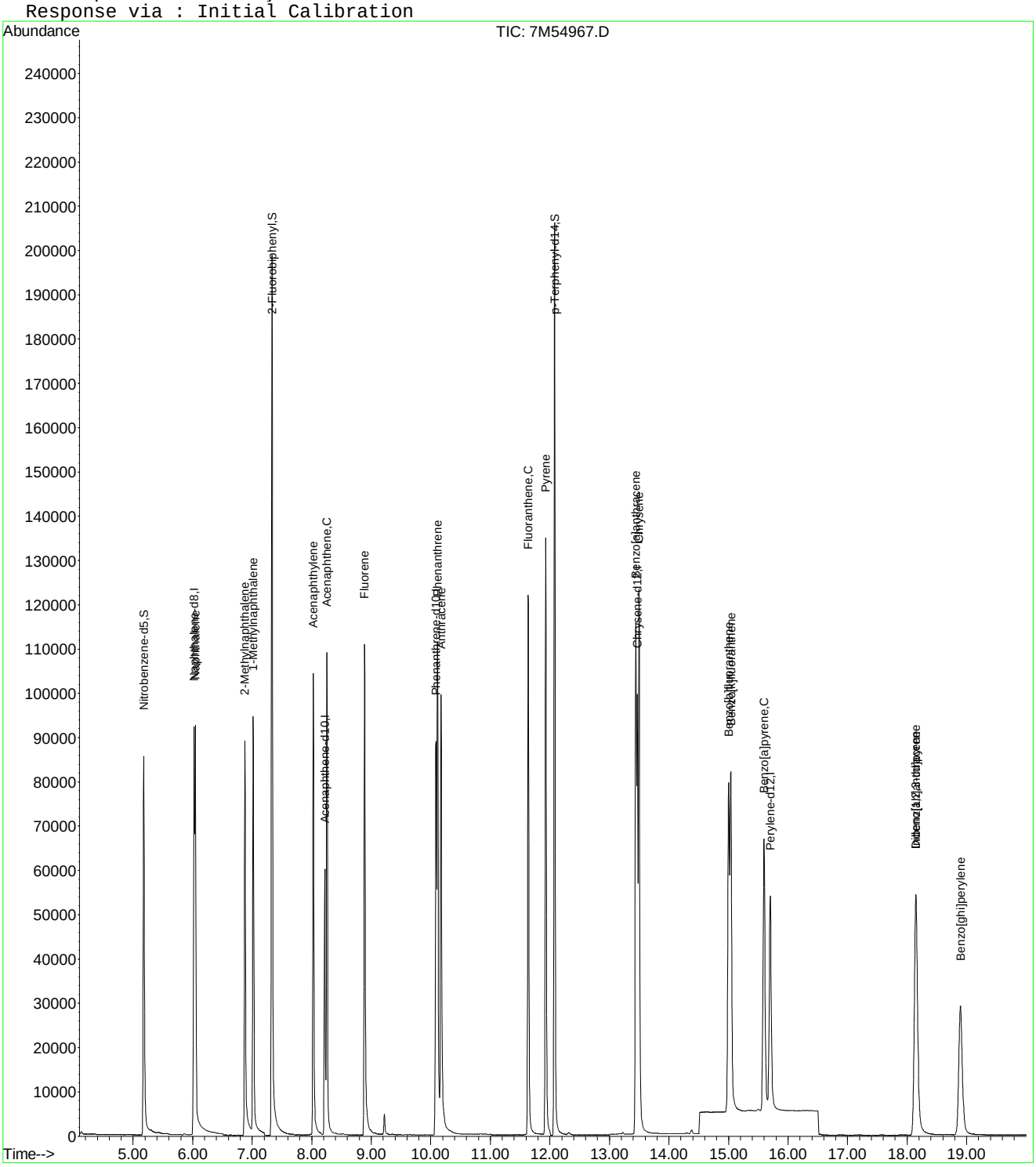
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.02	136	127764	1.00	ug/ml	-0.01
6) Acenaphthene-d10	8.22	164	81036	1.00	ug/ml	-0.01
11) Phenanthrene-d10	10.09	188	134564	1.00	ug/ml	0.00
15) Chrysene-d12	13.47	240	128186	1.00	ug/ml	-0.01
20) Perylene-d12	15.70	264	117848	1.00	ug/ml	-0.01
System Monitoring Compounds						
2) Nitrobenzene-d5	5.18	82	87741	1.6444	ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery = 65.60%			
7) 2-Fluorobiphenyl	7.33	172	205218	1.5311	ug/ml	-0.01
Spiked Amount 2.500	Range 43 - 116		Recovery = 61.20%			
17) p-Terphenyl-d14	12.08	244	236444	1.9882	ug/ml	-0.01
Spiked Amount 2.500	Range 33 - 141		Recovery = 79.60%			
Target Compounds						Qvalue
3) Naphthalene	6.04	128	104701	0.6922	ug/ml	99
4) 2-Methylnaphthalene	6.88	142	69984	0.7593	ug/ml	99
5) 1-Methylnaphthalene	7.02	142	67093	0.7130	ug/ml	100
8) Acenaphthylene	8.03	152	124521	0.6950	ug/ml	98
9) Acenaphthene	8.26	154	68364	0.6669	ug/ml	99
10) Fluorene	8.89	166	84729	0.6956	ug/ml	99
12) Phenanthrene	10.11	178	121533	0.7261	ug/ml	99
13) Anthracene	10.17	178	129822	0.7721	ug/ml	99
14) Fluoranthene	11.63	202	148563	0.8472	ug/ml	99
16) Pyrene	11.93	202	171324	0.8315	ug/ml	99
18) Benzo[a]anthracene	13.44	228	123277	0.7412	ug/ml	98
19) Chrysene	13.50	228	137619	0.8319	ug/ml	100
21) Benzo[b]fluoranthene	15.00	252	126907	0.7806	ug/ml	96
22) Benzo[k]fluoranthene	15.04	252	127415	0.8283	ug/ml	95
23) Benzo[a]pyrene	15.60	252	122545	0.8096	ug/ml	100
24) Indeno[1,2,3-cd]pyrene	18.15	276	117532	0.7095	ug/ml	100
25) Dibenz[ah]anthracene	18.15	278	100319	0.7155	ug/ml	100
26) Benzo[ghi]perylene	18.90	276	102685	0.7030	ug/ml	99

(#) = qualifier out of range (m) = manual integration
7M54967.D SIMPAHL.M Fri May 11 07:20:56 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\051012\7M54967.D Vial: 18
Acq On : 10 May 2012 4:06 pm Operator: CAA
Sample : L12050171-05 MSD 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\7M54968.D Vial: 19
Acq On : 10 May 2012 4:34 pm Operator: CAA
Sample : L12050171-07 Inst : HPMS7
Misc : 1,1 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 11 07:17:23 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

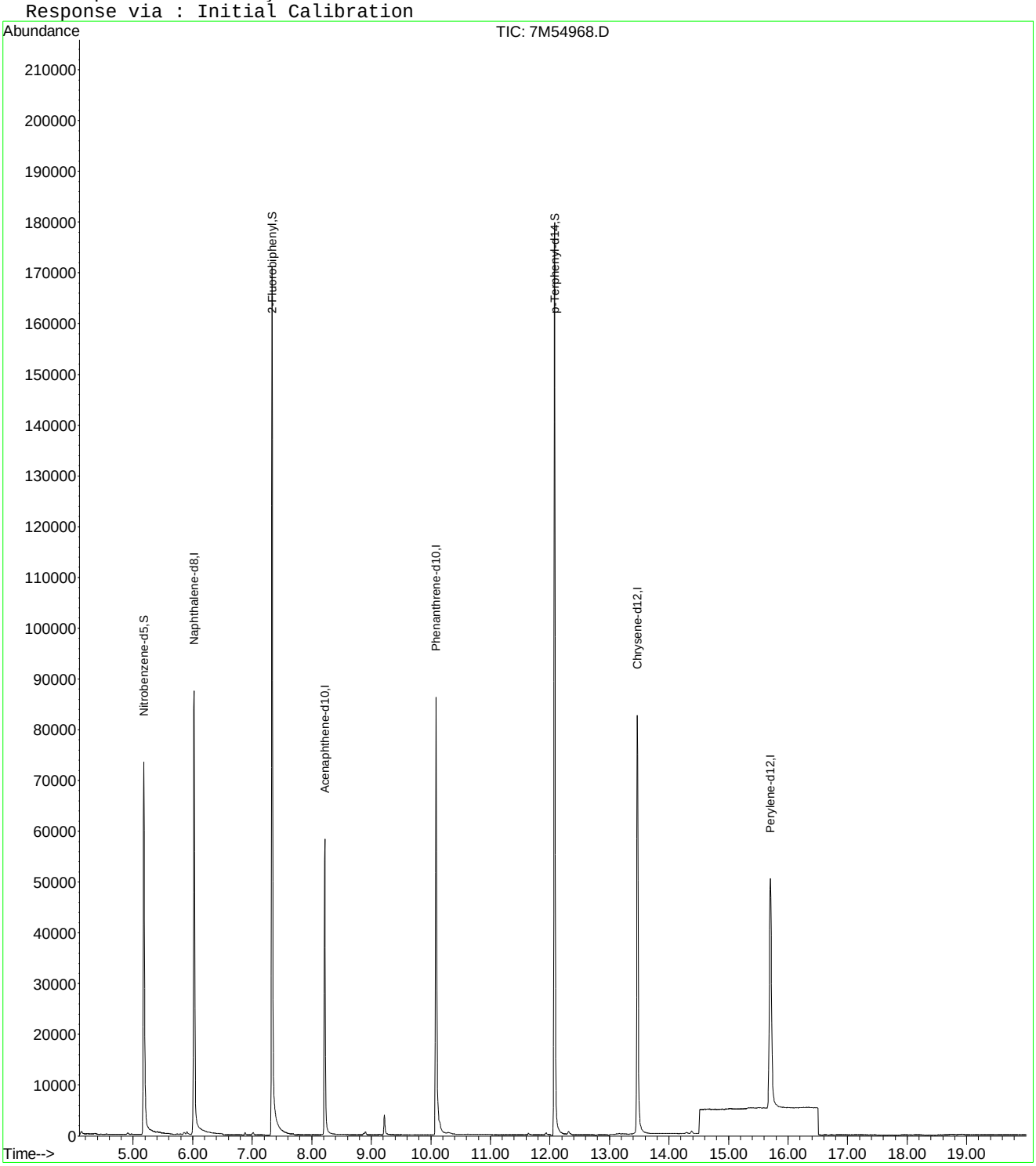
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.03	136	126815	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.22	164	82440	1.00	ug/ml	-0.01
11) Phenanthrene-d10	10.09	188	134997	1.00	ug/ml	0.00
15) Chrysene-d12	13.47	240	126453	1.00	ug/ml	-0.01
20) Perylene-d12	15.70	264	116155	1.00	ug/ml	-0.01
System Monitoring Compounds						
2) Nitrobenzene-d5	5.18	82	80972	1.5289	ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery = 61.20%			
7) 2-Fluorobiphenyl	7.33	172	178648	1.3102	ug/ml	-0.01
Spiked Amount 2.500	Range 43 - 116		Recovery = 52.40%			
17) p-Terphenyl-d14	12.08	244	207645	1.7700	ug/ml	-0.01
Spiked Amount 2.500	Range 33 - 141		Recovery = 70.80%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration
7M54968.D SIMPAHL.M Fri May 11 07:24:11 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\051012\7M54968.D Vial: 19
Acq On : 10 May 2012 4:34 pm Operator: CAA
Sample : L12050171-07 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



2.2.2.4 Standards Data

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\040412\7M54728.D Vial: 2
Acq On : 4 Apr 2012 9:39 am Operator: CAA
Sample : WG394111-02 1PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 05 10:56:38 2012 Quant Results File: SIMPAHL.RES

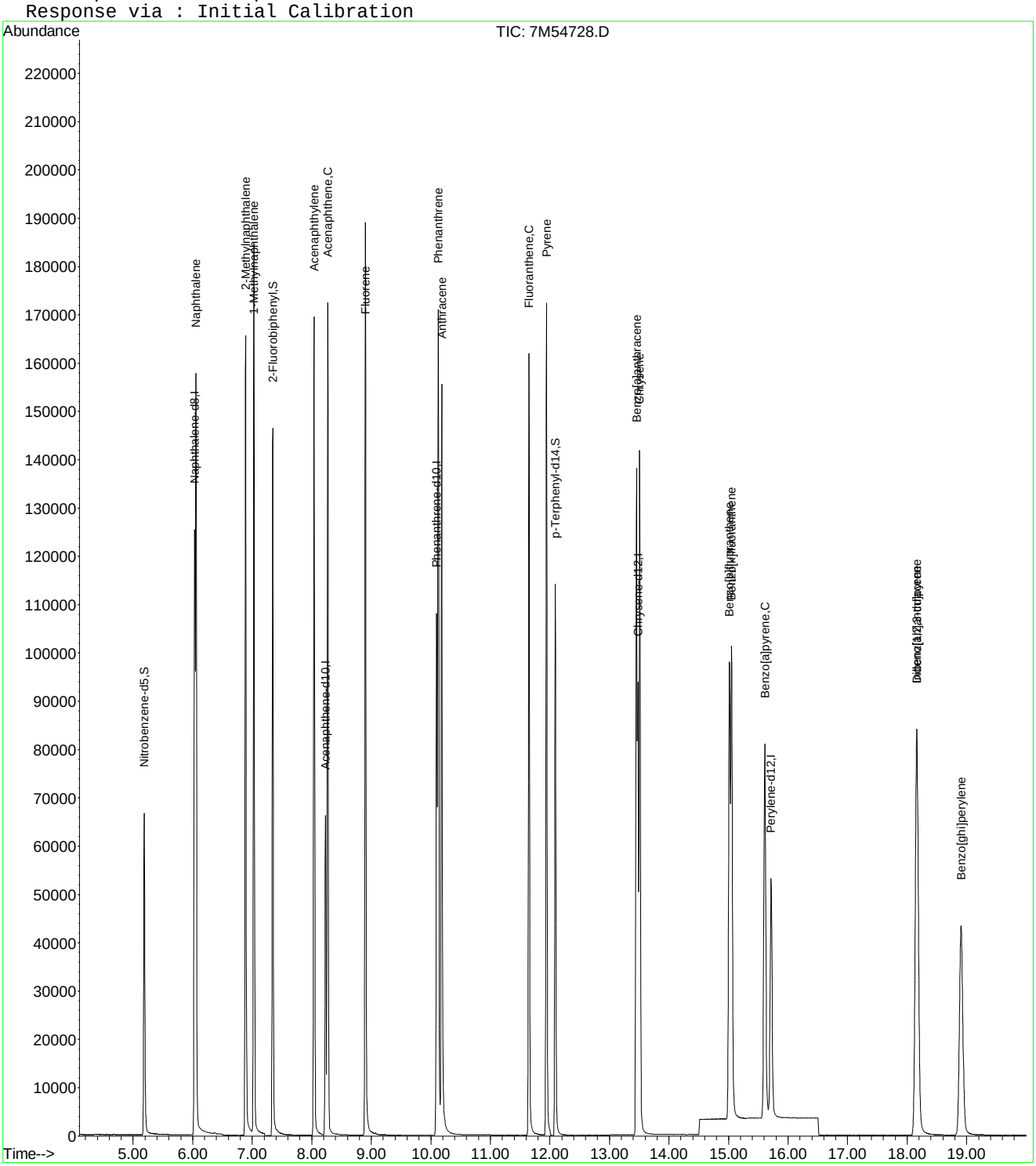
Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu Apr 05 10:56:28 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.03	136	153463	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.23	164	85143	1.00	ug/ml	0.00
11) Phenanthrene-d10	10.10	188	143225	1.00	ug/ml	0.00
15) Chrysene-d12	13.48	240	118114	1.00	ug/ml	0.00
20) Perylene-d12	15.71	264	116508	1.00	ug/ml	0.00
System Monitoring Compounds						
2) Nitrobenzene-d5	5.18	82	63871	0.9809	ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery = 39.20%			
7) 2-Fluorobiphenyl	7.35	172	137427	1.0163	ug/ml	0.00
Spiked Amount 2.500	Range 43 - 116		Recovery = 40.80%#			
17) p-Terphenyl-d14	12.09	244	118698	1.1101	ug/ml	0.00
Spiked Amount 2.500	Range 33 - 141		Recovery = 44.40%			
Target Compounds						Qvalue
3) Naphthalene	6.05	128	174314	0.9550	ug/ml	100
4) 2-Methylnaphthalene	6.89	142	112240	1.0173	ug/ml	100
5) 1-Methylnaphthalene	7.03	142	119453	1.0871	ug/ml	99
8) Acenaphthylene	8.04	152	169525	0.9990	ug/ml	100
9) Acenaphthene	8.27	154	101608	0.9584	ug/ml	100
10) Fluorene	8.90	166	126450	1.0464	ug/ml	100
12) Phenanthrene	10.13	178	174346	0.9841	ug/ml	100
13) Anthracene	10.18	178	177663	1.0067	ug/ml	100
14) Fluoranthene	11.65	202	183927	0.9372	ug/ml	100
16) Pyrene	11.94	202	208192	1.1119	ug/ml	100
18) Benzo[a]anthracene	13.46	228	151964	0.9952	ug/ml	100
19) Chrysene	13.51	228	148985	0.9748	ug/ml	100
21) Benzo[b]fluoranthene	15.01	252	153733	0.9700	ug/ml	96
22) Benzo[k]fluoranthene	15.05	252	143781	0.9822	ug/ml	96
23) Benzo[a]pyrene	15.61	252	148527	0.9919	ug/ml	100
24) Indeno[1,2,3-cd]pyrene	18.16	276	167498	0.9689	ug/ml	100
25) Dibenz[ah]anthracene	18.16	278	142338	0.9814	ug/ml	100
26) Benzo[ghi]perylene	18.91	276	144004	0.9548	ug/ml	100

(#) = qualifier out of range (m) = manual integration
7M54728.D SIMPAHL.M Thu Apr 05 13:50:13 2012 Page 1

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

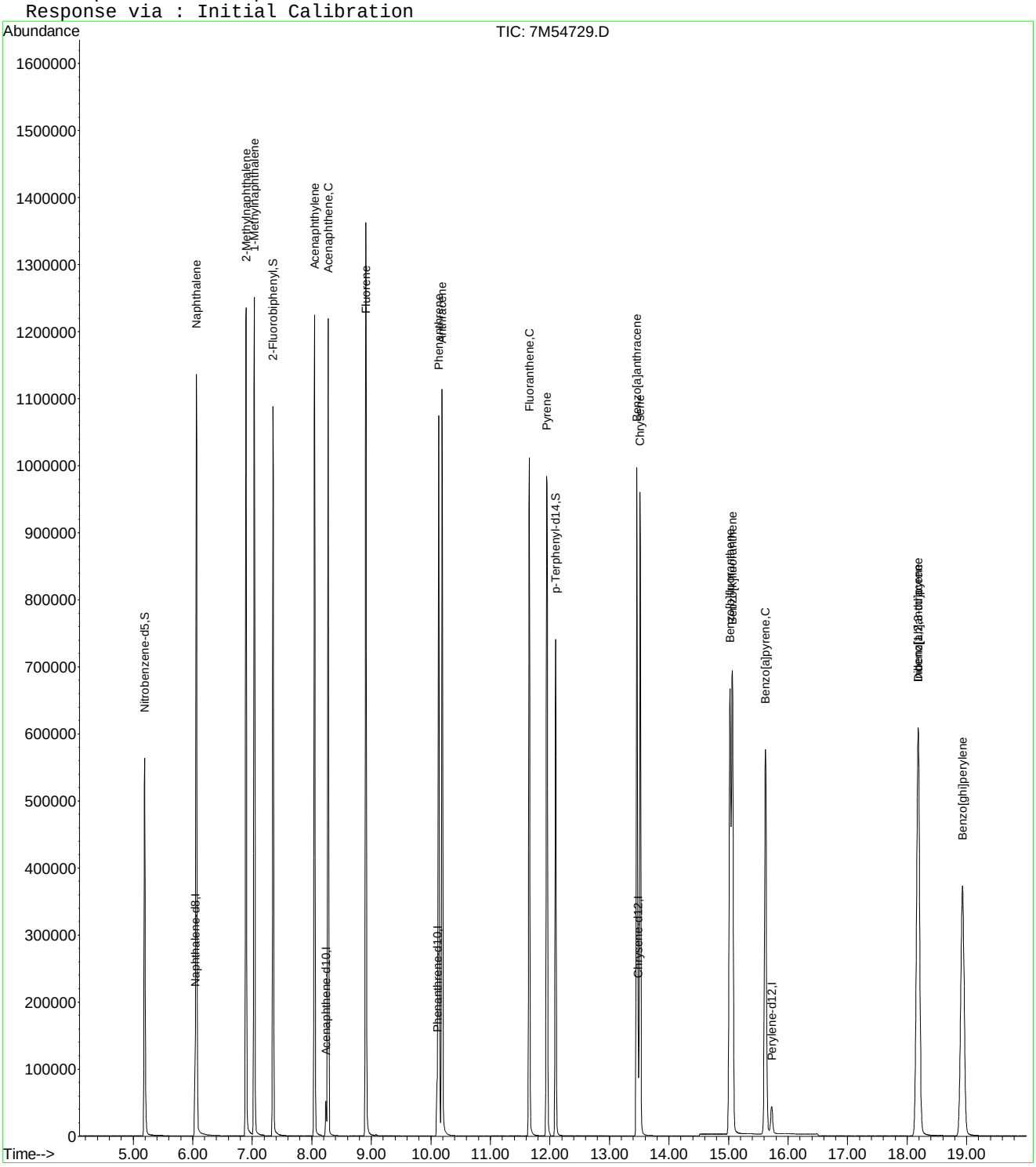
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.04	136	128908	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.24	164	64023	1.00	ug/ml	0.00
11) Phenanthrene-d10	10.10	188	105133	1.00	ug/ml	0.00
15) Chrysene-d12	13.49	240	92409	1.00	ug/ml	0.00
20) Perylene-d12	15.73	264	91750	1.00	ug/ml	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

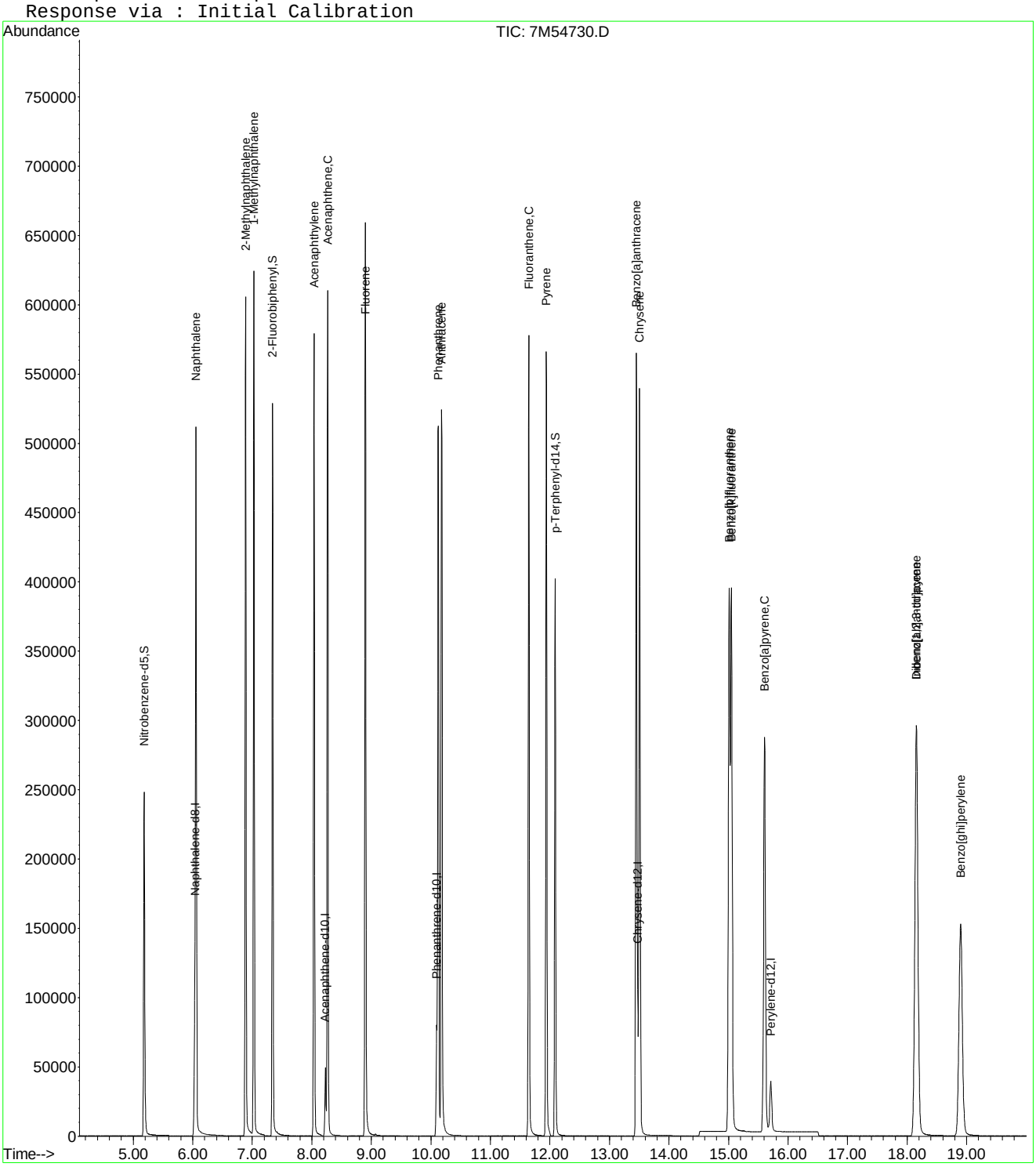
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.03	136	108655	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.23	164	58819	1.00	ug/ml	0.00
11) Phenanthrene-d10	10.10	188	97058	1.00	ug/ml	0.00
15) Chrysene-d12	13.48	240	93620	1.00	ug/ml	0.00
20) Perylene-d12	15.71	264	84709	1.00	ug/ml	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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\040412\7M54730.D Vial: 4
Acq On : 4 Apr 2012 11:03 am Operator: CAA
Sample : WG394111-04 5PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 5 10:57 2012 Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu Apr 05 10:58:29 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\040412\7M54731.D Vial: 5
Acq On : 4 Apr 2012 11:30 am Operator: CAA
Sample : WG394111-05 2.5PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 05 10:57:22 2012 Quant Results File: SIMPAHL.RES

Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu Apr 05 10:57:18 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

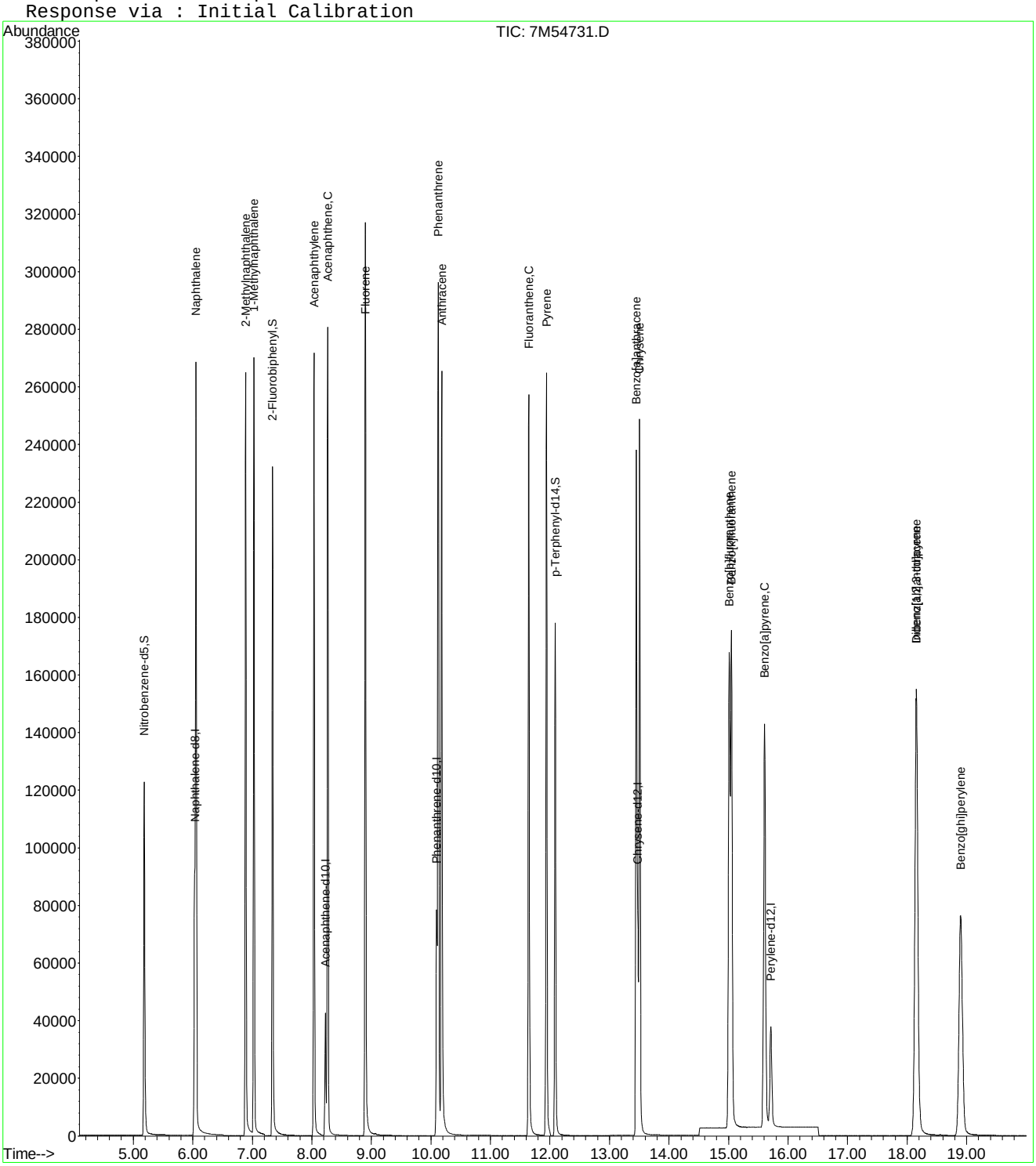
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.03	136	107923	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.23	164	51916	1.00	ug/ml	0.00
11) Phenanthrene-d10	10.10	188	98158	1.00	ug/ml	0.00
15) Chrysene-d12	13.48	240	84003	1.00	ug/ml	0.00
20) Perylene-d12	15.71	264	82066	1.00	ug/ml	0.00
System Monitoring Compounds						
2) Nitrobenzene-d5	5.18	82	112962	2.5073	ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery = 100.40%			
7) 2-Fluorobiphenyl	7.34	172	212151	2.5509	ug/ml	0.00
Spiked Amount 2.500	Range 43 - 116		Recovery = 102.00%			
17) p-Terphenyl-d14	12.09	244	187122	2.4047	ug/ml	0.00
Spiked Amount 2.500	Range 33 - 141		Recovery = 96.00%			
Target Compounds						Qvalue
3) Naphthalene	6.05	128	307088	2.4019	ug/ml	100
4) 2-Methylnaphthalene	6.89	142	175530	2.2161	ug/ml	100
5) 1-Methylnaphthalene	7.03	142	176814	2.2516	ug/ml	100
8) Acenaphthylene	8.04	152	301490	2.8308	ug/ml	99
9) Acenaphthene	8.27	154	175018	2.7418	ug/ml	94
10) Fluorene	8.90	166	216247	2.8919	ug/ml	100
12) Phenanthrene	10.12	178	309124	2.5215	ug/ml	100
13) Anthracene	10.18	178	307296	2.5122	ug/ml	100
14) Fluoranthene	11.65	202	284981	2.1436	ug/ml	100
16) Pyrene	11.94	202	314739	2.3011	ug/ml	100
18) Benzo[a]anthracene	13.45	228	266063	2.4304	ug/ml	100
19) Chrysene	13.51	228	258320	2.3925	ug/ml	99
21) Benzo[b]fluoranthene	15.01	252	285961	2.5037	ug/ml	96
22) Benzo[k]fluoranthene	15.05	252	257800	2.4437	ug/ml	96
23) Benzo[a]pyrene	15.60	252	260806	2.4638	ug/ml	100
24) Indeno[1,2,3-cd]pyrene	18.16	276	302188	2.5265	ug/ml	100
25) Dibenz[ah]anthracene	18.16	278	256480	2.5534	ug/ml	100
26) Benzo[ghi]perylene	18.89	276	255121	2.4055	ug/ml	100

(#) = qualifier out of range (m) = manual integration
7M54731.D SIMPAHL.M Thu Apr 05 13:50:26 2012 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\040412\7M54731.D Vial: 5
Acq On : 4 Apr 2012 11:30 am Operator: CAA
Sample : WG394111-05 2.5PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 5 10:57 2012 Quant Results File: SIMPAHL.RES

Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu Apr 05 10:58:29 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\040412\7M54732.D Vial: 6
Acq On : 4 Apr 2012 11:58 am Operator: CAA
Sample : WG394111-06 0.5PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 05 10:57:36 2012 Quant Results File: SIMPAHL.RES

Quant Method : C:\MSDCHEM\1\METHODS\SIMPAHL.M (RTE Integrator)
Title : OVD MSS03 SIMPAHL ICAL 04/04/12
Last Update : Thu Apr 05 10:57:31 2012
Response via : Initial Calibration
DataAcq Meth : PAHLSIM

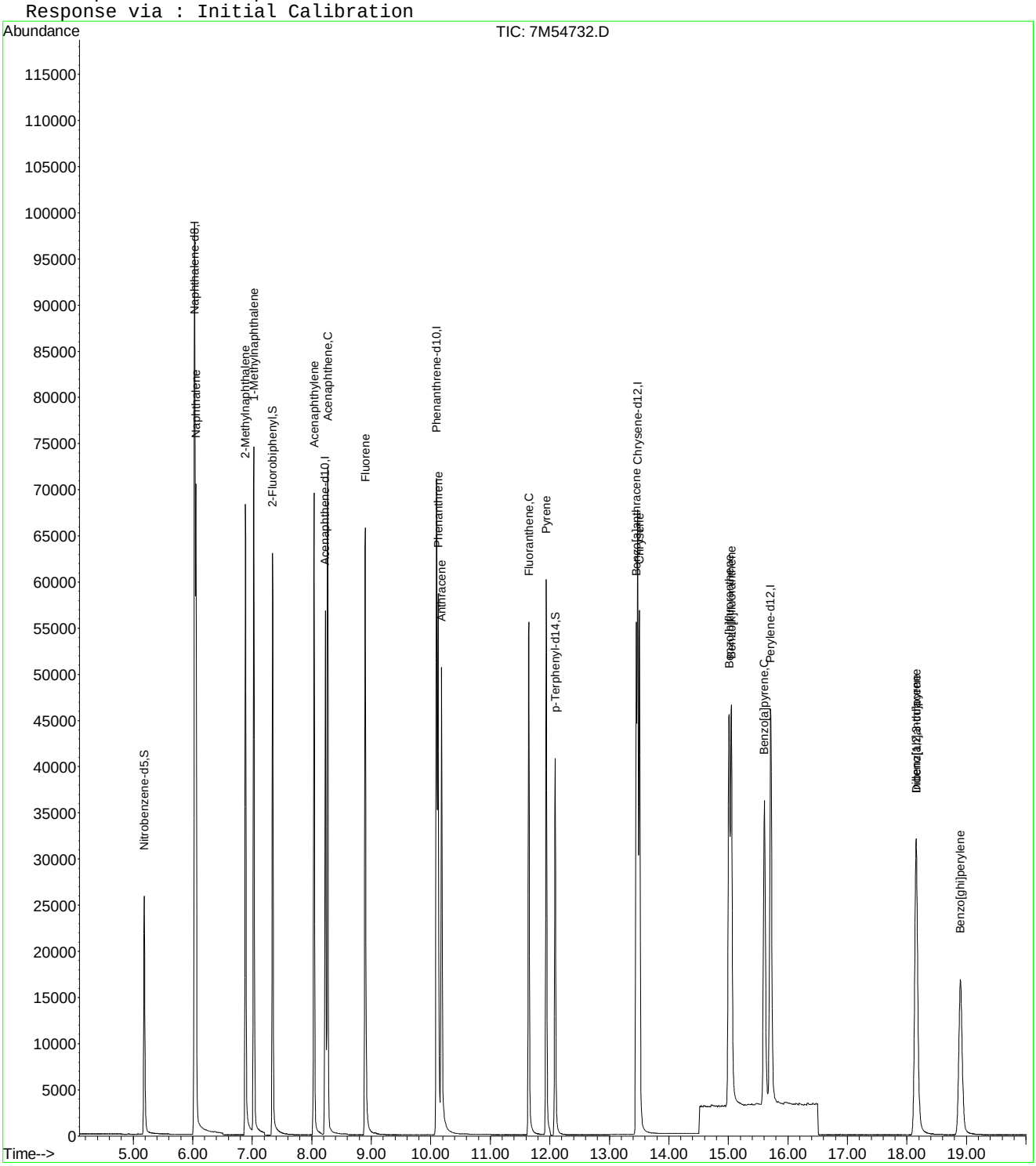
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.03	136	124416	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.23	164	72846	1.00	ug/ml	0.00
11) Phenanthrene-d10	10.09	188	97007	1.00	ug/ml	0.00
15) Chrysene-d12	13.48	240	93356	1.00	ug/ml	0.00
20) Perylene-d12	15.71	264	102269	1.00	ug/ml	0.00
System Monitoring Compounds						
2) Nitrobenzene-d5	5.18	82	25264	0.4849	ug/ml	0.00
Spiked Amount 2.500	Range 35 - 114		Recovery = 19.20%#			
7) 2-Fluorobiphenyl	7.34	172	59769	0.5074	ug/ml	0.00
Spiked Amount 2.500	Range 43 - 116		Recovery = 20.40%#			
17) p-Terphenyl-d14	12.09	244	43554	0.5033	ug/ml	0.00
Spiked Amount 2.500	Range 33 - 141		Recovery = 20.00%#			
Target Compounds						Qvalue
3) Naphthalene	6.05	128	75307	0.5106	ug/ml	100
4) 2-Methylnaphthalene	6.89	142	48164	0.5252	ug/ml	100
5) 1-Methylnaphthalene	7.03	142	49560	0.5450	ug/ml	100
8) Acenaphthylene	8.04	152	77288	0.5039	ug/ml	99
9) Acenaphthene	8.27	154	43592	0.4783	ug/ml	100
10) Fluorene	8.90	166	46685	0.4326	ug/ml	99
12) Phenanthrene	10.12	178	59636	0.4896	ug/ml	99
13) Anthracene	10.18	178	61358	0.5065	ug/ml	99
14) Fluoranthene	11.65	202	66304	0.5157	ug/ml	100
16) Pyrene	11.94	202	74252	0.4885	ug/ml	100
18) Benzo[a]anthracene	13.45	228	59958	0.4920	ug/ml	100
19) Chrysene	13.51	228	61514	0.5123	ug/ml	99
21) Benzo[b]fluoranthene	15.01	252	68495	0.4786	ug/ml	100
22) Benzo[k]fluoranthene	15.05	252	66287	0.5040	ug/ml	99
23) Benzo[a]pyrene	15.60	252	65422	0.4974	ug/ml	99
24) Indeno[1,2,3-cd]pyrene	18.16	276	65450	0.4291	ug/ml	100
25) Dibenz[ah]anthracene	18.16	278	55466	0.4329	ug/ml	100
26) Benzo[ghi]perylene	18.90	276	56433	0.4188	ug/ml	100

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

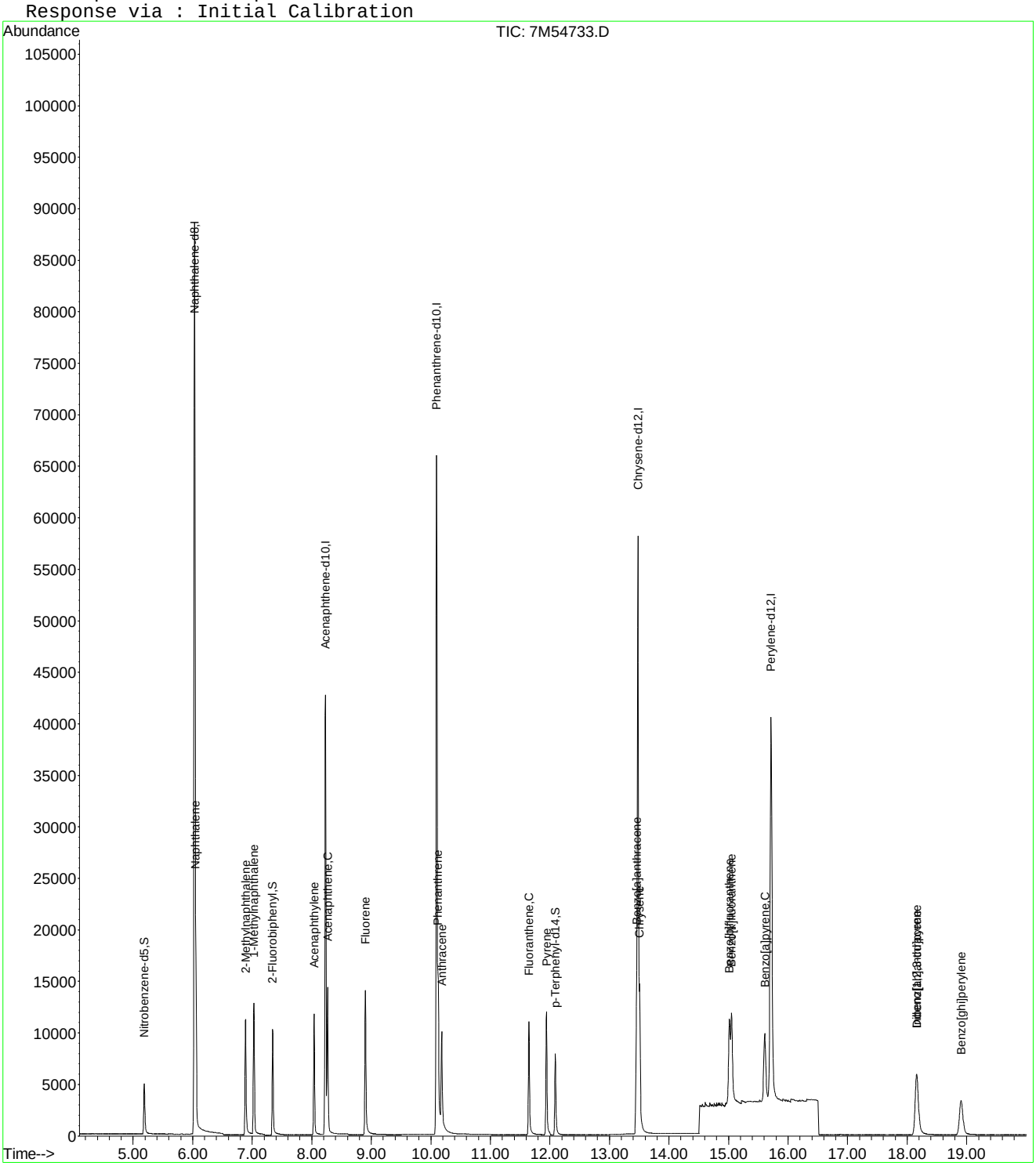
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.03	136	111904	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.23	164	58154	1.00	ug/ml	0.00
11) Phenanthrene-d10	10.10	188	92508	1.00	ug/ml	0.00
15) Chrysene-d12	13.48	240	83643	1.00	ug/ml	0.00
20) Perylene-d12	15.71	264	89887	1.00	ug/ml	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

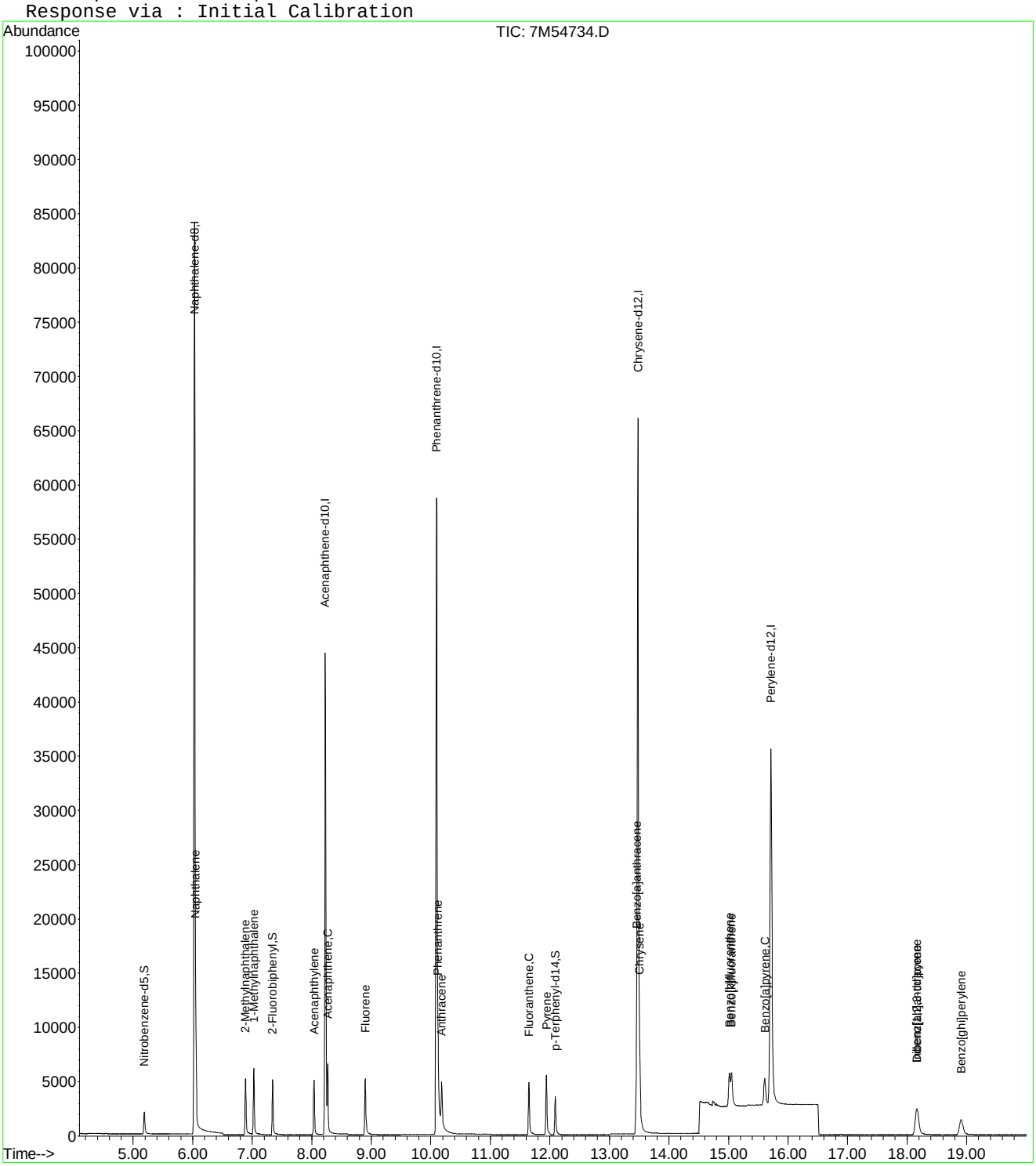
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.03	136	109028	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.23	164	59339	1.00	ug/ml	0.00
11) Phenanthrene-d10	10.09	188	88697	1.00	ug/ml	0.00
15) Chrysene-d12	13.48	240	96074	1.00	ug/ml	0.00
20) Perylene-d12	15.71	264	80216	1.00	ug/ml	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

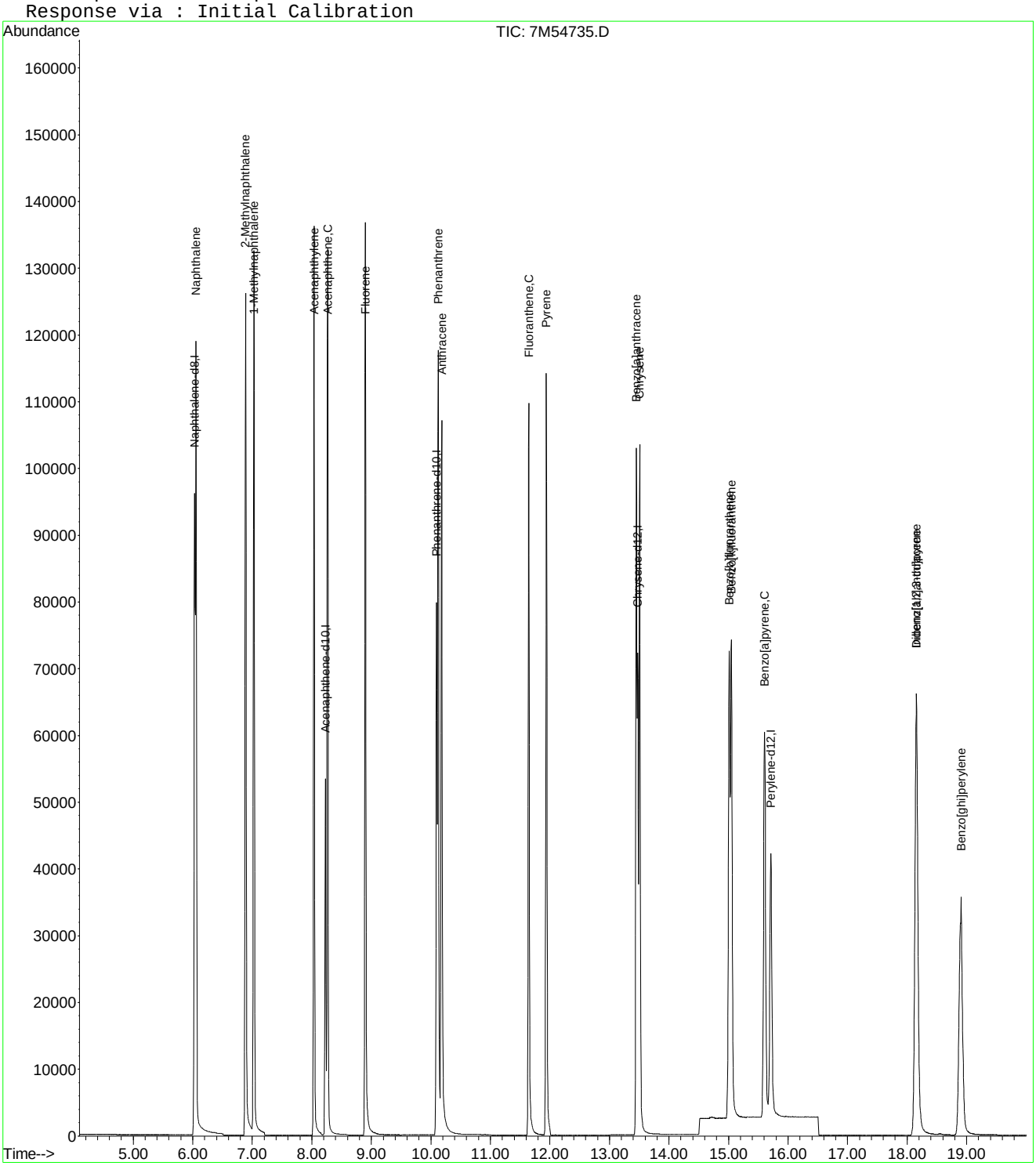
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.03	136	120214	1.00	ug/ml	0.00
6) Acenaphthene-d10	8.23	164	64322	1.00	ug/ml	0.00
11) Phenanthrene-d10	10.09	188	106999	1.00	ug/ml	0.00
15) Chrysene-d12	13.48	240	92251	1.00	ug/ml	0.00
20) Perylene-d12	15.71	264	93409	1.00	ug/ml	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

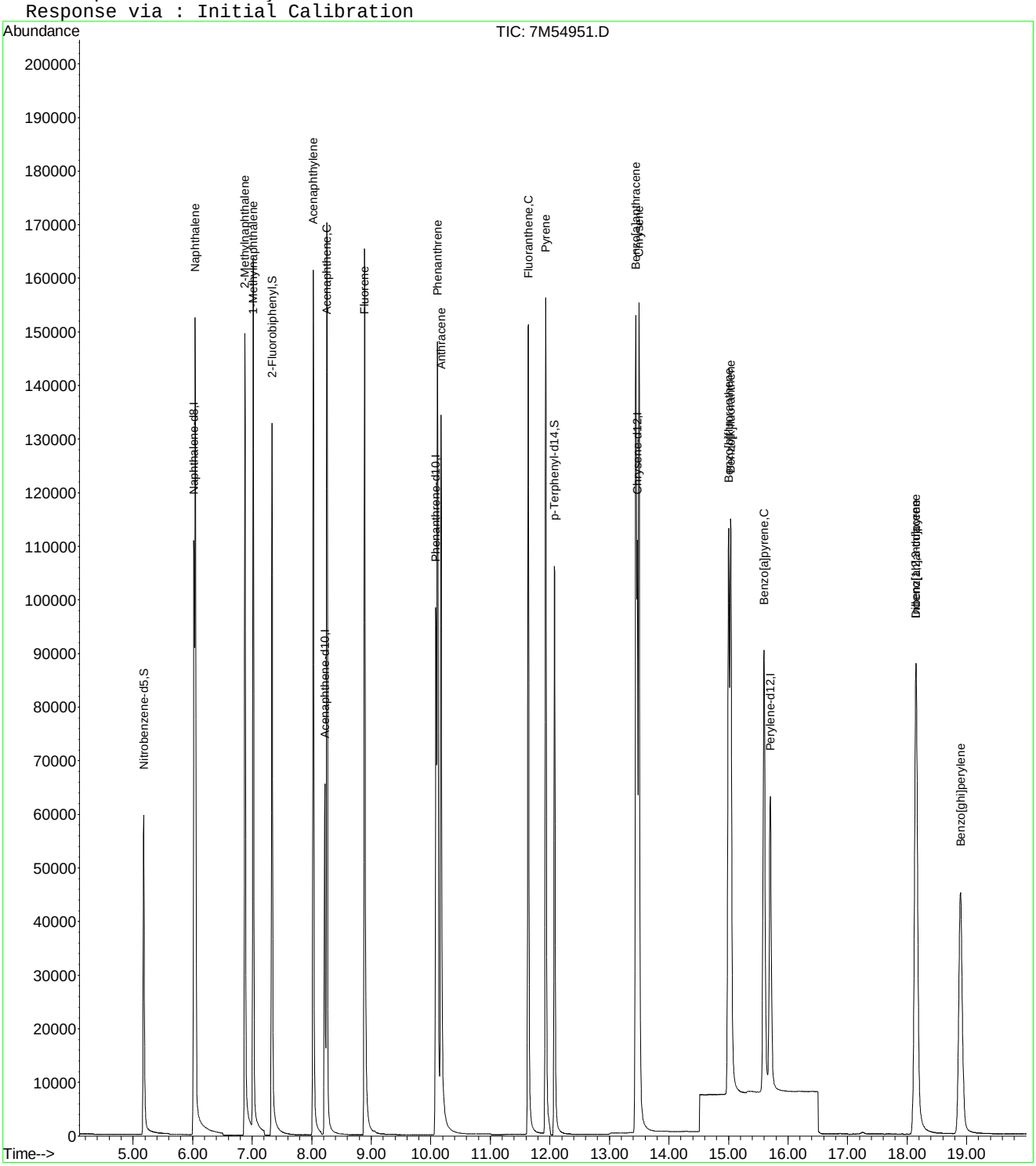
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.02	136	151009	1.00	ug/ml	-0.01
6) Acenaphthene-d10	8.22	164	88860	1.00	ug/ml	-0.01
11) Phenanthrene-d10	10.08	188	145629	1.00	ug/ml	-0.01
15) Chrysene-d12	13.47	240	141597	1.00	ug/ml	-0.01
20) Perylene-d12	15.70	264	133982	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)

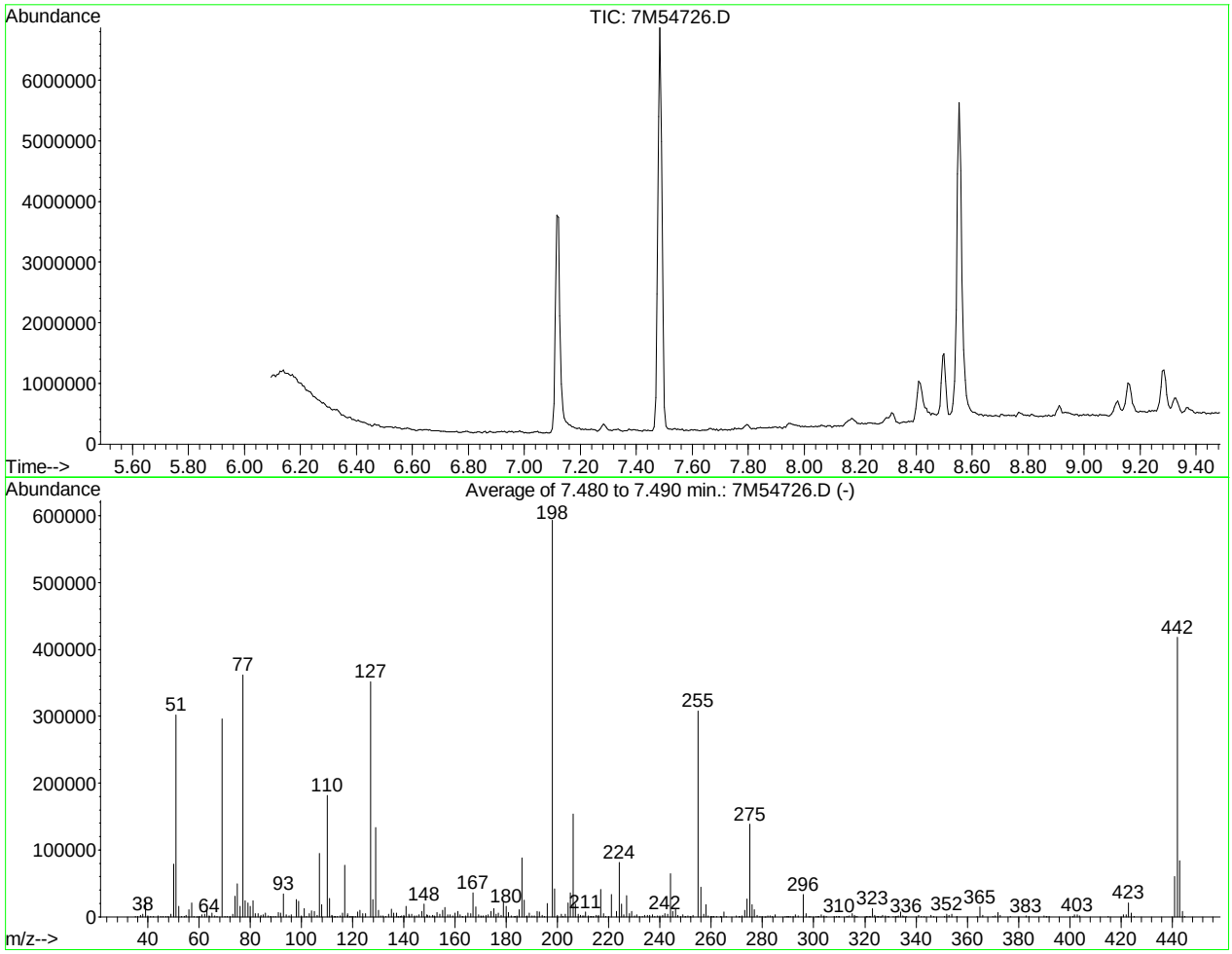
Data File : C:\MSDCHEM\1\DATA\051012\7M54951.D Vial: 2
Acq On : 10 May 2012 8:39 am Operator: CAA
Sample : WG397598-02 1PPM PAHL STD Inst : HPMS7
Misc : 1,1 STD49560 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 10 9:00 2012 Quant Results File: SIMPAHL.RES

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

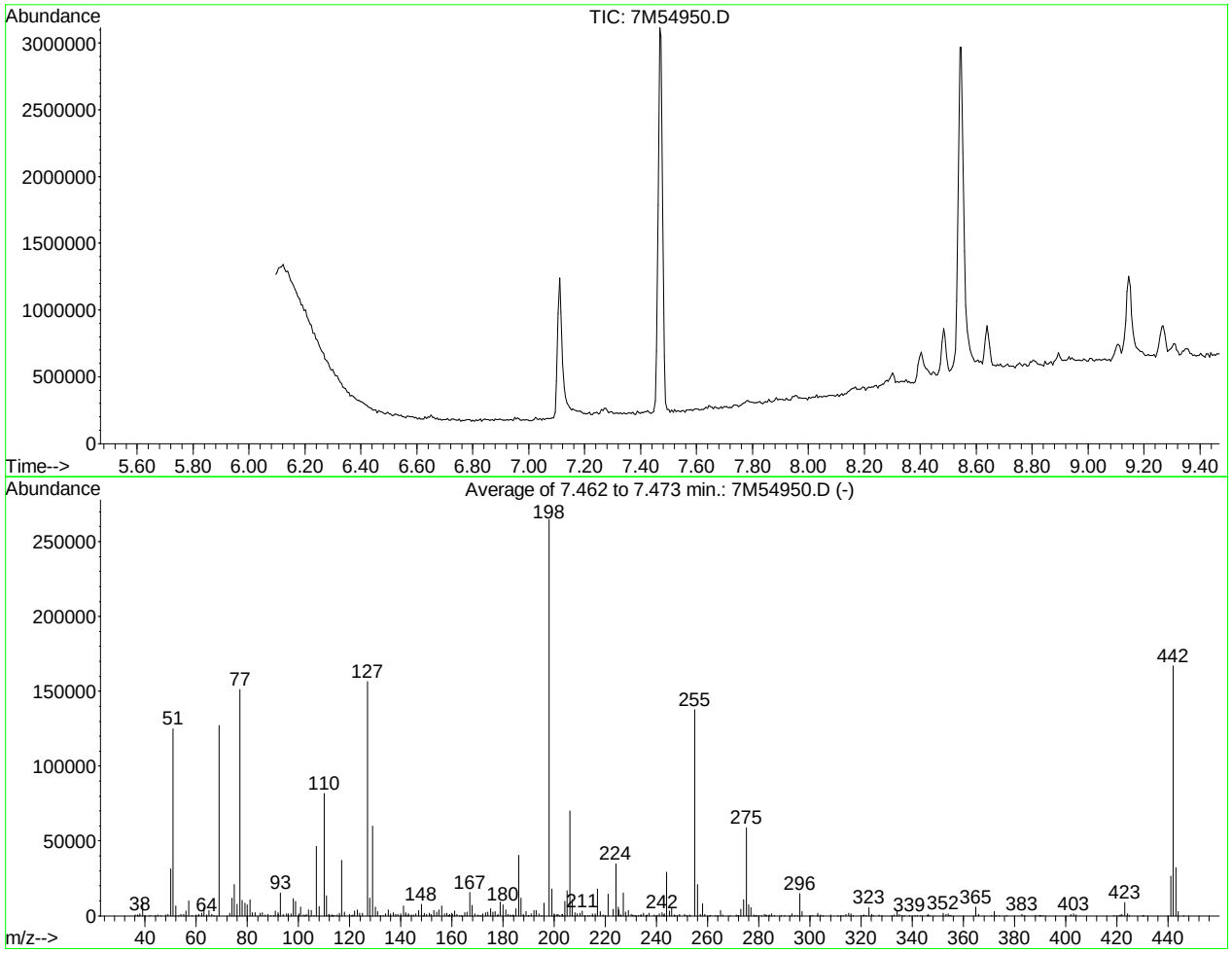


AutoFind: Scans 260, 261, 262; Background Corrected with Scan 254

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%			

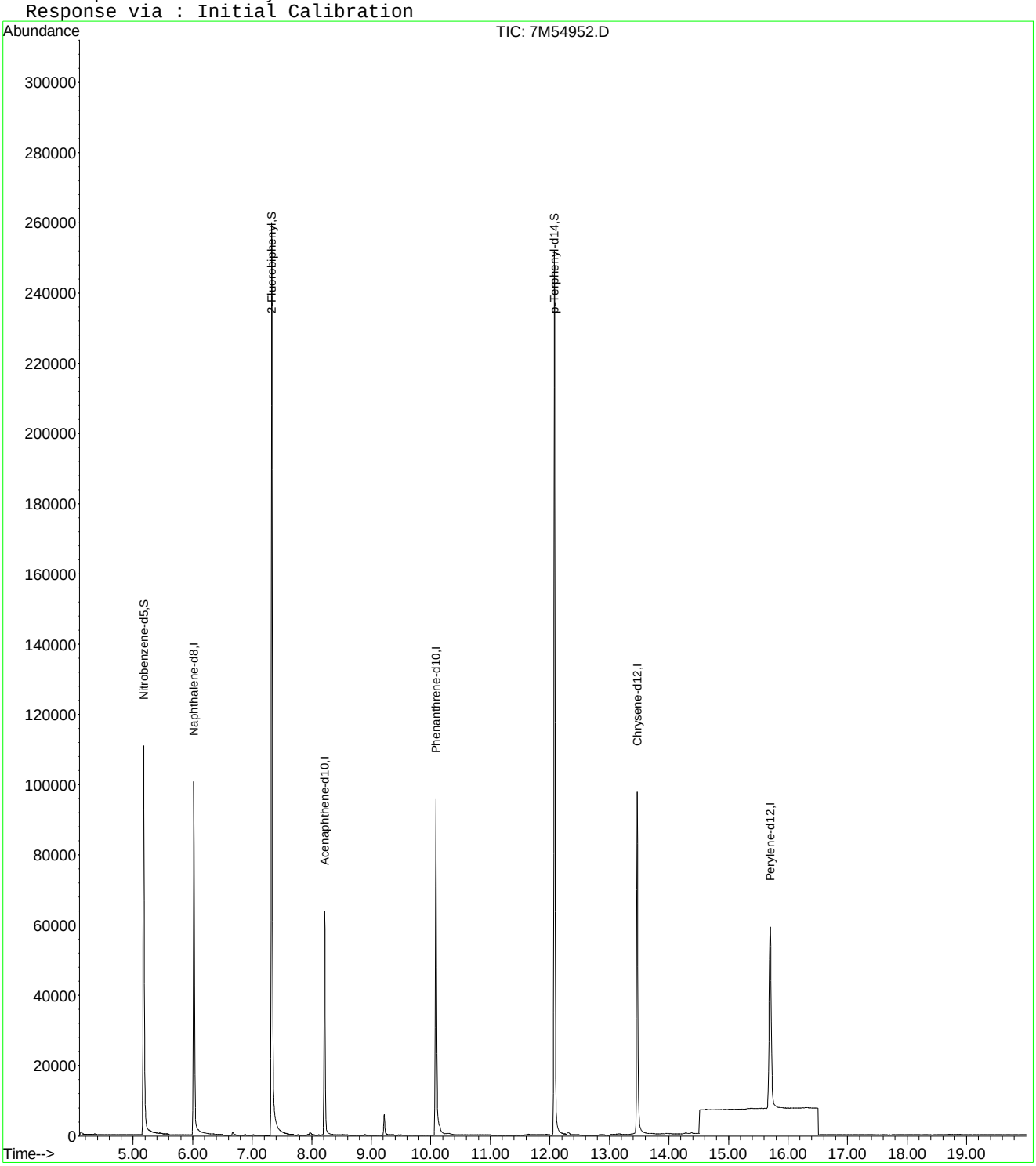
Target Compounds Qvalue

(#) = 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



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

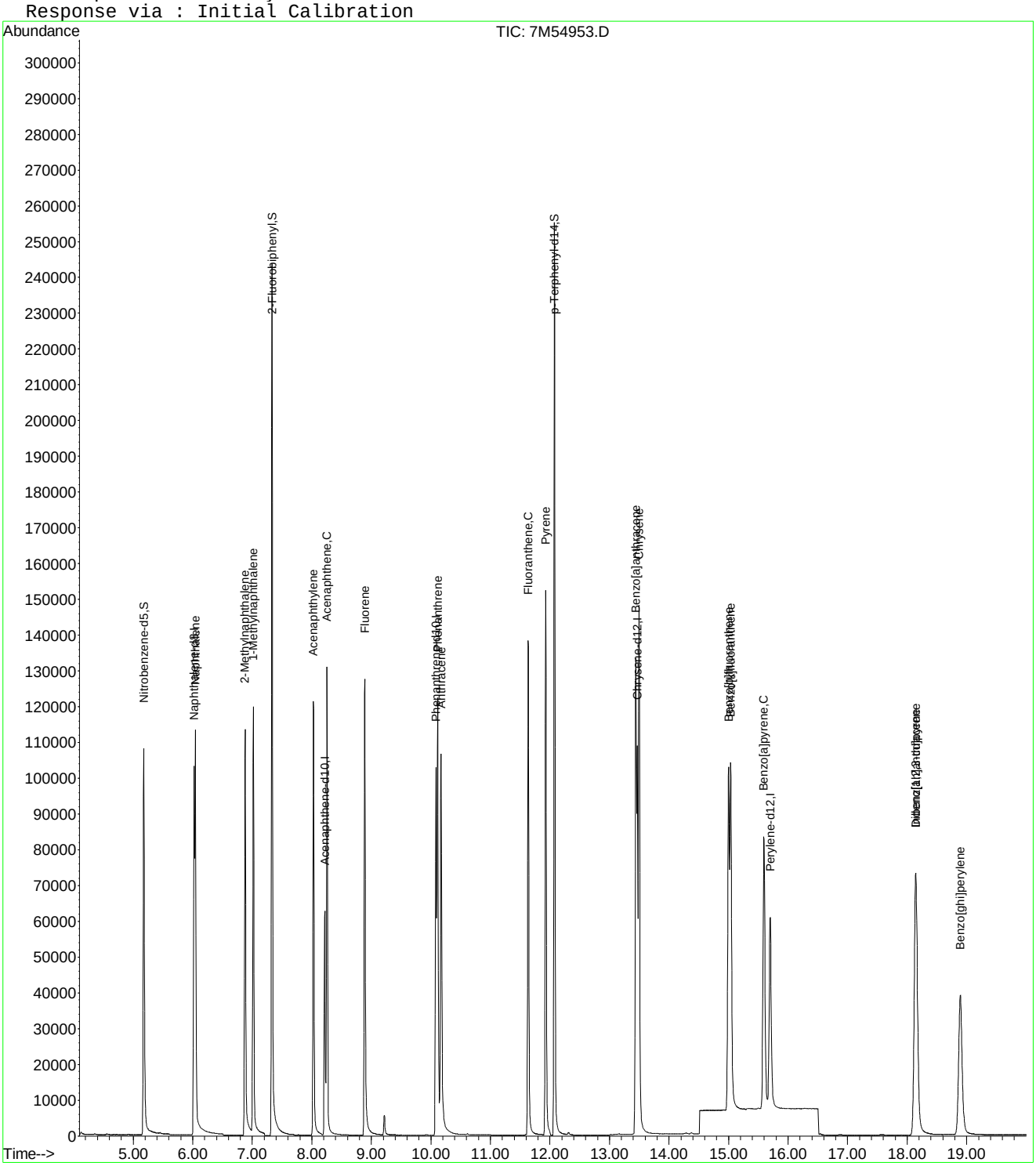
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-d8	6.02	136	139544	1.00	ug/ml	-0.01
6) Acenaphthene-d10	8.22	164	86699	1.00	ug/ml	-0.01
11) Phenanthrene-d10	10.08	188	145577	1.00	ug/ml	-0.01
15) Chrysene-d12	13.47	240	141383	1.00	ug/ml	-0.01
20) Perylene-d12	15.70	264	131125	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: L12050171
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.

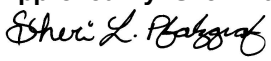
Serial Dilution/Post Digestion Spikes: WG397657 - All acceptance criteria were met.

Matrix Spikes: WG397657 - Sample 01 was chosen by the client for MS/MSD analysis. Samples 03(MS) and 05(MSD) yielded noncompliant recoveries for three analytes. Sample 02 was chosen by the client for MS/MSD analysis. Samples 04(MS) and 06(MSD) yielded noncompliant recoveries for three analytes.

SAMPLES

Samples: All acceptance criteria were met.

Narrative ID: 46276
Approved By: Sheri Pfalzgraf



Certificate of Analysis

Sample #: L12050171-01 | **PrePrep Method:** N/A | **Instrument:** PE-ICP2
Client ID: MW-12-050412 | **Prep Method:** 3005A | **Prep Date:** 05/10/2012 07:40
Matrix: Water | **Analytical Method:** 6010B | **Cal Date:** 05/11/2012 11:47
Workgroup #: WG397657 | **Analyst:** KHR | **Run Date:** 05/11/2012 12:44
Collect Date: 05/04/2012 10:30 | **Dilution:** 1 | **File ID:** P2.051112.124416
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	0.122		0.0100	0.00250
Beryllium, Total	7440-41-7		U	0.00200	0.000500
Cadmium, Total	7440-43-9	0.000383		0.000500	0.000250
Calcium, Total	7440-70-2	131		0.200	0.100
Chromium, Total	7440-47-3		U	0.00500	0.00250
Cobalt, Total	7440-48-4		U	0.0200	0.00250
Copper, Total	7440-50-8		U	0.0200	0.00500
Iron, Total	7439-89-6	0.376		0.100	0.0250
Magnesium, Total	7439-95-4	21.0		0.500	0.250
Manganese, Total	7439-96-5	0.280		0.0100	0.00500
Nickel, Total	7440-02-0		U	0.0400	0.00500
Potassium, Total	7440-09-7	5.24		1.00	0.250
Silver, Total	7440-22-4		U	0.0100	0.00500
Sodium, Total	7440-23-5	118		0.500	0.250
Vanadium, Total	7440-62-2	0.00598		0.0100	0.00500
Zinc, Total	7440-66-6	0.0485		0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Sample #: L12050171-02 | **PrePrep Method:** N/A | **Instrument:** PE-ICP2
Client ID: MW-12-050412 | **Prep Method:** 3005A | **Prep Date:** 05/10/2012 07:40
Matrix: Water | **Analytical Method:** 6010B | **Cal Date:** 05/11/2012 11:47
Workgroup #: WG397657 | **Analyst:** KHR | **Run Date:** 05/11/2012 12:50
Collect Date: 05/04/2012 10:30 | **Dilution:** 1 | **File ID:** P2.051112.125016
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	0.116		0.0100	0.00250
Beryllium, Dissolved	7440-41-7		U	0.00200	0.000500
Cadmium, Dissolved	7440-43-9		U	0.000500	0.000250
Calcium, Dissolved	7440-70-2	125		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		U	0.0200	0.00500
Iron, Dissolved	7439-89-6	0.245		0.100	0.0250
Magnesium, Dissolved	7439-95-4	19.3		0.500	0.250
Manganese, Dissolved	7439-96-5	0.264		0.0100	0.00500
Nickel, Dissolved	7440-02-0		U	0.0400	0.00500
Potassium, Dissolved	7440-09-7	4.97		1.00	0.250
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Sodium, Dissolved	7440-23-5	108		0.500	0.250
Vanadium, Dissolved	7440-62-2		U	0.0100	0.00500
Zinc, Dissolved	7440-66-6		U	0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Sample #: L12050171-03
Client ID: MW-12-050412
Matrix: Water
Workgroup #: WG397657
Collect Date: 05/04/2012 10:30
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: 05/10/2012 07:40
Cal Date: 05/11/2012 11:47
Run Date: 05/11/2012 12:56
File ID: P2.051112.125616

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	5.13		0.100	0.0500
Barium, Total	7440-39-3	0.623		0.0100	0.00250
Beryllium, Total	7440-41-7	0.0239		0.00200	0.000500
Cadmium, Total	7440-43-9	0.0230		0.000500	0.000250
Calcium, Total	7440-70-2	138		0.200	0.100
Chromium, Total	7440-47-3	0.250		0.00500	0.00250
Cobalt, Total	7440-48-4	0.0990		0.0200	0.00250
Copper, Total	7440-50-8	0.245		0.0200	0.00500
Iron, Total	7439-89-6	2.32		0.100	0.0250
Magnesium, Total	7439-95-4	24.5		0.500	0.250
Manganese, Total	7439-96-5	0.532		0.0100	0.00500
Nickel, Total	7440-02-0	0.247		0.0400	0.00500
Potassium, Total	7440-09-7	30.7		1.00	0.250
Silver, Total	7440-22-4	0.197		0.0100	0.00500
Sodium, Total	7440-23-5	150		0.500	0.250
Vanadium, Total	7440-62-2	0.519		0.0100	0.00500
Zinc, Total	7440-66-6	0.536		0.0200	0.00500

Certificate of Analysis

Sample #: L12050171-04 **PrePrep Method:** N/A **Instrument:** PE-ICP2
Client ID: MW-12-050412 **Prep Method:** 3005A **Prep Date:** 05/10/2012 07:40
Matrix: Water **Analytical Method:** 6010B **Cal Date:** 05/11/2012 11:47
Workgroup #: WG397657 **Analyst:** KHR **Run Date:** 05/11/2012 13:02
Collect Date: 05/04/2012 10:30 **Dilution:** 1 **File ID:** P2.051112.130218
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Dissolved	7429-90-5	4.97		0.100	0.0500
Barium, Dissolved	7440-39-3	0.599		0.0100	0.00250
Beryllium, Dissolved	7440-41-7	0.0230		0.00200	0.000500
Cadmium, Dissolved	7440-43-9	0.0222		0.000500	0.000250
Calcium, Dissolved	7440-70-2	128		0.200	0.100
Chromium, Dissolved	7440-47-3	0.240		0.00500	0.00250
Cobalt, Dissolved	7440-48-4	0.0956		0.0200	0.00250
Copper, Dissolved	7440-50-8	0.236		0.0200	0.00500
Iron, Dissolved	7439-89-6	2.15		0.100	0.0250
Magnesium, Dissolved	7439-95-4	23.4		0.500	0.250
Manganese, Dissolved	7439-96-5	0.507		0.0100	0.00500
Nickel, Dissolved	7440-02-0	0.239		0.0400	0.00500
Potassium, Dissolved	7440-09-7	30.0		1.00	0.250
Silver, Dissolved	7440-22-4	0.191		0.0100	0.00500
Sodium, Dissolved	7440-23-5	143		0.500	0.250
Vanadium, Dissolved	7440-62-2	0.498		0.0100	0.00500
Zinc, Dissolved	7440-66-6	0.464		0.0200	0.00500

Sample #: L12050171-05 **PrePrep Method:** N/A **Instrument:** PE-ICP2
Client ID: MW-12-050412 **Prep Method:** 3005A **Prep Date:** 05/10/2012 07:40
Matrix: Water **Analytical Method:** 6010B **Cal Date:** 05/11/2012 11:47
Workgroup #: WG397657 **Analyst:** KHR **Run Date:** 05/11/2012 13:08
Collect Date: 05/04/2012 10:30 **Dilution:** 1 **File ID:** P2.051112.130819
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	5.12		0.100	0.0500
Barium, Total	7440-39-3	0.619		0.0100	0.00250
Beryllium, Total	7440-41-7	0.0243		0.00200	0.000500
Cadmium, Total	7440-43-9	0.0232		0.000500	0.000250
Calcium, Total	7440-70-2	133		0.200	0.100
Chromium, Total	7440-47-3	0.251		0.00500	0.00250
Cobalt, Total	7440-48-4	0.0987		0.0200	0.00250

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Copper, Total	7440-50-8	0.248		0.0200	0.00500
Iron, Total	7439-89-6	2.31		0.100	0.0250
Magnesium, Total	7439-95-4	23.8		0.500	0.250
Manganese, Total	7439-96-5	0.523		0.0100	0.00500
Nickel, Total	7440-02-0	0.249		0.0400	0.00500
Potassium, Total	7440-09-7	30.3		1.00	0.250
Silver, Total	7440-22-4	0.200		0.0100	0.00500
Sodium, Total	7440-23-5	142		0.500	0.250
Vanadium, Total	7440-62-2	0.519		0.0100	0.00500
Zinc, Total	7440-66-6	0.528		0.0200	0.00500

Sample #: L12050171-06
Client ID: MW-12-050412
Matrix: Water
Workgroup #: WG397657
Collect Date: 05/04/2012 10:30
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: 05/10/2012 07:40
Cal Date: 05/11/2012 11:47
Run Date: 05/11/2012 13:14
File ID: P2.051112.131420

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Dissolved	7429-90-5	5.04		0.100	0.0500
Barium, Dissolved	7440-39-3	0.616		0.0100	0.00250
Beryllium, Dissolved	7440-41-7	0.0239		0.00200	0.000500
Cadmium, Dissolved	7440-43-9	0.0229		0.000500	0.000250
Calcium, Dissolved	7440-70-2	129		0.200	0.100
Chromium, Dissolved	7440-47-3	0.248		0.00500	0.00250
Cobalt, Dissolved	7440-48-4	0.0983		0.0200	0.00250
Copper, Dissolved	7440-50-8	0.241		0.0200	0.00500
Iron, Dissolved	7439-89-6	2.19		0.100	0.0250
Magnesium, Dissolved	7439-95-4	23.7		0.500	0.250
Manganese, Dissolved	7439-96-5	0.517		0.0100	0.00500
Nickel, Dissolved	7440-02-0	0.245		0.0400	0.00500
Potassium, Dissolved	7440-09-7	30.3		1.00	0.250
Silver, Dissolved	7440-22-4	0.196		0.0100	0.00500
Sodium, Dissolved	7440-23-5	141		0.500	0.250
Vanadium, Dissolved	7440-62-2	0.513		0.0100	0.00500
Zinc, Dissolved	7440-66-6	0.483		0.0200	0.00500

Certificate of Analysis

Sample #: L12050171-07 **PrePrep Method:** N/A **Instrument:** PE-ICP2
Client ID: PZ-01-050412 **Prep Method:** 3005A **Prep Date:** 05/10/2012 07:41
Matrix: Water **Analytical Method:** 6010B **Cal Date:** 05/11/2012 11:47
Workgroup #: WG397657 **Analyst:** KHR **Run Date:** 05/11/2012 13:46
Collect Date: 05/04/2012 12:07 **Dilution:** 1 **File ID:** P2.051112.134612
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Total	7429-90-5	28.9		0.100	0.0500
Barium, Total	7440-39-3	0.608		0.0100	0.00250
Beryllium, Total	7440-41-7		U	0.00200	0.000500
Cadmium, Total	7440-43-9	0.000642		0.000500	0.000250
Calcium, Total	7440-70-2	373		0.200	0.100
Chromium, Total	7440-47-3	0.0391		0.00500	0.00250
Cobalt, Total	7440-48-4	0.0138		0.0200	0.00250
Copper, Total	7440-50-8	0.0450		0.0200	0.00500
Iron, Total	7439-89-6	47.7		0.100	0.0250
Magnesium, Total	7439-95-4	196		0.500	0.250
Manganese, Total	7439-96-5	1.58		0.0100	0.00500
Nickel, Total	7440-02-0	0.0354		0.0400	0.00500
Potassium, Total	7440-09-7	10.5		1.00	0.250
Silver, Total	7440-22-4		U	0.0100	0.00500
Sodium, Total	7440-23-5	71.7		0.500	0.250
Vanadium, Total	7440-62-2	0.0601		0.0100	0.00500
Zinc, Total	7440-66-6	0.102		0.0200	0.00500

U	Not detected at or above adjusted sample detection limit.

Sample #: L12050171-08 **PrePrep Method:** N/A **Instrument:** PE-ICP2
Client ID: PZ-01-050412 **Prep Method:** 3005A **Prep Date:** 05/10/2012 07:41
Matrix: Water **Analytical Method:** 6010B **Cal Date:** 05/11/2012 11:47
Workgroup #: WG397657 **Analyst:** KHR **Run Date:** 05/11/2012 13:52
Collect Date: 05/04/2012 12:07 **Dilution:** 1 **File ID:** P2.051112.135208
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Aluminum, Dissolved	7429-90-5	0.0849		0.100	0.0500
Barium, Dissolved	7440-39-3	0.487		0.0100	0.00250
Beryllium, Dissolved	7440-41-7		U	0.00200	0.000500
Cadmium, Dissolved	7440-43-9	0.000489		0.000500	0.000250
Calcium, Dissolved	7440-70-2	95.0		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		U	0.0200	0.00500
Iron, Dissolved	7439-89-6	2.47		0.100	0.0250
Magnesium, Dissolved	7439-95-4	83.6		0.500	0.250
Manganese, Dissolved	7439-96-5	0.0347		0.0100	0.00500
Nickel, Dissolved	7440-02-0		U	0.0400	0.00500
Potassium, Dissolved	7440-09-7	2.88		1.00	0.250
Silver, Dissolved	7440-22-4		U	0.0100	0.00500
Sodium, Dissolved	7440-23-5	68.2		0.500	0.250
Vanadium, Dissolved	7440-62-2		U	0.0100	0.00500
Zinc, Dissolved	7440-66-6		U	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: WG397584
Analyst: REK
Spike Analyst: REK
Method: 3005A
Run Date: 05/10/2012 07:40
Hotblock Start Temp: 95.2 @ 06:40
Hotblock End Temp: 95.1 @ 00:00

SOP: ME401 Revison 14
Spike Solution: STD51357
Spike Witness: VC
ICP;WG378021 Filter Lot COA15782
HNO3 Lot #: COA16033
Digestion Tubes Lot #: COA16053
HCL Lot #: COA16113

	SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Spike Amount	Due Date
1	WG397584-03	BLANK	1	50 mL	50 mL		
2	WG397584-04	LCS	1	50 mL	50 mL	5 mL	
3	WG397584-01	REF	1	50 mL	50 mL		
4	L12050171-01	RS01	1	50 mL	50 mL		05/21/12
5	WG397584-02	REF	1	50 mL	50 mL		
6	L12050171-02	RS02	1	50 mL	50 mL		05/21/12
7	WG397584-05	MS	1	50 mL	50 mL	5 mL	
8	L12050171-03	MS01	1	50 mL	50 mL	5 mL	05/21/12
9	WG397584-07	MS	1	50 mL	50 mL	5 mL	
10	L12050171-04	MS02	1	50 mL	50 mL	5 mL	05/21/12
11	WG397584-06	MSD	1	50 mL	50 mL	5 mL	
12	L12050171-05	SD01	1	50 mL	50 mL	5 mL	05/21/12
13	WG397584-08	MSD	1	50 mL	50 mL	5 mL	
14	L12050171-06	SD02	1	50 mL	50 mL	5 mL	05/21/12
15	L12050171-07	SAMP	1	50 mL	50 mL		05/21/12
16	L12050171-08	SAMP	1	50 mL	50 mL		05/21/12
17	L12050291-01	SAMP	1	50 mL	50 mL		05/18/12
18	L12050292-01	SAMP	1	50 mL	50 mL		05/18/12
19	L12050293-01	SAMP	1	50 mL	50 mL		05/18/12
20	L12050294-01	SAMP	1	50 mL	50 mL		05/18/12
21	L12050295-01	SAMP	1	50 mL	50 mL		05/18/12
22	L12050296-01	SAMP	1	50 mL	50 mL		05/18/12
23	L12050297-02	SAMP	1	50 mL	50 mL		05/18/12
24	L12050297-04	SAMP	1	50 mL	50 mL		05/18/12
25	L12050297-06	SAMP	1	50 mL	50 mL		05/18/12
26	L12050297-08	SAMP	1	50 mL	50 mL		05/18/12
27	L12050297-09	SAMP	1	50 mL	50 mL		05/18/12
28	L12050297-10	SAMP	1	50 mL	50 mL		05/18/12
29	L12050297-12	SAMP	1	50 mL	50 mL		05/18/12

L12050171-07	FILTERED DIGESTATE
L12050292-01	FILTERED DIGESTATE
L12050293-01	FILTERED DIGESTATE
L12050295-01	FILTERED DIGESTATE
L12050296-01	FILTERED DIGESTATE
L12050297-06	FILTERED DIGESTATE

HB_DIG - Modified 09/30/2009
PDF ID: 2409244
Report generated: 05/10/2012 11:00

Microbac Laboratories Inc.
Metals Digest Log

Workgroup:	WG397584	**SOP:**	ME401 Revison 14
Analyst:	REK	**Spike Solution:**	STD51357
Spike Analyst:	REK	**Spike Witness:**	VC
Method:	3005A	**ICP;WG378021 Filter Lot**	COA15782
Run Date:	05/10/2012 07:41	**HNO3 Lot #:**	COA16033
Hotblock Start Temp:	95.2 @ 06:40	**Digestion Tubes Lot #:**	COA16053
Hotblock End Temp:	95.1 @ 00:00	**HCL Lot #:**	COA16113

Analyst: 

Reviewer: 

HB_DIG - Modified 09/30/2009
PDF ID: 2409244
Report generated: 05/10/2012 11:00

Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 051112H3.CSV
Analyst1: KHR Analyst2: N/A
Method: 6010 SOP: ME600E Rev: 12
Maintenance Log ID: 41696

Calibration Std: STD51542 ICV Std: STD51543 Post Spike: STD51356
ICSA: STD51556 ICSAB: STD51413 Int. Std: RGT17310
CCV: STD51453 LLCCV:

Workgroups: 397657, 397342

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	P2.051112.112058	WG397874-01	Calibration Point		1		05/11/12 11:20
2	P2.051112.112755	WG397874-02	Calibration Point		1		05/11/12 11:27
3	P2.051112.113449	WG397874-03	Calibration Point		1		05/11/12 11:34
4	P2.051112.114144	WG397874-04	Calibration Point		1		05/11/12 11:41
5	P2.051112.114744	WG397874-05	Calibration Point		1		05/11/12 11:47
6	P2.051112.115345	WG397874-06	Initial Calibration Verification		1		05/11/12 11:53
7	P2.051112.115943	WG397874-07	Initial Calib Blank		1		05/11/12 11:59
8	P2.051112.120636	WG397874-08	Interference Check		1		05/11/12 12:06
9	P2.051112.121233	WG397874-09	Interference Check		1		05/11/12 12:12
10	P2.051112.121830	WG397874-10	CCV		1		05/11/12 12:18
11	P2.051112.122429	WG397874-11	CCB		1		05/11/12 12:24
12	P2.051112.123122	WG397584-03	Method/Prep Blank	50/50	1		05/11/12 12:31
13	P2.051112.123817	WG397584-04	Laboratory Control S	50/50	1		05/11/12 12:38
14	P2.051112.124416	WG397584-01	Reference Sample		1	L12050171-01	05/11/12 12:44
15	P2.051112.125016	WG397584-02	Reference Sample		1	L12050171-02	05/11/12 12:50
16	P2.051112.125616	WG397584-05	Matrix Spike	50/50	1	L12050171-01	05/11/12 12:56
17	P2.051112.130218	WG397584-07	Matrix Spike	50/50	1	L12050171-02	05/11/12 13:02
18	P2.051112.130819	WG397584-06	Matrix Spike Duplica	50/50	1	L12050171-01	05/11/12 13:08
19	P2.051112.131420	WG397584-08	Matrix Spike Duplica	50/50	1	L12050171-02	05/11/12 13:14
20	P2.051112.132022	WG397657-01	Post Digestion Spike		1	L12050171-01	05/11/12 13:20
21	P2.051112.132624	WG397657-02	Serial Dilution		5	L12050171-01	05/11/12 13:26
22	P2.051112.133318	WG397874-12	CCV		1		05/11/12 13:33
23	P2.051112.133919	WG397874-13	CCB		1		05/11/12 13:39
24	P2.051112.134612	L12050171-07	PZ-01-050412	50/50	1		05/11/12 13:46
25	P2.051112.135208	L12050171-08	PZ-01-050412	50/50	1		05/11/12 13:52
26	P2.051112.135806	WG397874-14	CCV		1		05/11/12 13:58
27	P2.051112.140408	WG397874-15	CCB		1		05/11/12 14:04
28	P2.051112.141101	WG397874-16	Interference Check		1		05/11/12 14:11
29	P2.051112.141658	WG397874-17	Interference Check		1		05/11/12 14:16
30	P2.051112.142255	WG397874-18	CCV		1		05/11/12 14:22
31	P2.051112.142856	WG397874-19	CCB		1		05/11/12 14:28
32	P2.051112.143549	L12050291-01	GASTAR	50/50	200		05/11/12 14:35
33	P2.051112.144148	L12050292-01	NORTHEAST NATURAL EN	50/50	200		05/11/12 14:41
34	P2.051112.144747	L12050293-01	POST ROCK	50/50	200		05/11/12 14:47

Page: 1 Approved: May 15, 2012

Maren Berry

Microbac

Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 051112H3.CSV
Analyst1: KHR Analyst2: N/A
Method: 6010 SOP: ME600E Rev: 12
Maintenance Log ID: 41696

Calibration Std: STD51542 ICV Std: STD51543 Post Spike: STD51356
ICSA: STD51556 ICSAB: STD51413 Int. Std: RGT17310
CCV: STD51453 LLCCV:

Workgroups: 397657, 397342

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
35	P2.051112.145346	L12050294-01	STALNAKER	50/50	200		05/11/12 14:53
36	P2.051112.145945	L12050295-01	TERM ENERGY	50/50	200		05/11/12 14:59
37	P2.051112.150545	L12050296-01	BURNETT OIL	50/50	200		05/11/12 15:05
38	P2.051112.151146	L12050297-02	W30WTR	50/50	1		05/11/12 15:11
39	P2.051112.151843	L12050297-04	W30WB	50/50	1		05/11/12 15:18
40	P2.051112.152445	L12050297-06	W16	50/50	1		05/11/12 15:24
41	P2.051112.153045	WG397874-20	CCV		1		05/11/12 15:30
42	P2.051112.153644	WG397874-21	CCB		1		05/11/12 15:36
43	P2.051112.154338	L12050297-08	W6	50/50	1		05/11/12 15:43
44	P2.051112.155036	L12050297-09	W6B	50/50	5		05/11/12 15:50
45	P2.051112.155634	L12050297-10	W51	50/50	5		05/11/12 15:56
46	P2.051112.160313	L12050297-12	W7A	50/50	1		05/11/12 16:03
47	P2.051112.160913	WG397874-22	CCV		1		05/11/12 16:09
48	P2.051112.161514	WG397874-23	CCB		1		05/11/12 16:15
49	P2.051112.162207	L12050104-45	SPE-G-MW-46D-DIS		200		05/11/12 16:22
50	P2.051112.162902	L12050104-46	SPE-G-MW-47	50/50	200		05/11/12 16:29
51	P2.051112.163557	WG397293-01	Reference Sample	50/50	500	L12050104-53	05/11/12 16:35
52	P2.051112.164252	WG397293-04	Matrix Spike	50/50	500	L12050104-53	05/11/12 16:42
53	P2.051112.164947	WG397293-05	Matrix Spike Duplica	50/50	500	L12050104-53	05/11/12 16:49
54	P2.051112.165643	L12050104-54	SPE-K-FB-2	50/50	1		05/11/12 16:56
55	P2.051112.170339	L12050104-55	SPE-K-FB-2-DIS	50/50	1		05/11/12 17:03
56	P2.051112.171036	WG397874-24	CCV		1		05/11/12 17:10
57	P2.051112.171637	WG397874-25	CCB		1		05/11/12 17:16

 Approved: May 15, 2012

Maren Berry

Microbac Laboratories Inc.

Data Checklist

Date: 11-MAY-2012
Analyst: KHR
Analyst: NA
Method: 6010
Instrument: PE-ICP2
Curve Workgroup: 397874
Runlog ID: 46715
Analytical Workgroups: 397657, 397342

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	171
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	KHR
Secondary Reviewer	MMB
Comments	

Primary Reviewer:
14-MAY-2012

Secondary Reviewer:
15-MAY-2012

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-15-2012 15:40:21

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 6010B AAB#: WG397657

Login Number: L12050171

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-12-050412	01	05/04/12					05/10/12	5.9	180		05/11/12	7.1	180	
MW-12-050412	02	05/04/12					05/10/12	5.9	180		05/11/12	7.1	180	
MW-12-050412	03	05/04/12					05/10/12	5.9	180		05/11/12	7.1	180	
MW-12-050412	04	05/04/12					05/10/12	5.9	180		05/11/12	7.1	180	
MW-12-050412	05	05/04/12					05/10/12	5.9	180		05/11/12	7.1	180	
MW-12-050412	06	05/04/12					05/10/12	5.9	180		05/11/12	7.1	180	
PZ-01-050412	07	05/04/12					05/10/12	5.8	180		05/11/12	7.1	180	
PZ-01-050412	08	05/04/12					05/10/12	5.8	180		05/11/12	7.1	180	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2412472
Report generated 05/14/2012 09:01

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12050171
Blank File ID: P2.051112.123122
Prep Date: 05/10/12 07:40
Analyzed Date: 05/11/12 12:31
Analyst: KHR

Work Group: WG397657
Blank Sample ID: WG397584-03
Instrument ID: PE-ICP2
Method: 6010B

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG397584-04	P2.051112.123817	05/11/12 12:38	01
MW-12-050412	L12050171-01	P2.051112.124416	05/11/12 12:44	01
MW-12-050412	L12050171-02	P2.051112.125016	05/11/12 12:50	01
MW-12-050412	L12050171-03	P2.051112.125616	05/11/12 12:56	01
MW-12-050412	L12050171-04	P2.051112.130218	05/11/12 13:02	01
MW-12-050412	L12050171-05	P2.051112.130819	05/11/12 13:08	01
MW-12-050412	L12050171-06	P2.051112.131420	05/11/12 13:14	01
PZ-01-050412	L12050171-07	P2.051112.134612	05/11/12 13:46	01
PZ-01-050412	L12050171-08	P2.051112.135208	05/11/12 13:52	01

Report Name: BLANK_SUMMARY
PDF File ID: 2412473
Report generated 05/14/2012 09:01

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050171 Prep Date: 05/10/12 07:40 Sample ID: WG397584-03
Instrument ID: PE-ICP2 Run Date: 05/11/12 12:31 Prep Method: 3005A
File ID: P2.051112.123122 Analyst: KHR Method: 6010B
Workgroup (AAB#): WG397657 Matrix: Water Units: mg/L
Contract #: Cal ID: PE-ICP-11-MAY-12

Analytes	MDL	RL	Concentration	Dilution	Qualifier
Aluminum, Total	0.0500	0.100	0.0500	1	U
Barium, Total	0.00250	0.0100	-0.00412	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	-0.00560	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: 2412474
14-MAY-2012 09:01

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050171 Run Date: 05/11/2012 Sample ID: WG397584-04
Instrument ID: PE-ICP2 Run Time: 12:38 Prep Method: 3005A
File ID: P2.051112.123817 Analyst: KHR Method: 6010B
Workgroup (AAB#): WG397657 Matrix: Water Units: mg/L
QC Key: WATERLOO Lot#: STD51357 Cal ID: PE-ICP-11-MAY-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Aluminum, Total	5.00	5.10	102	85 - 115	
Barium, Total	0.500	0.511	102	85 - 115	
Beryllium, Total	0.0250	0.0240	96.1	85 - 115	
Cadmium, Total	0.0250	0.0234	93.4	85 - 115	
Calcium, Total	5.00	5.03	101	85 - 115	
Chromium, Total	0.250	0.254	101	85 - 115	
Cobalt, Total	0.100	0.102	102	85 - 115	
Copper, Total	0.250	0.251	100	85 - 115	
Iron, Total	2.00	2.00	99.8	85 - 115	
Magnesium, Total	5.00	5.11	102	85 - 115	
Manganese, Total	0.250	0.256	102	85 - 115	
Nickel, Total	0.250	0.259	103	85 - 115	
Potassium, Total	25.0	25.3	101	85 - 115	
Silver, Total	0.200	0.199	99.5	85 - 115	
Sodium, Total	25.0	24.7	98.9	85 - 115	
Vanadium, Total	0.500	0.513	103	85 - 115	
Zinc, Total	0.500	0.514	103	85 - 115	

LCS - Modified 03/06/2008
PDF File ID: 2412475
Report generated: 05/14/2012 09:01

Microbac Laboratories Inc.

MS/MSD REPORT

Loginnum:L12050171 Cal ID:PE-ICP2- 11-MAY-12 Worknum:WG397657

Instrument ID:PE-ICP2 Contract #: Prep Method:3005A

Parent ID:L12050171-01 File ID:P2.051112.124416 Dil:1 Method:6010B

Sample ID:L12050171-03 MS File ID:P2.051112.125616 Dil:1 Matrix:Water

Sample ID:L12050171-05 MSD File ID:P2.051112.130819 Dil:1 Units:mg/L

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Aluminum, Total	U	5.00	5.13	103	5.00	5.12	102	0.121	85 - 115	20	
Barium, Total	0.122	0.500	0.623	100	0.500	0.619	99.3	0.636	85 - 115	20	
Beryllium, Total	U	0.0250	0.0239	95.7	0.0250	0.0243	97	1.42	85 - 115	20	
Cadmium, Total	0.000383	0.0250	0.0230	90.4	0.0250	0.0232	91.4	1.06	85 - 115	20	
Calcium, Total	131	5.00	138	132	5.00	133	43.7	3.25	85 - 115	20	*
Chromium, Total	U	0.250	0.250	99.9	0.250	0.251	100	0.358	85 - 115	20	
Cobalt, Total	U	0.100	0.0990	99	0.100	0.0987	98.7	0.273	85 - 115	20	
Copper, Total	U	0.250	0.245	97.9	0.250	0.248	99.3	1.38	85 - 115	20	
Iron, Total	0.376	2.00	2.32	97.3	2.00	2.31	97	0.326	85 - 115	20	
Magnesium, Total	21.0	5.00	24.5	69.6	5.00	23.8	54.4	3.13	85 - 115	20	*
Manganese, Total	0.280	0.250	0.532	101	0.250	0.523	97.4	1.63	85 - 115	20	
Nickel, Total	U	0.250	0.247	98.7	0.250	0.249	99.5	0.726	85 - 115	20	
Potassium, Total	5.24	25.0	30.7	102	25.0	30.3	100	1.06	85 - 115	20	
Silver, Total	U	0.200	0.197	98.7	0.200	0.200	99.9	1.16	85 - 115	20	
Sodium, Total	118	25.0	150	128	25.0	142	94.4	5.78	85 - 115	20	*
Vanadium, Total	0.00598	0.500	0.519	103	0.500	0.519	103	0.148	85 - 115	20	
Zinc, Total	0.0485	0.500	0.536	97.5	0.500	0.528	95.8	1.55	85 - 115	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

MS_MSD - Modified 03/06/2008

PDF File ID: 2412476

Report generated 05/14/2012 09:01

Microbac Laboratories Inc.

MS/MSD REPORT

Loginnum:L12050171 Cal ID:PE-ICP2- 11-MAY-12 Worknum:WG397657

Instrument ID:PE-ICP2 Contract #: Prep Method:3005A

Parent ID:L12050171-02 File ID:P2.051112.125016 Dil:1 Method:6010B

Sample ID:L12050171-04 MS File ID:P2.051112.130218 Dil:1 Matrix:Water

Sample ID:L12050171-06 MSD File ID:P2.051112.131420 Dil:1 Units:mg/L

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Aluminum, Dissolved	U	5.00	4.97	99.3	5.00	5.04	101	1.50	85 - 115	20	
Barium, Dissolved	0.116	0.500	0.599	96.7	0.500	0.616	100	2.74	85 - 115	20	
Beryllium, Dissolved	U	0.0250	0.0230	91.8	0.0250	0.0239	95.6	3.97	85 - 115	20	
Cadmium, Dissolved	U	0.0250	0.0222	88.7	0.0250	0.0229	91.6	3.29	85 - 115	20	
Calcium, Dissolved	125	5.00	128	61.2	5.00	129	79.1	0.700	85 - 115	20	*
Chromium, Dissolved	U	0.250	0.240	96	0.250	0.248	99.2	3.22	85 - 115	20	
Cobalt, Dissolved	U	0.100	0.0956	95.6	0.100	0.0983	98.3	2.83	85 - 115	20	
Copper, Dissolved	U	0.250	0.236	94.3	0.250	0.241	96.2	2.08	85 - 115	20	
Iron, Dissolved	0.245	2.00	2.15	95	2.00	2.19	97.2	2.03	85 - 115	20	
Magnesium, Dissolved	19.3	5.00	23.4	81.1	5.00	23.7	86.9	1.23	85 - 115	20	*
Manganese, Dissolved	0.264	0.250	0.507	97.5	0.250	0.517	102	1.97	85 - 115	20	
Nickel, Dissolved	U	0.250	0.239	95.6	0.250	0.245	98	2.51	85 - 115	20	
Potassium, Dissolved	4.97	25.0	30.0	100	25.0	30.3	101	1.07	85 - 115	20	
Silver, Dissolved	U	0.200	0.191	95.3	0.200	0.196	97.9	2.74	85 - 115	20	
Sodium, Dissolved	108	25.0	143	137	25.0	141	131	1.04	85 - 115	20	*
Vanadium, Dissolved	U	0.500	0.498	99.5	0.500	0.513	103	3.10	85 - 115	20	
Zinc, Dissolved	U	0.500	0.464	92.8	0.500	0.483	96.6	4.02	85 - 115	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

MS_MSD - Modified 03/06/2008

PDF File ID: 2412476

Report generated 05/14/2012 09:01

Microbac Laboratories Inc.
Serial Dilution Report

Login: L12050171 **Worknum:** WG397657
Instrument: PE-ICP2 **Method:** 6010B
Serial Dil: WG397657-02 **File ID:** P2.051112.132624 **Dil:** 5 **Units:** mg/L
Sample: L12050171-01 **File ID:** P2.051112.124416 **Dil:** 1

Analyte	Sample	Qual	Serial Dil	Qual	% Diff	Q
Aluminum	ND	U	ND	U		
Barium	0.122	X	0.105	X	14.20	
Beryllium	ND	U	ND	U		
Cadmium	0.000383	F	ND	U		
Calcium	131		118		10.30	E
Chromium	ND	U	ND	U		
Cobalt	ND	U	ND	U		
Copper	ND	U	ND	U		
Iron	0.376	X	0.393	F	4.56	
Magnesium	21.0		20.1		4.44	
Manganese	0.280		0.259		7.32	
Nickel	ND	U	ND	U		
Potassium	5.24	X	5.31	X	1.34	
Silver	ND	U	ND	U		
Sodium	118		104		12.20	E
Vanadium	0.00598	F	ND	U		
Zinc	0.0485	X	0.0382	F	21.30	

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: 2412470
05/14/2012 09:02

Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L12050171 **Worknum:** WG397657
Instrument ID: PE-ICP2 **Method:** 6010B
Post Spike ID: WG397657-01 **File ID:** P2.051112.132022 **Dil:** 1 **Units:** mg/L
Sample ID: L12050171-01 **File ID:** P2.051112.124416 **Dil:** 1 **Matrix:** Water

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
ALUMINUM	5.14		0	U	5	102.8	75 - 125	
BARIUM	0.607		0.122		.5	99.5	75 - 125	
BERYLLIUM	0.0243		0	U	.025	97.1	75 - 125	
CADMIUM	0.0232		0.000383	F	.025	91.5	75 - 125	
CALCIUM	122		131		5	87.0	75 - 125	
CHROMIUM	0.250		0	U	.25	100.2	75 - 125	
COBALT	0.0994		0	U	.1	99.4	75 - 125	
COPPER	0.249		0	U	.25	99.4	75 - 125	
IRON	2.28		0.376		2	97.1	75 - 125	
MAGNESIUM	22.5		21.0		5	70.5	75 - 125	N
MANGANESE	0.499		0.280		.25	98.8	75 - 125	
NICKEL	0.248		0	U	.25	99.1	75 - 125	
POTASSIUM	30.4		5.24		25	102.6	75 - 125	
SILVER	0.201		0	U	.2	100.6	75 - 125	
SODIUM	133		118		25	105.8	75 - 125	
VANADIUM	0.517		0.00598	F	.5	102.3	75 - 125	
ZINC	0.527		0.0485		.5	96.7	75 - 125	

N = % Recovery exceeds control limits
F = Result is between MDL and RL
U = Sample result is below MDL. A value of zero is used in the calculation

POST_SPIKE - Modified 03/06/2008
PDF File ID: 2412471
Report generated: 05/14/2012 09:03

Microbac Laboratories Inc.
Initial Calibration Summary

Login:	**L12050171**	Workgroup (AAB#):	**WG397657**
Analytical Method:	**6010B**	Instrument ID:	**PE-ICP2**
ICAL Worknum:	**WG397874**	Initial Calibration Date:	**11-MAY-2012 11:47**

	WG397874-01		WG397874-02		WG397874-03		WG397874-04		WG397874-05			
	Conc	INT	Conc	INT	Conc	INT	Conc	INT	Conc	INT	R	Q
ALUMINUM	0	5.68	.1	776	.2	1550	10	75600	20	149000	.999963	
BARIUM	0	-140	.01	1650	.02	3290	1	163000	2	317000	.999887	
BERYLLIUM	0	-1740	.0005	648	.001	1300	.05	67100	.1	135000	.999997	
CADMIUM	0	100	.0005	19.5	.001	52.5	.05	2970	.1	5960	.999998	
CALCIUM	0	-88.3	NA	NA	.2	90.1	10	4820	20	9850	.999944	
CHROMIUM	0	199	.005	603	.01	1170	.5	58200	1	112000	.999861	
COBALT	0	14.7	.002	84.9	.004	156	.1	8020	.4	15600	.999907	
COPPER	0	-574	.005	1450	.01	2850	.5	142000	1	280000	.999978	
IRON	0	109	.04	653	.08	1320	4	67300	8	132000	.999952	
MAGNESIUM	0	39.9	.1	363	.2	740	10	37200	20	73500	.999979	
MANGANESE	0	379	.005	4760	.01	8820	.5	449000	1	853000	.999682	
NICKEL	0	-154	.005	370	.01	737	.5	35700	1	68800	.999836	
POTASSIUM	0	76.1	.5	1850	1	3500	50	163000	100	322000	1	
SILVER	0	-138	.004	1370	.008	2810	.4	135000	.8	265000	.999973	
SODIUM	0	1030	.5	10200	1	20600	50	1030000	100	1960000	1	
VANADIUM	0	15900	.01	1880	.02	3570	1	203000	2	391000	.999831	
ZINC	0	98.2	.01	463	.02	888	1	44800	2	87300	.999923	

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: 2412479
Report generated: 14-MAY-2012 09:46

Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L12050171 Run Date: 05/11/2012 Sample ID: WG397874-07
Instrument ID: PE-ICP2 Run Time: 11:59 Method: 6010B
File ID: P2.051112.115943 Analyst: KHR Units: mg/L
Workgroup (AAB#): WG397657 Cal ID: PE-ICP2 - 11-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: 2412481
Report generated 05/14/2012 09:01

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050171 Run Date: 05/11/2012 Sample ID: WG397874-11

Instrument ID: PE-ICP2 Run Time: 12:24 Method: 6010B

File ID: P2.051112.122429 Analyst: KHR Units: mg/L

Workgroup (AAB#): WG397657 Cal ID: PE-ICP - 11-MAY-12

Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00250	0.0100	-0.00425	F
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	-0.00578	F
Zinc	0.00500	0.0200	0.00500	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2412484
Report generated 05/14/2012 09:01

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050171 Run Date: 05/11/2012 Sample ID: WG397874-13

Instrument ID: PE-ICP2 Run Time: 13:39 Method: 6010B

File ID: P2.051112.133919 Analyst: KHR Units: mg/L

Workgroup (AAB#): WG397657 Cal ID: PE-ICP - 11-MAY-12

Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00250	0.0100	-0.00428	F
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: 2412484
Report generated 05/14/2012 09:01

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050171 Run Date: 05/11/2012 Sample ID: WG397874-15

Instrument ID: PE-ICP2 Run Time: 14:04 Method: 6010B

File ID: P2.051112.140408 Analyst: KHR Units: mg/L

Workgroup (AAB#): WG397657 Cal ID: PE-ICP - 11-MAY-12

Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00250	0.0100	-0.00428	F
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	-0.00566	F
Zinc	0.00500	0.0200	0.00500	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2412484
Report generated 05/14/2012 09:01

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050171 Run Date: 05/11/2012 Sample ID: WG397874-19

Instrument ID: PE-ICP2 Run Time: 14:28 Method: 6010B

File ID: P2.051112.142856 Analyst: KHR Units: mg/L

Workgroup (AAB#): WG397657 Cal ID: PE-ICP - 11-MAY-12

Matrix: WATER QAPP: WATERLOO

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00250	0.0100	-0.00428	F
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	-0.00508	F
Zinc	0.00500	0.0200	0.00500	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 2412484
Report generated 05/14/2012 09:01

Microbac Laboratories Inc.

INITIAL CALIBRATION VERIFICATION (ICV)
(Alternate Source)

Login Number: L12050171 Run Date: 05/11/2012 Sample ID: WG397874-06
Instrument ID: PE-ICP2 Run Time: 11:53 Method: 6010B
File ID: P2.051112.115345 Analyst: KHR Units: mg/L
Workgroup (AAB#): WG397657 Cal ID: PE-ICP - 11-MAY-12
QC Key: WATERLOO

Analyte		Expected	Found	%REC	LIMITS	Q
Aluminum		10	10.2	102	90 - 110	
Barium		1	1.03	103	90 - 110	
Beryllium		.05	0.0501	100	90 - 110	
Cadmium		.05	0.0493	98.6	90 - 110	
Calcium		10	10.4	104	90 - 110	
Chromium		.5	0.515	103	90 - 110	
Cobalt		.2	0.203	102	90 - 110	
Copper		.5	0.519	104	90 - 110	
Iron		4	4.09	102	90 - 110	
Magnesium		10	10.0	100	90 - 110	
Manganese		.5	0.523	105	90 - 110	
Nickel		.5	0.520	104	90 - 110	
Potassium		50	50.0	99.9	90 - 110	
Silver		.4	0.404	101	90 - 110	
Sodium		50	48.1	96.3	90 - 110	
Vanadium		1	1.02	102	90 - 110	
Zinc		1	1.04	104	90 - 110	

* Exceeds LIMITS Limit

ICV - Modified 03/06/2008
PDF File ID: 2412480
Report generated 05/14/2012 09:01

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050171 Run Date: 05/11/2012 Sample ID: WG397874-10
Instrument ID: PE-ICP2 Run Time: 12:18 Method: 6010B
File ID: P2.051112.121830 Analyst: KHR QC Key: WATERLOO
Workgroup (AAB#): WG397657 Cal ID: PE-ICP - 11-MAY-12
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	10.1	mg/L	101	90 - 110		
Barium		1.00	1.02	mg/L	102	90 - 110		
Beryllium		0.0500	0.0499	mg/L	99.9	90 - 110		
Cadmium		0.0500	0.0483	mg/L	96.6	90 - 110		
Calcium		10.0	10.3	mg/L	103	90 - 110		
Chromium		0.500	0.508	mg/L	102	90 - 110		
Cobalt		0.200	0.201	mg/L	100	90 - 110		
Copper		0.500	0.503	mg/L	101	90 - 110		
Iron		4.00	4.07	mg/L	102	90 - 110		
Magnesium		10.0	10.1	mg/L	101	90 - 110		
Manganese		0.500	0.505	mg/L	101	90 - 110		
Nickel		0.500	0.524	mg/L	105	90 - 110		
Potassium		50.0	50.1	mg/L	100	90 - 110		
Silver		0.400	0.403	mg/L	101	90 - 110		
Sodium		50.0	48.2	mg/L	96.3	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: 2412483
Report generated 05/14/2012 09:01

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050171 Run Date: 05/11/2012 Sample ID: WG397874-12
Instrument ID: PE-ICP2 Run Time: 13:33 Method: 6010B
File ID: P2.051112.133318 Analyst: KHR QC Key: WATERLOO
Workgroup (AAB#): WG397657 Cal ID: PE-ICP - 11-MAY-12
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	10.2	mg/L	102	90 - 110		
Barium		1.00	1.05	mg/L	105	90 - 110		
Beryllium		0.0500	0.0494	mg/L	98.8	90 - 110		
Cadmium		0.0500	0.0477	mg/L	95.4	90 - 110		
Calcium		10.0	10.4	mg/L	104	90 - 110		
Chromium		0.500	0.524	mg/L	105	90 - 110		
Cobalt		0.200	0.207	mg/L	104	90 - 110		
Copper		0.500	0.507	mg/L	101	90 - 110		
Iron		4.00	4.09	mg/L	102	90 - 110		
Magnesium		10.0	10.3	mg/L	103	90 - 110		
Manganese		0.500	0.536	mg/L	107	90 - 110		
Nickel		0.500	0.530	mg/L	106	90 - 110		
Potassium		50.0	50.4	mg/L	101	90 - 110		
Silver		0.400	0.405	mg/L	101	90 - 110		
Sodium		50.0	49.0	mg/L	98.0	90 - 110		
Vanadium		1.00	1.05	mg/L	105	90 - 110		
Zinc		1.00	1.05	mg/L	105	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
PDF File ID: 2412483
Report generated 05/14/2012 09:01

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050171 Run Date: 05/11/2012 Sample ID: WG397874-14
Instrument ID: PE-ICP2 Run Time: 13:58 Method: 6010B
File ID: P2.051112.135806 Analyst: KHR QC Key: WATERLOO
Workgroup (AAB#): WG397657 Cal ID: PE-ICP - 11-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	1.00	mg/L	100	90 - 110		
Beryllium		0.0500	0.0483	mg/L	96.6	90 - 110		
Cadmium		0.0500	0.0473	mg/L	94.6	90 - 110		
Calcium		10.0	10.3	mg/L	103	90 - 110		
Chromium		0.500	0.495	mg/L	99.0	90 - 110		
Cobalt		0.200	0.199	mg/L	99.6	90 - 110		
Copper		0.500	0.505	mg/L	101	90 - 110		
Iron		4.00	3.95	mg/L	98.7	90 - 110		
Magnesium		10.0	9.90	mg/L	99.0	90 - 110		
Manganese		0.500	0.510	mg/L	102	90 - 110		
Nickel		0.500	0.501	mg/L	100	90 - 110		
Potassium		50.0	49.5	mg/L	99.0	90 - 110		
Silver		0.400	0.399	mg/L	99.7	90 - 110		
Sodium		50.0	47.0	mg/L	94.1	90 - 110		
Vanadium		1.00	1.00	mg/L	100	90 - 110		
Zinc		1.00	0.985	mg/L	98.5	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
PDF File ID: 2412483
Report generated 05/14/2012 09:01

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050171 Run Date: 05/11/2012 Sample ID: WG397874-18
Instrument ID: PE-ICP2 Run Time: 14:22 Method: 6010B
File ID: P2.051112.142255 Analyst: KHR QC Key: WATERLOO
Workgroup (AAB#): WG397657 Cal ID: PE-ICP - 11-MAY-12
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	10.3	mg/L	103	90 - 110		
Barium		1.00	1.03	mg/L	103	90 - 110		
Beryllium		0.0500	0.0488	mg/L	97.7	90 - 110		
Cadmium		0.0500	0.0475	mg/L	95.0	90 - 110		
Calcium		10.0	10.5	mg/L	105	90 - 110		
Chromium		0.500	0.511	mg/L	102	90 - 110		
Cobalt		0.200	0.205	mg/L	102	90 - 110		
Copper		0.500	0.510	mg/L	102	90 - 110		
Iron		4.00	4.11	mg/L	103	90 - 110		
Magnesium		10.0	10.3	mg/L	103	90 - 110		
Manganese		0.500	0.523	mg/L	105	90 - 110		
Nickel		0.500	0.516	mg/L	103	90 - 110		
Potassium		50.0	51.5	mg/L	103	90 - 110		
Silver		0.400	0.402	mg/L	100	90 - 110		
Sodium		50.0	50.3	mg/L	101	90 - 110		
Vanadium		1.00	1.03	mg/L	103	90 - 110		
Zinc		1.00	1.02	mg/L	102	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
PDF File ID: 2412483
Report generated 05/14/2012 09:01

Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L12050171 **Workgroup (AAB#):** WG397657
Instrument ID: PE-ICP2 **Method:** 6010B
Sol. A : WG397874-08 **File ID:** P2.051112.120636 **Units:** mg/L
Sol. AB : WG397874-09 **File ID:** P2.051112.121233 **Matrix:** Water

	Sol. A			Sol. AB			
ANALYTE	True	Found	%Recovery	True	Found	%Recovery	Q
Aluminum	250	247	98.8	250	255	102	
Barium	NS	-0.00166	NS	0.250	0.247	98.8	
Beryllium	NS	-0.00174	NS	0.250	0.242	96.8	
Cadmium	NS	-0.0000700	NS	0.500	0.407	81.4	
Calcium	250	252	101	250	261	104	
Chromium	NS	-0.00308	NS	0.250	0.250	100	
Cobalt	NS	-0.00253	NS	0.250	0.236	94.4	
Copper	NS	0.00147	NS	0.250	0.246	98.4	
Iron	100	92.6	92.6	100	96.3	96.3	
Magnesium	250	250	100	250	260	104	
Manganese	NS	-0.00313	NS	0.250	0.241	96.4	
Nickel	NS	-0.00181	NS	0.500	0.480	96.0	
Potassium	NS	-0.0681	NS	5.00	4.84	96.8	
Silver	NS	0.000250	NS	0.500	0.502	100	
Sodium	NS	0.0326	NS	5.00	4.72	94.4	
Vanadium	NS	-0.00587	NS	0.250	0.241	96.4	
Zinc	NS	0.000120	NS	0.500	0.475	95.0	

NS = Not spiked
*** = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.**
 # = Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).
+ = Result for unspiked element is outside the acceptance limits of (+/-) 2 times the project method detection limit (MDL). This criteria is only applicable to specific QAPPs.

ICS - Modified 03/06/2008
PDF File ID: 2412482
Report generated 05/14/2012 09:01

Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L12050171 **Workgroup (AAB#):** WG397657
Instrument ID: PE-ICP2 **Method:** 6010B
Sol. A : WG397874-16 **File ID:** P2.051112.141101 **Units:** mg/L
Sol. AB : WG397874-17 **File ID:** P2.051112.141658 **Matrix:** Water

	Sol. A			Sol. AB			
ANALYTE	True	Found	%Recovery	True	Found	%Recovery	Q
Aluminum	250	257	103	250	266	106	
Barium	NS	-0.00174	NS	0.250	0.253	101	
Beryllium	NS	-0.00174	NS	0.250	0.246	98.4	
Cadmium	NS	-0.000210	NS	0.500	0.411	82.2	
Calcium	250	257	103	250	270	108	
Chromium	NS	-0.00315	NS	0.250	0.253	101	
Cobalt	NS	-0.00284	NS	0.250	0.240	96.0	
Copper	NS	0.00143	NS	0.250	0.256	102	
Iron	100	95.1	95.1	100	97.8	97.8	
Magnesium	250	258	103	250	266	106	
Manganese	NS	-0.00317	NS	0.250	0.248	99.2	
Nickel	NS	-0.00245	NS	0.500	0.488	97.6	
Potassium	NS	-0.0843	NS	5.00	5.05	101	
Silver	NS	0.000330	NS	0.500	0.511	102	
Sodium	NS	0.0255	NS	5.00	4.89	97.8	
Vanadium	NS	-0.00663	NS	0.250	0.250	100	
Zinc	NS	-0.000710	NS	0.500	0.472	94.4	

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: 2412482
Report generated 05/14/2012 09:01

Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12050171 **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: 2412478
Report generated: 05/14/2012 09:01

Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12050171 **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: 2412478
Report generated: 05/14/2012 09:01

Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12050171 **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: 2412478
Report generated: 05/14/2012 09:01

Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12050171 **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: 2412478
Report generated: 05/14/2012 09:01

Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12050171 **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: 2412478
Report generated: 05/14/2012 09:01

Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L12050171 **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: 2412478
Report generated: 05/14/2012 09:01

Microbac Laboratories Inc.
LINEAR RANGE (QUARTERLY)

Login Number: L12050171 **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: 2412477
Report generated: 05/14/2012 09:01

2.3.1.3 Raw Data

==========

Analysis Begun

Start Time: 5/11/2012 11:20:57 AM **Plasma On Time: 5/11/2012 7:44:53 AM**
Logged In Analyst: peicp2 **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N4011401 **Autosampler Model: Cetac**

Sample Information File: C:\pe\peicp2\Sample Information\FRIDAY1.sif
Batch ID:
Results Data Set: 051112H3
Results Library: C:\pe\peicp2\Results\Results.mdb

==========

Sequence No.: 1 **Autosampler Location: 1**
Sample ID: S0 **Date Collected: 5/11/2012 11:20:58 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: S0

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Y 371.029	2343649.9	28692.98	1.22%		
YRADIAL	315860.0	7515.13	2.38%		
Ga 417.206	1358159.8	7032.68	0.52%		
GaRADIAL	91024.3	899.16	0.99%		
Ag 328.068†	-137.8	61.90	44.93%	[0.00]	mg/L
Al 396.153†	5.7	9.59	168.88%	[0.00]	mg/L
As 188.979†	-29.5	4.75	16.10%	[0.00]	mg/L
Ba 233.527†	-139.9	20.66	14.77%	[0.00]	mg/L
Be 234.861†	-1741.8	39.08	2.24%	[0.00]	mg/L
B 249.677†	405.5	22.20	5.48%	[0.00]	mg/L
Ca 227.546†	-88.3	4.91	5.56%	[0.00]	mg/L
Cd 228.802†	100.4	6.21	6.19%	[0.00]	mg/L
Co 228.616†	14.7	2.48	16.85%	[0.00]	mg/L
Cr 267.716†	199.1	14.12	7.09%	[0.00]	mg/L
Cu 327.393†	-574.0	140.46	24.47%	[0.00]	mg/L
Fe 239.562†	109.3	7.89	7.22%	[0.00]	mg/L
Mg 279.077†	39.9	11.31	28.37%	[0.00]	mg/L
Mn 257.610†	379.2	11.37	3.00%	[0.00]	mg/L
Mo 202.031†	104.7	1.55	1.48%	[0.00]	mg/L
Ni 231.604†	-154.1	22.11	14.35%	[0.00]	mg/L
Pb 220.353†	-114.9	7.95	6.92%	[0.00]	mg/L
Sb 206.836†	3.6	0.92	25.42%	[0.00]	mg/L
Se 196.026†	21.0	1.50	7.11%	[0.00]	mg/L
Si 251.611†	646.1	33.34	5.16%	[0.00]	mg/L
Sn 189.927†	113.7	7.22	6.35%	[0.00]	mg/L
Ti 334.940†	1002.5	113.96	11.37%	[0.00]	mg/L
Tl 190.801†	-70.1	7.97	11.36%	[0.00]	mg/L
V 290.880†	15898.6	206.94	1.30%	[0.00]	mg/L
Zn 206.200†	98.2	6.13	6.24%	[0.00]	mg/L
K 766.490†	76.1	54.41	71.49%	[0.00]	mg/L
Na 589.592†	1029.8	203.26	19.74%	[0.00]	mg/L
Sr 407.771†	-531.1	573.21	107.92%	[0.00]	mg/L
Li 670.784†	59.8	30.81	51.55%	[0.00]	mg/L

==========

Sequence No.: 2 **Autosampler Location: 2**
Sample ID: S1 **Date Collected: 5/11/2012 11:27:55 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: S1

Approved: May 14, 2012

Analyte	Back Pressure	Flow
All	150.0 kPa	0.50 L/min

Mean Data: S1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Y 371.029	2365693.2	26990.49	1.14%		
YRADIAL	309618.3	7217.17	2.33%		
Ga 417.206	1353612.9	15541.99	1.15%		
GaRADIAL	89115.3	1178.02	1.32%		
Ag 328.068†	1366.5	120.50	8.82%	[0.0040]	mg/L
Al 396.153†	776.1	15.96	2.06%	[0.10]	mg/L
Ba 233.527†	1650.2	28.56	1.73%	[0.010]	mg/L
Be 234.861†	648.1	42.05	6.49%	[0.0005]	mg/L
Cd 228.802†	19.5	4.91	25.19%	[0.00050]	mg/L
Co 228.616†	84.9	9.56	11.27%	[0.0020]	mg/L
Cr 267.716†	603.0	12.42	2.06%	[0.0050]	mg/L
Cu 327.393†	1453.9	26.03	1.79%	[0.0050]	mg/L
Fe 239.562†	653.0	14.72	2.25%	[0.040]	mg/L
Mg 279.077†	362.7	16.29	4.49%	[0.10]	mg/L
Mn 257.610†	4756.9	48.21	1.01%	[0.0050]	mg/L
Mo 202.031†	379.5	8.87	2.34%	[0.010]	mg/L
Ni 231.604†	369.7	22.54	6.10%	[0.0050]	mg/L
Pb 220.353†	54.5	18.44	33.83%	[0.0050]	mg/L
Sb 206.836†	51.1	5.02	9.82%	[0.012]	mg/L
Si 251.611†	2250.0	10.39	0.46%	[0.050]	mg/L
Sn 189.927†	102.6	4.05	3.95%	[0.010]	mg/L
Ti 334.940†	10045.8	235.24	2.34%	[0.010]	mg/L
V 290.880†	1884.9	442.48	23.47%	[0.010]	mg/L
Zn 206.200†	462.6	13.68	2.96%	[0.010]	mg/L
K 766.490†	1845.6	34.28	1.86%	[0.50]	mg/L
Na 589.592†	10161.6	172.73	1.70%	[0.50]	mg/L
Sr 407.771†	27732.1	616.86	2.22%	[0.010]	mg/L
Li 670.784†	1711.3	29.06	1.70%	[0.010]	mg/L

==========

Sequence No.: 3 **Autosampler Location: 3**
Sample ID: S2 **Date Collected: 5/11/2012 11:34:49 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: S2

Analyte	Back Pressure	Flow
All	150.0 kPa	0.50 L/min

Mean Data: S2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Y 371.029	2396559.9	33908.64	1.41%		
YRADIAL	311674.7	6260.35	2.01%		
Ga 417.206	1364675.0	22272.44	1.63%		
GaRADIAL	89967.3	1374.99	1.53%		
Ag 328.068†	2805.3	64.37	2.29%	[0.0080]	mg/L
Al 396.153†	1548.7	12.48	0.81%	[0.20]	mg/L
As 188.979†	21.3	5.94	27.90%	[0.0080]	mg/L
Ba 233.527†	3290.6	48.68	1.48%	[0.020]	mg/L
Be 234.861†	1303.7	38.73	2.97%	[0.0010]	mg/L
B 249.677†	759.6	27.71	3.65%	[0.010]	mg/L
Ca 227.546†	90.1	3.22	3.58%	[0.20]	mg/L
Cd 228.802†	52.5	10.87	20.71%	[0.0010]	mg/L
Co 228.616†	155.6	14.07	9.04%	[0.0040]	mg/L
Cr 267.716†	1166.8	25.35	2.17%	[0.010]	mg/L
Cu 327.393†	2855.0	67.63	2.37%	[0.010]	mg/L
Fe 239.562†	1323.1	19.84	1.50%	[0.080]	mg/L
Mg 279.077†	739.8	21.85	2.95%	[0.20]	mg/L
Mn 257.610†	8823.7	168.52	1.91%	[0.010]	mg/L
Mo 202.031†	758.9	6.25	0.82%	[0.020]	mg/L
Ni 231.604†	736.8	17.04	2.31%	[0.010]	mg/L

Approved: May 14, 2012

Pb 220.353†	106.8	26.03	24.37%	[0.010] mg/L
Sb 206.836†	102.0	3.96	3.88%	[0.024] mg/L
Se 196.026†	13.1	2.54	19.37%	[0.0080] mg/L
Si 251.611†	4491.8	62.40	1.39%	[0.10] mg/L
Sn 189.927†	205.3	11.60	5.65%	[0.020] mg/L
Ti 334.940†	20320.9	476.05	2.34%	[0.020] mg/L
Tl 190.801†	40.8	4.83	11.84%	[0.010] mg/L
V 290.880†	3569.0	568.62	15.93%	[0.020] mg/L
Zn 206.200†	888.4	6.39	0.72%	[0.020] mg/L
K 766.490†	3501.9	60.27	1.72%	[1.00] mg/L
Na 589.592†	20590.2	442.65	2.15%	[1.00] mg/L
Sr 407.771†	56264.3	935.84	1.66%	[0.020] mg/L
Li 670.784†	3350.9	26.52	0.79%	[0.020] mg/L

Sequence No.: 4 **Autosampler Location: 4**
Sample ID: S3 **Date Collected: 5/11/2012 11:41:44 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: S3

Analyte	Back Pressure	Flow
All	150.0 kPa	0.50 L/min

Mean Data: S3

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Y 371.029	2288811.8	7348.69	0.32%		
YRADIAL	301594.6	3817.52	1.27%		
Ga 417.206	1330013.1	51872.48	3.90%		
GaRADIAL	87607.9	1783.54	2.04%		
Ag 328.068†	134627.6	5302.06	3.94%	[0.40]	mg/L
Al 396.153†	75613.6	168.77	0.22%	[10.00]	mg/L
As 188.979†	1176.0	30.71	2.61%	[0.40]	mg/L
Ba 233.527†	163460.5	817.93	0.50%	[1.00]	mg/L
Be 234.861†	67117.3	2851.85	4.25%	[0.05]	mg/L
B 249.677†	44206.0	1685.44	3.81%	[0.50]	mg/L
Ca 227.546†	4822.1	218.30	4.53%	[10.00]	mg/L
Cd 228.802†	2969.0	152.50	5.14%	[0.05]	mg/L
Co 228.616†	8023.2	75.49	0.94%	[0.20]	mg/L
Cr 267.716†	58196.3	388.27	0.67%	[0.50]	mg/L
Cu 327.393†	141956.4	4874.74	3.43%	[0.50]	mg/L
Fe 239.562†	67316.7	583.00	0.87%	[4.00]	mg/L
Mg 279.077†	37249.4	484.92	1.30%	[10.00]	mg/L
Mn 257.610†	449005.9	3671.86	0.82%	[0.50]	mg/L
Mo 202.031†	38631.0	288.11	0.75%	[1.00]	mg/L
Ni 231.604†	35693.8	356.61	1.00%	[0.50]	mg/L
Pb 220.353†	5778.3	29.44	0.51%	[0.50]	mg/L
Sb 206.836†	5242.9	192.88	3.68%	[1.20]	mg/L
Se 196.026†	745.9	30.54	4.09%	[0.40]	mg/L
Si 251.611†	221497.1	6175.84	2.79%	[5.00]	mg/L
Sn 189.927†	10816.9	92.65	0.86%	[1.00]	mg/L
Ti 334.940†	1031222.7	2924.43	0.28%	[1.00]	mg/L
Tl 190.801†	2010.8	4.91	0.24%	[0.50]	mg/L
V 290.880†	202887.0	516.63	0.25%	[1.00]	mg/L
Zn 206.200†	44784.0	421.63	0.94%	[1.00]	mg/L
K 766.490†	163034.3	2338.54	1.43%	[50.00]	mg/L
Na 589.592†	1032069.5	30662.32	2.97%	[50.00]	mg/L
Sr 407.771†	2800719.8	28962.14	1.03%	[1.00]	mg/L
Li 670.784†	159947.8	838.61	0.52%	[1.00]	mg/L

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: S4 **Date Collected: 5/11/2012 11:47:44 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: May 14, 2012

Nebulizer Parameters: S4

Analyte	Back Pressure	Flow
All	150.0 kPa	0.50 L/min

Mean Data: S4

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Y 371.029	2274138.5	8184.31	0.36%		
YRADIAL	304024.0	2762.17	0.91%		
Ga 417.206	1301670.1	25147.60	1.93%		
GaRADIAL	89586.2	1318.68	1.47%		
Ag 328.068†	265223.2	5199.85	1.96%	[0.80]	mg/L
Al 396.153†	148571.3	176.51	0.12%	[20.00]	mg/L
As 188.979†	2378.8	37.31	1.57%	[0.80]	mg/L
Ba 233.527†	317058.1	3658.92	1.15%	[2.00]	mg/L
Be 234.861†	134963.5	1564.84	1.16%	[0.10]	mg/L
B 249.677†	89321.9	1411.62	1.58%	[1.00]	mg/L
Ca 227.546†	9849.8	244.65	2.48%	[20.00]	mg/L
Cd 228.802†	5958.8	171.06	2.87%	[0.10]	mg/L
Co 228.616†	15606.9	185.52	1.19%	[0.40]	mg/L
Cr 267.716†	112496.2	644.90	0.57%	[1.00]	mg/L
Cu 327.393†	280080.8	6111.22	2.18%	[1.00]	mg/L
Fe 239.562†	131969.1	988.60	0.75%	[8.00]	mg/L
Mg 279.077†	73524.9	1062.55	1.45%	[20.00]	mg/L
Mn 257.610†	853268.8	12761.23	1.50%	[1.00]	mg/L
Mo 202.031†	75088.5	817.89	1.09%	[2.00]	mg/L
Ni 231.604†	68796.2	985.48	1.43%	[1.00]	mg/L
Pb 220.353†	11209.8	92.89	0.83%	[1.00]	mg/L
Sb 206.836†	10469.5	169.80	1.62%	[2.40]	mg/L
Se 196.026†	1506.8	34.55	2.29%	[0.80]	mg/L
Si 251.611†	434842.6	4122.78	0.95%	[10.00]	mg/L
Sn 189.927†	21055.2	204.53	0.97%	[2.00]	mg/L
Ti 334.940†	2038363.5	13695.94	0.67%	[2.00]	mg/L
Tl 190.801†	3917.5	23.56	0.60%	[1.00]	mg/L
V 290.880†	391075.9	2083.08	0.53%	[2.00]	mg/L
Zn 206.200†	87324.1	1474.95	1.69%	[2.00]	mg/L
K 766.490†	322057.8	1782.73	0.55%	[100.00]	mg/L
Na 589.592†	1955927.4	65925.13	3.37%	[100.00]	mg/L
Sr 407.771†	5406231.0	149235.04	2.76%	[2.00]	mg/L
Li 670.784†	309332.7	5057.84	1.64%	[2.00]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	4	Lin, Calc Int	311.6	332100	0.00000	0.999973	
Al 396.153	4	Lin, Calc Int	195.5	7443	0.00000	0.999963	
As 188.979	3	Wt. Lin	-2.4	2961	0.00000	0.999986	
Ba 233.527	4	Lin, Calc Int	672.0	159100	0.00000	0.999887	
Be 234.861	4	Lin, Calc Int	-68.1	1349000	0.00000	0.999997	
B 249.677	3	Lin, Calc Int	-143.5	89310	0.00000	0.999987	
Ca 227.546	3	Lin, Calc Int	-22.5	491.8	0.00000	0.999944	
Cd 228.802	4	Lin, Calc Int	-6.8	59630	0.00000	0.999998	
Co 228.616	4	Lin, Calc Int	29.4	39150	0.00000	0.999907	
Cr 267.716	4	Lin, Calc Int	268.4	113000	0.00000	0.999861	
Cu 327.393	4	Lin, Calc Int	272.3	280500	0.00000	0.999978	
Fe 239.562	4	Lin, Calc Int	164.8	16540	0.00000	0.999952	
Mg 279.077	4	Lin, Calc Int	60.5	3682	0.00000	0.999979	
Mn 257.610	4	Lin, Calc Int	3031.2	858500	0.00000	0.999682	
Mo 202.031	4	Lin, Calc Int	139.1	37680	0.00000	0.999902	
Ni 231.604	4	Lin, Calc Int	184.7	69090	0.00000	0.999836	
Pb 220.353	4	Lin, Calc Int	19.5	11260	0.00000	0.999886	
Sb 206.836	4	Lin, Calc Int	-0.2	4364	0.00000	1.000000	
Se 196.026	3	Wt. Lin	-1.9	1878	0.00000	0.999990	
Si 251.611	4	Lin, Calc Int	576.2	43580	0.00000	0.999959	
Sn 189.927	4	Lin, Calc Int	33.6	10570	0.00000	0.999910	
Ti 334.940	4	Lin, Calc Int	1434.2	1021000	0.00000	0.999983	
Tl 190.801	3	Lin, Calc Int	10.2	3926	0.00000	0.999907	
V 290.880	4	Lin, Calc Int	786.5	196500	0.00000	0.999831	
Zn 206.200	4	Lin, Calc Int	152.6	43790	0.00000	0.999923	
K 766.490	4	Non Lin, Calc Int	133.3	3297	-0.77735	1.000000	

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Na 589.592	4	Non Lin, Calc Int	-605.0	21740	-21.75310	1.000000
Sr 407.771	4	Lin, Calc Int	13063.8	2715000	0.00000	0.999848
Li 670.784	4	Lin, Calc Int	789.9	155200	0.00000	0.999866

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Sequence No.: 6 **Autosampler Location: 11**
Sample ID: ICV 2nd Vendor **Date Collected: 5/11/2012 11:53:45 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	150.0 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	2296453.4						20851.08	0.91%
YRADIAL	311826.9						5591.09	1.79%
Ga 417.206	1315280.7						16728.77	1.27%
GaRADIAL	90372.6						108.82	0.12%
Ag 328.068†	133317.6	0.404	mg/L	0.0112	0.404	mg/L	0.0112	2.77%
QC value within limits for Ag 328.068 Recovery = 101.03%								
Al 396.153†	76270.9	10.2	mg/L	0.02	10.2	mg/L	0.02	0.21%
QC value within limits for Al 396.153 Recovery = 101.52%								
As 188.979†	1203.9	0.402	mg/L	0.0051	0.402	mg/L	0.0051	1.27%
QC value within limits for As 188.979 Recovery = 100.62%								
Ba 233.527†	165162.2	1.03	mg/L	0.004	1.03	mg/L	0.004	0.38%
QC value within limits for Ba 233.527 Recovery = 103.41%								
Be 234.861†	68099.3	0.0501	mg/L	0.00109	0.0501	mg/L	0.00109	2.17%
QC value within limits for Be 234.861 Recovery = 100.13%								
B 249.677†	45474.8	0.507	mg/L	0.0129	0.507	mg/L	0.0129	2.55%
QC value within limits for B 249.677 Recovery = 101.36%								
Ca 227.546†	4873.2	10.4	mg/L	0.19	10.4	mg/L	0.19	1.87%
QC value within limits for Ca 227.546 Recovery = 104.32%								
Cd 228.802†	3016.1	0.0493	mg/L	0.00126	0.0493	mg/L	0.00126	2.55%
QC value within limits for Cd 228.802 Recovery = 98.58%								
Co 228.616†	8026.3	0.203	mg/L	0.0030	0.203	mg/L	0.0030	1.47%
QC value within limits for Co 228.616 Recovery = 101.69%								
Cr 267.716†	58385.6	0.515	mg/L	0.0061	0.515	mg/L	0.0061	1.18%
QC value within limits for Cr 267.716 Recovery = 102.99%								
Cu 327.393†	145432.2	0.519	mg/L	0.0129	0.519	mg/L	0.0129	2.48%
QC value within limits for Cu 327.393 Recovery = 103.84%								
Fe 239.562†	67764.2	4.09	mg/L	0.033	4.09	mg/L	0.033	0.81%
QC value within limits for Fe 239.562 Recovery = 102.17%								
Mg 279.077†	37003.6	10.0	mg/L	0.12	10.0	mg/L	0.12	1.16%
QC value within limits for Mg 279.077 Recovery = 100.48%								
Mn 257.610†	451579.1	0.523	mg/L	0.0024	0.523	mg/L	0.0024	0.46%
QC value within limits for Mn 257.610 Recovery = 104.62%								
Mo 202.031†	37632.8	0.996	mg/L	0.0029	0.996	mg/L	0.0029	0.29%
QC value within limits for Mo 202.031 Recovery = 99.59%								
Ni 231.604†	36146.3	0.520	mg/L	0.0045	0.520	mg/L	0.0045	0.87%
QC value within limits for Ni 231.604 Recovery = 104.03%								
Pb 220.353†	5778.2	0.513	mg/L	0.0055	0.513	mg/L	0.0055	1.08%
QC value within limits for Pb 220.353 Recovery = 102.59%								
Sb 206.836†	5440.8	1.25	mg/L	0.015	1.25	mg/L	0.015	1.23%
QC value within limits for Sb 206.836 Recovery = 103.80%								
Se 196.026†	768.0	0.412	mg/L	0.0058	0.412	mg/L	0.0058	1.41%
QC value within limits for Se 196.026 Recovery = 102.88%								
Si 251.611†	224644.3	5.13	mg/L	0.076	5.13	mg/L	0.076	1.48%
QC value within limits for Si 251.611 Recovery = 102.62%								
Sn 189.927†	11218.3	1.06	mg/L	0.014	1.06	mg/L	0.014	1.30%
QC value greater than the upper limit for Sn 189.927 Recovery = 105.86%								
Ti 334.940†	1043914.5	1.02	mg/L	0.006	1.02	mg/L	0.006	0.63%
QC value within limits for Ti 334.940 Recovery = 102.27%								
Tl 190.801†	2036.5	0.531	mg/L	0.0024	0.531	mg/L	0.0024	0.45%
QC value greater than the upper limit for Tl 190.801 Recovery = 106.17%								
V 290.880†	201304.7	1.02	mg/L	0.004	1.02	mg/L	0.004	0.44%
QC value within limits for V 290.880 Recovery = 101.91%								

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Zn 206.200† 45592.1 1.04 mg/L 0.007 1.04 mg/L 0.007 0.68%
QC value within limits for Zn 206.200 Recovery = 104.24%
K 766.490† 163058.2 50.0 mg/L 0.22 50.0 mg/L 0.22 0.45%
QC value within limits for K 766.490 Recovery = 99.92%
Na 589.592† 995689.8 48.1 mg/L 0.37 48.1 mg/L 0.37 0.76%
QC value within limits for Na 589.592 Recovery = 96.29%
Sr 407.771† 2717751.2 0.996 mg/L 0.0286 0.996 mg/L 0.0286 2.87%
QC value within limits for Sr 407.771 Recovery = 99.61%
Li 670.784† 159085.5 1.02 mg/L 0.017 1.02 mg/L 0.017 1.69%
QC value within limits for Li 670.784 Recovery = 101.96%
QC Failed. Continue with analysis.

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Sequence No.: 7 **Autosampler Location: 1**
Sample ID: ICB **Date Collected: 5/11/2012 11:59:43 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICB

Analyte	Back Pressure	Flow
All	150.0 kPa	0.50 L/min

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2384948.3						29379.53	1.23%
YRADIAL	314985.9						7189.10	2.28%
Ga 417.206	1383279.6						37340.61	2.70%
GaRADIAL	91375.9						1778.41	1.95%
Ag 328.068†	181.3	-0.00041	mg/L	0.000181	-0.00041	mg/L	0.000181	44.61%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	9.0	-0.0248	mg/L	0.00145	-0.0248	mg/L	0.00145	5.84%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	3.3	0.00195	mg/L	0.000907	0.00195	mg/L	0.000907	46.56%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-7.6	-0.00427	mg/L	0.000133	-0.00427	mg/L	0.000133	3.11%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	22.5	0.00007	mg/L	0.000051	0.00007	mg/L	0.000051	75.97%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	385.8	0.00593	mg/L	0.000397	0.00593	mg/L	0.000397	6.69%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	7.3	0.0583	mg/L	0.00686	0.0583	mg/L	0.00686	11.77%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-4.7	0.00002	mg/L	0.000182	0.00002	mg/L	0.000182	830.57%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-2.4	-0.00081	mg/L	0.000202	-0.00081	mg/L	0.000202	24.80%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	5.0	-0.00233	mg/L	0.000066	-0.00233	mg/L	0.000066	2.83%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	16.5	-0.00092	mg/L	0.000408	-0.00092	mg/L	0.000408	44.58%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	-12.3	-0.0107	mg/L	0.00069	-0.0107	mg/L	0.00069	6.45%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	-3.9	-0.0176	mg/L	0.00249	-0.0176	mg/L	0.00249	14.17%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	15.9	-0.00351	mg/L	0.000009	-0.00351	mg/L	0.000009	0.25%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-7.5	-0.00390	mg/L	0.000315	-0.00390	mg/L	0.000315	8.07%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	-8.9	-0.00280	mg/L	0.000180	-0.00280	mg/L	0.000180	6.43%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	5.6	-0.00124	mg/L	0.001039	-0.00124	mg/L	0.001039	83.98%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	2.7	0.00067	mg/L	0.000314	0.00067	mg/L	0.000314	46.58%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-0.3	0.00085	mg/L	0.000163	0.00085	mg/L	0.000163	19.18%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	-2.1	-0.0132	mg/L	0.00004	-0.0132	mg/L	0.00004	0.33%
QC value within limits for Si 251.611 Recovery = Not calculated								

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Sn 189.927† 3.5 -0.00284 mg/L 0.000321 -0.00284 mg/L 0.000321 11.28%
QC value within limits for Sn 189.927 Recovery = Not calculated
Ti 334.940† -182.7 -0.00157 mg/L 0.000119 -0.00157 mg/L 0.000119 7.59%
QC value within limits for Ti 334.940 Recovery = Not calculated
Tl 190.801† -1.6 -0.00303 mg/L 0.000098 -0.00303 mg/L 0.000098 3.25%
QC value within limits for Tl 190.801 Recovery = Not calculated
V 290.880† -227.7 -0.00516 mg/L 0.000141 -0.00516 mg/L 0.000141 2.74%
QC value within limits for V 290.880 Recovery = Not calculated
Zn 206.200† -9.0 -0.00371 mg/L 0.000042 -0.00371 mg/L 0.000042 1.13%
QC value within limits for Zn 206.200 Recovery = Not calculated
K 766.490† -51.6 -0.0561 mg/L 0.02075 -0.0561 mg/L 0.02075 36.99%
QC value within limits for K 766.490 Recovery = Not calculated
Na 589.592† -87.9 0.0238 mg/L 0.00698 0.0238 mg/L 0.00698 29.34%
QC value within limits for Na 589.592 Recovery = Not calculated
Sr 407.771† -340.7 -0.00494 mg/L 0.000024 -0.00494 mg/L 0.000024 0.49%
QC value within limits for Sr 407.771 Recovery = Not calculated
Li 670.784† 10.5 -0.00502 mg/L 0.000550 -0.00502 mg/L 0.000550 10.96%
QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

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Sequence No.: 8 **Autosampler Location: 12**
Sample ID: ICSA **Date Collected: 5/11/2012 12:06:36 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	2159943.1						14309.02	0.66%
YRADIAL	301507.8						1954.81	0.65%
Ga 417.206	1311380.7						25462.16	1.94%
GaRADIAL	90055.3						827.23	0.92%
Ag 328.068†	-13243.1	0.00025	mg/L	0.000727	0.00025	mg/L	0.000727	293.51%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	1840847.9	247	mg/L	4.2	247	mg/L	4.2	1.69%
QC value within limits for Al 396.153 Recovery = 98.92%								
As 188.979†	-0.9	0.00664	mg/L	0.001584	0.00664	mg/L	0.001584	23.86%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	777.5	-0.00166	mg/L	0.000230	-0.00166	mg/L	0.000230	13.85%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	25449.1	-0.00174	mg/L	0.000271	-0.00174	mg/L	0.000271	15.53%
QC value less than the lower limit for Be 234.861 Recovery = Not calculated								
B 249.677†	4189.0	0.00868	mg/L	0.001679	0.00868	mg/L	0.001679	19.36%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	122630.9	252	mg/L	6.5	252	mg/L	6.5	2.58%
QC value within limits for Ca 227.546 Recovery = 100.65%								
Cd 228.802†	-0.5	-0.00007	mg/L	0.000318	-0.00007	mg/L	0.000318	437.10%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	22.3	-0.00253	mg/L	0.000163	-0.00253	mg/L	0.000163	6.46%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	80.2	-0.00308	mg/L	0.000196	-0.00308	mg/L	0.000196	6.37%
QC value less than the lower limit for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-1493.0	0.00147	mg/L	0.000087	0.00147	mg/L	0.000087	5.91%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	1532003.2	92.6	mg/L	0.84	92.6	mg/L	0.84	0.91%
QC value within limits for Fe 239.562 Recovery = 92.62%								
Mg 279.077†	921665.5	250	mg/L	1.8	250	mg/L	1.8	0.73%
QC value within limits for Mg 279.077 Recovery = 100.09%								
Mn 257.610†	-1885.4	-0.00313	mg/L	0.000405	-0.00313	mg/L	0.000405	12.92%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-78.0	-0.00122	mg/L	0.000392	-0.00122	mg/L	0.000392	32.16%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	59.5	-0.00181	mg/L	0.000503	-0.00181	mg/L	0.000503	27.82%
QC value within limits for Ni 231.604 Recovery = Not calculated								

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Pb 220.353† -409.4 -0.00333 mg/L 0.001979 -0.00333 mg/L 0.001979 59.52%
QC value within limits for Pb 220.353 Recovery = Not calculated
Sb 206.836† -25.7 -0.00244 mg/L 0.001019 -0.00244 mg/L 0.001019 41.81%
QC value within limits for Sb 206.836 Recovery = Not calculated
Se 196.026† -65.8 -0.00941 mg/L 0.006281 -0.00941 mg/L 0.006281 66.75%
QC value within limits for Se 196.026 Recovery = Not calculated
Si 251.611† 1755.2 0.0271 mg/L 0.00091 0.0271 mg/L 0.00091 3.34%
QC value within limits for Si 251.611 Recovery = Not calculated
Sn 189.927† -331.6 -0.0346 mg/L 0.00146 -0.0346 mg/L 0.00146 4.22%
QC value within limits for Sn 189.927 Recovery = Not calculated
Ti 334.940† -38743.0 -0.00195 mg/L 0.002954 -0.00195 mg/L 0.002954 151.43%
QC value within limits for Ti 334.940 Recovery = Not calculated
Tl 190.801† -48.4 -0.00868 mg/L 0.003225 -0.00868 mg/L 0.003225 37.17%
QC value within limits for Tl 190.801 Recovery = Not calculated
V 290.880† 3788.4 -0.00587 mg/L 0.001416 -0.00587 mg/L 0.001416 24.14%
QC value within limits for V 290.880 Recovery = Not calculated
Zn 206.200† 235.6 0.00012 mg/L 0.000571 0.00012 mg/L 0.000571 494.87%
QC value within limits for Zn 206.200 Recovery = Not calculated
K 766.490† -91.0 -0.0681 mg/L 0.01002 -0.0681 mg/L 0.01002 14.72%
QC value within limits for K 766.490 Recovery = Not calculated
Na 589.592† 102.7 0.0326 mg/L 0.00534 0.0326 mg/L 0.00534 16.39%
QC value within limits for Na 589.592 Recovery = Not calculated
Sr 407.771† 2517.3 -0.00937 mg/L 0.000136 -0.00937 mg/L 0.000136 1.45%
QC value within limits for Sr 407.771 Recovery = Not calculated
Li 670.784† 220.9 -0.00367 mg/L 0.000095 -0.00367 mg/L 0.000095 2.58%
QC value within limits for Li 670.784 Recovery = Not calculated
QC Failed. Continue with analysis.

Sequence No.: 9 **Autosampler Location: 13**
Sample ID: ICSAB **Date Collected: 5/11/2012 12:12:33 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICSAB

Analyte	Back Pressure	Flow
All	150.0 kPa	0.50 L/min

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Calib. Std.Dev.	Sample Conc.	Units	Sample Std.Dev.	RSD
Y 371.029	2152694.0						19911.52	0.92%
YRADIAL	301193.7						1200.04	0.40%
Ga 417.206	1297939.2						27542.58	2.12%
GaRADIAL	89886.5						877.49	0.98%
Ag 328.068†	152560.6	0.502	mg/L	0.0132	0.502	mg/L	0.0132	2.64%
QC value within limits for Ag 328.068 Recovery = 100.33%								
Al 396.153†	1898800.9	255	mg/L	1.3	255	mg/L	1.3	0.52%
QC value within limits for Al 396.153 Recovery = 102.03%								
As 188.979†	690.6	0.241	mg/L	0.0043	0.241	mg/L	0.0043	1.79%
QC value within limits for As 188.979 Recovery = 96.21%								
Ba 233.527†	40387.2	0.247	mg/L	0.0030	0.247	mg/L	0.0030	1.19%
QC value within limits for Ba 233.527 Recovery = 98.86%								
Be 234.861†	354775.5	0.242	mg/L	0.0066	0.242	mg/L	0.0066	2.72%
QC value within limits for Be 234.861 Recovery = 96.64%								
B 249.677†	4337.9	-0.00282	mg/L	0.002659	-0.00282	mg/L	0.002659	94.41%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	126835.3	261	mg/L	6.9	261	mg/L	6.9	2.65%
QC value within limits for Ca 227.546 Recovery = 104.25%								
Cd 228.802†	24263.6	0.407	mg/L	0.0090	0.407	mg/L	0.0090	2.21%
QC value within limits for Cd 228.802 Recovery = 81.31%								
Co 228.616†	9354.1	0.236	mg/L	0.0031	0.236	mg/L	0.0031	1.33%
QC value within limits for Co 228.616 Recovery = 94.26%								
Cr 267.716†	28608.9	0.250	mg/L	0.0009	0.250	mg/L	0.0009	0.37%
QC value within limits for Cr 267.716 Recovery = 99.85%								
Cu 327.393†	67142.3	0.246	mg/L	0.0045	0.246	mg/L	0.0045	1.83%
QC value within limits for Cu 327.393 Recovery = 98.58%								
Fe 239.562†	1592252.6	96.3	mg/L	0.11	96.3	mg/L	0.11	0.11%
QC value within limits for Fe 239.562 Recovery = 96.26%								

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Mg 279.077†	956174.3	260 mg/L	0.3	260 mg/L	0.3	0.11%
QC value within limits for Mg 279.077 Recovery = 103.84%						
Mn 257.610†	207667.5	0.241 mg/L	0.0017	0.241 mg/L	0.0017	0.69%
QC value within limits for Mn 257.610 Recovery = 96.46%						
Mo 202.031†	-86.4	-0.00109 mg/L	0.000095	-0.00109 mg/L	0.000095	8.68%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	33360.2	0.480 mg/L	0.0049	0.480 mg/L	0.0049	1.02%
QC value within limits for Ni 231.604 Recovery = 95.95%						
Pb 220.353†	5020.5	0.480 mg/L	0.0029	0.480 mg/L	0.0029	0.61%
QC value within limits for Pb 220.353 Recovery = 95.95%						
Sb 206.836†	2115.4	0.487 mg/L	0.0084	0.487 mg/L	0.0084	1.72%
QC value within limits for Sb 206.836 Recovery = 97.36%						
Se 196.026†	402.4	0.241 mg/L	0.0016	0.241 mg/L	0.0016	0.67%
QC value within limits for Se 196.026 Recovery = 96.44%						
Si 251.611†	-315.6	-0.0204 mg/L	0.00049	-0.0204 mg/L	0.00049	2.40%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-345.0	-0.0358 mg/L	0.00115	-0.0358 mg/L	0.00115	3.20%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 334.940†	-39515.7	-0.00150 mg/L	0.003528	-0.00150 mg/L	0.003528	235.12%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	1874.4	0.481 mg/L	0.0014	0.481 mg/L	0.0014	0.30%
QC value within limits for Tl 190.801 Recovery = 96.30%						
V 290.880†	52526.7	0.241 mg/L	0.0031	0.241 mg/L	0.0031	1.27%
QC value within limits for V 290.880 Recovery = 96.50%						
Zn 206.200†	20923.6	0.475 mg/L	0.0024	0.475 mg/L	0.0024	0.51%
QC value within limits for Zn 206.200 Recovery = 94.97%						
K 766.490†	16099.2	4.84 mg/L	0.043	4.84 mg/L	0.043	0.90%
QC value within limits for K 766.490 Recovery = 96.87%						
Na 589.592†	101497.8	4.72 mg/L	0.048	4.72 mg/L	0.048	1.01%
QC value within limits for Na 589.592 Recovery = 94.37%						
Sr 407.771†	2610.0	-0.00953 mg/L	0.000126	-0.00953 mg/L	0.000126	1.33%
QC value within limits for Sr 407.771 Recovery = Not calculated						
Li 670.784†	250.6	-0.00347 mg/L	0.000685	-0.00347 mg/L	0.000685	19.71%
QC value within limits for Li 670.784 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 10 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 5/11/2012 12:18:30 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	150.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2318014.8						28854.82	1.24%
YRADIAL	310811.4						3367.42	1.08%
Ga 417.206	1333957.6						32079.00	2.40%
GaRADIAL	90241.8						793.12	0.88%
Ag 328.068†	132867.8	0.403	mg/L	0.0133	0.403	mg/L	0.0133	3.29%
QC value within limits for Ag 328.068 Recovery = 100.69%								
Al 396.153†	75719.1	10.1	mg/L	0.05	10.1	mg/L	0.05	0.52%
QC value within limits for Al 396.153 Recovery = 100.77%								
As 188.979†	1180.5	0.394	mg/L	0.0104	0.394	mg/L	0.0104	2.65%
QC value within limits for As 188.979 Recovery = 98.62%								
Ba 233.527†	162620.7	1.02	mg/L	0.006	1.02	mg/L	0.006	0.57%
QC value within limits for Ba 233.527 Recovery = 101.82%								
Be 234.861†	67908.6	0.0499	mg/L	0.00150	0.0499	mg/L	0.00150	3.00%
QC value within limits for Be 234.861 Recovery = 99.86%								
B 249.677†	44577.4	0.497	mg/L	0.0169	0.497	mg/L	0.0169	3.40%
QC value within limits for B 249.677 Recovery = 99.37%								
Ca 227.546†	4824.6	10.3	mg/L	0.36	10.3	mg/L	0.36	3.45%
QC value within limits for Ca 227.546 Recovery = 103.36%								
Cd 228.802†	2955.4	0.0483	mg/L	0.00172	0.0483	mg/L	0.00172	3.57%
QC value within limits for Cd 228.802 Recovery = 96.61%								

Approved: May 14, 2012

Co 228.616†	7923.3	0.201 mg/L	0.0038	0.201 mg/L	0.0038	1.91%
QC value within limits for Co 228.616 Recovery = 100.41%						
Cr 267.716†	57550.3	0.508 mg/L	0.0006	0.508 mg/L	0.0006	0.12%
QC value within limits for Cr 267.716 Recovery = 101.51%						
Cu 327.393†	141012.5	0.503 mg/L	0.0173	0.503 mg/L	0.0173	3.44%
QC value within limits for Cu 327.393 Recovery = 100.68%						
Fe 239.562†	67421.6	4.07 mg/L	0.025	4.07 mg/L	0.025	0.60%
QC value within limits for Fe 239.562 Recovery = 101.65%						
Mg 279.077†	37357.3	10.1 mg/L	0.07	10.1 mg/L	0.07	0.71%
QC value within limits for Mg 279.077 Recovery = 101.45%						
Mn 257.610†	436444.9	0.505 mg/L	0.0043	0.505 mg/L	0.0043	0.85%
QC value within limits for Mn 257.610 Recovery = 101.09%						
Mo 202.031†	38385.4	1.02 mg/L	0.004	1.02 mg/L	0.004	0.35%
QC value within limits for Mo 202.031 Recovery = 101.59%						
Ni 231.604†	36441.3	0.524 mg/L	0.0073	0.524 mg/L	0.0073	1.39%
QC value within limits for Ni 231.604 Recovery = 104.88%						
Pb 220.353†	5743.4	0.510 mg/L	0.0063	0.510 mg/L	0.0063	1.24%
QC value within limits for Pb 220.353 Recovery = 101.97%						
Sb 206.836†	5251.0	1.20 mg/L	0.032	1.20 mg/L	0.032	2.67%
QC value within limits for Sb 206.836 Recovery = 100.18%						
Se 196.026†	749.1	0.401 mg/L	0.0105	0.401 mg/L	0.0105	2.60%
QC value within limits for Se 196.026 Recovery = 100.37%						
Si 251.611†	219728.2	5.02 mg/L	0.128	5.02 mg/L	0.128	2.55%
QC value within limits for Si 251.611 Recovery = 100.35%						
Sn 189.927†	10591.0	0.999 mg/L	0.0161	0.999 mg/L	0.0161	1.61%
QC value within limits for Sn 189.927 Recovery = 99.93%						
Ti 334.940†	1031774.2	1.01 mg/L	0.001	1.01 mg/L	0.001	0.11%
QC value within limits for Ti 334.940 Recovery = 101.08%						
Tl 190.801†	2011.9	0.524 mg/L	0.0034	0.524 mg/L	0.0034	0.65%
QC value within limits for Tl 190.801 Recovery = 104.89%						
V 290.880†	198964.1	1.01 mg/L	0.003	1.01 mg/L	0.003	0.30%
QC value within limits for V 290.880 Recovery = 100.72%						
Zn 206.200†	44777.0	1.02 mg/L	0.003	1.02 mg/L	0.003	0.25%
QC value within limits for Zn 206.200 Recovery = 102.37%						
K 766.490†	163382.2	50.1 mg/L	0.19	50.1 mg/L	0.19	0.38%
QC value within limits for K 766.490 Recovery = 100.12%						
Na 589.592†	996024.1	48.2 mg/L	0.51	48.2 mg/L	0.51	1.06%
QC value within limits for Na 589.592 Recovery = 96.33%						
Sr 407.771†	2720134.2	0.997 mg/L	0.0140	0.997 mg/L	0.0140	1.41%
QC value within limits for Sr 407.771 Recovery = 99.70%						
Li 670.784†	159918.6	1.03 mg/L	0.002	1.03 mg/L	0.002	0.17%
QC value within limits for Li 670.784 Recovery = 102.50%						

All analyte(s) passed QC.

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Sequence No.: 11 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 5/11/2012 12:24:29 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	150.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2380011.6						8474.30	0.36%
YRADIAL	309809.9						3163.44	1.02%
Ga 417.206	1380729.4						27622.25	2.00%
GaRADIAL	90362.5						1652.54	1.83%
Ag 328.068†	89.9	-0.00068	mg/L	0.000084	-0.00068	mg/L	0.000084	12.33%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	20.9	-0.0232	mg/L	0.00111	-0.0232	mg/L	0.00111	4.79%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-0.2	0.00077	mg/L	0.001148	0.00077	mg/L	0.001148	149.25%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-3.5	-0.00425	mg/L	0.000059	-0.00425	mg/L	0.000059	1.39%
QC value within limits for Ba 233.527 Recovery = Not calculated								

Approved: May 14, 2012

Be 234.861†	2.8	0.00005 mg/L	0.000020	0.00005 mg/L	0.000020	38.75%
QC value within limits for Be 234.861 Recovery = Not calculated						
B 249.677†	186.4	0.00370 mg/L	0.000469	0.00370 mg/L	0.000469	12.67%
QC value within limits for B 249.677 Recovery = Not calculated						
Ca 227.546†	6.3	0.0564 mg/L	0.02106	0.0564 mg/L	0.02106	37.33%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Cd 228.802†	-12.2	-0.00010 mg/L	0.000088	-0.00010 mg/L	0.000088	90.49%
QC value within limits for Cd 228.802 Recovery = Not calculated						
Co 228.616†	-3.7	-0.00085 mg/L	0.000089	-0.00085 mg/L	0.000089	10.45%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	12.5	-0.00227 mg/L	0.000140	-0.00227 mg/L	0.000140	6.16%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 327.393†	18.7	-0.00091 mg/L	0.000602	-0.00091 mg/L	0.000602	66.31%
QC value within limits for Cu 327.393 Recovery = Not calculated						
Fe 239.562†	29.6	-0.00817 mg/L	0.000315	-0.00817 mg/L	0.000315	3.85%
QC value within limits for Fe 239.562 Recovery = Not calculated						
Mg 279.077†	14.8	-0.0125 mg/L	0.00325	-0.0125 mg/L	0.00325	26.06%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	31.3	-0.00350 mg/L	0.000010	-0.00350 mg/L	0.000010	0.29%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	0.2	-0.00369 mg/L	0.000348	-0.00369 mg/L	0.000348	9.45%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	-2.8	-0.00271 mg/L	0.000294	-0.00271 mg/L	0.000294	10.84%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Pb 220.353†	-0.6	-0.00178 mg/L	0.001167	-0.00178 mg/L	0.001167	65.53%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	-0.2	0.00002 mg/L	0.001606	0.00002 mg/L	0.001606	>999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	0.1	0.00106 mg/L	0.001984	0.00106 mg/L	0.001984	187.05%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	-17.4	-0.0136 mg/L	0.00024	-0.0136 mg/L	0.00024	1.78%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	2.6	-0.00294 mg/L	0.000502	-0.00294 mg/L	0.000502	17.08%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 334.940†	-199.4	-0.00159 mg/L	0.000061	-0.00159 mg/L	0.000061	3.84%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-1.3	-0.00296 mg/L	0.002316	-0.00296 mg/L	0.002316	78.25%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 290.880†	-350.1	-0.00578 mg/L	0.001878	-0.00578 mg/L	0.001878	32.49%
QC value within limits for V 290.880 Recovery = Not calculated						
Zn 206.200†	2.6	-0.00345 mg/L	0.000118	-0.00345 mg/L	0.000118	3.42%
QC value within limits for Zn 206.200 Recovery = Not calculated						
K 766.490†	-11.8	-0.0440 mg/L	0.00696	-0.0440 mg/L	0.00696	15.80%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592†	70.4	0.0311 mg/L	0.00461	0.0311 mg/L	0.00461	14.85%
QC value within limits for Na 589.592 Recovery = Not calculated						
Sr 407.771†	-100.3	-0.00485 mg/L	0.000093	-0.00485 mg/L	0.000093	1.91%
QC value within limits for Sr 407.771 Recovery = Not calculated						
Li 670.784†	-73.9	-0.00556 mg/L	0.000462	-0.00556 mg/L	0.000462	8.30%
QC value within limits for Li 670.784 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 12 **Autosampler Location: 14**
Sample ID: PBW 4P WG397584-03 **Date Collected: 5/11/2012 12:31:22 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW 4P WG397584-03

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: PBW 4P WG397584-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	2413902.5						15648.56	0.65%
YRADIAL	316990.0						5312.87	1.68%
Ga 417.206	1462102.6						10079.47	0.69%
GaRADIAL	94176.5						1606.52	1.71%

Approved: May 14, 2012

Ag 328.068†	70.9	-0.00074	mg/L	0.000068	-0.00074	mg/L	0.000068 9.25%
Al 396.153†	-4.7	-0.0266	mg/L	0.00198	-0.0266	mg/L	0.00198 7.42%
As 188.979†	5.4	0.00267	mg/L	0.001336	0.00267	mg/L	0.001336 50.12%
Ba 233.527†	16.5	-0.00412	mg/L	0.000097	-0.00412	mg/L	0.000097 2.35%
Be 234.861†	152.2	0.00016	mg/L	0.000017	0.00016	mg/L	0.000017 10.59%
B 249.677†	37.1	0.00203	mg/L	0.000046	0.00203	mg/L	0.000046 2.29%
Ca 227.546†	22.4	0.0889	mg/L	0.00531	0.0889	mg/L	0.00531 5.98%
Cd 228.802†	-8.0	-0.00004	mg/L	0.000113	-0.00004	mg/L	0.000113 303.53%
Co 228.616†	-1.3	-0.00079	mg/L	0.000068	-0.00079	mg/L	0.000068 8.63%
Cr 267.716†	-5.6	-0.00243	mg/L	0.000028	-0.00243	mg/L	0.000028 1.14%
Cu 327.393†	-13.6	-0.00102	mg/L	0.000149	-0.00102	mg/L	0.000149 14.58%
Fe 239.562†	-5.2	-0.0103	mg/L	0.00013	-0.0103	mg/L	0.00013 1.31%
Mg 279.077†	4.0	-0.0154	mg/L	0.00083	-0.0154	mg/L	0.00083 5.37%
Mn 257.610†	36.5	-0.00349	mg/L	0.000028	-0.00349	mg/L	0.000028 0.79%
Mo 202.031†	-4.7	-0.00382	mg/L	0.000024	-0.00382	mg/L	0.000024 0.62%
Ni 231.604†	-18.1	-0.00293	mg/L	0.000163	-0.00293	mg/L	0.000163 5.56%
Pb 220.353†	7.2	-0.00109	mg/L	0.000834	-0.00109	mg/L	0.000834 76.13%
Sb 206.836†	-0.1	0.00005	mg/L	0.001517	0.00005	mg/L	0.001517 >999.9%
Se 196.026†	-4.2	-0.00122	mg/L	0.001816	-0.00122	mg/L	0.001816 148.61%
Si 251.611†	-58.5	-0.0145	mg/L	0.00008	-0.0145	mg/L	0.00008 0.58%
Sn 189.927†	-20.8	-0.00515	mg/L	0.000435	-0.00515	mg/L	0.000435 8.46%
Ti 334.940†	-154.5	-0.00154	mg/L	0.000054	-0.00154	mg/L	0.000054 3.49%
Tl 190.801†	8.4	-0.00050	mg/L	0.000115	-0.00050	mg/L	0.000115 23.05%
V 290.880†	-314.5	-0.00560	mg/L	0.001753	-0.00560	mg/L	0.001753 31.31%
Zn 206.200†	39.9	-0.00259	mg/L	0.000162	-0.00259	mg/L	0.000162 6.23%
K 766.490†	-12.8	-0.0443	mg/L	0.02262	-0.0443	mg/L	0.02262 51.04%
Na 589.592†	62.4	0.0307	mg/L	0.00591	0.0307	mg/L	0.00591 19.26%
Sr 407.771†	-246.7	-0.00491	mg/L	0.000016	-0.00491	mg/L	0.000016 0.33%
Li 670.784†	-3.0	-0.00511	mg/L	0.000301	-0.00511	mg/L	0.000301 5.89%

Sequence No.: 13 **Autosampler Location: 15**
Sample ID: LCSW 4P WG397584-04 **Date Collected: 5/11/2012 12:38:17 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW 4P WG397584-04

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: LCSW 4P WG397584-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	2283011.3						23025.95	1.01%
YRADIAL	308330.8						7575.82	2.46%
Ga 417.206	1359553.6						33531.63	2.47%
GaRADIAL	89846.6						2261.28	2.52%
Ag 328.068†	65769.3	0.199	mg/L	0.0094	0.199	mg/L	0.0094	4.73%
Al 396.153†	38411.6	5.10	mg/L	0.016	5.10	mg/L	0.016	0.31%
As 188.979†	576.5	0.193	mg/L	0.0058	0.193	mg/L	0.0058	3.01%
Ba 233.527†	82001.6	0.511	mg/L	0.0027	0.511	mg/L	0.0027	0.53%
Be 234.861†	32653.1	0.0240	mg/L	0.00084	0.0240	mg/L	0.00084	3.49%
B 249.677†	86712.9	0.971	mg/L	0.0472	0.971	mg/L	0.0472	4.86%
Ca 227.546†	2336.0	5.03	mg/L	0.118	5.03	mg/L	0.118	2.34%
Cd 228.802†	1425.4	0.0234	mg/L	0.00112	0.0234	mg/L	0.00112	4.80%
Co 228.616†	4034.9	0.102	mg/L	0.0016	0.102	mg/L	0.0016	1.59%
Cr 267.716†	28903.0	0.254	mg/L	0.0047	0.254	mg/L	0.0047	1.86%
Cu 327.393†	70347.1	0.251	mg/L	0.0111	0.251	mg/L	0.0111	4.42%
Fe 239.562†	33192.6	2.00	mg/L	0.015	2.00	mg/L	0.015	0.75%
Mg 279.077†	18859.1	5.11	mg/L	0.065	5.11	mg/L	0.065	1.27%
Mn 257.610†	222448.0	0.256	mg/L	0.0020	0.256	mg/L	0.0020	0.77%
Mo 202.031†	19200.8	0.506	mg/L	0.0071	0.506	mg/L	0.0071	1.41%
Ni 231.604†	18063.9	0.259	mg/L	0.0027	0.259	mg/L	0.0027	1.04%
Pb 220.353†	2893.5	0.256	mg/L	0.0039	0.256	mg/L	0.0039	1.54%
Sb 206.836†	2579.0	0.590	mg/L	0.0134	0.590	mg/L	0.0134	2.27%
Se 196.026†	368.0	0.198	mg/L	0.0063	0.198	mg/L	0.0063	3.18%
Si 251.611†	110938.4	2.53	mg/L	0.089	2.53	mg/L	0.089	3.52%
Sn 189.927†	6000.7	0.565	mg/L	0.0067	0.565	mg/L	0.0067	1.20%
Ti 334.940†	520553.9	0.509	mg/L	0.0014	0.509	mg/L	0.0014	0.28%

Approved: May 14, 2012

Tl 190.801†	1032.9	0.268	mg/L	0.0012	0.268	mg/L	0.0012	0.44%
V 290.880†	101641.8	0.513	mg/L	0.0071	0.513	mg/L	0.0071	1.38%
Zn 206.200†	22564.0	0.514	mg/L	0.0058	0.514	mg/L	0.0058	1.14%
K 766.490†	83065.7	25.3	mg/L	0.26	25.3	mg/L	0.26	1.04%
Na 589.592†	523380.0	24.7	mg/L	0.71	24.7	mg/L	0.71	2.88%
Sr 407.771†	1409358.9	0.514	mg/L	0.0121	0.514	mg/L	0.0121	2.36%
Li 670.784†	83468.5	0.533	mg/L	0.0013	0.533	mg/L	0.0013	0.25%

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Sequence No.: 14 **Autosampler Location: 16**
Sample ID: L1205017101 WG397584-01 **Date Collected: 5/11/2012 12:44:16 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205017101 WG397584-01

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205017101 WG397584-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2126494.6						25855.56	1.22%
YRADIAL	288440.3						2003.12	0.69%
Ga 417.206	1321460.3						5437.73	0.41%
GaRADIAL	87947.8						451.26	0.51%
Ag 328.068†	782.7	0.00133	mg/L	0.000127	0.00133	mg/L	0.000127	9.57%
Al 396.153†	195.1	0.00012	mg/L	0.005101	0.00012	mg/L	0.005101	>999.9%
As 188.979†	-9.1	-0.00221	mg/L	0.000572	-0.00221	mg/L	0.000572	25.88%
Ba 233.527†	20105.2	0.122	mg/L	0.0017	0.122	mg/L	0.0017	1.40%
Be 234.861†	278.0	0.00020	mg/L	0.000054	0.00020	mg/L	0.000054	26.90%
B 249.677†	5674.2	0.0650	mg/L	0.00132	0.0650	mg/L	0.00132	2.04%
Ca 227.546†	64530.7	131	mg/L	2.0	131	mg/L	2.0	1.54%
Cd 228.802†	15.6	0.00038	mg/L	0.000173	0.00038	mg/L	0.000173	45.12%
Co 228.616†	12.5	-0.00044	mg/L	0.000224	-0.00044	mg/L	0.000224	51.19%
Cr 267.716†	182.4	-0.00074	mg/L	0.000155	-0.00074	mg/L	0.000155	20.90%
Cu 327.393†	131.1	-0.00049	mg/L	0.000737	-0.00049	mg/L	0.000737	149.99%
Fe 239.562†	6382.8	0.376	mg/L	0.0004	0.376	mg/L	0.0004	0.10%
Mg 279.077†	77518.8	21.0	mg/L	0.07	21.0	mg/L	0.07	0.33%
Mn 257.610†	243014.1	0.280	mg/L	0.0046	0.280	mg/L	0.0046	1.65%
Mo 202.031†	64.6	-0.00190	mg/L	0.000013	-0.00190	mg/L	0.000013	0.67%
Ni 231.604†	106.4	-0.00113	mg/L	0.000306	-0.00113	mg/L	0.000306	27.14%
Pb 220.353†	9.4	-0.00004	mg/L	0.001010	-0.00004	mg/L	0.001010	>999.9%
Sb 206.836†	-5.4	-0.00117	mg/L	0.002152	-0.00117	mg/L	0.002152	183.57%
Se 196.026†	-5.7	-0.00201	mg/L	0.002937	-0.00201	mg/L	0.002937	146.46%
Si 251.611†	243246.3	5.57	mg/L	0.004	5.57	mg/L	0.004	0.07%
Sn 189.927†	-307.3	-0.0323	mg/L	0.00037	-0.0323	mg/L	0.00037	1.16%
Ti 334.940†	-20400.6	-0.00170	mg/L	0.001372	-0.00170	mg/L	0.001372	80.60%
Tl 190.801†	-29.5	-0.0106	mg/L	0.00283	-0.0106	mg/L	0.00283	26.62%
V 290.880†	2081.0	0.00598	mg/L	0.000992	0.00598	mg/L	0.000992	16.60%
Zn 206.200†	2278.3	0.0485	mg/L	0.00048	0.0485	mg/L	0.00048	0.99%
K 766.490†	17776.7	5.24	mg/L	0.073	5.24	mg/L	0.073	1.40%
Na 589.592†	2263696.3	118	mg/L	0.4	118	mg/L	0.4	0.35%
Sr 407.771†	3180502.7	1.16	mg/L	0.001	1.16	mg/L	0.001	0.07%
Li 670.784†	4003.8	0.0207	mg/L	0.00024	0.0207	mg/L	0.00024	1.14%

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Sequence No.: 15 **Autosampler Location: 17**
Sample ID: L1205017102 WG397584-02 **Date Collected: 5/11/2012 12:50:16 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205017102 WG397584-02

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205017102 WG397584-02

Approved: May 14, 2012

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2212569.4						19572.51	0.88%
YRADIAL	302160.6						6033.56	2.00%
Ga 417.206	1352023.9						41474.65	3.07%
GaRADIAL	91681.2						1724.73	1.88%
Ag 328.068†	928.4	0.00172	mg/L	0.000138	0.00172	mg/L	0.000138	8.03%
Al 396.153†	-5.4	-0.0268	mg/L	0.00289	-0.0268	mg/L	0.00289	10.79%
As 188.979†	-10.4	-0.00266	mg/L	0.003378	-0.00266	mg/L	0.003378	126.87%
Ba 233.527†	19093.3	0.116	mg/L	0.0019	0.116	mg/L	0.0019	1.63%
Be 234.861†	298.3	0.00024	mg/L	0.000019	0.00024	mg/L	0.000019	7.64%
B 249.677†	5334.7	0.0612	mg/L	0.00249	0.0612	mg/L	0.00249	4.06%
Ca 227.546†	61322.5	125	mg/L	6.3	125	mg/L	6.3	5.08%
Cd 228.802†	2.0	0.00016	mg/L	0.000283	0.00016	mg/L	0.000283	179.16%
Co 228.616†	7.3	-0.00057	mg/L	0.000413	-0.00057	mg/L	0.000413	72.83%
Cr 267.716†	131.0	-0.00121	mg/L	0.000071	-0.00121	mg/L	0.000071	5.89%
Cu 327.393†	-55.9	-0.00117	mg/L	0.000091	-0.00117	mg/L	0.000091	7.78%
Fe 239.562†	4225.6	0.245	mg/L	0.0001	0.245	mg/L	0.0001	0.03%
Mg 279.077†	71289.1	19.3	mg/L	0.27	19.3	mg/L	0.27	1.40%
Mn 257.610†	229289.7	0.264	mg/L	0.0004	0.264	mg/L	0.0004	0.14%
Mo 202.031†	50.7	-0.00228	mg/L	0.000212	-0.00228	mg/L	0.000212	9.29%
Ni 231.604†	95.3	-0.00129	mg/L	0.000389	-0.00129	mg/L	0.000389	30.21%
Pb 220.353†	2.0	-0.00074	mg/L	0.001468	-0.00074	mg/L	0.001468	199.68%
Sb 206.836†	-7.2	-0.00158	mg/L	0.001199	-0.00158	mg/L	0.001199	75.86%
Se 196.026†	-4.1	-0.00119	mg/L	0.001513	-0.00119	mg/L	0.001513	127.42%
Si 251.611†	234229.9	5.36	mg/L	0.196	5.36	mg/L	0.196	3.65%
Sn 189.927†	-304.7	-0.0320	mg/L	0.00057	-0.0320	mg/L	0.00057	1.79%
Ti 334.940†	-19873.9	-0.00216	mg/L	0.001712	-0.00216	mg/L	0.001712	79.11%
Tl 190.801†	-30.6	-0.0109	mg/L	0.00039	-0.0109	mg/L	0.00039	3.57%
V 290.880†	1501.6	0.00309	mg/L	0.001526	0.00309	mg/L	0.001526	49.33%
Zn 206.200†	70.7	-0.00189	mg/L	0.000060	-0.00189	mg/L	0.000060	3.20%
K 766.490†	16846.3	4.97	mg/L	0.111	4.97	mg/L	0.111	2.24%
Na 589.592†	2098780.1	108	mg/L	0.5	108	mg/L	0.5	0.42%
Sr 407.771†	2974080.3	1.09	mg/L	0.010	1.09	mg/L	0.010	0.89%
Li 670.784†	3792.7	0.0193	mg/L	0.00083	0.0193	mg/L	0.00083	4.31%

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Sequence No.: 16 **Autosampler Location: 18**
Sample ID: L1205017103S WG397584-05 **Date Collected: 5/11/2012 12:56:16 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205017103S WG397584-05

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205017103S WG397584-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2168697.5						26521.46	1.22%
YRADIAL	296233.0						735.37	0.25%
Ga 417.206	1333460.2						46959.36	3.52%
GaRADIAL	88405.0						624.08	0.71%
Ag 328.068†	65321.6	0.197	mg/L	0.0073	0.197	mg/L	0.0073	3.69%
Al 396.153†	38605.8	5.13	mg/L	0.019	5.13	mg/L	0.019	0.37%
As 188.979†	575.8	0.193	mg/L	0.0043	0.193	mg/L	0.0043	2.23%
Ba 233.527†	99713.9	0.623	mg/L	0.0067	0.623	mg/L	0.0067	1.08%
Be 234.861†	32555.8	0.0239	mg/L	0.00098	0.0239	mg/L	0.00098	4.08%
B 249.677†	92621.1	1.04	mg/L	0.041	1.04	mg/L	0.041	3.96%
Ca 227.546†	67662.9	138	mg/L	4.9	138	mg/L	4.9	3.56%
Cd 228.802†	1403.5	0.0230	mg/L	0.00100	0.0230	mg/L	0.00100	4.35%
Co 228.616†	3921.9	0.0990	mg/L	0.00128	0.0990	mg/L	0.00128	1.29%
Cr 267.716†	28440.1	0.250	mg/L	0.0037	0.250	mg/L	0.0037	1.47%
Cu 327.393†	68690.2	0.245	mg/L	0.0081	0.245	mg/L	0.0081	3.32%
Fe 239.562†	38580.7	2.32	mg/L	0.008	2.32	mg/L	0.008	0.36%
Mg 279.077†	90294.3	24.5	mg/L	0.08	24.5	mg/L	0.08	0.32%
Mn 257.610†	459129.3	0.532	mg/L	0.0082	0.532	mg/L	0.0082	1.55%
Mo 202.031†	19254.2	0.508	mg/L	0.0084	0.508	mg/L	0.0084	1.66%
Ni 231.604†	17252.5	0.247	mg/L	0.0017	0.247	mg/L	0.0017	0.67%

Approved: May 14, 2012

Kym H. Rhoden

Pb 220.353†	2837.4	0.252 mg/L	0.0048	0.252 mg/L	0.0048	1.91%
Sb 206.836†	2555.5	0.585 mg/L	0.0192	0.585 mg/L	0.0192	3.29%
Se 196.026†	345.0	0.185 mg/L	0.0018	0.185 mg/L	0.0018	0.95%
Si 251.611†	356955.7	8.17 mg/L	0.231	8.17 mg/L	0.231	2.83%
Sn 189.927†	5548.6	0.522 mg/L	0.0073	0.522 mg/L	0.0073	1.40%
Ti 334.940†	500783.0	0.510 mg/L	0.0060	0.510 mg/L	0.0060	1.17%
Tl 190.801†	959.3	0.249 mg/L	0.0046	0.249 mg/L	0.0046	1.84%
V 290.880†	103069.8	0.519 mg/L	0.0083	0.519 mg/L	0.0083	1.59%
Zn 206.200†	23519.3	0.536 mg/L	0.0103	0.536 mg/L	0.0103	1.93%
K 766.490†	101001.4	30.7 mg/L	0.17	30.7 mg/L	0.17	0.56%
Na 589.592†	2773405.3	150 mg/L	0.6	150 mg/L	0.6	0.40%
Sr 407.771†	4477592.3	1.64 mg/L	0.006	1.64 mg/L	0.006	0.34%
Li 670.784†	86697.9	0.553 mg/L	0.0019	0.553 mg/L	0.0019	0.34%

Sequence No.: 17 **Autosampler Location: 19**
Sample ID: L1205017104S WG397584-07 **Date Collected: 5/11/2012 1:02:18 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205017104S WG397584-07

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205017104S WG397584-07

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2204167.5						27387.32	1.24%
YRADIAL	306085.7						3671.85	1.20%
Ga 417.206	1362159.7						47023.19	3.45%
GaRADIAL	90183.5						1020.86	1.13%
Ag 328.068†	63056.2	0.191	mg/L	0.0074	0.191	mg/L	0.0074	3.88%
Al 396.153†	37405.0	4.97	mg/L	0.014	4.97	mg/L	0.014	0.27%
As 188.979†	546.3	0.183	mg/L	0.0042	0.183	mg/L	0.0042	2.29%
Ba 233.527†	96010.8	0.599	mg/L	0.0117	0.599	mg/L	0.0117	1.95%
Be 234.861†	31223.3	0.0230	mg/L	0.00086	0.0230	mg/L	0.00086	3.72%
B 249.677†	89290.6	0.999	mg/L	0.0395	0.999	mg/L	0.0395	3.96%
Ca 227.546†	62719.1	128	mg/L	6.1	128	mg/L	6.1	4.76%
Cd 228.802†	1352.8	0.0222	mg/L	0.00113	0.0222	mg/L	0.00113	5.09%
Co 228.616†	3787.7	0.0956	mg/L	0.00171	0.0956	mg/L	0.00171	1.78%
Cr 267.716†	27366.2	0.240	mg/L	0.0028	0.240	mg/L	0.0028	1.16%
Cu 327.393†	66152.6	0.236	mg/L	0.0096	0.236	mg/L	0.0096	4.06%
Fe 239.562†	35655.4	2.15	mg/L	0.018	2.15	mg/L	0.018	0.83%
Mg 279.077†	86183.7	23.4	mg/L	0.11	23.4	mg/L	0.11	0.48%
Mn 257.610†	438265.1	0.507	mg/L	0.0118	0.507	mg/L	0.0118	2.32%
Mo 202.031†	18677.6	0.492	mg/L	0.0075	0.492	mg/L	0.0075	1.52%
Ni 231.604†	16701.0	0.239	mg/L	0.0052	0.239	mg/L	0.0052	2.18%
Pb 220.353†	2740.2	0.243	mg/L	0.0023	0.243	mg/L	0.0023	0.94%
Sb 206.836†	2459.8	0.563	mg/L	0.0181	0.563	mg/L	0.0181	3.22%
Se 196.026†	328.4	0.177	mg/L	0.0082	0.177	mg/L	0.0082	4.65%
Si 251.611†	335741.4	7.69	mg/L	0.247	7.69	mg/L	0.247	3.21%
Sn 189.927†	5385.9	0.507	mg/L	0.0087	0.507	mg/L	0.0087	1.72%
Ti 334.940†	487097.5	0.495	mg/L	0.0015	0.495	mg/L	0.0015	0.31%
Tl 190.801†	932.2	0.242	mg/L	0.0018	0.242	mg/L	0.0018	0.74%
V 290.880†	98811.0	0.498	mg/L	0.0076	0.498	mg/L	0.0076	1.52%
Zn 206.200†	20368.2	0.464	mg/L	0.0108	0.464	mg/L	0.0108	2.34%
K 766.490†	98733.1	30.0	mg/L	0.28	30.0	mg/L	0.28	0.92%
Na 589.592†	2657817.3	143	mg/L	2.4	143	mg/L	2.4	1.65%
Sr 407.771†	4291711.2	1.57	mg/L	0.028	1.57	mg/L	0.028	1.75%
Li 670.784†	84669.7	0.540	mg/L	0.0022	0.540	mg/L	0.0022	0.40%

Sequence No.: 18 **Autosampler Location: 20**
Sample ID: L1205017105SD WG397584-06 **Date Collected: 5/11/2012 1:08:19 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: May 14, 2012

Nebulizer Parameters: L1205017105SD WG397584-06

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205017105SD WG397584-06

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	2168733.2						15437.29	0.71%
YRADIAL	300817.2						1358.81	0.45%
Ga 417.206	1313236.6						29186.53	2.22%
GaRADIAL	89464.9						368.81	0.41%
Ag 328.068†	66082.4	0.200	mg/L	0.0058	0.200	mg/L	0.0058	2.90%
Al 396.153†	38559.2	5.12	mg/L	0.018	5.12	mg/L	0.018	0.35%
As 188.979†	578.0	0.194	mg/L	0.0038	0.194	mg/L	0.0038	1.96%
Ba 233.527†	99086.3	0.619	mg/L	0.0070	0.619	mg/L	0.0070	1.13%
Be 234.861†	33017.1	0.0243	mg/L	0.00060	0.0243	mg/L	0.00060	2.48%
B 249.677†	94256.1	1.05	mg/L	0.036	1.05	mg/L	0.036	3.37%
Ca 227.546†	65492.0	133	mg/L	4.6	133	mg/L	4.6	3.46%
Cd 228.802†	1418.3	0.0232	mg/L	0.00097	0.0232	mg/L	0.00097	4.17%
Co 228.616†	3911.3	0.0987	mg/L	0.00105	0.0987	mg/L	0.00105	1.06%
Cr 267.716†	28541.3	0.251	mg/L	0.0018	0.251	mg/L	0.0018	0.73%
Cu 327.393†	69644.6	0.248	mg/L	0.0083	0.248	mg/L	0.0083	3.34%
Fe 239.562†	38455.5	2.31	mg/L	0.009	2.31	mg/L	0.009	0.39%
Mg 279.077†	87511.8	23.8	mg/L	0.09	23.8	mg/L	0.09	0.37%
Mn 257.610†	451761.4	0.523	mg/L	0.0080	0.523	mg/L	0.0080	1.53%
Mo 202.031†	19216.0	0.507	mg/L	0.0101	0.507	mg/L	0.0101	2.00%
Ni 231.604†	17376.7	0.249	mg/L	0.0045	0.249	mg/L	0.0045	1.81%
Pb 220.353†	2834.5	0.252	mg/L	0.0024	0.252	mg/L	0.0024	0.96%
Sb 206.836†	2581.3	0.591	mg/L	0.0138	0.591	mg/L	0.0138	2.33%
Se 196.026†	363.1	0.195	mg/L	0.0052	0.195	mg/L	0.0052	2.68%
Si 251.611†	351648.8	8.05	mg/L	0.139	8.05	mg/L	0.139	1.72%
Sn 189.927†	5521.1	0.519	mg/L	0.0047	0.519	mg/L	0.0047	0.90%
Ti 334.940†	500288.5	0.509	mg/L	0.0022	0.509	mg/L	0.0022	0.44%
Tl 190.801†	950.1	0.246	mg/L	0.0023	0.246	mg/L	0.0023	0.94%
V 290.880†	102914.6	0.519	mg/L	0.0039	0.519	mg/L	0.0039	0.75%
Zn 206.200†	23157.9	0.528	mg/L	0.0061	0.528	mg/L	0.0061	1.16%
K 766.490†	99921.9	30.3	mg/L	0.13	30.3	mg/L	0.13	0.43%
Na 589.592†	2643482.7	142	mg/L	1.7	142	mg/L	1.7	1.18%
Sr 407.771†	4284768.6	1.57	mg/L	0.021	1.57	mg/L	0.021	1.33%
Li 670.784†	85574.4	0.546	mg/L	0.0039	0.546	mg/L	0.0039	0.71%

Sequence No.: 19 **Autosampler Location: 21**
Sample ID: L1205017106SD WG397584-08 **Date Collected: 5/11/2012 1:14:20 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205017106SD WG397584-08

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205017106SD WG397584-08

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	2173648.0						15638.42	0.72%
YRADIAL	299632.6						2009.60	0.67%
Ga 417.206	1331138.0						27463.16	2.06%
GaRADIAL	89258.5						552.72	0.62%
Ag 328.068†	64798.9	0.196	mg/L	0.0045	0.196	mg/L	0.0045	2.28%
Al 396.153†	37967.5	5.04	mg/L	0.020	5.04	mg/L	0.020	0.40%
As 188.979†	574.1	0.192	mg/L	0.0008	0.192	mg/L	0.0008	0.44%
Ba 233.527†	98660.3	0.616	mg/L	0.0093	0.616	mg/L	0.0093	1.50%
Be 234.861†	32484.1	0.0239	mg/L	0.00060	0.0239	mg/L	0.00060	2.51%
B 249.677†	91938.5	1.03	mg/L	0.026	1.03	mg/L	0.026	2.51%
Ca 227.546†	63157.9	129	mg/L	3.6	129	mg/L	3.6	2.77%
Cd 228.802†	1399.4	0.0229	mg/L	0.00081	0.0229	mg/L	0.00081	3.52%
Co 228.616†	3895.6	0.0983	mg/L	0.00178	0.0983	mg/L	0.00178	1.81%
Cr 267.716†	28253.0	0.248	mg/L	0.0043	0.248	mg/L	0.0043	1.72%

Approved: May 14, 2012

Cu 327.393†	67536.0	0.241 mg/L	0.0070	0.241 mg/L	0.0070	2.89%
Fe 239.562†	36384.3	2.19 mg/L	0.007	2.19 mg/L	0.007	0.33%
Mg 279.077†	87251.6	23.7 mg/L	0.20	23.7 mg/L	0.20	0.85%
Mn 257.610†	446912.1	0.517 mg/L	0.0102	0.517 mg/L	0.0102	1.97%
Mo 202.031†	19049.3	0.502 mg/L	0.0090	0.502 mg/L	0.0090	1.79%
Ni 231.604†	17121.4	0.245 mg/L	0.0057	0.245 mg/L	0.0057	2.33%
Pb 220.353†	2813.8	0.250 mg/L	0.0024	0.250 mg/L	0.0024	0.96%
Sb 206.836†	2539.9	0.582 mg/L	0.0105	0.582 mg/L	0.0105	1.81%
Se 196.026†	341.2	0.183 mg/L	0.0019	0.183 mg/L	0.0019	1.06%
Si 251.611†	341172.1	7.81 mg/L	0.131	7.81 mg/L	0.131	1.68%
Sn 189.927†	5449.9	0.513 mg/L	0.0092	0.513 mg/L	0.0092	1.80%
Ti 334.940†	497618.0	0.505 mg/L	0.0025	0.505 mg/L	0.0025	0.49%
Tl 190.801†	933.9	0.242 mg/L	0.0024	0.242 mg/L	0.0024	0.99%
V 290.880†	101898.9	0.513 mg/L	0.0029	0.513 mg/L	0.0029	0.57%
Zn 206.200†	21197.8	0.483 mg/L	0.0098	0.483 mg/L	0.0098	2.03%
K 766.490†	99774.2	30.3 mg/L	0.32	30.3 mg/L	0.32	1.06%
Na 589.592†	2634909.0	141 mg/L	1.8	141 mg/L	1.8	1.27%
Sr 407.771†	4286525.6	1.57 mg/L	0.008	1.57 mg/L	0.008	0.54%
Li 670.784†	85455.9	0.545 mg/L	0.0034	0.545 mg/L	0.0034	0.61%

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Sequence No.: 20 **Autosampler Location: 22**
Sample ID: L1205017101PS WG397657-01 **Date Collected: 5/11/2012 1:20:22 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205017101PS WG397657-01

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205017101PS WG397657-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2199442.1						8926.66	0.41%
YRADIAL	300908.0						953.20	0.32%
Ga 417.206	1325848.5						22260.32	1.68%
GaRADIAL	89118.9						627.23	0.70%
Ag 328.068†	66552.2	0.201	mg/L	0.0037	0.201	mg/L	0.0037	1.83%
Al 396.153†	38707.0	5.14	mg/L	0.033	5.14	mg/L	0.033	0.63%
As 188.979†	581.2	0.195	mg/L	0.0040	0.195	mg/L	0.0040	2.06%
Ba 233.527†	97276.3	0.607	mg/L	0.0019	0.607	mg/L	0.0019	0.31%
Be 234.861†	33025.6	0.0243	mg/L	0.00045	0.0243	mg/L	0.00045	1.86%
B 249.677†	94564.5	1.06	mg/L	0.019	1.06	mg/L	0.019	1.75%
Ca 227.546†	60104.1	122	mg/L	2.1	122	mg/L	2.1	1.75%
Cd 228.802†	1418.2	0.0232	mg/L	0.00070	0.0232	mg/L	0.00070	3.03%
Co 228.616†	3935.7	0.0994	mg/L	0.00047	0.0994	mg/L	0.00047	0.48%
Cr 267.716†	28531.2	0.250	mg/L	0.0008	0.250	mg/L	0.0008	0.32%
Cu 327.393†	69745.5	0.249	mg/L	0.0031	0.249	mg/L	0.0031	1.24%
Fe 239.562†	37871.1	2.28	mg/L	0.024	2.28	mg/L	0.024	1.05%
Mg 279.077†	82730.1	22.5	mg/L	0.06	22.5	mg/L	0.06	0.25%
Mn 257.610†	430896.3	0.499	mg/L	0.0036	0.499	mg/L	0.0036	0.72%
Mo 202.031†	19244.0	0.508	mg/L	0.0034	0.508	mg/L	0.0034	0.67%
Ni 231.604†	17306.7	0.248	mg/L	0.0028	0.248	mg/L	0.0028	1.14%
Pb 220.353†	2861.7	0.254	mg/L	0.0008	0.254	mg/L	0.0008	0.30%
Sb 206.836†	2630.4	0.602	mg/L	0.0084	0.602	mg/L	0.0084	1.39%
Se 196.026†	381.3	0.205	mg/L	0.0095	0.205	mg/L	0.0095	4.66%
Si 251.611†	332563.2	7.61	mg/L	0.092	7.61	mg/L	0.092	1.21%
Sn 189.927†	-284.5	-0.0301	mg/L	0.00064	-0.0301	mg/L	0.00064	2.13%
Ti 334.940†	503754.2	0.510	mg/L	0.0016	0.510	mg/L	0.0016	0.31%
Tl 190.801†	967.2	0.251	mg/L	0.0034	0.251	mg/L	0.0034	1.35%
V 290.880†	102545.8	0.517	mg/L	0.0012	0.517	mg/L	0.0012	0.23%
Zn 206.200†	23143.8	0.527	mg/L	0.0055	0.527	mg/L	0.0055	1.04%
K 766.490†	99998.2	30.4	mg/L	0.19	30.4	mg/L	0.19	0.61%
Na 589.592†	2502176.9	133	mg/L	2.3	133	mg/L	2.3	1.72%
Sr 407.771†	4084522.1	1.50	mg/L	0.014	1.50	mg/L	0.014	0.96%
Li 670.784†	85523.7	0.546	mg/L	0.0072	0.546	mg/L	0.0072	1.32%

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Sequence No.: 21 **Autosampler Location: 23**

Approved: May 14, 2012

Sample ID: L1205017101DL WG397657-02 **Date Collected: 5/11/2012 1:26:24 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205017101DL WG397657-02

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205017101DL WG397657-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2266223.0						16459.12	0.73%
YRADIAL	296336.1						8076.94	2.73%
Ga 417.206	1382102.6						15844.81	1.15%
GaRADIAL	88671.0						388.09	0.44%
Ag 328.068†	151.3	-0.00050	mg/L	0.000236	-0.00050	mg/L	0.000236	47.08%
Al 396.153†	23.9	-0.0228	mg/L	0.00096	-0.0228	mg/L	0.00096	4.23%
As 188.979†	-5.2	-0.00093	mg/L	0.001999	-0.00093	mg/L	0.001999	214.08%
Ba 233.527†	4008.9	0.0210	mg/L	0.00023	0.0210	mg/L	0.00023	1.10%
Be 234.861†	16.7	0.00005	mg/L	0.000011	0.00005	mg/L	0.000011	22.99%
B 249.677†	1942.9	0.0233	mg/L	0.00090	0.0233	mg/L	0.00090	3.85%
Ca 227.546†	11555.3	23.5	mg/L	0.40	23.5	mg/L	0.40	1.69%
Cd 228.802†	-11.1	-0.00007	mg/L	0.000028	-0.00007	mg/L	0.000028	39.11%
Co 228.616†	-6.0	-0.00091	mg/L	0.000141	-0.00091	mg/L	0.000141	15.58%
Cr 267.716†	69.0	-0.00176	mg/L	0.000078	-0.00176	mg/L	0.000078	4.45%
Cu 327.393†	-69.7	-0.00122	mg/L	0.000466	-0.00122	mg/L	0.000466	38.25%
Fe 239.562†	1464.9	0.0785	mg/L	0.00083	0.0785	mg/L	0.00083	1.06%
Mg 279.077†	14865.2	4.02	mg/L	0.112	4.02	mg/L	0.112	2.78%
Mn 257.610†	47516.1	0.0518	mg/L	0.00048	0.0518	mg/L	0.00048	0.92%
Mo 202.031†	18.9	-0.00318	mg/L	0.000100	-0.00318	mg/L	0.000100	3.14%
Ni 231.604†	-22.3	-0.00299	mg/L	0.000138	-0.00299	mg/L	0.000138	4.63%
Pb 220.353†	12.7	-0.00045	mg/L	0.001475	-0.00045	mg/L	0.001475	326.15%
Sb 206.836†	-1.3	-0.00022	mg/L	0.000791	-0.00022	mg/L	0.000791	353.51%
Se 196.026†	4.2	0.00325	mg/L	0.000714	0.00325	mg/L	0.000714	21.93%
Si 251.611†	47442.3	1.08	mg/L	0.012	1.08	mg/L	0.012	1.14%
Sn 189.927†	-186.9	-0.0209	mg/L	0.00015	-0.0209	mg/L	0.00015	0.71%
Ti 334.940†	-4597.8	-0.00238	mg/L	0.000422	-0.00238	mg/L	0.000422	17.75%
Tl 190.801†	-24.0	-0.00884	mg/L	0.001677	-0.00884	mg/L	0.001677	18.97%
V 290.880†	526.6	-0.00144	mg/L	0.001230	-0.00144	mg/L	0.001230	85.45%
Zn 206.200†	487.7	0.00763	mg/L	0.000063	0.00763	mg/L	0.000063	0.82%
K 766.490†	3702.3	1.06	mg/L	0.020	1.06	mg/L	0.020	1.90%
Na 589.592†	440709.2	20.7	mg/L	0.27	20.7	mg/L	0.27	1.29%
Sr 407.771†	619913.9	0.223	mg/L	0.0065	0.223	mg/L	0.0065	2.92%
Li 670.784†	817.2	0.00018	mg/L	0.000055	0.00018	mg/L	0.000055	31.50%

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Sequence No.: 22 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 5/11/2012 1:33:18 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	2258534.3						21860.80	0.97%
YRADIAL	308298.8						6476.11	2.10%
Ga 417.206	1340390.0						23528.92	1.76%
GaRADIAL	90536.5						723.17	0.80%
Ag 328.068†	133707.6	0.405	mg/L	0.0078	0.405	mg/L	0.0078	1.93%
QC value within limits for Ag 328.068 Recovery = 101.34%								
Al 396.153†	76430.6	10.2	mg/L	0.04	10.2	mg/L	0.04	0.36%
QC value within limits for Al 396.153 Recovery = 101.70%								

Approved: May 14, 2012

As 188.979†	1178.7	0.394 mg/L	0.0097	0.394 mg/L	0.0097	2.46%
QC value within limits for As 188.979 Recovery = 98.43%						
Ba 233.527†	168188.8	1.05 mg/L	0.013	1.05 mg/L	0.013	1.27%
QC value within limits for Ba 233.527 Recovery = 105.32%						
Be 234.861†	67146.1	0.0494 mg/L	0.00084	0.0494 mg/L	0.00084	1.71%
QC value within limits for Be 234.861 Recovery = 98.75%						
B 249.677†	45164.5	0.503 mg/L	0.0108	0.503 mg/L	0.0108	2.14%
QC value within limits for B 249.677 Recovery = 100.68%						
Ca 227.546†	4876.7	10.4 mg/L	0.29	10.4 mg/L	0.29	2.78%
QC value within limits for Ca 227.546 Recovery = 104.46%						
Cd 228.802†	2918.0	0.0477 mg/L	0.00155	0.0477 mg/L	0.00155	3.25%
QC value within limits for Cd 228.802 Recovery = 95.40%						
Co 228.616†	8176.4	0.207 mg/L	0.0024	0.207 mg/L	0.0024	1.14%
QC value within limits for Co 228.616 Recovery = 103.65%						
Cr 267.716†	59408.4	0.524 mg/L	0.0029	0.524 mg/L	0.0029	0.56%
QC value within limits for Cr 267.716 Recovery = 104.80%						
Cu 327.393†	141965.7	0.507 mg/L	0.0072	0.507 mg/L	0.0072	1.43%
QC value within limits for Cu 327.393 Recovery = 101.37%						
Fe 239.562†	67890.9	4.09 mg/L	0.040	4.09 mg/L	0.040	0.97%
QC value within limits for Fe 239.562 Recovery = 102.36%						
Mg 279.077†	37802.0	10.3 mg/L	0.10	10.3 mg/L	0.10	0.94%
QC value within limits for Mg 279.077 Recovery = 102.66%						
Mn 257.610†	462556.2	0.536 mg/L	0.0096	0.536 mg/L	0.0096	1.79%
QC value within limits for Mn 257.610 Recovery = 107.18%						
Mo 202.031†	39558.0	1.05 mg/L	0.013	1.05 mg/L	0.013	1.20%
QC value within limits for Mo 202.031 Recovery = 104.70%						
Ni 231.604†	36861.8	0.530 mg/L	0.0072	0.530 mg/L	0.0072	1.35%
QC value within limits for Ni 231.604 Recovery = 106.10%						
Pb 220.353†	5899.3	0.524 mg/L	0.0039	0.524 mg/L	0.0039	0.75%
QC value within limits for Pb 220.353 Recovery = 104.75%						
Sb 206.836†	5245.8	1.20 mg/L	0.024	1.20 mg/L	0.024	2.04%
QC value within limits for Sb 206.836 Recovery = 100.08%						
Se 196.026†	744.2	0.399 mg/L	0.0122	0.399 mg/L	0.0122	3.06%
QC value within limits for Se 196.026 Recovery = 99.71%						
Si 251.611†	223021.0	5.09 mg/L	0.059	5.09 mg/L	0.059	1.16%
QC value within limits for Si 251.611 Recovery = 101.86%						
Sn 189.927†	10915.8	1.03 mg/L	0.009	1.03 mg/L	0.009	0.89%
QC value within limits for Sn 189.927 Recovery = 103.00%						
Ti 334.940†	1049453.0	1.03 mg/L	0.010	1.03 mg/L	0.010	1.02%
QC value within limits for Ti 334.940 Recovery = 102.81%						
Tl 190.801†	2067.9	0.539 mg/L	0.0028	0.539 mg/L	0.0028	0.52%
QC value within limits for Tl 190.801 Recovery = 107.80%						
V 290.880†	208003.5	1.05 mg/L	0.009	1.05 mg/L	0.009	0.85%
QC value within limits for V 290.880 Recovery = 105.32%						
Zn 206.200†	45811.0	1.05 mg/L	0.012	1.05 mg/L	0.012	1.10%
QC value within limits for Zn 206.200 Recovery = 104.75%						
K 766.490†	164610.2	50.4 mg/L	0.18	50.4 mg/L	0.18	0.35%
QC value within limits for K 766.490 Recovery = 100.88%						
Na 589.592†	1012502.3	49.0 mg/L	0.41	49.0 mg/L	0.41	0.84%
QC value within limits for Na 589.592 Recovery = 98.00%						
Sr 407.771†	2820514.6	1.03 mg/L	0.019	1.03 mg/L	0.019	1.84%
QC value within limits for Sr 407.771 Recovery = 103.39%						
Li 670.784†	160386.9	1.03 mg/L	0.006	1.03 mg/L	0.006	0.61%
QC value within limits for Li 670.784 Recovery = 102.80%						

All analyte(s) passed QC.

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Sequence No.: 23 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 5/11/2012 1:39:19 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

Approved: May 14, 2012

Y 371.029	2355553.7				32169.43	1.37%
YRADIAL	308838.3				10589.19	3.43%
Ga 417.206	1382199.0				35146.46	2.54%
GaRADIAL	90737.7				1744.69	1.92%
Ag 328.068†	19.9	-0.00089 mg/L	0.000363	-0.00089 mg/L	0.000363	40.75%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153†	40.0	-0.0206 mg/L	0.00075	-0.0206 mg/L	0.00075	3.64%
QC value within limits for Al 396.153 Recovery = Not calculated						
As 188.979†	0.1	0.00086 mg/L	0.001642	0.00086 mg/L	0.001642	190.01%
QC value within limits for As 188.979 Recovery = Not calculated						
Ba 233.527†	-9.4	-0.00428 mg/L	0.000108	-0.00428 mg/L	0.000108	2.53%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 234.861†	-0.5	0.00005 mg/L	0.000026	0.00005 mg/L	0.000026	52.59%
QC value within limits for Be 234.861 Recovery = Not calculated						
B 249.677†	803.4	0.0106 mg/L	0.00073	0.0106 mg/L	0.00073	6.86%
QC value within limits for B 249.677 Recovery = Not calculated						
Ca 227.546†	8.5	0.0606 mg/L	0.01867	0.0606 mg/L	0.01867	30.80%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Cd 228.802†	-11.6	-0.00009 mg/L	0.000138	-0.00009 mg/L	0.000138	154.80%
QC value within limits for Cd 228.802 Recovery = Not calculated						
Co 228.616†	-15.9	-0.00116 mg/L	0.000008	-0.00116 mg/L	0.000008	0.68%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	11.4	-0.00228 mg/L	0.000072	-0.00228 mg/L	0.000072	3.15%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 327.393†	0.5	-0.00097 mg/L	0.000194	-0.00097 mg/L	0.000194	19.96%
QC value within limits for Cu 327.393 Recovery = Not calculated						
Fe 239.562†	7.1	-0.00954 mg/L	0.000253	-0.00954 mg/L	0.000253	2.65%
QC value within limits for Fe 239.562 Recovery = Not calculated						
Mg 279.077†	18.5	-0.0115 mg/L	0.00076	-0.0115 mg/L	0.00076	6.65%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	63.9	-0.00346 mg/L	0.000038	-0.00346 mg/L	0.000038	1.09%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	-6.7	-0.00387 mg/L	0.000248	-0.00387 mg/L	0.000248	6.40%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	-25.2	-0.00304 mg/L	0.000232	-0.00304 mg/L	0.000232	7.63%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Pb 220.353†	16.1	-0.00030 mg/L	0.000684	-0.00030 mg/L	0.000684	229.55%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	-1.3	-0.00025 mg/L	0.000565	-0.00025 mg/L	0.000565	230.06%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-0.8	0.00057 mg/L	0.003165	0.00057 mg/L	0.003165	550.75%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	25.8	-0.0126 mg/L	0.00018	-0.0126 mg/L	0.00018	1.43%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-11.7	-0.00429 mg/L	0.000666	-0.00429 mg/L	0.000666	15.55%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 334.940†	-128.7	-0.00152 mg/L	0.000081	-0.00152 mg/L	0.000081	5.29%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-6.8	-0.00435 mg/L	0.001893	-0.00435 mg/L	0.001893	43.55%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 290.880†	-126.5	-0.00464 mg/L	0.001922	-0.00464 mg/L	0.001922	41.39%
QC value within limits for V 290.880 Recovery = Not calculated						
Zn 206.200†	-23.2	-0.00403 mg/L	0.000236	-0.00403 mg/L	0.000236	5.85%
QC value within limits for Zn 206.200 Recovery = Not calculated						
K 766.490†	33.0	-0.0305 mg/L	0.01348	-0.0305 mg/L	0.01348	44.24%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592†	244.7	0.0391 mg/L	0.01158	0.0391 mg/L	0.01158	29.62%
QC value within limits for Na 589.592 Recovery = Not calculated						
Sr 407.771†	-35.5	-0.00483 mg/L	0.000082	-0.00483 mg/L	0.000082	1.70%
QC value within limits for Sr 407.771 Recovery = Not calculated						
Li 670.784†	-42.7	-0.00536 mg/L	0.000655	-0.00536 mg/L	0.000655	12.22%
QC value within limits for Li 670.784 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 24 **Autosampler Location: 24**
Sample ID: L1205017107 **Date Collected: 5/11/2012 1:46:12 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: May 14, 2012

Kym H. Rhoden

Nebulizer Parameters: L1205017107

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205017107

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2189410.0						6610.17	0.30%
YRADIAL	305114.0						3416.11	1.12%
Ga 417.206	1380938.2						32987.19	2.39%
GaRADIAL	91440.8						784.79	0.86%
Ag 328.068†	-5515.5	0.00352	mg/L	0.001111	0.00352	mg/L	0.001111	31.61%
Al 396.153†	215392.8	28.9	mg/L	0.02	28.9	mg/L	0.02	0.07%
As 188.979†	63.2	0.0269	mg/L	0.00187	0.0269	mg/L	0.00187	6.96%
Ba 233.527†	97528.2	0.608	mg/L	0.0033	0.608	mg/L	0.0033	0.54%
Be 234.861†	14309.2	0.00018	mg/L	0.000320	0.00018	mg/L	0.000320	174.08%
B 249.677†	26973.1	0.283	mg/L	0.0084	0.283	mg/L	0.0084	2.98%
Ca 227.546†	182668.2	373	mg/L	9.1	373	mg/L	9.1	2.44%
Cd 228.802†	40.1	0.00064	mg/L	0.000470	0.00064	mg/L	0.000470	73.25%
Co 228.616†	688.6	0.0138	mg/L	0.00030	0.0138	mg/L	0.00030	2.14%
Cr 267.716†	4554.3	0.0391	mg/L	0.00024	0.0391	mg/L	0.00024	0.62%
Cu 327.393†	11559.1	0.0450	mg/L	0.00098	0.0450	mg/L	0.00098	2.17%
Fe 239.562†	788666.5	47.7	mg/L	0.70	47.7	mg/L	0.70	1.48%
Mg 279.077†	722737.1	196	mg/L	1.0	196	mg/L	1.0	0.50%
Mn 257.610†	1355649.8	1.58	mg/L	0.011	1.58	mg/L	0.011	0.69%
Mo 202.031†	118.7	0.00216	mg/L	0.000258	0.00216	mg/L	0.000258	11.97%
Ni 231.604†	2627.9	0.0354	mg/L	0.00051	0.0354	mg/L	0.00051	1.43%
Pb 220.353†	218.0	0.0203	mg/L	0.00194	0.0203	mg/L	0.00194	9.57%
Sb 206.836†	-21.3	-0.00331	mg/L	0.000479	-0.00331	mg/L	0.000479	14.48%
Se 196.026†	-21.9	0.00302	mg/L	0.001658	0.00302	mg/L	0.001658	54.97%
Si 251.611†	2043057.5	46.9	mg/L	0.84	46.9	mg/L	0.84	1.79%
Sn 189.927†	-364.9	-0.0377	mg/L	0.00080	-0.0377	mg/L	0.00080	2.12%
Ti 334.940†	717578.3	0.757	mg/L	0.0054	0.757	mg/L	0.0054	0.71%
Tl 190.801†	-88.0	-0.0172	mg/L	0.00259	-0.0172	mg/L	0.00259	15.07%
V 290.880†	15092.8	0.0601	mg/L	0.00100	0.0601	mg/L	0.00100	1.67%
Zn 206.200†	4658.6	0.102	mg/L	0.0006	0.102	mg/L	0.0006	0.62%
K 766.490†	34882.8	10.5	mg/L	0.01	10.5	mg/L	0.01	0.10%
Na 589.592†	1446002.8	71.7	mg/L	0.92	71.7	mg/L	0.92	1.28%
Sr 407.771†	Saturated2							
Li 670.784†	17673.0	0.109	mg/L	0.0008	0.109	mg/L	0.0008	0.72%

Sequence No.: 25 **Autosampler Location: 25**
Sample ID: L1205017108 **Date Collected: 5/11/2012 1:52:08 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205017108

Analyte	Back Pressure	Flow
All	151.0 kPa	0.50 L/min

Mean Data: L1205017108

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2234131.3						22902.78	1.03%
YRADIAL	306433.3						2235.83	0.73%
Ga 417.206	1384701.1						28840.88	2.08%
GaRADIAL	92541.8						608.54	0.66%
Ag 328.068†	245.4	0.00090	mg/L	0.000280	0.00090	mg/L	0.000280	31.02%
Al 396.153†	825.0	0.0849	mg/L	0.00564	0.0849	mg/L	0.00564	6.64%
As 188.979†	39.7	0.0145	mg/L	0.00170	0.0145	mg/L	0.00170	11.72%
Ba 233.527†	78236.7	0.487	mg/L	0.0060	0.487	mg/L	0.0060	1.23%
Be 234.861†	972.7	0.00022	mg/L	0.000067	0.00022	mg/L	0.000067	30.25%
B 249.677†	21984.9	0.247	mg/L	0.0084	0.247	mg/L	0.0084	3.39%
Ca 227.546†	46670.7	95.0	mg/L	2.27	95.0	mg/L	2.27	2.39%
Cd 228.802†	27.2	0.00049	mg/L	0.000204	0.00049	mg/L	0.000204	41.75%
Co 228.616†	-18.8	-0.00143	mg/L	0.000147	-0.00143	mg/L	0.000147	10.28%
Cr 267.716†	237.2	-0.00019	mg/L	0.000018	-0.00019	mg/L	0.000018	9.17%

Approved: May 14, 2012

Cu 327.393†	-191.8	-0.00146	mg/L	0.000536	-0.00146	mg/L	0.000536 36.60%
Fe 239.562†	41113.1	2.47	mg/L	0.049	2.47	mg/L	0.049 1.97%
Mg 279.077†	307884.8	83.6	mg/L	0.06	83.6	mg/L	0.06 0.07%
Mn 257.610†	32745.0	0.0347	mg/L	0.00047	0.0347	mg/L	0.00047 1.35%
Mo 202.031†	131.7	-0.00007	mg/L	0.000229	-0.00007	mg/L	0.000229 352.30%
Ni 231.604†	49.5	-0.00195	mg/L	0.000707	-0.00195	mg/L	0.000707 36.20%
Pb 220.353†	13.0	-0.00003	mg/L	0.002942	-0.00003	mg/L	0.002942 >999.9%
Sb 206.836†	-9.8	-0.00208	mg/L	0.002829	-0.00208	mg/L	0.002829 135.90%
Se 196.026†	1.7	0.00265	mg/L	0.001094	0.00265	mg/L	0.001094 41.25%
Si 251.611†	457670.5	10.5	mg/L	0.15	10.5	mg/L	0.15 1.39%
Sn 189.927†	-289.7	-0.0306	mg/L	0.00084	-0.0306	mg/L	0.00084 2.76%
Ti 334.940†	-11694.4	0.00138	mg/L	0.001145	0.00138	mg/L	0.001145 83.00%
Tl 190.801†	-24.6	-0.00905	mg/L	0.003798	-0.00905	mg/L	0.003798 41.98%
V 290.880†	1645.5	0.00178	mg/L	0.002088	0.00178	mg/L	0.002088 117.05%
Zn 206.200†	48.6	-0.00243	mg/L	0.000079	-0.00243	mg/L	0.000079 3.26%
K 766.490†	9862.7	2.88	mg/L	0.031	2.88	mg/L	0.031 1.09%
Na 589.592†	1380205.0	68.2	mg/L	0.10	68.2	mg/L	0.10 0.14%
Sr 407.771†	Saturated2						
Li 670.784†	8506.5	0.0497	mg/L	0.00071	0.0497	mg/L	0.00071 1.42%

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Sequence No.: 26 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 5/11/2012 1:58:06 PM**
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	2320645.3						7274.16	0.31%
YRADIAL	316714.0						2148.59	0.68%
Ga 417.206	1339459.8						45818.65	3.42%
GaRADIAL	93018.4						573.93	0.62%
Ag 328.068†	131565.9	0.399	mg/L	0.0126	0.399	mg/L	0.0126	3.17%
QC value within limits for Ag 328.068 Recovery = 99.69%								
Al 396.153†	74397.9	9.90	mg/L	0.025	9.90	mg/L	0.025	0.26%
QC value within limits for Al 396.153 Recovery = 99.01%								
As 188.979†	1169.4	0.391	mg/L	0.0148	0.391	mg/L	0.0148	3.80%
QC value within limits for As 188.979 Recovery = 97.70%								
Ba 233.527†	160086.9	1.00	mg/L	0.017	1.00	mg/L	0.017	1.72%
QC value within limits for Ba 233.527 Recovery = 100.22%								
Be 234.861†	65664.6	0.0483	mg/L	0.00122	0.0483	mg/L	0.00122	2.53%
QC value within limits for Be 234.861 Recovery = 96.57%								
B 249.677†	44212.9	0.493	mg/L	0.0154	0.493	mg/L	0.0154	3.12%
QC value within limits for B 249.677 Recovery = 98.57%								
Ca 227.546†	4801.2	10.3	mg/L	0.39	10.3	mg/L	0.39	3.81%
QC value within limits for Ca 227.546 Recovery = 102.67%								
Cd 228.802†	2895.8	0.0473	mg/L	0.00239	0.0473	mg/L	0.00239	5.05%
QC value within limits for Cd 228.802 Recovery = 94.64%								
Co 228.616†	7862.3	0.199	mg/L	0.0015	0.199	mg/L	0.0015	0.73%
QC value within limits for Co 228.616 Recovery = 99.63%								
Cr 267.716†	56144.4	0.495	mg/L	0.0049	0.495	mg/L	0.0049	0.99%
QC value within limits for Cr 267.716 Recovery = 99.02%								
Cu 327.393†	141409.6	0.505	mg/L	0.0172	0.505	mg/L	0.0172	3.40%
QC value within limits for Cu 327.393 Recovery = 100.96%								
Fe 239.562†	65491.6	3.95	mg/L	0.005	3.95	mg/L	0.005	0.14%
QC value within limits for Fe 239.562 Recovery = 98.74%								
Mg 279.077†	36448.8	9.90	mg/L	0.021	9.90	mg/L	0.021	0.21%
QC value within limits for Mg 279.077 Recovery = 98.98%								
Mn 257.610†	440146.4	0.510	mg/L	0.0106	0.510	mg/L	0.0106	2.08%
QC value within limits for Mn 257.610 Recovery = 101.95%								
Mo 202.031†	37589.6	0.995	mg/L	0.0137	0.995	mg/L	0.0137	1.38%
QC value within limits for Mo 202.031 Recovery = 99.48%								
Ni 231.604†	34822.1	0.501	mg/L	0.0086	0.501	mg/L	0.0086	1.72%
QC value within limits for Ni 231.604 Recovery = 100.20%								

Approved: May 14, 2012

Pb 220.353†	5666.2	0.503 mg/L	0.0026	0.503 mg/L	0.0026	0.52%
QC value within limits for Pb 220.353 Recovery = 100.59%						
Sb 206.836†	5193.8	1.19 mg/L	0.043	1.19 mg/L	0.043	3.63%
QC value within limits for Sb 206.836 Recovery = 99.09%						
Se 196.026†	738.4	0.396 mg/L	0.0173	0.396 mg/L	0.0173	4.37%
QC value within limits for Se 196.026 Recovery = 98.93%						
Si 251.611†	219769.3	5.02 mg/L	0.093	5.02 mg/L	0.093	1.86%
QC value within limits for Si 251.611 Recovery = 100.38%						
Sn 189.927†	10490.7	0.990 mg/L	0.0053	0.990 mg/L	0.0053	0.54%
QC value within limits for Sn 189.927 Recovery = 98.98%						
Ti 334.940†	1016663.9	0.996 mg/L	0.0060	0.996 mg/L	0.0060	0.61%
QC value within limits for Ti 334.940 Recovery = 99.59%						
Tl 190.801†	1989.5	0.519 mg/L	0.0039	0.519 mg/L	0.0039	0.75%
QC value within limits for Tl 190.801 Recovery = 103.71%						
V 290.880†	198367.7	1.00 mg/L	0.009	1.00 mg/L	0.009	0.88%
QC value within limits for V 290.880 Recovery = 100.42%						
Zn 206.200†	43092.7	0.985 mg/L	0.0182	0.985 mg/L	0.0182	1.85%
QC value within limits for Zn 206.200 Recovery = 98.52%						
K 766.490†	161513.9	49.5 mg/L	0.11	49.5 mg/L	0.11	0.22%
QC value within limits for K 766.490 Recovery = 98.96%						
Na 589.592†	973903.1	47.0 mg/L	0.72	47.0 mg/L	0.72	1.52%
QC value within limits for Na 589.592 Recovery = 94.08%						
Sr 407.771†	2714297.8	0.995 mg/L	0.0117	0.995 mg/L	0.0117	1.18%
QC value within limits for Sr 407.771 Recovery = 99.48%						
Li 670.784†	157876.3	1.01 mg/L	0.006	1.01 mg/L	0.006	0.59%
QC value within limits for Li 670.784 Recovery = 101.19%						

All analyte(s) passed QC.

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Sequence No.: 27 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 5/11/2012 2:04:08 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	2349837.1						26408.64	1.12%
YRADIAL	310386.6						6718.28	2.16%
Ga 417.206	1358463.0						16541.39	1.22%
GaRADIAL	91452.3						1845.14	2.02%
Ag 328.068†	17.7	-0.00090	mg/L	0.000420	-0.00090	mg/L	0.000420	46.67%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	42.9	-0.0202	mg/L	0.00099	-0.0202	mg/L	0.00099	4.88%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	1.7	0.00140	mg/L	0.002016	0.00140	mg/L	0.002016	143.82%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-9.5	-0.00428	mg/L	0.000066	-0.00428	mg/L	0.000066	1.54%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-43.2	0.00002	mg/L	0.000024	0.00002	mg/L	0.000024	131.16%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	649.2	0.00888	mg/L	0.000340	0.00888	mg/L	0.000340	3.82%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	10.8	0.0653	mg/L	0.01471	0.0653	mg/L	0.01471	22.54%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-8.4	-0.00004	mg/L	0.000126	-0.00004	mg/L	0.000126	339.62%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-6.7	-0.00092	mg/L	0.000242	-0.00092	mg/L	0.000242	26.25%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	7.0	-0.00232	mg/L	0.000071	-0.00232	mg/L	0.000071	3.08%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	8.4	-0.00095	mg/L	0.000554	-0.00095	mg/L	0.000554	58.58%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	23.9	-0.00852	mg/L	0.000494	-0.00852	mg/L	0.000494	5.80%
QC value within limits for Fe 239.562 Recovery = Not calculated								

Approved: May 14, 2012

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Mg 279.077†              17.6     -0.0117 mg/L       0.00273     -0.0117 mg/L       0.00273  23.35%
   QC value within limits for Mg 279.077  Recovery = Not calculated
Mn 257.610†              64.1    -0.00346 mg/L      0.000014    -0.00346 mg/L      0.000014   0.42%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              -5.9    -0.00385 mg/L      0.000198    -0.00385 mg/L      0.000198   5.13%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Ni 231.604†             -19.6    -0.00295 mg/L      0.000225    -0.00295 mg/L      0.000225   7.60%
   QC value within limits for Ni 231.604  Recovery = Not calculated
Pb 220.353†              13.5    -0.00053 mg/L      0.000095    -0.00053 mg/L      0.000095  17.96%
   QC value within limits for Pb 220.353  Recovery = Not calculated
Sb 206.836†              -0.6    -0.00008 mg/L      0.000496    -0.00008 mg/L      0.000496 583.65%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -0.8     0.00058 mg/L      0.002625     0.00058 mg/L      0.002625 455.42%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              79.8     -0.0113 mg/L       0.00021     -0.0113 mg/L       0.00021   1.89%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†             -14.2    -0.00452 mg/L      0.000404    -0.00452 mg/L      0.000404   8.94%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Ti 334.940†            -166.2    -0.00156 mg/L      0.000059    -0.00156 mg/L      0.000059   3.77%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -1.1    -0.00290 mg/L      0.000698    -0.00290 mg/L      0.000698  24.04%
   QC value within limits for Tl 190.801  Recovery = Not calculated
V 290.880†             -326.6    -0.00566 mg/L      0.000456    -0.00566 mg/L      0.000456   8.05%
   QC value within limits for V 290.880  Recovery = Not calculated
Zn 206.200†             -26.3    -0.00410 mg/L      0.000063    -0.00410 mg/L      0.000063   1.54%
   QC value within limits for Zn 206.200  Recovery = Not calculated
K 766.490†               22.2     -0.0337 mg/L       0.00843     -0.0337 mg/L       0.00843  25.00%
   QC value within limits for K 766.490  Recovery = Not calculated
Na 589.592†             131.4      0.0339 mg/L       0.00692      0.0339 mg/L       0.00692  20.44%
   QC value within limits for Na 589.592  Recovery = Not calculated
Sr 407.771†             171.5    -0.00475 mg/L      0.000064    -0.00475 mg/L      0.000064   1.35%
   QC value within limits for Sr 407.771  Recovery = Not calculated
Li 670.784†              -52.8    -0.00543 mg/L      0.000530    -0.00543 mg/L      0.000530   9.76%
   QC value within limits for Li 670.784  Recovery = Not calculated
All analyte(s) passed QC.

================================================================================================================
Sequence No.: 28                                    Autosampler Location: 12
Sample ID: ICSA                                     Date Collected: 5/11/2012 2:11:01 PM
Analyst:                                            Data Type: Original
Initial Sample Wt:                                  Initial Sample Vol:
Dilution:                                           Sample Prep Vol:

----------------------------------------------------------------------------------------------------------------
Nebulizer Parameters: ICSA
Analyte                Back Pressure    Flow
All                  152.0 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          2125275.2                                                     30129.16   1.42%
YRADIAL             295805.9                                                      1704.61   0.58%
Ga 417.206         1297417.9                                                     38108.20   2.94%
GaRADIAL             88517.6                                                       814.22   0.92%
Ag 328.068†         -13586.1     0.00033 mg/L      0.000597     0.00033 mg/L      0.000597 179.82%
   QC value within limits for Ag 328.068  Recovery = Not calculated
Al 396.153†        1910919.7         257 mg/L           3.2         257 mg/L           3.2   1.25%
   QC value within limits for Al 396.153  Recovery = 102.69%
As 188.979†             -12.2     0.00295 mg/L      0.004289     0.00295 mg/L      0.004289 145.57%
   QC value within limits for As 188.979  Recovery = Not calculated
Ba 233.527†             775.7    -0.00174 mg/L      0.000148    -0.00174 mg/L      0.000148   8.51%
   QC value within limits for Ba 233.527  Recovery = Not calculated
Be 234.861†           26216.5    -0.00174 mg/L      0.000072    -0.00174 mg/L      0.000072   4.17%
   QC value less than the lower limit for Be 234.861  Recovery = Not calculated
B 249.677†             4764.9      0.0140 mg/L       0.00427      0.0140 mg/L       0.00427  30.42%
   QC value within limits for B 249.677  Recovery = Not calculated
Ca 227.546†          125006.5         257 mg/L          12.8         257 mg/L          12.8   4.98%
   QC value within limits for Ca 227.546  Recovery = 102.61%
Cd 228.802†             -9.2    -0.00021 mg/L      0.000116    -0.00021 mg/L      0.000116  56.33%
   QC value within limits for Cd 228.802  Recovery = Not calculated
```

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Co 228.616†	12.5	-0.00284 mg/L	0.000245	-0.00284 mg/L	0.000245	8.62%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	82.6	-0.00315 mg/L	0.000081	-0.00315 mg/L	0.000081	2.58%
QC value less than the lower limit for Cr 267.716 Recovery = Not calculated						
Cu 327.393†	-1564.1	0.00143 mg/L	0.000125	0.00143 mg/L	0.000125	8.75%
QC value within limits for Cu 327.393 Recovery = Not calculated						
Fe 239.562†	1573723.7	95.1 mg/L	0.74	95.1 mg/L	0.74	0.78%
QC value within limits for Fe 239.562 Recovery = 95.14%						
Mg 279.077†	948873.1	258 mg/L	1.6	258 mg/L	1.6	0.63%
QC value within limits for Mg 279.077 Recovery = 103.05%						
Mn 257.610†	-1978.7	-0.00317 mg/L	0.000566	-0.00317 mg/L	0.000566	17.84%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	-85.8	-0.00130 mg/L	0.000286	-0.00130 mg/L	0.000286	21.96%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	15.0	-0.00245 mg/L	0.000562	-0.00245 mg/L	0.000562	22.96%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Pb 220.353†	-402.9	-0.00138 mg/L	0.001821	-0.00138 mg/L	0.001821	132.22%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	-38.2	-0.00520 mg/L	0.000206	-0.00520 mg/L	0.000206	3.96%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-50.1	-0.00041 mg/L	0.000636	-0.00041 mg/L	0.000636	153.31%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	1929.7	0.0311 mg/L	0.00141	0.0311 mg/L	0.00141	4.53%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-350.6	-0.0364 mg/L	0.00097	-0.0364 mg/L	0.00097	2.67%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 334.940†	-41708.9	-0.00413 mg/L	0.004592	-0.00413 mg/L	0.004592	111.13%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-57.3	-0.0107 mg/L	0.00448	-0.0107 mg/L	0.00448	41.83%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 290.880†	3755.1	-0.00663 mg/L	0.002286	-0.00663 mg/L	0.002286	34.51%
QC value within limits for V 290.880 Recovery = Not calculated						
Zn 206.200†	201.5	-0.00071 mg/L	0.000481	-0.00071 mg/L	0.000481	67.57%
QC value within limits for Zn 206.200 Recovery = Not calculated						
K 766.490†	-144.5	-0.0843 mg/L	0.02861	-0.0843 mg/L	0.02861	33.95%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592†	-49.7	0.0255 mg/L	0.00354	0.0255 mg/L	0.00354	13.88%
QC value within limits for Na 589.592 Recovery = Not calculated						
Sr 407.771†	2660.2	-0.00943 mg/L	0.000288	-0.00943 mg/L	0.000288	3.06%
QC value within limits for Sr 407.771 Recovery = Not calculated						
Li 670.784†	235.0	-0.00357 mg/L	0.000566	-0.00357 mg/L	0.000566	15.83%
QC value within limits for Li 670.784 Recovery = Not calculated						

QC Failed. Continue with analysis.

Sequence No.: 29 **Autosampler Location: 13**
Sample ID: ICSAB **Date Collected: 5/11/2012 2:16:58 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICSAB

Analyte	Back Pressure	Flow
All	152.0 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	2088901.1						26411.11	1.26%
YRADIAL	293930.6						3319.86	1.13%
Ga 417.206	1268387.0						17658.17	1.39%
GaRADIAL	88002.4						607.41	0.69%
Ag 328.068†	155421.3	0.511	mg/L	0.0110	0.511	mg/L	0.0110	2.14%
QC value within limits for Ag 328.068 Recovery = 102.19%								
Al 396.153†	1982125.7	266	mg/L	4.3	266	mg/L	4.3	1.63%
QC value within limits for Al 396.153 Recovery = 106.51%								
As 188.979†	695.2	0.242	mg/L	0.0053	0.242	mg/L	0.0053	2.17%
QC value within limits for As 188.979 Recovery = 96.83%								
Ba 233.527†	41294.7	0.253	mg/L	0.0030	0.253	mg/L	0.0030	1.17%
QC value within limits for Ba 233.527 Recovery = 101.13%								

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Be 234.861†          361127.4       0.246 mg/L        0.0048       0.246 mg/L        0.0048   1.96%
   QC value within limits for Be 234.861  Recovery = 98.39%
B 249.677†            4745.0     0.00095 mg/L      0.002460     0.00095 mg/L      0.002460 258.02%
   QC value within limits for B 249.677  Recovery = Not calculated
Ca 227.546†          131421.0         270 mg/L           7.5         270 mg/L           7.5   2.78%
   QC value within limits for Ca 227.546  Recovery = 108.00%
Cd 228.802†          24509.8       0.411 mg/L        0.0070       0.411 mg/L        0.0070   1.69%
   QC value within limits for Cd 228.802  Recovery = 82.14%
Co 228.616†           9535.7       0.240 mg/L        0.0031       0.240 mg/L        0.0031   1.31%
   QC value within limits for Co 228.616  Recovery = 96.10%
Cr 267.716†          28980.8       0.253 mg/L        0.0007       0.253 mg/L        0.0007   0.27%
   QC value within limits for Cr 267.716  Recovery = 101.11%
Cu 327.393†          69722.4       0.256 mg/L        0.0065       0.256 mg/L        0.0065   2.53%
   QC value within limits for Cu 327.393  Recovery = 102.31%
Fe 239.562†        1617487.0        97.8 mg/L          1.41        97.8 mg/L          1.41   1.45%
   QC value within limits for Fe 239.562  Recovery = 97.79%
Mg 279.077†          980953.6         266 mg/L           3.7         266 mg/L           3.7   1.40%
   QC value within limits for Mg 279.077  Recovery = 106.53%
Mn 257.610†          213429.8       0.248 mg/L        0.0033       0.248 mg/L        0.0033   1.33%
   QC value within limits for Mn 257.610  Recovery = 99.16%
Mo 202.031†            -84.0    -0.00095 mg/L      0.000256    -0.00095 mg/L      0.000256  27.05%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Ni 231.604†          33942.5       0.488 mg/L        0.0044       0.488 mg/L        0.0044   0.91%
   QC value within limits for Ni 231.604  Recovery = 97.64%
Pb 220.353†           5108.9       0.489 mg/L        0.0055       0.489 mg/L        0.0055   1.12%
   QC value within limits for Pb 220.353  Recovery = 97.88%
Sb 206.836†           2144.6       0.494 mg/L        0.0093       0.494 mg/L        0.0093   1.88%
   QC value within limits for Sb 206.836  Recovery = 98.71%
Se 196.026†            403.4       0.242 mg/L        0.0043       0.242 mg/L        0.0043   1.76%
   QC value within limits for Se 196.026  Recovery = 96.80%
Si 251.611†           -276.6     -0.0195 mg/L       0.00025     -0.0195 mg/L       0.00025   1.30%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†           -362.4     -0.0375 mg/L       0.00123     -0.0375 mg/L       0.00123   3.29%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Ti 334.940†         -43057.7    -0.00357 mg/L      0.003787    -0.00357 mg/L      0.003787 105.99%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†           1901.4       0.489 mg/L        0.0030       0.489 mg/L        0.0030   0.61%
   QC value within limits for Tl 190.801  Recovery = 97.73%
V 290.880†           54305.3       0.250 mg/L        0.0027       0.250 mg/L        0.0027   1.06%
   QC value within limits for V 290.880  Recovery = 99.95%
Zn 206.200†          20813.8       0.472 mg/L        0.0006       0.472 mg/L        0.0006   0.12%
   QC value within limits for Zn 206.200  Recovery = 94.47%
K 766.490†           16792.4        5.05 mg/L         0.058        5.05 mg/L         0.058   1.14%
   QC value within limits for K 766.490  Recovery = 101.08%
Na 589.592†         105092.3        4.89 mg/L         0.013        4.89 mg/L         0.013   0.27%
   QC value within limits for Na 589.592  Recovery = 97.71%
Sr 407.771†           2822.9    -0.00965 mg/L      0.000199    -0.00965 mg/L      0.000199   2.06%
   QC value within limits for Sr 407.771  Recovery = Not calculated
Li 670.784†            227.2    -0.00362 mg/L      0.000302    -0.00362 mg/L      0.000302   8.34%
   QC value within limits for Li 670.784  Recovery = Not calculated
All analyte(s) passed QC.

================================================================================================================
Sequence No.: 30                                    Autosampler Location: 6
Sample ID: CCV                                      Date Collected: 5/11/2012 2:22:55 PM
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                   152.0 kPa         0.50 L/min

----------------------------------------------------------------------------------------------------------------
Mean Data: CCV
                 Mean Corrected          Calib.                          Sample
Analyte             Intensity     Conc. Units      Std.Dev.     Conc. Units      Std.Dev.   RSD
Y 371.029         2259173.1                                                    22329.19   0.99%
YRADIAL            306112.2                                                     2291.48   0.75%
Ga 417.206        1331047.9                                                    16815.82   1.26%
GaRADIAL            89192.4                                                     1335.66   1.50%
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Ag 328.068†	132586.4	0.402 mg/L	0.0089	0.402 mg/L	0.0089	2.22%
QC value within limits for Ag 328.068 Recovery = 100.49%						
Al 396.153†	77377.2	10.3 mg/L	0.04	10.3 mg/L	0.04	0.36%
QC value within limits for Al 396.153 Recovery = 102.99%						
As 188.979†	1179.2	0.394 mg/L	0.0041	0.394 mg/L	0.0041	1.04%
QC value within limits for As 188.979 Recovery = 98.50%						
Ba 233.527†	163840.2	1.03 mg/L	0.020	1.03 mg/L	0.020	1.95%
QC value within limits for Ba 233.527 Recovery = 102.58%						
Be 234.861†	66435.8	0.0488 mg/L	0.00111	0.0488 mg/L	0.00111	2.27%
QC value within limits for Be 234.861 Recovery = 97.67%						
B 249.677†	44330.3	0.494 mg/L	0.0110	0.494 mg/L	0.0110	2.23%
QC value within limits for B 249.677 Recovery = 98.81%						
Ca 227.546†	4901.1	10.5 mg/L	0.19	10.5 mg/L	0.19	1.83%
QC value within limits for Ca 227.546 Recovery = 104.85%						
Cd 228.802†	2906.3	0.0475 mg/L	0.00140	0.0475 mg/L	0.00140	2.95%
QC value within limits for Cd 228.802 Recovery = 94.99%						
Co 228.616†	8085.1	0.205 mg/L	0.0021	0.205 mg/L	0.0021	1.04%
QC value within limits for Co 228.616 Recovery = 102.46%						
Cr 267.716†	57904.6	0.511 mg/L	0.0092	0.511 mg/L	0.0092	1.80%
QC value within limits for Cr 267.716 Recovery = 102.14%						
Cu 327.393†	142831.3	0.510 mg/L	0.0132	0.510 mg/L	0.0132	2.58%
QC value within limits for Cu 327.393 Recovery = 101.98%						
Fe 239.562†	68167.2	4.11 mg/L	0.046	4.11 mg/L	0.046	1.12%
QC value within limits for Fe 239.562 Recovery = 102.78%						
Mg 279.077†	37839.3	10.3 mg/L	0.13	10.3 mg/L	0.13	1.27%
QC value within limits for Mg 279.077 Recovery = 102.76%						
Mn 257.610†	451314.1	0.523 mg/L	0.0090	0.523 mg/L	0.0090	1.72%
QC value within limits for Mn 257.610 Recovery = 104.56%						
Mo 202.031†	38599.8	1.02 mg/L	0.016	1.02 mg/L	0.016	1.61%
QC value within limits for Mo 202.031 Recovery = 102.16%						
Ni 231.604†	35883.8	0.516 mg/L	0.0095	0.516 mg/L	0.0095	1.83%
QC value within limits for Ni 231.604 Recovery = 103.27%						
Pb 220.353†	5826.6	0.517 mg/L	0.0045	0.517 mg/L	0.0045	0.86%
QC value within limits for Pb 220.353 Recovery = 103.46%						
Sb 206.836†	5268.6	1.21 mg/L	0.020	1.21 mg/L	0.020	1.62%
QC value within limits for Sb 206.836 Recovery = 100.52%						
Se 196.026†	745.6	0.400 mg/L	0.0106	0.400 mg/L	0.0106	2.64%
QC value within limits for Se 196.026 Recovery = 99.90%						
Si 251.611†	221521.4	5.06 mg/L	0.100	5.06 mg/L	0.100	1.97%
QC value within limits for Si 251.611 Recovery = 101.18%						
Sn 189.927†	10782.2	1.02 mg/L	0.011	1.02 mg/L	0.011	1.05%
QC value within limits for Sn 189.927 Recovery = 101.74%						
Ti 334.940†	1054535.5	1.03 mg/L	0.002	1.03 mg/L	0.002	0.24%
QC value within limits for Ti 334.940 Recovery = 103.31%						
Tl 190.801†	2032.7	0.530 mg/L	0.0046	0.530 mg/L	0.0046	0.87%
QC value within limits for Tl 190.801 Recovery = 106.01%						
V 290.880†	204380.5	1.03 mg/L	0.021	1.03 mg/L	0.021	2.04%
QC value within limits for V 290.880 Recovery = 103.47%						
Zn 206.200†	44406.9	1.02 mg/L	0.025	1.02 mg/L	0.025	2.50%
QC value within limits for Zn 206.200 Recovery = 101.53%						
K 766.490†	167877.6	51.5 mg/L	0.38	51.5 mg/L	0.38	0.74%
QC value within limits for K 766.490 Recovery = 102.91%						
Na 589.592†	1038546.7	50.3 mg/L	1.05	50.3 mg/L	1.05	2.09%
QC value within limits for Na 589.592 Recovery = 100.67%						
Sr 407.771†	2865361.4	1.05 mg/L	0.012	1.05 mg/L	0.012	1.14%
QC value within limits for Sr 407.771 Recovery = 105.05%						
Li 670.784†	165499.9	1.06 mg/L	0.009	1.06 mg/L	0.009	0.86%
QC value within limits for Li 670.784 Recovery = 106.10%						

All analyte(s) passed QC.

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Sequence No.: 31 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 5/11/2012 2:28:56 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

Approved: May 14, 2012

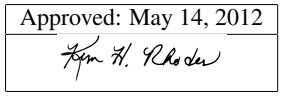
Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2316792.9						25582.45	1.10%
YRADIAL	308605.4						3113.59	1.01%
Ga 417.206	1377348.7						16105.59	1.17%
GaRADIAL	90432.8						2191.78	2.42%
Ag 328.068†	-16.6	-0.00100	mg/L	0.000038	-0.00100	mg/L	0.000038	3.76%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	41.3	-0.0205	mg/L	0.00159	-0.0205	mg/L	0.00159	7.75%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	3.0	0.00185	mg/L	0.000582	0.00185	mg/L	0.000582	31.48%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-9.2	-0.00428	mg/L	0.000110	-0.00428	mg/L	0.000110	2.56%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	32.0	0.00007	mg/L	0.000024	0.00007	mg/L	0.000024	32.06%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	380.4	0.00587	mg/L	0.000317	0.00587	mg/L	0.000317	5.39%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	14.1	0.0723	mg/L	0.01225	0.0723	mg/L	0.01225	16.93%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-6.7	-0.00001	mg/L	0.000284	-0.00001	mg/L	0.000284	>999.9%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-8.2	-0.00096	mg/L	0.000206	-0.00096	mg/L	0.000206	21.43%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	18.3	-0.00222	mg/L	0.000071	-0.00222	mg/L	0.000071	3.22%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-4.8	-0.00099	mg/L	0.000321	-0.00099	mg/L	0.000321	32.33%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	69.9	-0.00574	mg/L	0.000615	-0.00574	mg/L	0.000615	10.72%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	47.3	-0.00365	mg/L	0.002479	-0.00365	mg/L	0.002479	67.93%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	66.6	-0.00346	mg/L	0.000010	-0.00346	mg/L	0.000010	0.30%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-4.9	-0.00383	mg/L	0.000373	-0.00383	mg/L	0.000373	9.74%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	-3.0	-0.00271	mg/L	0.000118	-0.00271	mg/L	0.000118	4.34%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	4.0	-0.00137	mg/L	0.000505	-0.00137	mg/L	0.000505	36.84%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-0.3	-0.00002	mg/L	0.001062	-0.00002	mg/L	0.001062	>999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	0.3	0.00118	mg/L	0.000524	0.00118	mg/L	0.000524	44.48%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	-1.5	-0.0132	mg/L	0.00043	-0.0132	mg/L	0.00043	3.26%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	-14.2	-0.00452	mg/L	0.000692	-0.00452	mg/L	0.000692	15.33%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-157.4	-0.00155	mg/L	0.000163	-0.00155	mg/L	0.000163	10.51%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-3.1	-0.00343	mg/L	0.000819	-0.00343	mg/L	0.000819	23.91%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-211.4	-0.00508	mg/L	0.002873	-0.00508	mg/L	0.002873	56.60%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-19.5	-0.00395	mg/L	0.000146	-0.00395	mg/L	0.000146	3.70%
QC value within limits for Zn 206.200 Recovery = Not calculated								
K 766.490†	-21.2	-0.0469	mg/L	0.01404	-0.0469	mg/L	0.01404	29.95%
QC value within limits for K 766.490 Recovery = Not calculated								
Na 589.592†	46.7	0.0300	mg/L	0.00601	0.0300	mg/L	0.00601	20.07%
QC value within limits for Na 589.592 Recovery = Not calculated								
Sr 407.771†	228.4	-0.00473	mg/L	0.000081	-0.00473	mg/L	0.000081	1.71%
QC value within limits for Sr 407.771 Recovery = Not calculated								
Li 670.784†	-34.9	-0.00531	mg/L	0.000227	-0.00531	mg/L	0.000227	4.28%
QC value within limits for Li 670.784 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 32 **Autosampler Location: 26**
Sample ID: L1205029101 200X **Date Collected: 5/11/2012 2:35:49 PM**
Analyst: KHR **Data Type: Original**

Approved: May 14, 2012



Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205029101 200X

Analyte	Back Pressure	Flow
All	152.0 kPa	0.50 L/min

Mean Data: L1205029101 200X

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2140931.3						8777.37	0.41%
YRADIAL	291876.8						628.60	0.22%
Ga 417.206	1297796.4						37916.34	2.92%
GaRADIAL	87898.9						693.48	0.79%
Ag 328.068†	393.1	0.00036	mg/L	0.000439	0.00036	mg/L	0.000439	122.72%
Al 396.153†	85.7	-0.0145	mg/L	0.00473	-0.0145	mg/L	0.00473	32.58%
As 188.979†	-6.0	-0.00117	mg/L	0.000760	-0.00117	mg/L	0.000760	64.98%
Ba 233.527†	103796.1	0.648	mg/L	0.0037	0.648	mg/L	0.0037	0.58%
Be 234.861†	420.8	0.00031	mg/L	0.000094	0.00031	mg/L	0.000094	30.27%
B 249.677†	6854.6	0.0783	mg/L	0.00400	0.0783	mg/L	0.00400	5.11%
Ca 227.546†	26912.9	54.8	mg/L	1.67	54.8	mg/L	1.67	3.05%
Cd 228.802†	-12.7	-0.00010	mg/L	0.000203	-0.00010	mg/L	0.000203	203.28%
Co 228.616†	-24.3	-0.00158	mg/L	0.000050	-0.00158	mg/L	0.000050	3.16%
Cr 267.716†	35.3	-0.00205	mg/L	0.000309	-0.00205	mg/L	0.000309	15.08%
Cu 327.393†	-366.5	-0.00230	mg/L	0.000418	-0.00230	mg/L	0.000418	18.19%
Fe 239.562†	4216.6	0.245	mg/L	0.0024	0.245	mg/L	0.0024	0.98%
Mg 279.077†	21410.1	5.80	mg/L	0.014	5.80	mg/L	0.014	0.24%
Mn 257.610†	49234.3	0.0538	mg/L	0.00038	0.0538	mg/L	0.00038	0.70%
Mo 202.031†	19.8	-0.00314	mg/L	0.000300	-0.00314	mg/L	0.000300	9.55%
Ni 231.604†	10.5	-0.00252	mg/L	0.000298	-0.00252	mg/L	0.000298	11.84%
Pb 220.353†	26.4	0.00100	mg/L	0.002167	0.00100	mg/L	0.002167	215.75%
Sb 206.836†	-5.1	-0.00108	mg/L	0.001206	-0.00108	mg/L	0.001206	111.62%
Se 196.026†	-9.1	-0.00378	mg/L	0.001177	-0.00378	mg/L	0.001177	31.11%
Si 251.611†	2399.3	0.0419	mg/L	0.00239	0.0419	mg/L	0.00239	5.71%
Sn 189.927†	-289.0	-0.0305	mg/L	0.00012	-0.0305	mg/L	0.00012	0.39%
Ti 334.940†	-9476.7	-0.00247	mg/L	0.000760	-0.00247	mg/L	0.000760	30.72%
Tl 190.801†	-16.4	-0.00693	mg/L	0.003750	-0.00693	mg/L	0.003750	54.11%
V 290.880†	1758.5	0.00473	mg/L	0.000392	0.00473	mg/L	0.000392	8.28%
Zn 206.200†	18.2	-0.00309	mg/L	0.000349	-0.00309	mg/L	0.000349	11.30%
K 766.490†	3691.1	0.945	mg/L	0.0218	0.945	mg/L	0.0218	2.31%
Na 589.592†	2520760.9	134	mg/L	0.4	134	mg/L	0.4	0.28%
Sr 407.771†	Saturated2							
Li 670.784†	34713.5	0.219	mg/L	0.0035	0.219	mg/L	0.0035	1.59%

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Sequence No.: 33 **Autosampler Location: 27**
Sample ID: L1205029201 200X **Date Collected: 5/11/2012 2:41:48 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205029201 200X

Analyte	Back Pressure	Flow
All	152.0 kPa	0.50 L/min

Mean Data: L1205029201 200X

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2189904.4						35308.08	1.61%
YRADIAL	298741.6						1010.60	0.34%
Ga 417.206	1329110.0						24866.67	1.87%
GaRADIAL	90181.1						708.53	0.79%
Ag 328.068†	431.8	0.00067	mg/L	0.000525	0.00067	mg/L	0.000525	78.67%
Al 396.153†	-26.1	-0.0295	mg/L	0.00845	-0.0295	mg/L	0.00845	28.70%
As 188.979†	5.9	0.00289	mg/L	0.000704	0.00289	mg/L	0.000704	24.35%
Ba 233.527†	2990172.5	18.8	mg/L	0.19	18.8	mg/L	0.19	1.02%
Be 234.861†	777.6	0.00048	mg/L	0.000083	0.00048	mg/L	0.000083	17.51%
B 249.677†	7105.4	0.0810	mg/L	0.00221	0.0810	mg/L	0.00221	2.73%

Approved: May 14, 2012

Ca 227.546†	41903.8	85.3	mg/L	3.28	85.3	mg/L	3.28	3.84%
Cd 228.802†	-12.5	-0.00021	mg/L	0.000319	-0.00021	mg/L	0.000319	151.82%
Co 228.616†	-1036.5	-0.0335	mg/L	0.00122	-0.0335	mg/L	0.00122	3.63%
Cr 267.716†	66.4	-0.00176	mg/L	0.000127	-0.00176	mg/L	0.000127	7.19%
Cu 327.393†	-296.9	-0.00205	mg/L	0.000200	-0.00205	mg/L	0.000200	9.78%
Fe 239.562†	11475.9	0.684	mg/L	0.0081	0.684	mg/L	0.0081	1.19%
Mg 279.077†	29262.8	7.93	mg/L	0.148	7.93	mg/L	0.148	1.87%
Mn 257.610†	29735.1	0.0311	mg/L	0.00043	0.0311	mg/L	0.00043	1.39%
Mo 202.031†	9.6	-0.00340	mg/L	0.000311	-0.00340	mg/L	0.000311	9.15%
Ni 231.604†	64.4	-0.00171	mg/L	0.000557	-0.00171	mg/L	0.000557	32.58%
Pb 220.353†	26.9	0.00127	mg/L	0.001080	0.00127	mg/L	0.001080	84.88%
Sb 206.836†	-7.1	-0.00151	mg/L	0.000205	-0.00151	mg/L	0.000205	13.62%
Se 196.026†	-4.7	-0.00131	mg/L	0.000875	-0.00131	mg/L	0.000875	66.95%
Si 251.611†	2947.4	0.0545	mg/L	0.00160	0.0545	mg/L	0.00160	2.94%
Sn 189.927†	-317.3	-0.0332	mg/L	0.00118	-0.0332	mg/L	0.00118	3.54%
Ti 334.940†	-14579.9	-0.00290	mg/L	0.001152	-0.00290	mg/L	0.001152	39.72%
Tl 190.801†	-16.8	-0.00706	mg/L	0.002087	-0.00706	mg/L	0.002087	29.55%
V 290.880†	1350.5	0.00180	mg/L	0.001874	0.00180	mg/L	0.001874	103.86%
Zn 206.200†	12.7	-0.00322	mg/L	0.000274	-0.00322	mg/L	0.000274	8.50%
K 766.490†	3791.6	0.993	mg/L	0.0305	0.993	mg/L	0.0305	3.07%
Na 589.592†	2239902.3	117	mg/L	1.5	117	mg/L	1.5	1.29%
Sr 407.771†	Saturated3							
Li 670.784†	66952.9	0.426	mg/L	0.0077	0.426	mg/L	0.0077	1.82%

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Sequence No.: 34 **Autosampler Location: 28**
Sample ID: L1205029301 200X **Date Collected: 5/11/2012 2:47:47 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205029301 200X

Analyte	Back Pressure	Flow
All	152.0 kPa	0.50 L/min

Mean Data: L1205029301 200X

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2184406.8						36234.29	1.66%
YRADIAL	297429.9						1358.02	0.46%
Ga 417.206	1328022.9						16721.96	1.26%
GaRADIAL	88986.7						615.40	0.69%
Ag 328.068†	426.1	0.00081	mg/L	0.000480	0.00081	mg/L	0.000480	58.86%
Al 396.153†	-6.1	-0.0267	mg/L	0.00647	-0.0267	mg/L	0.00647	24.21%
As 188.979†	-2.7	0.00004	mg/L	0.004528	0.00004	mg/L	0.004528	>999.9%
Ba 233.527†	175902.2	1.10	mg/L	0.009	1.10	mg/L	0.009	0.80%
Be 234.861†	612.2	0.00028	mg/L	0.000064	0.00028	mg/L	0.000064	23.23%
B 249.677†	3708.3	0.0427	mg/L	0.00118	0.0427	mg/L	0.00118	2.76%
Ca 227.546†	38289.4	77.9	mg/L	1.49	77.9	mg/L	1.49	1.91%
Cd 228.802†	-6.6	-0.00001	mg/L	0.000105	-0.00001	mg/L	0.000105	>999.9%
Co 228.616†	-41.7	-0.00219	mg/L	0.000058	-0.00219	mg/L	0.000058	2.65%
Cr 267.716†	25.9	-0.00211	mg/L	0.000117	-0.00211	mg/L	0.000117	5.57%
Cu 327.393†	-241.2	-0.00179	mg/L	0.000248	-0.00179	mg/L	0.000248	13.84%
Fe 239.562†	18029.7	1.08	mg/L	0.008	1.08	mg/L	0.008	0.78%
Mg 279.077†	29543.1	8.01	mg/L	0.034	8.01	mg/L	0.034	0.42%
Mn 257.610†	119082.0	0.135	mg/L	0.0020	0.135	mg/L	0.0020	1.49%
Mo 202.031†	7.8	-0.00340	mg/L	0.000458	-0.00340	mg/L	0.000458	13.47%
Ni 231.604†	12.8	-0.00248	mg/L	0.000276	-0.00248	mg/L	0.000276	11.12%
Pb 220.353†	29.3	0.00132	mg/L	0.000881	0.00132	mg/L	0.000881	66.63%
Sb 206.836†	-15.1	-0.00335	mg/L	0.001319	-0.00335	mg/L	0.001319	39.43%
Se 196.026†	-4.5	-0.00109	mg/L	0.000290	-0.00109	mg/L	0.000290	26.63%
Si 251.611†	232.4	-0.00785	mg/L	0.000665	-0.00785	mg/L	0.000665	8.48%
Sn 189.927†	-312.8	-0.0328	mg/L	0.00075	-0.0328	mg/L	0.00075	2.30%
Ti 334.940†	-13269.2	-0.00272	mg/L	0.001182	-0.00272	mg/L	0.001182	43.46%
Tl 190.801†	-13.8	-0.00642	mg/L	0.000586	-0.00642	mg/L	0.000586	9.13%
V 290.880†	1609.7	0.00377	mg/L	0.001458	0.00377	mg/L	0.001458	38.71%
Zn 206.200†	162.4	0.00018	mg/L	0.000079	0.00018	mg/L	0.000079	43.15%
K 766.490†	2424.7	0.568	mg/L	0.0198	0.568	mg/L	0.0198	3.48%
Na 589.592†	2412974.1	127	mg/L	0.7	127	mg/L	0.7	0.54%
Sr 407.771†	Saturated2							

Approved: May 14, 2012

Li 670.784†	38810.4	0.245	mg/L	0.0033	0.245	mg/L	0.0033 1.33%

Sequence No.: 35 **Autosampler Location: 29**
Sample ID: L1205029401 200X **Date Collected: 5/11/2012 2:53:46 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205029401 200X

Analyte	Back Pressure	Flow
All	152.0 kPa	0.50 L/min

Mean Data: L1205029401 200X

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2177781.6						13056.08	0.60%
YRADIAL	299389.3						2522.00	0.84%
Ga 417.206	1327423.9						31141.39	2.35%
GaRADIAL	89223.6						796.01	0.89%
Ag 328.068†	304.0	0.00010	mg/L	0.000938	0.00010	mg/L	0.000938	930.42%
Al 396.153†	-19.1	-0.0285	mg/L	0.00441	-0.0285	mg/L	0.00441	15.45%
As 188.979†	6.9	0.00317	mg/L	0.001708	0.00317	mg/L	0.001708	53.82%
Ba 233.527†	222663.3	1.40	mg/L	0.013	1.40	mg/L	0.013	0.93%
Be 234.861†	527.4	0.00038	mg/L	0.000046	0.00038	mg/L	0.000046	12.05%
B 249.677†	33814.8	0.380	mg/L	0.0157	0.380	mg/L	0.0157	4.13%
Ca 227.546†	19884.4	40.5	mg/L	1.92	40.5	mg/L	1.92	4.75%
Cd 228.802†	-10.6	-0.00009	mg/L	0.000251	-0.00009	mg/L	0.000251	278.37%
Co 228.616†	-69.4	-0.00299	mg/L	0.000194	-0.00299	mg/L	0.000194	6.49%
Cr 267.716†	2.1	-0.00235	mg/L	0.000076	-0.00235	mg/L	0.000076	3.26%
Cu 327.393†	-204.0	-0.00172	mg/L	0.000027	-0.00172	mg/L	0.000027	1.57%
Fe 239.562†	4547.1	0.265	mg/L	0.0034	0.265	mg/L	0.0034	1.30%
Mg 279.077†	14738.7	3.99	mg/L	0.033	3.99	mg/L	0.033	0.83%
Mn 257.610†	7757.9	0.00551	mg/L	0.000161	0.00551	mg/L	0.000161	2.92%
Mo 202.031†	1.0	-0.00365	mg/L	0.000403	-0.00365	mg/L	0.000403	11.05%
Ni 231.604†	3.8	-0.00261	mg/L	0.000383	-0.00261	mg/L	0.000383	14.65%
Pb 220.353†	19.2	0.00027	mg/L	0.000878	0.00027	mg/L	0.000878	321.21%
Sb 206.836†	-15.3	-0.00342	mg/L	0.001034	-0.00342	mg/L	0.001034	30.27%
Se 196.026†	-6.5	-0.00235	mg/L	0.003056	-0.00235	mg/L	0.003056	130.29%
Si 251.611†	1265.6	0.0159	mg/L	0.00153	0.0159	mg/L	0.00153	9.66%
Sn 189.927†	-270.9	-0.0288	mg/L	0.00107	-0.0288	mg/L	0.00107	3.72%
Ti 334.940†	-7206.9	-0.00239	mg/L	0.000551	-0.00239	mg/L	0.000551	23.01%
Tl 190.801†	-11.2	-0.00555	mg/L	0.003091	-0.00555	mg/L	0.003091	55.65%
V 290.880†	1429.8	0.00307	mg/L	0.001028	0.00307	mg/L	0.001028	33.45%
Zn 206.200†	23.5	-0.00297	mg/L	0.000506	-0.00297	mg/L	0.000506	17.02%
K 766.490†	20339.8	5.97	mg/L	0.016	5.97	mg/L	0.016	0.27%
Na 589.592†	2996049.3	165	mg/L	0.9	165	mg/L	0.9	0.55%
Sr 407.771†	Saturated2							
Li 670.784†	42222.3	0.267	mg/L	0.0016	0.267	mg/L	0.0016	0.61%

Sequence No.: 36 **Autosampler Location: 30**
Sample ID: L1205029501 200X **Date Collected: 5/11/2012 2:59:45 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205029501 200X

Analyte	Back Pressure	Flow
All	152.0 kPa	0.50 L/min

Mean Data: L1205029501 200X

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2223962.9						24645.06	1.11%
YRADIAL	302924.5						2769.19	0.91%
Ga 417.206	1323008.4						33521.11	2.53%
GaRADIAL	90187.3						2089.75	2.32%

Approved: May 14, 2012

Ag 328.068†	273.7	-0.00007	mg/L	0.000092	-0.00007	mg/L	0.000092 129.02%
Al 396.153†	-41.9	-0.0316	mg/L	0.00740	-0.0316	mg/L	0.00740 23.43%
As 188.979†	-3.3	-0.00023	mg/L	0.001988	-0.00023	mg/L	0.001988 850.57%
Ba 233.527†	34601.9	0.213	mg/L	0.0031	0.213	mg/L	0.0031 1.45%
Be 234.861†	588.3	0.00040	mg/L	0.000060	0.00040	mg/L	0.000060 15.22%
B 249.677†	457.5	0.00656	mg/L	0.000455	0.00656	mg/L	0.000455 6.94%
Ca 227.546†	21372.8	43.5	mg/L	1.48	43.5	mg/L	1.48 3.40%
Cd 228.802†	-3.9	0.00005	mg/L	0.000147	0.00005	mg/L	0.000147 322.53%
Co 228.616†	-1.7	-0.00086	mg/L	0.000183	-0.00086	mg/L	0.000183 21.22%
Cr 267.716†	15.2	-0.00223	mg/L	0.000030	-0.00223	mg/L	0.000030 1.37%
Cu 327.393†	-100.2	-0.00130	mg/L	0.000127	-0.00130	mg/L	0.000127 9.76%
Fe 239.562†	6907.4	0.408	mg/L	0.0104	0.408	mg/L	0.0104 2.54%
Mg 279.077†	29550.6	8.01	mg/L	0.192	8.01	mg/L	0.192 2.39%
Mn 257.610†	10515.6	0.00873	mg/L	0.000275	0.00873	mg/L	0.000275 3.15%
Mo 202.031†	2.7	-0.00360	mg/L	0.000248	-0.00360	mg/L	0.000248 6.89%
Ni 231.604†	14.6	-0.00246	mg/L	0.000413	-0.00246	mg/L	0.000413 16.77%
Pb 220.353†	23.0	0.00062	mg/L	0.001327	0.00062	mg/L	0.001327 215.25%
Sb 206.836†	-11.6	-0.00257	mg/L	0.001007	-0.00257	mg/L	0.001007 39.10%
Se 196.026†	-10.4	-0.00440	mg/L	0.003462	-0.00440	mg/L	0.003462 78.63%
Si 251.611†	636.6	0.00143	mg/L	0.000961	0.00143	mg/L	0.000961 67.42%
Sn 189.927†	-272.9	-0.0290	mg/L	0.00042	-0.0290	mg/L	0.00042 1.44%
Ti 334.940†	-7368.6	-0.00210	mg/L	0.000461	-0.00210	mg/L	0.000461 21.96%
Tl 190.801†	0.1	-0.00267	mg/L	0.002989	-0.00267	mg/L	0.002989 111.92%
V 290.880†	1193.1	0.00179	mg/L	0.000927	0.00179	mg/L	0.000927 51.81%
Zn 206.200†	-5.9	-0.00365	mg/L	0.000149	-0.00365	mg/L	0.000149 4.10%
K 766.490†	2008.4	0.434	mg/L	0.0158	0.434	mg/L	0.0158 3.65%
Na 589.592†	2539882.3	135	mg/L	0.6	135	mg/L	0.6 0.42%
Sr 407.771†	1925296.7	0.703	mg/L	0.0095	0.703	mg/L	0.0095 1.35%
Li 670.784†	3194.1	0.0155	mg/L	0.00107	0.0155	mg/L	0.00107 6.93%

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Sequence No.: 37 **Autosampler Location: 31**
Sample ID: L1205029601 200X **Date Collected: 5/11/2012 3:05:45 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205029601 200X

Analyte	Back Pressure	Flow
All	152.0 kPa	0.50 L/min

Mean Data: L1205029601 200X

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2127879.1						27859.70	1.31%
YRADIAL	294257.5						526.79	0.18%
Ga 417.206	1341236.9						53510.33	3.99%
GaRADIAL	88970.2						141.50	0.16%
Ag 328.068†	475.7	0.00072	mg/L	0.000467	0.00072	mg/L	0.000467	64.43%
Al 396.153†	-81.6	-0.0369	mg/L	0.00218	-0.0369	mg/L	0.00218	5.90%
As 188.979†	6.2	0.00297	mg/L	0.002490	0.00297	mg/L	0.002490	83.90%
Ba 233.527†	6349700.4	39.9	mg/L	0.36	39.9	mg/L	0.36	0.90%
Be 234.861†	880.1	0.00059	mg/L	0.000100	0.00059	mg/L	0.000100	16.99%
B 249.677†	5635.4	0.0648	mg/L	0.00305	0.0648	mg/L	0.00305	4.71%
Ca 227.546†	39878.8	81.2	mg/L	3.57	81.2	mg/L	3.57	4.40%
Cd 228.802†	-1.4	-0.00015	mg/L	0.000158	-0.00015	mg/L	0.000158	105.74%
Co 228.616†	-2381.0	-0.0750	mg/L	0.00292	-0.0750	mg/L	0.00292	3.89%
Cr 267.716†	67.3	-0.00176	mg/L	0.000152	-0.00176	mg/L	0.000152	8.65%
Cu 327.393†	-326.9	-0.00216	mg/L	0.000589	-0.00216	mg/L	0.000589	27.23%
Fe 239.562†	8523.7	0.505	mg/L	0.0059	0.505	mg/L	0.0059	1.16%
Mg 279.077†	29876.6	8.10	mg/L	0.014	8.10	mg/L	0.014	0.18%
Mn 257.610†	20266.6	0.0201	mg/L	0.00047	0.0201	mg/L	0.00047	2.32%
Mo 202.031†	15.6	-0.00325	mg/L	0.000653	-0.00325	mg/L	0.000653	20.12%
Ni 231.604†	114.0	-0.00096	mg/L	0.000840	-0.00096	mg/L	0.000840	87.79%
Pb 220.353†	19.5	0.00062	mg/L	0.001578	0.00062	mg/L	0.001578	255.21%
Sb 206.836†	-9.5	-0.00205	mg/L	0.000257	-0.00205	mg/L	0.000257	12.52%
Se 196.026†	-10.2	-0.00429	mg/L	0.001466	-0.00429	mg/L	0.001466	34.21%
Si 251.611†	2485.2	0.0438	mg/L	0.00276	0.0438	mg/L	0.00276	6.29%
Sn 189.927†	-322.2	-0.0337	mg/L	0.00084	-0.0337	mg/L	0.00084	2.50%
Ti 334.940†	-14174.4	-0.00312	mg/L	0.001306	-0.00312	mg/L	0.001306	41.86%

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Tl 190.801†	-13.7	-0.00621 mg/L	0.003089	-0.00621 mg/L	0.003089	49.77%
V 290.880†	1650.7	0.00251 mg/L	0.001951	0.00251 mg/L	0.001951	77.71%
Zn 206.200†	-23.8	-0.00405 mg/L	0.000402	-0.00405 mg/L	0.000402	9.93%
K 766.490†	4213.9	1.10 mg/L	0.003	1.10 mg/L	0.003	0.26%
Na 589.592†	2549380.9	136 mg/L	0.4	136 mg/L	0.4	0.31%
Sr 407.771†	Saturated3					
Li 670.784†	73917.9	0.471 mg/L	0.0073	0.471 mg/L	0.0073	1.55%

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Sequence No.: 38 **Autosampler Location: 32**
Sample ID: L1205029702 **Date Collected: 5/11/2012 3:11:46 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205029702

Analyte	Back Pressure	Flow
All	152.0 kPa	0.50 L/min

Mean Data: L1205029702

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2199404.2						34411.98	1.56%
YRADIAL	302831.1						3357.29	1.11%
Ga 417.206	1439623.3						21315.98	1.48%
GaRADIAL	94363.1						2409.13	2.55%
Ag 328.068†	418.3	0.00018	mg/L	0.000301	0.00018	mg/L	0.000301	170.24%
Al 396.153†	-15.0	-0.0281	mg/L	0.00067	-0.0281	mg/L	0.00067	2.39%
As 188.979†	-8.3	-0.00197	mg/L	0.003666	-0.00197	mg/L	0.003666	185.83%
Ba 233.527†	14152.8	0.0847	mg/L	0.00334	0.0847	mg/L	0.00334	3.95%
Be 234.861†	180.5	0.00024	mg/L	0.000021	0.00024	mg/L	0.000021	8.47%
B 249.677†	1195.5	0.0150	mg/L	0.00049	0.0150	mg/L	0.00049	3.28%
Ca 227.546†	47958.1	97.8	mg/L	2.43	97.8	mg/L	2.43	2.49%
Cd 228.802†	-24.0	-0.00026	mg/L	0.000204	-0.00026	mg/L	0.000204	77.11%
Co 228.616†	42.9	0.00031	mg/L	0.000056	0.00031	mg/L	0.000056	18.01%
Cr 267.716†	245.7	-0.00020	mg/L	0.000080	-0.00020	mg/L	0.000080	40.06%
Cu 327.393†	-109.5	-0.00143	mg/L	0.000472	-0.00143	mg/L	0.000472	33.00%
Fe 239.562†	936.0	0.0453	mg/L	0.00054	0.0453	mg/L	0.00054	1.18%
Mg 279.077†	242412.9	65.8	mg/L	0.17	65.8	mg/L	0.17	0.26%
Mn 257.610†	571866.7	0.663	mg/L	0.0040	0.663	mg/L	0.0040	0.61%
Mo 202.031†	39.6	-0.00250	mg/L	0.000118	-0.00250	mg/L	0.000118	4.74%
Ni 231.604†	23697.4	0.340	mg/L	0.0085	0.340	mg/L	0.0085	2.50%
Pb 220.353†	19.4	0.00044	mg/L	0.000855	0.00044	mg/L	0.000855	195.19%
Sb 206.836†	-8.1	-0.00155	mg/L	0.000604	-0.00155	mg/L	0.000604	39.04%
Se 196.026†	-0.1	0.00090	mg/L	0.003490	0.00090	mg/L	0.003490	386.09%
Si 251.611†	166141.0	3.80	mg/L	0.060	3.80	mg/L	0.060	1.59%
Sn 189.927†	-307.7	-0.0323	mg/L	0.00099	-0.0323	mg/L	0.00099	3.07%
Ti 334.940†	-19699.0	-0.00607	mg/L	0.001055	-0.00607	mg/L	0.001055	17.39%
Tl 190.801†	-27.2	-0.0104	mg/L	0.00191	-0.0104	mg/L	0.00191	18.32%
V 290.880†	916.7	-0.00106	mg/L	0.000327	-0.00106	mg/L	0.000327	30.87%
Zn 206.200†	9.5	-0.00320	mg/L	0.000081	-0.00320	mg/L	0.000081	2.52%
K 766.490†	1015.5	0.201	mg/L	0.0053	0.201	mg/L	0.0053	2.65%
Na 589.592†	1341449.1	66.1	mg/L	1.46	66.1	mg/L	1.46	2.21%
Sr 407.771†	1107859.8	0.401	mg/L	0.0113	0.401	mg/L	0.0113	2.82%
Li 670.784†	245.9	-0.00350	mg/L	0.000115	-0.00350	mg/L	0.000115	3.29%

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Sequence No.: 39 **Autosampler Location: 33**
Sample ID: L1205029704 **Date Collected: 5/11/2012 3:18:43 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205029704

Analyte	Back Pressure	Flow
All	152.0 kPa	0.50 L/min

Mean Data: L1205029704

Approved: May 14, 2012

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2190097.2						16245.07	0.74%
YRADIAL	300407.1						2792.18	0.93%
Ga 417.206	1395317.5						24912.17	1.79%
GaRADIAL	92352.9						315.80	0.34%
Ag 328.068†	-304.2	0.00212	mg/L	0.000210	0.00212	mg/L	0.000210	9.92%
Al 396.153†	-46.7	-0.0312	mg/L	0.00657	-0.0312	mg/L	0.00657	21.05%
As 188.979†	34.4	0.0135	mg/L	0.00116	0.0135	mg/L	0.00116	8.57%
Ba 233.527†	102770.6	0.641	mg/L	0.0064	0.641	mg/L	0.0064	1.00%
Be 234.861†	2689.3	0.00000	mg/L	0.000085	0.00000	mg/L	0.000085	>999.9%
B 249.677†	4006.7	0.0424	mg/L	0.00095	0.0424	mg/L	0.00095	2.24%
Ca 227.546†	76316.9	155	mg/L	3.5	155	mg/L	3.5	2.27%
Cd 228.802†	12.2	0.00023	mg/L	0.000181	0.00023	mg/L	0.000181	77.67%
Co 228.616†	-21.0	-0.00169	mg/L	0.000112	-0.00169	mg/L	0.000112	6.61%
Cr 267.716†	170.3	-0.00054	mg/L	0.000109	-0.00054	mg/L	0.000109	20.01%
Cu 327.393†	-383.3	-0.00157	mg/L	0.000444	-0.00157	mg/L	0.000444	28.24%
Fe 239.562†	155554.8	9.40	mg/L	0.126	9.40	mg/L	0.126	1.34%
Mg 279.077†	196439.0	53.3	mg/L	0.37	53.3	mg/L	0.37	0.70%
Mn 257.610†	441417.7	0.511	mg/L	0.0058	0.511	mg/L	0.0058	1.13%
Mo 202.031†	33.3	-0.00224	mg/L	0.000129	-0.00224	mg/L	0.000129	5.77%
Ni 231.604†	52.9	-0.00190	mg/L	0.000445	-0.00190	mg/L	0.000445	23.38%
Pb 220.353†	10.7	-0.00066	mg/L	0.001012	-0.00066	mg/L	0.001012	152.43%
Sb 206.836†	-9.8	-0.00183	mg/L	0.001454	-0.00183	mg/L	0.001454	79.48%
Se 196.026†	-2.3	0.00244	mg/L	0.002579	0.00244	mg/L	0.002579	105.77%
Si 251.611†	308763.5	7.07	mg/L	0.107	7.07	mg/L	0.107	1.52%
Sn 189.927†	-327.2	-0.0341	mg/L	0.00007	-0.0341	mg/L	0.00007	0.20%
Ti 334.940†	-26594.1	-0.00417	mg/L	0.001984	-0.00417	mg/L	0.001984	47.52%
Tl 190.801†	-28.6	-0.0107	mg/L	0.00182	-0.0107	mg/L	0.00182	16.98%
V 290.880†	2041.5	0.00349	mg/L	0.001084	0.00349	mg/L	0.001084	31.08%
Zn 206.200†	12.6	-0.00338	mg/L	0.000034	-0.00338	mg/L	0.000034	1.00%
K 766.490†	3190.8	0.867	mg/L	0.0141	0.867	mg/L	0.0141	1.63%
Na 589.592†	1245474.1	61.0	mg/L	0.55	61.0	mg/L	0.55	0.91%
Sr 407.771†	1909804.1	0.695	mg/L	0.0060	0.695	mg/L	0.0060	0.86%
Li 670.784†	542.7	-0.00159	mg/L	0.000584	-0.00159	mg/L	0.000584	36.68%

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Sequence No.: 40 **Autosampler Location: 34**
Sample ID: L1205029706 **Date Collected: 5/11/2012 3:24:45 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205029706

Analyte	Back Pressure	Flow
All	152.0 kPa	0.50 L/min

Mean Data: L1205029706

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2217812.0						20116.71	0.91%
YRADIAL	311763.2						3840.89	1.23%
Ga 417.206	1439420.6						32545.41	2.26%
GaRADIAL	92969.1						1099.97	1.18%
Ag 328.068†	512.3	0.00145	mg/L	0.000545	0.00145	mg/L	0.000545	37.51%
Al 396.153†	12823.0	1.70	mg/L	0.010	1.70	mg/L	0.010	0.61%
As 188.979†	-9.2	-0.00211	mg/L	0.001026	-0.00211	mg/L	0.001026	48.72%
Ba 233.527†	8788.2	0.0510	mg/L	0.00050	0.0510	mg/L	0.00050	0.99%
Be 234.861†	1017.9	0.00037	mg/L	0.000058	0.00037	mg/L	0.000058	15.61%
B 249.677†	3990.2	0.0454	mg/L	0.00152	0.0454	mg/L	0.00152	3.36%
Ca 227.546†	57314.5	117	mg/L	3.4	117	mg/L	3.4	2.88%
Cd 228.802†	26.5	0.00057	mg/L	0.000250	0.00057	mg/L	0.000250	43.97%
Co 228.616†	74.3	0.00107	mg/L	0.000080	0.00107	mg/L	0.000080	7.44%
Cr 267.716†	387.7	0.00110	mg/L	0.000075	0.00110	mg/L	0.000075	6.88%
Cu 327.393†	377.0	0.00054	mg/L	0.000289	0.00054	mg/L	0.000289	53.13%
Fe 239.562†	32730.0	1.97	mg/L	0.002	1.97	mg/L	0.002	0.11%
Mg 279.077†	105211.7	28.6	mg/L	0.14	28.6	mg/L	0.14	0.50%
Mn 257.610†	63774.5	0.0708	mg/L	0.00053	0.0708	mg/L	0.00053	0.75%
Mo 202.031†	29.9	-0.00278	mg/L	0.000183	-0.00278	mg/L	0.000183	6.58%
Ni 231.604†	319.1	0.00195	mg/L	0.000496	0.00195	mg/L	0.000496	25.44%

Approved: May 14, 2012

Pb 220.353†	32.1	0.00212 mg/L	0.001187	0.00212 mg/L	0.001187	55.89%
Sb 206.836†	-5.8	-0.00120 mg/L	0.001314	-0.00120 mg/L	0.001314	109.21%
Se 196.026†	-8.3	-0.00284 mg/L	0.003500	-0.00284 mg/L	0.003500	123.06%
Si 251.611†	394635.3	9.04 mg/L	0.199	9.04 mg/L	0.199	2.20%
Sn 189.927†	-294.3	-0.0310 mg/L	0.00080	-0.0310 mg/L	0.00080	2.59%
Ti 334.940†	3857.7	0.0199 mg/L	0.00225	0.0199 mg/L	0.00225	11.32%
Tl 190.801†	-30.0	-0.0102 mg/L	0.00100	-0.0102 mg/L	0.00100	9.75%
V 290.880†	2218.4	0.00623 mg/L	0.000519	0.00623 mg/L	0.000519	8.33%
Zn 206.200†	916.5	0.0174 mg/L	0.00016	0.0174 mg/L	0.00016	0.94%
K 766.490†	2438.5	0.633 mg/L	0.0355	0.633 mg/L	0.0355	5.60%
Na 589.592†	1343395.5	66.2 mg/L	0.26	66.2 mg/L	0.26	0.39%
Sr 407.771†	425415.0	0.149 mg/L	0.0000	0.149 mg/L	0.0000	0.02%
Li 670.784†	1563.7	0.00498 mg/L	0.000523	0.00498 mg/L	0.000523	10.49%

Sequence No.: 41 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 5/11/2012 3:30:45 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	153.0 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	2312310.8						23319.44	1.01%
YRADIAL	319390.3						1065.88	0.33%
Ga 417.206	1369914.1						24602.53	1.80%
GaRADIAL	93723.6						902.17	0.96%
Ag 328.068†	125370.7	0.380	mg/L	0.0103	0.380	mg/L	0.0103	2.71%
QC value within limits for Ag 328.068 Recovery = 95.01%								
Al 396.153†	73600.4	9.80	mg/L	0.041	9.80	mg/L	0.041	0.42%
QC value within limits for Al 396.153 Recovery = 97.95%								
As 188.979†	1114.5	0.372	mg/L	0.0056	0.372	mg/L	0.0056	1.51%
QC value within limits for As 188.979 Recovery = 93.09%								
Ba 233.527†	155274.0	0.972	mg/L	0.0015	0.972	mg/L	0.0015	0.15%
QC value within limits for Ba 233.527 Recovery = 97.20%								
Be 234.861†	63380.4	0.0466	mg/L	0.00140	0.0466	mg/L	0.00140	3.01%
QC value within limits for Be 234.861 Recovery = 93.21%								
B 249.677†	42259.1	0.471	mg/L	0.0116	0.471	mg/L	0.0116	2.47%
QC value within limits for B 249.677 Recovery = 94.22%								
Ca 227.546†	4639.6	9.94	mg/L	0.209	9.94	mg/L	0.209	2.10%
QC value within limits for Ca 227.546 Recovery = 99.40%								
Cd 228.802†	2748.1	0.0449	mg/L	0.00146	0.0449	mg/L	0.00146	3.24%
QC value less than the lower limit for Cd 228.802 Recovery = 89.83%								
Co 228.616†	7638.8	0.194	mg/L	0.0030	0.194	mg/L	0.0030	1.54%
QC value within limits for Co 228.616 Recovery = 96.78%								
Cr 267.716†	54703.9	0.482	mg/L	0.0026	0.482	mg/L	0.0026	0.53%
QC value within limits for Cr 267.716 Recovery = 96.46%								
Cu 327.393†	136261.4	0.486	mg/L	0.0099	0.486	mg/L	0.0099	2.03%
QC value within limits for Cu 327.393 Recovery = 97.28%								
Fe 239.562†	63911.8	3.85	mg/L	0.041	3.85	mg/L	0.041	1.06%
QC value within limits for Fe 239.562 Recovery = 96.35%								
Mg 279.077†	35765.5	9.71	mg/L	0.075	9.71	mg/L	0.075	0.78%
QC value within limits for Mg 279.077 Recovery = 97.12%								
Mn 257.610†	420942.3	0.487	mg/L	0.0026	0.487	mg/L	0.0026	0.54%
QC value within limits for Mn 257.610 Recovery = 97.47%								
Mo 202.031†	36846.5	0.975	mg/L	0.0059	0.975	mg/L	0.0059	0.60%
QC value within limits for Mo 202.031 Recovery = 97.50%								
Ni 231.604†	35015.6	0.504	mg/L	0.0067	0.504	mg/L	0.0067	1.32%
QC value within limits for Ni 231.604 Recovery = 100.76%								
Pb 220.353†	5516.8	0.490	mg/L	0.0059	0.490	mg/L	0.0059	1.21%
QC value within limits for Pb 220.353 Recovery = 97.94%								
Sb 206.836†	4975.5	1.14	mg/L	0.023	1.14	mg/L	0.023	2.00%
QC value within limits for Sb 206.836 Recovery = 94.93%								
Se 196.026†	708.8	0.380	mg/L	0.0124	0.380	mg/L	0.0124	3.27%
QC value within limits for Se 196.026 Recovery = 94.97%								

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Si 251.611†	209165.8	4.78 mg/L	0.094	4.78 mg/L	0.094	1.96%
QC value within limits for Si 251.611 Recovery = 95.52%						
Sn 189.927†	10166.3	0.959 mg/L	0.0132	0.959 mg/L	0.0132	1.38%
QC value within limits for Sn 189.927 Recovery = 95.91%						
Ti 334.940†	1006349.5	0.986 mg/L	0.0012	0.986 mg/L	0.0012	0.12%
QC value within limits for Ti 334.940 Recovery = 98.58%						
Tl 190.801†	1958.9	0.511 mg/L	0.0036	0.511 mg/L	0.0036	0.71%
QC value within limits for Tl 190.801 Recovery = 102.11%						
V 290.880†	192657.8	0.975 mg/L	0.0040	0.975 mg/L	0.0040	0.41%
QC value within limits for V 290.880 Recovery = 97.51%						
Zn 206.200†	41553.6	0.950 mg/L	0.0107	0.950 mg/L	0.0107	1.13%
QC value within limits for Zn 206.200 Recovery = 94.99%						
K 766.490†	160557.2	49.2 mg/L	0.25	49.2 mg/L	0.25	0.50%
QC value within limits for K 766.490 Recovery = 98.36%						
Na 589.592†	975273.8	47.1 mg/L	0.73	47.1 mg/L	0.73	1.56%
QC value within limits for Na 589.592 Recovery = 94.22%						
Sr 407.771†	2694099.7	0.987 mg/L	0.0051	0.987 mg/L	0.0051	0.51%
QC value within limits for Sr 407.771 Recovery = 98.74%						
Li 670.784†	159571.3	1.02 mg/L	0.016	1.02 mg/L	0.016	1.57%
QC value within limits for Li 670.784 Recovery = 102.28%						

QC Failed. Continue with analysis.

Sequence No.: 42 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 5/11/2012 3:36:44 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	2357513.0						28229.14	1.20%
YRADIAL	314425.0						3628.35	1.15%
Ga 417.206	1382719.3						18182.70	1.31%
GaRADIAL	92784.2						2081.73	2.24%
Ag 328.068†	-44.7	-0.00109	mg/L	0.000468	-0.00109	mg/L	0.000468	42.96%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	14.6	-0.0240	mg/L	0.00156	-0.0240	mg/L	0.00156	6.48%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-1.9	0.00018	mg/L	0.002072	0.00018	mg/L	0.002072	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	198.0	-0.00298	mg/L	0.000133	-0.00298	mg/L	0.000133	4.46%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	28.0	0.00007	mg/L	0.000017	0.00007	mg/L	0.000017	24.08%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	111.1	0.00286	mg/L	0.000298	0.00286	mg/L	0.000298	10.42%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	9.3	0.0623	mg/L	0.01029	0.0623	mg/L	0.01029	16.51%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-17.7	-0.00019	mg/L	0.000189	-0.00019	mg/L	0.000189	100.79%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-11.6	-0.00105	mg/L	0.000068	-0.00105	mg/L	0.000068	6.48%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-4.6	-0.00242	mg/L	0.000130	-0.00242	mg/L	0.000130	5.35%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-123.2	-0.00141	mg/L	0.000609	-0.00141	mg/L	0.000609	43.07%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	0.3	-0.00994	mg/L	0.000606	-0.00994	mg/L	0.000606	6.09%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	-2.1	-0.0171	mg/L	0.00186	-0.0171	mg/L	0.00186	10.90%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	21.4	-0.00351	mg/L	0.000023	-0.00351	mg/L	0.000023	0.65%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-20.1	-0.00423	mg/L	0.000185	-0.00423	mg/L	0.000185	4.38%
QC value within limits for Mo 202.031 Recovery = Not calculated								

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```
Ni 231.604†              -15.0    -0.00289 mg/L      0.000209    -0.00289 mg/L      0.000209   7.24%
   QC value within limits for Ni 231.604  Recovery = Not calculated
Pb 220.353†               3.1     -0.00145 mg/L      0.000752    -0.00145 mg/L      0.000752  51.82%
   QC value within limits for Pb 220.353  Recovery = Not calculated
Sb 206.836†              -1.1     -0.00019 mg/L      0.000829    -0.00019 mg/L      0.000829 445.24%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -7.2     -0.00285 mg/L      0.001882    -0.00285 mg/L      0.001882  66.11%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              36.6      -0.0123 mg/L       0.00061     -0.0123 mg/L       0.00061   4.96%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†             -22.9     -0.00535 mg/L      0.000480    -0.00535 mg/L      0.000480   8.97%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Ti 334.940†             -232.2    -0.00162 mg/L      0.000100    -0.00162 mg/L      0.000100   6.17%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -3.8     -0.00360 mg/L      0.001994    -0.00360 mg/L      0.001994  55.36%
   QC value within limits for Tl 190.801  Recovery = Not calculated
V 290.880†              -480.4    -0.00644 mg/L      0.000837    -0.00644 mg/L      0.000837  13.00%
   QC value within limits for V 290.880  Recovery = Not calculated
Zn 206.200†             -33.2     -0.00426 mg/L      0.000157    -0.00426 mg/L      0.000157   3.69%
   QC value within limits for Zn 206.200  Recovery = Not calculated
K 766.490†               -3.3      -0.0414 mg/L       0.02214     -0.0414 mg/L       0.02214  53.41%
   QC value within limits for K 766.490  Recovery = Not calculated
Na 589.592†             -19.8       0.0269 mg/L       0.00632      0.0269 mg/L       0.00632  23.50%
   QC value within limits for Na 589.592  Recovery = Not calculated
Sr 407.771†              62.1     -0.00479 mg/L      0.000013    -0.00479 mg/L      0.000013   0.27%
   QC value within limits for Sr 407.771  Recovery = Not calculated
Li 670.784†             -41.8     -0.00536 mg/L      0.000415    -0.00536 mg/L      0.000415   7.74%
   QC value within limits for Li 670.784  Recovery = Not calculated
All analyte(s) passed QC.

================================================================================================
Sequence No.: 43                                    Autosampler Location: 35
Sample ID: L1205029708                              Date Collected: 5/11/2012 3:43:38 PM
Analyst: KHR                                        Data Type: Original
Initial Sample Wt:                                  Initial Sample Vol:
Dilution:                                           Sample Prep Vol:

------------------------------------------------------------------------------------------------
Nebulizer Parameters: L1205029708
Analyte                 Back Pressure     Flow
All                     152.0 kPa         0.50 L/min

------------------------------------------------------------------------------------------------
Mean Data: L1205029708
                 Mean Corrected          Calib.                          Sample
Analyte             Intensity      Conc. Units      Std.Dev.      Conc. Units      Std.Dev.   RSD
Y 371.029          2117605.5                                                     18142.21   0.86%
YRADIAL             295159.2                                                      4676.45   1.58%
Ga 417.206         1425759.4                                                     16165.88   1.13%
GaRADIAL             92907.3                                                      1403.90   1.51%
Ag 328.068†            713.4     0.00108 mg/L      0.000461     0.00108 mg/L      0.000461  42.87%
Al 396.153†             13.8     -0.0242 mg/L       0.00175     -0.0242 mg/L       0.00175   7.23%
As 188.979†             -3.6    -0.00040 mg/L      0.001769    -0.00040 mg/L      0.001769 444.39%
Ba 233.527†          12277.7      0.0729 mg/L       0.00044      0.0729 mg/L       0.00044   0.60%
Be 234.861†            147.5     0.00023 mg/L      0.000013     0.00023 mg/L      0.000013   5.52%
B 249.677†            4442.7      0.0513 mg/L       0.00066      0.0513 mg/L       0.00066   1.29%
Ca 227.546†          80520.6         164 mg/L           1.2         164 mg/L           1.2   0.71%
Cd 228.802†            -13.6    -0.00011 mg/L      0.000196    -0.00011 mg/L      0.000196 182.80%
Co 228.616†             91.3     0.00163 mg/L      0.000178     0.00163 mg/L      0.000178  10.95%
Cr 267.716†            241.8    -0.00023 mg/L      0.000048    -0.00023 mg/L      0.000048  21.00%
Cu 327.393†           -210.6    -0.00175 mg/L      0.000251    -0.00175 mg/L      0.000251  14.34%
Fe 239.562†            893.5       0.0426 mg/L       0.00068      0.0426 mg/L       0.00068   1.59%
Mg 279.077†         272833.8         74.1 mg/L          1.02         74.1 mg/L          1.02   1.38%
Mn 257.610†         706957.2        0.820 mg/L        0.0047        0.820 mg/L        0.0047   0.57%
Mo 202.031†            45.3    -0.00231 mg/L      0.000212    -0.00231 mg/L      0.000212   9.16%
Ni 231.604†            414.3     0.00333 mg/L      0.000220     0.00333 mg/L      0.000220   6.60%
Pb 220.353†             21.3     0.00098 mg/L      0.001030     0.00098 mg/L      0.001030 105.07%
Sb 206.836†             -7.6    -0.00169 mg/L      0.000526    -0.00169 mg/L      0.000526  31.19%
Se 196.026†              0.1     0.00085 mg/L      0.003094     0.00085 mg/L      0.003094 365.16%
Si 251.611†         226624.1        5.19 mg/L         0.037         5.19 mg/L         0.037   0.71%
Sn 189.927†            -327.2     -0.0341 mg/L       0.00048     -0.0341 mg/L       0.00048   1.40%
Ti 334.940†          -33275.6    -0.00944 mg/L      0.001515    -0.00944 mg/L      0.001515  16.05%
```

Approved: May 14, 2012

Kym H. Rhoden

Tl 190.801†	-46.7	-0.0157	mg/L	0.00263	-0.0157	mg/L	0.00263 16.76%
V 290.880†	1720.5	0.00282	mg/L	0.001643	0.00282	mg/L	0.001643 58.33%
Zn 206.200†	71.9	-0.00185	mg/L	0.000208	-0.00185	mg/L	0.000208 11.25%
K 766.490†	3642.1	0.890	mg/L	0.0122	0.890	mg/L	0.0122 1.37%
Na 589.592†	3134063.4	175	mg/L	5.8	175	mg/L	5.8 3.30%
Sr 407.771†	790772.7	0.283	mg/L	0.0065	0.283	mg/L	0.0065 2.29%
Li 670.784†	1144.2	0.00228	mg/L	0.000139	0.00228	mg/L	0.000139 6.09%

Sequence No.: 44 **Autosampler Location: 36**
Sample ID: L1205029709 0.2 **Date Collected: 5/11/2012 3:50:36 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205029709 0.2

Analyte	Back Pressure	Flow
All	152.0 kPa	0.50 L/min

Mean Data: L1205029709 0.2

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2180684.3						31170.61	1.43%
YRADIAL	297540.9						2207.46	0.74%
Ga 417.206	1330690.3						27783.61	2.09%
GaRADIAL	90083.3						849.50	0.94%
Ag 328.068†	143.4	0.00092	mg/L	0.000468	0.00092	mg/L	0.000468	50.71%
Al 396.153†	-72.6	-0.0354	mg/L	0.00720	-0.0354	mg/L	0.00720	20.35%
As 188.979†	14.2	0.00604	mg/L	0.002933	0.00604	mg/L	0.002933	48.54%
Ba 233.527†	1645.4	0.00602	mg/L	0.000043	0.00602	mg/L	0.000043	0.71%
Be 234.861†	1262.8	0.00018	mg/L	0.000138	0.00018	mg/L	0.000138	76.89%
B 249.677†	1669.9	0.0187	mg/L	0.00069	0.0187	mg/L	0.00069	3.69%
Ca 227.546†	49133.4	100	mg/L	2.5	100	mg/L	2.5	2.48%
Cd 228.802†	13.4	0.00030	mg/L	0.000146	0.00030	mg/L	0.000146	48.26%
Co 228.616†	26.9	-0.00013	mg/L	0.000379	-0.00013	mg/L	0.000379	292.17%
Cr 267.716†	106.6	-0.00130	mg/L	0.000214	-0.00130	mg/L	0.000214	16.40%
Cu 327.393†	-218.8	-0.00145	mg/L	0.000246	-0.00145	mg/L	0.000246	16.95%
Fe 239.562†	62915.9	3.79	mg/L	0.055	3.79	mg/L	0.055	1.46%
Mg 279.077†	106227.8	28.8	mg/L	0.32	28.8	mg/L	0.32	1.11%
Mn 257.610†	351589.1	0.406	mg/L	0.0077	0.406	mg/L	0.0077	1.90%
Mo 202.031†	31.8	-0.00258	mg/L	0.000061	-0.00258	mg/L	0.000061	2.35%
Ni 231.604†	351.9	0.00242	mg/L	0.000412	0.00242	mg/L	0.000412	17.01%
Pb 220.353†	5.1	-0.00105	mg/L	0.001200	-0.00105	mg/L	0.001200	113.81%
Sb 206.836†	-4.8	-0.00089	mg/L	0.000931	-0.00089	mg/L	0.000931	104.16%
Se 196.026†	-5.0	-0.00064	mg/L	0.003815	-0.00064	mg/L	0.003815	597.44%
Si 251.611†	71711.1	1.63	mg/L	0.024	1.63	mg/L	0.024	1.49%
Sn 189.927†	-309.1	-0.0324	mg/L	0.00135	-0.0324	mg/L	0.00135	4.17%
Ti 334.940†	-16872.3	-0.00294	mg/L	0.001699	-0.00294	mg/L	0.001699	57.77%
Tl 190.801†	-24.5	-0.00946	mg/L	0.004378	-0.00946	mg/L	0.004378	46.27%
V 290.880†	1256.5	0.00104	mg/L	0.000366	0.00104	mg/L	0.000366	35.15%
Zn 206.200†	14.9	-0.00323	mg/L	0.000029	-0.00323	mg/L	0.000029	0.90%
K 766.490†	2640.1	0.659	mg/L	0.0550	0.659	mg/L	0.0550	8.35%
Na 589.592†	1988865.4	102	mg/L	0.2	102	mg/L	0.2	0.18%
Sr 407.771†	2778350.0	1.02	mg/L	0.006	1.02	mg/L	0.006	0.57%
Li 670.784†	1023.9	0.00151	mg/L	0.000818	0.00151	mg/L	0.000818	54.24%

Sequence No.: 45 **Autosampler Location: 37**
Sample ID: L1205029710 0.2 **Date Collected: 5/11/2012 3:56:34 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205029710 0.2

Analyte	Back Pressure	Flow
All	153.0 kPa	0.50 L/min

Mean Data: L1205029710 0.2

Approved: May 14, 2012

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	2200109.3						26829.49	1.22%
YRADIAL	302161.2						321.94	0.11%
Ga 417.206	1334802.5						20151.06	1.51%
GaRADIAL	91472.7						893.36	0.98%
Ag 328.068†	164.0	0.00099	mg/L	0.000524	0.00099	mg/L	0.000524	52.95%
Al 396.153†	-84.2	-0.0369	mg/L	0.00145	-0.0369	mg/L	0.00145	3.93%
As 188.979†	12.7	0.00555	mg/L	0.000929	0.00555	mg/L	0.000929	16.75%
Ba 233.527†	1598.4	0.00572	mg/L	0.000093	0.00572	mg/L	0.000093	1.63%
Be 234.861†	1243.9	0.00016	mg/L	0.000016	0.00016	mg/L	0.000016	9.87%
B 249.677†	1645.6	0.0184	mg/L	0.00041	0.0184	mg/L	0.00041	2.21%
Ca 227.546†	50567.7	103	mg/L	2.2	103	mg/L	2.2	2.14%
Cd 228.802†	16.3	0.00035	mg/L	0.000174	0.00035	mg/L	0.000174	49.14%
Co 228.616†	30.7	-0.00003	mg/L	0.000400	-0.00003	mg/L	0.000400	>999.9%
Cr 267.716†	112.2	-0.00125	mg/L	0.000101	-0.00125	mg/L	0.000101	8.06%
Cu 327.393†	-348.7	-0.00191	mg/L	0.000360	-0.00191	mg/L	0.000360	18.82%
Fe 239.562†	63164.0	3.81	mg/L	0.037	3.81	mg/L	0.037	0.96%
Mg 279.077†	107209.4	29.1	mg/L	0.36	29.1	mg/L	0.36	1.23%
Mn 257.610†	360347.2	0.416	mg/L	0.0039	0.416	mg/L	0.0039	0.93%
Mo 202.031†	39.8	-0.00236	mg/L	0.000087	-0.00236	mg/L	0.000087	3.67%
Ni 231.604†	386.4	0.00292	mg/L	0.000625	0.00292	mg/L	0.000625	21.37%
Pb 220.353†	19.0	0.00020	mg/L	0.001209	0.00020	mg/L	0.001209	602.98%
Sb 206.836†	-10.5	-0.00220	mg/L	0.001504	-0.00220	mg/L	0.001504	68.45%
Se 196.026†	-0.6	0.00174	mg/L	0.001694	0.00174	mg/L	0.001694	97.35%
Si 251.611†	73955.0	1.68	mg/L	0.025	1.68	mg/L	0.025	1.47%
Sn 189.927†	-304.8	-0.0320	mg/L	0.00096	-0.0320	mg/L	0.00096	3.01%
Ti 334.940†	-17163.0	-0.00279	mg/L	0.001472	-0.00279	mg/L	0.001472	52.78%
Tl 190.801†	-27.4	-0.0102	mg/L	0.00342	-0.0102	mg/L	0.00342	33.50%
V 290.880†	1382.0	0.00167	mg/L	0.001570	0.00167	mg/L	0.001570	93.98%
Zn 206.200†	2.5	-0.00351	mg/L	0.000181	-0.00351	mg/L	0.000181	5.15%
K 766.490†	2547.4	0.629	mg/L	0.0056	0.629	mg/L	0.0056	0.89%
Na 589.592†	2017959.7	104	mg/L	0.8	104	mg/L	0.8	0.80%
Sr 407.771†	2817914.6	1.03	mg/L	0.009	1.03	mg/L	0.009	0.92%
Li 670.784†	1121.0	0.00213	mg/L	0.000855	0.00213	mg/L	0.000855	40.10%

User canceled analysis.

Approved: May 14, 2012

Lynn H. Rhoden

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Analysis Begun

Start Time: 5/11/2012 4:03:11 PM **Plasma On Time: 5/11/2012 7:44:53 AM**
Logged In Analyst: peicp2 **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N4011401 **Autosampler Model: Cetac**

Sample Information File: C:\pe\peicp2\Sample Information\FRIDAY1.sif
Batch ID:
Results Data Set: 051112H3
Results Library: C:\pe\peicp2\Results\Results.mdb

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Sequence No.: 1 **Autosampler Location: 38**
Sample ID: L1205029712 **Date Collected: 5/11/2012 4:03:13 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205029712

Analyte	Back Pressure	Flow
All	152.0 kPa	0.50 L/min

Mean Data: L1205029712

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2208832.8						12425.28	0.56%
YRADIAL	306179.6						3797.51	1.24%
Ga 417.206	1397455.1						38215.34	2.73%
GaRADIAL	93286.6						713.46	0.76%
Ag 328.068†	947.1	0.00193	mg/L	0.000142	0.00193	mg/L	0.000142	7.35%
Al 396.153†	1845.0	0.222	mg/L	0.0045	0.222	mg/L	0.0045	2.02%
As 188.979†	-6.0	-0.00113	mg/L	0.001991	-0.00113	mg/L	0.001991	175.53%
Ba 233.527†	7233.2	0.0412	mg/L	0.00024	0.0412	mg/L	0.00024	0.59%
Be 234.861†	518.1	0.00040	mg/L	0.000062	0.00040	mg/L	0.000062	15.48%
B 249.677†	11938.3	0.135	mg/L	0.0030	0.135	mg/L	0.0030	2.24%
Ca 227.546†	75427.9	153	mg/L	4.2	153	mg/L	4.2	2.74%
Cd 228.802†	6.6	0.00023	mg/L	0.000258	0.00023	mg/L	0.000258	113.39%
Co 228.616†	24.4	-0.00012	mg/L	0.000134	-0.00012	mg/L	0.000134	116.23%
Cr 267.716†	226.1	-0.00035	mg/L	0.000160	-0.00035	mg/L	0.000160	45.56%
Cu 327.393†	-57.3	-0.00113	mg/L	0.000422	-0.00113	mg/L	0.000422	37.26%
Fe 239.562†	12568.6	0.749	mg/L	0.0081	0.749	mg/L	0.0081	1.09%
Mg 279.077†	176114.6	47.8	mg/L	0.67	47.8	mg/L	0.67	1.40%
Mn 257.610†	1152870.8	1.34	mg/L	0.006	1.34	mg/L	0.006	0.48%
Mo 202.031†	39.9	-0.00231	mg/L	0.000084	-0.00231	mg/L	0.000084	3.63%
Ni 231.604†	264.8	0.00116	mg/L	0.000577	0.00116	mg/L	0.000577	49.64%
Pb 220.353†	9.8	-0.00046	mg/L	0.001511	-0.00046	mg/L	0.001511	325.25%
Sb 206.836†	-8.7	-0.00191	mg/L	0.001680	-0.00191	mg/L	0.001680	88.12%
Se 196.026†	-3.4	-0.00098	mg/L	0.002441	-0.00098	mg/L	0.002441	250.05%
Si 251.611†	168269.6	3.85	mg/L	0.072	3.85	mg/L	0.072	1.88%
Sn 189.927†	-321.6	-0.0336	mg/L	0.00118	-0.0336	mg/L	0.00118	3.51%
Ti 334.940†	-21401.7	0.00064	mg/L	0.001667	0.00064	mg/L	0.001667	260.13%
Tl 190.801†	-29.6	-0.0117	mg/L	0.00161	-0.0117	mg/L	0.00161	13.76%
V 290.880†	1626.4	0.00291	mg/L	0.001452	0.00291	mg/L	0.001452	49.88%
Zn 206.200†	190.5	0.00085	mg/L	0.000061	0.00085	mg/L	0.000061	7.16%
K 766.490†	4423.9	1.22	mg/L	0.019	1.22	mg/L	0.019	1.59%
Na 589.592†	1602895.1	80.2	mg/L	0.42	80.2	mg/L	0.42	0.52%
Sr 407.771†	2065418.8	0.753	mg/L	0.0031	0.753	mg/L	0.0031	0.41%
Li 670.784†	467.4	-0.00208	mg/L	0.000163	-0.00208	mg/L	0.000163	7.84%

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Sequence No.: 2 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 5/11/2012 4:09:13 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Approved: May 14, 2012

Kym H. Rhoden

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	2322837.7						5227.67	0.23%
YRADIAL	320055.8						3345.02	1.05%
Ga 417.206	1355219.8						37492.56	2.77%
GaRADIAL	93293.0						755.25	0.81%
Ag 328.068†	127204.8	0.386	mg/L	0.0119	0.386	mg/L	0.0119	3.08%
QC value within limits for Ag 328.068 Recovery = 96.39%								
Al 396.153†	73722.9	9.81	mg/L	0.034	9.81	mg/L	0.034	0.35%
QC value within limits for Al 396.153 Recovery = 98.12%								
As 188.979†	1131.2	0.378	mg/L	0.0068	0.378	mg/L	0.0068	1.80%
QC value within limits for As 188.979 Recovery = 94.52%								
Ba 233.527†	155138.0	0.971	mg/L	0.0086	0.971	mg/L	0.0086	0.89%
QC value within limits for Ba 233.527 Recovery = 97.11%								
Be 234.861†	63241.0	0.0465	mg/L	0.00129	0.0465	mg/L	0.00129	2.78%
QC value within limits for Be 234.861 Recovery = 92.99%								
B 249.677†	42085.2	0.469	mg/L	0.0142	0.469	mg/L	0.0142	3.02%
QC value within limits for B 249.677 Recovery = 93.82%								
Ca 227.546†	4732.9	10.1	mg/L	0.25	10.1	mg/L	0.25	2.44%
QC value within limits for Ca 227.546 Recovery = 101.16%								
Cd 228.802†	2794.1	0.0457	mg/L	0.00198	0.0457	mg/L	0.00198	4.34%
QC value within limits for Cd 228.802 Recovery = 91.33%								
Co 228.616†	7690.6	0.195	mg/L	0.0022	0.195	mg/L	0.0022	1.10%
QC value within limits for Co 228.616 Recovery = 97.43%								
Cr 267.716†	54756.1	0.483	mg/L	0.0027	0.483	mg/L	0.0027	0.57%
QC value within limits for Cr 267.716 Recovery = 96.56%								
Cu 327.393†	137269.0	0.490	mg/L	0.0163	0.490	mg/L	0.0163	3.33%
QC value within limits for Cu 327.393 Recovery = 98.00%								
Fe 239.562†	64200.1	3.87	mg/L	0.057	3.87	mg/L	0.057	1.46%
QC value within limits for Fe 239.562 Recovery = 96.78%								
Mg 279.077†	35991.9	9.77	mg/L	0.098	9.77	mg/L	0.098	1.00%
QC value within limits for Mg 279.077 Recovery = 97.73%								
Mn 257.610†	427313.9	0.495	mg/L	0.0046	0.495	mg/L	0.0046	0.94%
QC value within limits for Mn 257.610 Recovery = 98.96%								
Mo 202.031†	36442.6	0.964	mg/L	0.0041	0.964	mg/L	0.0041	0.42%
QC value within limits for Mo 202.031 Recovery = 96.43%								
Ni 231.604†	33826.2	0.487	mg/L	0.0047	0.487	mg/L	0.0047	0.97%
QC value within limits for Ni 231.604 Recovery = 97.31%								
Pb 220.353†	5562.0	0.494	mg/L	0.0058	0.494	mg/L	0.0058	1.17%
QC value within limits for Pb 220.353 Recovery = 98.74%								
Sb 206.836†	5071.2	1.16	mg/L	0.027	1.16	mg/L	0.027	2.36%
QC value within limits for Sb 206.836 Recovery = 96.75%								
Se 196.026†	714.3	0.383	mg/L	0.0096	0.383	mg/L	0.0096	2.50%
QC value within limits for Se 196.026 Recovery = 95.71%								
Si 251.611†	211592.1	4.83	mg/L	0.120	4.83	mg/L	0.120	2.49%
QC value within limits for Si 251.611 Recovery = 96.63%								
Sn 189.927†	10254.5	0.967	mg/L	0.0103	0.967	mg/L	0.0103	1.06%
QC value within limits for Sn 189.927 Recovery = 96.74%								
Ti 334.940†	1003150.8	0.983	mg/L	0.0010	0.983	mg/L	0.0010	0.11%
QC value within limits for Ti 334.940 Recovery = 98.27%								
Tl 190.801†	1952.9	0.509	mg/L	0.0026	0.509	mg/L	0.0026	0.51%
QC value within limits for Tl 190.801 Recovery = 101.80%								
V 290.880†	192439.5	0.974	mg/L	0.0081	0.974	mg/L	0.0081	0.83%
QC value within limits for V 290.880 Recovery = 97.40%								
Zn 206.200†	41524.7	0.949	mg/L	0.0156	0.949	mg/L	0.0156	1.64%
QC value within limits for Zn 206.200 Recovery = 94.92%								
K 766.490†	160212.7	49.1	mg/L	0.30	49.1	mg/L	0.30	0.61%
QC value within limits for K 766.490 Recovery = 98.15%								
Na 589.592†	980498.4	47.4	mg/L	0.29	47.4	mg/L	0.29	0.61%
QC value within limits for Na 589.592 Recovery = 94.75%								
Sr 407.771†	2704030.1	0.991	mg/L	0.0098	0.991	mg/L	0.0098	0.99%
QC value within limits for Sr 407.771 Recovery = 99.10%								
Li 670.784†	157868.0	1.01	mg/L	0.013	1.01	mg/L	0.013	1.24%
QC value within limits for Li 670.784 Recovery = 101.18%								

All analyte(s) passed QC.

Approved: May 14, 2012

Sequence No.: 3
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 5/11/2012 4:15:14 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

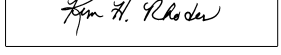
Nebulizer Parameters: CCB

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	2388674.6						20263.95	0.85%
YRADIAL	320112.4						2891.45	0.90%
Ga 417.206	1384884.7						30109.67	2.17%
GaRADIAL	93997.3						1678.51	1.79%
Ag 328.068†	46.4	-0.00082	mg/L	0.000135	-0.00082	mg/L	0.000135	16.49%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	12.5	-0.0243	mg/L	0.00126	-0.0243	mg/L	0.00126	5.16%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-0.9	0.00054	mg/L	0.001335	0.00054	mg/L	0.001335	248.02%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	101.5	-0.00359	mg/L	0.000115	-0.00359	mg/L	0.000115	3.20%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-11.2	0.00004	mg/L	0.000026	0.00004	mg/L	0.000026	60.91%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	49.9	0.00218	mg/L	0.000303	0.00218	mg/L	0.000303	13.94%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	5.8	0.0551	mg/L	0.00519	0.0551	mg/L	0.00519	9.41%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-11.9	-0.00009	mg/L	0.000094	-0.00009	mg/L	0.000094	102.55%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-8.1	-0.00096	mg/L	0.000108	-0.00096	mg/L	0.000108	11.25%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	2.4	-0.00236	mg/L	0.000033	-0.00236	mg/L	0.000033	1.40%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-81.3	-0.00127	mg/L	0.000658	-0.00127	mg/L	0.000658	51.98%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	-28.9	-0.0117	mg/L	0.00070	-0.0117	mg/L	0.00070	5.98%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	-2.5	-0.0172	mg/L	0.00330	-0.0172	mg/L	0.00330	19.23%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	32.1	-0.00350	mg/L	0.000008	-0.00350	mg/L	0.000008	0.24%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-5.8	-0.00385	mg/L	0.000105	-0.00385	mg/L	0.000105	2.73%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	-19.2	-0.00295	mg/L	0.000193	-0.00295	mg/L	0.000193	6.56%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	3.7	-0.00140	mg/L	0.000839	-0.00140	mg/L	0.000839	60.00%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-5.2	-0.00113	mg/L	0.000593	-0.00113	mg/L	0.000593	52.43%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-0.7	0.00065	mg/L	0.002761	0.00065	mg/L	0.002761	426.64%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	10.5	-0.0129	mg/L	0.00084	-0.0129	mg/L	0.00084	6.52%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	-26.5	-0.00569	mg/L	0.000665	-0.00569	mg/L	0.000665	11.68%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-136.7	-0.00153	mg/L	0.000074	-0.00153	mg/L	0.000074	4.84%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	2.6	-0.00197	mg/L	0.001974	-0.00197	mg/L	0.001974	100.24%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-554.8	-0.00682	mg/L	0.001215	-0.00682	mg/L	0.001215	17.81%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-49.8	-0.00464	mg/L	0.000085	-0.00464	mg/L	0.000085	1.82%
QC value within limits for Zn 206.200 Recovery = Not calculated								
K 766.490†	5.5	-0.0388	mg/L	0.02483	-0.0388	mg/L	0.02483	64.04%
QC value within limits for K 766.490 Recovery = Not calculated								
Na 589.592†	150.2	0.0347	mg/L	0.01044	0.0347	mg/L	0.01044	30.05%

Approved: May 14, 2012



QC value within limits for Na 589.592 Recovery = Not calculated

Sr 407.771†	270.5	-0.00471	mg/L	0.000033	-0.00471	mg/L	0.000033	0.70%

QC value within limits for Sr 407.771 Recovery = Not calculated

Li 670.784†	-13.7	-0.00518	mg/L	0.000129	-0.00518	mg/L	0.000129	2.48%

QC value within limits for Li 670.784 Recovery = Not calculated

All analyte(s) passed QC.

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Sequence No.: 4 **Autosampler Location: 39**
Sample ID: L1205010445 200X **Date Collected: 5/11/2012 4:22:07 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	152.0 kPa	0.50 L/min

Mean Data: L1205010445 200X

	Mean Corrected		Calib.			Sample		
Analyte	**Intensity**	**Conc.**	**Units**	**Std.Dev.**	**Conc.**	**Units**	**Std.Dev.**	**RSD**
Y 371.029	2378648.6						39273.37	1.65%
YRADIAL	315663.6						1184.78	0.38%
Ga 417.206	1405919.3						48908.61	3.48%
GaRADIAL	94717.5						2555.02	2.70%
Ag 328.068†	20.9	-0.00089	mg/L	0.000399	-0.00089	mg/L	0.000399	44.69%
Al 396.153†	-17.9	-0.0284	mg/L	0.00080	-0.0284	mg/L	0.00080	2.81%
As 188.979†	7.8	0.00345	mg/L	0.001089	0.00345	mg/L	0.001089	31.54%
Ba 233.527†	43.9	-0.00395	mg/L	0.000148	-0.00395	mg/L	0.000148	3.74%
Be 234.861†	248.1	0.00024	mg/L	0.000020	0.00024	mg/L	0.000020	8.68%
B 249.677†	-75.8	0.00078	mg/L	0.000264	0.00078	mg/L	0.000264	33.96%
Ca 227.546†	596.1	1.26	mg/L	0.034	1.26	mg/L	0.034	2.68%
Cd 228.802†	-30.3	-0.00041	mg/L	0.000181	-0.00041	mg/L	0.000181	43.81%
Co 228.616†	-4.4	-0.00086	mg/L	0.000052	-0.00086	mg/L	0.000052	6.01%
Cr 267.716†	-45.1	-0.00278	mg/L	0.000058	-0.00278	mg/L	0.000058	2.08%
Cu 327.393†	-114.9	-0.00138	mg/L	0.000691	-0.00138	mg/L	0.000691	49.94%
Fe 239.562†	-34.5	-0.0121	mg/L	0.00026	-0.0121	mg/L	0.00026	2.15%
Mg 279.077†	1152.6	0.296	mg/L	0.0025	0.296	mg/L	0.0025	0.83%
Mn 257.610†	-3.1	-0.00354	mg/L	0.000012	-0.00354	mg/L	0.000012	0.34%
Mo 202.031†	-27.1	-0.00442	mg/L	0.000045	-0.00442	mg/L	0.000045	1.01%
Ni 231.604†	-9.7	-0.00281	mg/L	0.000067	-0.00281	mg/L	0.000067	2.40%
Pb 220.353†	17.8	-0.00014	mg/L	0.001120	-0.00014	mg/L	0.001120	779.61%
Sb 206.836†	-4.7	-0.00102	mg/L	0.001657	-0.00102	mg/L	0.001657	163.00%
Se 196.026†	-8.5	-0.00354	mg/L	0.003101	-0.00354	mg/L	0.003101	87.69%
Si 251.611†	875.6	0.00692	mg/L	0.001363	0.00692	mg/L	0.001363	19.69%
Sn 189.927†	-72.8	-0.0101	mg/L	0.00051	-0.0101	mg/L	0.00051	5.11%
Ti 334.940†	-607.3	-0.00181	mg/L	0.000108	-0.00181	mg/L	0.000108	5.95%
Tl 190.801†	7.8	-0.00066	mg/L	0.001440	-0.00066	mg/L	0.001440	219.55%
V 290.880†	-447.0	-0.00628	mg/L	0.000943	-0.00628	mg/L	0.000943	15.02%
Zn 206.200†	589.1	0.00994	mg/L	0.000386	0.00994	mg/L	0.000386	3.88%
K 766.490†	41.6	-0.0279	mg/L	0.02478	-0.0279	mg/L	0.02478	88.79%
Na 589.592†	1644.6	0.103	mg/L	0.0071	0.103	mg/L	0.0071	6.89%
Sr 407.771†	19390.7	0.00230	mg/L	0.000062	0.00230	mg/L	0.000062	2.69%
Li 670.784†	-49.8	-0.00541	mg/L	0.000228	-0.00541	mg/L	0.000228	4.22%

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Sequence No.: 5 **Autosampler Location: 40**
Sample ID: L1205010446 200X **Date Collected: 5/11/2012 4:29:02 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205010446 200X

Analyte	Back Pressure	Flow
All	152.0 kPa	0.50 L/min

Mean Data: L1205010446 200X

	Mean Corrected		Calib.			Sample		

Approved: May 14, 2012

Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Y 371.029	2334284.7						10240.01	0.44%
YRADIAL	308661.5						5567.39	1.80%
Ga 417.206	1397696.5						26304.06	1.88%
GaRADIAL	93811.1						1534.29	1.64%
Ag 328.068†	-49.0	-0.00093	mg/L	0.000206	-0.00093	mg/L	0.000206	22.21%
Al 396.153†	133.3	-0.00798	mg/L	0.000979	-0.00798	mg/L	0.000979	12.26%
As 188.979†	5.6	0.00278	mg/L	0.002933	0.00278	mg/L	0.002933	105.43%
Ba 233.527†	18.4	-0.00412	mg/L	0.000142	-0.00412	mg/L	0.000142	3.44%
Be 234.861†	352.2	0.00024	mg/L	0.000017	0.00024	mg/L	0.000017	7.13%
B 249.677†	177.2	0.00329	mg/L	0.000332	0.00329	mg/L	0.000332	10.07%
Ca 227.546†	512.4	1.10	mg/L	0.027	1.10	mg/L	0.027	2.42%
Cd 228.802†	86.1	0.00157	mg/L	0.000152	0.00157	mg/L	0.000152	9.71%
Co 228.616†	299.8	0.00689	mg/L	0.000254	0.00689	mg/L	0.000254	3.68%
Cr 267.716†	-30.3	-0.00246	mg/L	0.000129	-0.00246	mg/L	0.000129	5.24%
Cu 327.393†	12188.5	0.0428	mg/L	0.00141	0.0428	mg/L	0.00141	3.30%
Fe 239.562†	8533.6	0.506	mg/L	0.0095	0.506	mg/L	0.0095	1.88%
Mg 279.077†	2011.5	0.529	mg/L	0.0091	0.529	mg/L	0.0091	1.72%
Mn 257.610†	373341.5	0.432	mg/L	0.0029	0.432	mg/L	0.0029	0.66%
Mo 202.031†	-28.3	-0.00433	mg/L	0.000174	-0.00433	mg/L	0.000174	4.02%
Ni 231.604†	636.6	0.00653	mg/L	0.000228	0.00653	mg/L	0.000228	3.50%
Pb 220.353†	28.0	0.00042	mg/L	0.000385	0.00042	mg/L	0.000385	92.32%
Sb 206.836†	-2.5	-0.00048	mg/L	0.000921	-0.00048	mg/L	0.000921	192.05%
Se 196.026†	-8.0	-0.00321	mg/L	0.001491	-0.00321	mg/L	0.001491	46.39%
Si 251.611†	2967.8	0.0549	mg/L	0.00192	0.0549	mg/L	0.00192	3.50%
Sn 189.927†	-69.1	-0.00972	mg/L	0.000223	-0.00972	mg/L	0.000223	2.30%
Ti 334.940†	-633.2	-0.00186	mg/L	0.000074	-0.00186	mg/L	0.000074	3.98%
Tl 190.801†	7.4	-0.00119	mg/L	0.001752	-0.00119	mg/L	0.001752	147.83%
V 290.880†	63.0	-0.00377	mg/L	0.001170	-0.00377	mg/L	0.001170	30.99%
Zn 206.200†	184482.9	4.21	mg/L	0.052	4.21	mg/L	0.052	1.24%
K 766.490†	370.7	0.0716	mg/L	0.00366	0.0716	mg/L	0.00366	5.11%
Na 589.592†	8537.0	0.421	mg/L	0.0226	0.421	mg/L	0.0226	5.37%
Sr 407.771†	11035.7	-0.00077	mg/L	0.000089	-0.00077	mg/L	0.000089	11.57%
Li 670.784†	259.8	-0.00342	mg/L	0.000102	-0.00342	mg/L	0.000102	2.98%

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Sequence No.: 6 **Autosampler Location: 41**
Sample ID: L1205010453 W397293-01 **Date Collected: 5/11/2012 4:35:57 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205010453 W397293-01

Analyte	Back Pressure	Flow
All	152.0 kPa	0.50 L/min

Mean Data: L1205010453 W397293-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2352783.4						12048.66	0.51%
YRADIAL	315394.6						5841.86	1.85%
Ga 417.206	1417132.1						21139.96	1.49%
GaRADIAL	95055.9						1080.88	1.14%
Ag 328.068†	20.1	-0.00091	mg/L	0.000105	-0.00091	mg/L	0.000105	11.56%
Al 396.153†	521.3	0.0441	mg/L	0.00102	0.0441	mg/L	0.00102	2.31%
As 188.979†	6.4	0.00300	mg/L	0.002351	0.00300	mg/L	0.002351	78.35%
Ba 233.527†	17.5	-0.00411	mg/L	0.000100	-0.00411	mg/L	0.000100	2.43%
Be 234.861†	336.3	0.00031	mg/L	0.000011	0.00031	mg/L	0.000011	3.38%
B 249.677†	-116.2	0.00028	mg/L	0.000096	0.00028	mg/L	0.000096	34.68%
Ca 227.546†	151.5	0.353	mg/L	0.0171	0.353	mg/L	0.0171	4.84%
Cd 228.802†	-0.7	0.00011	mg/L	0.000065	0.00011	mg/L	0.000065	61.23%
Co 228.616†	238.8	0.00535	mg/L	0.000149	0.00535	mg/L	0.000149	2.79%
Cr 267.716†	-44.9	-0.00264	mg/L	0.000072	-0.00264	mg/L	0.000072	2.73%
Cu 327.393†	2501.8	0.00815	mg/L	0.000405	0.00815	mg/L	0.000405	4.97%
Fe 239.562†	-25.8	-0.0115	mg/L	0.00026	-0.0115	mg/L	0.00026	2.29%
Mg 279.077†	476.4	0.113	mg/L	0.0002	0.113	mg/L	0.0002	0.18%
Mn 257.610†	114291.6	0.130	mg/L	0.0005	0.130	mg/L	0.0005	0.35%
Mo 202.031†	-33.1	-0.00455	mg/L	0.000042	-0.00455	mg/L	0.000042	0.91%
Ni 231.604†	204.2	0.00028	mg/L	0.000193	0.00028	mg/L	0.000193	69.95%
Pb 220.353†	14.6	-0.00051	mg/L	0.000864	-0.00051	mg/L	0.000864	168.97%

Approved: May 14, 2012

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Sb 206.836†	-6.2	-0.00135	mg/L	0.000419	-0.00135	mg/L	0.000419 30.96%
Se 196.026†	-10.2	-0.00445	mg/L	0.002983	-0.00445	mg/L	0.002983 66.98%
Si 251.611†	1547.6	0.0223	mg/L	0.00093	0.0223	mg/L	0.00093 4.15%
Sn 189.927†	-60.0	-0.00886	mg/L	0.000631	-0.00886	mg/L	0.000631 7.12%
Ti 334.940†	-452.5	-0.00179	mg/L	0.000119	-0.00179	mg/L	0.000119 6.64%
Tl 190.801†	8.4	-0.00062	mg/L	0.001793	-0.00062	mg/L	0.001793 290.66%
V 290.880†	-261.4	-0.00533	mg/L	0.001872	-0.00533	mg/L	0.001872 35.10%
Zn 206.200†	151061.2	3.45	mg/L	0.019	3.45	mg/L	0.019 0.54%
K 766.490†	46.2	-0.0267	mg/L	0.02696	-0.0267	mg/L	0.02696 101.17%
Na 589.592†	4271.3	0.224	mg/L	0.0090	0.224	mg/L	0.0090 4.02%
Sr 407.771†	5035.6	-0.00297	mg/L	0.000111	-0.00297	mg/L	0.000111 3.74%
Li 670.784†	37.8	-0.00484	mg/L	0.000371	-0.00484	mg/L	0.000371 7.65%

Sequence No.: 7 **Autosampler Location: 42**
Sample ID: L1205010453S W397293-04 **Date Collected: 5/11/2012 4:42:52 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205010453S W397293-04

Analyte	Back Pressure	Flow
All	152.0 kPa	0.50 L/min

Mean Data: L1205010453S W397293-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	2332718.3						22413.34	0.96%
YRADIAL	313568.9						4811.51	1.53%
Ga 417.206	1407926.3						34556.46	2.45%
GaRADIAL	93884.7						2003.34	2.13%
Ag 328.068†	218.9	-0.00030	mg/L	0.000526	-0.00030	mg/L	0.000526	172.68%
Al 396.153†	596.4	0.0541	mg/L	0.00169	0.0541	mg/L	0.00169	3.13%
As 188.979†	13.0	0.00522	mg/L	0.002187	0.00522	mg/L	0.002187	41.87%
Ba 233.527†	182.0	-0.00308	mg/L	0.000164	-0.00308	mg/L	0.000164	5.32%
Be 234.861†	337.6	0.00031	mg/L	0.000006	0.00031	mg/L	0.000006	2.00%
B 249.677†	28.0	0.00189	mg/L	0.000310	0.00189	mg/L	0.000310	16.38%
Ca 227.546†	156.2	0.363	mg/L	0.0165	0.363	mg/L	0.0165	4.56%
Cd 228.802†	-2.6	0.00006	mg/L	0.000107	0.00006	mg/L	0.000107	167.16%
Co 228.616†	243.6	0.00547	mg/L	0.000159	0.00547	mg/L	0.000159	2.90%
Cr 267.716†	24.6	-0.00203	mg/L	0.000040	-0.00203	mg/L	0.000040	1.95%
Cu 327.393†	2766.3	0.00909	mg/L	0.000205	0.00909	mg/L	0.000205	2.26%
Fe 239.562†	18.7	-0.00885	mg/L	0.000630	-0.00885	mg/L	0.000630	7.12%
Mg 279.077†	502.7	0.120	mg/L	0.0010	0.120	mg/L	0.0010	0.85%
Mn 257.610†	113624.8	0.129	mg/L	0.0014	0.129	mg/L	0.0014	1.08%
Mo 202.031†	8.7	-0.00343	mg/L	0.000190	-0.00343	mg/L	0.000190	5.54%
Ni 231.604†	235.3	0.00073	mg/L	0.000081	0.00073	mg/L	0.000081	11.18%
Pb 220.353†	21.6	0.00012	mg/L	0.000494	0.00012	mg/L	0.000494	425.59%
Sb 206.836†	-2.5	-0.00051	mg/L	0.000995	-0.00051	mg/L	0.000995	194.86%
Se 196.026†	-4.5	-0.00144	mg/L	0.002747	-0.00144	mg/L	0.002747	191.14%
Si 251.611†	1748.5	0.0269	mg/L	0.00158	0.0269	mg/L	0.00158	5.88%
Sn 189.927†	-50.7	-0.00798	mg/L	0.000601	-0.00798	mg/L	0.000601	7.53%
Ti 334.940†	538.2	-0.00082	mg/L	0.000138	-0.00082	mg/L	0.000138	16.79%
Tl 190.801†	9.7	-0.00027	mg/L	0.002412	-0.00027	mg/L	0.002412	901.83%
V 290.880†	325.3	-0.00235	mg/L	0.001573	-0.00235	mg/L	0.001573	66.96%
Zn 206.200†	148931.8	3.40	mg/L	0.050	3.40	mg/L	0.050	1.46%
K 766.490†	298.1	0.0497	mg/L	0.02233	0.0497	mg/L	0.02233	44.90%
Na 589.592†	5020.8	0.259	mg/L	0.0064	0.259	mg/L	0.0064	2.46%
Sr 407.771†	7803.4	-0.00195	mg/L	0.000118	-0.00195	mg/L	0.000118	6.06%
Li 670.784†	185.1	-0.00390	mg/L	0.000515	-0.00390	mg/L	0.000515	13.21%

Sequence No.: 8 **Autosampler Location: 43**
Sample ID: L1205010453SD W397293-05 **Date Collected: 5/11/2012 4:49:47 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205010453SD W397293-05

Approved: May 14, 2012

Analyte	Back Pressure	Flow
All	152.0 kPa	0.50 L/min

Mean Data: L1205010453SD W397293-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	2326160.4						18703.04	0.80%
YRADIAL	312061.8						4459.02	1.43%
Ga 417.206	1407097.3						19052.65	1.35%
GaRADIAL	93797.9						2244.50	2.39%
Ag 328.068†	206.8	-0.00034	mg/L	0.000311	-0.00034	mg/L	0.000311	90.96%
Al 396.153†	624.7	0.0579	mg/L	0.00016	0.0579	mg/L	0.00016	0.28%
As 188.979†	6.0	0.00287	mg/L	0.001945	0.00287	mg/L	0.001945	67.85%
Ba 233.527†	183.1	-0.00307	mg/L	0.000057	-0.00307	mg/L	0.000057	1.85%
Be 234.861†	343.3	0.00032	mg/L	0.000013	0.00032	mg/L	0.000013	4.10%
B 249.677†	9.3	0.00168	mg/L	0.000256	0.00168	mg/L	0.000256	15.26%
Ca 227.546†	162.1	0.375	mg/L	0.0193	0.375	mg/L	0.0193	5.16%
Cd 228.802†	5.0	0.00020	mg/L	0.000169	0.00020	mg/L	0.000169	83.00%
Co 228.616†	255.2	0.00576	mg/L	0.000148	0.00576	mg/L	0.000148	2.56%
Cr 267.716†	29.1	-0.00198	mg/L	0.000050	-0.00198	mg/L	0.000050	2.51%
Cu 327.393†	2648.7	0.00868	mg/L	0.000755	0.00868	mg/L	0.000755	8.69%
Fe 239.562†	21.3	-0.00870	mg/L	0.000341	-0.00870	mg/L	0.000341	3.92%
Mg 279.077†	522.8	0.125	mg/L	0.0050	0.125	mg/L	0.0050	4.00%
Mn 257.610†	116830.2	0.133	mg/L	0.0013	0.133	mg/L	0.0013	0.99%
Mo 202.031†	2.3	-0.00361	mg/L	0.000159	-0.00361	mg/L	0.000159	4.41%
Ni 231.604†	249.6	0.00093	mg/L	0.000108	0.00093	mg/L	0.000108	11.59%
Pb 220.353†	14.0	-0.00057	mg/L	0.000938	-0.00057	mg/L	0.000938	165.59%
Sb 206.836†	1.2	0.00034	mg/L	0.000496	0.00034	mg/L	0.000496	146.00%
Se 196.026†	-7.9	-0.00323	mg/L	0.000691	-0.00323	mg/L	0.000691	21.41%
Si 251.611†	1813.9	0.0284	mg/L	0.00035	0.0284	mg/L	0.00035	1.24%
Sn 189.927†	-55.2	-0.00840	mg/L	0.000814	-0.00840	mg/L	0.000814	9.69%
Ti 334.940†	541.4	-0.00082	mg/L	0.000020	-0.00082	mg/L	0.000020	2.42%
Tl 190.801†	7.6	-0.00081	mg/L	0.002872	-0.00081	mg/L	0.002872	354.29%
V 290.880†	295.7	-0.00250	mg/L	0.001134	-0.00250	mg/L	0.001134	45.39%
Zn 206.200†	153998.7	3.51	mg/L	0.037	3.51	mg/L	0.037	1.06%
K 766.490†	259.8	0.0381	mg/L	0.00668	0.0381	mg/L	0.00668	17.54%
Na 589.592†	5559.7	0.284	mg/L	0.0178	0.284	mg/L	0.0178	6.28%
Sr 407.771†	8292.1	-0.00177	mg/L	0.000209	-0.00177	mg/L	0.000209	11.83%
Li 670.784†	188.8	-0.00387	mg/L	0.000464	-0.00387	mg/L	0.000464	11.98%

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Sequence No.: 9 **Autosampler Location: 44**
Sample ID: L1205010454 **Date Collected: 5/11/2012 4:56:43 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205010454

Analyte	Back Pressure	Flow
All	152.0 kPa	0.50 L/min

Mean Data: L1205010454

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	2368145.0						8548.73	0.36%
YRADIAL	318586.1						968.71	0.30%
Ga 417.206	1469527.7						13131.44	0.89%
GaRADIAL	95525.9						2383.75	2.50%
Ag 328.068†	76.5	-0.00072	mg/L	0.000138	-0.00072	mg/L	0.000138	19.15%
Al 396.153†	-4.7	-0.0266	mg/L	0.00189	-0.0266	mg/L	0.00189	7.09%
As 188.979†	2.5	0.00168	mg/L	0.000693	0.00168	mg/L	0.000693	41.17%
Ba 233.527†	36.3	-0.00400	mg/L	0.000060	-0.00400	mg/L	0.000060	1.51%
Be 234.861†	91.7	0.00012	mg/L	0.000025	0.00012	mg/L	0.000025	20.87%
B 249.677†	-183.8	-0.00044	mg/L	0.000072	-0.00044	mg/L	0.000072	16.45%
Ca 227.546†	15.7	0.0749	mg/L	0.01268	0.0749	mg/L	0.01268	16.92%
Cd 228.802†	-20.9	-0.00025	mg/L	0.000071	-0.00025	mg/L	0.000071	28.59%
Co 228.616†	-9.7	-0.00100	mg/L	0.000140	-0.00100	mg/L	0.000140	14.03%
Cr 267.716†	4.3	-0.00234	mg/L	0.000114	-0.00234	mg/L	0.000114	4.89%
Cu 327.393†	-52.4	-0.00116	mg/L	0.000282	-0.00116	mg/L	0.000282	24.24%

Approved: May 14, 2012

Kym H. Rhoden

Fe 239.562†	-27.5	-0.0116	mg/L	0.00044	-0.0116	mg/L	0.00044 3.81%
Mg 279.077†	-12.6	-0.0199	mg/L	0.00220	-0.0199	mg/L	0.00220 11.04%
Mn 257.610†	72.1	-0.00345	mg/L	0.000026	-0.00345	mg/L	0.000026 0.76%
Mo 202.031†	-15.4	-0.00410	mg/L	0.000193	-0.00410	mg/L	0.000193 4.70%
Ni 231.604†	-33.8	-0.00316	mg/L	0.000132	-0.00316	mg/L	0.000132 4.17%
Pb 220.353†	14.2	-0.00047	mg/L	0.000655	-0.00047	mg/L	0.000655 138.70%
Sb 206.836†	-1.9	-0.00038	mg/L	0.000972	-0.00038	mg/L	0.000972 255.74%
Se 196.026†	-2.9	-0.00054	mg/L	0.003537	-0.00054	mg/L	0.003537 652.24%
Si 251.611†	-51.4	-0.0144	mg/L	0.00018	-0.0144	mg/L	0.00018 1.24%
Sn 189.927†	-42.2	-0.00717	mg/L	0.000529	-0.00717	mg/L	0.000529 7.37%
Ti 334.940†	-167.0	-0.00156	mg/L	0.000098	-0.00156	mg/L	0.000098 6.31%
Tl 190.801†	-4.1	-0.00368	mg/L	0.001888	-0.00368	mg/L	0.001888 51.30%
V 290.880†	-202.7	-0.00503	mg/L	0.001424	-0.00503	mg/L	0.001424 28.31%
Zn 206.200†	119.4	-0.00078	mg/L	0.000521	-0.00078	mg/L	0.000521 66.98%
K 766.490†	-22.3	-0.0472	mg/L	0.01512	-0.0472	mg/L	0.01512 32.03%
Na 589.592†	-75.5	0.0244	mg/L	0.00625	0.0244	mg/L	0.00625 25.65%
Sr 407.771†	-173.9	-0.00488	mg/L	0.000048	-0.00488	mg/L	0.000048 0.98%
Li 670.784†	-7.8	-0.00514	mg/L	0.000217	-0.00514	mg/L	0.000217 4.23%

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Sequence No.: 10 **Autosampler Location: 45**
Sample ID: L1205010455 **Date Collected: 5/11/2012 5:03:39 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1205010455

Analyte	Back Pressure	Flow
All	152.0 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	2413498.6						6293.32	0.26%
YRADIAL	323738.0						8494.54	2.62%
Ga 417.206	1505514.9						24121.60	1.60%
GaRADIAL	97123.8						4340.60	4.47%
Ag 328.068†	33.8	-0.00085	mg/L	0.000134	-0.00085	mg/L	0.000134	15.74%
Al 396.153†	-1.9	-0.0262	mg/L	0.00084	-0.0262	mg/L	0.00084	3.21%
As 188.979†	2.9	0.00180	mg/L	0.002004	0.00180	mg/L	0.002004	111.49%
Ba 233.527†	27.5	-0.00405	mg/L	0.000153	-0.00405	mg/L	0.000153	3.78%
Be 234.861†	138.0	0.00015	mg/L	0.000044	0.00015	mg/L	0.000044	28.47%
B 249.677†	-183.6	-0.00043	mg/L	0.000088	-0.00043	mg/L	0.000088	20.45%
Ca 227.546†	25.3	0.0944	mg/L	0.02839	0.0944	mg/L	0.02839	30.07%
Cd 228.802†	-23.8	-0.00030	mg/L	0.000102	-0.00030	mg/L	0.000102	34.16%
Co 228.616†	-6.9	-0.00093	mg/L	0.000227	-0.00093	mg/L	0.000227	24.46%
Cr 267.716†	4.6	-0.00234	mg/L	0.000117	-0.00234	mg/L	0.000117	5.02%
Cu 327.393†	-74.8	-0.00124	mg/L	0.000226	-0.00124	mg/L	0.000226	18.17%
Fe 239.562†	-45.1	-0.0127	mg/L	0.00038	-0.0127	mg/L	0.00038	2.96%
Mg 279.077†	-15.2	-0.0206	mg/L	0.00307	-0.0206	mg/L	0.00307	14.91%
Mn 257.610†	420.4	-0.00304	mg/L	0.000020	-0.00304	mg/L	0.000020	0.64%
Mo 202.031†	-25.0	-0.00436	mg/L	0.000031	-0.00436	mg/L	0.000031	0.70%
Ni 231.604†	-35.1	-0.00318	mg/L	0.000085	-0.00318	mg/L	0.000085	2.68%
Pb 220.353†	17.4	-0.00019	mg/L	0.001030	-0.00019	mg/L	0.001030	553.51%
Sb 206.836†	-0.6	-0.00009	mg/L	0.001293	-0.00009	mg/L	0.001293	>999.9%
Se 196.026†	-2.2	-0.00014	mg/L	0.000895	-0.00014	mg/L	0.000895	627.54%
Si 251.611†	27.8	-0.0125	mg/L	0.00026	-0.0125	mg/L	0.00026	2.10%
Sn 189.927†	-40.4	-0.00700	mg/L	0.000561	-0.00700	mg/L	0.000561	8.01%
Ti 334.940†	-235.3	-0.00162	mg/L	0.000085	-0.00162	mg/L	0.000085	5.22%
Tl 190.801†	-1.3	-0.00296	mg/L	0.002067	-0.00296	mg/L	0.002067	69.85%
V 290.880†	-358.9	-0.00582	mg/L	0.001809	-0.00582	mg/L	0.001809	31.06%
Zn 206.200†	60.7	-0.00212	mg/L	0.000122	-0.00212	mg/L	0.000122	5.76%
K 766.490†	-19.4	-0.0463	mg/L	0.00973	-0.0463	mg/L	0.00973	21.00%
Na 589.592†	-162.3	0.0204	mg/L	0.00215	0.0204	mg/L	0.00215	10.54%
Sr 407.771†	-291.3	-0.00492	mg/L	0.000009	-0.00492	mg/L	0.000009	0.18%
Li 670.784†	26.8	-0.00492	mg/L	0.000126	-0.00492	mg/L	0.000126	2.55%

==========

Sequence No.: 11 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 5/11/2012 5:10:36 PM**

Approved: May 14, 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	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	2340778.5						17558.13	0.75%
YRADIAL	315066.1						4911.88	1.56%
Ga 417.206	1382960.3						36845.79	2.66%
GaRADIAL	92211.6						1441.25	1.56%
Ag 328.068†	126262.3	0.383	mg/L	0.0118	0.383	mg/L	0.0118	3.10%
QC value within limits for Ag 328.068 Recovery = 95.68%								
Al 396.153†	72953.7	9.71	mg/L	0.048	9.71	mg/L	0.048	0.50%
QC value within limits for Al 396.153 Recovery = 97.08%								
As 188.979†	1114.7	0.372	mg/L	0.0049	0.372	mg/L	0.0049	1.30%
QC value within limits for As 188.979 Recovery = 93.11%								
Ba 233.527†	156139.7	0.977	mg/L	0.0084	0.977	mg/L	0.0084	0.86%
QC value within limits for Ba 233.527 Recovery = 97.74%								
Be 234.861†	62884.3	0.0462	mg/L	0.00110	0.0462	mg/L	0.00110	2.38%
QC value within limits for Be 234.861 Recovery = 92.48%								
B 249.677†	41396.7	0.461	mg/L	0.0163	0.461	mg/L	0.0163	3.54%
QC value within limits for B 249.677 Recovery = 92.29%								
Ca 227.546†	4644.1	9.94	mg/L	0.269	9.94	mg/L	0.269	2.71%
QC value within limits for Ca 227.546 Recovery = 99.36%								
Cd 228.802†	2757.7	0.0451	mg/L	0.00172	0.0451	mg/L	0.00172	3.81%
QC value within limits for Cd 228.802 Recovery = 90.16%								
Co 228.616†	7701.0	0.195	mg/L	0.0023	0.195	mg/L	0.0023	1.16%
QC value within limits for Co 228.616 Recovery = 97.59%								
Cr 267.716†	55021.5	0.485	mg/L	0.0032	0.485	mg/L	0.0032	0.66%
QC value within limits for Cr 267.716 Recovery = 97.03%								
Cu 327.393†	135649.9	0.484	mg/L	0.0178	0.484	mg/L	0.0178	3.67%
QC value within limits for Cu 327.393 Recovery = 96.84%								
Fe 239.562†	63860.0	3.85	mg/L	0.059	3.85	mg/L	0.059	1.52%
QC value within limits for Fe 239.562 Recovery = 96.27%								
Mg 279.077†	35706.1	9.70	mg/L	0.127	9.70	mg/L	0.127	1.31%
QC value within limits for Mg 279.077 Recovery = 96.96%								
Mn 257.610†	430130.3	0.498	mg/L	0.0032	0.498	mg/L	0.0032	0.65%
QC value within limits for Mn 257.610 Recovery = 99.61%								
Mo 202.031†	36804.0	0.974	mg/L	0.0028	0.974	mg/L	0.0028	0.29%
QC value within limits for Mo 202.031 Recovery = 97.39%								
Ni 231.604†	33997.8	0.489	mg/L	0.0029	0.489	mg/L	0.0029	0.60%
QC value within limits for Ni 231.604 Recovery = 97.81%								
Pb 220.353†	5563.9	0.494	mg/L	0.0055	0.494	mg/L	0.0055	1.12%
QC value within limits for Pb 220.353 Recovery = 98.77%								
Sb 206.836†	4981.3	1.14	mg/L	0.030	1.14	mg/L	0.030	2.64%
QC value within limits for Sb 206.836 Recovery = 95.04%								
Se 196.026†	700.2	0.375	mg/L	0.0100	0.375	mg/L	0.0100	2.65%
QC value within limits for Se 196.026 Recovery = 93.83%								
Si 251.611†	210094.8	4.80	mg/L	0.118	4.80	mg/L	0.118	2.45%
QC value within limits for Si 251.611 Recovery = 95.94%								
Sn 189.927†	10249.1	0.967	mg/L	0.0110	0.967	mg/L	0.0110	1.14%
QC value within limits for Sn 189.927 Recovery = 96.69%								
Ti 334.940†	990045.6	0.970	mg/L	0.0019	0.970	mg/L	0.0019	0.19%
QC value within limits for Ti 334.940 Recovery = 96.98%								
Tl 190.801†	1944.7	0.507	mg/L	0.0035	0.507	mg/L	0.0035	0.69%
QC value within limits for Tl 190.801 Recovery = 101.35%								
V 290.880†	193687.7	0.980	mg/L	0.0099	0.980	mg/L	0.0099	1.01%
QC value within limits for V 290.880 Recovery = 98.04%								
Zn 206.200†	42259.0	0.966	mg/L	0.0182	0.966	mg/L	0.0182	1.88%
QC value within limits for Zn 206.200 Recovery = 96.60%								
K 766.490†	159100.8	48.7	mg/L	0.51	48.7	mg/L	0.51	1.05%
QC value within limits for K 766.490 Recovery = 97.46%								
Na 589.592†	989083.4	47.8	mg/L	0.62	47.8	mg/L	0.62	1.29%
QC value within limits for Na 589.592 Recovery = 95.62%								
Sr 407.771†	2727158.0	1.000	mg/L	0.0113	1.000	mg/L	0.0113	1.13%

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QC value within limits for Sr 407.771 Recovery = 99.96%
Li 670.784† 156424.4 1.00 mg/L 0.008 1.00 mg/L 0.008 0.82%
QC value within limits for Li 670.784 Recovery = 100.25%
All analyte(s) passed QC.

==========

Sequence No.: 12 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 5/11/2012 5:16:37 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	2378580.5						12253.36	0.52%
YRADIAL	312123.3						6015.89	1.93%
Ga 417.206	1375009.7						39418.37	2.87%
GaRADIAL	91178.1						1649.93	1.81%
Ag 328.068†	-59.5	-0.00114	mg/L	0.000204	-0.00114	mg/L	0.000204	17.96%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	3.7	-0.0255	mg/L	0.00094	-0.0255	mg/L	0.00094	3.70%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-2.2	0.00009	mg/L	0.001480	0.00009	mg/L	0.001480	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	40.1	-0.00397	mg/L	0.000086	-0.00397	mg/L	0.000086	2.16%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-39.3	0.00002	mg/L	0.000019	0.00002	mg/L	0.000019	86.30%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	-67.8	0.00086	mg/L	0.000424	0.00086	mg/L	0.000424	49.32%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	13.8	0.0711	mg/L	0.00628	0.0711	mg/L	0.00628	8.83%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-12.2	-0.00010	mg/L	0.000146	-0.00010	mg/L	0.000146	152.51%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-10.3	-0.00102	mg/L	0.000157	-0.00102	mg/L	0.000157	15.45%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	6.2	-0.00232	mg/L	0.000041	-0.00232	mg/L	0.000041	1.77%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-47.9	-0.00115	mg/L	0.000185	-0.00115	mg/L	0.000185	16.16%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	-34.9	-0.0121	mg/L	0.00030	-0.0121	mg/L	0.00030	2.46%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	-9.4	-0.0191	mg/L	0.00303	-0.0191	mg/L	0.00303	15.91%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	70.5	-0.00345	mg/L	0.000002	-0.00345	mg/L	0.000002	0.05%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-5.3	-0.00384	mg/L	0.000329	-0.00384	mg/L	0.000329	8.58%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	-30.5	-0.00311	mg/L	0.000163	-0.00311	mg/L	0.000163	5.23%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	20.8	0.00012	mg/L	0.000867	0.00012	mg/L	0.000867	749.32%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.7	0.00022	mg/L	0.001582	0.00022	mg/L	0.001582	717.53%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-1.0	0.00050	mg/L	0.001716	0.00050	mg/L	0.001716	344.94%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	-8.3	-0.0134	mg/L	0.00057	-0.0134	mg/L	0.00057	4.29%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	-27.2	-0.00575	mg/L	0.000461	-0.00575	mg/L	0.000461	8.01%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-197.2	-0.00159	mg/L	0.000150	-0.00159	mg/L	0.000150	9.45%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-4.7	-0.00382	mg/L	0.001742	-0.00382	mg/L	0.001742	45.57%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-624.8	-0.00718	mg/L	0.001641	-0.00718	mg/L	0.001641	22.86%

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```
   QC value within limits for V 290.880  Recovery = Not calculated
Zn 206.200†              -21.6    -0.00400 mg/L      0.000261    -0.00400 mg/L      0.000261   6.53%
   QC value within limits for Zn 206.200  Recovery = Not calculated
K 766.490†                39.8     -0.0284 mg/L       0.04240     -0.0284 mg/L       0.04240 149.35%
   QC value within limits for K 766.490  Recovery = Not calculated
Na 589.592†             -116.0      0.0225 mg/L       0.00360      0.0225 mg/L       0.00360  16.02%
   QC value within limits for Na 589.592  Recovery = Not calculated
Sr 407.771†              173.8    -0.00475 mg/L      0.000046    -0.00475 mg/L      0.000046   0.97%
   QC value within limits for Sr 407.771  Recovery = Not calculated
Li 670.784†               45.7    -0.00479 mg/L      0.000458    -0.00479 mg/L      0.000458   9.55%
   QC value within limits for Li 670.784  Recovery = Not calculated
All analyte(s) passed QC.
```

Approved: May 14, 2012

2.3.2 Metals ICP-MS Data

2.3.2.1 Summary Data

Login Number: L12050171
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: WG397375 - All acceptance criteria were met.

Matrix Spikes: WG397375 - Sample 01 was chosen by the client for MS/MSD analysis. Samples 03(MS) and 05(MSD) met all acceptance criteria. Sample 02 was chosen by the client for MS/MSD analysis. Samples 04(MS) and 06(MSD) met all acceptance criteria.

SAMPLES

Samples: All acceptance criteria were met.

Narrative ID: 46074
Approved By: Sheri Pfalzgraf



Certificate of Analysis

Sample #: L12050171-01 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: MW-12-050412 **Prep Method:** 3015 **Prep Date:** 05/08/2012 10:09
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 05/08/2012 09:20
Workgroup #: WG397375 **Analyst:** JYH **Run Date:** 05/08/2012 15:03
Collect Date: 05/04/2012 10:30 **Dilution:** 1 **File ID:** NI.050812.150341
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		U	0.00100	0.000500
Arsenic, Total	7440-38-2	0.000833		0.00100	0.000500
Lead, Total	7439-92-1	0.000651		0.00100	0.000500
Selenium, Total	7782-49-2	0.00236		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 #: L12050171-02 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: MW-12-050412 **Prep Method:** 3015 **Prep Date:** 05/08/2012 10:09
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 05/08/2012 09:20
Workgroup #: WG397375 **Analyst:** JYH **Run Date:** 05/08/2012 15:32
Collect Date: 05/04/2012 10:30 **Dilution:** 1 **File ID:** NI.050812.153225
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Dissolved	7440-36-0		U	0.00100	0.000500
Arsenic, Dissolved	7440-38-2	0.000853		0.00100	0.000500
Lead, Dissolved	7439-92-1		U	0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.00205		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 #: L12050171-03 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: MW-12-050412 **Prep Method:** 3015 **Prep Date:** 05/08/2012 10:09
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 05/08/2012 09:20
Workgroup #: WG397375 **Analyst:** JYH **Run Date:** 05/08/2012 15:06
Collect Date: 05/04/2012 10:30 **Dilution:** 1 **File ID:** NI.050812.150633
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0	0.0620		0.00100	0.000500
Arsenic, Total	7440-38-2	0.0637		0.00100	0.000500
Lead, Total	7439-92-1	0.0635		0.00100	0.000500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Selenium, Total	7782-49-2	0.0614		0.00100	0.000500
Thallium, Total	7440-28-0	0.0637		0.000200	0.000100

Sample #: L12050171-04 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: MW-12-050412 **Prep Method:** 3015 **Prep Date:** 05/08/2012 10:09
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 05/08/2012 09:20
Workgroup #: WG397375 **Analyst:** JYH **Run Date:** 05/08/2012 15:35
Collect Date: 05/04/2012 10:30 **Dilution:** 1 **File ID:** NI.050812.153517
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Dissolved	7440-36-0	0.0627		0.00100	0.000500
Arsenic, Dissolved	7440-38-2	0.0644		0.00100	0.000500
Lead, Dissolved	7439-92-1	0.0629		0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.0613		0.00100	0.000500
Thallium, Dissolved	7440-28-0	0.0640		0.000200	0.000100

Sample #: L12050171-05 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: MW-12-050412 **Prep Method:** 3015 **Prep Date:** 05/08/2012 10:09
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 05/08/2012 09:20
Workgroup #: WG397375 **Analyst:** JYH **Run Date:** 05/08/2012 15:09
Collect Date: 05/04/2012 10:30 **Dilution:** 1 **File ID:** NI.050812.150925
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0	0.0650		0.00100	0.000500
Arsenic, Total	7440-38-2	0.0652		0.00100	0.000500
Lead, Total	7439-92-1	0.0654		0.00100	0.000500
Selenium, Total	7782-49-2	0.0620		0.00100	0.000500
Thallium, Total	7440-28-0	0.0653		0.000200	0.000100

Sample #: L12050171-06 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: MW-12-050412 **Prep Method:** 3015 **Prep Date:** 05/08/2012 10:09
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 05/08/2012 09:20
Workgroup #: WG397375 **Analyst:** JYH **Run Date:** 05/08/2012 15:38
Collect Date: 05/04/2012 10:30 **Dilution:** 1 **File ID:** NI.050812.153810
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Dissolved	7440-36-0	0.0644		0.00100	0.000500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Arsenic, Dissolved	7440-38-2	0.0653		0.00100	0.000500
Lead, Dissolved	7439-92-1	0.0645		0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.0622		0.00100	0.000500
Thallium, Dissolved	7440-28-0	0.0656		0.000200	0.000100

Sample #: L12050171-07 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: PZ-01-050412 **Prep Method:** 3015 **Prep Date:** 05/08/2012 10:09
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 05/08/2012 09:20
Workgroup #: WG397375 **Analyst:** JYH **Run Date:** 05/08/2012 15:41
Collect Date: 05/04/2012 12:07 **Dilution:** 1 **File ID:** NI.050812.154102
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Total	7440-36-0		U	0.00100	0.000500
Arsenic, Total	7440-38-2	0.0250		0.00100	0.000500
Lead, Total	7439-92-1	0.0229		0.00100	0.000500
Selenium, Total	7782-49-2	0.00251		0.00100	0.000500
Thallium, Total	7440-28-0	0.000388		0.000200	0.000100

U	Not detected at or above adjusted sample detection limit.

Sample #: L12050171-08 **PrePrep Method:** N/A **Instrument:** ICP-MS2
Client ID: PZ-01-050412 **Prep Method:** 3015 **Prep Date:** 05/08/2012 10:09
Matrix: Water **Analytical Method:** 6020 **Cal Date:** 05/08/2012 09:20
Workgroup #: WG397375 **Analyst:** JYH **Run Date:** 05/08/2012 15:43
Collect Date: 05/04/2012 12:07 **Dilution:** 1 **File ID:** NI.050812.154355
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Antimony, Dissolved	7440-36-0		U	0.00100	0.000500
Arsenic, Dissolved	7440-38-2	0.0167		0.00100	0.000500
Lead, Dissolved	7439-92-1		U	0.00100	0.000500
Selenium, Dissolved	7782-49-2	0.00177		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: WG397303
Analyst: VC
Spike Analyst: VC
Run Date: 05/08/2012 10:09
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# 381985 Lot #: COA15783

	SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Initial Vessel Wt	Final Vessel Wt	Spike Amount	Due Date
1	WG397303-03	BLANK	1	40 mL	100 mL	206.879 g	206.878 g		
2	WG397255-01	FBLK	18	40 mL	100 mL	206.511 g	206.496 g		
3	WG397303-04	LCS	1	40 mL	100 mL	205.479 g	205.471 g	.25 mL	
4	L12050134-08	SAMP	1	40 mL	100 mL	207.073 g	207.065 g		05/14/12
5	L12050150-30	SAMP	1	40 mL	100 mL	206.731 g	206.715 g		05/10/12
6	L12050154-02	SAMP	18	40 mL	100 mL	206.773 g	206.765 g		05/09/12
7	WG397303-01	REF	1	40 mL	100 mL	207.665 g	207.654 g		
8	L12050171-01	RS01	1	40 mL	100 mL	207.665 g	207.654 g		05/21/12
9	WG397303-02	REF	1	40 mL	100 mL	206.423 g	206.402 g		
10	L12050171-02	RS02	1	40 mL	100 mL	206.423 g	206.402 g		05/21/12
11	WG397303-05	MS	1	40 mL	100 mL	208.299 g	208.285 g	.25 mL	
12	L12050171-03	MS01	1	40 mL	100 mL	208.299 g	208.285 g	.25 mL	05/21/12
13	WG397303-07	MS	1	40 mL	100 mL	207.444 g	207.432 g	.25 mL	
14	L12050171-04	MS02	1	40 mL	100 mL	207.444 g	207.432 g	.25 mL	05/21/12
15	WG397303-06	MSD	1	40 mL	100 mL	205.779 g	205.768 g	.25 mL	
16	L12050171-05	SD01	1	40 mL	100 mL	205.779 g	205.768 g	.25 mL	05/21/12
17	WG397303-08	MSD	1	40 mL	100 mL	206.759 g	206.748 g	.25 mL	
18	L12050171-06	SD02	1	40 mL	100 mL	206.759 g	206.748 g	.25 mL	05/21/12
19	L12050171-07	SAMP	1	40 mL	100 mL	208.592 g	208.584 g		05/21/12
20	L12050171-08	SAMP	1	40 mL	100 mL	206.693 g	206.677 g		05/21/12
21	L12050223-05	SAMP	1	40 mL	100 mL	206.801 g	206.781 g		05/11/12

L12050150-30	filtered digestate
L12050171-07	filtered digestate

Analyst: Vicki Collins

Reviewer: Brenda Gregory

MW_DIG - Modified 09/30/2009
PDF ID: 2405462
Report generated: 05/08/2012 11:14

Microbac Laboratories Inc.

Instrument Run Log

Instrument: ICP-MS2 Dataset: 050812A.REP
Analyst1: JYH Analyst2: N/A
Method: 6020 SOP: ME700A Rev:
Maintenance Log ID: 41632

Calibration Std: STD51139 ICV Std: STD51141 Post Spike: STD47984
ICSA: STD51140 ICSAB: STD51239 Int. Std: RGT17150
CCV: STD51215 LLCCV: STD51549

Workgroups: 396772,397276,397161,397320,397375,397387

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	NI.050812.090902	Blank	Blank		1		05/08/12 09:09
2	NI.050812.091156	WG397315-01	Calibration Point		1		05/08/12 09:11
3	NI.050812.091449	WG397315-02	Calibration Point		1		05/08/12 09:14
4	NI.050812.091741	WG397315-03	Calibration Point		1		05/08/12 09:17
5	NI.050812.092034	WG397315-04	Calibration Point		1		05/08/12 09:20
6	NI.050812.092329	WG397315-05	Initial Calibration Verification		1		05/08/12 09:23
7	NI.050812.092624	WG397315-06	Initial Calib Blank		1		05/08/12 09:26
8	NI.050812.092919	WG397315-07	Low Level Initial Calibration V		1		05/08/12 09:29
9	NI.050812.093211	WG397315-08	Interference Check		1		05/08/12 09:32
10	NI.050812.093504	WG397315-09	Interference Check		1		05/08/12 09:35
11	NI.050812.093800	WG397315-10	CCV		1		05/08/12 09:38
12	NI.050812.094053	WG397315-11	CCB		1		05/08/12 09:40
13	NI.050812.094347	L12050017-01	2401 MW-1A	40/100	1		05/08/12 09:43
14	NI.050812.094639	WG3967772-03	L1205001701PS WG396777		1		05/08/12 09:46
15	NI.050812.094932	WG396772-04	Serial Dilution		5	L12050017-01	05/08/12 09:49
16	NI.050812.095227	WG397315-12	CCV		1		05/08/12 09:52
17	NI.050812.095520	WG397315-13	CCB		1		05/08/12 09:55
18	NI.050812.095815	WG397315-14	Low Level Continuing Calibra		1		05/08/12 09:58
19	NI.050812.100109	WG397190-02	Method/Prep Blank	40/100	1		05/08/12 10:01
20	NI.050812.100402	WG397190-03	Laboratory Control S	40/100	1		05/08/12 10:04
21	NI.050812.100654	WG397190-01	Reference Sample		1	L12050150-27	05/08/12 10:06
22	NI.050812.100947	WG397190-04	Matrix Spike	40/100	1	L12050150-27	05/08/12 10:09
23	NI.050812.101240	WG397190-05	Matrix Spike Duplica	40/100	1	L12050150-27	05/08/12 10:12
24	NI.050812.101532	L12050150-07	MW-8A	40/100	1		05/08/12 10:15
25	NI.050812.101824	L12050150-08	MW-8B	40/100	1		05/08/12 10:18
26	NI.050812.102117	WG397276-01	Post Digestion Spike		1	L12050150-08	05/08/12 10:21
27	NI.050812.102410	WG397276-02	Serial Dilution		5	L12050150-08	05/08/12 10:24
28	NI.050812.102706	WG397315-15	CCV		1		05/08/12 10:27
29	NI.050812.102958	WG397315-16	CCB		1		05/08/12 10:29
30	NI.050812.103253	L12050150-09	MW-9	40/100	1		05/08/12 10:32
31	NI.050812.103545	L12050150-10	MW-9DR	40/100	1		05/08/12 10:35
32	NI.050812.103838	L12050150-11	MW-10	40/100	1		05/08/12 10:38
33	NI.050812.104131	L12050150-12	MW-11	40/100	1		05/08/12 10:41
34	NI.050812.104423	L12050150-13	MW-12	40/100	1		05/08/12 10:44

Page: 1 Approved: May 09, 2012

Microbac

Microbac Laboratories Inc.

Instrument Run Log

Instrument: ICP-MS2 Dataset: 050812A.REP
Analyst1: JYH Analyst2: N/A
Method: 6020 SOP: ME700A Rev:
Maintenance Log ID: 41632

Calibration Std: STD51139 ICV Std: STD51141 Post Spike: STD47984
ICSA: STD51140 ICSAB: STD51239 Int. Std: RGT17150
CCV: STD51215 LLCCV: STD51549

Workgroups: 396772,397276,397161,397320,397375,397387

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
35	NI.050812.104715	L12050150-14	MW-13S	40/100	1		05/08/12 10:47
36	NI.050812.105008	L12050150-15	MW-13D	40/100	1		05/08/12 10:50
37	NI.050812.105301	L12050150-16	MW-14	40/100	1		05/08/12 10:53
38	NI.050812.105554	L12050150-17	MW-15	40/100	1		05/08/12 10:55
39	NI.050812.105847	L12050150-18	MW-19S	40/100	1		05/08/12 10:58
40	NI.050812.110141	WG397315-17	CCV		1		05/08/12 11:01
41	NI.050812.110434	WG397315-18	CCB		1		05/08/12 11:04
42	NI.050812.110727	L12050150-19	MW-19D	40/100	1		05/08/12 11:07
43	NI.050812.111019	L12050150-21	SW-1	40/100	1		05/08/12 11:10
44	NI.050812.111311	L12050150-22	SW-2A	40/100	1		05/08/12 11:13
45	NI.050812.111604	L12050150-23	SW-3	40/100	1		05/08/12 11:16
46	NI.050812.111857	L12050150-24	SW-4	40/100	1		05/08/12 11:18
47	NI.050812.112149	L12050150-25	SW-5	40/100	1		05/08/12 11:21
48	NI.050812.112441	L12050150-26	SW-6	40/100	1		05/08/12 11:24
49	NI.050812.112734	L12050085-13	2903 MW-12	40/100	1		05/08/12 11:27
50	NI.050812.113027	L12050085-14	2903 SW-1	40/100	1		05/08/12 11:30
51	NI.050812.113319	L12050085-15	2903 SW-4	40/100	1		05/08/12 11:33
52	NI.050812.113613	WG397315-19	CCV		1		05/08/12 11:36
53	NI.050812.113905	WG397315-20	CCB		1		05/08/12 11:39
54	NI.050812.114200	L12050108-01	9809-GMW-1	40/100	1		05/08/12 11:42
55	NI.050812.114452	L12050108-03	9809-GMW-3	40/100	1		05/08/12 11:44
56	NI.050812.114745	L12050108-04	9809-GMW-4	40/100	1		05/08/12 11:47
57	NI.050812.115040	WG397315-21	CCV		1		05/08/12 11:50
58	NI.050812.115332	WG397315-22	CCB		1		05/08/12 11:53
59	NI.050812.115627	WG397315-23	Low Level Continuing Calibra		1		05/08/12 11:56
60	NI.050812.121017	WG397152-02	Method/Prep Blank	40/100	1		05/08/12 12:10
61	NI.050812.121309	WG397152-03	Laboratory Control S	40/100	1		05/08/12 12:13
62	NI.050812.121602	WG397152-01	Reference Sample		1	L12050127-09	05/08/12 12:16
63	NI.050812.121854	WG397152-04	Matrix Spike	40/100	1	L12050127-09	05/08/12 12:18
64	NI.050812.122147	WG397152-05	Matrix Spike Duplica	40/100	1	L12050127-09	05/08/12 12:21
65	NI.050812.122440	L12050127-01	9801 MW-1A	40/100	1		05/08/12 12:24
66	NI.050812.122733	L12050127-02	9801 MW-2	40/100	1		05/08/12 12:27
67	NI.050812.123026	WG397320-01	Post Digestion Spike		1	L12050127-02	05/08/12 12:30
68	NI.050812.123319	WG397320-02	Serial Dilution		5	L12050127-02	05/08/12 12:33

Page: 2 Approved: May 09, 2012

Sheri L. Babcock

Microbac

Microbac Laboratories Inc.

Instrument Run Log

Instrument: ICP-MS2 Dataset: 050812A.REP
Analyst1: JYH Analyst2: N/A
Method: 6020 SOP: ME700A Rev:
Maintenance Log ID: 41632

Calibration Std: STD51139 ICV Std: STD51141 Post Spike: STD47984
ICSA: STD51140 ICSAB: STD51239 Int. Std: RGT17150
CCV: STD51215 LLCCV: STD51549

Workgroups: 396772,397276,397161,397320,397375,397387

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
69	NI.050812.123615	WG397315-24	CCV		1		05/08/12 12:36
70	NI.050812.123908	WG397315-25	CCB		1		05/08/12 12:39
71	NI.050812.124202	L12050127-03	9801 MW-3	40/100	1		05/08/12 12:42
72	NI.050812.124454	L12050127-04	9801 MW-3A	40/100	1		05/08/12 12:44
73	NI.050812.124746	L12050127-05	9801 MW-4	40/100	1		05/08/12 12:47
74	NI.050812.125038	L12050127-06	9801 MW-5	40/100	1		05/08/12 12:50
75	NI.050812.125330	L12050127-07	9801 MW-6	40/100	1		05/08/12 12:53
76	NI.050812.125622	L12050127-08	9801 MW-7	40/100	1		05/08/12 12:56
77	NI.050812.125914	L12050127-10	9801 SW-1	40/100	1		05/08/12 12:59
78	NI.050812.130207	L12050127-11	9801 SW-2	40/100	1		05/08/12 13:02
79	NI.050812.130500	L12050127-12	9801 SW-3	40/100	1		05/08/12 13:05
80	NI.050812.130752	L12050127-13	9801 SW-4	40/100	1		05/08/12 13:07
81	NI.050812.131046	WG397315-26	CCV		1		05/08/12 13:10
82	NI.050812.131338	WG397315-27	CCB		1		05/08/12 13:13
83	NI.050812.131632	L12050127-14	9801 SW-5	40/100	1		05/08/12 13:16
84	NI.050812.131925	L12050150-01	MW-1	40/100	1		05/08/12 13:19
85	NI.050812.132218	L12050150-02	MW-2	40/100	1		05/08/12 13:22
86	NI.050812.132510	L12050150-03	MW-3A	40/100	1		05/08/12 13:25
87	NI.050812.132802	L12050150-04	MW-4	40/100	1		05/08/12 13:28
88	NI.050812.133055	L12050150-05	MW-6A	40/100	1		05/08/12 13:30
89	NI.050812.133348	L12050150-06	MW-7D	40/100	1		05/08/12 13:33
90	NI.050812.133714	L12050127-02	9801 MW-2	40/100	5		05/08/12 13:37
91	NI.050812.134006	WG397320-01	Post Digestion Spike		5	L12050127-02	05/08/12 13:40
92	NI.050812.134259	WG397320-02	Serial Dilution		25	L12050127-02	05/08/12 13:42
93	NI.050812.134554	WG397315-28	CCV		1		05/08/12 13:45
94	NI.050812.134847	WG397315-29	CCB		1		05/08/12 13:48
95	NI.050812.135141	WG397315-30	Low Level Continuing Calibra		1		05/08/12 13:51
96	NI.050812.140834	WG397302-02	Method/Prep Blank		1		05/08/12 14:08
97	NI.050812.141615	WG397302-02	Method/Prep Blank		1		05/08/12 14:16
98	NI.050812.141926	WG397302-03	Laboratory Control S		1		05/08/12 14:19
99	NI.050812.144829	WG397303-03	Method/Prep Blank	40/100	1		05/08/12 14:48
100	NI.050812.145121	WG397255-01	Fluid Blank		1		05/08/12 14:51
101	NI.050812.145500	WG397303-04	Laboratory Control S	40/100	1		05/08/12 14:55
102	NI.050812.145755	WG397315-31	CCV		1		05/08/12 14:57

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Sheri L. Babcock

Microbac

Microbac Laboratories Inc.

Instrument Run Log

Instrument: ICP-MS2 Dataset: 050812A.REP
Analyst1: JYH Analyst2: N/A
Method: 6020 SOP: ME700A Rev:
Maintenance Log ID: 41632

Calibration Std: STD51139 ICV Std: STD51141 Post Spike: STD47984
ICSA: STD51140 ICSAB: STD51239 Int. Std: RGT17150
CCV: STD51215 LLCCV: STD51549

Workgroups: 396772,397276,397161,397320,397375,397387

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
103	NI.050812.150047	WG397315-32	CCB		1		05/08/12 15:00
104	NI.050812.150341	WG397303-01	Reference Sample		1	L12050171-01	05/08/12 15:03
105	NI.050812.150633	WG397303-05	Matrix Spike	40/100	1	L12050171-01	05/08/12 15:06
106	NI.050812.150925	WG397303-06	Matrix Spike Duplica	40/100	1	L12050171-01	05/08/12 15:09
107	NI.050812.151217	L12050134-08	RW-1	40/100	1		05/08/12 15:12
108	NI.050812.151509	L12050150-30	LEACHATE	40/100	5		05/08/12 15:15
109	NI.050812.151801	L12050154-02	2770-SPLP0025	40/100	1		05/08/12 15:18
110	NI.050812.152054	WG397375-01	Post Digestion Spike		1	L12050154-02	05/08/12 15:20
111	NI.050812.152347	WG397375-02	Serial Dilution		5	L12050154-02	05/08/12 15:23
112	NI.050812.152640	WG397315-33	CCV		1		05/08/12 15:26
113	NI.050812.152932	WG397315-34	CCB		1		05/08/12 15:29
114	NI.050812.153225	WG397303-02	Reference Sample		1	L12050171-02	05/08/12 15:32
115	NI.050812.153517	WG397303-07	Matrix Spike	40/100	1	L12050171-02	05/08/12 15:35
116	NI.050812.153810	WG397303-08	Matrix Spike Duplica	40/100	1	L12050171-02	05/08/12 15:38
117	NI.050812.154102	L12050171-07	PZ-01-050412	40/100	1		05/08/12 15:41
118	NI.050812.154355	L12050171-08	PZ-01-050412	40/100	1		05/08/12 15:43
119	NI.050812.154648	L12050223-05	40BF05312FB	40/100	1		05/08/12 15:46
120	NI.050812.155635	L12050150-30	LEACHATE	40/100	50		05/08/12 15:56
121	NI.050812.155928	L12050154-02	2770-SPLP0025	40/100	10		05/08/12 15:59
122	NI.050812.160220	WG397375-01	Post Digestion Spike		10	L12050154-02	05/08/12 16:02
123	NI.050812.160513	WG397375-02	Serial Dilution		50	L12050154-02	05/08/12 16:05
124	NI.050812.160808	WG397315-35	Interference Check		1		05/08/12 16:08
125	NI.050812.161100	WG397315-36	Interference Check		1		05/08/12 16:11
126	NI.050812.161355	WG397315-37	CCV		1		05/08/12 16:13
127	NI.050812.161648	WG397315-38	CCB		1		05/08/12 16:16
128	NI.050812.161942	WG397315-39	Low Level Continuing Calibra		1		05/08/12 16:19
129	NI.050812.162603	WG397001-02	Method/Prep Blank	40/100	1		05/08/12 16:26
130	NI.050812.162856	WG397001-03	Laboratory Control S	40/100	1		05/08/12 16:28
131	NI.050812.163148	WG397001-01	Reference Sample		1	L12050049-08	05/08/12 16:31
132	NI.050812.163440	WG397001-04	Matrix Spike	40/100	1	L12050049-08	05/08/12 16:34
133	NI.050812.163733	WG397001-05	Matrix Spike Duplica	40/100	1	L12050049-08	05/08/12 16:37
134	NI.050812.164026	L12050049-02	SS002CP027-120501	40/100	1		05/08/12 16:40
135	NI.050812.164317	L12050049-03	WP021CP057-120501	40/100	1		05/08/12 16:43
136	NI.050812.164610	WG397387-01	Post Digestion Spike		1	L12050049-03	05/08/12 16:46

Page: 4 Approved: May 09, 2012

Esther L. Babgard

Microbac

Microbac Laboratories Inc.

Instrument Run Log

Instrument: ICP-MS2 Dataset: 050812A.REP
Analyst1: JYH Analyst2: N/A
Method: 6020 SOP: ME700A Rev:
Maintenance Log ID: 41632

Calibration Std: STD51139 ICV Std: STD51141 Post Spike: STD47984
ICSA: STD51140 ICSAB: STD51239 Int. Std: RGT17150
CCV: STD51215 LLCCV: STD51549

Workgroups: 396772,397276,397161,397320,397375,397387

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
137	NI.050812.164903	WG397387-02	Serial Dilution		5	L12050049-03	05/08/12 16:49
138	NI.050812.165158	WG397315-40	CCV		1		05/08/12 16:51
139	NI.050812.165451	WG397315-41	CCB		1		05/08/12 16:54
140	NI.050812.165745	L12050049-04	ST006CP166-120501	40/100	1		05/08/12 16:57
141	NI.050812.170037	L12050049-05	ST008CP230-120501	40/100	1		05/08/12 17:00
142	NI.050812.170328	L12050049-06	SS040CP280-120501	40/100	1		05/08/12 17:03
143	NI.050812.170620	L12050049-07	SS038CP003-120501	40/100	1		05/08/12 17:06
144	NI.050812.170912	L12050088-02	KY038PS041-120502	40/100	1		05/08/12 17:09
145	NI.050812.171204	L12050088-03	KY038PS037-120502	40/100	1		05/08/12 17:12
146	NI.050812.171457	L12050088-04	KY038PS038-120502	40/100	1		05/08/12 17:14
147	NI.050812.171750	L12050088-06	KY038PS027-120502	40/100	1		05/08/12 17:17
148	NI.050812.172042	L12050088-07	SS052PS741-120502	40/100	1		05/08/12 17:20
149	NI.050812.172335	L12050088-08	SS052PS590-120502	40/100	1		05/08/12 17:23
150	NI.050812.172630	WG397315-42	CCV		1		05/08/12 17:26
151	NI.050812.172923	WG397315-43	CCB		1		05/08/12 17:29
152	NI.050812.173218	WG397315-44	Low Level Continuing Calibra		1		05/08/12 17:32

Page: 5 Approved: May 09, 2012

Sheri L. Babcock

Microbac

Microbac Laboratories Inc.

Data Checklist

Date: 08-MAY-2012
Analyst: JYH
Analyst: NA
Method: 6020
Instrument: ICP-MS2
Curve Workgroup: 397315
Runlog ID: 46603
Analytical Workgroups: 396772,397276,397161,397320,397375,397387

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	127,134,154,171,223,049,088
Client Forms	X
Level X	
Level 3	049
Level 4	134,154,171,223,088
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:
09-MAY-2012

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-09-2012 13:57:44

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 6020 AAB#: WG397375

Login Number: L12050171

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-12-050412	01	05/04/12					05/08/12	4	180		05/08/12	4.2	180	
MW-12-050412	02	05/04/12					05/08/12	4	180		05/08/12	4.2	180	
MW-12-050412	03	05/04/12					05/08/12	4	180		05/08/12	4.2	180	
MW-12-050412	04	05/04/12					05/08/12	4	180		05/08/12	4.2	180	
MW-12-050412	05	05/04/12					05/08/12	4	180		05/08/12	4.2	180	
MW-12-050412	06	05/04/12					05/08/12	4	180		05/08/12	4.2	180	
PZ-01-050412	07	05/04/12					05/08/12	3.9	180		05/08/12	4.1	180	
PZ-01-050412	08	05/04/12					05/08/12	3.9	180		05/08/12	4.2	180	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2406698
Report generated 05/09/2012 08:35

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12050171
Blank File ID: NI.050812.144829
Prep Date: 05/08/12 10:09
Analyzed Date: 05/08/12 14:48
Analyst: JYH

Work Group: WG397375
Blank Sample ID: WG397303-03
Instrument ID: ICP-MS2
Method: 6020

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG397303-04	NI.050812.145500	05/08/12 14:55	01
MW-12-050412	L12050171-01	NI.050812.150341	05/08/12 15:03	01
MW-12-050412	L12050171-03	NI.050812.150633	05/08/12 15:06	01
MW-12-050412	L12050171-05	NI.050812.150925	05/08/12 15:09	01
MW-12-050412	L12050171-02	NI.050812.153225	05/08/12 15:32	01
MW-12-050412	L12050171-04	NI.050812.153517	05/08/12 15:35	01
MW-12-050412	L12050171-06	NI.050812.153810	05/08/12 15:38	01
PZ-01-050412	L12050171-07	NI.050812.154102	05/08/12 15:41	01
PZ-01-050412	L12050171-08	NI.050812.154355	05/08/12 15:43	01

Report Name: BLANK_SUMMARY
PDF File ID: 2406700
Report generated 05/09/2012 11:24

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050171 Prep Date: 05/08/12 10:09 Sample ID: WG397303-03
Instrument ID: ICP-MS2 Run Date: 05/08/12 14:48 Prep Method: 3015
File ID: NI.050812.144829 Analyst: JYH Method: 6020
Workgroup (AAB#): WG397375 Matrix: Water Units: mg/L
Contract #: Cal ID: ICP-MS-08-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: 2406701
09-MAY-2012 11:24

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050171 **Run Date:** 05/08/2012 **Sample ID:** WG397303-04
Instrument ID: ICP-MS2 **Run Time:** 14:55 **Prep Method:** 3015
File ID: NI.050812.145500 **Analyst:** JYH **Method:** 6020
Workgroup (AAB#): WG397375 **Matrix:** Water **Units:** mg/L
QC Key: WATERLOO **Lot#:** STD49281 **Cal ID:** ICP-MS-08-MAY-12

Analytes	Expected	Found	% Rec	LCS Limits	Q
Antimony, Total	0.0625	0.0593	94.9	80 - 120	
Arsenic, Total	0.0625	0.0595	95.2	80 - 120	
Lead, Total	0.0625	0.0618	98.9	80 - 120	
Selenium, Total	0.0625	0.0575	92.0	80 - 120	
Thallium, Total	0.0625	0.0615	98.4	80 - 120	

LCS - Modified 03/06/2008
PDF File ID: 2406702
Report generated: 05/09/2012 11:24

Microbac Laboratories Inc.

MS/MSD REPORT

Loginnum:L12050171 Cal ID:ICP-MS2- 08-MAY-12 Worknum:WG397375

Instrument ID:ICP-MS2 Contract #: Prep Method:3015

Parent ID:L12050171-01 File ID:NI.050812.150341 Dil:1 Method:6020

Sample ID:L12050171-03 MS File ID:NI.050812.150633 Dil:1 Matrix:Water

Sample ID:L12050171-05 MSD File ID:NI.050812.150925 Dil:1 Units:mg/L

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Antimony, Total	U	0.0625	0.0620	99.3	0.0625	0.0650	104	4.60	80 - 120	20	
Arsenic, Total	0.000833	0.0625	0.0637	101	0.0625	0.0652	103	2.34	80 - 120	20	
Lead, Total	0.000651	0.0625	0.0635	101	0.0625	0.0654	104	3.03	80 - 120	20	
Selenium, Total	0.00236	0.0625	0.0614	94.5	0.0625	0.0620	95.4	0.921	80 - 120	20	
Thallium, Total	U	0.0625	0.0637	102	0.0625	0.0653	104	2.42	80 - 120	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

MS_MSD - Modified 03/06/2008
PDF File ID: 2406703
Report generated 05/09/2012 11:24

Microbac Laboratories Inc.

MS/MSD REPORT

Loginnum:L12050171 Cal ID:ICP-MS2- 08-MAY-12 Worknum:WG397375

Instrument ID:ICP-MS2 Contract #: Prep Method:3015

Parent ID:L12050171-02 File ID:NI.050812.153225 Dil:1 Method:6020

Sample ID:L12050171-04 MS File ID:NI.050812.153517 Dil:1 Matrix:Water

Sample ID:L12050171-06 MSD File ID:NI.050812.153810 Dil:1 Units:mg/L

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Antimony, Dissolved	U	0.0625	0.0627	100	0.0625	0.0644	103	2.67	80 - 120	20	
Arsenic, Dissolved	0.000853	0.0625	0.0644	102	0.0625	0.0653	103	1.39	80 - 120	20	
Lead, Dissolved	U	0.0625	0.0629	101	0.0625	0.0645	103	2.46	80 - 120	20	
Selenium, Dissolved	0.00205	0.0625	0.0613	94.8	0.0625	0.0622	96.2	1.41	80 - 120	20	
Thallium, Dissolved	U	0.0625	0.0640	102	0.0625	0.0656	105	2.50	80 - 120	20	

* FAILS %REC LIMIT

\# FAILS RPD LIMIT

MS_MSD - Modified 03/06/2008

PDF File ID: 2406703

Report generated 05/09/2012 11:24

Microbac Laboratories Inc.
Serial Dilution Report

Login: L12050171 **Worknum:** WG397375
Instrument: ICP-MS2 **Method:** 6020
Serial Dil: WG397375-02 **File ID:** NI.050812.152347 **Dil:** 5 **Units:** ug/L
Sample: L12050154-02 **File ID:** NI.050812.151801 **Dil:** 1

Analyte	Sample	Qual	Serial Dil	Qual	% Diff	Q
Antimony	0.402	X	1.02	F	153.00	
Arsenic	2.74	X	3.36	X	22.90	
Lead	ND	U	ND	U		
Selenium	1.36	X	1.13	F	16.70	
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: 2406696
05/09/2012 11:24

Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L12050171 **Worknum:** WG397375
Instrument ID: ICP-MS2 **Method:** 6020
Post Spike ID: WG397375-01 **File ID:** NI.050812.152054 **Dil:** 1 **Units:** ug/L
Sample ID: L12050154-02 **File ID:** NI.050812.151801 **Dil:** 1 **Matrix:** Water

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
ANTIMONY	51.3		0.402		50	101.7	75 - 125	
ARSENIC	53.3		2.74		50	101.2	75 - 125	
LEAD	52.7		0	U	50	105.4	75 - 125	
SELENIUM	50.3		1.36		50	97.9	75 - 125	
THALLIUM	53.8		0	U	50	107.6	75 - 125	

N = % Recovery exceeds control limits
F = Result is between MDL and RL
U = Sample result is below MDL. A value of zero is used in the calculation

POST_SPIKE - Modified 03/06/2008
PDF File ID: 2406697
Report generated: 05/09/2012 11:24

Microbac Laboratories Inc.
Initial Calibration Summary

Login:	**L12050171**	Workgroup (AAB#):	**WG397375**
Analytical Method:	**6020**	Instrument ID:	**ICP-MS2**
ICAL Worknum:	**WG397315**	Initial Calibration Date:	**08-MAY-2012 09:20**

	WG397315-01		WG397315-02		WG397315-03		WG397315-04			
	Conc	INT	Conc	INT	Conc	INT	Conc	INT	R	Q
ANTIMONY	0	20.5	.4	625	50	610000	100	1170000	.999995	
ARSENIC	0	-263	.4	-176	50	73200	100	142000	.999998	
LEAD	0	1170	.4	4030	50	2830000	100	5530000	.999926	
SELENIUM	0	27.9	.4	43.8	50	8530	100	16400	1	
THALLIUM	0	5.30	.4	945	50	898000	100	1740000	.999978	

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: 2406706
Report generated: 09-MAY-2012 08:36

Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L12050171 Run Date: 05/08/2012 Sample ID: WG397315-06
Instrument ID: ICP-MS2 Run Time: 09:26 Method: 6020
File ID: NI.050812.092624 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG397375 Cal ID: ICP-MS2 - 08-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: 2406709
Report generated 05/09/2012 08:36

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050171 Run Date: 05/08/2012 Sample ID: WG397315-11

Instrument ID: ICP-MS2 Run Time: 09:40 Method: 6020

File ID: NI.050812.094053 Analyst: JYH Units: ug/L

Workgroup (AAB#): WG397375 Cal ID: ICP-MS - 08-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: 2406716
Report generated 05/09/2012 08:37

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050171 Run Date: 05/08/2012 Sample ID: WG397315-29

Instrument ID: ICP-MS2 Run Time: 13:48 Method: 6020

File ID: NI.050812.134847 Analyst: JYH Units: ug/L

Workgroup (AAB#): WG397375 Cal ID: ICP-MS - 08-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: 2406716
Report generated 05/09/2012 08:37

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050171 Run Date: 05/08/2012 Sample ID: WG397315-32

Instrument ID: ICP-MS2 Run Time: 15:00 Method: 6020

File ID: NI.050812.150047 Analyst: JYH Units: ug/L

Workgroup (AAB#): WG397375 Cal ID: ICP-MS - 08-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: 2406716
Report generated 05/09/2012 08:37

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050171 Run Date: 05/08/2012 Sample ID: WG397315-34

Instrument ID: ICP-MS2 Run Time: 15:29 Method: 6020

File ID: NI.050812.152932 Analyst: JYH Units: ug/L

Workgroup (AAB#): WG397375 Cal ID: ICP-MS - 08-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: 2406716
Report generated 05/09/2012 08:37

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050171 Run Date: 05/08/2012 Sample ID: WG397315-38

Instrument ID: ICP-MS2 Run Time: 16:16 Method: 6020

File ID: NI.050812.161648 Analyst: JYH Units: ug/L

Workgroup (AAB#): WG397375 Cal ID: ICP-MS - 08-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: 2406716
Report generated 05/09/2012 08:37

Microbac Laboratories Inc.

INITIAL CALIBRATION VERIFICATION (ICV)
(Alternate Source)

Login Number: L12050171 Run Date: 05/08/2012 Sample ID: WG397315-05
Instrument ID: ICP-MS2 Run Time: 09:23 Method: 6020
File ID: NI.050812.092329 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG397375 Cal ID: ICP-MS - 08-MAY-12
QC Key: WATERLOO

Analyte		Expected	Found	%REC	LIMITS	Q
Antimony		50	51.6	103	90 - 110	
Arsenic		50	52.3	105	90 - 110	
Lead		50	51.1	102	90 - 110	
Selenium		50	53.5	107	90 - 110	
Thallium		50	51.3	103	90 - 110	

* Exceeds LIMITS Limit

ICV - Modified 03/06/2008
PDF File ID: 2406707
Report generated 05/09/2012 08:36

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050171 Run Date: 05/08/2012 Sample ID: WG397315-10

Instrument ID: ICP-MS2 Run Time: 09:38 Method: 6020

File ID: NI.050812.093800 Analyst: JYH QC Key: WATERLOO

Workgroup (AAB#): WG397375 Cal ID: ICP-MS - 08-MAY-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	50.6	ug/L	101	90 - 110		
Arsenic		50.0	51.3	ug/L	103	90 - 110		
Lead		50.0	49.9	ug/L	99.7	90 - 110		
Selenium		50.0	52.9	ug/L	106	90 - 110		
Thallium		50.0	50.2	ug/L	100	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2406713

Report generated 05/09/2012 08:36

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050171 Run Date: 05/08/2012 Sample ID: WG397315-28

Instrument ID: ICP-MS2 Run Time: 13:45 Method: 6020

File ID: NI.050812.134554 Analyst: JYH QC Key: WATERLOO

Workgroup (AAB#): WG397375 Cal ID: ICP-MS - 08-MAY-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	49.8	ug/L	99.7	90 - 110		
Arsenic		50.0	49.5	ug/L	99.1	90 - 110		
Lead		50.0	50.1	ug/L	100	90 - 110		
Selenium		50.0	46.7	ug/L	93.5	90 - 110		
Thallium		50.0	51.0	ug/L	102	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2406713

Report generated 05/09/2012 08:36

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050171 Run Date: 05/08/2012 Sample ID: WG397315-31

Instrument ID: ICP-MS2 Run Time: 14:57 Method: 6020

File ID: NI.050812.145755 Analyst: JYH QC Key: WATERLOO

Workgroup (AAB#): WG397375 Cal ID: ICP-MS - 08-MAY-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	51.0	ug/L	102	90 - 110		
Arsenic		50.0	49.9	ug/L	99.8	90 - 110		
Lead		50.0	50.0	ug/L	100	90 - 110		
Selenium		50.0	48.3	ug/L	96.5	90 - 110		
Thallium		50.0	50.6	ug/L	101	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2406713

Report generated 05/09/2012 08:36

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050171 Run Date: 05/08/2012 Sample ID: WG397315-33

Instrument ID: ICP-MS2 Run Time: 15:26 Method: 6020

File ID: NI.050812.152640 Analyst: JYH QC Key: WATERLOO

Workgroup (AAB#): WG397375 Cal ID: ICP-MS - 08-MAY-12

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	50.8	ug/L	102	90 - 110		
Arsenic		50.0	49.3	ug/L	98.7	90 - 110		
Lead		50.0	49.0	ug/L	98.0	90 - 110		
Selenium		50.0	46.8	ug/L	93.6	90 - 110		
Thallium		50.0	50.0	ug/L	100	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 2406713

Report generated 05/09/2012 08:36

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050171 Run Date: 05/08/2012 Sample ID: WG397315-37
Instrument ID: ICP-MS2 Run Time: 16:13 Method: 6020
File ID: NI.050812.161355 Analyst: JYH QC Key: WATERLOO
Workgroup (AAB#): WG397375 Cal ID: ICP-MS - 08-MAY-12
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	50.4	ug/L	101	90 - 110		
Arsenic		50.0	48.9	ug/L	97.8	90 - 110		
Lead		50.0	49.2	ug/L	98.4	90 - 110		
Selenium		50.0	46.0	ug/L	92.0	90 - 110		
Thallium		50.0	50.1	ug/L	100	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
PDF File ID: 2406713
Report generated 05/09/2012 08:36

Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L12050171 **Workgroup (AAB#):** WG397375
Instrument ID: ICP-MS2 **Method:** 6020
Sol. A : WG397315-08 **File ID:** NI.050812.093211 **Units:** ug/L
Sol. AB : WG397315-09 **File ID:** NI.050812.093504 **Matrix:** Water

	Sol. A			Sol. AB			
ANALYTE	True	Found	%Recovery	True	Found	%Recovery	Q
Antimony	NS	0.0549	NS	100	101	101	
Arsenic	NS	-0.0480	NS	100	102	102	
Lead	NS	0.0214	NS	100	102	102	
Selenium	NS	0.00960	NS	100	102	102	
Thallium	NS	0.0173	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: 2406711
Report generated 05/09/2012 08:36

Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L12050171 **Workgroup (AAB#):** WG397375
Instrument ID: ICP-MS2 **Method:** 6020
Sol. A : WG397315-35 **File ID:** NI.050812.160808 **Units:** ug/L
Sol. AB : WG397315-36 **File ID:** NI.050812.161100 **Matrix:** Water

	Sol. A			Sol. AB			
ANALYTE	True	Found	%Recovery	True	Found	%Recovery	Q
Antimony	NS	0.0686	NS	100	101	101	
Arsenic	NS	0.000200	NS	100	99.6	99.6	
Lead	NS	0.0218	NS	100	103	103	
Selenium	NS	-0.00210	NS	100	91.6	91.6	
Thallium	NS	0.0268	NS	100	98.3	98.3	

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: 2406711
Report generated 05/09/2012 08:36

Microbac Laboratories Inc.

INTERNAL STANDARD REPORT

Login: L12050171 **Analytical Method:** 6020
Analytical Workgroup: WG397375 **Matrix:** 1
Instrument: ICP-MS2 **Analyst:** JYH
ICAL Date: 08-MAY-2012 09:11

			BISMUTH	GERMANIUM	INDIUM	TERBIUM
Sample	Type	Run Date	% Rec	% Rec	% Rec	% Rec
L12050171-01	SAMP	08-MAY-2012 15:03	87.757	96.7	97.33	97.015
L12050171-02	SAMP	08-MAY-2012 15:32	88.782	94.306	100.172	99.338
L12050171-03	SAMP	08-MAY-2012 15:06	87.659	97.085	98.48	97.469
L12050171-04	SAMP	08-MAY-2012 15:35	88.368	94.741	99.815	98.888
L12050171-05	SAMP	08-MAY-2012 15:09	87.022	95.719	97.379	96.91
L12050171-06	SAMP	08-MAY-2012 15:38	88.075	94.642	99.075	98.871
L12050171-07	SAMP	08-MAY-2012 15:41	77.037	88.4	91.116	104.382
L12050171-08	SAMP	08-MAY-2012 15:43	83.331	93.76	95.844	100.176
WG397303-03	BLANK	08-MAY-2012 14:48	91.162	95.865	94.748	90.847
WG397303-04	LCS	08-MAY-2012 14:55	98.439	105.099	103.767	98.54
WG397315-05	ICV	08-MAY-2012 09:23	98.379	99.214	99.134	102.236
WG397315-06	ICB	08-MAY-2012 09:26	97.7	95.603	96.462	97.407
WG397315-07	LLICV	08-MAY-2012 09:29	98.043	95.133	95.57	97.908
WG397315-08	ICS	08-MAY-2012 09:32	97.936	101.33	103.488	107.929
WG397315-09	ICS	08-MAY-2012 09:35	101.551	105.292	106.333	110.472
WG397315-10	CCV	08-MAY-2012 09:38	100.339	101.925	102.573	105.281
WG397315-11	CCB	08-MAY-2012 09:40	99.6	98.686	100.308	101.238
WG397315-14	LLCCV	08-MAY-2012 09:58	100.588	103.832	104.919	103.79
WG397315-28	CCV	08-MAY-2012 13:45	99.432	103.916	106.9	106.012
WG397315-29	CCB	08-MAY-2012 13:48	97.376	100.188	103.415	99.647
WG397315-30	LLCCV	08-MAY-2012 13:51	98.956	101.605	103.997	100.599
WG397315-31	CCV	08-MAY-2012 14:57	94.829	100.152	98.874	96.357
WG397315-32	CCB	08-MAY-2012 15:00	93.169	95.752	94.794	91.086
WG397315-33	CCV	08-MAY-2012 15:26	93.551	92.525	97.705	96.587
WG397315-34	CCB	08-MAY-2012 15:29	96.31	94.888	100.127	97.255
WG397315-35	ICS	08-MAY-2012 16:08	89.666	91.535	95.193	95.749
WG397315-36	ICS	08-MAY-2012 16:11	91.016	92.542	95.345	95.62
WG397315-37	CCV	08-MAY-2012 16:13	94.168	96.296	98.041	96.88
WG397315-38	CCB	08-MAY-2012 16:16	91.135	89.924	92.4	89.298
WG397315-39	LLCCV	08-MAY-2012 16:19	90.596	89.589	90.921	87.95
WG397375-01	PSPK	08-MAY-2012 15:20	93.63	101.562	107.551	106.961
WG397375-01	PSPK	08-MAY-2012 16:02	96.256	95.261	100.002	97.143
WG397375-02	SERIAL	08-MAY-2012 15:23	90.36	84.882	93.003	90.127
WG397375-02	SERIAL	08-MAY-2012 16:05	90.917	89.566	93.416	90.085

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: 2406705
Report generated: 05/09/2012 11:24

Microbac Laboratories Inc.

INTERNAL STANDARD REPORT

Login: L12050171 **Analytical Method:** 6020
Analytical Workgroup: WG397375 **Matrix:** 18
Instrument: ICP-MS2 **Analyst:** JYH
ICAL Date: 08-MAY-2012 09:11

			BISMUTH	GERMANIUM	INDIUM	TERBIUM
Sample	Type	Run Date	% Rec	% Rec	% Rec	% Rec
L12050154-02	SAMP	08-MAY-2012 15:18	91.996	99.802	103.841	103.198
L12050154-02	SAMP	08-MAY-2012 15:59	93.68	94.937	97.317	95.464

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: 2406705
Report generated: 05/09/2012 11:24

Microbac Laboratories Inc.
LINEAR RANGE (QUARTERLY)

Login Number: L12050171 **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: 2406704
Report generated: 05/09/2012 08:36

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: Tuesday, May 08, 2012 08:43:55

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	1318	2021	0.701
Mg	23.985	23.975	4706	2020	0.709
In	114.904	114.875	22871	2022	0.696
U	238.050	238.025	47468	2033	0.686

Relative Std. Dev.

Mass	Meas. Intens. RSD
5.525	15.309
5.575	13.311
5.625	4.923
5.675	6.526
5.725	4.619
5.775	4.829
5.825	3.523
5.875	3.720
5.925	3.401
5.975	3.904
6.025	3.119
6.075	2.804
6.125	2.568
6.175	1.252
6.225	3.271
6.275	2.513
6.325	2.492
6.375	18.914
6.425	
6.475	104.583
6.525	45.175
6.575	8.012
6.625	4.209
6.675	6.781
6.725	2.347
6.775	3.938
6.825	2.219
6.875	2.453

Report Date/Time: Tuesday, May 08, 2012 08:46:29
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6.925	2.471
6.975	3.280
7.025	1.319
7.075	1.087
7.125	1.339
7.175	1.838
7.225	3.440
7.275	3.428
7.325	2.845
7.375	11.378
7.425	223.607
7.475	223.607
7.525	223.607
7.575	223.607
7.625	223.607
7.675	
7.725	
7.775	149.071
7.825	223.607
7.875	149.071
7.925	
7.975	
8.025	223.607
8.075	223.607
8.125	223.607
8.175	
8.225	
8.275	
8.325	
8.375	136.931
8.425	
8.475	
22.525	6.961
22.575	2.813
22.625	1.471
22.675	0.748
22.725	0.913
22.775	0.891
22.825	0.989
22.875	1.402
22.925	1.543
22.975	1.411
23.025	1.734
23.075	1.674
23.125	1.442
23.175	1.887
23.225	1.690

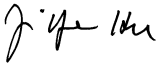
Approved: May 09, 2012

23.275	2.102
23.325	4.641
23.375	104.583
23.425	
23.475	149.071
23.525	9.106
23.575	6.599
23.625	3.880
23.675	2.320
23.725	1.511
23.775	1.849
23.825	1.707
23.875	1.249
23.925	2.453
23.975	1.732
24.025	2.402
24.075	1.704
24.125	1.924
24.175	1.325
24.225	3.037
24.275	2.568
24.325	8.531
24.375	223.607
24.425	223.607
24.475	223.607
24.525	19.444
24.575	11.958
24.625	7.057
24.675	4.704
24.725	3.265
24.775	5.963
24.825	3.061
24.875	4.472
24.925	2.692
24.975	1.910
25.025	3.341
25.075	1.407
25.125	1.759
25.175	4.937
25.225	3.699
25.275	11.387
25.325	50.206
25.375	223.607
25.425	55.902
25.475	69.722
113.525	5.116
113.575	2.709

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113.625	2.379
113.675	1.887
113.725	3.615
113.775	2.960
113.825	2.803
113.875	2.462
113.925	2.985
113.975	3.351
114.025	3.808
114.075	0.731
114.125	2.629
114.175	6.472
114.225	19.108
114.275	67.748
114.325	60.111
114.375	21.030
114.425	8.751
114.475	4.248
114.525	3.618
114.575	2.026
114.625	1.458
114.675	1.546
114.725	2.197
114.775	2.475
114.825	2.308
114.875	1.753
114.925	1.174
114.975	1.757
115.025	2.247
115.075	3.197
115.125	3.011
115.175	2.994
115.225	3.843
115.275	37.797
115.325	223.607
115.375	70.711
115.425	18.054
115.475	12.285
115.525	10.332
115.575	9.646
115.625	3.897
115.675	6.177
115.725	7.184
115.775	2.051
115.825	4.690
115.875	4.727
115.925	4.089

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115.975	3.100
116.025	2.104
116.075	2.906
116.125	6.128
116.175	8.025
116.225	10.963
116.275	223.607
116.325	223.607
116.375	136.931
116.425	91.287
116.475	70.711
236.525	
236.575	
236.625	
236.675	
236.725	
236.775	
236.825	
236.875	
236.925	
236.975	
237.025	
237.075	
237.125	
237.175	
237.225	136.931
237.275	
237.325	223.607
237.375	104.583
237.425	223.607
237.475	47.507
237.525	16.571
237.575	7.235
237.625	7.041
237.675	2.882
237.725	2.289
237.775	1.276
237.825	3.136
237.875	1.656
237.925	1.367
237.975	2.749
238.025	1.356
238.075	1.404
238.125	2.629
238.175	2.027
238.225	1.480
238.275	3.238

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238.325	3.486
238.375	3.621
238.425	4.450
238.475	10.652
238.525	22.060
238.575	
238.625	
238.675	223.607
238.725	
238.775	
238.825	
238.875	
238.925	223.607
238.975	
239.025	223.607
239.075	136.931
239.125	223.607
239.175	
239.225	223.607
239.275	
239.325	
239.375	
239.425	
239.475	

Approved: May 09, 2012

Daily Performance Report

Sample ID: Daily Performance Check
Sample Date/Time: Tuesday, May 08, 2012 08:51:08
Sample Description:
Method File: C:\NexION Data\Method\Daily Performance.mth
Dataset File: C:\NexION Data\DataSet\050212\Daily Performance Check.447
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	5349.0	5349.011	79.831	1.5	Standard
	Mg	24.0	64878.3	64878.283	613.807	0.9	Standard
	In	114.9	100091.6	100091.605	909.660	0.9	Standard
	U	238.1	77706.7	77706.693	417.035	0.5	Standard
⌈	CeO	155.9	2472.3	0.023	0.000	1.3	Standard
| >	Ce	139.9	108971.8	108971.802	319.304	0.3	Standard
⌊	Ce++	70.0	1604.1	0.015	0.000	1.1	Standard
	Bkgd	220.0	0.1	0.100	0.091	91.3	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

Sample ID: Daily Performance Check
Report Date/Time: Tuesday, May 08, 2012 08:53:27
Page 1

Approved: May 09, 2012

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\NexIONData\Wizard\SmartTune\ESI SmartTune Fullmicrobac.swz

Start Time: 5/8/2012 8:42:41 AM
End Time: 5/8/2012 8:43:27 AM

Torch Alignment - [Passed]

Vertical	Horizontal	Intensity
-0.02 mm	-0.46 mm	93843.72

Report Date/Time: Tuesday, May 08, 2012 08:43:27
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Approved: May 09, 2012

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ESI SmartTune Fullmicrobac.swz

Optimization Status

Start Time: 5/8/2012 8:42:41 AM

Torch Alignment
Optimization Settings:
Method: C:\NexIONData\Method\ESI Torch Alignment.mth.
Intensity Criterion: In 114.904 Maximum

Optimization Results:

	Vertical	Horizontal	Intensity
[Passed]	-0.02 mm	-0.46 mm	93843.72

End Time: 5/8/2012 8:43:27 AM

Approved: May 09, 2012

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\NexIONData\Wizard\SmartTune\ESI SmartTune Fullmicrobac.swz

Start Time: 5/8/2012 8:51:06 AM
End Time: 5/8/2012 8:53:27 AM

Daily Performance Check - [Passed] Optimum value(s): N/A
Obtained Intensity (Be 9.0122): 5349.01
Obtained Intensity (Mg 23.985): 64878.28
Obtained Intensity (In 114.904): 100091.60
Obtained Intensity (U 238.05): 77706.69
Obtained Intensity (Bkgd 220): 0.10
Obtained Formula (CeO 155.9 / Ce 139.905): 0.023 (=2472.27 / 108971.80)
Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.015 (=1604.08 / 108971.80)

Approved: May 09, 2012

SmartTune Wizard - Details

```
Optimization Details

SmartTune file: C:\NexIONData\Wizard\SmartTune\ESI SmartTune Fullmicrobac.swz

Optimization Status

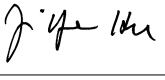
Start Time: 5/8/2012 8:51:06 AM

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): 5349.01
                Obtained Intensity (Mg 23.985): 64878.28
                Obtained Intensity (In 114.904): 100091.60
                Obtained Intensity (U 238.05): 77706.69
                Obtained Intensity (Bkgd 220): 0.10
                Obtained Formula (CeO 155.9 / Ce 139.905): 0.023 (=2472.27 / 108971.80)
                Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.015 (=1604.08 / 108971.80)
[Passed]  Optimum value(s): N/A

End Time: 5/8/2012 8:53:27 AM
```


Approved: May 09, 2012



Method 6020 - Summary Report

Sample ID: Blank
Sample Date/Time: Tuesday, May 08, 2012 09:09:02
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	17857.2	0.9				ug/L		Standard
|	**Be**	9	11.7	89.2				ug/L		Standard
|	**Al**	27	13327.5	4.0				ug/L		Standard
⌊>	**Sc**	45	333080.2	1.5				ug/L		Standard
⌈	**Ti**	47	113.3	23.2				ug/L		Standard
|	**V**	51	4348.9	1.6				ug/L		Standard
|	**Cr**	52	14000.5	1.2				ug/L		Standard
|	**Cr**	53	319.2	9.7				ug/L		Standard
|	**Mn**	55	1367.4	2.9				ug/L		Standard
|	**Co**	59	114.7	7.0				ug/L		Standard
|	**Ni**	60	76.3	14.9				ug/L		Standard
|	**Cu**	65	135.0	7.1				ug/L		Standard
|	**Zn**	66	184.7	6.5				ug/L		Standard
| >	**Ge**	72	274929.0	0.8				ug/L		Standard
|	**As**	75	-261.9	8.8				ug/L		Standard
|	**Se**	82	27.4	18.4				ug/L		Standard
⌊	**Se-1**	77	93.7	10.3				ug/L		Standard
	Ga	71	248574.5	0.6				mg/L		Standard
⌈	**Rb**	85	15.0	66.7				ug/L		Standard
| >	**Y**	89	267564.4	2.5				ug/L		Standard
⌊	**Rh**	103	1.7	173.2				ug/L		Standard
⌈	**Mo**	98	5.5	29.5				ug/L		Standard
|	**Ag**	107	44.3	21.7				ug/L		Standard
|	**Cd**	111	511.7	7.6				mg/L		Standard
|	**Cd**	114	1246.8	0.8				ug/L		Standard
| >	**In**	115	743274.4	0.9				ug/L		Standard
|	**Sn**	118	816.0	3.9				ug/L		Standard
|	**Sb**	123	15.1	20.3				ug/L		Standard
⌊	**Ba**	135	36.7	13.5				ug/L		Standard
⌈	**Ce**	140	44.0	11.4				ug/L		Standard
⌊>	**Tb**	159	826676.4	1.7				ug/L		Standard
⌈	**Ho**	165	11.7	19.8				ug/L		Standard
|	**Tl**	203	5.7	36.7				ug/L		Standard
|	**Tl**	205	10.7	19.5				ug/L		Standard
|	**Pb**	206	301.3	6.2				ug/L		Standard
|	**Pb**	207	250.0	4.8				ug/L		Standard
|	**Pb**	208	1166.0	3.7				ug/L		Standard
|	**U**	238	2.7	78.1				ug/L		Standard
⌊>	**Bi**	209	454659.1	0.8				ug/L		Standard
⌈	**Na**	23	136.7	16.5				mg/L		Standard
|	**Mg**	24	498.3	3.8				mg/L		Standard

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	K	39	556.7	1.4	mg/L	Standard
	Ca	43	51.7	14.8	mg/L	Standard
	Fe	54	864.6	1.5	mg/L	Standard
	Fe	57	6002.9	1.5	mg/L	Standard
>	**Sc-1**	45	333080.2	1.5	mg/L	Standard
	Cl	35	40103.3	0.7	ug/L	Standard
	Kr	83	67.3	4.7	ug/L	Standard
	Br	81	15293.6	2.8	ug/L	Standard
	P	31	74262.5	2.8	ug/L	Standard
	S	34	787377.3	0.8	ug/L	Standard
	Sr	88	290.0	9.0	ug/L	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72			
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89			
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115			
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159			
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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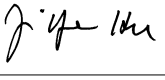
	Pb	207
	Pb	208
	U	238
>	Bi	209
	Na	23
	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

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: Tuesday, May 08, 2012 09:11:56
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	17244.8	2.4				ug/L	17857	Standard
|	**Be**	9	6.7	43.3				ug/L	12	Standard
|	**Al**	27	12927.2	0.5				ug/L	13328	Standard
⌊>	**Sc**	45	325657.7	2.9				ug/L	333080	Standard
⌈	**Ti**	47	104.3	9.7				ug/L	113	Standard
|	**V**	51	4301.4	3.2				ug/L	4349	Standard
|	**Cr**	52	13806.3	0.8				ug/L	14000	Standard
|	**Cr**	53	281.7	7.1				ug/L	319	Standard
|	**Mn**	55	1326.4	3.6				ug/L	1367	Standard
|	**Co**	59	108.3	16.8				ug/L	115	Standard
|	**Ni**	60	82.7	2.5				ug/L	76	Standard
|	**Cu**	65	116.3	10.8				ug/L	135	Standard
|	**Zn**	66	179.0	1.5				ug/L	185	Standard
| >	**Ge**	72	270967.4	1.8				ug/L	274929	Standard
|	**As**	75	-263.1	9.4				ug/L	-262	Standard
|	**Se**	82	27.9	21.7				ug/L	27	Standard
⌊	**Se-1**	77	92.0	10.5				ug/L	94	Standard
	Ga	71	242786.0	2.1				mg/L	248575	Standard
⌈	**Rb**	85	28.3	10.2				ug/L	15	Standard
| >	**Y**	89	266493.5	1.4				ug/L	267564	Standard
⌊	**Rh**	103	1.7	173.2				ug/L	2	Standard
⌈	**Mo**	98	6.9	12.2				ug/L	5	Standard
|	**Ag**	107	52.7	7.7				ug/L	44	Standard
|	**Cd**	111	495.7	5.7				mg/L	512	Standard
|	**Cd**	114	1233.6	4.5				ug/L	1247	Standard
| >	**In**	115	743478.9	0.7				ug/L	743274	Standard
|	**Sn**	118	836.4	3.1				ug/L	816	Standard
|	**Sb**	123	20.5	24.3				ug/L	15	Standard
⌊	**Ba**	135	45.0	3.8				ug/L	37	Standard
⌈	**Ce**	140	46.7	13.8				ug/L	44	Standard
⌊>	**Tb**	159	825741.1	1.8				ug/L	826676	Standard
⌈	**Ho**	165	12.0	22.0				ug/L	12	Standard
|	**Tl**	203	5.3	10.8				ug/L	6	Standard
|	**Tl**	205	9.3	43.3				ug/L	11	Standard
|	**Pb**	206	317.3	5.8				ug/L	301	Standard
|	**Pb**	207	236.3	6.2				ug/L	250	Standard
|	**Pb**	208	1168.7	1.7				ug/L	1166	Standard
|	**U**	238	2.0	0.0				ug/L	3	Standard
⌊>	**Bi**	209	453771.4	3.1				ug/L	454659	Standard
⌈	**Na**	23	128.3	25.0				mg/L	137	Standard
|	**Mg**	24	405.0	6.4				mg/L	498	Standard

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	K	39	560.0	10.3		mg/L	557	Standard
	Ca	43	45.0	19.2		mg/L	52	Standard
	Fe	54	882.5	3.0		mg/L	865	Standard
	Fe	57	6139.6	1.1		mg/L	6003	Standard
>	**Sc-1**	45	325657.7	2.9		mg/L	333080	Standard
	Cl	35	39803.2	0.2		ug/L	40103	Standard
	Kr	83	68.3	2.5		ug/L	67	Standard
	Br	81	14781.4	1.2		ug/L	15294	Standard
	P	31	73078.4	1.9		ug/L	74262	Standard
	S	34	771744.6	2.2		ug/L	787377	Standard
	Sr	88	330.0	6.6		ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	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: Tuesday, May 08, 2012 09:14:49
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	17401.7	4.4				ug/L	17857	Standard
|	**Be**	9	225.0	32.3				ug/L	12	Standard
|	**Al**	27	14036.5	3.1				ug/L	13328	Standard
⌊>	**Sc**	45	330458.8	3.1				ug/L	333080	Standard
⌈	**Ti**	47	275.3	9.0				ug/L	113	Standard
|	**V**	51	5254.7	1.3				ug/L	4349	Standard
|	**Cr**	52	14789.5	1.5				ug/L	14000	Standard
|	**Cr**	53	413.3	10.6				ug/L	319	Standard
|	**Mn**	55	2634.6	1.0				ug/L	1367	Standard
|	**Co**	59	966.0	3.3				ug/L	115	Standard
|	**Ni**	60	258.0	8.8				ug/L	76	Standard
|	**Cu**	65	304.0	8.6				ug/L	135	Standard
|	**Zn**	66	268.0	6.3				ug/L	185	Standard
| >	**Ge**	72	273384.4	2.2				ug/L	274929	Standard
|	**As**	75	-175.8	12.5				ug/L	-262	Standard
|	**Se**	82	43.8	6.1				ug/L	27	Standard
⌊	**Se-1**	77	92.3	12.6				ug/L	94	Standard
	Ga	71	248647.4	1.0				mg/L	248575	Standard
⌈	**Rb**	85	13.3	57.3				ug/L	15	Standard
| >	**Y**	89	261887.5	1.3				ug/L	267564	Standard
⌊	**Rh**	103	5.0	0.0				ug/L	2	Standard
⌈	**Mo**	98	483.6	6.2				ug/L	5	Standard
|	**Ag**	107	635.0	4.0				ug/L	44	Standard
|	**Cd**	111	759.1	4.3				mg/L	512	Standard
|	**Cd**	114	1853.3	2.5				ug/L	1247	Standard
| >	**In**	115	743703.9	0.6				ug/L	743274	Standard
|	**Sn**	118	1707.4	2.8				ug/L	816	Standard
|	**Sb**	123	624.9	8.2				ug/L	15	Standard
⌊	**Ba**	135	295.7	3.9				ug/L	37	Standard
⌈	**Ce**	140	47.3	19.2				ug/L	44	Standard
⌊>	**Tb**	159	828749.9	1.6				ug/L	826676	Standard
⌈	**Ho**	165	7.7	71.8				ug/L	12	Standard
|	**Tl**	203	944.7	2.2				ug/L	6	Standard
|	**Tl**	205	2108.5	0.2				ug/L	11	Standard
|	**Pb**	206	1022.7	1.1				ug/L	301	Standard
|	**Pb**	207	859.4	2.9				ug/L	250	Standard
|	**Pb**	208	4026.5	2.0				ug/L	1166	Standard
|	**U**	238	1443.7	5.3				ug/L	3	Standard
⌊>	**Bi**	209	451255.0	1.0				ug/L	454659	Standard
⌈	**Na**	23	128.3	25.9				mg/L	137	Standard
|	**Mg**	24	4165.6	5.0				mg/L	498	Standard

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	K	39	656.7	12.3	mg/L	557	Standard
	Ca	43	43.3	37.1	mg/L	52	Standard
	Fe	54	982.7	6.9	mg/L	865	Standard
	Fe	57	7130.0	4.2	mg/L	6003	Standard
>	**Sc-1**	45	330458.8	3.1	mg/L	333080	Standard
	Cl	35	40137.8	0.7	ug/L	40103	Standard
	Kr	83	67.2	0.6	ug/L	67	Standard
	Br	81	14943.2	1.4	ug/L	15294	Standard
	P	31	73734.1	3.7	ug/L	74262	Standard
	S	34	758176.2	0.8	ug/L	787377	Standard
	Sr	88	318.3	6.3	ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	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: Tuesday, May 08, 2012 09:17:21
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Method 6020 - Summary Report

Sample ID: Standard 3
Sample Date/Time: Tuesday, May 08, 2012 09:17:41
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	17817.1	2.4	**50.0000**	178.937	357.9	ug/L	17857	Standard
|	**Be**	9	207016.8	2.3	**50.0000**	2.384	4.8	ug/L	12	Standard
|	**Al**	27	984303.0	2.1	**50.0000**	2.704	5.4	ug/L	13328	Standard
⌊>	**Sc**	45	343683.7	4.3				ug/L	333080	Standard
⌈	**Ti**	47	187314.9	2.5	**100.0000**	0.932	0.9	ug/L	113	Standard
|	**V**	51	956361.8	3.4	**50.0000**	0.986	2.0	ug/L	4349	Standard
|	**Cr**	52	711738.9	2.5	**50.0000**	0.525	1.0	ug/L	14000	Standard
|	**Cr**	53	107224.0	2.1	**50.0000**	0.325	0.7	ug/L	319	Standard
|	**Mn**	55	1229450.4	2.2	**50.0000**	0.352	0.7	ug/L	1367	Standard
|	**Co**	59	886214.6	2.0	**50.0000**	0.315	0.6	ug/L	115	Standard
|	**Ni**	60	185050.8	2.8	**50.0000**	0.659	1.3	ug/L	76	Standard
|	**Cu**	65	163786.7	1.7	**50.0000**	0.344	0.7	ug/L	135	Standard
|	**Zn**	66	72028.9	2.1	**50.0000**	0.295	0.6	ug/L	185	Standard
| >	**Ge**	72	278403.6	1.6				ug/L	274929	Standard
|	**As**	75	73215.9	1.4	**50.0000**	0.267	0.5	ug/L	-262	Standard
|	**Se**	82	8530.0	1.9	**50.0000**	0.201	0.4	ug/L	27	Standard
⌊	**Se-1**	77	4824.8	1.7	**50.0000**	1.569	3.1	ug/L	94	Standard
	Ga	71	248775.1	1.7				mg/L	248575	Standard
⌈	**Rb**	85	1381.7	7.8				ug/L	15	Standard
| >	**Y**	89	268144.8	2.8				ug/L	267564	Standard
⌊	**Rh**	103	58.3	19.8				ug/L	2	Standard
⌈	**Mo**	98	516425.7	1.9	**100.0000**	1.933	1.9	ug/L	5	Standard
|	**Ag**	107	562809.5	1.7	**50.0000**	0.603	1.2	ug/L	44	Standard
|	**Cd**	111	252056.1	1.3	**50.0000**	0.521	1.0	mg/L	512	Standard
|	**Cd**	114	640272.6	1.3	**50.0000**	0.392	0.8	ug/L	1247	Standard
| >	**In**	115	750588.0	2.0				ug/L	743274	Standard
|	**Sn**	118	869118.0	1.5	**50.0000**	0.266	0.5	ug/L	816	Standard
|	**Sb**	123	609812.7	1.0	**50.0000**	0.548	1.1	ug/L	15	Standard
⌊	**Ba**	135	261571.8	1.4	**50.0000**	0.347	0.7	ug/L	37	Standard
⌈	**Ce**	140	979.0	0.8				ug/L	44	Standard
⌊>	**Tb**	159	851361.3	1.2				ug/L	826676	Standard
⌈	**Ho**	165	22.3	27.4				ug/L	12	Standard
|	**Tl**	203	897890.8	1.7	**50.0000**	0.662	1.3	ug/L	6	Standard
|	**Tl**	205	2215361.1	1.8	**50.0000**	0.584	1.2	ug/L	11	Standard
|	**Pb**	206	724548.1	1.5	**50.0000**	0.612	1.2	ug/L	301	Standard
|	**Pb**	207	603500.5	1.9	**50.0000**	0.438	0.9	ug/L	250	Standard
|	**Pb**	208	2828329.4	1.7	**50.0000**	0.512	1.0	ug/L	1166	Standard
|	**U**	238	1488961.0	0.8	**50.0000**	1.150	2.3	ug/L	3	Standard
⌊>	**Bi**	209	452057.0	2.7				ug/L	454659	Standard
⌈	**Na**	23	23224.5	1.7	**5.0000**	0.205	4.1	mg/L	137	Standard
|	**Mg**	24	3246809.9	1.8	**5.0000**	0.244	4.9	mg/L	498	Standard

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	K	39	69679.9	1.9	**5.0000**	0.160	3.2	mg/L	557	Standard
	Ca	43	2355.2	2.4	**5.0000**	0.330	6.6	mg/L	52	Standard
	Fe	54	32230.5	3.4	**5.0000**	0.164	3.3	mg/L	865	Standard
	Fe	57	1038047.7	1.2	**5.0000**	0.201	4.0	mg/L	6003	Standard
>	**Sc-1**	45	343683.7	4.3				mg/L	333080	Standard
	Cl	35	50267.7	3.5				ug/L	40103	Standard
	Kr	83	64.7	2.7				ug/L	67	Standard
	Br	81	15001.6	7.3				ug/L	15294	Standard
	P	31	84531.9	1.5				ug/L	74262	Standard
	S	34	863786.1	1.4				ug/L	787377	Standard
	Sr	88	1661.8	5.6				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72			
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89			
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115			
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159			
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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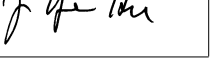
	Pb	207
	Pb	208
	U	238
>	Bi	209
	Na	23
	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Standard 3
Report Date/Time: Tuesday, May 08, 2012 09:20:14
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Method 6020 - Summary Report

Sample ID: Standard 4
Sample Date/Time: Tuesday, May 08, 2012 09:20:34
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	18119.2	3.1	**485.6383**	492.303	101.4	ug/L	17857	Standard
|	**Be**	9	395297.1	0.8	**99.8696**	1.916	1.9	ug/L	12	Standard
|	**Al**	27	1872750.1	1.3	**100.0174**	1.495	1.5	ug/L	13328	Standard
⌊>	**Sc**	45	328680.6	1.5				ug/L	333080	Standard
⌈	**Ti**	47	368006.0	0.8	**202.1648**	1.982	1.0	ug/L	113	Standard
|	**V**	51	1822952.0	1.1	**99.6755**	0.732	0.7	ug/L	4349	Standard
|	**Cr**	52	1346961.6	0.7	**99.7043**	0.981	1.0	ug/L	14000	Standard
|	**Cr**	53	205322.9	1.4	**99.8611**	1.944	1.9	ug/L	319	Standard
|	**Mn**	55	2205686.8	1.9	**96.5532**	1.207	1.3	ug/L	1367	Standard
|	**Co**	59	1702089.3	1.1	**99.9378**	1.287	1.3	ug/L	115	Standard
|	**Ni**	60	355443.2	1.1	**99.9518**	0.731	0.7	ug/L	76	Standard
|	**Cu**	65	310861.5	1.0	**99.3599**	0.658	0.7	ug/L	135	Standard
|	**Zn**	66	137702.9	0.6	**99.7728**	0.460	0.5	ug/L	185	Standard
| >	**Ge**	72	267729.2	1.1				ug/L	274929	Standard
|	**As**	75	141554.7	1.0	**100.1741**	0.555	0.6	ug/L	-262	Standard
|	**Se**	82	16399.8	1.0	**100.0925**	1.250	1.2	ug/L	27	Standard
⌊	**Se-1**	77	9381.6	2.6	**100.9988**	1.580	1.6	ug/L	94	Standard
	Ga	71	238480.5	0.2				mg/L	248575	Standard
⌈	**Rb**	85	9713.1	3.9				ug/L	15	Standard
| >	**Y**	89	266916.0	1.8				ug/L	267564	Standard
⌊	**Rh**	103	88.3	45.4				ug/L	2	Standard
⌈	**Mo**	98	992915.1	0.7	**200.7491**	2.646	1.3	ug/L	5	Standard
|	**Ag**	107	1042132.3	0.8	**98.5011**	1.293	1.3	ug/L	44	Standard
|	**Cd**	111	479944.2	0.9	**99.9439**	1.424	1.4	mg/L	512	Standard
|	**Cd**	114	1217344.2	1.3	**99.8634**	0.894	0.9	ug/L	1247	Standard
| >	**In**	115	716173.2	1.9				ug/L	743274	Standard
|	**Sn**	118	1687949.5	1.1	**100.9062**	1.103	1.1	ug/L	816	Standard
|	**Sb**	123	1171238.9	0.6	**100.3252**	1.424	1.4	ug/L	15	Standard
⌊	**Ba**	135	506506.8	1.0	**100.7371**	1.347	1.3	ug/L	37	Standard
⌈	**Ce**	140	371.3	5.5				ug/L	44	Standard
⌊>	**Tb**	159	839086.2	2.2				ug/L	826676	Standard
⌈	**Ho**	165	29.0	15.0				ug/L	12	Standard
|	**Tl**	203	1737193.4	0.5	**100.6633**	0.234	0.2	ug/L	6	Standard
|	**Tl**	205	4233171.5	0.7	**100.0397**	0.170	0.2	ug/L	11	Standard
|	**Pb**	206	1390861.7	1.1	**100.2783**	0.567	0.6	ug/L	301	Standard
|	**Pb**	207	1161947.4	0.5	**100.4324**	0.186	0.2	ug/L	250	Standard
|	**Pb**	208	5532017.4	0.5	**101.2184**	0.332	0.3	ug/L	1166	Standard
|	**U**	238	3133972.1	0.4	**104.8593**	1.005	1.0	ug/L	3	Standard
⌊>	**Bi**	209	431469.4	0.6				ug/L	454659	Standard
⌈	**Na**	23	44498.6	1.9	**10.0168**	0.320	3.2	mg/L	137	Standard
|	**Mg**	24	6303462.5	0.4	**10.0699**	0.192	1.9	mg/L	498	Standard

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	K	39	131047.7	1.2	**9.9340**	0.143	1.4	mg/L	557	Standard
	Ca	43	4535.7	0.6	**10.0712**	0.097	1.0	mg/L	52	Standard
	Fe	54	62040.4	1.5	**10.1089**	0.234	2.3	mg/L	865	Standard
	Fe	57	1950662.2	3.7	**9.9230**	0.465	4.7	mg/L	6003	Standard
>	**Sc-1**	45	328680.6	1.5				mg/L	333080	Standard
	Cl	35	52812.6	0.5				ug/L	40103	Standard
	Kr	83	68.4	9.9				ug/L	67	Standard
	Br	81	14955.7	1.2				ug/L	15294	Standard
	P	31	87967.1	1.1				ug/L	74262	Standard
	S	34	864539.0	0.6				ug/L	787377	Standard
	Sr	88	19901.4	1.9				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	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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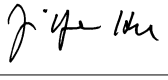
Approved: May 09, 2012

	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

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: May 09, 2012



Method 6020 - Summary Report

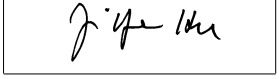
Sample ID: QC Std 1
Sample Date/Time: Tuesday, May 08, 2012 09:23:29
Number of Replicates: 3
Autosampler Position: 201
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	17037.9	2.5	**-356.9699**	90.411	25.3	ug/L	17857	Standard
|	**Be**	9	205465.4	0.4	**50.8749**	0.841	1.7	ug/L	12	Standard
|	**Al**	27	1020443.2	2.2	**53.0810**	0.303	0.6	ug/L	13328	Standard
⌊>	**Sc**	45	335342.7	1.6				ug/L	333080	Standard
⌈	**Ti**	47	189359.3	1.0	**102.0722**	0.455	0.4	ug/L	113	Standard
|	**V**	51	953699.6	1.3	**51.0735**	0.993	1.9	ug/L	4349	Standard
|	**Cr**	52	711420.0	0.9	**51.1879**	0.520	1.0	ug/L	14000	Standard
|	**Cr**	53	107659.5	0.8	**51.3187**	0.440	0.9	ug/L	319	Standard
|	**Mn**	55	1230557.9	0.8	**52.8475**	0.655	1.2	ug/L	1367	Standard
|	**Co**	59	886609.4	0.4	**51.0907**	0.290	0.6	ug/L	115	Standard
|	**Ni**	60	187416.2	1.6	**51.7153**	0.459	0.9	ug/L	76	Standard
|	**Cu**	65	164440.6	1.1	**51.5652**	0.335	0.6	ug/L	135	Standard
|	**Zn**	66	74469.2	1.1	**52.8918**	0.348	0.7	ug/L	185	Standard
|>	**Ge**	72	272769.1	0.7				ug/L	274929	Standard
|	**As**	75	75241.7	0.4	**52.3442**	0.161	0.3	ug/L	-262	Standard
|	**Se**	82	8942.3	0.9	**53.4683**	0.505	0.9	ug/L	27	Standard
⌊	**Se-1**	77	4994.2	0.1	**52.3345**	0.318	0.6	ug/L	94	Standard
	Ga	71	244695.9	1.1				mg/L	248575	Standard
⌈	**Rb**	85	1416.7	9.9				ug/L	15	Standard
|>	**Y**	89	267252.0	2.0				ug/L	267564	Standard
⌊	**Rh**	103	53.3	28.6				ug/L	2	Standard
⌈	**Mo**	98	522752.3	0.9	**102.7125**	0.857	0.8	ug/L	5	Standard
|	**Ag**	107	571184.2	0.4	**52.4618**	0.245	0.5	ug/L	44	Standard
|	**Cd**	111	256692.9	0.2	**51.8971**	0.109	0.2	mg/L	512	Standard
|	**Cd**	114	647635.0	0.3	**51.5869**	0.177	0.3	ug/L	1247	Standard
|>	**In**	115	736838.7	0.4				ug/L	743274	Standard
|	**Sn**	118	911714.7	0.3	**52.9449**	0.210	0.4	ug/L	816	Standard
|	**Sb**	123	620374.4	0.1	**51.6396**	0.158	0.3	ug/L	15	Standard
⌊	**Ba**	135	266483.7	0.5	**51.5037**	0.479	0.9	ug/L	37	Standard
⌈	**Ce**	140	982.4	5.1				ug/L	44	Standard
⌊>	**Tb**	159	845164.2	0.3				ug/L	826676	Standard
⌈	**Ho**	165	17.0	42.4				ug/L	12	Standard
|	**Tl**	203	917469.1	0.8	**51.2833**	0.224	0.4	ug/L	6	Standard
|	**Tl**	205	2262530.0	0.5	**51.5815**	0.347	0.7	ug/L	11	Standard
|	**Pb**	206	729740.8	0.7	**50.7445**	0.276	0.5	ug/L	301	Standard
|	**Pb**	207	628023.6	0.8	**52.3543**	0.317	0.6	ug/L	250	Standard
|	**Pb**	208	2893847.2	0.7	**51.0667**	0.281	0.6	ug/L	1166	Standard
|	**U**	238	1558949.4	0.7	**50.3187**	0.491	1.0	ug/L	3	Standard
⌊>	**Bi**	209	447290.8	1.1				ug/L	454659	Standard
⌈	**Na**	23	23688.5	2.0	**5.2150**	0.165	3.2	mg/L	137	Standard
|	**Mg**	24	3207238.0	2.1	**5.0206**	0.110	2.2	mg/L	498	Standard

Sample ID: QC Std 1
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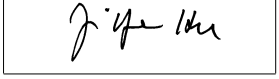
	K	39	70836.9	0.6	**5.2425**	0.103	2.0	mg/L	557	Standard
	Ca	43	2323.5	1.2	**5.0115**	0.070	1.4	mg/L	52	Standard
	Fe	54	32758.7	1.5	**5.1568**	0.151	2.9	mg/L	865	Standard
	Fe	57	1044819.3	0.5	**5.1939**	0.103	2.0	mg/L	6003	Standard
>	**Sc-1**	45	335342.7	1.6				mg/L	333080	Standard
	Cl	35	51322.8	0.3				ug/L	40103	Standard
	Kr	83	70.6	10.0				ug/L	67	Standard
	Br	81	14972.4	3.2				ug/L	15294	Standard
	P	31	91056.2	1.4				ug/L	74262	Standard
	S	34	897659.9	0.9				ug/L	787377	Standard
	Sr	88	841.7	9.5				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9	101.750		
	Al	27	106.162		
>	Sc	45			
	Ti	47	102.072		
	V	51	102.147		
	Cr	52	102.376		
	Cr	53	102.637		
	Mn	55	105.695		
	Co	59	102.181		
	Ni	60	103.431		
	Cu	65	103.130		
	Zn	66	105.784		
>	Ge	72		99.214	
	As	75	104.688		
	Se	82	106.937		
	Se-1	77	104.669		
	Ga	71			
	Rb	85			
>	Y	89		99.883	
	Rh	103			
	Mo	98	102.713		
	Ag	107	104.924		
	Cd	111	103.794		
	Cd	114			
>	In	115		99.134	
	Sn	118	105.890		
	Sb	123	103.279		
	Ba	135	103.007		
	Ce	140			
>	Tb	159		102.236	
	Ho	165			
	Tl	203	102.567		
	Tl	205			
	Pb	206	101.489		

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	Pb	207	104.709	
	Pb	208	102.133	
	U	238	100.637	
>	Bi	209		98.379
	Na	23	104.299	
	Mg	24	100.412	
	K	39	104.850	
	Ca	43	100.231	
	Fe	54	103.135	
	Fe	57	103.878	
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 1
Report Date/Time: Tuesday, May 08, 2012 09:26:02
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Method 6020 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Tuesday, May 08, 2012 09:26:24
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	16011.8	3.3	**-925.2499**	301.220	32.6	ug/L	17857	Standard
|	**Be**	9	15.0	33.3	**-0.0032**	0.001	37.6	ug/L	12	Standard
|	**Al**	27	12882.1	2.4	**-0.0205**	0.012	56.2	ug/L	13328	Standard
⌊>	**Sc**	45	334560.0	2.6				ug/L	333080	Standard
⌈	**Ti**	47	111.0	23.5	**0.0136**	0.013	98.5	ug/L	113	Standard
|	**V**	51	3976.2	2.2	**-0.0101**	0.003	30.0	ug/L	4349	Standard
|	**Cr**	52	12903.2	1.7	**-0.0503**	0.018	36.6	ug/L	14000	Standard
|	**Cr**	53	281.7	9.5	**-0.0073**	0.012	159.6	ug/L	319	Standard
|	**Mn**	55	1274.1	3.1	**-0.0062**	0.002	38.1	ug/L	1367	Standard
|	**Co**	59	124.3	16.4	**0.0019**	0.001	71.9	ug/L	115	Standard
|	**Ni**	60	80.7	7.0	**0.0021**	0.002	88.6	ug/L	76	Standard
|	**Cu**	65	130.7	4.4	**-0.0027**	0.002	78.8	ug/L	135	Standard
|	**Zn**	66	167.3	6.9	**-0.0166**	0.011	63.5	ug/L	185	Standard
|>	**Ge**	72	262839.8	2.5				ug/L	274929	Standard
|	**As**	75	-242.2	7.8	**-0.0032**	0.018	569.7	ug/L	-262	Standard
|	**Se**	82	30.5	5.0	**-0.0226**	0.011	50.0	ug/L	27	Standard
⌊	**Se-1**	77	89.0	6.8	**0.0533**	0.045	84.2	ug/L	94	Standard
	Ga	71	240236.3	1.8				mg/L	248575	Standard
⌈	**Rb**	85	6.7	43.3				ug/L	15	Standard
|>	**Y**	89	256259.4	1.9				ug/L	267564	Standard
⌊	**Rh**	103	0.0					ug/L	2	Standard
⌈	**Mo**	98	108.6	41.9	**0.0277**	0.009	32.4	ug/L	5	Standard
|	**Ag**	107	82.0	36.6	**-0.0001**	0.003	4326.9	ug/L	44	Standard
|	**Cd**	111	510.5	1.6	**0.0039**	0.001	30.5	mg/L	512	Standard
|	**Cd**	114	1240.6	3.9	**0.0052**	0.003	64.9	ug/L	1247	Standard
|>	**In**	115	716975.3	0.9				ug/L	743274	Standard
|	**Sn**	118	960.7	5.8	**0.0091**	0.003	31.0	ug/L	816	Standard
|	**Sb**	123	1075.9	51.0	**0.0902**	0.046	51.0	ug/L	15	Standard
⌊	**Ba**	135	48.0	13.0	**0.0029**	0.001	43.3	ug/L	37	Standard
⌈	**Ce**	140	47.7	19.8				ug/L	44	Standard
⌊>	**Tb**	159	805244.5	2.1				ug/L	826676	Standard
⌈	**Ho**	165	13.3	48.8				ug/L	12	Standard
|	**Tl**	203	43.0	58.4	**0.0001**	0.001	2429.8	ug/L	6	Standard
|	**Tl**	205	107.7	59.5	**0.0048**	0.001	29.4	ug/L	11	Standard
|	**Pb**	206	326.0	15.7	**0.0023**	0.003	137.8	ug/L	301	Standard
|	**Pb**	207	273.3	7.7	**0.0019**	0.001	69.8	ug/L	250	Standard
|	**Pb**	208	1311.0	11.2	**0.0028**	0.002	75.3	ug/L	1166	Standard
|	**U**	238	71.3	62.8	**0.0061**	0.001	22.9	ug/L	3	Standard
⌊>	**Bi**	209	444203.4	2.0				ug/L	454659	Standard
⌈	**Na**	23	106.7	39.9	**-0.0000**	0.010	32379.6	mg/L	137	Standard
|	**Mg**	24	540.0	12.0	**-0.0008**	0.000	11.0	mg/L	498	Standard

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	K	39	555.0	4.1	**-0.0033**	0.003	83.9	mg/L	557	Standard
	Ca	43	40.0	21.7	**-0.0028**	0.019	694.8	mg/L	52	Standard
	Fe	54	853.8	4.0	**-0.0178**	0.006	34.2	mg/L	865	Standard
	Fe	57	5526.0	5.6	**-0.0035**	0.001	32.4	mg/L	6003	Standard
>	**Sc-1**	45	334560.0	2.6				mg/L	333080	Standard
	Cl	35	48719.9	2.0				ug/L	40103	Standard
	Kr	83	64.8	3.3				ug/L	67	Standard
	Br	81	14465.2	2.8				ug/L	15294	Standard
	P	31	82849.4	3.4				ug/L	74262	Standard
	S	34	878858.1	2.6				ug/L	787377	Standard
	Sr	88	290.0	9.1				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		95.603	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		95.775	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		96.462	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		97.407	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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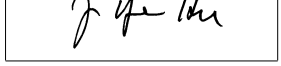
Approved: May 09, 2012

	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	97.700
	Na	23	
	Mg	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

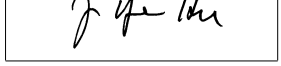
Sample ID: QC Std 3
Sample Date/Time: Tuesday, May 08, 2012 09:29:19
Number of Replicates: 3
Autosampler Position: 202
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	16215.3	2.0	**-630.1117**	290.526	46.1	ug/L	17857	Standard
|	**Be**	9	11.7	89.2	**-0.0040**	0.003	67.4	ug/L	12	Standard
|	**Al**	27	18684.8	0.8	**0.3047**	0.018	5.9	ug/L	13328	Standard
⌊>	**Sc**	45	328424.5	2.6				ug/L	333080	Standard
⌈	**Ti**	47	115.3	11.1	**0.0166**	0.008	49.4	ug/L	113	Standard
|	**V**	51	10946.5	4.3	**0.3818**	0.014	3.6	ug/L	4349	Standard
|	**Cr**	52	23155.0	1.5	**0.7393**	0.022	3.0	ug/L	14000	Standard
|	**Cr**	53	1892.6	2.7	**0.7966**	0.005	0.6	ug/L	319	Standard
|	**Mn**	55	12611.6	2.6	**0.5025**	0.013	2.5	ug/L	1367	Standard
|	**Co**	59	6767.8	3.5	**0.4012**	0.009	2.2	ug/L	115	Standard
|	**Ni**	60	5654.4	3.2	**1.6071**	0.048	3.0	ug/L	76	Standard
|	**Cu**	65	2683.9	1.3	**0.8336**	0.028	3.4	ug/L	135	Standard
|	**Zn**	66	9672.8	1.3	**7.0445**	0.072	1.0	ug/L	185	Standard
| >	**Ge**	72	261547.8	2.2				ug/L	274929	Standard
|	**As**	75	292.2	14.6	**0.3832**	0.035	9.0	ug/L	-262	Standard
|	**Se**	82	90.0	14.6	**0.3520**	0.093	26.5	ug/L	27	Standard
⌊	**Se-1**	77	121.7	5.5	**0.4216**	0.046	11.0	ug/L	94	Standard
	Ga	71	238775.3	2.2				mg/L	248575	Standard
⌈	**Rb**	85	25.0	34.6				ug/L	15	Standard
| >	**Y**	89	265838.3	7.3				ug/L	267564	Standard
⌊	**Rh**	103	0.0					ug/L	2	Standard
⌈	**Mo**	98	45.4	29.9	**0.0152**	0.003	18.9	ug/L	5	Standard
|	**Ag**	107	4497.0	3.1	**0.4206**	0.007	1.6	ug/L	44	Standard
|	**Cd**	111	1643.7	3.7	**0.2430**	0.009	3.9	mg/L	512	Standard
|	**Cd**	114	4177.3	2.1	**0.2493**	0.009	3.6	ug/L	1247	Standard
| >	**In**	115	710345.7	1.6				ug/L	743274	Standard
|	**Sn**	118	916.4	7.0	**0.0070**	0.005	65.8	ug/L	816	Standard
|	**Sb**	123	4952.6	1.2	**0.4262**	0.011	2.6	ug/L	15	Standard
⌊	**Ba**	135	3800.8	0.9	**0.7555**	0.011	1.4	ug/L	37	Standard
⌈	**Ce**	140	58.3	25.0				ug/L	44	Standard
⌊>	**Tb**	159	809386.1	1.0				ug/L	826676	Standard
⌈	**Ho**	165	9.7	6.0				ug/L	12	Standard
|	**Tl**	203	1459.7	3.5	**0.0795**	0.003	4.0	ug/L	6	Standard
|	**Tl**	205	3405.7	3.4	**0.0803**	0.004	4.6	ug/L	11	Standard
|	**Pb**	206	3141.3	1.9	**0.1988**	0.006	3.1	ug/L	301	Standard
|	**Pb**	207	2608.2	1.4	**0.1973**	0.006	3.0	ug/L	250	Standard
|	**Pb**	208	12293.3	1.6	**0.1973**	0.005	2.6	ug/L	1166	Standard
|	**U**	238	11877.3	0.9	**0.3885**	0.003	0.7	ug/L	3	Standard
⌊>	**Bi**	209	445762.6	1.3				ug/L	454659	Standard
⌈	**Na**	23	133.3	30.1	**0.0064**	0.010	152.9	mg/L	137	Standard
|	**Mg**	24	740.0	4.7	**-0.0004**	0.000	18.1	mg/L	498	Standard

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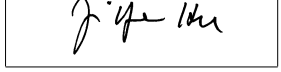
	K	39	640.0	7.5	**0.0039**	0.004	103.3	mg/L	557	Standard
	Ca	43	30.0	44.1	**-0.0238**	0.029	121.3	mg/L	52	Standard
	Fe	54	896.3	9.3	**-0.0079**	0.017	219.5	mg/L	865	Standard
	Fe	57	5589.4	5.7	**-0.0026**	0.001	35.5	mg/L	6003	Standard
>	**Sc-1**	45	328424.5	2.6				mg/L	333080	Standard
	Cl	35	47431.8	0.7				ug/L	40103	Standard
	Kr	83	68.2	4.4				ug/L	67	Standard
	Br	81	14723.8	3.0				ug/L	15294	Standard
	P	31	82779.7	1.4				ug/L	74262	Standard
	S	34	849798.4	1.0				ug/L	787377	Standard
	Sr	88	293.3	20.3				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51	95.454		
	Cr	52	92.416		
	Cr	53			
	Mn	55	100.502		
	Co	59	100.291		
	Ni	60	100.444		
	Cu	65	104.201		
	Zn	66	112.713		
>	Ge	72		95.133	
	As	75	95.799		
	Se	82	88.000		
	Se-1	77	105.391		
	Ga	71			
	Rb	85			
>	Y	89		99.355	
	Rh	103			
	Mo	98			
	Ag	107	105.161		
	Cd	111	101.239		
	Cd	114			
>	In	115		95.570	
	Sn	118			
	Sb	123	106.556		
	Ba	135	100.736		
	Ce	140			
>	Tb	159		97.908	
	Ho	165			
	Tl	203	99.425		
	Tl	205			
	Pb	206			

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	Pb	207			
	Pb	208	98.671		
	U	238	97.116		
>	Bi	209		98.043	
	Na	23			
	Mg	24			
	K	39			
	Ca	43			
	Fe	54			
	Fe	57			
>	Sc-1	45			
	Cl	35			
	Kr	83			
	Br	81			
	P	31			
	S	34			
	Sr	88			

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 3
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Method 6020 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Tuesday, May 08, 2012 09:32:11
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	18272.7	4.0	**-47.1366**	240.972	511.2	ug/L	17857	Standard
|	**Be**	9	6.7	43.3	**-0.0054**	0.001	12.2	ug/L	12	Standard
|	**Al**	27	91509446.1	1.1	**4639.9824**	104.384	2.2	ug/L	13328	Standard
⌊>	**Sc**	45	348621.0	1.8				ug/L	333080	Standard
⌈	**Ti**	47	223133.3	1.8	**117.7713**	0.599	0.5	ug/L	113	Standard
|	**V**	51	6426.0	4.5	**0.1065**	0.018	17.2	ug/L	4349	Standard
|	**Cr**	52	16896.4	1.0	**0.1809**	0.012	6.5	ug/L	14000	Standard
|	**Cr**	53	4796.6	2.2	**2.0984**	0.057	2.7	ug/L	319	Standard
|	**Mn**	55	2503.2	2.8	**0.0423**	0.002	4.0	ug/L	1367	Standard
|	**Co**	59	509.0	4.5	**0.0232**	0.002	7.2	ug/L	115	Standard
|	**Ni**	60	1805.8	0.2	**0.4671**	0.005	1.2	ug/L	76	Standard
|	**Cu**	65	750.7	1.5	**0.1854**	0.006	3.1	ug/L	135	Standard
|	**Zn**	66	2883.9	1.1	**1.8709**	0.043	2.3	ug/L	185	Standard
|>	**Ge**	72	278584.7	1.3				ug/L	274929	Standard
|	**As**	75	-323.4	10.1	**-0.0480**	0.021	43.5	ug/L	-262	Standard
|	**Se**	82	37.7	21.4	**0.0096**	0.051	528.3	ug/L	27	Standard
⌊	**Se-1**	77	314.3	5.5	**2.3516**	0.179	7.6	ug/L	94	Standard
	Ga	71	248049.1	2.0				mg/L	248575	Standard
⌈	**Rb**	85	5274.3	3.9				ug/L	15	Standard
|>	**Y**	89	270424.1	1.9				ug/L	267564	Standard
⌊	**Rh**	103	6.7	86.6				ug/L	2	Standard
⌈	**Mo**	98	524803.7	0.8	**98.7931**	1.223	1.2	ug/L	5	Standard
|	**Ag**	107	131.3	6.2	**0.0038**	0.001	25.0	ug/L	44	Standard
|	**Cd**	111	1091.7	2.6	**0.1095**	0.002	1.5	mg/L	512	Standard
|	**Cd**	114	4233.3	1.9	**0.2271**	0.003	1.2	ug/L	1247	Standard
|>	**In**	115	769202.3	2.0				ug/L	743274	Standard
|	**Sn**	118	1267.7	0.5	**0.0223**	0.002	7.0	ug/L	816	Standard
|	**Sb**	123	706.9	0.8	**0.0549**	0.001	2.4	ug/L	15	Standard
⌊	**Ba**	135	176.7	8.8	**0.0261**	0.003	9.8	ug/L	37	Standard
⌈	**Ce**	140	2193.2	1.8				ug/L	44	Standard
⌊>	**Tb**	159	892222.7	2.5				ug/L	826676	Standard
⌈	**Ho**	165	15.7	9.8				ug/L	12	Standard
|	**Tl**	203	350.3	2.6	**0.0173**	0.000	2.3	ug/L	6	Standard
|	**Tl**	205	804.0	2.9	**0.0208**	0.001	2.8	ug/L	11	Standard
|	**Pb**	206	616.0	2.8	**0.0225**	0.001	5.6	ug/L	301	Standard
|	**Pb**	207	499.7	7.5	**0.0208**	0.003	12.6	ug/L	250	Standard
|	**Pb**	208	2359.7	1.2	**0.0214**	0.000	0.1	ug/L	1166	Standard
|	**U**	238	29.7	17.0	**0.0048**	0.000	3.4	ug/L	3	Standard
⌊>	**Bi**	209	445277.2	1.2				ug/L	454659	Standard
⌈	**Na**	23	59816.2	1.5	**12.6991**	0.216	1.7	mg/L	137	Standard
|	**Mg**	24	3331604.9	0.7	**5.0174**	0.106	2.1	mg/L	498	Standard

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	K	39	73380.6	1.8	**5.2229**	0.042	0.8	mg/L	557	Standard
	Ca	43	7303.4	1.2	**15.3370**	0.219	1.4	mg/L	52	Standard
	Fe	54	79758.7	0.8	**12.2858**	0.191	1.6	mg/L	865	Standard
	Fe	57	2471726.9	1.3	**11.8573**	0.066	0.6	mg/L	6003	Standard
>	**Sc-1**	45	348621.0	1.8				mg/L	333080	Standard
	Cl	35	9105537.6	1.9				ug/L	40103	Standard
	Kr	83	72.3	4.2				ug/L	67	Standard
	Br	81	15851.6	2.5				ug/L	15294	Standard
	P	31	7008959.8	2.2				ug/L	74262	Standard
	S	34	1784549.5	1.1				ug/L	787377	Standard
	Sr	88	1691.8	4.6				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	92.800		
>	Sc	45			
	Ti	47	117.771		
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		101.330	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		101.069	
	Rh	103			
	Mo	98	98.793		
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		103.488	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		107.929	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: QC Std 4
Report Date/Time: Tuesday, May 08, 2012 09:34:44
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	Pb	207		
	Pb	208		
	U	238		
>	Bi	209		97.936
⌈	Na	23	101.593	
	Mg	24	100.347	
	K	39	104.457	
	Ca	43	102.247	
	Fe	54	98.287	
	Fe	57	94.859	
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 4	Se-1	77	

Sample ID: QC Std 4
Report Date/Time: Tuesday, May 08, 2012 09:34:44
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Method 6020 - Summary Report

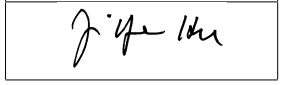
Sample ID: QC Std 5
Sample Date/Time: Tuesday, May 08, 2012 09:35:04
Number of Replicates: 3
Autosampler Position: 204
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	18853.4	1.5	**-163.4703**	130.223	79.7	ug/L	17857	Standard
|	**Be**	9	448888.4	3.2	**102.3999**	3.141	3.1	ug/L	12	Standard
|	**Al**	27	82918184.3	2.8	**4027.1495**	155.041	3.8	ug/L	13328	Standard
⌊>	**Sc**	45	364031.5	2.7				ug/L	333080	Standard
⌈	**Ti**	47	202312.6	2.5	**102.7520**	1.719	1.7	ug/L	113	Standard
|	**V**	51	1922179.2	3.4	**97.1998**	3.377	3.5	ug/L	4349	Standard
|	**Cr**	52	1463094.4	1.8	**100.1579**	1.143	1.1	ug/L	14000	Standard
|	**Cr**	53	225008.3	2.5	**101.1973**	1.766	1.7	ug/L	319	Standard
|	**Mn**	55	2419329.7	1.8	**97.9484**	1.122	1.1	ug/L	1367	Standard
|	**Co**	59	1816181.8	2.7	**98.6111**	2.049	2.1	ug/L	115	Standard
|	**Ni**	60	379012.7	3.2	**98.5575**	2.392	2.4	ug/L	76	Standard
|	**Cu**	65	331473.3	2.1	**97.9787**	1.242	1.3	ug/L	135	Standard
|	**Zn**	66	151676.5	2.9	**101.6280**	2.126	2.1	ug/L	185	Standard
| >	**Ge**	72	289479.0	0.8				ug/L	274929	Standard
|	**As**	75	155648.9	2.3	**101.8599**	1.522	1.5	ug/L	-262	Standard
|	**Se**	82	18070.5	2.3	**101.9933**	1.617	1.6	ug/L	27	Standard
⌊	**Se-1**	77	10449.9	2.4	**104.0784**	1.698	1.6	ug/L	94	Standard
	Ga	71	259318.7	0.5				mg/L	248575	Standard
⌈	**Rb**	85	4975.8	7.9				ug/L	15	Standard
| >	**Y**	89	287040.0	2.9				ug/L	267564	Standard
⌊	**Rh**	103	126.7	9.9				ug/L	2	Standard
⌈	**Mo**	98	483560.3	1.2	**88.5824**	1.233	1.4	ug/L	5	Standard
|	**Ag**	107	1021860.3	9.8	**87.5184**	8.710	10.0	ug/L	44	Standard
|	**Cd**	111	529698.3	1.9	**99.9400**	2.079	2.1	mg/L	512	Standard
|	**Cd**	114	1342612.5	2.6	**99.8001**	2.882	2.9	ug/L	1247	Standard
| >	**In**	115	790348.3	0.6				ug/L	743274	Standard
|	**Sn**	118	2053.1	1.7	**0.0629**	0.001	2.0	ug/L	816	Standard
|	**Sb**	123	1306666.4	1.9	**101.4086**	2.267	2.2	ug/L	15	Standard
⌊	**Ba**	135	549565.6	2.2	**99.0358**	2.592	2.6	ug/L	37	Standard
⌈	**Ce**	140	2087.8	4.7				ug/L	44	Standard
⌊>	**Tb**	159	913243.0	1.0				ug/L	826676	Standard
⌈	**Ho**	165	18.0	25.5				ug/L	12	Standard
|	**Tl**	203	1867777.7	1.7	**101.1458**	2.075	2.1	ug/L	6	Standard
|	**Tl**	205	4564614.3	1.8	**100.8132**	2.264	2.2	ug/L	11	Standard
|	**Pb**	206	1481564.3	2.6	**99.8319**	2.998	3.0	ug/L	301	Standard
|	**Pb**	207	1274488.4	2.3	**102.9521**	2.788	2.7	ug/L	250	Standard
|	**Pb**	208	5993659.1	2.5	**102.4903**	2.998	2.9	ug/L	1166	Standard
|	**U**	238	3262645.0	2.5	**102.0188**	2.956	2.9	ug/L	3	Standard
⌊>	**Bi**	209	461712.4	0.5				ug/L	454659	Standard
⌈	**Na**	23	54982.9	1.9	**11.1786**	0.314	2.8	mg/L	137	Standard
|	**Mg**	24	3072433.9	2.6	**4.4323**	0.178	4.0	mg/L	498	Standard

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	K	39	66540.8	2.4	**4.5306**	0.110	2.4	mg/L	557	Standard
	Ca	43	6473.1	6.2	**13.0120**	0.965	7.4	mg/L	52	Standard
	Fe	54	70984.8	3.2	**10.4498**	0.379	3.6	mg/L	865	Standard
	Fe	57	2196818.1	2.5	**10.0902**	0.292	2.9	mg/L	6003	Standard
>	**Sc-1**	45	364031.5	2.7				mg/L	333080	Standard
	Cl	35	8354586.2	0.5				ug/L	40103	Standard
	Kr	83	89.4	5.7				ug/L	67	Standard
	Br	81	16172.8	2.8				ug/L	15294	Standard
	P	31	6328406.5	1.1				ug/L	74262	Standard
	S	34	1703461.9	2.4				ug/L	787377	Standard
	Sr	88	1801.8	7.7				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	80.543		
>	Sc	45			
	Ti	47	102.752		
	V	51	97.200		
	Cr	52	100.158		
	Cr	53			
	Mn	55	97.948		
	Co	59	98.611		
	Ni	60	98.557		
	Cu	65	97.979		
	Zn	66	101.628		
>	Ge	72		105.292	
	As	75	101.860		
	Se	82	101.993		
	Se-1	77	104.078		
	Ga	71			
	Rb	85			
>	Y	89		107.279	
	Rh	103			
	Mo	98	88.582		
	Ag	107	87.518		
	Cd	111	99.940		
	Cd	114			
>	In	115		106.333	
	Sn	118			
	Sb	123	101.409		
	Ba	135	99.036		
	Ce	140			
>	Tb	159		110.472	
	Ho	165			
	Tl	203	101.146		
	Tl	205			
	Pb	206	99.832		

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	Pb	207	102.952	
	Pb	208	102.490	
	U	238	102.019	
>	Bi	209		101.551
	Na	23	89.428	
	Mg	24	88.646	
	K	39	90.612	
	Ca	43	86.747	
	Fe	54	83.598	
	Fe	57	80.722	
>	Sc-1	45		
	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

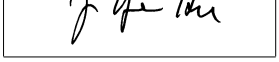
Sample ID: QC Std 6
Sample Date/Time: Tuesday, May 08, 2012 09:38:00
Number of Replicates: 3
Autosampler Position: 101
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	17521.8	0.3	**-627.3848**	110.232	17.6	ug/L	17857	Standard
|	**Be**	9	214817.3	1.4	**50.2826**	0.371	0.7	ug/L	12	Standard
|	**Al**	27	985427.5	0.9	**48.4140**	0.876	1.8	ug/L	13328	Standard
⌊>	**Sc**	45	354666.6	0.9				ug/L	333080	Standard
⌈	**Ti**	47	193263.9	1.3	**101.4133**	0.630	0.6	ug/L	113	Standard
|	**V**	51	972528.8	2.5	**50.6869**	0.507	1.0	ug/L	4349	Standard
|	**Cr**	52	730509.2	2.1	**51.1629**	0.719	1.4	ug/L	14000	Standard
|	**Cr**	53	108399.0	1.8	**50.2929**	0.175	0.3	ug/L	319	Standard
|	**Mn**	55	1241027.7	1.9	**51.8755**	0.219	0.4	ug/L	1367	Standard
|	**Co**	59	895565.6	1.0	**50.2377**	0.403	0.8	ug/L	115	Standard
|	**Ni**	60	188171.0	1.2	**50.5480**	0.388	0.8	ug/L	76	Standard
|	**Cu**	65	166103.2	0.9	**50.7067**	0.488	1.0	ug/L	135	Standard
|	**Zn**	66	73293.2	2.0	**50.6651**	0.151	0.3	ug/L	185	Standard
| >	**Ge**	72	280221.4	1.8				ug/L	274929	Standard
|	**As**	75	75814.0	1.3	**51.3451**	0.240	0.5	ug/L	-262	Standard
|	**Se**	82	9084.5	2.6	**52.8654**	0.554	1.0	ug/L	27	Standard
⌊	**Se-1**	77	5028.8	4.5	**51.2598**	1.432	2.8	ug/L	94	Standard
	Ga	71	253056.3	2.0				mg/L	248575	Standard
⌈	**Rb**	85	1565.1	9.7				ug/L	15	Standard
| >	**Y**	89	277958.1	0.5				ug/L	267564	Standard
⌊	**Rh**	103	41.7	59.2				ug/L	2	Standard
⌈	**Mo**	98	530465.9	1.4	**100.7426**	1.863	1.8	ug/L	5	Standard
|	**Ag**	107	616259.7	2.0	**54.7173**	1.738	3.2	ug/L	44	Standard
|	**Cd**	111	259672.9	0.5	**50.7428**	0.802	1.6	mg/L	512	Standard
|	**Cd**	114	651183.8	0.9	**50.1324**	0.791	1.6	ug/L	1247	Standard
| >	**In**	115	762398.2	1.1				ug/L	743274	Standard
|	**Sn**	118	892587.0	1.2	**50.0987**	0.925	1.8	ug/L	816	Standard
|	**Sb**	123	628814.6	1.6	**50.5966**	1.349	2.7	ug/L	15	Standard
⌊	**Ba**	135	265378.8	1.9	**49.5767**	1.308	2.6	ug/L	37	Standard
⌈	**Ce**	140	972.4	4.9				ug/L	44	Standard
⌊>	**Tb**	159	870335.2	0.3				ug/L	826676	Standard
⌈	**Ho**	165	26.3	21.6				ug/L	12	Standard
|	**Tl**	203	916194.5	2.2	**50.2085**	0.912	1.8	ug/L	6	Standard
|	**Tl**	205	2280516.7	1.4	**50.9724**	0.459	0.9	ug/L	11	Standard
|	**Pb**	206	738640.3	1.6	**50.3564**	0.534	1.1	ug/L	301	Standard
|	**Pb**	207	612527.3	1.5	**50.0622**	0.604	1.2	ug/L	250	Standard
|	**Pb**	208	2882538.6	1.3	**49.8709**	0.455	0.9	ug/L	1166	Standard
|	**U**	238	1544781.3	1.3	**48.8859**	0.663	1.4	ug/L	3	Standard
⌊>	**Bi**	209	456198.1	0.6				ug/L	454659	Standard
⌈	**Na**	23	24553.2	2.7	**5.1084**	0.098	1.9	mg/L	137	Standard
|	**Mg**	24	3267474.9	0.6	**4.8358**	0.025	0.5	mg/L	498	Standard

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	K	39	71133.3	1.0	**4.9745**	0.048	1.0	mg/L	557	Standard
	Ca	43	2303.5	7.9	**4.6897**	0.337	7.2	mg/L	52	Standard
	Fe	54	32214.0	0.9	**4.7824**	0.019	0.4	mg/L	865	Standard
	Fe	57	1045571.6	2.6	**4.9116**	0.111	2.3	mg/L	6003	Standard
>	**Sc-1**	45	354666.6	0.9				mg/L	333080	Standard
	Cl	35	126934.0	39.7				ug/L	40103	Standard
	Kr	83	71.6	3.0				ug/L	67	Standard
	Br	81	15750.7	3.9				ug/L	15294	Standard
	P	31	85524.9	0.9				ug/L	74262	Standard
	S	34	870025.6	0.8				ug/L	787377	Standard
	Sr	88	791.7	9.1				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	96.828		
>	Sc	45			
	Ti	47	101.413		
	V	51	101.374		
	Cr	52	102.326		
	Cr	53			
	Mn	55	103.751		
	Co	59	100.475		
	Ni	60	101.096		
	Cu	65	101.413		
	Zn	66	101.330		
>	Ge	72		101.925	
	As	75	102.690		
	Se	82	105.731		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		103.885	
	Rh	103			
	Mo	98	100.743		
	Ag	107	109.435		
	Cd	111	101.486		
	Cd	114			
>	In	115		102.573	
	Sn	118	100.197		
	Sb	123	101.193		
	Ba	135	99.153		
	Ce	140			
>	Tb	159		105.281	
	Ho	165			
	Tl	203	100.417		
	Tl	205			
	Pb	206	100.713		

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	Pb	207	100.124	
	Pb	208	99.742	
	U	238	97.772	
>	Bi	209		100.339
	Na	23	102.168	
	Mg	24	96.716	
	K	39	99.490	
	Ca	43	93.795	
	Fe	54	95.647	
	Fe	57	98.232	
>	Sc-1	45		
	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

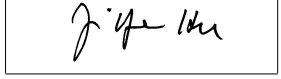
Sample ID: QC Std 7
Sample Date/Time: Tuesday, May 08, 2012 09:40:53
Number of Replicates: 3
Autosampler Position: 102
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	17368.3	1.0	**-276.1931**	100.022	36.2	ug/L	17857	Standard
|	**Be**	9	11.7	65.5	**-0.0041**	0.002	45.7	ug/L	12	Standard
|	**Al**	27	13959.8	12.1	**0.0266**	0.089	336.4	ug/L	13328	Standard
⌊>	**Sc**	45	339095.9	0.4				ug/L	333080	Standard
⌈	**Ti**	47	118.0	19.5	**0.0157**	0.013	80.4	ug/L	113	Standard
|	**V**	51	4166.6	0.8	**-0.0068**	0.003	44.1	ug/L	4349	Standard
|	**Cr**	52	13410.9	1.4	**-0.0438**	0.014	31.1	ug/L	14000	Standard
|	**Cr**	53	376.7	2.8	**0.0341**	0.005	13.6	ug/L	319	Standard
|	**Mn**	55	1401.7	5.2	**-0.0024**	0.003	141.4	ug/L	1367	Standard
|	**Co**	59	158.7	13.3	**0.0036**	0.001	34.4	ug/L	115	Standard
|	**Ni**	60	83.7	15.6	**0.0022**	0.004	168.5	ug/L	76	Standard
|	**Cu**	65	162.7	7.4	**0.0060**	0.004	67.1	ug/L	135	Standard
|	**Zn**	66	177.3	3.8	**-0.0134**	0.005	36.1	ug/L	185	Standard
| >	**Ge**	72	271316.7	0.6				ug/L	274929	Standard
|	**As**	75	-240.1	6.2	**0.0041**	0.011	263.0	ug/L	-262	Standard
|	**Se**	82	36.7	14.1	**0.0091**	0.032	351.4	ug/L	27	Standard
⌊	**Se-1**	77	88.3	17.7	**0.0164**	0.171	1039.7	ug/L	94	Standard
	Ga	71	247745.1	0.9				mg/L	248575	Standard
⌈	**Rb**	85	23.3	81.1				ug/L	15	Standard
| >	**Y**	89	271944.2	4.9				ug/L	267564	Standard
⌊	**Rh**	103	1.7	173.2				ug/L	2	Standard
⌈	**Mo**	98	99.8	68.5	**0.0254**	0.014	53.4	ug/L	5	Standard
|	**Ag**	107	774.0	67.2	**0.0628**	0.048	76.6	ug/L	44	Standard
|	**Cd**	111	507.5	6.9	**-0.0007**	0.008	1125.6	mg/L	512	Standard
|	**Cd**	114	1250.6	1.2	**0.0021**	0.002	101.4	ug/L	1247	Standard
| >	**In**	115	745560.3	1.1				ug/L	743274	Standard
|	**Sn**	118	913.4	4.7	**0.0042**	0.003	67.5	ug/L	816	Standard
|	**Sb**	123	599.6	23.1	**0.0479**	0.012	24.9	ug/L	15	Standard
⌊	**Ba**	135	60.3	24.4	**0.0049**	0.003	60.1	ug/L	37	Standard
⌈	**Ce**	140	43.3	7.4				ug/L	44	Standard
⌊>	**Tb**	159	836907.9	1.2				ug/L	826676	Standard
⌈	**Ho**	165	7.7	37.7				ug/L	12	Standard
|	**Tl**	203	72.3	54.7	**0.0017**	0.002	134.9	ug/L	6	Standard
|	**Tl**	205	171.0	72.1	**0.0062**	0.003	45.6	ug/L	11	Standard
|	**Pb**	206	339.0	12.8	**0.0028**	0.003	117.1	ug/L	301	Standard
|	**Pb**	207	296.0	6.4	**0.0034**	0.002	60.8	ug/L	250	Standard
|	**Pb**	208	1375.4	8.4	**0.0036**	0.002	66.5	ug/L	1166	Standard
|	**U**	238	95.0	100.5	**0.0069**	0.003	45.1	ug/L	3	Standard
⌊>	**Bi**	209	452838.6	2.2				ug/L	454659	Standard
⌈	**Na**	23	145.0	36.0	**0.0079**	0.012	145.7	mg/L	137	Standard
|	**Mg**	24	598.3	23.0	**-0.0007**	0.000	30.5	mg/L	498	Standard

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	K	39	646.7	6.2	**0.0028**	0.003	107.4	mg/L	557	Standard
	Ca	43	56.7	22.2	**0.0321**	0.027	84.5	mg/L	52	Standard
	Fe	54	879.0	4.7	**-0.0156**	0.007	42.9	mg/L	865	Standard
	Fe	57	5696.1	2.7	**-0.0030**	0.001	21.8	mg/L	6003	Standard
>	**Sc-1**	45	339095.9	0.4				mg/L	333080	Standard
	Cl	35	72680.3	5.8				ug/L	40103	Standard
	Kr	83	71.8	7.2				ug/L	67	Standard
	Br	81	15376.1	3.3				ug/L	15294	Standard
	P	31	81078.1	2.4				ug/L	74262	Standard
	S	34	870703.3	2.2				ug/L	787377	Standard
	Sr	88	326.7	11.9				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		98.686	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		101.637	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		100.308	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		101.238	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: QC Std 7
Report Date/Time: Tuesday, May 08, 2012 09:43:25
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	99.600
	Na	23	
	Mg	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: L1205001701
Sample Date/Time: Tuesday, May 08, 2012 09:43:47
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	69648.1	2.9	**19010.6857**	1344.243	7.1	ug/L	17857	Standard
|	**Be**	9	640.0	12.9	**0.1079**	0.014	12.9	ug/L	12	Standard
|	**Al**	27	19489131.0	3.7	**744.7535**	31.069	4.2	ug/L	13328	Standard
⌊>	**Sc**	45	462210.6	1.8				ug/L	333080	Standard
⌈	**Ti**	47	21804.7	3.1	**10.4295**	0.555	5.3	ug/L	113	Standard
|	**V**	51	36070.7	2.9	**1.4967**	0.088	5.9	ug/L	4349	Standard
|	**Cr**	52	45792.1	1.4	**1.9608**	0.106	5.4	ug/L	14000	Standard
|	**Cr**	53	5615.2	1.0	**2.2439**	0.065	2.9	ug/L	319	Standard
|	**Mn**	55	258586.2	2.6	**9.8410**	0.418	4.3	ug/L	1367	Standard
|	**Co**	59	14821.9	2.6	**0.7552**	0.027	3.6	ug/L	115	Standard
|	**Ni**	60	6718.5	3.4	**1.6308**	0.066	4.1	ug/L	76	Standard
|	**Cu**	65	1750.4	2.7	**0.4442**	0.024	5.3	ug/L	135	Standard
|	**Zn**	66	33678.7	1.8	**21.2209**	0.636	3.0	ug/L	185	Standard
| >	**Ge**	72	306362.2	2.2				ug/L	274929	Standard
|	**As**	75	-46.4	84.4	**0.1431**	0.024	16.8	ug/L	-262	Standard
|	**Se**	82	95.3	6.1	**0.2974**	0.040	13.5	ug/L	27	Standard
⌊	**Se-1**	77	156.0	11.2	**0.5525**	0.189	34.2	ug/L	94	Standard
	Ga	71	288000.1	2.0				mg/L	248575	Standard
⌈	**Rb**	85	67828.3	4.3				ug/L	15	Standard
| >	**Y**	89	365817.0	0.8				ug/L	267564	Standard
⌊	**Rh**	103	8.3	91.7				ug/L	2	Standard
⌈	**Mo**	98	243.5	8.3	**0.0487**	0.003	5.7	ug/L	5	Standard
|	**Ag**	107	520.7	12.2	**0.0350**	0.005	14.1	ug/L	44	Standard
|	**Cd**	111	869.6	7.0	**0.0553**	0.007	12.6	mg/L	512	Standard
|	**Cd**	114	2070.3	4.7	**0.0514**	0.005	9.9	ug/L	1247	Standard
| >	**In**	115	822686.8	2.6				ug/L	743274	Standard
|	**Sn**	118	8768.9	2.2	**0.4085**	0.020	4.9	ug/L	816	Standard
|	**Sb**	123	564.3	2.5	**0.0406**	0.002	5.3	ug/L	15	Standard
⌊	**Ba**	135	66301.1	2.3	**11.4810**	0.555	4.8	ug/L	37	Standard
⌈	**Ce**	140	276335.2	2.9				ug/L	44	Standard
⌊>	**Tb**	159	940122.5	2.1				ug/L	826676	Standard
⌈	**Ho**	165	4740.7	1.3				ug/L	12	Standard
|	**Tl**	203	482.7	1.8	**0.0230**	0.001	3.9	ug/L	6	Standard
|	**Tl**	205	1168.4	6.3	**0.0274**	0.002	6.9	ug/L	11	Standard
|	**Pb**	206	8061.5	2.6	**0.5068**	0.030	5.9	ug/L	301	Standard
|	**Pb**	207	6697.5	1.0	**0.5040**	0.021	4.3	ug/L	250	Standard
|	**Pb**	208	31493.2	1.6	**0.5022**	0.025	4.9	ug/L	1166	Standard
|	**U**	238	3160.3	0.8	**0.0997**	0.004	3.8	ug/L	3	Standard
⌊>	**Bi**	209	476208.9	3.0				ug/L	454659	Standard
⌈	**Na**	23	15391.2	3.5	**2.4454**	0.092	3.8	mg/L	137	Standard
|	**Mg**	24	257682.1	2.7	**0.2912**	0.010	3.5	mg/L	498	Standard

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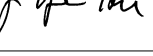
Approved: May 09, 2012

	K	39	8330.6	3.1	**0.4063**	0.016	3.9	mg/L	557	Standard
	Ca	43	648.3	1.6	**0.9420**	0.006	0.6	mg/L	52	Standard
	Fe	54	7168.2	1.6	**0.6868**	0.014	2.1	mg/L	865	Standard
	Fe	57	209637.6	2.5	**0.7295**	0.025	3.4	mg/L	6003	Standard
>	**Sc-1**	45	462210.6	1.8				mg/L	333080	Standard
	Cl	35	759116.1	3.5				ug/L	40103	Standard
	Kr	83	86.3	5.3				ug/L	67	Standard
	Br	81	39442.1	2.8				ug/L	15294	Standard
	P	31	152179.1	2.5				ug/L	74262	Standard
	S	34	798924.2	6.2				ug/L	787377	Standard
	Sr	88	297834.4	5.5				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		111.433	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		136.721	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		110.684	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		113.723	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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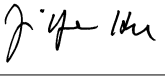


	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	104.740
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

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: L1205001701PS WG3967772-03

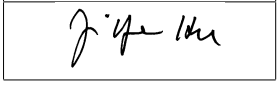
Sample Date/Time: Tuesday, May 08, 2012 09:46:39
Number of Replicates: 3
Autosampler Position: 206
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	69236.2	2.3	**18394.9504**	416.422	2.3	ug/L	17857	Standard
|	**Be**	9	236266.7	2.1	**41.8169**	1.027	2.5	ug/L	12	Standard
|	**Al**	27	20077102.0	4.3	**755.7457**	29.685	3.9	ug/L	13328	Standard
⌊>	**Sc**	45	469110.9	1.6				ug/L	333080	Standard
⌈	**Ti**	47	20782.2	2.5	**9.5975**	0.158	1.6	ug/L	113	Standard
|	**V**	51	1145753.6	3.0	**52.8073**	1.050	2.0	ug/L	4349	Standard
|	**Cr**	52	865125.1	3.1	**53.6172**	1.263	2.4	ug/L	14000	Standard
|	**Cr**	53	130449.3	2.1	**53.5216**	0.681	1.3	ug/L	319	Standard
|	**Mn**	55	1688859.1	2.7	**62.4277**	1.061	1.7	ug/L	1367	Standard
|	**Co**	59	1043137.4	2.4	**51.7313**	0.738	1.4	ug/L	115	Standard
|	**Ni**	60	224107.4	3.3	**53.2202**	1.218	2.3	ug/L	76	Standard
|	**Cu**	65	194140.7	3.1	**52.3926**	1.155	2.2	ug/L	135	Standard
|	**Zn**	66	109870.8	2.9	**67.1949**	1.256	1.9	ug/L	185	Standard
| >	**Ge**	72	316917.0	1.0				ug/L	274929	Standard
|	**As**	75	82144.6	2.4	**49.1928**	0.838	1.7	ug/L	-262	Standard
|	**Se**	82	9914.1	3.1	**51.0064**	1.257	2.5	ug/L	27	Standard
⌊	**Se-1**	77	5196.6	1.0	**46.7713**	0.039	0.1	ug/L	94	Standard
	Ga	71	294248.1	1.4				mg/L	248575	Standard
⌈	**Rb**	85	64333.0	3.1				ug/L	15	Standard
| >	**Y**	89	371551.6	2.0				ug/L	267564	Standard
⌊	**Rh**	103	93.3	34.9				ug/L	2	Standard
⌈	**Mo**	98	345.0	4.7	**0.0649**	0.002	3.4	ug/L	5	Standard
|	**Ag**	107	716087.1	3.6	**57.2632**	1.371	2.4	ug/L	44	Standard
|	**Cd**	111	278262.5	2.6	**48.9776**	0.633	1.3	mg/L	512	Standard
|	**Cd**	114	685609.0	2.8	**47.5424**	0.717	1.5	ug/L	1247	Standard
| >	**In**	115	846163.7	1.4				ug/L	743274	Standard
|	**Sn**	118	9152.8	3.2	**0.4149**	0.009	2.1	ug/L	816	Standard
|	**Sb**	123	658136.0	2.4	**47.7005**	0.567	1.2	ug/L	15	Standard
⌊	**Ba**	135	356444.6	2.7	**59.9822**	0.791	1.3	ug/L	37	Standard
⌈	**Ce**	140	269284.2	3.3				ug/L	44	Standard
⌊>	**Tb**	159	950234.9	1.0				ug/L	826676	Standard
⌈	**Ho**	165	4578.4	4.5				ug/L	12	Standard
|	**Tl**	203	1001778.4	2.0	**51.2364**	0.724	1.4	ug/L	6	Standard
|	**Tl**	205	2486986.2	2.1	**51.8776**	0.756	1.5	ug/L	11	Standard
|	**Pb**	206	805284.4	3.0	**51.2329**	1.031	2.0	ug/L	301	Standard
|	**Pb**	207	692510.7	2.4	**52.8201**	0.757	1.4	ug/L	250	Standard
|	**Pb**	208	3179292.5	2.4	**51.3320**	0.767	1.5	ug/L	1166	Standard
|	**U**	238	1671121.3	3.0	**49.3512**	1.152	2.3	ug/L	3	Standard
⌊>	**Bi**	209	488815.9	1.2				ug/L	454659	Standard
⌈	**Na**	23	15347.8	3.6	**2.4023**	0.099	4.1	mg/L	137	Standard
|	**Mg**	24	257481.5	1.8	**0.2866**	0.007	2.3	mg/L	498	Standard

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	K	39	8288.9	1.4	**0.3973**	0.004	0.9	mg/L	557	Standard
	Ca	43	643.3	9.4	**0.9195**	0.102	11.1	mg/L	52	Standard
	Fe	54	7265.0	4.9	**0.6857**	0.045	6.6	mg/L	865	Standard
	Fe	57	201360.5	3.8	**0.6886**	0.028	4.1	mg/L	6003	Standard
>	**Sc-1**	45	469110.9	1.6				mg/L	333080	Standard
	Cl	35	737453.8	0.7				ug/L	40103	Standard
	Kr	83	95.4	1.4				ug/L	67	Standard
	Br	81	38293.3	2.3				ug/L	15294	Standard
	P	31	148081.9	1.4				ug/L	74262	Standard
	S	34	731132.0	3.5				ug/L	787377	Standard
	Sr	88	297481.6	5.0				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		115.272	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		138.864	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		113.843	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		114.946	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1205001701PS WG3967772-03
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	107.513
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Y 89 Int Std for sample	Y	89	Rerun sample

Sample ID: L1205001701PS WG3967772-03
Report Date/Time: Tuesday, May 08, 2012 09:49:12
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Approved: May 09, 2012

Method 6020 - Summary Report

Sample ID: L1205001701SDL WG396772-04
Sample Date/Time: Tuesday, May 08, 2012 09:49:32
Number of Replicates: 3
Autosampler Position: 207
Sample Description: 5
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	28620.4	3.5	**4410.7186**	733.369	16.6	ug/L	17857	Standard
|	**Be**	9	153.3	29.6	**0.0265**	0.009	35.7	ug/L	12	Standard
|	**Al**	27	3531636.2	4.7	**163.5915**	2.505	1.5	ug/L	13328	Standard
⌊>	**Sc**	45	379823.3	3.2				ug/L	333080	Standard
⌈	**Ti**	47	3754.8	4.8	**1.8313**	0.073	4.0	ug/L	113	Standard
|	**V**	51	10062.9	2.5	**0.2705**	0.010	3.7	ug/L	4349	Standard
|	**Cr**	52	19802.9	0.9	**0.3162**	0.018	5.6	ug/L	14000	Standard
|	**Cr**	53	1275.1	6.6	**0.4188**	0.032	7.7	ug/L	319	Standard
|	**Mn**	55	46715.9	2.9	**1.8017**	0.042	2.3	ug/L	1367	Standard
|	**Co**	59	2760.6	4.6	**0.1421**	0.006	4.2	ug/L	115	Standard
|	**Ni**	60	1272.7	3.1	**0.3051**	0.007	2.2	ug/L	76	Standard
|	**Cu**	65	482.7	4.3	**0.0953**	0.005	5.0	ug/L	135	Standard
|	**Zn**	66	8989.0	2.8	**5.8025**	0.114	2.0	ug/L	185	Standard
| >	**Ge**	72	293787.4	1.0				ug/L	274929	Standard
|	**As**	75	-207.2	21.1	**0.0382**	0.027	71.4	ug/L	-262	Standard
|	**Se**	82	50.7	23.9	**0.0705**	0.070	99.2	ug/L	27	Standard
⌊	**Se-1**	77	102.3	14.2	**0.0827**	0.150	181.1	ug/L	94	Standard
	Ga	71	269298.5	0.7				mg/L	248575	Standard
⌈	**Rb**	85	11197.5	3.7				ug/L	15	Standard
| >	**Y**	89	304571.8	2.3				ug/L	267564	Standard
⌊	**Rh**	103	0.0					ug/L	2	Standard
⌈	**Mo**	98	76.0	22.6	**0.0196**	0.003	15.4	ug/L	5	Standard
|	**Ag**	107	339.3	22.0	**0.0208**	0.006	29.3	ug/L	44	Standard
|	**Cd**	111	571.2	0.6	**0.0040**	0.001	34.3	mg/L	512	Standard
|	**Cd**	114	1533.6	5.6	**0.0160**	0.006	35.5	ug/L	1247	Standard
| >	**In**	115	801313.9	0.7				ug/L	743274	Standard
|	**Sn**	118	2467.5	3.7	**0.0835**	0.004	4.8	ug/L	816	Standard
|	**Sb**	123	1070.9	36.1	**0.0803**	0.029	36.2	ug/L	15	Standard
⌊	**Ba**	135	11731.5	2.1	**2.0784**	0.029	1.4	ug/L	37	Standard
⌈	**Ce**	140	49192.1	3.6				ug/L	44	Standard
⌊>	**Tb**	159	888273.5	1.3				ug/L	826676	Standard
⌈	**Ho**	165	818.4	3.7				ug/L	12	Standard
|	**Tl**	203	150.0	21.8	**0.0056**	0.002	30.1	ug/L	6	Standard
|	**Tl**	205	374.7	14.8	**0.0105**	0.001	11.2	ug/L	11	Standard
|	**Pb**	206	1779.8	5.3	**0.0971**	0.006	5.9	ug/L	301	Standard
|	**Pb**	207	1469.7	0.5	**0.0954**	0.001	0.5	ug/L	250	Standard
|	**Pb**	208	6903.3	2.9	**0.0953**	0.003	3.2	ug/L	1166	Standard
|	**U**	238	604.7	9.3	**0.0223**	0.002	7.4	ug/L	3	Standard
⌊>	**Bi**	209	470870.0	0.7				ug/L	454659	Standard
⌈	**Na**	23	2948.6	3.7	**0.5522**	0.029	5.3	mg/L	137	Standard
|	**Mg**	24	49969.0	4.1	**0.0675**	0.002	2.3	mg/L	498	Standard

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	K	39	2026.8	6.2	**0.0886**	0.005	5.5	mg/L	557	Standard
	Ca	43	168.3	11.2	**0.2365**	0.048	20.3	mg/L	52	Standard
	Fe	54	2134.7	6.8	**0.1489**	0.014	9.3	mg/L	865	Standard
	Fe	57	43014.3	2.3	**0.1588**	0.003	1.9	mg/L	6003	Standard
>	**Sc-1**	45	379823.3	3.2				mg/L	333080	Standard
	Cl	35	180885.2	3.4				ug/L	40103	Standard
	Kr	83	72.9	8.1				ug/L	67	Standard
	Br	81	20042.4	2.7				ug/L	15294	Standard
	P	31	87911.8	1.3				ug/L	74262	Standard
	S	34	659224.4	1.5				ug/L	787377	Standard
	Sr	88	50693.1	4.6				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		106.859	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		113.831	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		107.809	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		107.451	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1205001701SDL WG396772-04
Report Date/Time: Tuesday, May 08, 2012 09:52:04
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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

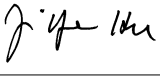
103.566

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1205001701SDL WG396772-04
Report Date/Time: Tuesday, May 08, 2012 09:52:04
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Method 6020 - Summary Report

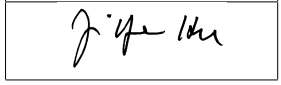
Sample ID: QC Std 6
Sample Date/Time: Tuesday, May 08, 2012 09:52:27
Number of Replicates: 3
Autosampler Position: 101
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	18489.6	1.5	**-377.5242**	474.813	125.8	ug/L	17857	Standard
|	**Be**	9	222149.4	3.1	**50.5165**	0.174	0.3	ug/L	12	Standard
|	**Al**	27	1036827.0	0.4	**49.5312**	1.724	3.5	ug/L	13328	Standard
⌊>	**Sc**	45	365104.8	3.4				ug/L	333080	Standard
⌈	**Ti**	47	202333.7	2.0	**101.0331**	2.052	2.0	ug/L	113	Standard
|	**V**	51	1018791.6	1.3	**50.5344**	0.748	1.5	ug/L	4349	Standard
|	**Cr**	52	763478.9	0.5	**50.8803**	0.349	0.7	ug/L	14000	Standard
|	**Cr**	53	115877.3	1.1	**51.1653**	0.485	0.9	ug/L	319	Standard
|	**Mn**	55	1303362.8	0.6	**51.8472**	0.260	0.5	ug/L	1367	Standard
|	**Co**	59	942682.3	1.1	**50.3187**	0.468	0.9	ug/L	115	Standard
|	**Ni**	60	197685.0	0.8	**50.5317**	0.310	0.6	ug/L	76	Standard
|	**Cu**	65	174774.6	1.0	**50.7680**	0.427	0.8	ug/L	135	Standard
|	**Zn**	66	76295.0	0.8	**50.1896**	0.323	0.6	ug/L	185	Standard
| >	**Ge**	72	294460.1	0.2				ug/L	274929	Standard
|	**As**	75	77816.7	1.2	**50.1536**	0.505	1.0	ug/L	-262	Standard
|	**Se**	82	9084.1	0.8	**50.3008**	0.317	0.6	ug/L	27	Standard
⌊	**Se-1**	77	5263.9	1.3	**51.0746**	0.676	1.3	ug/L	94	Standard
	Ga	71	265959.4	1.0				mg/L	248575	Standard
⌈	**Rb**	85	1513.4	6.4				ug/L	15	Standard
| >	**Y**	89	289529.6	2.5				ug/L	267564	Standard
⌊	**Rh**	103	55.0	32.8				ug/L	2	Standard
⌈	**Mo**	98	544048.3	0.5	**98.7854**	1.226	1.2	ug/L	5	Standard
|	**Ag**	107	606877.0	2.4	**51.5026**	0.846	1.6	ug/L	44	Standard
|	**Cd**	111	267393.9	0.2	**49.9536**	0.477	1.0	mg/L	512	Standard
|	**Cd**	114	669737.7	0.8	**49.2921**	0.231	0.5	ug/L	1247	Standard
| >	**In**	115	797407.8	1.1				ug/L	743274	Standard
|	**Sn**	118	913301.5	1.5	**49.0031**	0.241	0.5	ug/L	816	Standard
|	**Sb**	123	637764.6	1.1	**49.0543**	0.047	0.1	ug/L	15	Standard
⌊	**Ba**	135	271455.4	1.2	**48.4774**	0.125	0.3	ug/L	37	Standard
⌈	**Ce**	140	1035.0	1.8				ug/L	44	Standard
⌊>	**Tb**	159	888990.8	1.2				ug/L	826676	Standard
⌈	**Ho**	165	30.0	15.3				ug/L	12	Standard
|	**Tl**	203	931059.1	0.2	**50.1485**	0.174	0.3	ug/L	6	Standard
|	**Tl**	205	2325274.1	0.5	**51.0813**	0.282	0.6	ug/L	11	Standard
|	**Pb**	206	744800.1	0.5	**49.9057**	0.250	0.5	ug/L	301	Standard
|	**Pb**	207	623692.9	0.2	**50.0996**	0.164	0.3	ug/L	250	Standard
|	**Pb**	208	2908762.7	0.1	**49.4605**	0.089	0.2	ug/L	1166	Standard
|	**U**	238	1544856.2	1.0	**48.0479**	0.541	1.1	ug/L	3	Standard
⌊>	**Bi**	209	464174.5	0.2				ug/L	454659	Standard
⌈	**Na**	23	25451.4	2.5	**5.1456**	0.046	0.9	mg/L	137	Standard
|	**Mg**	24	3473776.4	0.8	**4.9974**	0.153	3.1	mg/L	498	Standard

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	K	39	74079.0	1.8	**5.0345**	0.079	1.6	mg/L	557	Standard
	Ca	43	2503.5	3.2	**4.9587**	0.065	1.3	mg/L	52	Standard
	Fe	54	34349.5	1.3	**4.9616**	0.111	2.2	mg/L	865	Standard
	Fe	57	1090722.0	1.5	**4.9800**	0.100	2.0	mg/L	6003	Standard
>	**Sc-1**	45	365104.8	3.4				mg/L	333080	Standard
	Cl	35	58412.8	2.9				ug/L	40103	Standard
	Kr	83	76.3	7.5				ug/L	67	Standard
	Br	81	16146.9	3.2				ug/L	15294	Standard
	P	31	83537.6	5.2				ug/L	74262	Standard
	S	34	831379.0	5.5				ug/L	787377	Standard
	Sr	88	830.0	5.3				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	99.062		
>	Sc	45			
	Ti	47	101.033		
	V	51	101.069		
	Cr	52	101.761		
	Cr	53			
	Mn	55	103.694		
	Co	59	100.637		
	Ni	60	101.063		
	Cu	65	101.536		
	Zn	66	100.379		
>	Ge	72		107.104	
	As	75	100.307		
	Se	82	100.602		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		108.209	
	Rh	103			
	Mo	98	98.785		
	Ag	107	103.005		
	Cd	111	99.907		
	Cd	114			
>	In	115		107.283	
	Sn	118	98.006		
	Sb	123	98.109		
	Ba	135	96.955		
	Ce	140			
>	Tb	159		107.538	
	Ho	165			
	Tl	203	100.297		
	Tl	205			
	Pb	206	99.811		

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	Pb	207	100.199	
	Pb	208	98.921	
	U	238	96.096	
>	Bi	209		102.093
	Na	23	102.911	
	Mg	24	99.948	
	K	39	100.690	
	Ca	43	99.174	
	Fe	54	99.231	
	Fe	57	99.599	
>	Sc-1	45		
	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: Tuesday, May 08, 2012 09:55:20
Number of Replicates: 3
Autosampler Position: 102
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	17571.9	1.4	**-224.7410**	169.724	75.5	ug/L	17857	Standard
|	**Be**	9	13.3	94.4	**-0.0037**	0.003	81.7	ug/L	12	Standard
|	**Al**	27	14600.4	10.8	**0.0547**	0.077	141.5	ug/L	13328	Standard
⌊>	**Sc**	45	341393.5	2.7				ug/L	333080	Standard
⌈	**Ti**	47	122.7	11.1	**0.0167**	0.008	46.7	ug/L	113	Standard
|	**V**	51	4291.2	2.9	**-0.0052**	0.010	184.4	ug/L	4349	Standard
|	**Cr**	52	13725.5	0.4	**-0.0436**	0.012	27.0	ug/L	14000	Standard
|	**Cr**	53	365.0	6.5	**0.0246**	0.014	54.9	ug/L	319	Standard
|	**Mn**	55	1363.7	2.9	**-0.0054**	0.002	28.2	ug/L	1367	Standard
|	**Co**	59	150.7	19.4	**0.0030**	0.002	59.0	ug/L	115	Standard
|	**Ni**	60	86.0	4.2	**0.0023**	0.001	40.8	ug/L	76	Standard
|	**Cu**	65	148.3	5.4	**0.0005**	0.003	674.4	ug/L	135	Standard
|	**Zn**	66	195.3	5.6	**-0.0037**	0.008	221.8	ug/L	185	Standard
| >	**Ge**	72	277644.5	1.5				ug/L	274929	Standard
|	**As**	75	-231.7	13.9	**0.0138**	0.020	141.9	ug/L	-262	Standard
|	**Se**	82	33.7	14.1	**-0.0134**	0.031	231.5	ug/L	27	Standard
⌊	**Se-1**	77	89.7	1.3	**0.0084**	0.007	85.1	ug/L	94	Standard
	Ga	71	255926.4	0.5				mg/L	248575	Standard
⌈	**Rb**	85	31.7	9.1				ug/L	15	Standard
| >	**Y**	89	272044.0	1.1				ug/L	267564	Standard
⌊	**Rh**	103	0.0					ug/L	2	Standard
⌈	**Mo**	98	111.6	41.8	**0.0273**	0.009	32.9	ug/L	5	Standard
|	**Ag**	107	147.0	57.6	**0.0054**	0.008	140.8	ug/L	44	Standard
|	**Cd**	111	518.5	3.9	**0.0004**	0.004	1130.9	mg/L	512	Standard
|	**Cd**	114	1395.7	11.4	**0.0125**	0.013	102.4	ug/L	1247	Standard
| >	**In**	115	753234.1	0.2				ug/L	743274	Standard
|	**Sn**	118	1032.7	11.6	**0.0104**	0.007	67.0	ug/L	816	Standard
|	**Sb**	123	375.1	35.9	**0.0290**	0.011	38.0	ug/L	15	Standard
⌊	**Ba**	135	74.7	62.6	**0.0075**	0.009	118.5	ug/L	37	Standard
⌈	**Ce**	140	64.3	11.2				ug/L	44	Standard
⌊>	**Tb**	159	829772.2	1.6				ug/L	826676	Standard
⌈	**Ho**	165	14.0	37.8				ug/L	12	Standard
|	**Tl**	203	93.0	111.6	**0.0028**	0.006	206.4	ug/L	6	Standard
|	**Tl**	205	238.3	107.1	**0.0077**	0.006	74.7	ug/L	11	Standard
|	**Pb**	206	358.3	22.7	**0.0041**	0.006	137.7	ug/L	301	Standard
|	**Pb**	207	312.3	13.1	**0.0047**	0.003	71.9	ug/L	250	Standard
|	**Pb**	208	1412.7	18.7	**0.0041**	0.005	110.8	ug/L	1166	Standard
|	**U**	238	102.7	78.0	**0.0071**	0.003	36.1	ug/L	3	Standard
⌊>	**Bi**	209	453456.0	1.1				ug/L	454659	Standard
⌈	**Na**	23	135.0	12.8	**0.0055**	0.003	61.7	mg/L	137	Standard
|	**Mg**	24	676.7	22.2	**-0.0006**	0.000	41.5	mg/L	498	Standard

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	K	39	655.0	5.3	**0.0032**	0.004	118.6	mg/L	557	Standard
	Ca	43	43.3	17.6	**0.0027**	0.017	628.5	mg/L	52	Standard
	Fe	54	916.3	1.9	**-0.0106**	0.005	48.7	mg/L	865	Standard
	Fe	57	5621.0	5.4	**-0.0036**	0.002	43.8	mg/L	6003	Standard
>	**Sc-1**	45	341393.5	2.7				mg/L	333080	Standard
	Cl	35	53880.6	1.5				ug/L	40103	Standard
	Kr	83	69.6	9.8				ug/L	67	Standard
	Br	81	15170.1	0.7				ug/L	15294	Standard
	P	31	75645.9	1.1				ug/L	74262	Standard
	S	34	827206.4	1.0				ug/L	787377	Standard
	Sr	88	286.7	13.3				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		100.988	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		101.674	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		101.340	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		100.374	
	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

99.735

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: Tuesday, May 08, 2012 09:58:15
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	17715.4	3.2	**-636.7679**	310.297	48.7	ug/L	17857	Standard
|	**Be**	9	6.7	43.3	**-0.0054**	0.001	12.3	ug/L	12	Standard
|	**Al**	27	20135.1	6.6	**0.2903**	0.065	22.3	ug/L	13328	Standard
⌊>	**Sc**	45	358918.0	0.1				ug/L	333080	Standard
⌈	**Ti**	47	108.0	17.3	**0.0073**	0.010	132.0	ug/L	113	Standard
|	**V**	51	11969.2	1.0	**0.3831**	0.010	2.6	ug/L	4349	Standard
|	**Cr**	52	25555.5	0.5	**0.7590**	0.019	2.5	ug/L	14000	Standard
|	**Cr**	53	2122.6	4.1	**0.8226**	0.036	4.4	ug/L	319	Standard
|	**Mn**	55	14053.2	0.8	**0.5143**	0.008	1.5	ug/L	1367	Standard
|	**Co**	59	7416.5	2.3	**0.4029**	0.011	2.8	ug/L	115	Standard
|	**Ni**	60	6221.6	2.3	**1.6203**	0.044	2.7	ug/L	76	Standard
|	**Cu**	65	2910.3	1.3	**0.8275**	0.009	1.1	ug/L	135	Standard
|	**Zn**	66	10893.9	0.9	**7.2731**	0.113	1.6	ug/L	185	Standard
| >	**Ge**	72	285463.8	0.7				ug/L	274929	Standard
|	**As**	75	310.7	8.3	**0.3774**	0.018	4.9	ug/L	-262	Standard
|	**Se**	82	94.8	3.4	**0.3312**	0.017	5.0	ug/L	27	Standard
⌊	**Se-1**	77	139.0	12.5	**0.4862**	0.185	38.1	ug/L	94	Standard
	Ga	71	261917.2	0.8				mg/L	248575	Standard
⌈	**Rb**	85	30.0	50.0				ug/L	15	Standard
| >	**Y**	89	288166.5	1.4				ug/L	267564	Standard
⌊	**Rh**	103	3.3	86.6				ug/L	2	Standard
⌈	**Mo**	98	32.6	5.8	**0.0119**	0.000	3.1	ug/L	5	Standard
|	**Ag**	107	4939.1	1.7	**0.4209**	0.009	2.1	ug/L	44	Standard
|	**Cd**	111	1775.0	1.7	**0.2374**	0.006	2.4	mg/L	512	Standard
|	**Cd**	114	4547.9	1.8	**0.2464**	0.005	2.0	ug/L	1247	Standard
| >	**In**	115	779838.6	0.4				ug/L	743274	Standard
|	**Sn**	118	899.4	3.2	**0.0011**	0.002	140.5	ug/L	816	Standard
|	**Sb**	123	5162.0	0.9	**0.4045**	0.002	0.5	ug/L	15	Standard
⌊	**Ba**	135	4068.9	2.2	**0.7364**	0.013	1.8	ug/L	37	Standard
⌈	**Ce**	140	44.3	20.3				ug/L	44	Standard
⌊>	**Tb**	159	858003.7	1.0				ug/L	826676	Standard
⌈	**Ho**	165	8.7	24.0				ug/L	12	Standard
|	**Tl**	203	1479.1	2.4	**0.0785**	0.003	3.7	ug/L	6	Standard
|	**Tl**	205	3499.1	2.4	**0.0804**	0.002	3.0	ug/L	11	Standard
|	**Pb**	206	3229.7	2.4	**0.1992**	0.005	2.6	ug/L	301	Standard
|	**Pb**	207	2710.6	2.4	**0.2000**	0.003	1.5	ug/L	250	Standard
|	**Pb**	208	12658.7	0.6	**0.1981**	0.001	0.7	ug/L	1166	Standard
|	**U**	238	12255.3	0.3	**0.3907**	0.004	1.0	ug/L	3	Standard
⌊>	**Bi**	209	457334.4	1.2				ug/L	454659	Standard
⌈	**Na**	23	130.0	27.7	**0.0030**	0.007	246.6	mg/L	137	Standard
|	**Mg**	24	761.7	2.1	**-0.0005**	0.000	4.4	mg/L	498	Standard

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	K	39	623.3	6.8	**-0.0014**	0.003	205.3	mg/L	557	Standard
	Ca	43	41.7	50.0	**-0.0054**	0.043	797.0	mg/L	52	Standard
	Fe	54	1009.1	1.3	**-0.0037**	0.002	52.0	mg/L	865	Standard
	Fe	57	6376.3	1.0	**-0.0014**	0.000	22.4	mg/L	6003	Standard
>	**Sc-1**	45	358918.0	0.1				mg/L	333080	Standard
	Cl	35	51701.4	2.4				ug/L	40103	Standard
	Kr	83	76.4	3.9				ug/L	67	Standard
	Br	81	16602.4	3.7				ug/L	15294	Standard
	P	31	82737.0	1.7				ug/L	74262	Standard
	S	34	835761.2	2.2				ug/L	787377	Standard
	Sr	88	366.7	4.8				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51	95.786		
	Cr	52	94.879		
	Cr	53			
	Mn	55	102.868		
	Co	59	100.719		
	Ni	60	101.267		
	Cu	65	103.437		
	Zn	66	116.370		
>	Ge	72		103.832	
	As	75	94.339		
	Se	82	82.805		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		107.700	
	Rh	103			
	Mo	98			
	Ag	107	105.230		
	Cd	111	98.908		
	Cd	114			
>	In	115		104.919	
	Sn	118			
	Sb	123	101.118		
	Ba	135	98.193		
	Ce	140			
>	Tb	159		103.790	
	Ho	165			
	Tl	203	98.168		
	Tl	205			
	Pb	206			

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	Pb	207			
	Pb	208	99.058		
	U	238	97.668		
>	Bi	209			100.588
	Na	23			
	Mg	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: Tuesday, May 08, 2012 10:00:48
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Method 6020 - Summary Report

Sample ID: PBW 77 WG397190-02
Sample Date/Time: Tuesday, May 08, 2012 10:01:09
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	17740.4	4.7	**-359.5917**	510.808	142.1	ug/L	17857	Standard
|	**Be**	9	13.3	86.6	**-0.0038**	0.003	70.0	ug/L	12	Standard
|	**Al**	27	13916.4	3.7	**0.0029**	0.025	862.6	ug/L	13328	Standard
⌊>	**Sc**	45	349492.8	3.4				ug/L	333080	Standard
⌈	**Ti**	47	103.0	29.9	**0.0053**	0.016	303.3	ug/L	113	Standard
|	**V**	51	4397.7	0.8	**-0.0036**	0.004	124.1	ug/L	4349	Standard
|	**Cr**	52	14225.3	0.6	**-0.0247**	0.013	52.3	ug/L	14000	Standard
|	**Cr**	53	360.8	10.4	**0.0199**	0.020	100.8	ug/L	319	Standard
|	**Mn**	55	1661.4	4.7	**0.0059**	0.002	37.6	ug/L	1367	Standard
|	**Co**	59	127.0	10.3	**0.0015**	0.001	42.5	ug/L	115	Standard
|	**Ni**	60	108.3	3.0	**0.0079**	0.001	14.8	ug/L	76	Standard
|	**Cu**	65	155.0	8.7	**0.0017**	0.003	200.5	ug/L	135	Standard
|	**Zn**	66	1726.8	4.6	**1.0471**	0.037	3.5	ug/L	185	Standard
| >	**Ge**	72	282389.1	1.8				ug/L	274929	Standard
|	**As**	75	-260.6	8.8	**-0.0030**	0.012	413.3	ug/L	-262	Standard
|	**Se**	82	31.5	8.1	**-0.0295**	0.017	58.4	ug/L	27	Standard
⌊	**Se-1**	77	96.3	11.4	**0.0609**	0.106	173.7	ug/L	94	Standard
	Ga	71	255692.2	1.0				mg/L	248575	Standard
⌈	**Rb**	85	18.3	63.0				ug/L	15	Standard
| >	**Y**	89	277445.6	0.7				ug/L	267564	Standard
⌊	**Rh**	103	1.7	173.2				ug/L	2	Standard
⌈	**Mo**	98	20.8	17.0	**0.0098**	0.001	6.6	ug/L	5	Standard
|	**Ag**	107	148.0	17.0	**0.0054**	0.002	42.6	ug/L	44	Standard
|	**Cd**	111	511.6	2.2	**-0.0018**	0.002	120.2	mg/L	512	Standard
|	**Cd**	114	1318.0	4.2	**0.0055**	0.004	80.8	ug/L	1247	Standard
| >	**In**	115	759466.9	0.8				ug/L	743274	Standard
|	**Sn**	118	1095.7	1.7	**0.0135**	0.001	4.0	ug/L	816	Standard
|	**Sb**	123	147.9	8.8	**0.0104**	0.001	10.0	ug/L	15	Standard
⌊	**Ba**	135	48.3	5.2	**0.0024**	0.000	20.1	ug/L	37	Standard
⌈	**Ce**	140	51.0	9.0				ug/L	44	Standard
⌊>	**Tb**	159	842771.0	1.2				ug/L	826676	Standard
⌈	**Ho**	165	7.3	43.8				ug/L	12	Standard
|	**Tl**	203	13.7	33.0	**-0.0016**	0.000	15.8	ug/L	6	Standard
|	**Tl**	205	22.7	14.2	**0.0029**	0.000	2.7	ug/L	11	Standard
|	**Pb**	206	323.3	3.9	**0.0016**	0.001	70.8	ug/L	301	Standard
|	**Pb**	207	250.0	7.6	**-0.0005**	0.002	306.5	ug/L	250	Standard
|	**Pb**	208	1219.7	0.9	**0.0007**	0.000	63.9	ug/L	1166	Standard
|	**U**	238	8.0	21.7	**0.0041**	0.000	1.3	ug/L	3	Standard
⌊>	**Bi**	209	454858.2	1.5				ug/L	454659	Standard
⌈	**Na**	23	106.7	10.8	**-0.0011**	0.003	289.0	mg/L	137	Standard
|	**Mg**	24	623.3	7.3	**-0.0007**	0.000	13.8	mg/L	498	Standard

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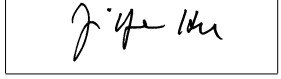
	K	39	645.0	8.1	**0.0013**	0.002	178.3	mg/L	557	Standard
	Ca	43	63.3	4.6	**0.0427**	0.010	22.4	mg/L	52	Standard
	Fe	54	880.2	6.8	**-0.0197**	0.007	33.2	mg/L	865	Standard
	Fe	57	6368.0	3.5	**-0.0006**	0.001	130.2	mg/L	6003	Standard
>	**Sc-1**	45	349492.8	3.4				mg/L	333080	Standard
	Cl	35	48073.5	2.0				ug/L	40103	Standard
	Kr	83	67.4	2.7				ug/L	67	Standard
	Br	81	15765.7	1.5				ug/L	15294	Standard
	P	31	76656.9	3.3				ug/L	74262	Standard
	S	34	792483.6	4.2				ug/L	787377	Standard
	Sr	88	383.3	7.2				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		102.713	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		103.693	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		102.179	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		101.947	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	100.044
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: PBW 77 WG397190-02
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Method 6020 - Summary Report

Sample ID: LCSW 77 WG397190-03
Sample Date/Time: Tuesday, May 08, 2012 10:04:02
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	19744.5	3.2	**-440.9642**	247.526	56.1	ug/L	17857	Standard
|	**Be**	9	110788.7	2.2	**23.4614**	0.424	1.8	ug/L	12	Standard
|	**Al**	27	640709.7	0.3	**28.1935**	0.351	1.2	ug/L	13328	Standard
⌊>	**Sc**	45	391958.7	0.9				ug/L	333080	Standard
⌈	**Ti**	47	167.0	20.2	**0.0328**	0.017	51.1	ug/L	113	Standard
|	**V**	51	537831.7	0.5	**25.8137**	0.111	0.4	ug/L	4349	Standard
|	**Cr**	52	419892.4	0.9	**26.7138**	0.154	0.6	ug/L	14000	Standard
|	**Cr**	53	62253.5	0.4	**26.6449**	0.188	0.7	ug/L	319	Standard
|	**Mn**	55	704321.1	0.6	**27.1998**	0.196	0.7	ug/L	1367	Standard
|	**Co**	59	502406.3	1.0	**26.0603**	0.172	0.7	ug/L	115	Standard
|	**Ni**	60	104650.9	1.7	**25.9871**	0.355	1.4	ug/L	76	Standard
|	**Cu**	65	93216.2	0.7	**26.2937**	0.119	0.5	ug/L	135	Standard
|	**Zn**	66	38916.9	1.8	**24.8107**	0.491	2.0	ug/L	185	Standard
| >	**Ge**	72	302984.1	0.4				ug/L	274929	Standard
|	**As**	75	39155.2	1.1	**24.6140**	0.270	1.1	ug/L	-262	Standard
|	**Se**	82	4666.9	3.3	**25.0082**	0.820	3.3	ug/L	27	Standard
⌊	**Se-1**	77	2524.9	2.8	**23.3108**	0.610	2.6	ug/L	94	Standard
	Ga	71	281584.2	0.8				mg/L	248575	Standard
⌈	**Rb**	85	70.0	12.4				ug/L	15	Standard
| >	**Y**	89	307084.5	3.2				ug/L	267564	Standard
⌊	**Rh**	103	28.3	10.2				ug/L	2	Standard
⌈	**Mo**	98	59.3	29.8	**0.0164**	0.003	19.0	ug/L	5	Standard
|	**Ag**	107	345594.8	2.2	**28.5895**	0.659	2.3	ug/L	44	Standard
|	**Cd**	111	136097.1	0.6	**24.7322**	0.185	0.7	mg/L	512	Standard
|	**Cd**	114	336078.5	0.5	**24.0625**	0.106	0.4	ug/L	1247	Standard
| >	**In**	115	817995.8	0.2				ug/L	743274	Standard
|	**Sn**	118	5817.8	2.2	**0.2563**	0.007	2.9	ug/L	816	Standard
|	**Sb**	123	318398.3	0.6	**23.8726**	0.106	0.4	ug/L	15	Standard
⌊	**Ba**	135	142164.2	0.6	**24.7461**	0.134	0.5	ug/L	37	Standard
⌈	**Ce**	140	190.7	9.0				ug/L	44	Standard
⌊>	**Tb**	159	909593.1	0.7				ug/L	826676	Standard
⌈	**Ho**	165	15.3	33.5				ug/L	12	Standard
|	**Tl**	203	488627.7	0.9	**25.9289**	0.371	1.4	ug/L	6	Standard
|	**Tl**	205	1140532.2	1.0	**24.6855**	0.256	1.0	ug/L	11	Standard
|	**Pb**	206	390297.7	1.1	**25.7556**	0.324	1.3	ug/L	301	Standard
|	**Pb**	207	333804.5	0.8	**26.4067**	0.152	0.6	ug/L	250	Standard
|	**Pb**	208	1537285.8	0.6	**25.7438**	0.248	1.0	ug/L	1166	Standard
|	**U**	238	798424.9	0.9	**24.4663**	0.111	0.5	ug/L	3	Standard
⌊>	**Bi**	209	471172.8	1.3				ug/L	454659	Standard
⌈	**Na**	23	151.7	14.9	**0.0048**	0.004	85.0	mg/L	137	Standard
|	**Mg**	24	1206.7	6.1	**-0.0000**	0.000	1803.5	mg/L	498	Standard

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	K	39	640.0	4.3	**-0.0040**	0.001	34.8	mg/L	557	Standard
	Ca	43	43.3	24.0	**-0.0094**	0.020	216.4	mg/L	52	Standard
	Fe	54	1427.1	7.0	**0.0415**	0.015	37.1	mg/L	865	Standard
	Fe	57	7060.0	1.1	**-0.0010**	0.000	17.2	mg/L	6003	Standard
>	**Sc-1**	45	391958.7	0.9				mg/L	333080	Standard
	Cl	35	51614.8	0.9				ug/L	40103	Standard
	Kr	83	80.3	3.8				ug/L	67	Standard
	Br	81	18553.0	2.9				ug/L	15294	Standard
	P	31	118038.1	1.7				ug/L	74262	Standard
	S	34	821474.7	5.7				ug/L	787377	Standard
	Sr	88	1673.4	10.8				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		110.204	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		114.770	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		110.053	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		110.030	
	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

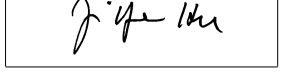
103.632

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: LCSW 77 WG397190-03
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Method 6020 - Summary Report

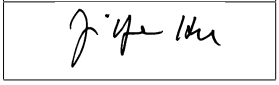
Sample ID: L1205015027 WG397190-01
Sample Date/Time: Tuesday, May 08, 2012 10:06:54
Number of Replicates: 3
Autosampler Position: 210
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	30831.4	3.3	**4056.2716**	474.024	11.7	ug/L	17857	Standard
|	**Be**	9	88.3	94.8	**0.0107**	0.017	158.5	ug/L	12	Standard
|	**Al**	27	2501630.3	1.0	**104.8251**	1.105	1.1	ug/L	13328	Standard
⌊>	**Sc**	45	419060.8	1.9				ug/L	333080	Standard
⌈	**Ti**	47	7664.3	4.3	**3.9044**	0.219	5.6	ug/L	113	Standard
|	**V**	51	15728.6	1.9	**0.5767**	0.016	2.7	ug/L	4349	Standard
|	**Cr**	52	20442.1	0.2	**0.4009**	0.018	4.6	ug/L	14000	Standard
|	**Cr**	53	2198.5	3.9	**0.8574**	0.026	3.0	ug/L	319	Standard
|	**Mn**	55	1992115.8	1.9	**81.8040**	0.728	0.9	ug/L	1367	Standard
|	**Co**	59	5475.0	9.9	**0.2958**	0.026	8.9	ug/L	115	Standard
|	**Ni**	60	3959.9	3.2	**1.0238**	0.023	2.3	ug/L	76	Standard
|	**Cu**	65	2776.6	1.3	**0.7877**	0.003	0.4	ug/L	135	Standard
|	**Zn**	66	3002.3	4.4	**1.9028**	0.063	3.3	ug/L	185	Standard
| >	**Ge**	72	285367.2	1.3				ug/L	274929	Standard
|	**As**	75	561.5	14.7	**0.5433**	0.052	9.6	ug/L	-262	Standard
|	**Se**	82	278.4	10.8	**1.3840**	0.163	11.8	ug/L	27	Standard
⌊	**Se-1**	77	147.3	12.6	**0.5718**	0.199	34.8	ug/L	94	Standard
	Ga	71	257998.0	1.4				mg/L	248575	Standard
⌈	**Rb**	85	14129.9	2.3				ug/L	15	Standard
| >	**Y**	89	282857.9	3.4				ug/L	267564	Standard
⌊	**Rh**	103	126.7	12.1				ug/L	2	Standard
⌈	**Mo**	98	622.1	6.6	**0.1220**	0.006	5.1	ug/L	5	Standard
|	**Ag**	107	127.0	32.6	**0.0033**	0.004	106.9	ug/L	44	Standard
|	**Cd**	111	603.2	7.8	**0.0137**	0.008	56.5	mg/L	512	Standard
|	**Cd**	114	1493.8	2.1	**0.0168**	0.001	6.3	ug/L	1247	Standard
| >	**In**	115	775272.3	1.2				ug/L	743274	Standard
|	**Sn**	118	1773.4	6.1	**0.0496**	0.005	9.7	ug/L	816	Standard
|	**Sb**	123	1131.9	16.3	**0.0881**	0.016	17.7	ug/L	15	Standard
⌊	**Ba**	135	155580.3	2.1	**28.5730**	0.260	0.9	ug/L	37	Standard
⌈	**Ce**	140	13514.0	1.9				ug/L	44	Standard
⌊>	**Tb**	159	871706.3	1.7				ug/L	826676	Standard
⌈	**Ho**	165	238.3	8.0				ug/L	12	Standard
|	**Tl**	203	475.3	4.0	**0.0240**	0.001	3.2	ug/L	6	Standard
|	**Tl**	205	1122.0	7.2	**0.0277**	0.002	5.5	ug/L	11	Standard
|	**Pb**	206	2404.2	1.0	**0.1453**	0.001	0.8	ug/L	301	Standard
|	**Pb**	207	1953.5	0.3	**0.1406**	0.002	1.3	ug/L	250	Standard
|	**Pb**	208	9226.1	1.5	**0.1411**	0.001	0.5	ug/L	1166	Standard
|	**U**	238	6790.2	8.6	**0.2210**	0.016	7.3	ug/L	3	Standard
⌊>	**Bi**	209	450994.6	1.2				ug/L	454659	Standard
⌈	**Na**	23	37389.4	3.5	**6.5922**	0.241	3.7	mg/L	137	Standard
|	**Mg**	24	2994476.1	0.5	**3.7510**	0.059	1.6	mg/L	498	Standard

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	K	39	13971.4	1.8	**0.7895**	0.013	1.6	mg/L	557	Standard
	Ca	43	7211.7	3.3	**12.5886**	0.639	5.1	mg/L	52	Standard
	Fe	54	3068.7	3.6	**0.2418**	0.019	8.0	mg/L	865	Standard
	Fe	57	85011.2	1.0	**0.3091**	0.009	2.8	mg/L	6003	Standard
>	**Sc-1**	45	419060.8	1.9				mg/L	333080	Standard
	Cl	35	1119333.9	2.1				ug/L	40103	Standard
	Kr	83	74.2	2.3				ug/L	67	Standard
	Br	81	131743.4	4.0				ug/L	15294	Standard
	P	31	106411.7	6.3				ug/L	74262	Standard
	S	34	1002446.3	4.1				ug/L	787377	Standard
	Sr	88	3793557.0	0.2				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		103.797	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		105.716	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		104.305	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		105.447	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	99.194
	Na	23	
	Mg	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: L1205015027 WG397190-01
Report Date/Time: Tuesday, May 08, 2012 10:09:28
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Method 6020 - Summary Report

Sample ID: L1205015027S WG397190-04
Sample Date/Time: Tuesday, May 08, 2012 10:09:47
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	29749.2	0.7	**3844.3595**	209.881	5.5	ug/L	17857	Standard
|	**Be**	9	107926.5	2.1	**21.8257**	0.383	1.8	ug/L	12	Standard
|	**Al**	27	2383006.1	2.7	**101.9249**	2.887	2.8	ug/L	13328	Standard
⌊>	**Sc**	45	410492.9	2.1				ug/L	333080	Standard
⌈	**Ti**	47	7087.7	17.7	**3.5955**	0.649	18.0	ug/L	113	Standard
|	**V**	51	503513.5	1.3	**25.5856**	0.343	1.3	ug/L	4349	Standard
|	**Cr**	52	379219.4	1.2	**25.4999**	0.318	1.2	ug/L	14000	Standard
|	**Cr**	53	57339.1	0.9	**25.9812**	0.333	1.3	ug/L	319	Standard
|	**Mn**	55	2498645.7	0.9	**102.3424**	1.231	1.2	ug/L	1367	Standard
|	**Co**	59	450830.9	0.2	**24.7605**	0.169	0.7	ug/L	115	Standard
|	**Ni**	60	96845.9	0.2	**25.4635**	0.108	0.4	ug/L	76	Standard
|	**Cu**	65	84416.5	1.0	**25.2096**	0.202	0.8	ug/L	135	Standard
|	**Zn**	66	38829.4	0.9	**26.2172**	0.146	0.6	ug/L	185	Standard
| >	**Ge**	72	286161.1	0.5				ug/L	274929	Standard
|	**As**	75	38418.1	1.4	**25.5629**	0.249	1.0	ug/L	-262	Standard
|	**Se**	82	4604.8	1.4	**26.1353**	0.246	0.9	ug/L	27	Standard
⌊	**Se-1**	77	2615.9	0.7	**25.6629**	0.233	0.9	ug/L	94	Standard
	Ga	71	255595.7	1.2				mg/L	248575	Standard
⌈	**Rb**	85	12481.8	1.4				ug/L	15	Standard
| >	**Y**	89	287109.8	0.6				ug/L	267564	Standard
⌊	**Rh**	103	130.0	17.6				ug/L	2	Standard
⌈	**Mo**	98	577.5	3.8	**0.1127**	0.004	3.7	ug/L	5	Standard
|	**Ag**	107	291581.3	0.5	**25.2095**	0.120	0.5	ug/L	44	Standard
|	**Cd**	111	130748.6	0.7	**24.8336**	0.128	0.5	mg/L	512	Standard
|	**Cd**	114	329368.6	0.9	**24.6506**	0.332	1.3	ug/L	1247	Standard
| >	**In**	115	782645.9	0.5				ug/L	743274	Standard
|	**Sn**	118	1832.1	2.5	**0.0519**	0.002	4.0	ug/L	816	Standard
|	**Sb**	123	314327.6	0.3	**24.6324**	0.147	0.6	ug/L	15	Standard
⌊	**Ba**	135	282425.7	0.9	**51.3909**	0.718	1.4	ug/L	37	Standard
⌈	**Ce**	140	12078.8	1.1				ug/L	44	Standard
⌊>	**Tb**	159	878647.8	1.2				ug/L	826676	Standard
⌈	**Ho**	165	216.0	1.9				ug/L	12	Standard
|	**Tl**	203	455696.0	0.5	**25.1620**	0.322	1.3	ug/L	6	Standard
|	**Tl**	205	1061836.1	0.4	**23.9154**	0.293	1.2	ug/L	11	Standard
|	**Pb**	206	363264.1	0.2	**24.9435**	0.238	1.0	ug/L	301	Standard
|	**Pb**	207	309531.8	0.5	**25.4801**	0.312	1.2	ug/L	250	Standard
|	**Pb**	208	1434818.0	0.4	**25.0022**	0.288	1.1	ug/L	1166	Standard
|	**U**	238	762153.5	0.7	**24.3035**	0.322	1.3	ug/L	3	Standard
⌊>	**Bi**	209	452793.1	0.8				ug/L	454659	Standard
⌈	**Na**	23	35413.0	1.9	**6.3729**	0.089	1.4	mg/L	137	Standard
|	**Mg**	24	2869299.8	1.1	**3.6701**	0.118	3.2	mg/L	498	Standard

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	K	39	13429.3	1.0	**0.7742**	0.025	3.3	mg/L	557	Standard
	Ca	43	7116.7	2.7	**12.6815**	0.546	4.3	mg/L	52	Standard
	Fe	54	2817.6	4.1	**0.2168**	0.019	8.7	mg/L	865	Standard
	Fe	57	77348.6	0.8	**0.2849**	0.007	2.4	mg/L	6003	Standard
>	**Sc-1**	45	410492.9	2.1				mg/L	333080	Standard
	Cl	35	1070792.1	1.5				ug/L	40103	Standard
	Kr	83	75.0	0.9				ug/L	67	Standard
	Br	81	96482.1	1.5				ug/L	15294	Standard
	P	31	104144.3	2.4				ug/L	74262	Standard
	S	34	1033318.5	3.2				ug/L	787377	Standard
	Sr	88	3557237.3	1.8				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		104.085	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		107.305	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		105.297	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		106.287	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

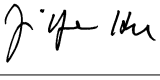
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	99.590
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: May 09, 2012



Method 6020 - Summary Report

Sample ID: L1205015027SD WG397190-05

Sample Date/Time: Tuesday, May 08, 2012 10:12:40
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	30512.4	1.6	**3792.0099**	99.725	2.6	ug/L	17857	Standard
|	**Be**	9	110892.8	1.9	**21.7864**	0.361	1.7	ug/L	12	Standard
|	**Al**	27	2733937.1	3.2	**113.6661**	2.999	2.6	ug/L	13328	Standard
⌊>	**Sc**	45	422514.4	1.6				ug/L	333080	Standard
⌈	**Ti**	47	8244.9	11.4	**4.1050**	0.471	11.5	ug/L	113	Standard
|	**V**	51	512777.0	0.5	**25.5353**	0.280	1.1	ug/L	4349	Standard
|	**Cr**	52	384743.5	0.7	**25.3478**	0.140	0.6	ug/L	14000	Standard
|	**Cr**	53	57832.7	1.9	**25.6765**	0.322	1.3	ug/L	319	Standard
|	**Mn**	55	2522351.5	0.5	**101.2453**	0.838	0.8	ug/L	1367	Standard
|	**Co**	59	463965.6	0.9	**24.9714**	0.109	0.4	ug/L	115	Standard
|	**Ni**	60	99384.6	0.7	**25.6081**	0.110	0.4	ug/L	76	Standard
|	**Cu**	65	86543.2	2.2	**25.3262**	0.408	1.6	ug/L	135	Standard
|	**Zn**	66	40648.8	0.7	**26.9014**	0.291	1.1	ug/L	185	Standard
| >	**Ge**	72	292005.4	0.8				ug/L	274929	Standard
|	**As**	75	39373.7	1.1	**25.6744**	0.191	0.7	ug/L	-262	Standard
|	**Se**	82	4808.9	1.2	**26.7526**	0.141	0.5	ug/L	27	Standard
⌊	**Se-1**	77	2714.2	1.2	**26.1098**	0.212	0.8	ug/L	94	Standard
	Ga	71	260603.5	0.7				mg/L	248575	Standard
⌈	**Rb**	85	13652.8	3.1				ug/L	15	Standard
| >	**Y**	89	292007.3	1.3				ug/L	267564	Standard
⌊	**Rh**	103	121.7	22.6				ug/L	2	Standard
⌈	**Mo**	98	547.0	6.1	**0.1058**	0.005	5.0	ug/L	5	Standard
|	**Ag**	107	300896.3	1.8	**25.6911**	0.538	2.1	ug/L	44	Standard
|	**Cd**	111	132637.7	0.7	**24.8781**	0.170	0.7	mg/L	512	Standard
|	**Cd**	114	332526.0	0.7	**24.5755**	0.263	1.1	ug/L	1247	Standard
| >	**In**	115	792563.4	0.9				ug/L	743274	Standard
|	**Sn**	118	2021.8	3.7	**0.0610**	0.005	7.6	ug/L	816	Standard
|	**Sb**	123	318559.0	0.6	**24.6537**	0.382	1.6	ug/L	15	Standard
⌊	**Ba**	135	286503.8	0.7	**51.4836**	0.839	1.6	ug/L	37	Standard
⌈	**Ce**	140	12599.6	1.1				ug/L	44	Standard
⌊>	**Tb**	159	886405.2	0.6				ug/L	826676	Standard
⌈	**Ho**	165	217.7	4.7				ug/L	12	Standard
|	**Tl**	203	463795.5	0.3	**25.1354**	0.212	0.8	ug/L	6	Standard
|	**Tl**	205	1086178.1	0.9	**24.0100**	0.086	0.4	ug/L	11	Standard
|	**Pb**	206	368640.5	0.7	**24.8440**	0.128	0.5	ug/L	301	Standard
|	**Pb**	207	316623.1	0.6	**25.5810**	0.014	0.1	ug/L	250	Standard
|	**Pb**	208	1460870.1	0.5	**24.9847**	0.066	0.3	ug/L	1166	Standard
|	**U**	238	774519.2	0.4	**24.2403**	0.062	0.3	ug/L	3	Standard
⌊>	**Bi**	209	461311.5	0.6				ug/L	454659	Standard
⌈	**Na**	23	36224.9	1.2	**6.3345**	0.169	2.7	mg/L	137	Standard
|	**Mg**	24	2831458.1	1.2	**3.5173**	0.044	1.2	mg/L	498	Standard

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	K	39	13454.3	1.8	**0.7522**	0.022	3.0	mg/L	557	Standard
	Ca	43	7068.3	3.0	**12.2258**	0.195	1.6	mg/L	52	Standard
	Fe	54	2908.4	3.4	**0.2177**	0.011	5.3	mg/L	865	Standard
	Fe	57	80322.3	0.7	**0.2876**	0.006	2.0	mg/L	6003	Standard
>	**Sc-1**	45	422514.4	1.6				mg/L	333080	Standard
	Cl	35	1126893.9	0.8				ug/L	40103	Standard
	Kr	83	73.9	7.2				ug/L	67	Standard
	Br	81	137625.6	0.5				ug/L	15294	Standard
	P	31	107551.2	1.2				ug/L	74262	Standard
	S	34	1082330.8	2.0				ug/L	787377	Standard
	Sr	88	3663859.9	1.1				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		106.211	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		109.135	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		106.631	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		107.225	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	101.463
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1205015027SD WG397190-05
Report Date/Time: Tuesday, May 08, 2012 10:15:13
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Method 6020 - Summary Report

Sample ID: L1205015007
Sample Date/Time: Tuesday, May 08, 2012 10:15:32
Number of Replicates: 3
Autosampler Position: 213
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	31693.2	4.4	**4766.5684**	721.549	15.1	ug/L	17857	Standard
|	**Be**	9	100.0	8.7	**0.0133**	0.001	10.3	ug/L	12	Standard
|	**Al**	27	11286962.4	5.9	**485.2057**	20.973	4.3	ug/L	13328	Standard
⌊>	**Sc**	45	410425.3	2.6				ug/L	333080	Standard
⌈	**Ti**	47	32729.4	5.6	**16.6306**	0.751	4.5	ug/L	113	Standard
|	**V**	51	25585.4	4.5	**1.0684**	0.041	3.9	ug/L	4349	Standard
|	**Cr**	52	27958.5	3.0	**0.9061**	0.032	3.5	ug/L	14000	Standard
|	**Cr**	53	2619.4	8.8	**1.0359**	0.090	8.6	ug/L	319	Standard
|	**Mn**	55	10953124.9	3.9	**444.9711**	11.422	2.6	ug/L	1367	Standard
|	**Co**	59	13343.5	5.0	**0.7211**	0.028	3.8	ug/L	115	Standard
|	**Ni**	60	9801.8	4.5	**2.5360**	0.084	3.3	ug/L	76	Standard
|	**Cu**	65	6124.9	3.5	**1.7716**	0.050	2.8	ug/L	135	Standard
|	**Zn**	66	7426.2	2.2	**4.8581**	0.044	0.9	ug/L	185	Standard
| >	**Ge**	72	288576.2	1.4				ug/L	274929	Standard
|	**As**	75	474.9	8.6	**0.4827**	0.026	5.4	ug/L	-262	Standard
|	**Se**	82	246.5	7.6	**1.1861**	0.101	8.6	ug/L	27	Standard
⌊	**Se-1**	77	147.7	9.2	**0.5584**	0.149	26.7	ug/L	94	Standard
	Ga	71	260251.6	1.2				mg/L	248575	Standard
⌈	**Rb**	85	11474.3	2.6				ug/L	15	Standard
| >	**Y**	89	293667.1	0.8				ug/L	267564	Standard
⌊	**Rh**	103	58.3	9.9				ug/L	2	Standard
⌈	**Mo**	98	798.9	5.4	**0.1545**	0.006	4.0	ug/L	5	Standard
|	**Ag**	107	195.3	10.8	**0.0092**	0.002	21.2	ug/L	44	Standard
|	**Cd**	111	800.2	6.2	**0.0511**	0.007	13.8	mg/L	512	Standard
|	**Cd**	114	1970.4	2.1	**0.0525**	0.002	3.6	ug/L	1247	Standard
| >	**In**	115	777704.7	1.6				ug/L	743274	Standard
|	**Sn**	118	1852.4	4.0	**0.0537**	0.003	6.1	ug/L	816	Standard
|	**Sb**	123	734.5	2.1	**0.0564**	0.002	2.9	ug/L	15	Standard
⌊	**Ba**	135	165450.3	3.0	**30.2896**	0.515	1.7	ug/L	37	Standard
⌈	**Ce**	140	580349.7	3.1				ug/L	44	Standard
⌊>	**Tb**	159	883096.7	0.8				ug/L	826676	Standard
⌈	**Ho**	165	1782.8	2.7				ug/L	12	Standard
|	**Tl**	203	524.7	3.6	**0.0270**	0.001	4.2	ug/L	6	Standard
|	**Tl**	205	1260.1	6.4	**0.0311**	0.002	6.3	ug/L	11	Standard
|	**Pb**	206	2729.6	2.7	**0.1695**	0.005	3.1	ug/L	301	Standard
|	**Pb**	207	2261.8	2.6	**0.1678**	0.005	2.8	ug/L	250	Standard
|	**Pb**	208	10792.2	2.9	**0.1702**	0.004	2.6	ug/L	1166	Standard
|	**U**	238	3346.0	5.1	**0.1119**	0.005	4.4	ug/L	3	Standard
⌊>	**Bi**	209	446834.2	0.6				ug/L	454659	Standard
⌈	**Na**	23	77636.8	2.5	**14.0042**	0.350	2.5	mg/L	137	Standard
|	**Mg**	24	1916461.0	20.4	**2.4509**	0.503	20.5	mg/L	498	Standard

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	K	39	24788.6	1.1	**1.4672**	0.041	2.8	mg/L	557	Standard
	Ca	43	4235.6	1.8	**7.5097**	0.122	1.6	mg/L	52	Standard
	Fe	54	11071.8	6.8	**1.3095**	0.073	5.6	mg/L	865	Standard
	Fe	57	355463.7	3.9	**1.4210**	0.041	2.9	mg/L	6003	Standard
>	**Sc-1**	45	410425.3	2.6				mg/L	333080	Standard
	Cl	35	829806.9	2.1				ug/L	40103	Standard
	Kr	83	79.9	3.0				ug/L	67	Standard
	Br	81	121289.5	2.0				ug/L	15294	Standard
	P	31	134983.3	3.6				ug/L	74262	Standard
	S	34	1150221.4	2.3				ug/L	787377	Standard
	Sr	88	2705751.7	2.8				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		104.964	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		109.756	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		104.632	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		106.825	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	98.279
	Na	23	
	Mg	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 09, 2012

Method 6020 - Summary Report

Sample ID: L1205015008
Sample Date/Time: Tuesday, May 08, 2012 10:18:24
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	91461.9	0.7	**25959.3392**	412.320	1.6	ug/L	17857	Standard
|	**Be**	9	33.3	52.7	**-0.0013**	0.003	221.5	ug/L	12	Standard
|	**Al**	27	3693751.0	4.1	**132.5371**	6.193	4.7	ug/L	13328	Standard
⌊>	**Sc**	45	490097.4	0.9				ug/L	333080	Standard
⌈	**Ti**	47	10129.7	9.5	**4.8107**	0.472	9.8	ug/L	113	Standard
|	**V**	51	30335.6	1.9	**1.2191**	0.030	2.5	ug/L	4349	Standard
|	**Cr**	52	24850.7	1.8	**0.5887**	0.027	4.6	ug/L	14000	Standard
|	**Cr**	53	1383.4	12.9	**0.4410**	0.074	16.7	ug/L	319	Standard
|	**Mn**	55	2742319.8	2.9	**104.7904**	2.786	2.7	ug/L	1367	Standard
|	**Co**	59	10289.8	1.1	**0.5218**	0.005	1.0	ug/L	115	Standard
|	**Ni**	60	3034.0	4.0	**0.7238**	0.029	4.0	ug/L	76	Standard
|	**Cu**	65	3945.5	1.3	**1.0560**	0.016	1.5	ug/L	135	Standard
|	**Zn**	66	3631.1	0.4	**2.1593**	0.011	0.5	ug/L	185	Standard
| >	**Ge**	72	306718.1	0.5				ug/L	274929	Standard
|	**As**	75	-24.3	104.4	**0.1564**	0.016	10.1	ug/L	-262	Standard
|	**Se**	82	114.8	8.0	**0.4005**	0.047	11.7	ug/L	27	Standard
⌊	**Se-1**	77	113.7	6.2	**0.1472**	0.072	49.0	ug/L	94	Standard
	Ga	71	283025.1	0.9				mg/L	248575	Standard
⌈	**Rb**	85	2283.5	1.8				ug/L	15	Standard
| >	**Y**	89	314297.1	1.9				ug/L	267564	Standard
⌊	**Rh**	103	71.7	38.4				ug/L	2	Standard
⌈	**Mo**	98	752.8	0.8	**0.1366**	0.001	0.6	ug/L	5	Standard
|	**Ag**	107	124.3	5.2	**0.0023**	0.001	22.0	ug/L	44	Standard
|	**Cd**	111	840.3	3.3	**0.0481**	0.005	9.9	mg/L	512	Standard
|	**Cd**	114	2020.3	0.7	**0.0460**	0.001	1.4	ug/L	1247	Standard
| >	**In**	115	833373.6	0.2				ug/L	743274	Standard
|	**Sn**	118	1396.7	2.5	**0.0235**	0.002	7.0	ug/L	816	Standard
|	**Sb**	123	154.3	8.3	**0.0098**	0.001	9.8	ug/L	15	Standard
⌊	**Ba**	135	111359.8	1.6	**19.0246**	0.262	1.4	ug/L	37	Standard
⌈	**Ce**	140	47920.4	2.7				ug/L	44	Standard
⌊>	**Tb**	159	932833.4	0.5				ug/L	826676	Standard
⌈	**Ho**	165	178.7	6.0				ug/L	12	Standard
|	**Tl**	203	245.3	3.8	**0.0107**	0.000	4.1	ug/L	6	Standard
|	**Tl**	205	589.0	2.7	**0.0151**	0.000	3.0	ug/L	11	Standard
|	**Pb**	206	699.0	6.3	**0.0258**	0.003	9.9	ug/L	301	Standard
|	**Pb**	207	588.7	3.9	**0.0257**	0.002	8.1	ug/L	250	Standard
|	**Pb**	208	2698.1	1.7	**0.0249**	0.001	3.0	ug/L	1166	Standard
|	**U**	238	4552.0	2.2	**0.1438**	0.004	2.8	ug/L	3	Standard
⌊>	**Bi**	209	469598.8	1.1				ug/L	454659	Standard
⌈	**Na**	23	43751.4	2.6	**6.5963**	0.234	3.5	mg/L	137	Standard
|	**Mg**	24	3387795.4	1.3	**3.6283**	0.077	2.1	mg/L	498	Standard

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	K	39	14466.9	3.8	**0.6940**	0.034	5.0	mg/L	557	Standard
	Ca	43	5616.0	0.7	**8.3474**	0.104	1.2	mg/L	52	Standard
	Fe	54	3561.9	2.4	**0.2386**	0.012	5.0	mg/L	865	Standard
	Fe	57	86533.2	2.9	**0.2649**	0.011	4.2	mg/L	6003	Standard
>	**Sc-1**	45	490097.4	0.9				mg/L	333080	Standard
	Cl	35	423825.9	0.9				ug/L	40103	Standard
	Kr	83	79.9	4.2				ug/L	67	Standard
	Br	81	47892.3	2.4				ug/L	15294	Standard
	P	31	231593.2	0.5				ug/L	74262	Standard
	S	34	1109625.7	0.8				ug/L	787377	Standard
	Sr	88	2494370.9	2.3				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		111.563	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		117.466	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		112.122	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		112.841	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

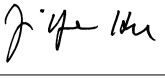
Approved: May 09, 2012

Pb	207	
Pb	208	
U	238	
> Bi	209	103.286
Na	23	
Mg	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 09, 2012



Method 6020 - Summary Report

Sample ID: L1205015008PS WG397276-01

Sample Date/Time: Tuesday, May 08, 2012 10:21:17
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	90972.4	2.0	**25450.4159**	859.459	3.4	ug/L	17857	Standard
|	**Be**	9	229466.3	0.9	**38.5359**	1.077	2.8	ug/L	12	Standard
|	**Al**	27	4745621.3	0.8	**168.9948**	5.223	3.1	ug/L	13328	Standard
⌊>	**Sc**	45	494621.0	3.3				ug/L	333080	Standard
⌈	**Ti**	47	11338.3	7.9	**5.2815**	0.553	10.5	ug/L	113	Standard
|	**V**	51	1122493.5	1.0	**52.3464**	2.253	4.3	ug/L	4349	Standard
|	**Cr**	52	840028.7	1.2	**52.6579**	2.280	4.3	ug/L	14000	Standard
|	**Cr**	53	124990.1	0.7	**51.8779**	2.070	4.0	ug/L	319	Standard
|	**Mn**	55	4001495.5	1.0	**149.7400**	6.030	4.0	ug/L	1367	Standard
|	**Co**	59	1020076.7	0.7	**51.1819**	2.050	4.0	ug/L	115	Standard
|	**Ni**	60	211217.9	1.4	**50.7563**	2.329	4.6	ug/L	76	Standard
|	**Cu**	65	188960.0	0.6	**51.5909**	1.918	3.7	ug/L	135	Standard
|	**Zn**	66	79260.8	0.5	**49.0067**	1.921	3.9	ug/L	185	Standard
|>	**Ge**	72	313569.7	3.7				ug/L	274929	Standard
|	**As**	75	80593.4	0.4	**48.8278**	1.839	3.8	ug/L	-262	Standard
|	**Se**	82	9593.6	1.1	**49.9224**	1.690	3.4	ug/L	27	Standard
⌊	**Se-1**	77	5093.5	0.8	**46.3656**	1.741	3.8	ug/L	94	Standard
	Ga	71	290578.9	3.1				mg/L	248575	Standard
⌈	**Rb**	85	2331.8	4.6				ug/L	15	Standard
|>	**Y**	89	317975.9	5.8				ug/L	267564	Standard
⌊	**Rh**	103	176.7	24.1				ug/L	2	Standard
⌈	**Mo**	98	904.2	2.6	**0.1600**	0.000	0.2	ug/L	5	Standard
|	**Ag**	107	666688.3	2.5	**53.1386**	1.326	2.5	ug/L	44	Standard
|	**Cd**	111	275282.7	0.9	**48.3003**	1.235	2.6	mg/L	512	Standard
|	**Cd**	114	682571.1	1.1	**47.1837**	1.274	2.7	ug/L	1247	Standard
|>	**In**	115	849298.2	2.8				ug/L	743274	Standard
|	**Sn**	118	1850.1	2.2	**0.0451**	0.004	9.6	ug/L	816	Standard
|	**Sb**	123	655656.7	0.7	**47.3723**	1.290	2.7	ug/L	15	Standard
⌊	**Ba**	135	398398.2	0.3	**66.8343**	1.673	2.5	ug/L	37	Standard
⌈	**Ce**	140	47515.4	0.3				ug/L	44	Standard
⌊>	**Tb**	159	953015.7	3.4				ug/L	826676	Standard
⌈	**Ho**	165	194.3	9.4				ug/L	12	Standard
|	**Tl**	203	978648.2	0.8	**50.8008**	1.950	3.8	ug/L	6	Standard
|	**Tl**	205	2434672.1	1.4	**51.5567**	2.441	4.7	ug/L	11	Standard
|	**Pb**	206	779768.2	1.0	**50.3619**	2.212	4.4	ug/L	301	Standard
|	**Pb**	207	672380.7	0.9	**52.0597**	2.240	4.3	ug/L	250	Standard
|	**Pb**	208	3080805.4	0.9	**50.4935**	2.179	4.3	ug/L	1166	Standard
|	**U**	238	1653035.7	1.0	**49.5402**	1.596	3.2	ug/L	3	Standard
⌊>	**Bi**	209	482062.7	3.5				ug/L	454659	Standard
⌈	**Na**	23	42297.3	0.8	**6.3209**	0.210	3.3	mg/L	137	Standard
|	**Mg**	24	3297460.9	2.5	**3.5027**	0.190	5.4	mg/L	498	Standard

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	K	39	14623.7	2.3	**0.6959**	0.042	6.0	mg/L	557	Standard
	Ca	43	5300.9	2.3	**7.8048**	0.254	3.3	mg/L	52	Standard
	Fe	54	3375.1	5.4	**0.2144**	0.014	6.7	mg/L	865	Standard
	Fe	57	85698.4	1.9	**0.2594**	0.006	2.3	mg/L	6003	Standard
>	**Sc-1**	45	494621.0	3.3				mg/L	333080	Standard
	Cl	35	412457.8	0.8				ug/L	40103	Standard
	Kr	83	86.2	4.5				ug/L	67	Standard
	Br	81	46533.0	0.5				ug/L	15294	Standard
	P	31	229822.5	0.9				ug/L	74262	Standard
	S	34	1067877.1	1.4				ug/L	787377	Standard
	Sr	88	2478366.4	1.5				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		114.055	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		118.841	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		114.264	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		115.283	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

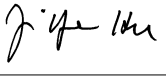
Approved: May 09, 2012

	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	106.027
	Na	23	
	Mg	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 09, 2012



Method 6020 - Summary Report

Sample ID: L1205015008SDL WG397276-02

Sample Date/Time: Tuesday, May 08, 2012 10:24:10
Number of Replicates: 3
Autosampler Position: 216
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	27843.9	1.3	**6059.2139**	538.101	8.9	ug/L	17857	Standard
|	**Be**	9	930.1	169.9	**0.2357**	0.413	175.2	ug/L	12	Standard
|	**Al**	27	715081.4	4.8	**37.4463**	3.343	8.9	ug/L	13328	Standard
⌊>	**Sc**	45	332064.6	3.9				ug/L	333080	Standard
⌈	**Ti**	47	1616.4	12.3	**0.8611**	0.129	15.0	ug/L	113	Standard
|	**V**	51	11451.8	48.9	**0.4134**	0.329	79.5	ug/L	4349	Standard
|	**Cr**	52	16449.6	24.4	**0.2280**	0.334	146.5	ug/L	14000	Standard
|	**Cr**	53	776.7	87.1	**0.2440**	0.348	142.5	ug/L	319	Standard
|	**Mn**	55	477382.2	3.6	**21.3256**	1.191	5.6	ug/L	1367	Standard
|	**Co**	59	4972.5	111.7	**0.2971**	0.342	115.3	ug/L	115	Standard
|	**Ni**	60	1195.4	99.5	**0.3270**	0.352	107.7	ug/L	76	Standard
|	**Cu**	65	1416.1	77.2	**0.4221**	0.370	87.6	ug/L	135	Standard
|	**Zn**	66	2091.8	21.6	**1.4154**	0.368	26.0	ug/L	185	Standard
|>	**Ge**	72	261943.5	2.0				ug/L	274929	Standard
|	**As**	75	64.5	737.9	**0.2223**	0.348	156.7	ug/L	-262	Standard
|	**Se**	82	63.2	84.4	**0.1866**	0.344	184.5	ug/L	27	Standard
⌊	**Se-1**	77	110.0	27.6	**0.2951**	0.363	123.1	ug/L	94	Standard
	Ga	71	231348.6	3.0				mg/L	248575	Standard
⌈	**Rb**	85	370.0	14.2				ug/L	15	Standard
|>	**Y**	89	241404.1	4.7				ug/L	267564	Standard
⌊	**Rh**	103	8.3	34.6				ug/L	2	Standard
⌈	**Mo**	98	120.6	5.0	**0.0298**	0.001	3.3	ug/L	5	Standard
|	**Ag**	107	1660.3	166.1	**0.1503**	0.263	175.0	ug/L	44	Standard
|	**Cd**	111	1254.9	137.7	**0.1600**	0.365	228.0	mg/L	512	Standard
|	**Cd**	114	3198.5	140.2	**0.1670**	0.373	223.1	ug/L	1247	Standard
|>	**In**	115	730949.2	2.7				ug/L	743274	Standard
|	**Sn**	118	683.0	3.6	**-0.0083**	0.002	21.9	ug/L	816	Standard
|	**Sb**	123	3116.6	136.6	**0.2662**	0.369	138.7	ug/L	15	Standard
⌊	**Ba**	135	20644.5	10.5	**4.0251**	0.532	13.2	ug/L	37	Standard
⌈	**Ce**	140	8587.4	2.8				ug/L	44	Standard
⌊>	**Tb**	159	792389.6	2.9				ug/L	826676	Standard
⌈	**Ho**	165	39.3	28.0				ug/L	12	Standard
|	**Tl**	203	2778.4	166.3	**0.1542**	0.260	168.8	ug/L	6	Standard
|	**Tl**	205	6570.7	166.2	**0.1533**	0.251	163.7	ug/L	11	Standard
|	**Pb**	206	2830.7	148.4	**0.1779**	0.295	165.6	ug/L	301	Standard
|	**Pb**	207	2486.8	150.2	**0.1880**	0.314	167.0	ug/L	250	Standard
|	**Pb**	208	11355.5	149.6	**0.1816**	0.302	166.5	ug/L	1166	Standard
|	**U**	238	6113.1	150.8	**0.2027**	0.300	148.0	ug/L	3	Standard
⌊>	**Bi**	209	444257.0	0.5				ug/L	454659	Standard
⌈	**Na**	23	7743.6	4.3	**1.7060**	0.074	4.4	mg/L	137	Standard
|	**Mg**	24	565063.9	2.2	**0.8932**	0.054	6.1	mg/L	498	Standard

Sample ID: L1205015008SDL WG397276-02
Report Date/Time: Tuesday, May 08, 2012 10:26:44

Approved: May 09, 2012

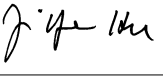
	K	39	3248.7	1.8	**0.2003**	0.014	6.9	mg/L	557	Standard
	Ca	43	995.0	6.3	**2.1192**	0.186	8.8	mg/L	52	Standard
	Fe	54	972.2	7.7	**0.0031**	0.019	606.8	mg/L	865	Standard
	Fe	57	19412.4	1.9	**0.0669**	0.003	4.3	mg/L	6003	Standard
>	**Sc-1**	45	332064.6	3.9				mg/L	333080	Standard
	Cl	35	114624.4	1.6				ug/L	40103	Standard
	Kr	83	64.6	6.2				ug/L	67	Standard
	Br	81	17833.0	1.8				ug/L	15294	Standard
	P	31	59239.0	2.3				ug/L	74262	Standard
	S	34	813058.3	3.8				ug/L	787377	Standard
	Sr	88	397534.8	3.4				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		95.277	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		90.223	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		98.342	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		95.852	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1205015008SDL WG397276-02
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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

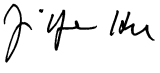
97.712

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: Tuesday, May 08, 2012 10:27:06
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	17860.5	1.2	**-248.8341**	209.630	84.2	ug/L	17857	Standard
|	**Be**	9	213355.2	4.4	**50.9026**	0.861	1.7	ug/L	12	Standard
|	**Al**	27	1012149.5	3.4	**50.7209**	0.514	1.0	ug/L	13328	Standard
⌊>	**Sc**	45	347885.9	3.0				ug/L	333080	Standard
⌈	**Ti**	47	195261.4	3.9	**101.1047**	3.385	3.3	ug/L	113	Standard
|	**V**	51	986379.6	3.1	**50.7362**	1.264	2.5	ug/L	4349	Standard
|	**Cr**	52	733698.8	4.7	**50.6988**	2.196	4.3	ug/L	14000	Standard
|	**Cr**	53	108511.6	2.9	**49.6844**	1.339	2.7	ug/L	319	Standard
|	**Mn**	55	1255533.5	3.3	**51.7916**	1.432	2.8	ug/L	1367	Standard
|	**Co**	59	894601.1	3.0	**49.5185**	1.177	2.4	ug/L	115	Standard
|	**Ni**	60	189011.4	2.4	**50.1023**	0.852	1.7	ug/L	76	Standard
|	**Cu**	65	166228.2	2.5	**50.0735**	1.054	2.1	ug/L	135	Standard
|	**Zn**	66	73141.9	2.7	**49.8945**	1.053	2.1	ug/L	185	Standard
| >	**Ge**	72	283936.9	0.9				ug/L	274929	Standard
|	**As**	75	75444.0	2.2	**50.4250**	0.892	1.8	ug/L	-262	Standard
|	**Se**	82	8896.2	2.4	**51.0875**	0.960	1.9	ug/L	27	Standard
⌊	**Se-1**	77	5014.2	1.9	**50.4432**	0.891	1.8	ug/L	94	Standard
	Ga	71	255676.3	1.7				mg/L	248575	Standard
⌈	**Rb**	85	1463.4	10.1				ug/L	15	Standard
| >	**Y**	89	284418.1	0.6				ug/L	267564	Standard
⌊	**Rh**	103	56.7	31.0				ug/L	2	Standard
⌈	**Mo**	98	517469.3	1.0	**96.5378**	0.699	0.7	ug/L	5	Standard
|	**Ag**	107	587096.1	0.4	**51.1988**	0.053	0.1	ug/L	44	Standard
|	**Cd**	111	259993.1	1.9	**49.9026**	0.740	1.5	mg/L	512	Standard
|	**Cd**	114	656747.1	2.6	**49.6629**	1.088	2.2	ug/L	1247	Standard
| >	**In**	115	776040.8	0.5				ug/L	743274	Standard
|	**Sn**	118	891772.6	3.4	**49.1625**	1.471	3.0	ug/L	816	Standard
|	**Sb**	123	622913.2	2.4	**49.2284**	0.977	2.0	ug/L	15	Standard
⌊	**Ba**	135	266468.4	2.9	**48.8940**	1.234	2.5	ug/L	37	Standard
⌈	**Ce**	140	1032.7	2.6				ug/L	44	Standard
⌊>	**Tb**	159	872074.2	1.7				ug/L	826676	Standard
⌈	**Ho**	165	22.7	10.2				ug/L	12	Standard
|	**Tl**	203	914128.3	1.8	**50.0994**	0.740	1.5	ug/L	6	Standard
|	**Tl**	205	2291259.6	1.9	**51.2164**	0.836	1.6	ug/L	11	Standard
|	**Pb**	206	729184.0	3.5	**49.7136**	1.561	3.1	ug/L	301	Standard
|	**Pb**	207	604369.6	2.1	**49.3976**	0.855	1.7	ug/L	250	Standard
|	**Pb**	208	2839986.3	2.4	**49.1366**	1.037	2.1	ug/L	1166	Standard
|	**U**	238	1501143.5	3.2	**47.5046**	1.352	2.8	ug/L	3	Standard
⌊>	**Bi**	209	456163.4	0.4				ug/L	454659	Standard
⌈	**Na**	23	25843.7	0.4	**5.4874**	0.169	3.1	mg/L	137	Standard
|	**Mg**	24	3331604.9	3.5	**5.0267**	0.081	1.6	mg/L	498	Standard

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	K	39	73697.2	1.8	**5.2582**	0.088	1.7	mg/L	557	Standard
	Ca	43	2531.9	1.8	**5.2728**	0.239	4.5	mg/L	52	Standard
	Fe	54	32794.4	3.4	**4.9690**	0.043	0.9	mg/L	865	Standard
	Fe	57	1055627.8	4.5	**5.0559**	0.135	2.7	mg/L	6003	Standard
>	**Sc-1**	45	347885.9	3.0				mg/L	333080	Standard
	Cl	35	60786.4	2.2				ug/L	40103	Standard
	Kr	83	72.0	1.4				ug/L	67	Standard
	Br	81	16492.3	4.1				ug/L	15294	Standard
	P	31	99753.3	2.7				ug/L	74262	Standard
	S	34	961279.6	1.3				ug/L	787377	Standard
	Sr	88	871.7	4.1				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	101.442		
>	Sc	45			
	Ti	47	101.105		
	V	51	101.472		
	Cr	52	101.398		
	Cr	53			
	Mn	55	103.583		
	Co	59	99.037		
	Ni	60	100.205		
	Cu	65	100.147		
	Zn	66	99.789		
>	Ge	72		103.276	
	As	75	100.850		
	Se	82	102.175		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		106.299	
	Rh	103			
	Mo	98	96.538		
	Ag	107	102.398		
	Cd	111	99.805		
	Cd	114			
>	In	115		104.408	
	Sn	118	98.325		
	Sb	123	98.457		
	Ba	135	97.788		
	Ce	140			
>	Tb	159		105.492	
	Ho	165			
	Tl	203	100.199		
	Tl	205			
	Pb	206	99.427		

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	Pb	207	98.795	
	Pb	208	98.273	
	U	238	95.009	
>	Bi	209		100.331
	Na	23	109.747	
	Mg	24	100.534	
	K	39	105.164	
	Ca	43	105.455	
	Fe	54	99.380	
	Fe	57	101.118	
>	Sc-1	45		
	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: Tuesday, May 08, 2012 10:29:58
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	17994.0	4.0	**-92.5340**	224.238	242.3	ug/L	17857	Standard
|	**Be**	9	18.3	63.0	**-0.0026**	0.003	105.5	ug/L	12	Standard
|	**Al**	27	14064.9	4.4	**0.0197**	0.026	130.1	ug/L	13328	Standard
⌊>	**Sc**	45	344856.6	2.2				ug/L	333080	Standard
⌈	**Ti**	47	134.7	16.9	**0.0236**	0.012	49.1	ug/L	113	Standard
|	**V**	51	4304.5	1.2	**-0.0025**	0.005	179.2	ug/L	4349	Standard
|	**Cr**	52	13682.2	0.5	**-0.0377**	0.019	51.7	ug/L	14000	Standard
|	**Cr**	53	321.7	7.1	**0.0057**	0.013	234.1	ug/L	319	Standard
|	**Mn**	55	1399.4	5.6	**-0.0034**	0.002	72.9	ug/L	1367	Standard
|	**Co**	59	146.3	15.7	**0.0028**	0.001	43.4	ug/L	115	Standard
|	**Ni**	60	87.3	15.6	**0.0028**	0.003	116.0	ug/L	76	Standard
|	**Cu**	65	144.0	18.8	**-0.0006**	0.008	1310.6	ug/L	135	Standard
|	**Zn**	66	188.3	5.8	**-0.0075**	0.005	69.0	ug/L	185	Standard
| >	**Ge**	72	275171.9	2.0				ug/L	274929	Standard
|	**As**	75	-269.0	2.4	**-0.0134**	0.001	8.1	ug/L	-262	Standard
|	**Se**	82	28.0	10.3	**-0.0457**	0.018	39.1	ug/L	27	Standard
⌊	**Se-1**	77	83.7	25.6	**-0.0490**	0.213	435.7	ug/L	94	Standard
	Ga	71	250420.0	1.1				mg/L	248575	Standard
⌈	**Rb**	85	38.3	7.5				ug/L	15	Standard
| >	**Y**	89	264613.0	2.1				ug/L	267564	Standard
⌊	**Rh**	103	1.7	173.2				ug/L	2	Standard
⌈	**Mo**	98	89.9	54.0	**0.0230**	0.009	37.7	ug/L	5	Standard
|	**Ag**	107	81.3	28.5	**-0.0005**	0.002	357.2	ug/L	44	Standard
|	**Cd**	111	481.8	2.8	**-0.0068**	0.003	50.3	mg/L	512	Standard
|	**Cd**	114	1269.0	3.6	**0.0026**	0.005	170.4	ug/L	1247	Standard
| >	**In**	115	752878.2	3.3				ug/L	743274	Standard
|	**Sn**	118	932.7	7.0	**0.0047**	0.002	49.3	ug/L	816	Standard
|	**Sb**	123	322.6	31.6	**0.0246**	0.007	30.0	ug/L	15	Standard
⌊	**Ba**	135	53.7	31.4	**0.0035**	0.003	82.2	ug/L	37	Standard
⌈	**Ce**	140	44.7	7.2				ug/L	44	Standard
⌊>	**Tb**	159	834001.1	1.0				ug/L	826676	Standard
⌈	**Ho**	165	7.0	75.6				ug/L	12	Standard
|	**Tl**	203	40.3	17.4	**-0.0001**	0.000	393.2	ug/L	6	Standard
|	**Tl**	205	119.3	13.6	**0.0051**	0.000	6.5	ug/L	11	Standard
|	**Pb**	206	339.7	7.0	**0.0031**	0.001	45.4	ug/L	301	Standard
|	**Pb**	207	263.0	4.2	**0.0009**	0.001	74.1	ug/L	250	Standard
|	**Pb**	208	1277.7	4.5	**0.0021**	0.001	34.7	ug/L	1166	Standard
|	**U**	238	63.0	20.8	**0.0058**	0.000	6.7	ug/L	3	Standard
⌊>	**Bi**	209	446684.3	1.5				ug/L	454659	Standard
⌈	**Na**	23	115.0	28.5	**0.0008**	0.007	821.2	mg/L	137	Standard
|	**Mg**	24	600.0	8.2	**-0.0007**	0.000	8.9	mg/L	498	Standard

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	K	39	718.4	2.6	**0.0073**	0.003	34.7	mg/L	557	Standard
	Ca	43	53.3	14.3	**0.0232**	0.018	79.1	mg/L	52	Standard
	Fe	54	860.0	7.0	**-0.0211**	0.007	33.5	mg/L	865	Standard
	Fe	57	5484.3	1.7	**-0.0045**	0.001	14.9	mg/L	6003	Standard
>	**Sc-1**	45	344856.6	2.2				mg/L	333080	Standard
	Cl	35	55864.5	1.8				ug/L	40103	Standard
	Kr	83	74.8	5.1				ug/L	67	Standard
	Br	81	15353.6	4.5				ug/L	15294	Standard
	P	31	91908.5	5.6				ug/L	74262	Standard
	S	34	918845.6	0.4				ug/L	787377	Standard
	Sr	88	355.0	11.0				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		100.088	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		98.897	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		101.292	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		100.886	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	98.246
	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 7
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Method 6020 - Summary Report

Sample ID: L1205015009
Sample Date/Time: Tuesday, May 08, 2012 10:32:53
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	30746.2	2.2	**2641.9077**	426.953	16.2	ug/L	17857	Standard
|	**Be**	9	76.7	49.4	**0.0068**	0.007	100.0	ug/L	12	Standard
|	**Al**	27	8910162.9	3.8	**338.7381**	13.267	3.9	ug/L	13328	Standard
⌊>	**Sc**	45	464042.5	2.1				ug/L	333080	Standard
⌈	**Ti**	47	56381.8	4.4	**28.6095**	1.295	4.5	ug/L	113	Standard
|	**V**	51	45347.7	1.6	**2.0668**	0.037	1.8	ug/L	4349	Standard
|	**Cr**	52	34268.7	2.4	**1.3370**	0.045	3.4	ug/L	14000	Standard
|	**Cr**	53	4028.0	2.4	**1.6677**	0.035	2.1	ug/L	319	Standard
|	**Mn**	55	13522661.8	0.7	**547.8808**	1.371	0.3	ug/L	1367	Standard
|	**Co**	59	49519.5	0.3	**2.6841**	0.024	0.9	ug/L	115	Standard
|	**Ni**	60	5307.6	1.5	**1.3600**	0.027	2.0	ug/L	76	Standard
|	**Cu**	65	3052.6	1.1	**0.8576**	0.004	0.5	ug/L	135	Standard
|	**Zn**	66	5875.5	1.7	**3.8032**	0.076	2.0	ug/L	185	Standard
| >	**Ge**	72	289428.3	0.6				ug/L	274929	Standard
|	**As**	75	1364.2	2.3	**1.0630**	0.025	2.4	ug/L	-262	Standard
|	**Se**	82	606.1	1.7	**3.2167**	0.067	2.1	ug/L	27	Standard
⌊	**Se-1**	77	186.7	11.4	**0.9455**	0.217	23.0	ug/L	94	Standard
	Ga	71	260651.1	1.1				mg/L	248575	Standard
⌈	**Rb**	85	15981.8	3.9				ug/L	15	Standard
| >	**Y**	89	294282.3	1.2				ug/L	267564	Standard
⌊	**Rh**	103	193.3	23.2				ug/L	2	Standard
⌈	**Mo**	98	205.0	7.3	**0.0436**	0.003	6.1	ug/L	5	Standard
|	**Ag**	107	98.3	2.3	**0.0007**	0.000	23.9	ug/L	44	Standard
|	**Cd**	111	647.6	1.7	**0.0203**	0.002	10.5	mg/L	512	Standard
|	**Cd**	114	1627.8	3.3	**0.0250**	0.004	14.1	ug/L	1247	Standard
| >	**In**	115	787754.9	0.7				ug/L	743274	Standard
|	**Sn**	118	2372.2	1.7	**0.0807**	0.003	3.6	ug/L	816	Standard
|	**Sb**	123	366.9	4.7	**0.0270**	0.001	4.2	ug/L	15	Standard
⌊	**Ba**	135	180753.8	0.7	**32.6756**	0.477	1.5	ug/L	37	Standard
⌈	**Ce**	140	96218.2	1.1				ug/L	44	Standard
⌊>	**Tb**	159	887945.6	1.0				ug/L	826676	Standard
⌈	**Ho**	165	1032.7	3.6				ug/L	12	Standard
|	**Tl**	203	624.7	2.4	**0.0322**	0.001	3.0	ug/L	6	Standard
|	**Tl**	205	1476.7	1.6	**0.0357**	0.000	0.8	ug/L	11	Standard
|	**Pb**	206	3079.3	3.5	**0.1914**	0.007	3.5	ug/L	301	Standard
|	**Pb**	207	2569.6	3.4	**0.1911**	0.009	4.6	ug/L	250	Standard
|	**Pb**	208	11846.8	0.7	**0.1865**	0.002	1.0	ug/L	1166	Standard
|	**U**	238	717.7	0.7	**0.0267**	0.000	1.1	ug/L	3	Standard
⌊>	**Bi**	209	452049.3	1.4				ug/L	454659	Standard
⌈	**Na**	23	58578.0	0.2	**9.3382**	0.203	2.2	mg/L	137	Standard
|	**Mg**	24	2021874.8	19.1	**2.2815**	0.391	17.2	mg/L	498	Standard

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	K	39	5846.1	0.9	**0.2705**	0.006	2.1	mg/L	557	Standard
	Ca	43	7318.4	4.7	**11.5229**	0.523	4.5	mg/L	52	Standard
	Fe	54	4811.0	3.0	**0.4075**	0.028	6.9	mg/L	865	Standard
	Fe	57	145762.8	0.3	**0.4957**	0.012	2.5	mg/L	6003	Standard
>	**Sc-1**	45	464042.5	2.1				mg/L	333080	Standard
	Cl	35	1912299.6	2.2				ug/L	40103	Standard
	Kr	83	84.4	4.0				ug/L	67	Standard
	Br	81	299193.6	0.8				ug/L	15294	Standard
	P	31	135406.7	1.9				ug/L	74262	Standard
	S	34	1067839.7	0.4				ug/L	787377	Standard
	Sr	88	6415908.2	2.0				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		105.274	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		109.986	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		105.984	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		107.412	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

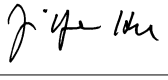
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	99.426
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

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: L1205015010
Sample Date/Time: Tuesday, May 08, 2012 10:35:45
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	296090.5	1.5	**85594.8549**	3977.322	4.6	ug/L	17857	Standard
|	**Be**	9	565.0	6.2	**0.0713**	0.003	3.8	ug/L	12	Standard
|	**Al**	27	137181891.4	1.1	**4046.6251**	84.044	2.1	ug/L	13328	Standard
⌊>	**Sc**	45	599310.4	2.8				ug/L	333080	Standard
⌈	**Ti**	47	166389.8	1.8	**81.7664**	1.383	1.7	ug/L	113	Standard
|	**V**	51	412065.8	2.7	**19.9764**	0.485	2.4	ug/L	4349	Standard
|	**Cr**	52	62286.4	1.2	**3.1350**	0.042	1.3	ug/L	14000	Standard
|	**Cr**	53	7628.6	2.0	**3.1778**	0.057	1.8	ug/L	319	Standard
|	**Mn**	55	6250895.1	1.3	**244.9730**	2.711	1.1	ug/L	1367	Standard
|	**Co**	59	63730.1	0.4	**3.3431**	0.022	0.7	ug/L	115	Standard
|	**Ni**	60	10419.2	0.6	**2.6015**	0.009	0.3	ug/L	76	Standard
|	**Cu**	65	9814.2	2.1	**2.7631**	0.054	2.0	ug/L	135	Standard
|	**Zn**	66	13149.4	0.4	**8.3974**	0.008	0.1	ug/L	185	Standard
| >	**Ge**	72	299172.1	0.3				ug/L	274929	Standard
|	**As**	75	474.9	3.8	**0.4717**	0.011	2.3	ug/L	-262	Standard
|	**Se**	82	118.8	5.1	**0.4378**	0.033	7.6	ug/L	27	Standard
⌊	**Se-1**	77	180.3	6.4	**0.8222**	0.106	12.9	ug/L	94	Standard
	Ga	71	293479.2	0.8				mg/L	248575	Standard
⌈	**Rb**	85	84464.8	1.2				ug/L	15	Standard
| >	**Y**	89	368412.0	2.5				ug/L	267564	Standard
⌊	**Rh**	103	50.0	20.0				ug/L	2	Standard
⌈	**Mo**	98	695.1	7.2	**0.1304**	0.009	7.1	ug/L	5	Standard
|	**Ag**	107	714.7	1.4	**0.0521**	0.001	1.9	ug/L	44	Standard
|	**Cd**	111	617.0	8.0	**0.0117**	0.010	82.4	mg/L	512	Standard
|	**Cd**	114	1640.2	1.0	**0.0229**	0.001	5.9	ug/L	1247	Standard
| >	**In**	115	807930.9	0.5				ug/L	743274	Standard
|	**Sn**	118	2445.2	1.9	**0.0813**	0.003	3.8	ug/L	816	Standard
|	**Sb**	123	569.3	3.8	**0.0417**	0.001	3.5	ug/L	15	Standard
⌊	**Ba**	135	405042.3	0.5	**71.3982**	0.762	1.1	ug/L	37	Standard
⌈	**Ce**	140	2725906.0	0.8				ug/L	44	Standard
⌊>	**Tb**	159	918926.4	1.5				ug/L	826676	Standard
⌈	**Ho**	165	10314.8	0.9				ug/L	12	Standard
|	**Tl**	203	722.7	7.3	**0.0366**	0.003	7.9	ug/L	6	Standard
|	**Tl**	205	1654.1	4.9	**0.0387**	0.002	4.3	ug/L	11	Standard
|	**Pb**	206	16790.0	1.7	**1.1059**	0.014	1.3	ug/L	301	Standard
|	**Pb**	207	13636.5	1.3	**1.0757**	0.010	0.9	ug/L	250	Standard
|	**Pb**	208	64456.3	1.6	**1.0769**	0.012	1.1	ug/L	1166	Standard
|	**U**	238	19211.5	1.8	**0.6018**	0.010	1.6	ug/L	3	Standard
⌊>	**Bi**	209	463781.9	0.5				ug/L	454659	Standard
⌈	**Na**	23	31362.5	3.5	**3.8579**	0.165	4.3	mg/L	137	Standard
|	**Mg**	24	1419228.6	0.2	**1.2424**	0.032	2.6	mg/L	498	Standard

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	K	39	14066.5	3.8	**0.5424**	0.009	1.6	mg/L	557	Standard
	Ca	43	3400.4	6.6	**4.0900**	0.320	7.8	mg/L	52	Standard
	Fe	54	54743.6	1.9	**4.8113**	0.060	1.3	mg/L	865	Standard
	Fe	57	1763290.5	0.8	**4.9046**	0.148	3.0	mg/L	6003	Standard
>	**Sc-1**	45	599310.4	2.8				mg/L	333080	Standard
	Cl	35	449541.2	2.1				ug/L	40103	Standard
	Kr	83	111.8	4.5				ug/L	67	Standard
	Br	81	53776.2	3.0				ug/L	15294	Standard
	P	31	485836.4	0.5				ug/L	74262	Standard
	S	34	878486.0	3.7				ug/L	787377	Standard
	Sr	88	2619397.7	2.1				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		108.818	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		137.691	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		108.699	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		111.159	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	102.007
	Na	23	
	Mg	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: L1205015010
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Method 6020 - Summary Report

Sample ID: L1205015011
Sample Date/Time: Tuesday, May 08, 2012 10:38:38
Number of Replicates: 3
Autosampler Position: 219
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	60375.1	3.0	**15373.4618**	955.009	6.2	ug/L	17857	Standard
|	**Be**	9	70.0	37.1	**0.0057**	0.005	80.3	ug/L	12	Standard
|	**Al**	27	6139165.0	3.0	**236.5240**	8.768	3.7	ug/L	13328	Standard
⌊>	**Sc**	45	457497.9	0.8				ug/L	333080	Standard
⌈	**Ti**	47	58648.4	3.2	**28.3551**	0.994	3.5	ug/L	113	Standard
|	**V**	51	55022.6	1.0	**2.4256**	0.026	1.1	ug/L	4349	Standard
|	**Cr**	52	23232.1	1.8	**0.4979**	0.038	7.5	ug/L	14000	Standard
|	**Cr**	53	1051.7	2.6	**0.3045**	0.011	3.6	ug/L	319	Standard
|	**Mn**	55	1860655.7	1.0	**71.7697**	0.342	0.5	ug/L	1367	Standard
|	**Co**	59	19775.2	0.5	**1.0178**	0.015	1.5	ug/L	115	Standard
|	**Ni**	60	8424.3	1.8	**2.0671**	0.016	0.8	ug/L	76	Standard
|	**Cu**	65	1393.4	2.8	**0.3475**	0.017	4.9	ug/L	135	Standard
|	**Zn**	66	5447.3	0.8	**3.3430**	0.031	0.9	ug/L	185	Standard
| >	**Ge**	72	303794.1	1.5				ug/L	274929	Standard
|	**As**	75	-160.5	8.7	**0.0715**	0.010	13.5	ug/L	-262	Standard
|	**Se**	82	71.2	8.2	**0.1718**	0.037	21.4	ug/L	27	Standard
⌊	**Se-1**	77	116.3	14.8	**0.1826**	0.160	87.7	ug/L	94	Standard
	Ga	71	278288.9	1.8				mg/L	248575	Standard
⌈	**Rb**	85	12611.9	5.7				ug/L	15	Standard
| >	**Y**	89	302920.8	3.7				ug/L	267564	Standard
⌊	**Rh**	103	68.3	16.9				ug/L	2	Standard
⌈	**Mo**	98	196.1	5.5	**0.0397**	0.002	6.0	ug/L	5	Standard
|	**Ag**	107	138.3	25.6	**0.0034**	0.003	89.3	ug/L	44	Standard
|	**Cd**	111	687.0	1.7	**0.0198**	0.002	9.3	mg/L	512	Standard
|	**Cd**	114	1689.3	2.1	**0.0219**	0.004	19.4	ug/L	1247	Standard
| >	**In**	115	839232.9	1.5				ug/L	743274	Standard
|	**Sn**	118	1271.7	4.1	**0.0166**	0.003	15.3	ug/L	816	Standard
|	**Sb**	123	214.9	12.6	**0.0142**	0.002	15.6	ug/L	15	Standard
⌊	**Ba**	135	130784.8	1.3	**22.1892**	0.119	0.5	ug/L	37	Standard
⌈	**Ce**	140	37714.6	1.2				ug/L	44	Standard
⌊>	**Tb**	159	927632.6	1.1				ug/L	826676	Standard
⌈	**Ho**	165	387.0	6.8				ug/L	12	Standard
|	**Tl**	203	275.7	16.5	**0.0122**	0.002	20.2	ug/L	6	Standard
|	**Tl**	205	649.3	11.0	**0.0163**	0.002	9.9	ug/L	11	Standard
|	**Pb**	206	642.7	3.2	**0.0217**	0.002	7.0	ug/L	301	Standard
|	**Pb**	207	531.3	3.3	**0.0208**	0.002	8.1	ug/L	250	Standard
|	**Pb**	208	2535.1	2.6	**0.0218**	0.001	6.3	ug/L	1166	Standard
|	**U**	238	281.7	11.5	**0.0124**	0.001	8.2	ug/L	3	Standard
⌊>	**Bi**	209	473401.8	0.7				ug/L	454659	Standard
⌈	**Na**	23	38002.6	0.4	**6.1352**	0.069	1.1	mg/L	137	Standard
|	**Mg**	24	838709.2	2.1	**0.9611**	0.027	2.8	mg/L	498	Standard

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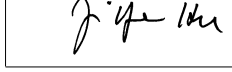
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	K	39	5997.9	3.2	**0.2832**	0.008	2.8	mg/L	557	Standard
	Ca	43	2128.5	5.5	**3.3357**	0.209	6.3	mg/L	52	Standard
	Fe	54	3761.5	2.8	**0.2905**	0.013	4.4	mg/L	865	Standard
	Fe	57	102495.6	2.4	**0.3445**	0.011	3.2	mg/L	6003	Standard
>	**Sc-1**	45	457497.9	0.8				mg/L	333080	Standard
	Cl	35	319888.0	0.7				ug/L	40103	Standard
	Kr	83	94.8	0.5				ug/L	67	Standard
	Br	81	29523.7	1.5				ug/L	15294	Standard
	P	31	180277.9	0.9				ug/L	74262	Standard
	S	34	1225975.7	1.6				ug/L	787377	Standard
	Sr	88	1921402.3	2.7				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		110.499	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		113.214	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		112.910	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		112.212	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	104.122
	Na	23	
	Mg	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: L1205015011
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Method 6020 - Summary Report

Sample ID: L1205015012
Sample Date/Time: Tuesday, May 08, 2012 10:41:31
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	90980.8	3.0	**27958.5980**	990.499	3.5	ug/L	17857	Standard
|	**Be**	9	258.3	14.5	**0.0396**	0.008	19.2	ug/L	12	Standard
|	**Al**	27	38622330.0	0.7	**1477.4421**	35.841	2.4	ug/L	13328	Standard
⌊>	**Sc**	45	462035.7	2.8				ug/L	333080	Standard
⌈	**Ti**	47	268807.1	2.4	**131.2447**	1.271	1.0	ug/L	113	Standard
|	**V**	51	95756.4	0.6	**4.4339**	0.069	1.6	ug/L	4349	Standard
|	**Cr**	52	26850.1	1.5	**0.7519**	0.036	4.8	ug/L	14000	Standard
|	**Cr**	53	1969.3	4.2	**0.7055**	0.021	2.9	ug/L	319	Standard
|	**Mn**	55	1091359.6	3.3	**42.4297**	0.732	1.7	ug/L	1367	Standard
|	**Co**	59	23186.4	3.0	**1.2045**	0.016	1.3	ug/L	115	Standard
|	**Ni**	60	4617.4	4.3	**1.1334**	0.040	3.5	ug/L	76	Standard
|	**Cu**	65	3847.2	2.1	**1.0484**	0.021	2.0	ug/L	135	Standard
|	**Zn**	66	18821.0	1.8	**12.0018**	0.308	2.6	ug/L	185	Standard
|>	**Ge**	72	301166.7	1.9				ug/L	274929	Standard
|	**As**	75	35.5	22.9	**0.1937**	0.005	2.4	ug/L	-262	Standard
|	**Se**	82	52.2	4.7	**0.0710**	0.008	11.7	ug/L	27	Standard
⌊	**Se-1**	77	116.7	7.7	**0.1955**	0.076	39.0	ug/L	94	Standard
	Ga	71	277980.9	2.2				mg/L	248575	Standard
⌈	**Rb**	85	51338.5	2.4				ug/L	15	Standard
|>	**Y**	89	304128.9	4.3				ug/L	267564	Standard
⌊	**Rh**	103	41.7	50.0				ug/L	2	Standard
⌈	**Mo**	98	311.5	3.2	**0.0607**	0.001	2.2	ug/L	5	Standard
|	**Ag**	107	183.7	9.5	**0.0073**	0.001	18.9	ug/L	44	Standard
|	**Cd**	111	632.8	2.7	**0.0124**	0.004	32.4	mg/L	512	Standard
|	**Cd**	114	1604.4	1.1	**0.0181**	0.001	7.4	ug/L	1247	Standard
|>	**In**	115	823040.3	0.8				ug/L	743274	Standard
|	**Sn**	118	2214.2	2.2	**0.0669**	0.002	2.7	ug/L	816	Standard
|	**Sb**	123	426.6	5.6	**0.0303**	0.002	6.7	ug/L	15	Standard
⌊	**Ba**	135	262159.6	1.5	**45.3576**	0.347	0.8	ug/L	37	Standard
⌈	**Ce**	140	426176.5	1.2				ug/L	44	Standard
⌊>	**Tb**	159	910261.4	1.6				ug/L	826676	Standard
⌈	**Ho**	165	2516.2	3.3				ug/L	12	Standard
|	**Tl**	203	380.3	6.7	**0.0180**	0.001	6.3	ug/L	6	Standard
|	**Tl**	205	860.4	5.1	**0.0212**	0.001	5.6	ug/L	11	Standard
|	**Pb**	206	9745.1	1.4	**0.6292**	0.004	0.6	ug/L	301	Standard
|	**Pb**	207	7704.6	1.0	**0.5948**	0.006	1.0	ug/L	250	Standard
|	**Pb**	208	37048.1	1.1	**0.6064**	0.002	0.3	ug/L	1166	Standard
|	**U**	238	5091.2	2.3	**0.1613**	0.002	1.1	ug/L	3	Standard
⌊>	**Bi**	209	466711.3	1.2				ug/L	454659	Standard
⌈	**Na**	23	30221.8	2.3	**4.8270**	0.109	2.3	mg/L	137	Standard
|	**Mg**	24	1019247.5	1.4	**1.1570**	0.017	1.5	mg/L	498	Standard

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	K	39	18331.1	2.7	**0.9480**	0.009	0.9	mg/L	557	Standard
	Ca	43	1686.8	3.0	**2.5995**	0.136	5.2	mg/L	52	Standard
	Fe	54	16011.4	0.5	**1.7286**	0.045	2.6	mg/L	865	Standard
	Fe	57	499726.8	1.5	**1.7829**	0.036	2.0	mg/L	6003	Standard
>	**Sc-1**	45	462035.7	2.8				mg/L	333080	Standard
	Cl	35	220620.2	2.3				ug/L	40103	Standard
	Kr	83	83.4	6.5				ug/L	67	Standard
	Br	81	23051.7	4.2				ug/L	15294	Standard
	P	31	262706.3	2.4				ug/L	74262	Standard
	S	34	891344.5	3.2				ug/L	787377	Standard
	Sr	88	1350245.8	2.3				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		109.543	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		113.666	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		110.732	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		110.111	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1205015012
Report Date/Time: Tuesday, May 08, 2012 10:44:03
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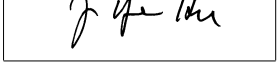
Approved: May 09, 2012

Pb	207	
Pb	208	
U	238	
> Bi	209	102.651
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	

Approved: May 09, 2012



Method 6020 - Summary Report

Sample ID: L1205015013
Sample Date/Time: Tuesday, May 08, 2012 10:44:23
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	55821.0	2.2	**13303.0376**	958.989	7.2	ug/L	17857	Standard
|	**Be**	9	50.0	26.5	**0.0021**	0.003	121.5	ug/L	12	Standard
|	**Al**	27	4877075.4	1.7	**186.5665**	4.070	2.2	ug/L	13328	Standard
⌊>	**Sc**	45	460417.8	2.1				ug/L	333080	Standard
⌈	**Ti**	47	21514.3	3.5	**10.1151**	0.255	2.5	ug/L	113	Standard
|	**V**	51	37680.3	0.4	**1.5437**	0.012	0.8	ug/L	4349	Standard
|	**Cr**	52	26583.3	0.9	**0.6761**	0.020	3.0	ug/L	14000	Standard
|	**Cr**	53	2132.7	2.7	**0.7463**	0.027	3.6	ug/L	319	Standard
|	**Mn**	55	416020.2	1.5	**15.6071**	0.079	0.5	ug/L	1367	Standard
|	**Co**	59	4981.8	1.1	**0.2460**	0.005	2.1	ug/L	115	Standard
|	**Ni**	60	12359.4	1.4	**2.9681**	0.011	0.4	ug/L	76	Standard
|	**Cu**	65	1658.1	1.3	**0.4106**	0.006	1.4	ug/L	135	Standard
|	**Zn**	66	4115.2	1.7	**2.4271**	0.027	1.1	ug/L	185	Standard
| >	**Ge**	72	311346.6	1.0				ug/L	274929	Standard
|	**As**	75	-30.4	88.1	**0.1530**	0.016	10.7	ug/L	-262	Standard
|	**Se**	82	88.9	6.2	**0.2549**	0.026	10.1	ug/L	27	Standard
⌊	**Se-1**	77	122.3	2.1	**0.2119**	0.015	7.0	ug/L	94	Standard
	Ga	71	284890.8	0.2				mg/L	248575	Standard
⌈	**Rb**	85	10492.0	5.6				ug/L	15	Standard
| >	**Y**	89	306231.8	2.7				ug/L	267564	Standard
⌊	**Rh**	103	41.7	48.5				ug/L	2	Standard
⌈	**Mo**	98	822.8	3.1	**0.1448**	0.003	2.3	ug/L	5	Standard
|	**Ag**	107	99.0	13.4	**0.0000**	0.001	4986.3	ug/L	44	Standard
|	**Cd**	111	662.1	0.5	**0.0129**	0.000	3.6	mg/L	512	Standard
|	**Cd**	114	1674.5	2.4	**0.0183**	0.002	12.7	ug/L	1247	Standard
| >	**In**	115	857403.6	0.8				ug/L	743274	Standard
|	**Sn**	118	1413.7	0.5	**0.0223**	0.000	1.8	ug/L	816	Standard
|	**Sb**	123	207.5	7.8	**0.0133**	0.001	9.1	ug/L	15	Standard
⌊	**Ba**	135	311902.6	1.2	**51.8027**	0.252	0.5	ug/L	37	Standard
⌈	**Ce**	140	38263.6	0.2				ug/L	44	Standard
⌊>	**Tb**	159	937695.7	0.9				ug/L	826676	Standard
⌈	**Ho**	165	255.3	3.7				ug/L	12	Standard
|	**Tl**	203	314.7	3.7	**0.0140**	0.001	5.3	ug/L	6	Standard
|	**Tl**	205	745.7	3.2	**0.0181**	0.000	1.8	ug/L	11	Standard
|	**Pb**	206	1261.7	1.2	**0.0610**	0.001	2.2	ug/L	301	Standard
|	**Pb**	207	1041.0	2.4	**0.0597**	0.003	4.6	ug/L	250	Standard
|	**Pb**	208	4899.3	1.2	**0.0599**	0.001	2.4	ug/L	1166	Standard
|	**U**	238	553.0	5.0	**0.0204**	0.001	4.3	ug/L	3	Standard
⌊>	**Bi**	209	481369.0	1.1				ug/L	454659	Standard
⌈	**Na**	23	36470.5	0.7	**5.8512**	0.158	2.7	mg/L	137	Standard
|	**Mg**	24	3173638.1	1.8	**3.6196**	0.140	3.9	mg/L	498	Standard

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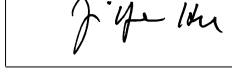
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	K	39	15182.6	3.2	**0.7810**	0.043	5.5	mg/L	557	Standard
	Ca	43	2880.3	10.1	**4.5114**	0.381	8.4	mg/L	52	Standard
	Fe	54	2758.0	6.8	**0.1695**	0.029	17.1	mg/L	865	Standard
	Fe	57	72822.9	1.0	**0.2341**	0.008	3.4	mg/L	6003	Standard
>	**Sc-1**	45	460417.8	2.1				mg/L	333080	Standard
	Cl	35	466931.5	1.1				ug/L	40103	Standard
	Kr	83	69.4	9.5				ug/L	67	Standard
	Br	81	40930.2	0.7				ug/L	15294	Standard
	P	31	136424.0	1.7				ug/L	74262	Standard
	S	34	1316838.0	0.6				ug/L	787377	Standard
	Sr	88	1884004.1	1.8				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		113.246	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		114.452	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		115.355	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		113.430	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	105.875
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1205015014
Sample Date/Time: Tuesday, May 08, 2012 10:47:15
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	38116.2	2.5	**6080.8042**	338.122	5.6	ug/L	17857	Standard
|	**Be**	9	141.7	14.3	**0.0190**	0.004	21.4	ug/L	12	Standard
|	**Al**	27	13805411.4	1.8	**537.2284**	3.698	0.7	ug/L	13328	Standard
⌊>	**Sc**	45	453632.3	1.9				ug/L	333080	Standard
⌈	**Ti**	47	63011.4	0.9	**29.9449**	0.281	0.9	ug/L	113	Standard
|	**V**	51	40915.8	0.3	**1.7105**	0.007	0.4	ug/L	4349	Standard
|	**Cr**	52	26366.6	2.4	**0.6747**	0.043	6.3	ug/L	14000	Standard
|	**Cr**	53	1837.6	6.5	**0.6284**	0.051	8.1	ug/L	319	Standard
|	**Mn**	55	451826.4	0.6	**17.0830**	0.120	0.7	ug/L	1367	Standard
|	**Co**	59	6365.7	1.8	**0.3182**	0.006	1.8	ug/L	115	Standard
|	**Ni**	60	2354.8	4.0	**0.5528**	0.023	4.2	ug/L	76	Standard
|	**Cu**	65	2530.9	2.3	**0.6558**	0.017	2.6	ug/L	135	Standard
|	**Zn**	66	5589.4	0.9	**3.3728**	0.033	1.0	ug/L	185	Standard
|>	**Ge**	72	309046.7	0.1				ug/L	274929	Standard
|	**As**	75	-104.5	23.6	**0.1075**	0.015	14.0	ug/L	-262	Standard
|	**Se**	82	90.9	1.7	**0.2690**	0.008	2.9	ug/L	27	Standard
⌊	**Se-1**	77	128.7	3.2	**0.2800**	0.038	13.6	ug/L	94	Standard
	Ga	71	279291.7	0.7				mg/L	248575	Standard
⌈	**Rb**	85	10411.9	3.5				ug/L	15	Standard
|>	**Y**	89	309094.3	0.4				ug/L	267564	Standard
⌊	**Rh**	103	65.0	7.7				ug/L	2	Standard
⌈	**Mo**	98	103.2	11.7	**0.0234**	0.002	7.9	ug/L	5	Standard
|	**Ag**	107	94.7	14.8	**-0.0003**	0.001	396.5	ug/L	44	Standard
|	**Cd**	111	627.1	1.2	**0.0078**	0.002	26.4	mg/L	512	Standard
|	**Cd**	114	1527.8	1.3	**0.0092**	0.001	13.3	ug/L	1247	Standard
|>	**In**	115	850124.7	1.2				ug/L	743274	Standard
|	**Sn**	118	1836.4	2.9	**0.0442**	0.002	5.2	ug/L	816	Standard
|	**Sb**	123	193.9	3.2	**0.0125**	0.000	3.3	ug/L	15	Standard
⌊	**Ba**	135	45001.1	1.7	**7.5341**	0.207	2.7	ug/L	37	Standard
⌈	**Ce**	140	94152.6	0.9				ug/L	44	Standard
⌊>	**Tb**	159	932193.5	0.5				ug/L	826676	Standard
⌈	**Ho**	165	1118.0	1.8				ug/L	12	Standard
|	**Tl**	203	275.7	8.5	**0.0121**	0.001	9.1	ug/L	6	Standard
|	**Tl**	205	653.0	3.2	**0.0163**	0.001	3.2	ug/L	11	Standard
|	**Pb**	206	3452.4	1.6	**0.2042**	0.006	3.1	ug/L	301	Standard
|	**Pb**	207	2316.2	2.7	**0.1597**	0.007	4.3	ug/L	250	Standard
|	**Pb**	208	11538.7	0.7	**0.1701**	0.004	2.1	ug/L	1166	Standard
|	**U**	238	1552.7	5.9	**0.0507**	0.003	6.6	ug/L	3	Standard
⌊>	**Bi**	209	478164.6	1.2				ug/L	454659	Standard
⌈	**Na**	23	36328.5	2.2	**5.9135**	0.022	0.4	mg/L	137	Standard
|	**Mg**	24	588256.8	1.4	**0.6794**	0.011	1.6	mg/L	498	Standard

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	K	39	2963.6	2.7	**0.1186**	0.001	1.2	mg/L	557	Standard
	Ca	43	2225.2	7.8	**3.5211**	0.272	7.7	mg/L	52	Standard
	Fe	54	5398.3	3.8	**0.4910**	0.037	7.6	mg/L	865	Standard
	Fe	57	155354.1	0.2	**0.5432**	0.012	2.2	mg/L	6003	Standard
>	**Sc-1**	45	453632.3	1.9				mg/L	333080	Standard
	Cl	35	426196.6	0.7				ug/L	40103	Standard
	Kr	83	74.4	2.7				ug/L	67	Standard
	Br	81	42643.3	1.1				ug/L	15294	Standard
	P	31	135086.2	0.7				ug/L	74262	Standard
	S	34	1250655.1	2.4				ug/L	787377	Standard
	Sr	88	1956814.4	0.9				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		112.410	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		115.521	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		114.376	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		112.764	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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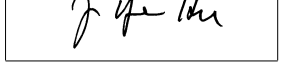
Pb	207	
Pb	208	
U	238	
> Bi	209	105.170
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1205015014
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Method 6020 - Summary Report

Sample ID: L1205015015
Sample Date/Time: Tuesday, May 08, 2012 10:50:08
Number of Replicates: 3
Autosampler Position: 223
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	38677.6	0.7	**6634.2459**	269.995	4.1	ug/L	17857	Standard
|	**Be**	9	31.7	18.2	**-0.0010**	0.001	101.8	ug/L	12	Standard
|	**Al**	27	3417521.9	1.3	**135.0000**	2.959	2.2	ug/L	13328	Standard
⌊>	**Sc**	45	445224.6	1.7				ug/L	333080	Standard
⌈	**Ti**	47	14744.2	3.6	**6.9791**	0.280	4.0	ug/L	113	Standard
|	**V**	51	25835.4	1.1	**0.9960**	0.009	0.9	ug/L	4349	Standard
|	**Cr**	52	27161.0	0.6	**0.7284**	0.017	2.4	ug/L	14000	Standard
|	**Cr**	53	1848.4	2.2	**0.6340**	0.021	3.2	ug/L	319	Standard
|	**Mn**	55	355494.7	1.1	**13.4435**	0.111	0.8	ug/L	1367	Standard
|	**Co**	59	3471.1	4.5	**0.1712**	0.007	4.2	ug/L	115	Standard
|	**Ni**	60	2865.3	0.2	**0.6780**	0.003	0.4	ug/L	76	Standard
|	**Cu**	65	1856.4	0.2	**0.4696**	0.001	0.3	ug/L	135	Standard
|	**Zn**	66	15273.4	0.4	**9.4713**	0.035	0.4	ug/L	185	Standard
| >	**Ge**	72	308672.5	0.4				ug/L	274929	Standard
|	**As**	75	-189.9	39.2	**0.0550**	0.046	83.7	ug/L	-262	Standard
|	**Se**	82	59.0	20.2	**0.1005**	0.062	61.4	ug/L	27	Standard
⌊	**Se-1**	77	134.7	7.0	**0.3380**	0.089	26.2	ug/L	94	Standard
	Ga	71	280233.2	0.7				mg/L	248575	Standard
⌈	**Rb**	85	4910.8	3.1				ug/L	15	Standard
| >	**Y**	89	302103.7	2.9				ug/L	267564	Standard
⌊	**Rh**	103	93.3	20.3				ug/L	2	Standard
⌈	**Mo**	98	268.6	7.3	**0.0510**	0.004	7.1	ug/L	5	Standard
|	**Ag**	107	79.3	13.9	**-0.0016**	0.001	53.1	ug/L	44	Standard
|	**Cd**	111	3571.9	2.8	**0.5167**	0.015	2.9	mg/L	512	Standard
|	**Cd**	114	8843.9	2.3	**0.5073**	0.014	2.7	ug/L	1247	Standard
| >	**In**	115	861189.5	0.8				ug/L	743274	Standard
|	**Sn**	118	4749.1	0.9	**0.1879**	0.001	0.7	ug/L	816	Standard
|	**Sb**	123	170.6	7.0	**0.0106**	0.001	8.3	ug/L	15	Standard
⌊	**Ba**	135	38336.8	1.7	**6.3334**	0.084	1.3	ug/L	37	Standard
⌈	**Ce**	140	11851.3	1.0				ug/L	44	Standard
⌊>	**Tb**	159	929727.3	1.2				ug/L	826676	Standard
⌈	**Ho**	165	205.7	7.1				ug/L	12	Standard
|	**Tl**	203	217.7	8.8	**0.0090**	0.001	10.5	ug/L	6	Standard
|	**Tl**	205	489.7	7.3	**0.0128**	0.001	6.0	ug/L	11	Standard
|	**Pb**	206	1110.0	3.8	**0.0514**	0.003	5.9	ug/L	301	Standard
|	**Pb**	207	930.7	2.8	**0.0513**	0.002	3.4	ug/L	250	Standard
|	**Pb**	208	4225.6	0.7	**0.0491**	0.001	1.5	ug/L	1166	Standard
|	**U**	238	288.7	7.6	**0.0125**	0.001	5.1	ug/L	3	Standard
⌊>	**Bi**	209	480058.6	0.5				ug/L	454659	Standard
⌈	**Na**	23	55327.5	1.0	**9.1904**	0.073	0.8	mg/L	137	Standard
|	**Mg**	24	873659.2	0.3	**1.0289**	0.017	1.7	mg/L	498	Standard

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Report Date/Time: Tuesday, May 08, 2012 10:52:41
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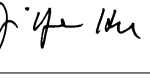
	K	39	3498.7	4.8	**0.1519**	0.012	8.1	mg/L	557	Standard
	Ca	43	4320.6	0.8	**7.0555**	0.069	1.0	mg/L	52	Standard
	Fe	54	2303.8	3.0	**0.1249**	0.013	10.5	mg/L	865	Standard
	Fe	57	53005.9	1.8	**0.1684**	0.001	0.8	mg/L	6003	Standard
>	**Sc-1**	45	445224.6	1.7				mg/L	333080	Standard
	Cl	35	387950.8	1.3				ug/L	40103	Standard
	Kr	83	69.0	3.8				ug/L	67	Standard
	Br	81	26322.8	0.8				ug/L	15294	Standard
	P	31	255493.9	1.2				ug/L	74262	Standard
	S	34	1003540.6	4.2				ug/L	787377	Standard
	Sr	88	3467745.2	1.1				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		112.274	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		112.909	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		115.864	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		112.466	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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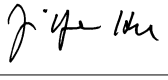


	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	105.586
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: May 09, 2012



Method 6020 - Summary Report

Sample ID: L1205015016
Sample Date/Time: Tuesday, May 08, 2012 10:53:01
Number of Replicates: 3
Autosampler Position: 224
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	109128.5	2.8	**37622.9584**	529.908	1.4	ug/L	17857	Standard
|	**Be**	9	40.0	33.1	**0.0006**	0.003	445.0	ug/L	12	Standard
|	**Al**	27	6285205.2	2.7	**250.6383**	7.414	3.0	ug/L	13328	Standard
⌊>	**Sc**	45	442065.7	1.7				ug/L	333080	Standard
⌈	**Ti**	47	16334.8	4.9	**7.7199**	0.382	5.0	ug/L	113	Standard
|	**V**	51	24493.3	1.7	**0.9297**	0.023	2.5	ug/L	4349	Standard
|	**Cr**	52	25467.7	2.7	**0.6153**	0.062	10.1	ug/L	14000	Standard
|	**Cr**	53	1756.8	5.2	**0.5938**	0.044	7.4	ug/L	319	Standard
|	**Mn**	55	51004.0	1.1	**1.8706**	0.018	1.0	ug/L	1367	Standard
|	**Co**	59	876.0	7.7	**0.0389**	0.003	8.1	ug/L	115	Standard
|	**Ni**	60	1985.5	3.9	**0.4623**	0.020	4.3	ug/L	76	Standard
|	**Cu**	65	886.7	1.8	**0.2001**	0.007	3.4	ug/L	135	Standard
|	**Zn**	66	3418.1	0.7	**2.0061**	0.030	1.5	ug/L	185	Standard
| >	**Ge**	72	309350.4	1.1				ug/L	274929	Standard
|	**As**	75	-39.0	75.9	**0.1477**	0.018	12.1	ug/L	-262	Standard
|	**Se**	82	91.6	5.7	**0.2722**	0.024	9.0	ug/L	27	Standard
⌊	**Se-1**	77	133.0	14.7	**0.3184**	0.170	53.3	ug/L	94	Standard
	Ga	71	278476.6	2.6				mg/L	248575	Standard
⌈	**Rb**	85	7561.9	2.3				ug/L	15	Standard
| >	**Y**	89	308593.7	2.4				ug/L	267564	Standard
⌊	**Rh**	103	30.0	33.3				ug/L	2	Standard
⌈	**Mo**	98	434.4	6.9	**0.0789**	0.005	6.6	ug/L	5	Standard
|	**Ag**	107	90.7	18.5	**-0.0007**	0.001	190.5	ug/L	44	Standard
|	**Cd**	111	644.2	8.2	**0.0092**	0.008	88.5	mg/L	512	Standard
|	**Cd**	114	1629.8	3.2	**0.0147**	0.002	15.5	ug/L	1247	Standard
| >	**In**	115	861512.0	1.2				ug/L	743274	Standard
|	**Sn**	118	2196.8	2.1	**0.0609**	0.003	4.9	ug/L	816	Standard
|	**Sb**	123	159.4	3.0	**0.0098**	0.000	2.3	ug/L	15	Standard
⌊	**Ba**	135	96825.1	0.9	**16.0014**	0.164	1.0	ug/L	37	Standard
⌈	**Ce**	140	48088.5	1.1				ug/L	44	Standard
⌊>	**Tb**	159	944588.5	1.3				ug/L	826676	Standard
⌈	**Ho**	165	311.3	2.4				ug/L	12	Standard
|	**Tl**	203	422.7	7.9	**0.0198**	0.002	7.6	ug/L	6	Standard
|	**Tl**	205	979.7	2.8	**0.0233**	0.001	2.3	ug/L	11	Standard
|	**Pb**	206	857.0	4.3	**0.0355**	0.003	8.1	ug/L	301	Standard
|	**Pb**	207	675.0	0.6	**0.0318**	0.001	2.8	ug/L	250	Standard
|	**Pb**	208	3210.1	3.2	**0.0328**	0.002	6.1	ug/L	1166	Standard
|	**U**	238	521.0	10.4	**0.0196**	0.002	8.9	ug/L	3	Standard
⌊>	**Bi**	209	476439.0	1.0				ug/L	454659	Standard
⌈	**Na**	23	50769.9	1.1	**8.4927**	0.164	1.9	mg/L	137	Standard
|	**Mg**	24	1475639.4	1.7	**1.7512**	0.027	1.6	mg/L	498	Standard

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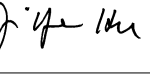
	K	39	16886.1	2.1	**0.9110**	0.005	0.5	mg/L	557	Standard
	Ca	43	1955.1	3.6	**3.1654**	0.085	2.7	mg/L	52	Standard
	Fe	54	1499.1	5.2	**0.0279**	0.012	42.0	mg/L	865	Standard
	Fe	57	25396.3	2.0	**0.0652**	0.003	5.0	mg/L	6003	Standard
>	**Sc-1**	45	442065.7	1.7				mg/L	333080	Standard
	Cl	35	695441.4	0.8				ug/L	40103	Standard
	Kr	83	72.3	7.8				ug/L	67	Standard
	Br	81	40977.9	2.7				ug/L	15294	Standard
	P	31	227661.0	0.9				ug/L	74262	Standard
	S	34	1162574.2	1.5				ug/L	787377	Standard
	Sr	88	1323465.4	3.9				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		112.520	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		115.334	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		115.908	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		114.263	
	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

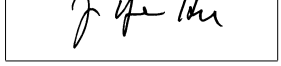
104.790

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1205015017
Sample Date/Time: Tuesday, May 08, 2012 10:55:54
Number of Replicates: 3
Autosampler Position: 225
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	160531.1	1.9	**56304.7700**	1139.351	2.0	ug/L	17857	Standard
|	**Be**	9	31.7	18.2	**-0.0013**	0.001	75.5	ug/L	12	Standard
|	**Al**	27	3996264.9	1.4	**150.3384**	2.428	1.6	ug/L	13328	Standard
⌊>	**Sc**	45	467671.4	0.4				ug/L	333080	Standard
⌈	**Ti**	47	10407.6	3.2	**4.9855**	0.167	3.4	ug/L	113	Standard
|	**V**	51	14564.8	4.0	**0.4705**	0.025	5.3	ug/L	4349	Standard
|	**Cr**	52	22296.4	2.4	**0.4342**	0.031	7.1	ug/L	14000	Standard
|	**Cr**	53	5175.1	12.2	**2.0711**	0.261	12.6	ug/L	319	Standard
|	**Mn**	55	1494999.5	1.8	**57.5809**	0.806	1.4	ug/L	1367	Standard
|	**Co**	59	1316.4	3.5	**0.0625**	0.002	3.4	ug/L	115	Standard
|	**Ni**	60	4062.5	2.7	**0.9847**	0.024	2.4	ug/L	76	Standard
|	**Cu**	65	903.7	6.7	**0.2091**	0.018	8.5	ug/L	135	Standard
|	**Zn**	66	2636.6	1.5	**1.5436**	0.029	1.9	ug/L	185	Standard
|>	**Ge**	72	304150.8	0.4				ug/L	274929	Standard
|	**As**	75	-55.0	86.6	**0.1372**	0.030	21.6	ug/L	-262	Standard
|	**Se**	82	120.1	12.1	**0.4338**	0.076	17.6	ug/L	27	Standard
⌊	**Se-1**	77	254.0	5.0	**1.4984**	0.122	8.1	ug/L	94	Standard
	Ga	71	276568.0	2.5				mg/L	248575	Standard
⌈	**Rb**	85	9047.7	2.6				ug/L	15	Standard
|>	**Y**	89	297768.5	3.7				ug/L	267564	Standard
⌊	**Rh**	103	73.3	27.6				ug/L	2	Standard
⌈	**Mo**	98	837.8	5.8	**0.1491**	0.010	6.7	ug/L	5	Standard
|	**Ag**	107	74.3	15.9	**-0.0019**	0.001	47.7	ug/L	44	Standard
|	**Cd**	111	626.1	4.7	**0.0080**	0.005	66.1	mg/L	512	Standard
|	**Cd**	114	1613.0	1.3	**0.0155**	0.002	15.2	ug/L	1247	Standard
|>	**In**	115	847060.5	1.1				ug/L	743274	Standard
|	**Sn**	118	1356.4	1.8	**0.0203**	0.001	5.4	ug/L	816	Standard
|	**Sb**	123	114.0	15.0	**0.0067**	0.001	19.7	ug/L	15	Standard
⌊	**Ba**	135	55222.5	1.1	**9.2786**	0.074	0.8	ug/L	37	Standard
⌈	**Ce**	140	7427.2	7.2				ug/L	44	Standard
⌊>	**Tb**	159	931791.8	1.4				ug/L	826676	Standard
⌈	**Ho**	165	51.7	21.4				ug/L	12	Standard
|	**Tl**	203	605.7	6.3	**0.0297**	0.002	7.3	ug/L	6	Standard
|	**Tl**	205	1473.4	0.9	**0.0341**	0.000	0.6	ug/L	11	Standard
|	**Pb**	206	648.3	4.7	**0.0221**	0.002	8.0	ug/L	301	Standard
|	**Pb**	207	517.3	4.5	**0.0198**	0.002	8.3	ug/L	250	Standard
|	**Pb**	208	2513.1	4.5	**0.0215**	0.002	7.7	ug/L	1166	Standard
|	**U**	238	2956.0	2.0	**0.0940**	0.001	1.5	ug/L	3	Standard
⌊>	**Bi**	209	473143.1	0.5				ug/L	454659	Standard
⌈	**Na**	23	42168.6	3.0	**6.6614**	0.205	3.1	mg/L	137	Standard
|	**Mg**	24	4723515.5	2.8	**5.3016**	0.150	2.8	mg/L	498	Standard

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	K	39	27722.0	1.4	**1.4385**	0.020	1.4	mg/L	557	Standard
	Ca	43	12727.0	2.2	**19.9468**	0.392	2.0	mg/L	52	Standard
	Fe	54	1598.8	2.4	**0.0293**	0.004	12.7	mg/L	865	Standard
	Fe	57	38163.0	1.1	**0.1057**	0.002	1.8	mg/L	6003	Standard
>	**Sc-1**	45	467671.4	0.4				mg/L	333080	Standard
	Cl	35	2890222.3	0.7				ug/L	40103	Standard
	Kr	83	67.4	7.9				ug/L	67	Standard
	Br	81	50483.2	2.1				ug/L	15294	Standard
	P	31	150725.4	2.3				ug/L	74262	Standard
	S	34	1246066.2	1.4				ug/L	787377	Standard
	Sr	88	2093816.2	1.2				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		110.629	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		111.289	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		113.963	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		112.715	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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Pb	207	
Pb	208	
U	238	
> Bi	209	104.065
Na	23	
Mg	24	
K	39	
Ca	43	
Fe	54	
Fe	57	
> Sc-1	45	
Cl	35	
Kr	83	
Br	81	
P	31	
S	34	
Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1205015017
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Method 6020 - Summary Report

Sample ID: L1205015018
Sample Date/Time: Tuesday, May 08, 2012 10:58:47
Number of Replicates: 3
Autosampler Position: 226
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	37914.0	0.9	**6176.4086**	516.550	8.4	ug/L	17857	Standard
|	**Be**	9	208.3	8.4	**0.0317**	0.004	13.7	ug/L	12	Standard
|	**Al**	27	26239857.9	1.8	**1033.0721**	27.157	2.6	ug/L	13328	Standard
⌊>	**Sc**	45	448946.2	4.1				ug/L	333080	Standard
⌈	**Ti**	47	64223.2	2.9	**30.5367**	0.400	1.3	ug/L	113	Standard
|	**V**	51	67391.5	2.4	**2.9692**	0.025	0.8	ug/L	4349	Standard
|	**Cr**	52	37676.8	2.9	**1.4086**	0.022	1.6	ug/L	14000	Standard
|	**Cr**	53	4172.2	5.4	**1.6134**	0.049	3.0	ug/L	319	Standard
|	**Mn**	55	4466418.8	2.7	**169.5157**	1.929	1.1	ug/L	1367	Standard
|	**Co**	59	16286.8	2.6	**0.8233**	0.007	0.9	ug/L	115	Standard
|	**Ni**	60	4068.5	2.0	**0.9709**	0.012	1.3	ug/L	76	Standard
|	**Cu**	65	3557.4	5.7	**0.9401**	0.031	3.3	ug/L	135	Standard
|	**Zn**	66	7263.1	1.8	**4.4280**	0.077	1.7	ug/L	185	Standard
| >	**Ge**	72	308926.2	3.1				ug/L	274929	Standard
|	**As**	75	20.3	357.0	**0.1833**	0.044	24.2	ug/L	-262	Standard
|	**Se**	82	99.9	13.8	**0.3159**	0.060	19.1	ug/L	27	Standard
⌊	**Se-1**	77	149.0	3.6	**0.4734**	0.080	16.8	ug/L	94	Standard
	Ga	71	281463.5	3.1				mg/L	248575	Standard
⌈	**Rb**	85	16857.7	4.0				ug/L	15	Standard
| >	**Y**	89	313449.4	3.1				ug/L	267564	Standard
⌊	**Rh**	103	61.7	16.9				ug/L	2	Standard
⌈	**Mo**	98	912.2	2.9	**0.1624**	0.003	2.0	ug/L	5	Standard
|	**Ag**	107	106.3	19.8	**0.0007**	0.001	208.7	ug/L	44	Standard
|	**Cd**	111	639.3	5.0	**0.0108**	0.005	44.6	mg/L	512	Standard
|	**Cd**	114	1590.2	1.4	**0.0144**	0.004	27.2	ug/L	1247	Standard
| >	**In**	115	843540.3	2.5				ug/L	743274	Standard
|	**Sn**	118	2603.6	0.2	**0.0839**	0.003	4.0	ug/L	816	Standard
|	**Sb**	123	750.1	3.5	**0.0530**	0.001	1.4	ug/L	15	Standard
⌊	**Ba**	135	147299.7	1.8	**24.8679**	0.342	1.4	ug/L	37	Standard
⌈	**Ce**	140	208582.9	1.8				ug/L	44	Standard
⌊>	**Tb**	159	928632.0	1.6				ug/L	826676	Standard
⌈	**Ho**	165	2014.8	5.0				ug/L	12	Standard
|	**Tl**	203	390.3	9.3	**0.0182**	0.001	7.7	ug/L	6	Standard
|	**Tl**	205	915.0	7.2	**0.0220**	0.001	5.6	ug/L	11	Standard
|	**Pb**	206	6884.6	3.8	**0.4315**	0.009	2.1	ug/L	301	Standard
|	**Pb**	207	5589.0	2.3	**0.4190**	0.003	0.6	ug/L	250	Standard
|	**Pb**	208	26821.4	2.7	**0.4265**	0.005	1.1	ug/L	1166	Standard
|	**U**	238	9032.4	2.4	**0.2790**	0.004	1.4	ug/L	3	Standard
⌊>	**Bi**	209	473820.8	2.6				ug/L	454659	Standard
⌈	**Na**	23	58355.5	1.7	**9.6195**	0.227	2.4	mg/L	137	Standard
|	**Mg**	24	717972.8	3.2	**0.8386**	0.028	3.3	mg/L	498	Standard

Sample ID: L1205015018
Report Date/Time: Tuesday, May 08, 2012 11:01:19
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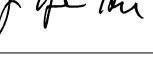
	K	39	8614.1	3.2	**0.4362**	0.033	7.6	mg/L	557	Standard
	Ca	43	3157.0	3.1	**5.0891**	0.115	2.3	mg/L	52	Standard
	Fe	54	7155.2	4.5	**0.7106**	0.042	6.0	mg/L	865	Standard
	Fe	57	216445.7	2.6	**0.7781**	0.041	5.2	mg/L	6003	Standard
>	**Sc-1**	45	448946.2	4.1				mg/L	333080	Standard
	Cl	35	479531.3	4.5				ug/L	40103	Standard
	Kr	83	71.7	3.7				ug/L	67	Standard
	Br	81	42481.1	1.6				ug/L	15294	Standard
	P	31	115719.5	5.8				ug/L	74262	Standard
	S	34	1392826.2	7.1				ug/L	787377	Standard
	Sr	88	2057450.8	4.3				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		112.366	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		117.149	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		113.490	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		112.333	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	104.215
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

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Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, May 08, 2012 11:01:41
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	19574.3	1.0	**-226.2566**	253.600	112.1	ug/L	17857	Standard
|	**Be**	9	235680.8	1.4	**51.4431**	0.177	0.3	ug/L	12	Standard
|	**Al**	27	1100925.8	1.9	**50.4577**	0.262	0.5	ug/L	13328	Standard
⌊>	**Sc**	45	380357.6	1.7				ug/L	333080	Standard
⌈	**Ti**	47	211622.5	2.3	**102.1920**	2.249	2.2	ug/L	113	Standard
|	**V**	51	1068228.2	2.6	**51.2448**	1.341	2.6	ug/L	4349	Standard
|	**Cr**	52	800198.7	1.6	**51.5865**	0.874	1.7	ug/L	14000	Standard
|	**Cr**	53	119297.1	1.7	**50.9429**	1.013	2.0	ug/L	319	Standard
|	**Mn**	55	1370929.5	1.7	**52.7420**	0.965	1.8	ug/L	1367	Standard
|	**Co**	59	972867.2	2.0	**50.2223**	1.051	2.1	ug/L	115	Standard
|	**Ni**	60	204774.1	1.6	**50.6219**	0.866	1.7	ug/L	76	Standard
|	**Cu**	65	181416.0	1.0	**50.9639**	0.571	1.1	ug/L	135	Standard
|	**Zn**	66	79024.9	1.2	**50.2740**	0.456	0.9	ug/L	185	Standard
| >	**Ge**	72	304483.7	0.5				ug/L	274929	Standard
|	**As**	75	79914.4	0.5	**49.8135**	0.474	1.0	ug/L	-262	Standard
|	**Se**	82	9107.1	0.5	**48.7628**	0.319	0.7	ug/L	27	Standard
⌊	**Se-1**	77	5494.0	1.6	**51.5589**	0.584	1.1	ug/L	94	Standard
	Ga	71	276987.6	0.2				mg/L	248575	Standard
⌈	**Rb**	85	1488.4	7.8				ug/L	15	Standard
| >	**Y**	89	296651.0	0.6				ug/L	267564	Standard
⌊	**Rh**	103	48.3	57.0				ug/L	2	Standard
⌈	**Mo**	98	556450.6	1.1	**95.2518**	0.548	0.6	ug/L	5	Standard
|	**Ag**	107	614669.6	0.3	**49.1870**	0.574	1.2	ug/L	44	Standard
|	**Cd**	111	283961.5	1.4	**50.0107**	0.265	0.5	mg/L	512	Standard
|	**Cd**	114	718182.4	1.4	**49.8335**	0.311	0.6	ug/L	1247	Standard
| >	**In**	115	845768.0	0.8				ug/L	743274	Standard
|	**Sn**	118	978886.7	1.3	**49.5201**	0.313	0.6	ug/L	816	Standard
|	**Sb**	123	672263.4	1.2	**48.7502**	0.167	0.3	ug/L	15	Standard
⌊	**Ba**	135	288183.8	1.2	**48.5225**	0.428	0.9	ug/L	37	Standard
⌈	**Ce**	140	1086.7	2.7				ug/L	44	Standard
⌊>	**Tb**	159	933066.2	0.7				ug/L	826676	Standard
⌈	**Ho**	165	26.0	20.0				ug/L	12	Standard
|	**Tl**	203	965094.3	0.7	**50.9289**	0.370	0.7	ug/L	6	Standard
|	**Tl**	205	2420377.1	0.7	**52.0946**	0.571	1.1	ug/L	11	Standard
|	**Pb**	206	773239.8	1.2	**50.7637**	0.760	1.5	ug/L	301	Standard
|	**Pb**	207	642118.2	1.0	**50.5348**	0.449	0.9	ug/L	250	Standard
|	**Pb**	208	3007725.1	0.7	**50.1079**	0.409	0.8	ug/L	1166	Standard
|	**U**	238	1574349.2	0.4	**47.9730**	0.184	0.4	ug/L	3	Standard
⌊>	**Bi**	209	473776.5	0.7				ug/L	454659	Standard
⌈	**Na**	23	26878.8	3.8	**5.2167**	0.225	4.3	mg/L	137	Standard
|	**Mg**	24	3578176.0	2.6	**4.9375**	0.065	1.3	mg/L	498	Standard

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	K	39	77491.0	1.6	**5.0537**	0.013	0.2	mg/L	557	Standard
	Ca	43	2593.6	3.5	**4.9330**	0.261	5.3	mg/L	52	Standard
	Fe	54	36292.8	2.3	**5.0321**	0.103	2.0	mg/L	865	Standard
	Fe	57	1156192.0	1.5	**5.0663**	0.097	1.9	mg/L	6003	Standard
>	**Sc-1**	45	380357.6	1.7				mg/L	333080	Standard
	Cl	35	65866.9	2.1				ug/L	40103	Standard
	Kr	83	71.1	3.9				ug/L	67	Standard
	Br	81	17153.0	4.2				ug/L	15294	Standard
	P	31	91555.0	0.4				ug/L	74262	Standard
	S	34	948865.1	3.4				ug/L	787377	Standard
	Sr	88	923.4	13.4				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	100.915		
>	Sc	45			
	Ti	47	102.192		
	V	51	102.490		
	Cr	52	103.173		
	Cr	53			
	Mn	55	105.484		
	Co	59	100.445		
	Ni	60	101.244		
	Cu	65	101.928		
	Zn	66	100.548		
>	Ge	72		110.750	
	As	75	99.627		
	Se	82	97.526		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		110.871	
	Rh	103			
	Mo	98	95.252		
	Ag	107	98.374		
	Cd	111	100.021		
	Cd	114			
>	In	115		113.789	
	Sn	118	99.040		
	Sb	123	97.500		
	Ba	135	97.045		
	Ce	140			
>	Tb	159		112.870	
	Ho	165			
	Tl	203	101.858		
	Tl	205			
	Pb	206	101.527		

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	Pb	207	101.070	
	Pb	208	100.216	
	U	238	95.946	
>	Bi	209		104.205
	Na	23	104.334	
	Mg	24	98.749	
	K	39	101.074	
	Ca	43	98.660	
	Fe	54	100.643	
	Fe	57	101.325	
>	Sc-1	45		
	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: Tuesday, May 08, 2012 11:04:34
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	18464.6	3.3	**-132.4491**	205.145	154.9	ug/L	17857	Standard
|	**Be**	9	6.7	43.3	**-0.0054**	0.001	13.3	ug/L	12	Standard
|	**Al**	27	24566.2	77.8	**0.5150**	0.935	181.5	ug/L	13328	Standard
⌊>	**Sc**	45	355322.7	2.1				ug/L	333080	Standard
⌈	**Ti**	47	118.7	22.6	**0.0116**	0.013	112.5	ug/L	113	Standard
|	**V**	51	4617.7	2.7	**0.0008**	0.008	1033.1	ug/L	4349	Standard
|	**Cr**	52	14808.2	0.9	**-0.0144**	0.021	144.0	ug/L	14000	Standard
|	**Cr**	53	373.3	10.4	**0.0205**	0.019	92.7	ug/L	319	Standard
|	**Mn**	55	1443.7	3.4	**-0.0049**	0.002	41.5	ug/L	1367	Standard
|	**Co**	59	135.3	15.5	**0.0018**	0.001	70.5	ug/L	115	Standard
|	**Ni**	60	87.3	13.3	**0.0016**	0.003	186.4	ug/L	76	Standard
|	**Cu**	65	149.0	3.7	**-0.0015**	0.001	97.6	ug/L	135	Standard
|	**Zn**	66	200.0	10.7	**-0.0069**	0.014	196.8	ug/L	185	Standard
|>	**Ge**	72	290997.8	1.9				ug/L	274929	Standard
|	**As**	75	-273.7	4.8	**-0.0066**	0.012	181.0	ug/L	-262	Standard
|	**Se**	82	28.5	26.9	**-0.0523**	0.041	79.1	ug/L	27	Standard
⌊	**Se-1**	77	85.7	1.8	**-0.0746**	0.015	20.4	ug/L	94	Standard
	Ga	71	266424.7	1.6				mg/L	248575	Standard
⌈	**Rb**	85	13.3	21.7				ug/L	15	Standard
|>	**Y**	89	282296.3	2.1				ug/L	267564	Standard
⌊	**Rh**	103	0.0					ug/L	2	Standard
⌈	**Mo**	98	96.5	68.0	**0.0234**	0.012	50.8	ug/L	5	Standard
|	**Ag**	107	99.3	62.5	**0.0007**	0.005	801.9	ug/L	44	Standard
|	**Cd**	111	552.2	7.6	**0.0013**	0.008	604.7	mg/L	512	Standard
|	**Cd**	114	1405.0	5.2	**0.0074**	0.005	70.6	ug/L	1247	Standard
|>	**In**	115	795190.9	0.6				ug/L	743274	Standard
|	**Sn**	118	1057.4	6.0	**0.0086**	0.003	37.0	ug/L	816	Standard
|	**Sb**	123	267.5	59.5	**0.0191**	0.012	64.0	ug/L	15	Standard
⌊	**Ba**	135	62.7	35.2	**0.0046**	0.004	85.3	ug/L	37	Standard
⌈	**Ce**	140	47.0	8.5				ug/L	44	Standard
⌊>	**Tb**	159	858458.5	1.9				ug/L	826676	Standard
⌈	**Ho**	165	9.0	38.5				ug/L	12	Standard
|	**Tl**	203	54.0	74.6	**0.0005**	0.002	401.9	ug/L	6	Standard
|	**Tl**	205	120.0	66.1	**0.0050**	0.002	34.5	ug/L	11	Standard
|	**Pb**	206	356.3	14.5	**0.0032**	0.003	102.9	ug/L	301	Standard
|	**Pb**	207	290.3	9.3	**0.0022**	0.002	87.2	ug/L	250	Standard
|	**Pb**	208	1371.7	11.3	**0.0028**	0.002	86.9	ug/L	1166	Standard
|	**U**	238	50.7	85.8	**0.0054**	0.001	24.8	ug/L	3	Standard
⌊>	**Bi**	209	466440.0	1.8				ug/L	454659	Standard
⌈	**Na**	23	120.0	53.2	**0.0011**	0.013	1216.8	mg/L	137	Standard
|	**Mg**	24	645.0	24.5	**-0.0007**	0.000	32.7	mg/L	498	Standard

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	K	39	668.3	16.1	**0.0022**	0.008	352.9	mg/L	557	Standard
	Ca	43	46.7	34.4	**0.0057**	0.033	567.2	mg/L	52	Standard
	Fe	54	960.9	10.5	**-0.0095**	0.016	163.4	mg/L	865	Standard
	Fe	57	6378.0	3.3	**-0.0011**	0.001	70.0	mg/L	6003	Standard
>	**Sc-1**	45	355322.7	2.1				mg/L	333080	Standard
	Cl	35	57146.0	3.2				ug/L	40103	Standard
	Kr	83	64.9	0.3				ug/L	67	Standard
	Br	81	16293.8	1.0				ug/L	15294	Standard
	P	31	86243.5	5.2				ug/L	74262	Standard
	S	34	941418.1	4.7				ug/L	787377	Standard
	Sr	88	386.7	13.3				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		105.845	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		105.506	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		106.985	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		103.845	
	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

102.591

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: L1205015019
Sample Date/Time: Tuesday, May 08, 2012 11:07:27
Number of Replicates: 3
Autosampler Position: 227
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	93388.7	2.0	**30329.5988**	297.137	1.0	ug/L	17857	Standard
|	**Be**	9	55.0	18.2	**0.0033**	0.002	53.1	ug/L	12	Standard
|	**Al**	27	5308855.4	6.7	**209.6980**	17.606	8.4	ug/L	13328	Standard
⌊>	**Sc**	45	446450.5	2.1				ug/L	333080	Standard
⌈	**Ti**	47	18465.6	6.4	**8.9194**	0.763	8.6	ug/L	113	Standard
|	**V**	51	18781.9	3.1	**0.6771**	0.040	5.9	ug/L	4349	Standard
|	**Cr**	52	24782.3	1.5	**0.6033**	0.047	7.8	ug/L	14000	Standard
|	**Cr**	53	1780.1	7.3	**0.6197**	0.077	12.4	ug/L	319	Standard
|	**Mn**	55	132317.7	1.9	**5.0544**	0.054	1.1	ug/L	1367	Standard
|	**Co**	59	1642.4	3.2	**0.0796**	0.004	5.4	ug/L	115	Standard
|	**Ni**	60	2333.8	3.5	**0.5584**	0.009	1.7	ug/L	76	Standard
|	**Cu**	65	3247.3	3.1	**0.8714**	0.015	1.7	ug/L	135	Standard
|	**Zn**	66	5049.8	2.1	**3.0951**	0.086	2.8	ug/L	185	Standard
|>	**Ge**	72	303285.8	2.8				ug/L	274929	Standard
|	**As**	75	-87.9	47.0	**0.1168**	0.025	21.6	ug/L	-262	Standard
|	**Se**	82	106.5	4.1	**0.3632**	0.036	10.0	ug/L	27	Standard
⌊	**Se-1**	77	137.7	13.4	**0.3871**	0.145	37.3	ug/L	94	Standard
	Ga	71	280702.2	2.2				mg/L	248575	Standard
⌈	**Rb**	85	3978.9	6.4				ug/L	15	Standard
|>	**Y**	89	293492.3	1.3				ug/L	267564	Standard
⌊	**Rh**	103	45.0	29.4				ug/L	2	Standard
⌈	**Mo**	98	293.2	7.3	**0.0564**	0.004	6.3	ug/L	5	Standard
|	**Ag**	107	320.7	1.5	**0.0181**	0.001	3.7	ug/L	44	Standard
|	**Cd**	111	628.8	5.7	**0.0095**	0.008	79.3	mg/L	512	Standard
|	**Cd**	114	1620.9	4.3	**0.0170**	0.003	20.4	ug/L	1247	Standard
|>	**In**	115	839632.6	1.3				ug/L	743274	Standard
|	**Sn**	118	2043.8	4.5	**0.0559**	0.004	6.3	ug/L	816	Standard
|	**Sb**	123	219.1	6.0	**0.0145**	0.001	7.9	ug/L	15	Standard
⌊	**Ba**	135	99919.8	1.8	**16.9423**	0.168	1.0	ug/L	37	Standard
⌈	**Ce**	140	47529.8	0.9				ug/L	44	Standard
⌊>	**Tb**	159	920976.8	1.8				ug/L	826676	Standard
⌈	**Ho**	165	341.3	9.0				ug/L	12	Standard
|	**Tl**	203	338.3	8.9	**0.0156**	0.002	10.7	ug/L	6	Standard
|	**Tl**	205	784.0	2.2	**0.0193**	0.000	2.5	ug/L	11	Standard
|	**Pb**	206	1470.4	2.3	**0.0766**	0.002	2.7	ug/L	301	Standard
|	**Pb**	207	1230.1	5.7	**0.0764**	0.005	6.7	ug/L	250	Standard
|	**Pb**	208	5783.8	1.7	**0.0765**	0.001	1.4	ug/L	1166	Standard
|	**U**	238	354.3	3.4	**0.0147**	0.000	2.9	ug/L	3	Standard
⌊>	**Bi**	209	471003.7	0.7				ug/L	454659	Standard
⌈	**Na**	23	49657.9	0.9	**8.2249**	0.165	2.0	mg/L	137	Standard
|	**Mg**	24	829215.2	2.0	**0.9741**	0.037	3.8	mg/L	498	Standard

Sample ID: L1205015019
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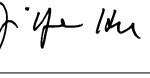
	K	39	10838.9	2.9	**0.5630**	0.026	4.6	mg/L	557	Standard
	Ca	43	2241.8	6.5	**3.6105**	0.304	8.4	mg/L	52	Standard
	Fe	54	2593.4	3.9	**0.1595**	0.019	11.8	mg/L	865	Standard
	Fe	57	59720.9	2.8	**0.1933**	0.010	5.3	mg/L	6003	Standard
>	**Sc-1**	45	446450.5	2.1				mg/L	333080	Standard
	Cl	35	577511.3	2.6				ug/L	40103	Standard
	Kr	83	69.1	13.3				ug/L	67	Standard
	Br	81	36063.7	2.0				ug/L	15294	Standard
	P	31	222612.0	1.6				ug/L	74262	Standard
	S	34	1320996.6	2.1				ug/L	787377	Standard
	Sr	88	1586966.5	2.8				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		110.314	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		109.690	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		112.964	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		111.407	
	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

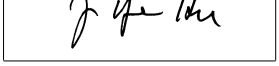
103.595

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1205015019
Report Date/Time: Tuesday, May 08, 2012 11:10:00
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Method 6020 - Summary Report

Sample ID: L1205015021
Sample Date/Time: Tuesday, May 08, 2012 11:10:19
Number of Replicates: 3
Autosampler Position: 228
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	26778.7	2.3	**1953.2240**	392.538	20.1	ug/L	17857	Standard
|	**Be**	9	40.0	50.0	**0.0008**	0.004	468.5	ug/L	12	Standard
|	**Al**	27	1966454.8	6.8	**80.6746**	4.939	6.1	ug/L	13328	Standard
⌊>	**Sc**	45	426991.6	0.9				ug/L	333080	Standard
⌈	**Ti**	47	7316.1	6.2	**3.3936**	0.237	7.0	ug/L	113	Standard
|	**V**	51	19298.8	3.4	**0.6731**	0.027	4.0	ug/L	4349	Standard
|	**Cr**	52	23119.0	1.1	**0.4464**	0.008	1.7	ug/L	14000	Standard
|	**Cr**	53	1972.6	11.7	**0.6752**	0.093	13.7	ug/L	319	Standard
|	**Mn**	55	2329886.9	1.8	**87.2983**	1.466	1.7	ug/L	1367	Standard
|	**Co**	59	8402.3	1.0	**0.4167**	0.004	1.0	ug/L	115	Standard
|	**Ni**	60	3220.7	3.3	**0.7544**	0.025	3.3	ug/L	76	Standard
|	**Cu**	65	2100.8	3.8	**0.5296**	0.018	3.4	ug/L	135	Standard
|	**Zn**	66	5297.9	0.8	**3.1501**	0.043	1.4	ug/L	185	Standard
| >	**Ge**	72	312773.4	0.7				ug/L	274929	Standard
|	**As**	75	78.5	47.2	**0.2188**	0.022	10.1	ug/L	-262	Standard
|	**Se**	82	101.3	0.3	**0.3179**	0.005	1.6	ug/L	27	Standard
⌊	**Se-1**	77	142.7	3.3	**0.3959**	0.045	11.4	ug/L	94	Standard
	Ga	71	284006.2	1.0				mg/L	248575	Standard
⌈	**Rb**	85	16739.2	1.4				ug/L	15	Standard
| >	**Y**	89	304528.0	2.7				ug/L	267564	Standard
⌊	**Rh**	103	43.3	58.1				ug/L	2	Standard
⌈	**Mo**	98	616.8	6.3	**0.1102**	0.005	4.8	ug/L	5	Standard
|	**Ag**	107	94.0	5.9	**-0.0004**	0.001	151.4	ug/L	44	Standard
|	**Cd**	111	657.8	3.6	**0.0124**	0.005	38.7	mg/L	512	Standard
|	**Cd**	114	1643.8	3.3	**0.0164**	0.002	14.8	ug/L	1247	Standard
| >	**In**	115	855608.4	1.3				ug/L	743274	Standard
|	**Sn**	118	1339.7	0.6	**0.0188**	0.001	6.6	ug/L	816	Standard
|	**Sb**	123	888.2	1.8	**0.0622**	0.002	2.7	ug/L	15	Standard
⌊	**Ba**	135	169438.2	0.9	**28.1991**	0.145	0.5	ug/L	37	Standard
⌈	**Ce**	140	20198.8	1.4				ug/L	44	Standard
⌊>	**Tb**	159	928772.8	0.7				ug/L	826676	Standard
⌈	**Ho**	165	343.3	2.6				ug/L	12	Standard
|	**Tl**	203	391.0	2.4	**0.0181**	0.000	2.5	ug/L	6	Standard
|	**Tl**	205	923.4	2.8	**0.0220**	0.000	2.1	ug/L	11	Standard
|	**Pb**	206	1889.5	5.0	**0.1022**	0.006	6.0	ug/L	301	Standard
|	**Pb**	207	1550.1	2.6	**0.0997**	0.003	3.3	ug/L	250	Standard
|	**Pb**	208	7289.4	1.7	**0.0997**	0.002	1.5	ug/L	1166	Standard
|	**U**	238	556.7	1.8	**0.0206**	0.000	2.0	ug/L	3	Standard
⌊>	**Bi**	209	478845.1	0.6				ug/L	454659	Standard
⌈	**Na**	23	30826.3	1.5	**5.3295**	0.129	2.4	mg/L	137	Standard
|	**Mg**	24	1477715.2	0.4	**1.8156**	0.019	1.0	mg/L	498	Standard

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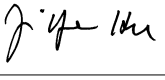
Approved: May 09, 2012

	K	39	15756.5	2.6	**0.8788**	0.031	3.6	mg/L	557	Standard
	Ca	43	4105.6	2.3	**6.9902**	0.213	3.1	mg/L	52	Standard
	Fe	54	6455.4	0.6	**0.6655**	0.008	1.2	mg/L	865	Standard
	Fe	57	189466.0	2.2	**0.7129**	0.018	2.5	mg/L	6003	Standard
>	**Sc-1**	45	426991.6	0.9				mg/L	333080	Standard
	Cl	35	722506.9	1.2				ug/L	40103	Standard
	Kr	83	66.3	0.5				ug/L	67	Standard
	Br	81	46999.5	3.0				ug/L	15294	Standard
	P	31	112617.9	1.3				ug/L	74262	Standard
	S	34	974197.6	5.7				ug/L	787377	Standard
	Sr	88	1952134.7	1.0				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		113.765	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		113.815	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		115.113	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		112.350	
	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

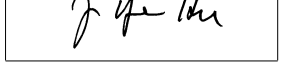
105.320

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1205015021
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Method 6020 - Summary Report

Sample ID: L1205015022
Sample Date/Time: Tuesday, May 08, 2012 11:13:11
Number of Replicates: 3
Autosampler Position: 229
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	38482.1	1.0	**6595.8058**	419.284	6.4	ug/L	17857	Standard
|	**Be**	9	36.7	34.3	**-0.0001**	0.002	2014.2	ug/L	12	Standard
|	**Al**	27	1939919.9	2.5	**76.5160**	1.117	1.5	ug/L	13328	Standard
⌊>	**Sc**	45	444028.4	1.6				ug/L	333080	Standard
⌈	**Ti**	47	10651.5	15.1	**5.1347**	0.836	16.3	ug/L	113	Standard
|	**V**	51	19172.8	3.0	**0.6973**	0.018	2.6	ug/L	4349	Standard
|	**Cr**	52	24882.1	2.0	**0.6125**	0.021	3.4	ug/L	14000	Standard
|	**Cr**	53	2579.4	15.5	**0.9630**	0.159	16.5	ug/L	319	Standard
|	**Mn**	55	1943030.6	0.7	**75.2381**	1.439	1.9	ug/L	1367	Standard
|	**Co**	59	5755.8	0.3	**0.2934**	0.004	1.5	ug/L	115	Standard
|	**Ni**	60	5349.3	1.8	**1.3101**	0.037	2.9	ug/L	76	Standard
|	**Cu**	65	2444.2	1.2	**0.6461**	0.009	1.5	ug/L	135	Standard
|	**Zn**	66	3828.2	0.8	**2.3167**	0.021	0.9	ug/L	185	Standard
| >	**Ge**	72	302667.2	1.3				ug/L	274929	Standard
|	**As**	75	434.4	15.7	**0.4428**	0.041	9.3	ug/L	-262	Standard
|	**Se**	82	254.0	9.6	**1.1618**	0.135	11.6	ug/L	27	Standard
⌊	**Se-1**	77	191.3	1.7	**0.9084**	0.055	6.0	ug/L	94	Standard
	Ga	71	275967.9	1.6				mg/L	248575	Standard
⌈	**Rb**	85	16353.8	2.0				ug/L	15	Standard
| >	**Y**	89	292246.8	1.2				ug/L	267564	Standard
⌊	**Rh**	103	156.7	9.8				ug/L	2	Standard
⌈	**Mo**	98	656.4	5.6	**0.1202**	0.006	4.7	ug/L	5	Standard
|	**Ag**	107	90.0	2.9	**-0.0005**	0.000	35.4	ug/L	44	Standard
|	**Cd**	111	600.8	3.5	**0.0055**	0.003	55.0	mg/L	512	Standard
|	**Cd**	114	1579.8	3.6	**0.0153**	0.005	32.0	ug/L	1247	Standard
| >	**In**	115	830978.2	0.8				ug/L	743274	Standard
|	**Sn**	118	1960.5	2.6	**0.0527**	0.003	6.3	ug/L	816	Standard
|	**Sb**	123	591.5	2.6	**0.0421**	0.001	2.7	ug/L	15	Standard
⌊	**Ba**	135	203385.0	0.5	**34.8534**	0.275	0.8	ug/L	37	Standard
⌈	**Ce**	140	17613.6	0.7				ug/L	44	Standard
⌊>	**Tb**	159	923969.7	0.3				ug/L	826676	Standard
⌈	**Ho**	165	304.3	7.5				ug/L	12	Standard
|	**Tl**	203	581.7	4.7	**0.0290**	0.002	5.3	ug/L	6	Standard
|	**Tl**	205	1378.4	0.8	**0.0327**	0.000	1.2	ug/L	11	Standard
|	**Pb**	206	1856.8	2.9	**0.1041**	0.004	4.2	ug/L	301	Standard
|	**Pb**	207	1574.1	2.0	**0.1056**	0.003	2.5	ug/L	250	Standard
|	**Pb**	208	7255.0	0.6	**0.1031**	0.001	1.3	ug/L	1166	Standard
|	**U**	238	10958.6	2.2	**0.3450**	0.008	2.4	ug/L	3	Standard
⌊>	**Bi**	209	463722.8	0.6				ug/L	454659	Standard
⌈	**Na**	23	43804.9	0.9	**7.2910**	0.049	0.7	mg/L	137	Standard
|	**Mg**	24	4286563.8	1.6	**5.0675**	0.068	1.3	mg/L	498	Standard

Sample ID: L1205015022
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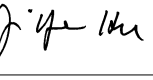
Approved: May 09, 2012

	K	39	16225.4	3.8	**0.8694**	0.023	2.7	mg/L	557	Standard
	Ca	43	10773.8	2.6	**17.7737**	0.222	1.2	mg/L	52	Standard
	Fe	54	3461.8	4.0	**0.2673**	0.016	5.9	mg/L	865	Standard
	Fe	57	93732.4	2.0	**0.3228**	0.003	0.9	mg/L	6003	Standard
>	**Sc-1**	45	444028.4	1.6				mg/L	333080	Standard
	Cl	35	1543970.5	0.6				ug/L	40103	Standard
	Kr	83	74.1	6.5				ug/L	67	Standard
	Br	81	116657.5	1.9				ug/L	15294	Standard
	P	31	122946.2	2.9				ug/L	74262	Standard
	S	34	1205427.9	0.5				ug/L	787377	Standard
	Sr	88	5502435.3	1.7				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		110.089	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		109.225	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		111.800	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		111.769	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	101.994
	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

Sample ID: L1205015022
Report Date/Time: Tuesday, May 08, 2012 11:15:45
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Method 6020 - Summary Report

Sample ID: L1205015023
Sample Date/Time: Tuesday, May 08, 2012 11:16:04
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	35032.1	1.7	**5483.3643**	269.097	4.9	ug/L	17857	Standard
|	**Be**	9	10.0	50.0	**-0.0050**	0.001	19.3	ug/L	12	Standard
|	**Al**	27	778813.7	7.3	**31.0798**	1.664	5.4	ug/L	13328	Standard
⌊>	**Sc**	45	432847.6	2.2				ug/L	333080	Standard
⌈	**Ti**	47	4906.5	3.0	**2.3734**	0.110	4.6	ug/L	113	Standard
|	**V**	51	13605.3	3.7	**0.4373**	0.018	4.0	ug/L	4349	Standard
|	**Cr**	52	23960.3	4.1	**0.5750**	0.041	7.2	ug/L	14000	Standard
|	**Cr**	53	2020.1	5.6	**0.7360**	0.033	4.5	ug/L	319	Standard
|	**Mn**	55	7320798.1	1.7	**287.8767**	2.339	0.8	ug/L	1367	Standard
|	**Co**	59	10218.1	2.0	**0.5331**	0.005	1.0	ug/L	115	Standard
|	**Ni**	60	6592.4	2.4	**1.6436**	0.008	0.5	ug/L	76	Standard
|	**Cu**	65	2162.8	2.9	**0.5757**	0.017	3.0	ug/L	135	Standard
|	**Zn**	66	3684.8	0.8	**2.2604**	0.032	1.4	ug/L	185	Standard
|>	**Ge**	72	298197.6	2.1				ug/L	274929	Standard
|	**As**	75	407.1	7.8	**0.4296**	0.017	4.0	ug/L	-262	Standard
|	**Se**	82	245.7	5.3	**1.1362**	0.057	5.0	ug/L	27	Standard
⌊	**Se-1**	77	174.0	4.9	**0.7669**	0.091	11.9	ug/L	94	Standard
	Ga	71	268534.1	1.4				mg/L	248575	Standard
⌈	**Rb**	85	14393.5	3.4				ug/L	15	Standard
|>	**Y**	89	293436.6	2.0				ug/L	267564	Standard
⌊	**Rh**	103	166.7	24.1				ug/L	2	Standard
⌈	**Mo**	98	585.8	2.0	**0.1094**	0.003	3.0	ug/L	5	Standard
|	**Ag**	107	57.7	12.8	**-0.0030**	0.001	19.6	ug/L	44	Standard
|	**Cd**	111	602.9	1.6	**0.0075**	0.003	40.8	mg/L	512	Standard
|	**Cd**	114	1531.4	3.1	**0.0134**	0.002	15.3	ug/L	1247	Standard
|>	**In**	115	819156.4	1.2				ug/L	743274	Standard
|	**Sn**	118	1952.8	3.0	**0.0538**	0.004	7.7	ug/L	816	Standard
|	**Sb**	123	526.3	8.8	**0.0379**	0.003	9.1	ug/L	15	Standard
⌊	**Ba**	135	226035.3	0.8	**39.2954**	0.293	0.7	ug/L	37	Standard
⌈	**Ce**	140	9628.1	1.4				ug/L	44	Standard
⌊>	**Tb**	159	910421.8	0.9				ug/L	826676	Standard
⌈	**Ho**	165	211.3	8.8				ug/L	12	Standard
|	**Tl**	203	599.0	5.3	**0.0305**	0.002	7.2	ug/L	6	Standard
|	**Tl**	205	1383.4	3.9	**0.0333**	0.002	5.2	ug/L	11	Standard
|	**Pb**	206	1031.4	3.1	**0.0498**	0.003	7.0	ug/L	301	Standard
|	**Pb**	207	831.7	5.1	**0.0469**	0.004	8.1	ug/L	250	Standard
|	**Pb**	208	4006.2	0.8	**0.0488**	0.001	1.6	ug/L	1166	Standard
|	**U**	238	13103.0	2.5	**0.4179**	0.003	0.6	ug/L	3	Standard
⌊>	**Bi**	209	456763.5	1.9				ug/L	454659	Standard
⌈	**Na**	23	45155.5	2.2	**7.7116**	0.145	1.9	mg/L	137	Standard
|	**Mg**	24	4677929.6	1.6	**5.6734**	0.036	0.6	mg/L	498	Standard

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	K	39	14914.0	1.9	**0.8175**	0.017	2.1	mg/L	557	Standard
	Ca	43	11884.7	2.3	**20.1307**	0.523	2.6	mg/L	52	Standard
	Fe	54	2602.3	4.9	**0.1702**	0.010	5.7	mg/L	865	Standard
	Fe	57	70924.0	1.4	**0.2436**	0.006	2.6	mg/L	6003	Standard
>	**Sc-1**	45	432847.6	2.2				mg/L	333080	Standard
	Cl	35	1747279.7	1.4				ug/L	40103	Standard
	Kr	83	68.9	11.3				ug/L	67	Standard
	Br	81	118038.9	1.5				ug/L	15294	Standard
	P	31	108720.6	3.0				ug/L	74262	Standard
	S	34	1219655.2	1.8				ug/L	787377	Standard
	Sr	88	6141026.4	2.4				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		108.464	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		109.670	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		110.209	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		110.130	
	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

100.463

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: L1205015024
Sample Date/Time: Tuesday, May 08, 2012 11:18:57
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	23186.1	0.8	**1089.8587**	278.787	25.6	ug/L	17857	Standard
|	**Be**	9	50.0	52.9	**0.0036**	0.006	164.8	ug/L	12	Standard
|	**Al**	27	5471565.5	2.2	**242.2760**	2.783	1.1	ug/L	13328	Standard
⌊>	**Sc**	45	398096.7	3.0				ug/L	333080	Standard
⌈	**Ti**	47	23738.6	3.3	**11.8302**	0.421	3.6	ug/L	113	Standard
|	**V**	51	55581.2	1.3	**2.5419**	0.047	1.9	ug/L	4349	Standard
|	**Cr**	52	25836.0	1.6	**0.7261**	0.035	4.8	ug/L	14000	Standard
|	**Cr**	53	1701.8	7.2	**0.6080**	0.057	9.3	ug/L	319	Standard
|	**Mn**	55	5927887.9	1.3	**236.4116**	3.866	1.6	ug/L	1367	Standard
|	**Co**	59	11554.7	0.9	**0.6123**	0.008	1.3	ug/L	115	Standard
|	**Ni**	60	6372.3	2.4	**1.6112**	0.043	2.7	ug/L	76	Standard
|	**Cu**	65	3962.9	1.4	**1.1087**	0.016	1.5	ug/L	135	Standard
|	**Zn**	66	5140.2	1.9	**3.2557**	0.051	1.6	ug/L	185	Standard
| >	**Ge**	72	294001.4	0.4				ug/L	274929	Standard
|	**As**	75	2257.9	1.7	**1.6240**	0.024	1.5	ug/L	-262	Standard
|	**Se**	82	313.2	1.7	**1.5318**	0.030	2.0	ug/L	27	Standard
⌊	**Se-1**	77	148.3	14.1	**0.5368**	0.210	39.1	ug/L	94	Standard
	Ga	71	268151.9	0.9				mg/L	248575	Standard
⌈	**Rb**	85	8986.0	3.6				ug/L	15	Standard
| >	**Y**	89	296253.4	0.8				ug/L	267564	Standard
⌊	**Rh**	103	85.0	5.9				ug/L	2	Standard
⌈	**Mo**	98	3037.5	1.5	**0.5435**	0.008	1.4	ug/L	5	Standard
|	**Ag**	107	151.0	7.0	**0.0047**	0.001	20.7	ug/L	44	Standard
|	**Cd**	111	619.2	4.3	**0.0106**	0.004	36.6	mg/L	512	Standard
|	**Cd**	114	1573.3	1.2	**0.0166**	0.000	2.9	ug/L	1247	Standard
| >	**In**	115	817992.4	0.9				ug/L	743274	Standard
|	**Sn**	118	2752.2	0.7	**0.0958**	0.002	1.6	ug/L	816	Standard
|	**Sb**	123	2187.0	0.8	**0.1625**	0.003	1.7	ug/L	15	Standard
⌊	**Ba**	135	138806.0	1.3	**24.1617**	0.270	1.1	ug/L	37	Standard
⌈	**Ce**	140	60058.8	1.3				ug/L	44	Standard
⌊>	**Tb**	159	897792.6	2.2				ug/L	826676	Standard
⌈	**Ho**	165	805.0	3.8				ug/L	12	Standard
|	**Tl**	203	275.3	10.2	**0.0127**	0.002	13.0	ug/L	6	Standard
|	**Tl**	205	654.7	1.8	**0.0169**	0.000	2.1	ug/L	11	Standard
|	**Pb**	206	8253.6	1.9	**0.5392**	0.010	1.8	ug/L	301	Standard
|	**Pb**	207	6771.2	1.9	**0.5295**	0.005	1.0	ug/L	250	Standard
|	**Pb**	208	31820.4	1.2	**0.5272**	0.004	0.7	ug/L	1166	Standard
|	**U**	238	3036.6	1.1	**0.0994**	0.000	0.2	ug/L	3	Standard
⌊>	**Bi**	209	458797.9	1.0				ug/L	454659	Standard
⌈	**Na**	23	35702.0	1.5	**6.6275**	0.112	1.7	mg/L	137	Standard
|	**Mg**	24	2472301.1	16.8	**3.2688**	0.613	18.8	mg/L	498	Standard

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	K	39	31980.4	1.3	**1.9672**	0.086	4.4	mg/L	557	Standard
	Ca	43	8687.5	2.0	**15.9838**	0.389	2.4	mg/L	52	Standard
	Fe	54	6339.0	3.9	**0.7092**	0.020	2.8	mg/L	865	Standard
	Fe	57	191162.0	1.9	**0.7742**	0.013	1.7	mg/L	6003	Standard
>	**Sc-1**	45	398096.7	3.0				mg/L	333080	Standard
	Cl	35	448174.2	2.7				ug/L	40103	Standard
	Kr	83	67.4	14.2				ug/L	67	Standard
	Br	81	143965.7	0.4				ug/L	15294	Standard
	P	31	590475.6	0.8				ug/L	74262	Standard
	S	34	1119200.3	1.7				ug/L	787377	Standard
	Sr	88	2698164.8	1.9				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		106.937	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		110.722	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		110.053	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		108.603	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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Pb	207	
Pb	208	
U	238	
> Bi	209	100.910
Na	23	
Mg	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: L1205015025
Sample Date/Time: Tuesday, May 08, 2012 11:21:49
Number of Replicates: 3
Autosampler Position: 232
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	86058.7	1.4	**18473.5588**	1516.031	8.2	ug/L	17857	Standard
|	**Be**	9	761.7	3.6	**0.1017**	0.004	3.9	ug/L	12	Standard
|	**Al**	27	65436689.1	1.7	**1987.3174**	76.604	3.9	ug/L	13328	Standard
⌊>	**Sc**	45	582336.5	4.1				ug/L	333080	Standard
⌈	**Ti**	47	279821.6	1.4	**131.9189**	1.861	1.4	ug/L	113	Standard
|	**V**	51	960539.6	1.9	**44.9518**	0.862	1.9	ug/L	4349	Standard
|	**Cr**	52	125340.1	2.0	**7.0120**	0.158	2.2	ug/L	14000	Standard
|	**Cr**	53	16665.0	1.9	**6.8192**	0.089	1.3	ug/L	319	Standard
|	**Mn**	55	39759024.0	1.6	**1494.7932**	20.114	1.3	ug/L	1367	Standard
|	**Co**	59	215380.7	0.7	**10.8490**	0.088	0.8	ug/L	115	Standard
|	**Ni**	60	25183.6	0.8	**6.0588**	0.073	1.2	ug/L	76	Standard
|	**Cu**	65	26473.1	2.4	**7.2203**	0.151	2.1	ug/L	135	Standard
|	**Zn**	66	26550.9	1.4	**16.3946**	0.245	1.5	ug/L	185	Standard
| >	**Ge**	72	311922.4	0.6				ug/L	274929	Standard
|	**As**	75	1966.5	0.7	**1.3639**	0.010	0.7	ug/L	-262	Standard
|	**Se**	82	117.9	2.7	**0.4064**	0.018	4.4	ug/L	27	Standard
⌊	**Se-1**	77	175.0	15.7	**0.7003**	0.249	35.6	ug/L	94	Standard
	Ga	71	283090.1	1.3				mg/L	248575	Standard
⌈	**Rb**	85	65775.8	1.6				ug/L	15	Standard
| >	**Y**	89	446840.4	1.1				ug/L	267564	Standard
⌊	**Rh**	103	66.7	38.5				ug/L	2	Standard
⌈	**Mo**	98	521.5	3.6	**0.0972**	0.004	3.7	ug/L	5	Standard
|	**Ag**	107	307.0	9.3	**0.0174**	0.002	14.3	ug/L	44	Standard
|	**Cd**	111	706.7	3.5	**0.0252**	0.004	15.0	mg/L	512	Standard
|	**Cd**	114	1818.8	2.0	**0.0329**	0.003	9.7	ug/L	1247	Standard
| >	**In**	115	826473.0	0.6				ug/L	743274	Standard
|	**Sn**	118	1900.8	3.4	**0.0502**	0.004	7.8	ug/L	816	Standard
|	**Sb**	123	959.4	1.3	**0.0697**	0.001	1.4	ug/L	15	Standard
⌊	**Ba**	135	1297966.3	1.8	**223.6739**	4.192	1.9	ug/L	37	Standard
⌈	**Ce**	140	1473578.9	2.9				ug/L	44	Standard
⌊>	**Tb**	159	965185.7	1.4				ug/L	826676	Standard
⌈	**Ho**	165	19090.0	2.3				ug/L	12	Standard
|	**Tl**	203	643.3	3.4	**0.0324**	0.001	3.5	ug/L	6	Standard
|	**Tl**	205	1523.1	2.0	**0.0359**	0.001	1.7	ug/L	11	Standard
|	**Pb**	206	52546.0	2.7	**3.5099**	0.110	3.1	ug/L	301	Standard
|	**Pb**	207	42450.4	2.0	**3.3981**	0.079	2.3	ug/L	250	Standard
|	**Pb**	208	200137.6	1.7	**3.3918**	0.071	2.1	ug/L	1166	Standard
|	**U**	238	4415.3	3.8	**0.1415**	0.006	4.2	ug/L	3	Standard
⌊>	**Bi**	209	463153.8	0.6				ug/L	454659	Standard
⌈	**Na**	23	35565.0	2.1	**4.5071**	0.121	2.7	mg/L	137	Standard
|	**Mg**	24	2980285.4	2.9	**2.6887**	0.139	5.2	mg/L	498	Standard

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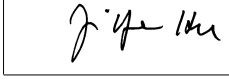
	K	39	27874.0	2.3	**1.1546**	0.065	5.6	mg/L	557	Standard
	Ca	43	3460.4	4.9	**4.2866**	0.206	4.8	mg/L	52	Standard
	Fe	54	248861.4	2.9	**23.0982**	0.886	3.8	mg/L	865	Standard
	Fe	57	7463809.7	3.1	**21.4765**	0.921	4.3	mg/L	6003	Standard
>	**Sc-1**	45	582336.5	4.1				mg/L	333080	Standard
	Cl	35	282480.3	0.6				ug/L	40103	Standard
	Kr	83	82.8	4.7				ug/L	67	Standard
	Br	81	35966.0	3.9				ug/L	15294	Standard
	P	31	1869747.1	1.2				ug/L	74262	Standard
	S	34	920813.1	6.8				ug/L	787377	Standard
	Sr	88	2222405.7	1.0				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		113.456	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		167.003	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		111.194	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		116.755	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1205015025
Report Date/Time: Tuesday, May 08, 2012 11:24:22
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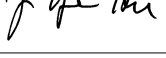


	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	101.868
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	
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 09, 2012



Method 6020 - Summary Report

Sample ID: L1205015026
Sample Date/Time: Tuesday, May 08, 2012 11:24:41
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	28662.1	3.5	**3045.8600**	694.317	22.8	ug/L	17857	Standard
|	**Be**	9	215.0	10.7	**0.0357**	0.006	16.4	ug/L	12	Standard
|	**Al**	27	9797403.1	3.2	**412.2091**	15.913	3.9	ug/L	13328	Standard
⌊>	**Sc**	45	419578.5	3.0				ug/L	333080	Standard
⌈	**Ti**	47	39456.3	2.1	**18.8559**	0.458	2.4	ug/L	113	Standard
|	**V**	51	51651.4	3.7	**2.2357**	0.072	3.2	ug/L	4349	Standard
|	**Cr**	52	28042.9	2.1	**0.7951**	0.035	4.4	ug/L	14000	Standard
|	**Cr**	53	2701.1	5.7	**0.9996**	0.048	4.8	ug/L	319	Standard
|	**Mn**	55	8081009.0	2.2	**308.5909**	6.453	2.1	ug/L	1367	Standard
|	**Co**	59	27891.7	2.9	**1.4223**	0.035	2.4	ug/L	115	Standard
|	**Ni**	60	7391.5	3.3	**1.7914**	0.044	2.5	ug/L	76	Standard
|	**Cu**	65	6538.1	1.9	**1.7775**	0.024	1.4	ug/L	135	Standard
|	**Zn**	66	27824.9	3.0	**17.4594**	0.332	1.9	ug/L	185	Standard
| >	**Ge**	72	307077.2	1.7				ug/L	274929	Standard
|	**As**	75	561.7	6.8	**0.5176**	0.025	4.9	ug/L	-262	Standard
|	**Se**	82	117.2	4.0	**0.4128**	0.034	8.2	ug/L	27	Standard
⌊	**Se-1**	77	137.0	13.3	**0.3682**	0.188	51.0	ug/L	94	Standard
	Ga	71	279255.5	3.0				mg/L	248575	Standard
⌈	**Rb**	85	43942.0	2.7				ug/L	15	Standard
| >	**Y**	89	317589.2	3.0				ug/L	267564	Standard
⌊	**Rh**	103	63.3	12.1				ug/L	2	Standard
⌈	**Mo**	98	869.7	4.3	**0.1528**	0.006	3.9	ug/L	5	Standard
|	**Ag**	107	120.0	5.0	**0.0017**	0.001	33.0	ug/L	44	Standard
|	**Cd**	111	760.4	4.0	**0.0301**	0.004	13.5	mg/L	512	Standard
|	**Cd**	114	2035.1	1.6	**0.0431**	0.001	3.1	ug/L	1247	Standard
| >	**In**	115	856832.8	1.1				ug/L	743274	Standard
|	**Sn**	118	3941.5	2.6	**0.1487**	0.003	2.1	ug/L	816	Standard
|	**Sb**	123	1625.3	3.8	**0.1148**	0.005	3.9	ug/L	15	Standard
⌊	**Ba**	135	211247.7	1.5	**35.1126**	0.822	2.3	ug/L	37	Standard
⌈	**Ce**	140	257393.8	2.5				ug/L	44	Standard
⌊>	**Tb**	159	950308.4	1.1				ug/L	826676	Standard
⌈	**Ho**	165	2289.5	3.8				ug/L	12	Standard
|	**Tl**	203	334.7	3.8	**0.0155**	0.001	4.2	ug/L	6	Standard
|	**Tl**	205	803.4	1.8	**0.0198**	0.000	2.2	ug/L	11	Standard
|	**Pb**	206	20758.2	1.7	**1.3552**	0.031	2.3	ug/L	301	Standard
|	**Pb**	207	17405.7	1.8	**1.3618**	0.025	1.9	ug/L	250	Standard
|	**Pb**	208	80621.6	1.6	**1.3354**	0.027	2.0	ug/L	1166	Standard
|	**U**	238	851.4	4.3	**0.0300**	0.001	3.6	ug/L	3	Standard
⌊>	**Bi**	209	469538.4	0.9				ug/L	454659	Standard
⌈	**Na**	23	33209.7	1.7	**5.8491**	0.247	4.2	mg/L	137	Standard
|	**Mg**	24	1090506.4	1.3	**1.3639**	0.048	3.5	mg/L	498	Standard

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	K	39	23680.2	3.1	**1.3677**	0.029	2.1	mg/L	557	Standard
	Ca	43	7628.6	1.2	**13.3016**	0.239	1.8	mg/L	52	Standard
	Fe	54	31936.0	1.4	**3.9839**	0.096	2.4	mg/L	865	Standard
	Fe	57	1001716.4	3.6	**3.9746**	0.200	5.0	mg/L	6003	Standard
>	**Sc-1**	45	419578.5	3.0				mg/L	333080	Standard
	Cl	35	488722.7	0.4				ug/L	40103	Standard
	Kr	83	70.2	7.4				ug/L	67	Standard
	Br	81	45912.0	2.6				ug/L	15294	Standard
	P	31	329595.7	2.8				ug/L	74262	Standard
	S	34	2908127.0	2.1				ug/L	787377	Standard
	Sr	88	2406060.2	3.1				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		111.693	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		118.696	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		115.278	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		114.955	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	103.273
	Na	23	
	Mg	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 09, 2012

Method 6020 - Summary Report

Sample ID: L1205008513
Sample Date/Time: Tuesday, May 08, 2012 11:27:34
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	24873.7	1.2	**63.8123**	207.855	325.7	ug/L	17857	Standard
|	**Be**	9	21.7	53.3	**-0.0031**	0.002	71.6	ug/L	12	Standard
|	**Al**	27	720792.2	2.9	**26.4218**	0.063	0.2	ug/L	13328	Standard
⌊>	**Sc**	45	469740.1	3.1				ug/L	333080	Standard
⌈	**Ti**	47	8283.6	2.5	**4.0348**	0.044	1.1	ug/L	113	Standard
|	**V**	51	82999.4	3.1	**3.8498**	0.151	3.9	ug/L	4349	Standard
|	**Cr**	52	19471.8	1.3	**0.2733**	0.033	12.1	ug/L	14000	Standard
|	**Cr**	53	1164.2	4.7	**0.3617**	0.019	5.4	ug/L	319	Standard
|	**Mn**	55	1388781.3	3.3	**54.5243**	1.933	3.5	ug/L	1367	Standard
|	**Co**	59	4068.2	2.6	**0.2088**	0.005	2.6	ug/L	115	Standard
|	**Ni**	60	7538.5	4.7	**1.8808**	0.066	3.5	ug/L	76	Standard
|	**Cu**	65	1651.4	3.5	**0.4284**	0.012	2.9	ug/L	135	Standard
|	**Zn**	66	3443.7	2.9	**2.1017**	0.073	3.5	ug/L	185	Standard
| >	**Ge**	72	298408.4	1.6				ug/L	274929	Standard
|	**As**	75	-100.3	49.5	**0.1081**	0.031	28.5	ug/L	-262	Standard
|	**Se**	82	87.3	10.2	**0.2669**	0.056	21.0	ug/L	27	Standard
⌊	**Se-1**	77	136.0	11.6	**0.3947**	0.153	38.6	ug/L	94	Standard
	Ga	71	270417.2	0.8				mg/L	248575	Standard
⌈	**Rb**	85	2655.2	5.5				ug/L	15	Standard
| >	**Y**	89	299758.0	0.8				ug/L	267564	Standard
⌊	**Rh**	103	121.7	29.7				ug/L	2	Standard
⌈	**Mo**	98	902.9	5.5	**0.1634**	0.009	5.6	ug/L	5	Standard
|	**Ag**	107	95.7	7.8	**0.0000**	0.001	5566.9	ug/L	44	Standard
|	**Cd**	111	755.6	7.0	**0.0335**	0.009	26.2	mg/L	512	Standard
|	**Cd**	114	1895.9	3.5	**0.0378**	0.005	14.3	ug/L	1247	Standard
| >	**In**	115	830092.7	1.0				ug/L	743274	Standard
|	**Sn**	118	1575.1	1.7	**0.0330**	0.002	5.5	ug/L	816	Standard
|	**Sb**	123	274.8	3.0	**0.0188**	0.001	3.4	ug/L	15	Standard
⌊	**Ba**	135	218869.6	2.1	**37.5506**	0.991	2.6	ug/L	37	Standard
⌈	**Ce**	140	4189.6	1.4				ug/L	44	Standard
⌊>	**Tb**	159	927531.7	1.7				ug/L	826676	Standard
⌈	**Ho**	165	43.7	1.3				ug/L	12	Standard
|	**Tl**	203	284.0	4.7	**0.0133**	0.001	4.5	ug/L	6	Standard
|	**Tl**	205	690.3	1.9	**0.0179**	0.000	0.8	ug/L	11	Standard
|	**Pb**	206	415.3	3.1	**0.0079**	0.001	10.5	ug/L	301	Standard
|	**Pb**	207	345.7	7.4	**0.0074**	0.002	26.9	ug/L	250	Standard
|	**Pb**	208	1634.7	2.7	**0.0080**	0.001	8.6	ug/L	1166	Standard
|	**U**	238	25612.7	4.1	**0.8185**	0.038	4.7	ug/L	3	Standard
⌊>	**Bi**	209	453941.8	0.9				ug/L	454659	Standard
⌈	**Na**	23	65647.0	3.5	**10.3368**	0.040	0.4	mg/L	137	Standard
|	**Mg**	24	15954729.7	3.6	**17.8310**	0.206	1.2	mg/L	498	Standard

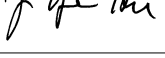
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	K	39	9741.5	5.2	**0.4739**	0.011	2.4	mg/L	557	Standard
	Ca	43	12898.8	4.8	**20.1235**	0.466	2.3	mg/L	52	Standard
	Fe	54	1632.7	10.1	**0.0322**	0.014	43.0	mg/L	865	Standard
	Fe	57	39077.0	3.0	**0.1083**	0.001	0.6	mg/L	6003	Standard
>	**Sc-1**	45	469740.1	3.1				mg/L	333080	Standard
	Cl	35	512974.8	2.0				ug/L	40103	Standard
	Kr	83	67.3	3.0				ug/L	67	Standard
	Br	81	31354.2	6.1				ug/L	15294	Standard
	P	31	170682.8	1.7				ug/L	74262	Standard
	S	34	2000844.0	1.8				ug/L	787377	Standard
	Sr	88	4654198.5	7.0				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		108.540	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		112.032	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		111.681	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		112.200	
	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

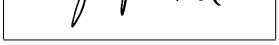
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QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1205008513
Report Date/Time: Tuesday, May 08, 2012 11:30:08
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Approved: May 09, 2012



Method 6020 - Summary Report

Sample ID: L1205008514
Sample Date/Time: Tuesday, May 08, 2012 11:30:27
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	29705.8	4.9	**3447.4645**	377.640	11.0	ug/L	17857	Standard
|	**Be**	9	80.0	37.5	**0.0088**	0.006	64.8	ug/L	12	Standard
|	**Al**	27	5803549.4	5.4	**242.4872**	6.471	2.7	ug/L	13328	Standard
⌊>	**Sc**	45	421610.4	2.9				ug/L	333080	Standard
⌈	**Ti**	47	19486.5	3.8	**9.3950**	0.256	2.7	ug/L	113	Standard
|	**V**	51	39658.6	3.8	**1.6849**	0.050	3.0	ug/L	4349	Standard
|	**Cr**	52	26976.0	3.3	**0.7459**	0.039	5.2	ug/L	14000	Standard
|	**Cr**	53	3157.0	7.2	**1.2090**	0.086	7.1	ug/L	319	Standard
|	**Mn**	55	2902438.1	4.1	**112.0722**	3.458	3.1	ug/L	1367	Standard
|	**Co**	59	9122.4	5.1	**0.4668**	0.019	4.1	ug/L	115	Standard
|	**Ni**	60	4585.7	3.2	**1.1166**	0.025	2.2	ug/L	76	Standard
|	**Cu**	65	4302.6	2.7	**1.1683**	0.019	1.6	ug/L	135	Standard
|	**Zn**	66	22954.4	2.3	**14.5507**	0.224	1.5	ug/L	185	Standard
| >	**Ge**	72	303492.0	1.1				ug/L	274929	Standard
|	**As**	75	146.3	14.8	**0.2627**	0.015	5.5	ug/L	-262	Standard
|	**Se**	82	112.2	3.6	**0.3933**	0.029	7.3	ug/L	27	Standard
⌊	**Se-1**	77	150.7	4.7	**0.5137**	0.084	16.3	ug/L	94	Standard
	Ga	71	277550.5	1.0				mg/L	248575	Standard
⌈	**Rb**	85	39967.7	3.3				ug/L	15	Standard
| >	**Y**	89	302227.4	2.5				ug/L	267564	Standard
⌊	**Rh**	103	53.3	47.2				ug/L	2	Standard
⌈	**Mo**	98	2310.9	5.1	**0.3997**	0.020	5.0	ug/L	5	Standard
|	**Ag**	107	224.3	14.6	**0.0101**	0.003	25.2	ug/L	44	Standard
|	**Cd**	111	843.6	3.1	**0.0459**	0.004	9.6	mg/L	512	Standard
|	**Cd**	114	2135.1	1.9	**0.0513**	0.003	5.0	ug/L	1247	Standard
| >	**In**	115	849405.3	0.4				ug/L	743274	Standard
|	**Sn**	118	4885.5	2.2	**0.1980**	0.006	3.1	ug/L	816	Standard
|	**Sb**	123	959.8	1.7	**0.0678**	0.001	1.3	ug/L	15	Standard
⌊	**Ba**	135	91573.7	2.7	**15.3479**	0.403	2.6	ug/L	37	Standard
⌈	**Ce**	140	56526.0	4.2				ug/L	44	Standard
⌊>	**Tb**	159	922991.5	1.9				ug/L	826676	Standard
⌈	**Ho**	165	685.7	3.1				ug/L	12	Standard
|	**Tl**	203	456.7	2.9	**0.0217**	0.001	4.3	ug/L	6	Standard
|	**Tl**	205	1038.0	0.9	**0.0246**	0.000	1.8	ug/L	11	Standard
|	**Pb**	206	6195.9	1.4	**0.3849**	0.001	0.3	ug/L	301	Standard
|	**Pb**	207	5061.5	3.7	**0.3760**	0.010	2.7	ug/L	250	Standard
|	**Pb**	208	23807.6	2.4	**0.3749**	0.005	1.4	ug/L	1166	Standard
|	**U**	238	996.4	2.8	**0.0341**	0.001	2.6	ug/L	3	Standard
⌊>	**Bi**	209	475500.4	1.2				ug/L	454659	Standard
⌈	**Na**	23	40848.3	0.8	**7.1630**	0.184	2.6	mg/L	137	Standard
|	**Mg**	24	1227816.8	3.2	**1.5274**	0.004	0.3	mg/L	498	Standard

Sample ID: L1205008514
Report Date/Time: Tuesday, May 08, 2012 11:33:00
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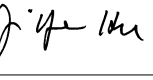
Approved: May 09, 2012

	K	39	26162.6	3.0	**1.5080**	0.001	0.1	mg/L	557	Standard
	Ca	43	3047.0	3.1	**5.2331**	0.206	3.9	mg/L	52	Standard
	Fe	54	5363.9	3.5	**0.5352**	0.015	2.7	mg/L	865	Standard
	Fe	57	148102.7	4.0	**0.5577**	0.006	1.1	mg/L	6003	Standard
>	**Sc-1**	45	421610.4	2.9				mg/L	333080	Standard
	Cl	35	806320.2	1.3				ug/L	40103	Standard
	Kr	83	66.4	6.2				ug/L	67	Standard
	Br	81	51088.5	1.4				ug/L	15294	Standard
	P	31	180973.6	0.8				ug/L	74262	Standard
	S	34	1413019.1	4.0				ug/L	787377	Standard
	Sr	88	1540433.4	2.6				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		110.389	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		112.955	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		114.279	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		111.651	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	104.584
	Na	23	
	Mg	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 09, 2012

Method 6020 - Summary Report

Sample ID: L1205008515
Sample Date/Time: Tuesday, May 08, 2012 11:33:19
Number of Replicates: 3
Autosampler Position: 236
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	26930.6	2.0	**2465.9615**	72.457	2.9	ug/L	17857	Standard
|	**Be**	9	40.0	21.7	**0.0011**	0.002	168.2	ug/L	12	Standard
|	**Al**	27	1390465.3	2.2	**58.9763**	1.922	3.3	ug/L	13328	Standard
⌊>	**Sc**	45	411946.1	1.7				ug/L	333080	Standard
⌈	**Ti**	47	7822.4	2.4	**3.7753**	0.182	4.8	ug/L	113	Standard
|	**V**	51	22915.2	0.7	**0.8848**	0.031	3.5	ug/L	4349	Standard
|	**Cr**	52	17983.0	1.5	**0.1623**	0.019	11.7	ug/L	14000	Standard
|	**Cr**	53	1187.5	2.4	**0.3676**	0.024	6.4	ug/L	319	Standard
|	**Mn**	55	1180890.5	2.0	**45.9277**	0.760	1.7	ug/L	1367	Standard
|	**Co**	59	3095.6	2.4	**0.1560**	0.000	0.3	ug/L	115	Standard
|	**Ni**	60	1192.0	0.6	**0.2772**	0.008	3.0	ug/L	76	Standard
|	**Cu**	65	1757.8	2.7	**0.4548**	0.026	5.8	ug/L	135	Standard
|	**Zn**	66	3393.0	1.7	**2.0493**	0.082	4.0	ug/L	185	Standard
|>	**Ge**	72	301185.7	2.6				ug/L	274929	Standard
|	**As**	75	-81.1	26.2	**0.1207**	0.012	10.0	ug/L	-262	Standard
|	**Se**	82	53.8	20.0	**0.0809**	0.064	79.5	ug/L	27	Standard
⌊	**Se-1**	77	126.7	6.1	**0.2919**	0.055	18.9	ug/L	94	Standard
	Ga	71	273109.0	3.2				mg/L	248575	Standard
⌈	**Rb**	85	29502.1	4.8				ug/L	15	Standard
|>	**Y**	89	290290.1	6.4				ug/L	267564	Standard
⌊	**Rh**	103	41.7	45.4				ug/L	2	Standard
⌈	**Mo**	98	820.5	6.1	**0.1482**	0.010	7.0	ug/L	5	Standard
|	**Ag**	107	61.3	13.9	**-0.0028**	0.001	26.8	ug/L	44	Standard
|	**Cd**	111	604.1	4.6	**0.0056**	0.004	63.8	mg/L	512	Standard
|	**Cd**	114	1531.1	2.7	**0.0113**	0.002	17.8	ug/L	1247	Standard
|>	**In**	115	835053.1	2.3				ug/L	743274	Standard
|	**Sn**	118	1452.7	1.0	**0.0262**	0.001	5.6	ug/L	816	Standard
|	**Sb**	123	256.7	11.4	**0.0174**	0.003	14.7	ug/L	15	Standard
⌊	**Ba**	135	75729.5	0.9	**12.9124**	0.188	1.5	ug/L	37	Standard
⌈	**Ce**	140	31767.6	0.4				ug/L	44	Standard
⌊>	**Tb**	159	914712.7	3.6				ug/L	826676	Standard
⌈	**Ho**	165	451.3	9.9				ug/L	12	Standard
|	**Tl**	203	245.0	2.9	**0.0106**	0.001	5.9	ug/L	6	Standard
|	**Tl**	205	567.7	1.2	**0.0146**	0.000	2.2	ug/L	11	Standard
|	**Pb**	206	1880.8	2.1	**0.1034**	0.003	2.7	ug/L	301	Standard
|	**Pb**	207	1534.7	1.4	**0.1003**	0.005	4.9	ug/L	250	Standard
|	**Pb**	208	7326.7	0.4	**0.1021**	0.003	3.2	ug/L	1166	Standard
|	**U**	238	597.0	7.8	**0.0221**	0.002	8.3	ug/L	3	Standard
⌊>	**Bi**	209	472354.3	3.1				ug/L	454659	Standard
⌈	**Na**	23	16408.9	2.2	**2.9306**	0.112	3.8	mg/L	137	Standard
|	**Mg**	24	952160.1	0.2	**1.2122**	0.020	1.6	mg/L	498	Standard

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	K	39	14143.3	2.6	**0.8147**	0.037	4.6	mg/L	557	Standard
	Ca	43	2333.5	3.5	**4.0808**	0.149	3.7	mg/L	52	Standard
	Fe	54	3095.2	7.7	**0.2523**	0.037	14.5	mg/L	865	Standard
	Fe	57	77676.9	0.8	**0.2851**	0.008	2.7	mg/L	6003	Standard
>	**Sc-1**	45	411946.1	1.7				mg/L	333080	Standard
	Cl	35	328640.6	1.7				ug/L	40103	Standard
	Kr	83	65.7	7.9				ug/L	67	Standard
	Br	81	24495.6	3.0				ug/L	15294	Standard
	P	31	112456.1	3.3				ug/L	74262	Standard
	S	34	1086680.4	1.7				ug/L	787377	Standard
	Sr	88	1521315.0	1.2				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		109.550	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		108.494	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		112.348	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		110.649	
	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

103.892

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1205008515
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Method 6020 - Summary Report

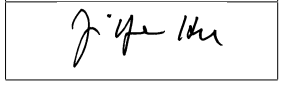
Sample ID: QC Std 6
Sample Date/Time: Tuesday, May 08, 2012 11:36:13
Number of Replicates: 3
Autosampler Position: 101
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	18661.5	1.4	**-478.3107**	244.442	51.1	ug/L	17857	Standard
|	**Be**	9	223615.1	4.3	**49.9096**	2.222	4.5	ug/L	12	Standard
|	**Al**	27	1064063.6	2.9	**49.8716**	1.967	3.9	ug/L	13328	Standard
⌊>	**Sc**	45	372161.4	3.9				ug/L	333080	Standard
⌈	**Ti**	47	205220.2	2.8	**99.1441**	1.998	2.0	ug/L	113	Standard
|	**V**	51	1051692.7	2.3	**50.4780**	1.242	2.5	ug/L	4349	Standard
|	**Cr**	52	786243.3	3.6	**50.6936**	1.677	3.3	ug/L	14000	Standard
|	**Cr**	53	114960.7	3.9	**49.1009**	1.403	2.9	ug/L	319	Standard
|	**Mn**	55	1329559.2	1.4	**51.1741**	0.233	0.5	ug/L	1367	Standard
|	**Co**	59	956170.3	1.9	**49.3826**	0.389	0.8	ug/L	115	Standard
|	**Ni**	60	202675.4	1.6	**50.1295**	0.639	1.3	ug/L	76	Standard
|	**Cu**	65	176854.5	2.3	**49.7043**	0.738	1.5	ug/L	135	Standard
|	**Zn**	66	78229.5	2.8	**49.7930**	1.228	2.5	ug/L	185	Standard
| >	**Ge**	72	304334.9	1.6				ug/L	274929	Standard
|	**As**	75	79006.1	1.5	**49.2762**	0.777	1.6	ug/L	-262	Standard
|	**Se**	82	9162.1	1.1	**49.0964**	1.327	2.7	ug/L	27	Standard
⌊	**Se-1**	77	5299.9	2.6	**49.7261**	0.504	1.0	ug/L	94	Standard
	Ga	71	274369.5	1.2				mg/L	248575	Standard
⌈	**Rb**	85	1533.4	5.5				ug/L	15	Standard
| >	**Y**	89	290186.3	1.6				ug/L	267564	Standard
⌊	**Rh**	103	55.0	24.1				ug/L	2	Standard
⌈	**Mo**	98	541886.4	3.4	**93.8294**	3.377	3.6	ug/L	5	Standard
|	**Ag**	107	601920.5	2.0	**48.7154**	0.886	1.8	ug/L	44	Standard
|	**Cd**	111	276575.2	2.5	**49.2683**	1.183	2.4	mg/L	512	Standard
|	**Cd**	114	702866.6	2.8	**49.3291**	1.272	2.6	ug/L	1247	Standard
| >	**In**	115	836193.9	1.1				ug/L	743274	Standard
|	**Sn**	118	960770.2	3.4	**49.1569**	1.398	2.8	ug/L	816	Standard
|	**Sb**	123	661302.7	2.1	**48.5044**	0.812	1.7	ug/L	15	Standard
⌊	**Ba**	135	283170.1	1.7	**48.2248**	0.726	1.5	ug/L	37	Standard
⌈	**Ce**	140	1044.4	4.1				ug/L	44	Standard
⌊>	**Tb**	159	930710.3	0.8				ug/L	826676	Standard
⌈	**Ho**	165	27.3	2.1				ug/L	12	Standard
|	**Tl**	203	958064.6	1.0	**50.4414**	0.492	1.0	ug/L	6	Standard
|	**Tl**	205	2420622.5	1.3	**51.9768**	0.358	0.7	ug/L	11	Standard
|	**Pb**	206	760903.1	1.8	**49.8345**	0.607	1.2	ug/L	301	Standard
|	**Pb**	207	636207.7	2.1	**49.9512**	0.758	1.5	ug/L	250	Standard
|	**Pb**	208	2975008.2	2.0	**49.4461**	0.787	1.6	ug/L	1166	Standard
|	**U**	238	1553258.6	3.4	**47.2153**	1.278	2.7	ug/L	3	Standard
⌊>	**Bi**	209	474877.1	1.0				ug/L	454659	Standard
⌈	**Na**	23	25753.5	2.8	**5.1106**	0.200	3.9	mg/L	137	Standard
|	**Mg**	24	3505674.0	1.9	**4.9495**	0.221	4.5	mg/L	498	Standard

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	K	39	75970.1	2.6	**5.0669**	0.164	3.2	mg/L	557	Standard
	Ca	43	2481.9	4.2	**4.8193**	0.027	0.6	mg/L	52	Standard
	Fe	54	35165.4	3.8	**4.9847**	0.221	4.4	mg/L	865	Standard
	Fe	57	1129967.9	2.2	**5.0646**	0.221	4.4	mg/L	6003	Standard
>	**Sc-1**	45	372161.4	3.9				mg/L	333080	Standard
	Cl	35	65172.7	4.3				ug/L	40103	Standard
	Kr	83	66.4	4.3				ug/L	67	Standard
	Br	81	17156.4	1.0				ug/L	15294	Standard
	P	31	102057.9	4.1				ug/L	74262	Standard
	S	34	1018613.3	0.3				ug/L	787377	Standard
	Sr	88	1535.1	23.1				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	99.743		
>	Sc	45			
	Ti	47	99.144		
	V	51	100.956		
	Cr	52	101.387		
	Cr	53			
	Mn	55	102.348		
	Co	59	98.765		
	Ni	60	100.259		
	Cu	65	99.409		
	Zn	66	99.586		
>	Ge	72		110.696	
	As	75	98.552		
	Se	82	98.193		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		108.455	
	Rh	103			
	Mo	98	93.829		
	Ag	107	97.431		
	Cd	111	98.537		
	Cd	114			
>	In	115		112.501	
	Sn	118	98.314		
	Sb	123	97.009		
	Ba	135	96.450		
	Ce	140			
>	Tb	159		112.585	
	Ho	165			
	Tl	203	100.883		
	Tl	205			
	Pb	206	99.669		

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	Pb	207	99.902	
	Pb	208	98.892	
	U	238	94.431	
>	Bi	209		104.447
	Na	23	102.212	
	Mg	24	98.990	
	K	39	101.337	
	Ca	43	96.385	
	Fe	54	99.694	
	Fe	57	101.291	
>	Sc-1	45		
	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: Tuesday, May 08, 2012 11:39:05
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	18412.9	4.5	**-574.4494**	316.458	55.1	ug/L	17857	Standard
|	**Be**	9	18.3	15.7	**-0.0029**	0.001	20.0	ug/L	12	Standard
|	**Al**	27	13991.5	8.3	**-0.0344**	0.041	118.7	ug/L	13328	Standard
⌊>	**Sc**	45	370571.8	2.3				ug/L	333080	Standard
⌈	**Ti**	47	121.0	18.1	**0.0124**	0.011	89.1	ug/L	113	Standard
|	**V**	51	4480.8	0.7	**-0.0078**	0.007	87.8	ug/L	4349	Standard
|	**Cr**	52	14491.6	0.7	**-0.0435**	0.026	59.0	ug/L	14000	Standard
|	**Cr**	53	345.8	10.9	**0.0066**	0.012	184.8	ug/L	319	Standard
|	**Mn**	55	1566.7	12.6	**-0.0005**	0.007	1478.1	ug/L	1367	Standard
|	**Co**	59	139.7	8.0	**0.0019**	0.001	34.5	ug/L	115	Standard
|	**Ni**	60	82.0	13.4	**-0.0000**	0.002	38164.3	ug/L	76	Standard
|	**Cu**	65	152.3	9.3	**-0.0009**	0.003	343.1	ug/L	135	Standard
|	**Zn**	66	199.3	12.0	**-0.0083**	0.016	189.1	ug/L	185	Standard
| >	**Ge**	72	293224.4	2.9				ug/L	274929	Standard
|	**As**	75	-280.2	8.2	**-0.0095**	0.019	196.4	ug/L	-262	Standard
|	**Se**	82	31.8	29.0	**-0.0354**	0.050	142.4	ug/L	27	Standard
⌊	**Se-1**	77	94.0	10.1	**0.0007**	0.079	11252.0	ug/L	94	Standard
	Ga	71	268365.5	3.0				mg/L	248575	Standard
⌈	**Rb**	85	21.7	13.3				ug/L	15	Standard
| >	**Y**	89	281755.1	2.7				ug/L	267564	Standard
⌊	**Rh**	103	1.7	173.2				ug/L	2	Standard
⌈	**Mo**	98	90.2	47.5	**0.0221**	0.007	33.8	ug/L	5	Standard
|	**Ag**	107	93.7	27.8	**0.0001**	0.002	2070.6	ug/L	44	Standard
|	**Cd**	111	564.5	7.0	**0.0029**	0.008	293.2	mg/L	512	Standard
|	**Cd**	114	1402.5	1.5	**0.0065**	0.003	49.2	ug/L	1247	Standard
| >	**In**	115	800987.9	1.6				ug/L	743274	Standard
|	**Sn**	118	1066.7	2.7	**0.0087**	0.001	9.5	ug/L	816	Standard
|	**Sb**	123	269.2	33.3	**0.0190**	0.007	34.5	ug/L	15	Standard
⌊	**Ba**	135	71.3	34.7	**0.0060**	0.004	72.0	ug/L	37	Standard
⌈	**Ce**	140	64.7	25.0				ug/L	44	Standard
⌊>	**Tb**	159	877025.5	1.0				ug/L	826676	Standard
⌈	**Ho**	165	8.3	30.2				ug/L	12	Standard
|	**Tl**	203	44.3	23.5	**0.0000**	0.001	28269.7	ug/L	6	Standard
|	**Tl**	205	103.3	25.7	**0.0046**	0.001	11.9	ug/L	11	Standard
|	**Pb**	206	350.0	6.0	**0.0026**	0.001	45.4	ug/L	301	Standard
|	**Pb**	207	304.0	2.2	**0.0031**	0.001	20.9	ug/L	250	Standard
|	**Pb**	208	1378.0	6.2	**0.0026**	0.001	41.4	ug/L	1166	Standard
|	**U**	238	66.7	45.1	**0.0059**	0.001	15.4	ug/L	3	Standard
⌊>	**Bi**	209	470848.6	1.8				ug/L	454659	Standard
⌈	**Na**	23	123.3	4.7	**0.0009**	0.002	195.7	mg/L	137	Standard
|	**Mg**	24	701.7	22.2	**-0.0006**	0.000	34.8	mg/L	498	Standard

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	K	39	678.3	6.8	**0.0009**	0.002	235.6	mg/L	557	Standard
	Ca	43	50.0	10.0	**0.0087**	0.012	141.5	mg/L	52	Standard
	Fe	54	1022.2	2.7	**-0.0066**	0.001	13.8	mg/L	865	Standard
	Fe	57	5847.8	1.2	**-0.0047**	0.001	17.7	mg/L	6003	Standard
>	**Sc-1**	45	370571.8	2.3				mg/L	333080	Standard
	Cl	35	59732.5	1.4				ug/L	40103	Standard
	Kr	83	63.0	8.7				ug/L	67	Standard
	Br	81	16187.8	3.2				ug/L	15294	Standard
	P	31	95759.4	3.6				ug/L	74262	Standard
	S	34	1021085.7	2.1				ug/L	787377	Standard
	Sr	88	478.3	53.5				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		106.655	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		105.304	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		107.765	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		106.091	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	103.561
	Na	23	
	Mg	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: Tuesday, May 08, 2012 11:41:39
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Method 6020 - Summary Report

Sample ID: L1205010801
Sample Date/Time: Tuesday, May 08, 2012 11:42:00
Number of Replicates: 3
Autosampler Position: 237
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	63260.2	3.6	**16593.6847**	266.562	1.6	ug/L	17857	Standard
|	**Be**	9	973.4	9.7	**0.1694**	0.009	5.5	ug/L	12	Standard
|	**Al**	27	6574874.4	4.6	**253.2696**	1.443	0.6	ug/L	13328	Standard
⌊>	**Sc**	45	457581.0	4.6				ug/L	333080	Standard
⌈	**Ti**	47	9023.4	5.5	**4.4142**	0.215	4.9	ug/L	113	Standard
|	**V**	51	59098.3	3.9	**2.6834**	0.097	3.6	ug/L	4349	Standard
|	**Cr**	52	50966.7	3.7	**2.3975**	0.105	4.4	ug/L	14000	Standard
|	**Cr**	53	5892.0	5.6	**2.4358**	0.123	5.0	ug/L	319	Standard
|	**Mn**	55	1281572.7	4.1	**50.4635**	1.413	2.8	ug/L	1367	Standard
|	**Co**	59	58788.2	3.2	**3.1015**	0.066	2.1	ug/L	115	Standard
|	**Ni**	60	16662.5	4.0	**4.1977**	0.147	3.5	ug/L	76	Standard
|	**Cu**	65	18459.9	3.6	**5.2679**	0.135	2.6	ug/L	135	Standard
|	**Zn**	66	46023.5	2.8	**29.9176**	0.475	1.6	ug/L	185	Standard
| >	**Ge**	72	297401.2	1.6				ug/L	274929	Standard
|	**As**	75	1722.4	5.7	**1.2664**	0.045	3.6	ug/L	-262	Standard
|	**Se**	82	135.5	11.5	**0.5330**	0.076	14.3	ug/L	27	Standard
⌊	**Se-1**	77	203.7	2.7	**1.0613**	0.055	5.2	ug/L	94	Standard
	Ga	71	275113.4	2.3				mg/L	248575	Standard
⌈	**Rb**	85	123359.2	4.7				ug/L	15	Standard
| >	**Y**	89	731686.8	2.4				ug/L	267564	Standard
⌊	**Rh**	103	41.7	54.1				ug/L	2	Standard
⌈	**Mo**	98	1173.9	4.0	**0.2123**	0.007	3.3	ug/L	5	Standard
|	**Ag**	107	274.0	7.3	**0.0147**	0.001	9.1	ug/L	44	Standard
|	**Cd**	111	1091.1	3.4	**0.0956**	0.009	9.2	mg/L	512	Standard
|	**Cd**	114	2762.5	1.1	**0.1008**	0.002	1.9	ug/L	1247	Standard
| >	**In**	115	823168.7	1.7				ug/L	743274	Standard
|	**Sn**	118	4427.3	2.6	**0.1820**	0.002	1.3	ug/L	816	Standard
|	**Sb**	123	1288.1	4.4	**0.0944**	0.003	3.0	ug/L	15	Standard
⌊	**Ba**	135	251256.0	3.3	**43.4584**	0.767	1.8	ug/L	37	Standard
⌈	**Ce**	140	1169173.7	4.4				ug/L	44	Standard
⌊>	**Tb**	159	962925.6	2.6				ug/L	826676	Standard
⌈	**Ho**	165	53734.9	4.8				ug/L	12	Standard
|	**Tl**	203	802.4	3.5	**0.0408**	0.001	3.2	ug/L	6	Standard
|	**Tl**	205	1870.1	3.8	**0.0434**	0.001	3.0	ug/L	11	Standard
|	**Pb**	206	8995.0	4.1	**0.5812**	0.021	3.6	ug/L	301	Standard
|	**Pb**	207	7397.5	2.9	**0.5723**	0.013	2.3	ug/L	250	Standard
|	**Pb**	208	34700.5	3.4	**0.5687**	0.016	2.8	ug/L	1166	Standard
|	**U**	238	10756.5	4.3	**0.3377**	0.012	3.6	ug/L	3	Standard
⌊>	**Bi**	209	465031.4	0.7				ug/L	454659	Standard
⌈	**Na**	23	16704.2	1.3	**2.6856**	0.096	3.6	mg/L	137	Standard
|	**Mg**	24	2219412.4	20.0	**2.5328**	0.404	15.9	mg/L	498	Standard

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	K	39	45802.5	2.9	**2.4615**	0.046	1.9	mg/L	557	Standard
	Ca	43	5462.7	5.6	**8.6969**	0.094	1.1	mg/L	52	Standard
	Fe	54	17062.0	5.5	**1.8707**	0.042	2.3	mg/L	865	Standard
	Fe	57	536109.4	4.9	**1.9331**	0.023	1.2	mg/L	6003	Standard
>	**Sc-1**	45	457581.0	4.6				mg/L	333080	Standard
	Cl	35	438305.4	1.4				ug/L	40103	Standard
	Kr	83	126.3	4.1				ug/L	67	Standard
	Br	81	21655.5	2.1				ug/L	15294	Standard
	P	31	240285.6	4.7				ug/L	74262	Standard
	S	34	2202854.3	3.6				ug/L	787377	Standard
	Sr	88	1752204.2	2.5				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		108.174	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		273.462	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		110.749	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		116.482	
	Ho	165			
ê	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

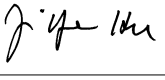
102.281

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: L1205010803
Sample Date/Time: Tuesday, May 08, 2012 11:44:52
Number of Replicates: 3
Autosampler Position: 238
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	126279.1	0.4	**43712.1692**	1175.139	2.7	ug/L	17857	Standard
|	**Be**	9	3002.0	3.3	**0.5424**	0.027	5.0	ug/L	12	Standard
|	**Al**	27	5198849.0	3.2	**201.8439**	9.865	4.9	ug/L	13328	Standard
⌊>	**Sc**	45	453951.8	2.0				ug/L	333080	Standard
⌈	**Ti**	47	4210.6	8.7	**1.8840**	0.149	7.9	ug/L	113	Standard
|	**V**	51	13269.9	2.5	**0.3757**	0.015	3.9	ug/L	4349	Standard
|	**Cr**	52	19466.8	1.1	**0.1831**	0.006	3.3	ug/L	14000	Standard
|	**Cr**	53	1958.5	7.3	**0.6498**	0.050	7.7	ug/L	319	Standard
|	**Mn**	55	325035.6	2.0	**11.8353**	0.180	1.5	ug/L	1367	Standard
|	**Co**	59	75414.3	2.1	**3.6945**	0.035	0.9	ug/L	115	Standard
|	**Ni**	60	21194.1	1.5	**4.9605**	0.042	0.9	ug/L	76	Standard
|	**Cu**	65	642.3	6.5	**0.1263**	0.009	7.4	ug/L	135	Standard
|	**Zn**	66	29204.1	1.6	**17.5665**	0.103	0.6	ug/L	185	Standard
| >	**Ge**	72	320371.3	1.2				ug/L	274929	Standard
|	**As**	75	-25.6	44.6	**0.1563**	0.007	4.3	ug/L	-262	Standard
|	**Se**	82	72.4	4.5	**0.1577**	0.013	8.2	ug/L	27	Standard
⌊	**Se-1**	77	152.7	13.6	**0.4554**	0.189	41.6	ug/L	94	Standard
	Ga	71	291054.9	2.3				mg/L	248575	Standard
⌈	**Rb**	85	124834.0	2.6				ug/L	15	Standard
| >	**Y**	89	334429.5	3.1				ug/L	267564	Standard
⌊	**Rh**	103	35.0	24.7				ug/L	2	Standard
⌈	**Mo**	98	117.8	8.3	**0.0252**	0.002	6.4	ug/L	5	Standard
|	**Ag**	107	77.0	13.2	**-0.0019**	0.001	40.0	ug/L	44	Standard
|	**Cd**	111	1373.8	3.1	**0.1294**	0.007	5.0	mg/L	512	Standard
|	**Cd**	114	3399.2	2.6	**0.1294**	0.005	4.2	ug/L	1247	Standard
| >	**In**	115	884760.7	0.6				ug/L	743274	Standard
|	**Sn**	118	1474.4	0.2	**0.0231**	0.001	2.5	ug/L	816	Standard
|	**Sb**	123	123.5	8.4	**0.0070**	0.001	9.8	ug/L	15	Standard
⌊	**Ba**	135	276564.0	1.6	**44.5138**	0.691	1.6	ug/L	37	Standard
⌈	**Ce**	140	131034.0	2.3				ug/L	44	Standard
⌊>	**Tb**	159	960718.2	0.3				ug/L	826676	Standard
⌈	**Ho**	165	2614.9	3.3				ug/L	12	Standard
|	**Tl**	203	414.7	3.5	**0.0187**	0.001	4.1	ug/L	6	Standard
|	**Tl**	205	972.7	2.6	**0.0225**	0.001	2.8	ug/L	11	Standard
|	**Pb**	206	3219.7	3.6	**0.1826**	0.007	3.6	ug/L	301	Standard
|	**Pb**	207	2704.2	0.2	**0.1835**	0.001	0.4	ug/L	250	Standard
|	**Pb**	208	12587.0	1.6	**0.1811**	0.002	1.3	ug/L	1166	Standard
|	**U**	238	2338.5	1.8	**0.0723**	0.001	1.4	ug/L	3	Standard
⌊>	**Bi**	209	493198.3	0.5				ug/L	454659	Standard
⌈	**Na**	23	16245.4	2.5	**2.6307**	0.108	4.1	mg/L	137	Standard
|	**Mg**	24	643433.7	3.2	**0.7430**	0.036	4.8	mg/L	498	Standard

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	K	39	15920.0	2.1	**0.8328**	0.007	0.8	mg/L	557	Standard
	Ca	43	826.7	1.3	**1.2502**	0.015	1.2	mg/L	52	Standard
	Fe	54	8500.1	3.1	**0.8622**	0.052	6.0	mg/L	865	Standard
	Fe	57	256878.6	2.7	**0.9180**	0.037	4.0	mg/L	6003	Standard
>	**Sc-1**	45	453951.8	2.0				mg/L	333080	Standard
	Cl	35	779367.6	0.9				ug/L	40103	Standard
	Kr	83	70.6	7.0				ug/L	67	Standard
	Br	81	33507.0	3.4				ug/L	15294	Standard
	P	31	96002.6	3.6				ug/L	74262	Standard
	S	34	1535986.5	1.9				ug/L	787377	Standard
	Sr	88	704091.3	3.4				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		116.529	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		124.990	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		119.036	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		116.215	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	108.477
	Na	23	
	Mg	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: L1205010804
Sample Date/Time: Tuesday, May 08, 2012 11:47:45
Number of Replicates: 3
Autosampler Position: 239
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	72811.3	3.0	**23263.5539**	823.392	3.5	ug/L	17857	Standard
|	**Be**	9	255.0	5.2	**0.0433**	0.003	6.8	ug/L	12	Standard
|	**Al**	27	4995937.7	3.4	**208.7594**	5.922	2.8	ug/L	13328	Standard
⌊>	**Sc**	45	421533.5	0.7				ug/L	333080	Standard
⌈	**Ti**	47	7923.4	5.6	**3.6525**	0.193	5.3	ug/L	113	Standard
|	**V**	51	21155.1	1.2	**0.7536**	0.013	1.7	ug/L	4349	Standard
|	**Cr**	52	23430.1	0.9	**0.4562**	0.018	3.9	ug/L	14000	Standard
|	**Cr**	53	2000.1	5.3	**0.6814**	0.047	6.9	ug/L	319	Standard
|	**Mn**	55	347887.5	3.0	**12.8919**	0.339	2.6	ug/L	1367	Standard
|	**Co**	59	11347.2	1.7	**0.5608**	0.008	1.4	ug/L	115	Standard
|	**Ni**	60	5208.6	2.2	**1.2244**	0.022	1.8	ug/L	76	Standard
|	**Cu**	65	1054.0	4.1	**0.2413**	0.013	5.3	ug/L	135	Standard
|	**Zn**	66	7598.9	0.9	**4.5469**	0.023	0.5	ug/L	185	Standard
| >	**Ge**	72	314914.7	0.5				ug/L	274929	Standard
|	**As**	75	605.3	3.2	**0.5350**	0.013	2.5	ug/L	-262	Standard
|	**Se**	82	75.0	3.0	**0.1775**	0.013	7.6	ug/L	27	Standard
⌊	**Se-1**	77	129.0	10.7	**0.2604**	0.124	47.6	ug/L	94	Standard
	Ga	71	288015.8	0.9				mg/L	248575	Standard
⌈	**Rb**	85	62179.0	2.0				ug/L	15	Standard
| >	**Y**	89	317369.0	2.4				ug/L	267564	Standard
⌊	**Rh**	103	23.3	12.4				ug/L	2	Standard
⌈	**Mo**	98	241.2	8.9	**0.0457**	0.004	8.0	ug/L	5	Standard
|	**Ag**	107	131.3	13.7	**0.0023**	0.001	60.8	ug/L	44	Standard
|	**Cd**	111	653.2	5.4	**0.0088**	0.007	73.6	mg/L	512	Standard
|	**Cd**	114	1655.2	3.7	**0.0145**	0.005	31.6	ug/L	1247	Standard
| >	**In**	115	876986.8	0.6				ug/L	743274	Standard
|	**Sn**	118	2120.8	3.4	**0.0553**	0.004	7.3	ug/L	816	Standard
|	**Sb**	123	190.1	5.9	**0.0118**	0.001	7.0	ug/L	15	Standard
⌊	**Ba**	135	130859.1	2.0	**21.2474**	0.549	2.6	ug/L	37	Standard
⌈	**Ce**	140	60341.6	2.0				ug/L	44	Standard
⌊>	**Tb**	159	952358.1	0.3				ug/L	826676	Standard
⌈	**Ho**	165	906.4	6.1				ug/L	12	Standard
|	**Tl**	203	387.7	8.7	**0.0173**	0.002	9.0	ug/L	6	Standard
|	**Tl**	205	942.4	5.9	**0.0219**	0.001	4.6	ug/L	11	Standard
|	**Pb**	206	4276.9	1.2	**0.2499**	0.003	1.1	ug/L	301	Standard
|	**Pb**	207	3533.4	2.0	**0.2467**	0.004	1.6	ug/L	250	Standard
|	**Pb**	208	16558.9	2.3	**0.2452**	0.005	2.1	ug/L	1166	Standard
|	**U**	238	1079.0	7.6	**0.0355**	0.003	7.3	ug/L	3	Standard
⌊>	**Bi**	209	492183.9	0.7				ug/L	454659	Standard
⌈	**Na**	23	6488.1	3.0	**1.1174**	0.036	3.3	mg/L	137	Standard
|	**Mg**	24	477138.7	2.2	**0.5927**	0.009	1.5	mg/L	498	Standard

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	K	39	16589.1	2.7	**0.9401**	0.030	3.2	mg/L	557	Standard
	Ca	43	1028.4	5.6	**1.7057**	0.107	6.3	mg/L	52	Standard
	Fe	54	8201.2	3.8	**0.9012**	0.035	3.8	mg/L	865	Standard
	Fe	57	240024.6	3.6	**0.9234**	0.028	3.0	mg/L	6003	Standard
>	**Sc-1**	45	421533.5	0.7				mg/L	333080	Standard
	Cl	35	458567.6	1.2				ug/L	40103	Standard
	Kr	83	67.2	2.4				ug/L	67	Standard
	Br	81	30853.9	0.3				ug/L	15294	Standard
	P	31	114988.4	3.6				ug/L	74262	Standard
	S	34	1267184.3	0.8				ug/L	787377	Standard
	Sr	88	493544.8	1.9				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		114.544	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		118.614	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		117.990	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		115.203	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	108.253
	Na	23	
	Mg	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: L1205010804
Report Date/Time: Tuesday, May 08, 2012 11:50:18
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Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, May 08, 2012 11:50:40
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	19607.7	1.3	**-89.4465**	193.598	216.4	ug/L	17857	Standard
|	**Be**	9	228176.8	3.7	**50.4018**	1.425	2.8	ug/L	12	Standard
|	**Al**	27	1085675.0	4.9	**50.3431**	1.692	3.4	ug/L	13328	Standard
⌊>	**Sc**	45	375802.6	1.7				ug/L	333080	Standard
⌈	**Ti**	47	206893.3	3.8	**99.8764**	2.861	2.9	ug/L	113	Standard
|	**V**	51	1059207.5	3.3	**50.7942**	1.169	2.3	ug/L	4349	Standard
|	**Cr**	52	795014.6	4.1	**51.2255**	1.620	3.2	ug/L	14000	Standard
|	**Cr**	53	117189.4	4.1	**50.0224**	1.618	3.2	ug/L	319	Standard
|	**Mn**	55	1353391.3	2.9	**52.0539**	1.176	2.3	ug/L	1367	Standard
|	**Co**	59	954874.4	1.9	**49.2822**	0.445	0.9	ug/L	115	Standard
|	**Ni**	60	200617.7	2.6	**49.5806**	0.765	1.5	ug/L	76	Standard
|	**Cu**	65	175472.0	2.5	**49.2803**	0.813	1.6	ug/L	135	Standard
|	**Zn**	66	78091.5	2.8	**49.6660**	0.918	1.8	ug/L	185	Standard
| >	**Ge**	72	304529.1	1.0				ug/L	274929	Standard
|	**As**	75	79461.5	2.8	**49.5173**	0.902	1.8	ug/L	-262	Standard
|	**Se**	82	9208.5	1.4	**49.2989**	0.217	0.4	ug/L	27	Standard
⌊	**Se-1**	77	5278.6	1.5	**49.4937**	0.268	0.5	ug/L	94	Standard
	Ga	71	273900.6	0.7				mg/L	248575	Standard
⌈	**Rb**	85	1501.7	3.6				ug/L	15	Standard
| >	**Y**	89	292599.7	2.8				ug/L	267564	Standard
⌊	**Rh**	103	46.7	22.3				ug/L	2	Standard
⌈	**Mo**	98	548865.1	2.8	**94.4061**	2.520	2.7	ug/L	5	Standard
|	**Ag**	107	598327.8	2.2	**48.1123**	1.330	2.8	ug/L	44	Standard
|	**Cd**	111	280145.5	2.1	**49.5745**	0.745	1.5	mg/L	512	Standard
|	**Cd**	114	710447.9	2.5	**49.5306**	0.815	1.6	ug/L	1247	Standard
| >	**In**	115	841724.8	1.1				ug/L	743274	Standard
|	**Sn**	118	962492.2	3.6	**48.9175**	1.289	2.6	ug/L	816	Standard
|	**Sb**	123	662460.0	3.4	**48.2640**	1.186	2.5	ug/L	15	Standard
⌊	**Ba**	135	281987.4	2.3	**47.7049**	0.771	1.6	ug/L	37	Standard
⌈	**Ce**	140	1037.0	2.2				ug/L	44	Standard
⌊>	**Tb**	159	917708.4	1.3				ug/L	826676	Standard
⌈	**Ho**	165	26.0	13.9				ug/L	12	Standard
|	**Tl**	203	952513.7	2.0	**50.4977**	0.921	1.8	ug/L	6	Standard
|	**Tl**	205	2420632.2	2.1	**52.3405**	1.041	2.0	ug/L	11	Standard
|	**Pb**	206	755443.4	3.0	**49.8224**	1.374	2.8	ug/L	301	Standard
|	**Pb**	207	633115.2	3.0	**50.0540**	1.267	2.5	ug/L	250	Standard
|	**Pb**	208	2952229.2	2.9	**49.4097**	1.307	2.6	ug/L	1166	Standard
|	**U**	238	1540135.2	3.8	**47.1464**	1.692	3.6	ug/L	3	Standard
⌊>	**Bi**	209	471588.7	0.9				ug/L	454659	Standard
⌈	**Na**	23	26212.7	1.8	**5.1488**	0.139	2.7	mg/L	137	Standard
|	**Mg**	24	3570264.4	2.8	**4.9861**	0.065	1.3	mg/L	498	Standard

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	K	39	76078.9	2.1	**5.0214**	0.067	1.3	mg/L	557	Standard
	Ca	43	2470.2	5.4	**4.7471**	0.185	3.9	mg/L	52	Standard
	Fe	54	35777.5	2.9	**5.0196**	0.084	1.7	mg/L	865	Standard
	Fe	57	1136190.5	5.7	**5.0360**	0.214	4.3	mg/L	6003	Standard
>	**Sc-1**	45	375802.6	1.7				mg/L	333080	Standard
	Cl	35	59015.4	0.7				ug/L	40103	Standard
	Kr	83	64.1	6.1				ug/L	67	Standard
	Br	81	16814.3	4.0				ug/L	15294	Standard
	P	31	92302.0	2.0				ug/L	74262	Standard
	S	34	930462.7	4.6				ug/L	787377	Standard
	Sr	88	1273.4	10.6				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	100.686		
>	Sc	45			
	Ti	47	99.876		
	V	51	101.588		
	Cr	52	102.451		
	Cr	53			
	Mn	55	104.108		
	Co	59	98.564		
	Ni	60	99.161		
	Cu	65	98.561		
	Zn	66	99.332		
>	Ge	72		110.766	
	As	75	99.035		
	Se	82	98.598		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		109.357	
	Rh	103			
	Mo	98	94.406		
	Ag	107	96.225		
	Cd	111	99.149		
	Cd	114			
>	In	115		113.246	
	Sn	118	97.835		
	Sb	123	96.528		
	Ba	135	95.410		
	Ce	140			
>	Tb	159		111.012	
	Ho	165			
	Tl	203	100.995		
	Tl	205			
	Pb	206	99.645		

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	Pb	207	100.108	
	Pb	208	98.819	
	U	238	94.293	
>	Bi	209		103.724
	Na	23	102.976	
	Mg	24	99.722	
	K	39	100.429	
	Ca	43	94.943	
	Fe	54	100.392	
	Fe	57	100.720	
>	Sc-1	45		
	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: Tuesday, May 08, 2012 11:53:32
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	18611.4	2.3	**-364.3294**	87.768	24.1	ug/L	17857	Standard
|	**Be**	9	13.3	57.3	**-0.0039**	0.002	43.0	ug/L	12	Standard
|	**Al**	27	15109.2	8.7	**0.0286**	0.083	290.6	ug/L	13328	Standard
⌊>	**Sc**	45	366669.5	2.9				ug/L	333080	Standard
⌈	**Ti**	47	108.3	15.6	**0.0060**	0.009	145.2	ug/L	113	Standard
|	**V**	51	4583.7	1.3	**-0.0028**	0.004	146.1	ug/L	4349	Standard
|	**Cr**	52	14766.9	0.7	**-0.0255**	0.013	49.2	ug/L	14000	Standard
|	**Cr**	53	336.7	9.1	**0.0027**	0.013	481.7	ug/L	319	Standard
|	**Mn**	55	1475.4	3.0	**-0.0041**	0.002	44.3	ug/L	1367	Standard
|	**Co**	59	141.0	6.8	**0.0020**	0.001	27.8	ug/L	115	Standard
|	**Ni**	60	84.3	17.6	**0.0006**	0.004	604.6	ug/L	76	Standard
|	**Cu**	65	150.3	10.5	**-0.0014**	0.005	337.0	ug/L	135	Standard
|	**Zn**	66	216.3	2.5	**0.0029**	0.004	147.5	ug/L	185	Standard
| >	**Ge**	72	293321.4	0.5				ug/L	274929	Standard
|	**As**	75	-265.9	15.5	**0.0001**	0.026	35104.5	ug/L	-262	Standard
|	**Se**	82	30.6	12.8	**-0.0419**	0.023	54.1	ug/L	27	Standard
⌊	**Se-1**	77	109.0	12.7	**0.1496**	0.134	89.3	ug/L	94	Standard
	Ga	71	271427.7	0.5				mg/L	248575	Standard
⌈	**Rb**	85	15.0	0.0				ug/L	15	Standard
| >	**Y**	89	281178.2	3.0				ug/L	267564	Standard
⌊	**Rh**	103	0.0					ug/L	2	Standard
⌈	**Mo**	98	89.2	56.6	**0.0216**	0.009	40.8	ug/L	5	Standard
|	**Ag**	107	75.3	25.6	**-0.0016**	0.002	97.0	ug/L	44	Standard
|	**Cd**	111	554.2	8.1	**-0.0017**	0.008	436.9	mg/L	512	Standard
|	**Cd**	114	1431.5	2.7	**0.0059**	0.002	38.7	ug/L	1247	Standard
| >	**In**	115	821719.1	0.8				ug/L	743274	Standard
|	**Sn**	118	1041.4	3.6	**0.0059**	0.002	25.8	ug/L	816	Standard
|	**Sb**	123	256.1	47.9	**0.0175**	0.009	51.4	ug/L	15	Standard
⌊	**Ba**	135	65.0	17.1	**0.0046**	0.002	40.9	ug/L	37	Standard
⌈	**Ce**	140	61.0	15.6				ug/L	44	Standard
⌊>	**Tb**	159	877479.7	1.2				ug/L	826676	Standard
⌈	**Ho**	165	8.0	21.7				ug/L	12	Standard
|	**Tl**	203	42.3	61.0	**-0.0001**	0.001	1880.7	ug/L	6	Standard
|	**Tl**	205	94.3	57.7	**0.0044**	0.001	26.9	ug/L	11	Standard
|	**Pb**	206	340.0	3.6	**0.0022**	0.001	34.4	ug/L	301	Standard
|	**Pb**	207	291.7	8.8	**0.0024**	0.002	87.8	ug/L	250	Standard
|	**Pb**	208	1380.7	7.3	**0.0030**	0.002	57.0	ug/L	1166	Standard
|	**U**	238	61.0	66.6	**0.0057**	0.001	22.0	ug/L	3	Standard
⌊>	**Bi**	209	465043.6	0.3				ug/L	454659	Standard
⌈	**Na**	23	108.3	25.4	**-0.0019**	0.006	311.8	mg/L	137	Standard
|	**Mg**	24	686.7	7.6	**-0.0006**	0.000	16.4	mg/L	498	Standard

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	K	39	651.7	13.8	**-0.0005**	0.005	1094.4	mg/L	557	Standard
	Ca	43	35.0	37.8	**-0.0211**	0.025	118.2	mg/L	52	Standard
	Fe	54	1018.4	6.6	**-0.0056**	0.007	121.0	mg/L	865	Standard
	Fe	57	6169.6	1.5	**-0.0029**	0.000	13.8	mg/L	6003	Standard
>	**Sc-1**	45	366669.5	2.9				mg/L	333080	Standard
	Cl	35	54755.1	1.2				ug/L	40103	Standard
	Kr	83	64.4	8.3				ug/L	67	Standard
	Br	81	15824.9	0.4				ug/L	15294	Standard
	P	31	88512.0	0.9				ug/L	74262	Standard
	S	34	956675.1	3.3				ug/L	787377	Standard
	Sr	88	333.3	7.1				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		106.690	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		105.088	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		110.554	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		106.145	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	102.284
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
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Method 6020 - Summary Report

Sample ID: QC Std 8
Sample Date/Time: Tuesday, May 08, 2012 11:56:27
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	18948.5	0.7	**-172.3766**	234.397	136.0	ug/L	17857	Standard
|	**Be**	9	10.0		**-0.0047**	0.000	0.9	ug/L	12	Standard
|	**Al**	27	21331.7	4.8	**0.3281**	0.034	10.3	ug/L	13328	Standard
⌊>	**Sc**	45	366220.7	1.9				ug/L	333080	Standard
⌈	**Ti**	47	131.7	7.6	**0.0180**	0.006	30.9	ug/L	113	Standard
|	**V**	51	12587.3	2.9	**0.4006**	0.019	4.6	ug/L	4349	Standard
|	**Cr**	52	26888.2	2.1	**0.8107**	0.035	4.3	ug/L	14000	Standard
|	**Cr**	53	2160.2	5.4	**0.8182**	0.058	7.1	ug/L	319	Standard
|	**Mn**	55	14689.1	1.0	**0.5271**	0.009	1.7	ug/L	1367	Standard
|	**Co**	59	7485.2	1.7	**0.3976**	0.009	2.4	ug/L	115	Standard
|	**Ni**	60	6410.7	2.3	**1.6326**	0.030	1.8	ug/L	76	Standard
|	**Cu**	65	2980.0	5.9	**0.8286**	0.052	6.2	ug/L	135	Standard
|	**Zn**	66	11097.4	2.4	**7.2444**	0.179	2.5	ug/L	185	Standard
| >	**Ge**	72	291921.6	1.1				ug/L	274929	Standard
|	**As**	75	343.3	16.9	**0.3937**	0.035	9.0	ug/L	-262	Standard
|	**Se**	82	93.8	9.1	**0.3136**	0.043	13.7	ug/L	27	Standard
⌊	**Se-1**	77	136.7	6.0	**0.4312**	0.088	20.5	ug/L	94	Standard
	Ga	71	265004.9	1.1				mg/L	248575	Standard
⌈	**Rb**	85	26.7	47.2				ug/L	15	Standard
| >	**Y**	89	281522.6	2.8				ug/L	267564	Standard
⌊	**Rh**	103	0.0					ug/L	2	Standard
⌈	**Mo**	98	28.7	17.8	**0.0109**	0.001	8.3	ug/L	5	Standard
|	**Ag**	107	4708.7	4.3	**0.3795**	0.014	3.8	ug/L	44	Standard
|	**Cd**	111	1862.1	2.2	**0.2354**	0.004	1.8	mg/L	512	Standard
|	**Cd**	114	4578.4	3.8	**0.2306**	0.009	3.8	ug/L	1247	Standard
| >	**In**	115	822855.6	1.4				ug/L	743274	Standard
|	**Sn**	118	957.0	3.2	**0.0015**	0.001	92.7	ug/L	816	Standard
|	**Sb**	123	5186.5	3.9	**0.3851**	0.015	3.8	ug/L	15	Standard
⌊	**Ba**	135	4078.5	2.6	**0.6994**	0.020	2.8	ug/L	37	Standard
⌈	**Ce**	140	62.3	14.9				ug/L	44	Standard
⌊>	**Tb**	159	879408.7	0.9				ug/L	826676	Standard
⌈	**Ho**	165	9.3	52.9				ug/L	12	Standard
|	**Tl**	203	1482.7	2.0	**0.0778**	0.002	2.5	ug/L	6	Standard
|	**Tl**	205	3504.4	2.3	**0.0796**	0.002	1.9	ug/L	11	Standard
|	**Pb**	206	3315.4	2.2	**0.2025**	0.006	3.0	ug/L	301	Standard
|	**Pb**	207	2737.9	1.9	**0.1998**	0.005	2.4	ug/L	250	Standard
|	**Pb**	208	12801.1	0.9	**0.1981**	0.003	1.7	ug/L	1166	Standard
|	**U**	238	12039.1	4.2	**0.3797**	0.018	4.7	ug/L	3	Standard
⌊>	**Bi**	209	462483.1	0.6				ug/L	454659	Standard
⌈	**Na**	23	116.7	6.5	**-0.0002**	0.002	1060.4	mg/L	137	Standard
|	**Mg**	24	765.0	7.9	**-0.0005**	0.000	12.7	mg/L	498	Standard

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	K	39	666.7	11.7	**0.0008**	0.006	815.7	mg/L	557	Standard
	Ca	43	43.3	40.5	**-0.0035**	0.036	1040.7	mg/L	52	Standard
	Fe	54	1006.8	6.4	**-0.0071**	0.010	137.5	mg/L	865	Standard
	Fe	57	6421.4	0.9	**-0.0018**	0.001	41.3	mg/L	6003	Standard
>	**Sc-1**	45	366220.7	1.9				mg/L	333080	Standard
	Cl	35	52829.3	1.3				ug/L	40103	Standard
	Kr	83	61.0	4.4				ug/L	67	Standard
	Br	81	16440.6	0.3				ug/L	15294	Standard
	P	31	89357.0	2.2				ug/L	74262	Standard
	S	34	938920.1	1.8				ug/L	787377	Standard
	Sr	88	438.3	6.3				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51	100.148		
	Cr	52	101.341		
	Cr	53			
	Mn	55	105.427		
	Co	59	99.389		
	Ni	60	102.035		
	Cu	65	103.581		
	Zn	66	115.911		
>	Ge	72		106.181	
	As	75	98.422		
	Se	82	78.407		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		105.217	
	Rh	103			
	Mo	98			
	Ag	107	94.875		
	Cd	111	98.080		
	Cd	114			
>	In	115		110.707	
	Sn	118			
	Sb	123	96.272		
	Ba	135	93.250		
	Ce	140			
>	Tb	159		106.379	
	Ho	165			
	Tl	203	97.270		
	Tl	205			
	Pb	206			

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	Pb	207		
	Pb	208	99.059	
	U	238	94.915	
>	Bi	209		101.721
	Na	23		
	Mg	24		
	K	39		
	Ca	43		
	Fe	54		
	Fe	57		
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 8
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Method 6020 - Summary Report

Sample ID: PBW 44 WG397152-02
Sample Date/Time: Tuesday, May 08, 2012 12:10:17
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	18728.3	5.1	**143.0169**	384.226	268.7	ug/L	17857	Standard
|	**Be**	9	8.3	69.3	**-0.0050**	0.001	28.0	ug/L	12	Standard
|	**Al**	27	21051.3	7.8	**0.3607**	0.098	27.2	ug/L	13328	Standard
⌊>	**Sc**	45	350763.9	2.7				ug/L	333080	Standard
⌈	**Ti**	47	100.7	18.8	**0.0024**	0.010	397.5	ug/L	113	Standard
|	**V**	51	4633.8	1.8	**0.0009**	0.006	647.0	ug/L	4349	Standard
|	**Cr**	52	14881.6	1.6	**-0.0122**	0.024	200.1	ug/L	14000	Standard
|	**Cr**	53	329.2	14.4	**0.0002**	0.021	11317.1	ug/L	319	Standard
|	**Mn**	55	1942.1	1.5	**0.0150**	0.001	4.8	ug/L	1367	Standard
|	**Co**	59	111.7	2.3	**0.0005**	0.000	24.6	ug/L	115	Standard
|	**Ni**	60	101.7	4.0	**0.0052**	0.001	16.6	ug/L	76	Standard
|	**Cu**	65	224.0	3.8	**0.0204**	0.003	13.7	ug/L	135	Standard
|	**Zn**	66	1694.8	2.5	**0.9879**	0.032	3.2	ug/L	185	Standard
| >	**Ge**	72	291798.1	0.8				ug/L	274929	Standard
|	**As**	75	-291.6	9.0	**-0.0175**	0.015	88.6	ug/L	-262	Standard
|	**Se**	82	27.2	28.1	**-0.0595**	0.044	73.7	ug/L	27	Standard
⌊	**Se-1**	77	93.3	8.6	**-0.0007**	0.077	10464.5	ug/L	94	Standard
	Ga	71	267142.3	0.9				mg/L	248575	Standard
⌈	**Rb**	85	18.3	15.7				ug/L	15	Standard
| >	**Y**	89	272069.3	0.5				ug/L	267564	Standard
⌊	**Rh**	103	1.7	173.2				ug/L	2	Standard
⌈	**Mo**	98	40.9	9.9	**0.0133**	0.001	5.0	ug/L	5	Standard
|	**Ag**	107	53.0	27.9	**-0.0033**	0.001	37.0	ug/L	44	Standard
|	**Cd**	111	544.9	4.3	**-0.0006**	0.004	706.7	mg/L	512	Standard
|	**Cd**	114	1359.4	3.3	**0.0035**	0.002	62.6	ug/L	1247	Standard
| >	**In**	115	798917.0	1.1				ug/L	743274	Standard
|	**Sn**	118	1008.0	5.3	**0.0057**	0.003	56.3	ug/L	816	Standard
|	**Sb**	123	72.7	10.7	**0.0041**	0.001	16.2	ug/L	15	Standard
⌊	**Ba**	135	87.0	27.6	**0.0089**	0.004	49.8	ug/L	37	Standard
⌈	**Ce**	140	68.3	8.3				ug/L	44	Standard
⌊>	**Tb**	159	865487.0	0.7				ug/L	826676	Standard
⌈	**Ho**	165	9.0	58.8				ug/L	12	Standard
|	**Tl**	203	9.3	27.0	**-0.0018**	0.000	7.6	ug/L	6	Standard
|	**Tl**	205	21.3	11.8	**0.0028**	0.000	1.9	ug/L	11	Standard
|	**Pb**	206	331.0	3.3	**0.0019**	0.001	37.2	ug/L	301	Standard
|	**Pb**	207	284.0	8.0	**0.0020**	0.002	90.0	ug/L	250	Standard
|	**Pb**	208	1303.7	2.1	**0.0019**	0.000	24.0	ug/L	1166	Standard
|	**U**	238	5.0	0.0	**0.0040**	0.000	0.0	ug/L	3	Standard
⌊>	**Bi**	209	459537.4	0.4				ug/L	454659	Standard
⌈	**Na**	23	115.0	23.0	**0.0006**	0.006	1050.6	mg/L	137	Standard
|	**Mg**	24	651.7	10.2	**-0.0006**	0.000	16.2	mg/L	498	Standard

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	K	39	610.0	3.0	**-0.0014**	0.001	53.7	mg/L	557	Standard
	Ca	43	55.0	27.3	**0.0252**	0.034	136.1	mg/L	52	Standard
	Fe	54	940.5	6.1	**-0.0109**	0.005	50.1	mg/L	865	Standard
	Fe	57	6668.1	2.4	**0.0007**	0.002	206.8	mg/L	6003	Standard
>	**Sc-1**	45	350763.9	2.7				mg/L	333080	Standard
	Cl	35	47352.5	0.3				ug/L	40103	Standard
	Kr	83	67.0	8.6				ug/L	67	Standard
	Br	81	16461.4	3.0				ug/L	15294	Standard
	P	31	81126.8	3.9				ug/L	74262	Standard
	S	34	899268.2	3.5				ug/L	787377	Standard
	Sr	88	436.7	15.1				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		106.136	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		101.684	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		107.486	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		104.695	
	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

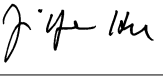
101.073

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: LCSW 44 WG397152-03
Sample Date/Time: Tuesday, May 08, 2012 12:13:09
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	20827.7	4.7	**-105.1640**	543.081	516.4	ug/L	17857	Standard
|	**Be**	9	114981.4	1.7	**23.8722**	0.547	2.3	ug/L	12	Standard
|	**Al**	27	660090.0	1.1	**28.4802**	0.475	1.7	ug/L	13328	Standard
⌊>	**Sc**	45	399840.6	0.7				ug/L	333080	Standard
⌈	**Ti**	47	199.7	11.4	**0.0457**	0.010	22.3	ug/L	113	Standard
|	**V**	51	560681.4	1.4	**26.1194**	0.250	1.0	ug/L	4349	Standard
|	**Cr**	52	435994.3	0.8	**26.9306**	0.376	1.4	ug/L	14000	Standard
|	**Cr**	53	64994.9	0.3	**27.0023**	0.412	1.5	ug/L	319	Standard
|	**Mn**	55	745707.6	0.2	**27.9524**	0.336	1.2	ug/L	1367	Standard
|	**Co**	59	522624.5	0.9	**26.3105**	0.152	0.6	ug/L	115	Standard
|	**Ni**	60	108769.2	2.5	**26.2107**	0.303	1.2	ug/L	76	Standard
|	**Cu**	65	96436.4	2.3	**26.3972**	0.252	1.0	ug/L	135	Standard
|	**Zn**	66	40537.5	2.5	**25.0795**	0.296	1.2	ug/L	185	Standard
|>	**Ge**	72	312200.7	1.4				ug/L	274929	Standard
|	**As**	75	39633.7	1.0	**24.1831**	0.135	0.6	ug/L	-262	Standard
|	**Se**	82	4603.1	1.7	**23.9296**	0.292	1.2	ug/L	27	Standard
⌊	**Se-1**	77	2649.9	1.6	**23.7610**	0.081	0.3	ug/L	94	Standard
	Ga	71	293229.0	1.5				mg/L	248575	Standard
⌈	**Rb**	85	75.0	11.5				ug/L	15	Standard
|>	**Y**	89	319863.6	2.0				ug/L	267564	Standard
⌊	**Rh**	103	33.3	22.9				ug/L	2	Standard
⌈	**Mo**	98	46.3	18.5	**0.0136**	0.001	9.9	ug/L	5	Standard
|	**Ag**	107	345615.4	2.0	**27.0184**	0.401	1.5	ug/L	44	Standard
|	**Cd**	111	142471.6	0.8	**24.4676**	0.261	1.1	mg/L	512	Standard
|	**Cd**	114	351385.5	1.2	**23.7751**	0.234	1.0	ug/L	1247	Standard
|>	**In**	115	865573.6	1.1				ug/L	743274	Standard
|	**Sn**	118	1605.4	2.1	**0.0311**	0.002	5.3	ug/L	816	Standard
|	**Sb**	123	332943.7	1.0	**23.5933**	0.366	1.5	ug/L	15	Standard
⌊	**Ba**	135	148163.6	0.7	**24.3745**	0.287	1.2	ug/L	37	Standard
⌈	**Ce**	140	167.0	9.3				ug/L	44	Standard
⌊>	**Tb**	159	943388.2	1.0				ug/L	826676	Standard
⌈	**Ho**	165	13.7	36.8				ug/L	12	Standard
|	**Tl**	203	502924.4	1.5	**25.8302**	0.361	1.4	ug/L	6	Standard
|	**Tl**	205	1172155.6	0.7	**24.5560**	0.094	0.4	ug/L	11	Standard
|	**Pb**	206	402449.2	0.5	**25.7063**	0.302	1.2	ug/L	301	Standard
|	**Pb**	207	342087.4	0.4	**26.1950**	0.291	1.1	ug/L	250	Standard
|	**Pb**	208	1584336.3	0.4	**25.6813**	0.299	1.2	ug/L	1166	Standard
|	**U**	238	809626.3	1.2	**24.0157**	0.418	1.7	ug/L	3	Standard
⌊>	**Bi**	209	486775.3	1.1				ug/L	454659	Standard
⌈	**Na**	23	148.3	26.2	**0.0037**	0.007	196.9	mg/L	137	Standard
|	**Mg**	24	1150.0	6.1	**-0.0001**	0.000	92.4	mg/L	498	Standard

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	K	39	618.3	11.3	**-0.0062**	0.004	71.6	mg/L	557	Standard
	Ca	43	45.0	38.5	**-0.0081**	0.031	388.2	mg/L	52	Standard
	Fe	54	1479.9	7.9	**0.0446**	0.015	33.8	mg/L	865	Standard
	Fe	57	7468.5	4.5	**0.0002**	0.002	1022.2	mg/L	6003	Standard
>	**Sc-1**	45	399840.6	0.7				mg/L	333080	Standard
	Cl	35	54517.6	0.5				ug/L	40103	Standard
	Kr	83	73.1	3.3				ug/L	67	Standard
	Br	81	18771.6	4.2				ug/L	15294	Standard
	P	31	132813.5	6.2				ug/L	74262	Standard
	S	34	963653.3	3.8				ug/L	787377	Standard
	Sr	88	1213.4	2.9				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		113.557	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		119.546	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		116.454	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		114.118	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: LCSW 44 WG397152-03
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	107.064
	Na	23	
	Mg	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 44 WG397152-03
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Method 6020 - Summary Report

Sample ID: L1205012709 WG397152-01
Sample Date/Time: Tuesday, May 08, 2012 12:16:02
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	36993.5	3.2	**8035.8935**	405.871	5.1	ug/L	17857	Standard
|	**Be**	9	790.0	13.1	**0.1602**	0.025	15.6	ug/L	12	Standard
|	**Al**	27	3280054.8	2.5	**146.8204**	2.944	2.0	ug/L	13328	Standard
⌊>	**Sc**	45	393058.6	2.6				ug/L	333080	Standard
⌈	**Ti**	47	759.0	14.9	**0.3190**	0.045	14.1	ug/L	113	Standard
|	**V**	51	8962.3	3.1	**0.2015**	0.005	2.3	ug/L	4349	Standard
|	**Cr**	52	28285.1	2.5	**0.8341**	0.013	1.6	ug/L	14000	Standard
|	**Cr**	53	1043.4	3.2	**0.3017**	0.007	2.3	ug/L	319	Standard
|	**Mn**	55	992386.2	3.6	**38.3080**	0.320	0.8	ug/L	1367	Standard
|	**Co**	59	36126.4	3.4	**1.8669**	0.023	1.2	ug/L	115	Standard
|	**Ni**	60	5590.7	2.5	**1.3673**	0.017	1.2	ug/L	76	Standard
|	**Cu**	65	722.0	7.1	**0.1588**	0.018	11.2	ug/L	135	Standard
|	**Zn**	66	7039.3	2.5	**4.3691**	0.069	1.6	ug/L	185	Standard
| >	**Ge**	72	303273.0	2.9				ug/L	274929	Standard
|	**As**	75	-211.0	20.1	**0.0400**	0.025	62.9	ug/L	-262	Standard
|	**Se**	82	85.0	5.4	**0.2464**	0.018	7.2	ug/L	27	Standard
⌊	**Se-1**	77	184.3	11.8	**0.8415**	0.258	30.6	ug/L	94	Standard
	Ga	71	275695.5	3.4				mg/L	248575	Standard
⌈	**Rb**	85	60925.8	5.4				ug/L	15	Standard
| >	**Y**	89	480327.1	2.9				ug/L	267564	Standard
⌊	**Rh**	103	20.0	43.3				ug/L	2	Standard
⌈	**Mo**	98	70.8	9.8	**0.0183**	0.001	5.3	ug/L	5	Standard
|	**Ag**	107	86.7	24.4	**-0.0007**	0.002	228.8	ug/L	44	Standard
|	**Cd**	111	761.9	4.6	**0.0356**	0.004	10.6	mg/L	512	Standard
|	**Cd**	114	1896.4	3.0	**0.0388**	0.001	2.7	ug/L	1247	Standard
| >	**In**	115	823912.4	2.3				ug/L	743274	Standard
|	**Sn**	118	1419.7	2.1	**0.0255**	0.002	8.6	ug/L	816	Standard
|	**Sb**	123	435.6	36.9	**0.0308**	0.011	36.8	ug/L	15	Standard
⌊	**Ba**	135	171737.0	1.7	**29.6840**	0.293	1.0	ug/L	37	Standard
⌈	**Ce**	140	332552.4	1.9				ug/L	44	Standard
⌊>	**Tb**	159	930460.6	2.6				ug/L	826676	Standard
⌈	**Ho**	165	27038.1	2.1				ug/L	12	Standard
|	**Tl**	203	646.0	5.7	**0.0320**	0.002	5.0	ug/L	6	Standard
|	**Tl**	205	1472.4	6.8	**0.0342**	0.001	4.1	ug/L	11	Standard
|	**Pb**	206	1053.7	5.6	**0.0491**	0.003	5.8	ug/L	301	Standard
|	**Pb**	207	883.4	7.2	**0.0490**	0.003	6.9	ug/L	250	Standard
|	**Pb**	208	4034.5	4.5	**0.0472**	0.001	3.1	ug/L	1166	Standard
|	**U**	238	3367.0	0.7	**0.1072**	0.003	3.1	ug/L	3	Standard
⌊>	**Bi**	209	470437.7	2.6				ug/L	454659	Standard
⌈	**Na**	23	7400.1	1.7	**1.3727**	0.047	3.4	mg/L	137	Standard
|	**Mg**	24	779840.7	2.4	**1.0402**	0.012	1.1	mg/L	498	Standard

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	K	39	30671.1	4.4	**1.9073**	0.037	1.9	mg/L	557	Standard
	Ca	43	1795.1	6.0	**3.2705**	0.138	4.2	mg/L	52	Standard
	Fe	54	1313.4	4.6	**0.0251**	0.006	25.5	mg/L	865	Standard
	Fe	57	16924.5	4.0	**0.0410**	0.001	2.9	mg/L	6003	Standard
>	**Sc-1**	45	393058.6	2.6				mg/L	333080	Standard
	Cl	35	250256.7	1.3				ug/L	40103	Standard
	Kr	83	97.0	3.9				ug/L	67	Standard
	Br	81	21397.6	3.5				ug/L	15294	Standard
	P	31	86915.9	9.6				ug/L	74262	Standard
	S	34	1838926.0	2.2				ug/L	787377	Standard
	Sr	88	654922.1	3.9				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		110.310	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		179.518	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		110.849	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		112.554	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1205012709 WG397152-01
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	103.470
	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
Y 89 Int Std for sample	Y	89	Rerun sample

Sample ID: L1205012709 WG397152-01
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Method 6020 - Summary Report

Sample ID: L1205012709S WG397152-04

Sample Date/Time: Tuesday, May 08, 2012 12:18:54
Number of Replicates: 3
Autosampler Position: 304
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	40333.7	4.0	**8591.6248**	473.841	5.5	ug/L	17857	Standard
	Be	9	119563.4	2.6	**23.8679**	0.143	0.6	ug/L	12	Standard
	Al	27	4351408.1	2.2	**184.2775**	0.600	0.3	ug/L	13328	Standard
>	Sc	45	415794.9	2.3				ug/L	333080	Standard
	Ti	47	1029.4	9.7	**0.4450**	0.063	14.1	ug/L	113	Standard
	V	51	546419.7	1.7	**25.8350**	0.422	1.6	ug/L	4349	Standard
	Cr	52	432478.3	2.7	**27.1140**	0.279	1.0	ug/L	14000	Standard
	Cr	53	63297.0	2.8	**26.6809**	0.124	0.5	ug/L	319	Standard
	Mn	55	1765783.4	2.0	**67.2621**	0.782	1.2	ug/L	1367	Standard
	Co	59	539974.3	3.4	**27.5820**	0.224	0.8	ug/L	115	Standard
	Ni	60	110760.7	3.4	**27.0873**	0.383	1.4	ug/L	76	Standard
	Cu	65	93718.4	2.7	**26.0355**	0.249	1.0	ug/L	135	Standard
	Zn	66	47663.9	1.7	**29.9628**	0.517	1.7	ug/L	185	Standard
>	Ge	72	307655.5	2.9				ug/L	274929	Standard
	As	75	40886.5	1.5	**25.3140**	0.355	1.4	ug/L	-262	Standard
	Se	82	4798.2	2.9	**25.3256**	0.274	1.1	ug/L	27	Standard
	Se-1	77	2912.3	0.9	**26.6185**	0.586	2.2	ug/L	94	Standard
	Ga	71	282386.3	3.7				mg/L	248575	Standard
	Rb	85	70403.2	1.3				ug/L	15	Standard
>	Y	89	497521.7	1.9				ug/L	267564	Standard
	Rh	103	41.7	18.3				ug/L	2	Standard
	Mo	98	54.2	19.1	**0.0150**	0.002	11.4	ug/L	5	Standard
	Ag	107	326818.9	3.3	**25.8167**	0.439	1.7	ug/L	44	Standard
	Cd	111	146201.5	2.3	**25.3788**	0.474	1.9	mg/L	512	Standard
	Cd	114	370215.7	1.8	**25.3234**	0.398	1.6	ug/L	1247	Standard
>	In	115	856525.3	2.3				ug/L	743274	Standard
	Sn	118	1562.4	3.4	**0.0298**	0.001	3.0	ug/L	816	Standard
	Sb	123	345949.5	1.1	**24.7774**	0.414	1.7	ug/L	15	Standard
	Ba	135	329762.1	1.5	**54.8335**	0.438	0.8	ug/L	37	Standard
	Ce	140	358813.5	1.8				ug/L	44	Standard
>	Tb	159	957962.7	1.7				ug/L	826676	Standard
	Ho	165	29013.4	3.0				ug/L	12	Standard
	Tl	203	495573.9	2.5	**25.6307**	0.244	1.0	ug/L	6	Standard
	Tl	205	1161742.6	2.7	**24.5077**	0.309	1.3	ug/L	11	Standard
	Pb	206	394691.8	1.8	**25.3874**	0.181	0.7	ug/L	301	Standard
	Pb	207	338427.5	2.1	**26.0961**	0.227	0.9	ug/L	250	Standard
	Pb	208	1565338.9	1.8	**25.5517**	0.236	0.9	ug/L	1166	Standard
	U	238	808587.4	2.4	**24.1519**	0.329	1.4	ug/L	3	Standard
>	Bi	209	483344.5	1.7				ug/L	454659	Standard
	Na	23	7975.4	1.8	**1.3984**	0.011	0.8	mg/L	137	Standard
	Mg	24	844050.0	2.2	**1.0643**	0.008	0.7	mg/L	498	Standard

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	K	39	33405.2	3.9	**1.9652**	0.035	1.8	mg/L	557	Standard
	Ca	43	2006.8	2.9	**3.4633**	0.086	2.5	mg/L	52	Standard
	Fe	54	1554.1	4.7	**0.0466**	0.006	12.7	mg/L	865	Standard
	Fe	57	23341.3	4.3	**0.0629**	0.002	3.1	mg/L	6003	Standard
>	**Sc-1**	45	415794.9	2.3				mg/L	333080	Standard
	Cl	35	276690.3	0.7				ug/L	40103	Standard
	Kr	83	104.2	5.9				ug/L	67	Standard
	Br	81	23184.4	2.6				ug/L	15294	Standard
	P	31	95146.3	2.8				ug/L	74262	Standard
	S	34	1963263.9	1.6				ug/L	787377	Standard
	Sr	88	686174.1	3.0				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		111.904	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		185.945	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		115.237	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		115.881	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	106.309
	Na	23	
	Mg	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

Approved: May 09, 2012

Method 6020 - Summary Report

Sample ID: L1205012709SD WG397152-05

Sample Date/Time: Tuesday, May 08, 2012 12:21:47
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	39247.4	1.2	**8599.2214**	174.402	2.0	ug/L	17857	Standard
|	**Be**	9	119140.0	1.8	**24.4486**	0.360	1.5	ug/L	12	Standard
|	**Al**	27	4238558.9	1.5	**184.5342**	4.310	2.3	ug/L	13328	Standard
⌊>	**Sc**	45	404495.1	0.8				ug/L	333080	Standard
⌈	**Ti**	47	985.0	6.0	**0.4133**	0.022	5.4	ug/L	113	Standard
|	**V**	51	551743.2	0.9	**25.5675**	0.210	0.8	ug/L	4349	Standard
|	**Cr**	52	434221.5	0.9	**26.6746**	0.401	1.5	ug/L	14000	Standard
|	**Cr**	53	62139.7	0.8	**25.6755**	0.271	1.1	ug/L	319	Standard
|	**Mn**	55	1791899.0	1.7	**66.9066**	0.792	1.2	ug/L	1367	Standard
|	**Co**	59	534466.6	2.0	**26.7716**	0.666	2.5	ug/L	115	Standard
|	**Ni**	60	110145.0	1.5	**26.4095**	0.144	0.5	ug/L	76	Standard
|	**Cu**	65	92962.0	1.8	**25.3160**	0.265	1.0	ug/L	135	Standard
|	**Zn**	66	47898.9	1.0	**29.5111**	0.148	0.5	ug/L	185	Standard
|>	**Ge**	72	313806.5	1.4				ug/L	274929	Standard
|	**As**	75	41242.9	1.4	**25.0293**	0.059	0.2	ug/L	-262	Standard
|	**Se**	82	4755.7	1.0	**24.6042**	0.330	1.3	ug/L	27	Standard
⌊	**Se-1**	77	2928.3	3.8	**26.2105**	0.702	2.7	ug/L	94	Standard
	Ga	71	284776.5	1.2				mg/L	248575	Standard
⌈	**Rb**	85	66083.8	1.6				ug/L	15	Standard
|>	**Y**	89	519951.4	2.6				ug/L	267564	Standard
⌊	**Rh**	103	45.0	50.9				ug/L	2	Standard
⌈	**Mo**	98	84.7	7.4	**0.0199**	0.001	4.7	ug/L	5	Standard
|	**Ag**	107	325845.9	1.3	**25.2768**	0.288	1.1	ug/L	44	Standard
|	**Cd**	111	148705.8	1.5	**25.3430**	0.191	0.8	mg/L	512	Standard
|	**Cd**	114	370109.7	0.8	**24.8530**	0.073	0.3	ug/L	1247	Standard
|>	**In**	115	872285.8	0.7				ug/L	743274	Standard
|	**Sn**	118	1601.8	6.2	**0.0303**	0.005	16.6	ug/L	816	Standard
|	**Sb**	123	347162.8	0.5	**24.4098**	0.069	0.3	ug/L	15	Standard
⌊	**Ba**	135	328211.5	0.7	**53.5845**	0.489	0.9	ug/L	37	Standard
⌈	**Ce**	140	349327.1	0.3				ug/L	44	Standard
⌊>	**Tb**	159	967062.7	0.7				ug/L	826676	Standard
⌈	**Ho**	165	28732.2	0.8				ug/L	12	Standard
|	**Tl**	203	502276.4	0.6	**25.8309**	0.274	1.1	ug/L	6	Standard
|	**Tl**	205	1161368.5	0.1	**24.3616**	0.131	0.5	ug/L	11	Standard
|	**Pb**	206	396535.9	0.1	**25.3600**	0.145	0.6	ug/L	301	Standard
|	**Pb**	207	340733.3	0.1	**26.1239**	0.131	0.5	ug/L	250	Standard
|	**Pb**	208	1574100.3	0.3	**25.5470**	0.102	0.4	ug/L	1166	Standard
|	**U**	238	811467.8	0.5	**24.1001**	0.210	0.9	ug/L	3	Standard
⌊>	**Bi**	209	486141.7	0.6				ug/L	454659	Standard
⌈	**Na**	23	7963.8	2.3	**1.4358**	0.021	1.5	mg/L	137	Standard
|	**Mg**	24	819589.0	0.7	**1.0623**	0.016	1.5	mg/L	498	Standard

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	K	39	32613.4	1.3	**1.9730**	0.032	1.6	mg/L	557	Standard
	Ca	43	2086.8	2.8	**3.7077**	0.088	2.4	mg/L	52	Standard
	Fe	54	1489.9	5.6	**0.0438**	0.013	29.1	mg/L	865	Standard
	Fe	57	22022.7	2.6	**0.0601**	0.003	5.1	mg/L	6003	Standard
>	**Sc-1**	45	404495.1	0.8				mg/L	333080	Standard
	Cl	35	281073.7	1.3				ug/L	40103	Standard
	Kr	83	105.0	2.4				ug/L	67	Standard
	Br	81	25216.8	2.1				ug/L	15294	Standard
	P	31	91882.1	2.9				ug/L	74262	Standard
	S	34	1958253.8	1.5				ug/L	787377	Standard
	Sr	88	694809.5	3.0				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		114.141	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		194.328	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		117.357	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		116.982	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	106.924
	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
Y 89 Int Std for sample	Y	89	Rerun sample

Approved: May 09, 2012

Method 6020 - Summary Report

Sample ID: L1205012701

Sample Date/Time: Tuesday, May 08, 2012 12:24:40
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	331484.9	4.5	**127093.7540**	2182.705	1.7	ug/L	17857	Standard
|	**Be**	9	111.7	18.1	**0.0128**	0.003	22.4	ug/L	12	Standard
|	**Al**	27	576750.8	6.4	**21.0876**	0.966	4.6	ug/L	13328	Standard
⌊>	**Sc**	45	467692.0	3.3				ug/L	333080	Standard
⌈	**Ti**	47	5118.2	4.9	**2.5403**	0.093	3.6	ug/L	113	Standard
|	**V**	51	12499.8	4.6	**0.3984**	0.016	4.1	ug/L	4349	Standard
|	**Cr**	52	25381.9	5.0	**0.7133**	0.041	5.8	ug/L	14000	Standard
|	**Cr**	53	1050.0	2.1	**0.3240**	0.008	2.5	ug/L	319	Standard
|	**Mn**	55	2007125.8	5.4	**80.8354**	1.781	2.2	ug/L	1367	Standard
|	**Co**	59	23197.4	5.4	**1.2479**	0.042	3.3	ug/L	115	Standard
|	**Ni**	60	11395.3	7.8	**2.9266**	0.139	4.8	ug/L	76	Standard
|	**Cu**	65	783.0	2.4	**0.1852**	0.004	2.4	ug/L	135	Standard
|	**Zn**	66	3976.9	6.5	**2.5149**	0.126	5.0	ug/L	185	Standard
| >	**Ge**	72	290876.0	3.7				ug/L	274929	Standard
|	**As**	75	-70.4	51.9	**0.1256**	0.024	19.5	ug/L	-262	Standard
|	**Se**	82	68.5	7.0	**0.1734**	0.029	16.5	ug/L	27	Standard
⌊	**Se-1**	77	122.7	15.9	**0.2921**	0.147	50.3	ug/L	94	Standard
	Ga	71	264165.9	4.2				mg/L	248575	Standard
⌈	**Rb**	85	114468.1	4.8				ug/L	15	Standard
| >	**Y**	89	278348.7	3.3				ug/L	267564	Standard
⌊	**Rh**	103	150.0	8.8				ug/L	2	Standard
⌈	**Mo**	98	782.8	8.7	**0.1445**	0.006	4.4	ug/L	5	Standard
|	**Ag**	107	85.7	20.6	**-0.0007**	0.001	175.0	ug/L	44	Standard
|	**Cd**	111	617.2	4.2	**0.0105**	0.004	34.5	mg/L	512	Standard
|	**Cd**	114	1633.4	6.0	**0.0211**	0.003	16.4	ug/L	1247	Standard
| >	**In**	115	816280.3	4.0				ug/L	743274	Standard
|	**Sn**	118	1379.1	0.9	**0.0241**	0.002	10.2	ug/L	816	Standard
|	**Sb**	123	643.9	26.3	**0.0466**	0.011	23.5	ug/L	15	Standard
⌊	**Ba**	135	446580.7	3.9	**77.9231**	1.362	1.7	ug/L	37	Standard
⌈	**Ce**	140	10071.7	3.1				ug/L	44	Standard
⌊>	**Tb**	159	900638.6	2.7				ug/L	826676	Standard
⌈	**Ho**	165	196.3	8.4				ug/L	12	Standard
|	**Tl**	203	406.7	15.6	**0.0203**	0.004	18.8	ug/L	6	Standard
|	**Tl**	205	915.0	14.2	**0.0232**	0.003	14.0	ug/L	11	Standard
|	**Pb**	206	803.0	10.8	**0.0351**	0.006	17.9	ug/L	301	Standard
|	**Pb**	207	680.7	4.1	**0.0355**	0.003	8.6	ug/L	250	Standard
|	**Pb**	208	3183.5	7.1	**0.0355**	0.004	11.8	ug/L	1166	Standard
|	**U**	238	1673.4	4.1	**0.0576**	0.003	4.5	ug/L	3	Standard
⌊>	**Bi**	209	449135.0	2.0				ug/L	454659	Standard
⌈	**Na**	23	22221.3	5.0	**3.4981**	0.100	2.9	mg/L	137	Standard
|	**Mg**	24	1384514.9	2.3	**1.5534**	0.045	2.9	mg/L	498	Standard

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	K	39	25099.1	3.6	**1.2981**	0.012	0.9	mg/L	557	Standard
	Ca	43	17264.8	3.4	**27.0932**	0.492	1.8	mg/L	52	Standard
	Fe	54	4588.7	3.2	**0.3769**	0.006	1.6	mg/L	865	Standard
	Fe	57	140215.3	5.2	**0.4714**	0.016	3.5	mg/L	6003	Standard
>	**Sc-1**	45	467692.0	3.3				mg/L	333080	Standard
	Cl	35	518492.3	2.4				ug/L	40103	Standard
	Kr	83	69.9	8.2				ug/L	67	Standard
	Br	81	32408.0	5.1				ug/L	15294	Standard
	P	31	185488.8	5.2				ug/L	74262	Standard
	S	34	1307220.5	1.9				ug/L	787377	Standard
	Sr	88	4533195.9	1.6				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		105.800	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		104.031	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		109.822	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		108.947	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

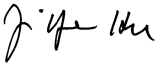
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	98.785
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1205012702
Sample Date/Time: Tuesday, May 08, 2012 12:27:33
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	26559.9	2.4	**1985.3886**	359.988	18.1	ug/L	17857	Standard
|	**Be**	9	236.7	27.5	**0.0393**	0.011	28.1	ug/L	12	Standard
|	**Al**	27	1981220.7	0.8	**82.2508**	3.151	3.8	ug/L	13328	Standard
⌊>	**Sc**	45	422570.9	4.0				ug/L	333080	Standard
⌈	**Ti**	47	2298.8	19.4	**1.0115**	0.204	20.2	ug/L	113	Standard
|	**V**	51	8402.8	2.6	**0.1545**	0.020	13.0	ug/L	4349	Standard
|	**Cr**	52	25887.4	0.7	**0.5909**	0.047	8.0	ug/L	14000	Standard
|	**Cr**	53	1578.4	5.2	**0.4979**	0.030	6.1	ug/L	319	Standard
|	**Mn**	55	140904.6	1.8	**5.1160**	0.177	3.5	ug/L	1367	Standard
|	**Co**	59	6805.9	1.8	**0.3297**	0.007	2.1	ug/L	115	Standard
|	**Ni**	60	1991.1	7.9	**0.4481**	0.022	5.0	ug/L	76	Standard
|	**Cu**	65	1031.0	4.5	**0.2311**	0.007	3.0	ug/L	135	Standard
|	**Zn**	66	3923.8	5.1	**2.2462**	0.058	2.6	ug/L	185	Standard
| >	**Ge**	72	319301.1	3.6				ug/L	274929	Standard
|	**As**	75	-179.4	20.1	**0.0654**	0.019	29.4	ug/L	-262	Standard
|	**Se**	82	63.6	1.5	**0.1137**	0.008	6.6	ug/L	27	Standard
⌊	**Se-1**	77	139.3	18.3	**0.3350**	0.202	60.2	ug/L	94	Standard
	Ga	71	296653.8	3.6				mg/L	248575	Standard
⌈	**Rb**	85	27257.9	3.7				ug/L	15	Standard
| >	**Y**	89	330164.5	3.4				ug/L	267564	Standard
⌊	**Rh**	103	8.3	124.9				ug/L	2	Standard
⌈	**Mo**	98	85.7	6.4	**0.0199**	0.001	7.3	ug/L	5	Standard
|	**Ag**	107	98.0	7.4	**-0.0003**	0.001	231.9	ug/L	44	Standard
|	**Cd**	111	907.9	0.8	**0.0502**	0.005	9.4	mg/L	512	Standard
|	**Cd**	114	2304.9	4.7	**0.0560**	0.004	7.7	ug/L	1247	Standard
| >	**In**	115	888774.6	3.8				ug/L	743274	Standard
|	**Sn**	118	1761.1	3.2	**0.0366**	0.001	3.9	ug/L	816	Standard
|	**Sb**	123	307.8	8.1	**0.0198**	0.002	10.5	ug/L	15	Standard
⌊	**Ba**	135	174907.8	2.4	**28.0369**	0.735	2.6	ug/L	37	Standard
⌈	**Ce**	140	115364.3	1.8				ug/L	44	Standard
⌊>	**Tb**	159	956711.4	2.7				ug/L	826676	Standard
⌈	**Ho**	165	1292.4	2.8				ug/L	12	Standard
|	**Tl**	203	425.3	4.0	**0.0193**	0.001	5.1	ug/L	6	Standard
|	**Tl**	205	1051.0	2.5	**0.0242**	0.000	1.3	ug/L	11	Standard
|	**Pb**	206	5382.0	3.0	**0.3208**	0.008	2.6	ug/L	301	Standard
|	**Pb**	207	4417.6	3.6	**0.3148**	0.008	2.6	ug/L	250	Standard
|	**Pb**	208	20705.5	3.1	**0.3127**	0.003	1.1	ug/L	1166	Standard
|	**U**	238	722.7	3.9	**0.0251**	0.001	3.0	ug/L	3	Standard
⌊>	**Bi**	209	490732.5	2.7				ug/L	454659	Standard
⌈	**Na**	23	13082.3	2.5	**2.2729**	0.069	3.0	mg/L	137	Standard
|	**Mg**	24	417984.9	1.8	**0.5181**	0.014	2.7	mg/L	498	Standard

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	K	39	8480.7	2.6	**0.4579**	0.025	5.5	mg/L	557	Standard
	Ca	43	273.3	17.3	**0.3873**	0.094	24.2	mg/L	52	Standard
	Fe	54	1862.9	3.8	**0.0836**	0.019	22.4	mg/L	865	Standard
	Fe	57	18594.7	1.8	**0.0427**	0.004	8.2	mg/L	6003	Standard
>	**Sc-1**	45	422570.9	4.0				mg/L	333080	Standard
	Cl	35	396535.9	1.7				ug/L	40103	Standard
	Kr	83	73.1	3.9				ug/L	67	Standard
	Br	81	27111.7	1.9				ug/L	15294	Standard
	P	31	137267.1	5.9				ug/L	74262	Standard
	S	34	1320722.2	2.7				ug/L	787377	Standard
	Sr	88	177365.9	5.6				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		116.139	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		123.396	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		119.576	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		115.730	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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Pb	207	
Pb	208	
U	238	
> Bi	209	107.934
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
Y 89 Int Std for sample	Y	89	Rerun sample

Approved: May 09, 2012

Method 6020 - Summary Report

Sample ID: L1205012702PS WG397320-01
Sample Date/Time: Tuesday, May 08, 2012 12:30:26
Number of Replicates: 3
Autosampler Position: 308
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	25977.3	2.2	**1155.4721**	182.757	15.8	ug/L	17857	Standard
|	**Be**	9	242182.6	2.4	**45.3563**	0.163	0.4	ug/L	12	Standard
|	**Al**	27	3034039.9	2.8	**120.2710**	0.849	0.7	ug/L	13328	Standard
⌊>	**Sc**	45	443271.1	2.3				ug/L	333080	Standard
⌈	**Ti**	47	2678.2	5.4	**1.1697**	0.065	5.5	ug/L	113	Standard
|	**V**	51	1164344.2	4.2	**52.5768**	1.847	3.5	ug/L	4349	Standard
|	**Cr**	52	890751.3	4.2	**54.0936**	1.829	3.4	ug/L	14000	Standard
|	**Cr**	53	132662.5	1.8	**53.3294**	0.512	1.0	ug/L	319	Standard
|	**Mn**	55	1636786.9	3.1	**59.2761**	1.367	2.3	ug/L	1367	Standard
|	**Co**	59	1071862.0	3.1	**52.0805**	1.275	2.4	ug/L	115	Standard
|	**Ni**	60	221898.9	4.5	**51.6282**	1.992	3.9	ug/L	76	Standard
|	**Cu**	65	196068.0	3.3	**51.8418**	1.269	2.4	ug/L	135	Standard
|	**Zn**	66	82583.7	4.0	**49.4457**	1.570	3.2	ug/L	185	Standard
| >	**Ge**	72	323457.7	0.9				ug/L	274929	Standard
|	**As**	75	82516.2	3.5	**48.4161**	1.403	2.9	ug/L	-262	Standard
|	**Se**	82	9476.3	5.0	**47.7485**	2.030	4.3	ug/L	27	Standard
⌊	**Se-1**	77	5378.0	3.4	**47.4381**	1.593	3.4	ug/L	94	Standard
	Ga	71	304465.3	0.4				mg/L	248575	Standard
⌈	**Rb**	85	26660.1	2.8				ug/L	15	Standard
| >	**Y**	89	335243.6	1.2				ug/L	267564	Standard
⌊	**Rh**	103	56.7	13.5				ug/L	2	Standard
⌈	**Mo**	98	279.4	9.8	**0.0509**	0.004	8.7	ug/L	5	Standard
|	**Ag**	107	686357.4	5.6	**51.6462**	2.852	5.5	ug/L	44	Standard
|	**Cd**	111	291009.7	3.2	**48.1952**	1.568	3.3	mg/L	512	Standard
|	**Cd**	114	729292.4	3.0	**47.5854**	1.450	3.0	ug/L	1247	Standard
| >	**In**	115	899383.2	0.4				ug/L	743274	Standard
|	**Sn**	118	2418.5	1.9	**0.0669**	0.002	3.1	ug/L	816	Standard
|	**Sb**	123	688875.9	1.5	**46.9782**	0.709	1.5	ug/L	15	Standard
⌊	**Ba**	135	476478.7	1.8	**75.4481**	1.386	1.8	ug/L	37	Standard
⌈	**Ce**	140	117107.7	2.7				ug/L	44	Standard
⌊>	**Tb**	159	978694.0	0.3				ug/L	826676	Standard
⌈	**Ho**	165	1304.1	3.9				ug/L	12	Standard
|	**Tl**	203	1020513.0	2.1	**50.5055**	1.159	2.3	ug/L	6	Standard
|	**Tl**	205	2601356.2	1.8	**52.5077**	1.019	1.9	ug/L	11	Standard
|	**Pb**	206	822199.8	3.1	**50.6213**	1.638	3.2	ug/L	301	Standard
|	**Pb**	207	710112.3	2.9	**52.4134**	1.614	3.1	ug/L	250	Standard
|	**Pb**	208	3268062.4	2.9	**51.0608**	1.553	3.0	ug/L	1166	Standard
|	**U**	238	1685231.2	3.2	**48.1604**	1.616	3.4	ug/L	3	Standard
⌊>	**Bi**	209	505188.4	0.3				ug/L	454659	Standard
⌈	**Na**	23	12845.5	4.8	**2.1239**	0.058	2.7	mg/L	137	Standard
|	**Mg**	24	421203.9	2.8	**0.4973**	0.005	1.0	mg/L	498	Standard

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	K	39	8490.7	3.8	**0.4344**	0.008	1.9	mg/L	557	Standard
	Ca	43	321.7	13.9	**0.4443**	0.082	18.3	mg/L	52	Standard
	Fe	54	1823.9	5.2	**0.0670**	0.007	10.1	mg/L	865	Standard
	Fe	57	19057.0	4.0	**0.0409**	0.001	3.2	mg/L	6003	Standard
>	**Sc-1**	45	443271.1	2.3				mg/L	333080	Standard
	Cl	35	392366.0	1.3				ug/L	40103	Standard
	Kr	83	68.0	3.7				ug/L	67	Standard
	Br	81	25957.3	6.0				ug/L	15294	Standard
	P	31	134454.0	1.2				ug/L	74262	Standard
	S	34	1333233.1	2.2				ug/L	787377	Standard
	Sr	88	190999.5	4.4				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		117.651	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		125.295	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		121.003	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		118.389	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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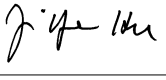
Approved: May 09, 2012

	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	111.114
	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
Y 89 Int Std for sample	Y	89	Rerun sample
In 115 Int Std for sample	In	115	Rerun sample

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Method 6020 - Summary Report

Sample ID: L1205012702SDL WG397152-02
Sample Date/Time: Tuesday, May 08, 2012 12:33:19
Number of Replicates: 3
Autosampler Position: 309
Sample Description: 5
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	17158.0	3.1	**822.0451**	249.066	30.3	ug/L	17857	Standard
|	**Be**	9	60.0	36.3	**0.0096**	0.006	63.6	ug/L	12	Standard
|	**Al**	27	359407.4	8.5	**20.3674**	1.850	9.1	ug/L	13328	Standard
⌊>	**Sc**	45	301575.2	0.8				ug/L	333080	Standard
⌈	**Ti**	47	437.3	10.8	**0.1959**	0.024	12.0	ug/L	113	Standard
|	**V**	51	4524.5	3.3	**0.0202**	0.012	58.8	ug/L	4349	Standard
|	**Cr**	52	13700.5	1.9	**0.0091**	0.033	360.1	ug/L	14000	Standard
|	**Cr**	53	426.7	7.6	**0.0647**	0.019	29.3	ug/L	319	Standard
|	**Mn**	55	22566.8	1.6	**0.9429**	0.030	3.2	ug/L	1367	Standard
|	**Co**	59	1118.7	4.5	**0.0613**	0.004	6.3	ug/L	115	Standard
|	**Ni**	60	397.3	3.5	**0.0927**	0.004	4.4	ug/L	76	Standard
|	**Cu**	65	372.0	6.3	**0.0757**	0.007	9.2	ug/L	135	Standard
|	**Zn**	66	3426.7	1.7	**2.3896**	0.076	3.2	ug/L	185	Standard
| >	**Ge**	72	263175.9	1.4				ug/L	274929	Standard
|	**As**	75	-193.0	1.3	**0.0327**	0.001	1.6	ug/L	-262	Standard
|	**Se**	82	26.3	3.7	**-0.0487**	0.004	8.2	ug/L	27	Standard
⌊	**Se-1**	77	74.7	10.1	**-0.1057**	0.083	78.5	ug/L	94	Standard
	Ga	71	232596.8	0.4				mg/L	248575	Standard
⌈	**Rb**	85	3837.2	4.6				ug/L	15	Standard
| >	**Y**	89	240275.3	0.8				ug/L	267564	Standard
⌊	**Rh**	103	1.7	173.2				ug/L	2	Standard
⌈	**Mo**	98	21.2	15.2	**0.0100**	0.001	6.2	ug/L	5	Standard
|	**Ag**	107	75.3	18.1	**-0.0010**	0.001	127.5	ug/L	44	Standard
|	**Cd**	111	291.0	3.4	**-0.0441**	0.002	4.7	mg/L	512	Standard
|	**Cd**	114	688.9	1.3	**-0.0422**	0.000	1.1	ug/L	1247	Standard
| >	**In**	115	745818.5	0.4				ug/L	743274	Standard
|	**Sn**	118	736.0	4.0	**-0.0060**	0.002	30.3	ug/L	816	Standard
|	**Sb**	123	1114.0	35.5	**0.0900**	0.032	35.7	ug/L	15	Standard
⌊	**Ba**	135	29910.8	2.2	**5.7051**	0.114	2.0	ug/L	37	Standard
⌈	**Ce**	140	20039.3	3.5				ug/L	44	Standard
⌊>	**Tb**	159	796412.4	0.2				ug/L	826676	Standard
⌈	**Ho**	165	213.0	9.7				ug/L	12	Standard
|	**Tl**	203	158.3	21.5	**0.0066**	0.002	29.3	ug/L	6	Standard
|	**Tl**	205	379.7	14.2	**0.0111**	0.001	11.3	ug/L	11	Standard
|	**Pb**	206	1238.1	6.2	**0.0661**	0.005	8.3	ug/L	301	Standard
|	**Pb**	207	1018.7	2.5	**0.0644**	0.002	3.4	ug/L	250	Standard
|	**Pb**	208	4791.6	2.0	**0.0646**	0.002	2.7	ug/L	1166	Standard
|	**U**	238	190.3	11.6	**0.0100**	0.001	7.2	ug/L	3	Standard
⌊>	**Bi**	209	444923.0	0.1				ug/L	454659	Standard
⌈	**Na**	23	2250.2	3.7	**0.5293**	0.017	3.2	mg/L	137	Standard
|	**Mg**	24	78789.6	4.5	**0.1355**	0.006	4.1	mg/L	498	Standard

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	K	39	2103.5	3.8	**0.1296**	0.005	4.0	mg/L	557	Standard
	Ca	43	100.0	15.0	**0.1532**	0.035	23.0	mg/L	52	Standard
	Fe	54	594.8	8.0	**-0.0493**	0.009	18.5	mg/L	865	Standard
	Fe	57	7325.1	2.6	**0.0096**	0.001	14.0	mg/L	6003	Standard
>	**Sc-1**	45	301575.2	0.8				mg/L	333080	Standard
	Cl	35	106548.1	1.7				ug/L	40103	Standard
	Kr	83	51.1	11.7				ug/L	67	Standard
	Br	81	13489.3	2.6				ug/L	15294	Standard
	P	31	37614.2	3.9				ug/L	74262	Standard
	S	34	836226.0	2.7				ug/L	787377	Standard
	Sr	88	26646.8	3.9				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		95.725	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		89.801	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		100.342	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		96.339	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1205012702SDL WG397152-02
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	97.859
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1205012702SDL WG397152-02
Report Date/Time: Tuesday, May 08, 2012 12:35:53
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Method 6020 - Summary Report

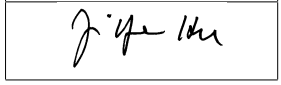
Sample ID: QC Std 6
Sample Date/Time: Tuesday, May 08, 2012 12:36:15
Number of Replicates: 3
Autosampler Position: 101
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	17767.1	2.0	**-49.1579**	142.128	289.1	ug/L	17857	Standard
|	**Be**	9	216805.2	0.5	**53.0797**	0.280	0.5	ug/L	12	Standard
|	**Al**	27	1035042.5	1.3	**53.2480**	0.448	0.8	ug/L	13328	Standard
⌊>	**Sc**	45	339102.8	0.7				ug/L	333080	Standard
⌈	**Ti**	47	194021.8	1.2	**100.9421**	0.840	0.8	ug/L	113	Standard
|	**V**	51	977777.8	1.6	**50.5296**	0.429	0.8	ug/L	4349	Standard
|	**Cr**	52	738130.8	1.1	**51.2603**	0.539	1.1	ug/L	14000	Standard
|	**Cr**	53	110149.8	0.8	**50.6856**	1.349	2.7	ug/L	319	Standard
|	**Mn**	55	1256831.1	0.3	**52.0986**	0.956	1.8	ug/L	1367	Standard
|	**Co**	59	887281.3	0.8	**49.3535**	1.013	2.1	ug/L	115	Standard
|	**Ni**	60	187270.1	1.8	**49.8749**	0.771	1.5	ug/L	76	Standard
|	**Cu**	65	165435.0	1.4	**50.0681**	0.481	1.0	ug/L	135	Standard
|	**Zn**	66	73372.6	1.2	**50.2917**	0.609	1.2	ug/L	185	Standard
| >	**Ge**	72	282645.9	1.9				ug/L	274929	Standard
|	**As**	75	73294.4	2.4	**49.2162**	0.535	1.1	ug/L	-262	Standard
|	**Se**	82	8175.4	2.5	**47.1458**	0.402	0.9	ug/L	27	Standard
⌊	**Se-1**	77	5054.8	3.4	**51.0877**	0.845	1.7	ug/L	94	Standard
	Ga	71	251940.2	2.5				mg/L	248575	Standard
⌈	**Rb**	85	1418.4	3.9				ug/L	15	Standard
| >	**Y**	89	268428.9	1.5				ug/L	267564	Standard
⌊	**Rh**	103	41.7	18.3				ug/L	2	Standard
⌈	**Mo**	98	506764.0	2.6	**92.4845**	1.690	1.8	ug/L	5	Standard
|	**Ag**	107	533354.0	2.0	**45.5132**	1.438	3.2	ug/L	44	Standard
|	**Cd**	111	267173.6	1.5	**50.1725**	0.694	1.4	mg/L	512	Standard
|	**Cd**	114	686498.6	0.7	**50.8008**	1.075	2.1	ug/L	1247	Standard
| >	**In**	115	793409.4	2.7				ug/L	743274	Standard
|	**Sn**	118	919461.6	1.8	**49.5933**	0.625	1.3	ug/L	816	Standard
|	**Sb**	123	645784.1	1.0	**49.9366**	0.850	1.7	ug/L	15	Standard
⌊	**Ba**	135	270335.9	1.2	**48.5342**	0.745	1.5	ug/L	37	Standard
⌈	**Ce**	140	1042.7	5.0				ug/L	44	Standard
⌊>	**Tb**	159	867434.0	1.3				ug/L	826676	Standard
⌈	**Ho**	165	24.3	2.4				ug/L	12	Standard
|	**Tl**	203	920250.4	0.8	**51.2034**	0.539	1.1	ug/L	6	Standard
|	**Tl**	205	2332104.0	1.0	**52.9220**	0.474	0.9	ug/L	11	Standard
|	**Pb**	206	734034.9	1.2	**50.8089**	0.656	1.3	ug/L	301	Standard
|	**Pb**	207	610477.2	1.5	**50.6533**	0.245	0.5	ug/L	250	Standard
|	**Pb**	208	2855234.1	1.6	**50.1503**	0.408	0.8	ug/L	1166	Standard
|	**U**	238	1497010.6	1.2	**48.0947**	0.289	0.6	ug/L	3	Standard
⌊>	**Bi**	209	449385.1	1.7				ug/L	454659	Standard
⌈	**Na**	23	25142.5	1.7	**5.4737**	0.119	2.2	mg/L	137	Standard
|	**Mg**	24	3446455.6	1.9	**5.3345**	0.063	1.2	mg/L	498	Standard

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	K	39	72836.4	2.6	**5.3301**	0.115	2.2	mg/L	557	Standard
	Ca	43	2531.9	2.8	**5.4075**	0.174	3.2	mg/L	52	Standard
	Fe	54	35584.1	1.7	**5.5492**	0.063	1.1	mg/L	865	Standard
	Fe	57	1103022.4	2.3	**5.4223**	0.085	1.6	mg/L	6003	Standard
>	**Sc-1**	45	339102.8	0.7				mg/L	333080	Standard
	Cl	35	61177.4	3.4				ug/L	40103	Standard
	Kr	83	59.8	5.0				ug/L	67	Standard
	Br	81	14491.1	6.6				ug/L	15294	Standard
	P	31	96145.3	4.5				ug/L	74262	Standard
	S	34	983465.3	2.2				ug/L	787377	Standard
	Sr	88	1160.0	3.0				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	106.496		
>	Sc	45			
	Ti	47	100.942		
	V	51	101.059		
	Cr	52	102.521		
	Cr	53			
	Mn	55	104.197		
	Co	59	98.707		
	Ni	60	99.750		
	Cu	65	100.136		
	Zn	66	100.583		
>	Ge	72		102.807	
	As	75	98.432		
	Se	82	94.292		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		100.323	
	Rh	103			
	Mo	98	92.484		
	Ag	107	91.026		
	Cd	111	100.345		
	Cd	114			
>	In	115		106.745	
	Sn	118	99.187		
	Sb	123	99.873		
	Ba	135	97.068		
	Ce	140			
>	Tb	159		104.930	
	Ho	165			
	Tl	203	102.407		
	Tl	205			
	Pb	206	101.618		

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	Pb	207	101.307	
	Pb	208	100.301	
	U	238	96.189	
>	Bi	209		98.840
	Na	23	109.475	
	Mg	24	106.690	
	K	39	106.602	
	Ca	43	108.149	
	Fe	54	110.984	
	Fe	57	108.446	
>	Sc-1	45		
	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

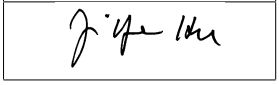
Sample ID: QC Std 7
Sample Date/Time: Tuesday, May 08, 2012 12:39:08
Number of Replicates: 3
Autosampler Position: 102
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	16787.6	2.5	**-344.5728**	143.500	41.6	ug/L	17857	Standard
|	**Be**	9	13.3	21.7	**-0.0036**	0.001	21.5	ug/L	12	Standard
|	**Al**	27	13556.1	1.7	**0.0250**	0.018	72.2	ug/L	13328	Standard
⌊>	**Sc**	45	330012.5	1.6				ug/L	333080	Standard
⌈	**Ti**	47	114.0	6.9	**0.0144**	0.005	33.0	ug/L	113	Standard
|	**V**	51	4168.2	2.8	**-0.0035**	0.003	95.3	ug/L	4349	Standard
|	**Cr**	52	13438.6	1.9	**-0.0274**	0.011	41.8	ug/L	14000	Standard
|	**Cr**	53	320.8	18.8	**0.0095**	0.029	306.5	ug/L	319	Standard
|	**Mn**	55	1385.1	1.0	**-0.0023**	0.002	73.5	ug/L	1367	Standard
|	**Co**	59	140.3	6.0	**0.0027**	0.001	24.4	ug/L	115	Standard
|	**Ni**	60	77.7	17.6	**0.0009**	0.004	469.1	ug/L	76	Standard
|	**Cu**	65	139.7	4.2	**-0.0006**	0.001	201.2	ug/L	135	Standard
|	**Zn**	66	195.3	7.3	**0.0016**	0.011	691.9	ug/L	185	Standard
| >	**Ge**	72	267464.0	2.0				ug/L	274929	Standard
|	**As**	75	-231.3	16.8	**0.0081**	0.026	320.8	ug/L	-262	Standard
|	**Se**	82	27.9	23.1	**-0.0416**	0.041	98.5	ug/L	27	Standard
⌊	**Se-1**	77	78.3	3.2	**-0.0792**	0.012	14.9	ug/L	94	Standard
	Ga	71	243384.4	1.3				mg/L	248575	Standard
⌈	**Rb**	85	21.7	58.1				ug/L	15	Standard
| >	**Y**	89	257671.5	2.1				ug/L	267564	Standard
⌊	**Rh**	103	1.7	173.2				ug/L	2	Standard
⌈	**Mo**	98	76.4	57.7	**0.0205**	0.009	41.5	ug/L	5	Standard
|	**Ag**	107	77.7	11.0	**-0.0009**	0.001	93.5	ug/L	44	Standard
|	**Cd**	111	515.9	0.9	**-0.0009**	0.000	34.8	mg/L	512	Standard
|	**Cd**	114	1349.9	2.9	**0.0080**	0.003	38.5	ug/L	1247	Standard
| >	**In**	115	759152.1	0.7				ug/L	743274	Standard
|	**Sn**	118	1001.7	5.4	**0.0082**	0.003	41.8	ug/L	816	Standard
|	**Sb**	123	390.2	35.9	**0.0301**	0.012	38.4	ug/L	15	Standard
⌊	**Ba**	135	60.7	22.4	**0.0047**	0.002	51.9	ug/L	37	Standard
⌈	**Ce**	140	50.0	6.0				ug/L	44	Standard
⌊>	**Tb**	159	826826.4	1.2				ug/L	826676	Standard
⌈	**Ho**	165	10.0	43.6				ug/L	12	Standard
|	**Tl**	203	44.0	16.4	**0.0001**	0.000	407.5	ug/L	6	Standard
|	**Tl**	205	101.0	18.1	**0.0046**	0.000	9.4	ug/L	11	Standard
|	**Pb**	206	329.7	2.7	**0.0023**	0.001	29.6	ug/L	301	Standard
|	**Pb**	207	264.7	4.6	**0.0010**	0.001	108.6	ug/L	250	Standard
|	**Pb**	208	1296.0	1.4	**0.0023**	0.000	20.7	ug/L	1166	Standard
|	**U**	238	64.0	39.9	**0.0059**	0.001	14.2	ug/L	3	Standard
⌊>	**Bi**	209	448971.0	1.1				ug/L	454659	Standard
⌈	**Na**	23	116.7	21.6	**0.0024**	0.006	243.4	mg/L	137	Standard
|	**Mg**	24	540.0	16.1	**-0.0008**	0.000	16.6	mg/L	498	Standard

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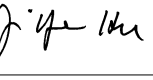


	K	39	706.7	12.7	**0.0087**	0.007	80.1	mg/L	557	Standard
	Ca	43	36.7	47.9	**-0.0092**	0.039	425.7	mg/L	52	Standard
	Fe	54	965.1	5.0	**0.0025**	0.010	409.6	mg/L	865	Standard
	Fe	57	5534.3	5.7	**-0.0031**	0.001	43.3	mg/L	6003	Standard
>	**Sc-1**	45	330012.5	1.6				mg/L	333080	Standard
	Cl	35	56953.9	2.0				ug/L	40103	Standard
	Kr	83	57.4	7.9				ug/L	67	Standard
	Br	81	13893.0	2.4				ug/L	15294	Standard
	P	31	86706.3	6.0				ug/L	74262	Standard
	S	34	956392.0	1.5				ug/L	787377	Standard
	Sr	88	480.0	43.9				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		97.285	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		96.303	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		102.136	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		100.018	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	98.749
	Na	23	
	Mg	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: L1205012703
Sample Date/Time: Tuesday, May 08, 2012 12:42:02
Number of Replicates: 3
Autosampler Position: 310
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	97678.9	0.8	**36094.0664**	1188.505	3.3	ug/L	17857	Standard
|	**Be**	9	2105.1	0.6	**0.4207**	0.016	3.8	ug/L	12	Standard
|	**Al**	27	1260214.1	4.4	**53.7584**	1.753	3.3	ug/L	13328	Standard
⌊>	**Sc**	45	409012.0	3.0				ug/L	333080	Standard
⌈	**Ti**	47	4332.6	9.1	**2.1536**	0.186	8.7	ug/L	113	Standard
|	**V**	51	7803.5	4.4	**0.1635**	0.011	7.0	ug/L	4349	Standard
|	**Cr**	52	19004.6	2.6	**0.2814**	0.018	6.4	ug/L	14000	Standard
|	**Cr**	53	1060.0	7.5	**0.3306**	0.031	9.3	ug/L	319	Standard
|	**Mn**	55	437919.8	3.6	**17.6823**	0.370	2.1	ug/L	1367	Standard
|	**Co**	59	16677.2	4.2	**0.9002**	0.027	3.0	ug/L	115	Standard
|	**Ni**	60	8144.5	5.0	**2.0976**	0.070	3.4	ug/L	76	Standard
|	**Cu**	65	809.4	4.4	**0.1941**	0.007	3.7	ug/L	135	Standard
|	**Zn**	66	9136.4	3.0	**5.9922**	0.097	1.6	ug/L	185	Standard
| >	**Ge**	72	289364.9	1.7				ug/L	274929	Standard
|	**As**	75	-12.1	160.4	**0.1637**	0.013	7.7	ug/L	-262	Standard
|	**Se**	82	45.2	19.4	**0.0440**	0.053	119.4	ug/L	27	Standard
⌊	**Se-1**	77	103.0	7.7	**0.1037**	0.063	61.1	ug/L	94	Standard
	Ga	71	261562.2	1.0				mg/L	248575	Standard
⌈	**Rb**	85	54554.7	1.7				ug/L	15	Standard
| >	**Y**	89	282188.3	2.9				ug/L	267564	Standard
⌊	**Rh**	103	20.0	25.0				ug/L	2	Standard
⌈	**Mo**	98	99.4	1.5	**0.0237**	0.000	1.0	ug/L	5	Standard
|	**Ag**	107	79.0	10.0	**-0.0012**	0.001	58.5	ug/L	44	Standard
|	**Cd**	111	620.2	1.1	**0.0126**	0.002	12.8	mg/L	512	Standard
|	**Cd**	114	1563.5	2.0	**0.0176**	0.003	14.9	ug/L	1247	Standard
| >	**In**	115	805328.2	0.3				ug/L	743274	Standard
|	**Sn**	118	1638.4	1.9	**0.0388**	0.002	5.0	ug/L	816	Standard
|	**Sb**	123	246.8	10.2	**0.0173**	0.002	11.0	ug/L	15	Standard
⌊	**Ba**	135	205966.3	3.5	**36.4218**	1.391	3.8	ug/L	37	Standard
⌈	**Ce**	140	33313.9	3.6				ug/L	44	Standard
⌊>	**Tb**	159	874858.5	1.5				ug/L	826676	Standard
⌈	**Ho**	165	667.0	4.3				ug/L	12	Standard
|	**Tl**	203	209.0	7.5	**0.0090**	0.001	9.4	ug/L	6	Standard
|	**Tl**	205	424.7	7.6	**0.0117**	0.001	7.0	ug/L	11	Standard
|	**Pb**	206	2113.1	3.8	**0.1218**	0.004	3.3	ug/L	301	Standard
|	**Pb**	207	1704.4	5.1	**0.1166**	0.005	4.7	ug/L	250	Standard
|	**Pb**	208	8102.5	4.1	**0.1180**	0.004	3.5	ug/L	1166	Standard
|	**U**	238	333.0	11.8	**0.0142**	0.001	9.0	ug/L	3	Standard
⌊>	**Bi**	209	461836.2	1.4				ug/L	454659	Standard
⌈	**Na**	23	12900.5	5.3	**2.3145**	0.098	4.2	mg/L	137	Standard
|	**Mg**	24	544768.3	2.1	**0.6980**	0.017	2.4	mg/L	498	Standard

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	K	39	14246.7	5.8	**0.8263**	0.025	3.0	mg/L	557	Standard
	Ca	43	1645.1	8.8	**2.8673**	0.172	6.0	mg/L	52	Standard
	Fe	54	5827.2	7.2	**0.6175**	0.034	5.5	mg/L	865	Standard
	Fe	57	169556.6	4.9	**0.6638**	0.024	3.5	mg/L	6003	Standard
>	**Sc-1**	45	409012.0	3.0				mg/L	333080	Standard
	Cl	35	262558.9	1.9				ug/L	40103	Standard
	Kr	83	58.7	9.3				ug/L	67	Standard
	Br	81	20957.0	3.6				ug/L	15294	Standard
	P	31	119604.1	4.1				ug/L	74262	Standard
	S	34	1683002.6	4.1				ug/L	787377	Standard
	Sr	88	702821.9	3.7				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		105.251	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		105.466	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		108.349	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		105.828	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	101.579
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1205012703
Report Date/Time: Tuesday, May 08, 2012 12:44:34
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Approved: May 09, 2012

Method 6020 - Summary Report

Sample ID: L1205012704
Sample Date/Time: Tuesday, May 08, 2012 12:44:54
Number of Replicates: 3
Autosampler Position: 311
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	219573.8	2.9	**85313.1462**	407.858	0.5	ug/L	17857	Standard
|	**Be**	9	18.3	15.7	**-0.0035**	0.001	15.9	ug/L	12	Standard
|	**Al**	27	139079.9	5.3	**4.8257**	0.439	9.1	ug/L	13328	Standard
⌊>	**Sc**	45	445426.5	3.1				ug/L	333080	Standard
⌈	**Ti**	47	4143.9	17.7	**2.1100**	0.427	20.2	ug/L	113	Standard
|	**V**	51	6735.9	4.4	**0.1168**	0.009	7.3	ug/L	4349	Standard
|	**Cr**	52	21150.8	3.5	**0.4618**	0.025	5.5	ug/L	14000	Standard
|	**Cr**	53	728.4	8.5	**0.1882**	0.022	11.9	ug/L	319	Standard
|	**Mn**	55	1211529.1	3.3	**50.1083**	0.748	1.5	ug/L	1367	Standard
|	**Co**	59	1028.7	3.7	**0.0516**	0.003	4.9	ug/L	115	Standard
|	**Ni**	60	2862.3	5.2	**0.7399**	0.027	3.7	ug/L	76	Standard
|	**Cu**	65	684.0	1.6	**0.1616**	0.007	4.1	ug/L	135	Standard
|	**Zn**	66	2675.6	0.6	**1.6955**	0.030	1.8	ug/L	185	Standard
| >	**Ge**	72	283152.3	1.9				ug/L	274929	Standard
|	**As**	75	-216.0	13.4	**0.0273**	0.017	63.9	ug/L	-262	Standard
|	**Se**	82	36.5	11.3	**-0.0016**	0.024	1522.0	ug/L	27	Standard
⌊	**Se-1**	77	97.7	7.0	**0.0733**	0.086	117.3	ug/L	94	Standard
	Ga	71	259334.7	2.3				mg/L	248575	Standard
⌈	**Rb**	85	34029.9	2.4				ug/L	15	Standard
| >	**Y**	89	272029.6	4.1				ug/L	267564	Standard
⌊	**Rh**	103	80.0	18.8				ug/L	2	Standard
⌈	**Mo**	98	310.7	12.5	**0.0617**	0.006	9.9	ug/L	5	Standard
|	**Ag**	107	112.0	21.7	**0.0016**	0.002	119.2	ug/L	44	Standard
|	**Cd**	111	581.1	7.4	**0.0054**	0.006	118.8	mg/L	512	Standard
|	**Cd**	114	1532.8	4.3	**0.0155**	0.003	19.4	ug/L	1247	Standard
| >	**In**	115	804465.4	1.7				ug/L	743274	Standard
|	**Sn**	118	1389.1	1.3	**0.0256**	0.001	5.7	ug/L	816	Standard
|	**Sb**	123	225.1	9.1	**0.0156**	0.001	8.2	ug/L	15	Standard
⌊	**Ba**	135	656256.1	3.1	**116.1604**	1.680	1.4	ug/L	37	Standard
⌈	**Ce**	140	1902.8	5.8				ug/L	44	Standard
⌊>	**Tb**	159	874931.5	3.0				ug/L	826676	Standard
⌈	**Ho**	165	38.3	8.0				ug/L	12	Standard
|	**Tl**	203	117.3	22.0	**0.0041**	0.001	32.2	ug/L	6	Standard
|	**Tl**	205	284.0	17.7	**0.0088**	0.001	12.5	ug/L	11	Standard
|	**Pb**	206	579.3	7.2	**0.0194**	0.002	10.2	ug/L	301	Standard
|	**Pb**	207	460.0	4.1	**0.0170**	0.001	3.7	ug/L	250	Standard
|	**Pb**	208	2219.7	4.9	**0.0184**	0.001	5.6	ug/L	1166	Standard
|	**U**	238	189.0	6.8	**0.0099**	0.000	3.4	ug/L	3	Standard
⌊>	**Bi**	209	451477.3	2.6				ug/L	454659	Standard
⌈	**Na**	23	18775.0	2.8	**3.1015**	0.024	0.8	mg/L	137	Standard
|	**Mg**	24	1613436.4	1.6	**1.9009**	0.030	1.6	mg/L	498	Standard

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	K	39	27059.2	2.5	**1.4759**	0.038	2.6	mg/L	557	Standard
	Ca	43	10643.7	2.9	**17.5061**	0.241	1.4	mg/L	52	Standard
	Fe	54	2179.0	3.2	**0.1094**	0.003	2.4	mg/L	865	Standard
	Fe	57	54645.1	1.8	**0.1746**	0.003	1.9	mg/L	6003	Standard
>	**Sc-1**	45	445426.5	3.1				mg/L	333080	Standard
	Cl	35	161238.8	0.8				ug/L	40103	Standard
	Kr	83	63.7	3.2				ug/L	67	Standard
	Br	81	16950.3	5.5				ug/L	15294	Standard
	P	31	124637.0	4.3				ug/L	74262	Standard
	S	34	1002570.1	1.9				ug/L	787377	Standard
	Sr	88	3424494.3	3.3				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		102.991	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		101.669	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		108.233	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		105.837	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

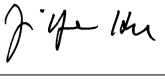
Approved: May 09, 2012

	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	99.300
	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
Ba 135 Upper, S, EEE	Ba	135	

Approved: May 09, 2012



Method 6020 - Summary Report

Sample ID: L1205012705
Sample Date/Time: Tuesday, May 08, 2012 12:47:46
Number of Replicates: 3
Autosampler Position: 312
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	52648.0	1.1	**14031.8988**	808.072	5.8	ug/L	17857	Standard
|	**Be**	9	335.0	14.7	**0.0590**	0.008	14.2	ug/L	12	Standard
|	**Al**	27	1646691.5	10.4	**68.3448**	6.149	9.0	ug/L	13328	Standard
⌊>	**Sc**	45	421163.5	2.2				ug/L	333080	Standard
⌈	**Ti**	47	7035.7	13.7	**3.5274**	0.517	14.7	ug/L	113	Standard
|	**V**	51	14199.2	4.0	**0.4876**	0.042	8.5	ug/L	4349	Standard
|	**Cr**	52	31494.4	2.8	**1.1449**	0.113	9.9	ug/L	14000	Standard
|	**Cr**	53	2101.0	2.3	**0.7994**	0.046	5.7	ug/L	319	Standard
|	**Mn**	55	1601434.3	2.8	**64.8061**	3.041	4.7	ug/L	1367	Standard
|	**Co**	59	10863.9	4.2	**0.5844**	0.037	6.3	ug/L	115	Standard
|	**Ni**	60	4220.9	2.6	**1.0770**	0.056	5.2	ug/L	76	Standard
|	**Cu**	65	1327.7	4.6	**0.3475**	0.027	7.8	ug/L	135	Standard
|	**Zn**	66	5117.5	3.3	**3.2929**	0.165	5.0	ug/L	185	Standard
| >	**Ge**	72	289731.6	2.7				ug/L	274929	Standard
|	**As**	75	382.4	4.4	**0.4214**	0.018	4.2	ug/L	-262	Standard
|	**Se**	82	211.5	2.0	**0.9838**	0.050	5.1	ug/L	27	Standard
⌊	**Se-1**	77	135.3	10.1	**0.4306**	0.173	40.1	ug/L	94	Standard
	Ga	71	259501.8	1.6				mg/L	248575	Standard
⌈	**Rb**	85	49552.6	3.1				ug/L	15	Standard
| >	**Y**	89	295358.1	1.5				ug/L	267564	Standard
⌊	**Rh**	103	55.0	31.5				ug/L	2	Standard
⌈	**Mo**	98	151.4	17.8	**0.0325**	0.005	15.2	ug/L	5	Standard
|	**Ag**	107	90.7	12.7	**-0.0004**	0.001	256.6	ug/L	44	Standard
|	**Cd**	111	706.7	3.9	**0.0255**	0.006	23.7	mg/L	512	Standard
|	**Cd**	114	1761.9	3.0	**0.0290**	0.003	9.9	ug/L	1247	Standard
| >	**In**	115	825017.4	0.9				ug/L	743274	Standard
|	**Sn**	118	1175.4	2.4	**0.0127**	0.001	7.3	ug/L	816	Standard
|	**Sb**	123	392.6	5.0	**0.0277**	0.002	6.1	ug/L	15	Standard
⌊	**Ba**	135	388943.0	2.4	**67.1462**	1.972	2.9	ug/L	37	Standard
⌈	**Ce**	140	66352.5	4.1				ug/L	44	Standard
⌊>	**Tb**	159	898173.0	2.2				ug/L	826676	Standard
⌈	**Ho**	165	1178.4	6.4				ug/L	12	Standard
|	**Tl**	203	727.7	2.2	**0.0373**	0.001	1.5	ug/L	6	Standard
|	**Tl**	205	1681.1	2.1	**0.0397**	0.001	2.2	ug/L	11	Standard
|	**Pb**	206	1992.1	3.0	**0.1145**	0.004	3.4	ug/L	301	Standard
|	**Pb**	207	1604.8	4.3	**0.1094**	0.004	3.4	ug/L	250	Standard
|	**Pb**	208	7549.1	4.0	**0.1094**	0.004	3.4	ug/L	1166	Standard
|	**U**	238	895.4	7.3	**0.0320**	0.002	4.8	ug/L	3	Standard
⌊>	**Bi**	209	458965.3	1.9				ug/L	454659	Standard
⌈	**Na**	23	26418.0	0.9	**4.6282**	0.104	2.2	mg/L	137	Standard
|	**Mg**	24	954991.0	2.6	**1.1892**	0.031	2.6	mg/L	498	Standard

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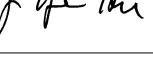
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	K	39	16141.9	4.6	**0.9145**	0.047	5.1	mg/L	557	Standard
	Ca	43	6046.2	1.2	**10.4833**	0.255	2.4	mg/L	52	Standard
	Fe	54	3525.4	8.9	**0.2983**	0.035	11.7	mg/L	865	Standard
	Fe	57	96308.9	4.9	**0.3521**	0.013	3.7	mg/L	6003	Standard
>	**Sc-1**	45	421163.5	2.2				mg/L	333080	Standard
	Cl	35	669079.1	1.5				ug/L	40103	Standard
	Kr	83	66.9	2.7				ug/L	67	Standard
	Br	81	96535.1	3.5				ug/L	15294	Standard
	P	31	106275.6	1.3				ug/L	74262	Standard
	S	34	1801000.2	3.9				ug/L	787377	Standard
	Sr	88	1866693.8	5.3				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		105.384	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		110.388	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		110.998	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		108.649	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	100.947
	Na	23	
	Mg	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 09, 2012

Method 6020 - Summary Report

Sample ID: L1205012706
Sample Date/Time: Tuesday, May 08, 2012 12:50:38
Number of Replicates: 3
Autosampler Position: 313
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	96396.2	5.0	**34833.6448**	172.436	0.5	ug/L	17857	Standard
|	**Be**	9	66.7	8.7	**0.0065**	0.002	26.9	ug/L	12	Standard
|	**Al**	27	1714068.0	9.1	**72.3459**	5.672	7.8	ug/L	13328	Standard
⌊>	**Sc**	45	414691.3	4.7				ug/L	333080	Standard
⌈	**Ti**	47	9525.4	11.3	**5.1076**	0.605	11.8	ug/L	113	Standard
|	**V**	51	23113.6	6.9	**1.0143**	0.060	5.9	ug/L	4349	Standard
|	**Cr**	52	45330.6	7.0	**2.3023**	0.161	7.0	ug/L	14000	Standard
|	**Cr**	53	2753.6	2.7	**1.1736**	0.019	1.6	ug/L	319	Standard
|	**Mn**	55	3843360.1	5.1	**165.6444**	5.007	3.0	ug/L	1367	Standard
|	**Co**	59	15699.5	10.5	**0.9010**	0.075	8.4	ug/L	115	Standard
|	**Ni**	60	10900.9	5.7	**2.9965**	0.108	3.6	ug/L	76	Standard
|	**Cu**	65	808.7	1.1	**0.2094**	0.004	2.1	ug/L	135	Standard
|	**Zn**	66	2278.8	2.3	**1.4877**	0.004	0.2	ug/L	185	Standard
|>	**Ge**	72	271898.7	2.1				ug/L	274929	Standard
|	**As**	75	2374.2	3.6	**1.8228**	0.037	2.0	ug/L	-262	Standard
|	**Se**	82	866.0	4.5	**5.0011**	0.153	3.1	ug/L	27	Standard
⌊	**Se-1**	77	151.7	7.7	**0.6932**	0.150	21.7	ug/L	94	Standard
	Ga	71	241188.4	3.1				mg/L	248575	Standard
⌈	**Rb**	85	255591.4	1.4				ug/L	15	Standard
|>	**Y**	89	266631.8	2.8				ug/L	267564	Standard
⌊	**Rh**	103	171.7	8.9				ug/L	2	Standard
⌈	**Mo**	98	204.6	8.0	**0.0454**	0.002	4.7	ug/L	5	Standard
|	**Ag**	107	49.7	10.1	**-0.0033**	0.001	16.0	ug/L	44	Standard
|	**Cd**	111	544.6	6.4	**0.0062**	0.004	65.5	mg/L	512	Standard
|	**Cd**	114	1386.8	3.4	**0.0125**	0.003	26.7	ug/L	1247	Standard
|>	**In**	115	747940.4	2.7				ug/L	743274	Standard
|	**Sn**	118	2930.0	13.3	**0.1199**	0.027	22.2	ug/L	816	Standard
|	**Sb**	123	1031.4	4.5	**0.0830**	0.002	1.9	ug/L	15	Standard
⌊	**Ba**	135	1383322.9	3.4	**263.3812**	2.520	1.0	ug/L	37	Standard
⌈	**Ce**	140	36268.1	3.9				ug/L	44	Standard
⌊>	**Tb**	159	850164.9	2.9				ug/L	826676	Standard
⌈	**Ho**	165	1031.4	5.0				ug/L	12	Standard
|	**Tl**	203	469.3	12.9	**0.0269**	0.003	12.9	ug/L	6	Standard
|	**Tl**	205	1048.0	13.2	**0.0289**	0.003	10.7	ug/L	11	Standard
|	**Pb**	206	1083.7	2.4	**0.0635**	0.003	4.9	ug/L	301	Standard
|	**Pb**	207	842.7	3.4	**0.0572**	0.001	2.6	ug/L	250	Standard
|	**Pb**	208	4086.9	1.2	**0.0599**	0.001	1.2	ug/L	1166	Standard
|	**U**	238	196.0	3.2	**0.0109**	0.000	1.7	ug/L	3	Standard
⌊>	**Bi**	209	401581.1	1.6				ug/L	454659	Standard
⌈	**Na**	23	130420.8	2.5	**23.3091**	0.510	2.2	mg/L	137	Standard
|	**Mg**	24	7617066.4	2.5	**9.6506**	0.299	3.1	mg/L	498	Standard

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	K	39	410051.5	0.9	**24.7304**	0.960	3.9	mg/L	557	Standard
	Ca	43	24394.6	2.3	**43.2628**	1.395	3.2	mg/L	52	Standard
	Fe	54	72800.7	2.5	**9.3987**	0.361	3.8	mg/L	865	Standard
	Fe	57	2291273.7	2.4	**9.2404**	0.271	2.9	mg/L	6003	Standard
>	**Sc-1**	45	414691.3	4.7				mg/L	333080	Standard
	Cl	35	2061591.7	2.0				ug/L	40103	Standard
	Kr	83	70.1	4.3				ug/L	67	Standard
	Br	81	442548.8	3.9				ug/L	15294	Standard
	P	31	409235.4	2.1				ug/L	74262	Standard
	S	34	1022024.0	3.8				ug/L	787377	Standard
	Sr	88	6761877.9	4.6				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		98.898	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		99.651	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		100.628	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		102.841	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	88.326
	Na	23	
	Mg	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 09, 2012

Method 6020 - Summary Report

Sample ID: L1205012707

Sample Date/Time: Tuesday, May 08, 2012 12:53:30
Number of Replicates: 3
Autosampler Position: 314
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	86955.6	3.2	**32413.2423**	1555.886	4.8	ug/L	17857	Standard
|	**Be**	9	4375.6	3.5	**0.9120**	0.035	3.8	ug/L	12	Standard
|	**Al**	27	36126742.6	1.4	**1614.5318**	43.692	2.7	ug/L	13328	Standard
⌊>	**Sc**	45	395425.8	1.4				ug/L	333080	Standard
⌈	**Ti**	47	2411.5	28.7	**1.1539**	0.349	30.3	ug/L	113	Standard
|	**V**	51	46871.1	1.3	**2.0971**	0.037	1.8	ug/L	4349	Standard
|	**Cr**	52	24576.9	0.3	**0.6331**	0.013	2.0	ug/L	14000	Standard
|	**Cr**	53	1798.4	3.7	**0.6473**	0.031	4.8	ug/L	319	Standard
|	**Mn**	55	1931257.7	1.0	**76.6450**	0.913	1.2	ug/L	1367	Standard
|	**Co**	59	201847.4	1.3	**10.7404**	0.132	1.2	ug/L	115	Standard
|	**Ni**	60	68742.6	1.0	**17.5105**	0.236	1.3	ug/L	76	Standard
|	**Cu**	65	871.0	3.6	**0.2073**	0.009	4.4	ug/L	135	Standard
|	**Zn**	66	37780.0	1.5	**24.7146**	0.413	1.7	ug/L	185	Standard
| >	**Ge**	72	295273.1	0.5				ug/L	274929	Standard
|	**As**	75	28.2	259.8	**0.1894**	0.047	24.8	ug/L	-262	Standard
|	**Se**	82	327.2	6.5	**1.6015**	0.110	6.8	ug/L	27	Standard
⌊	**Se-1**	77	471.0	2.0	**3.7093**	0.081	2.2	ug/L	94	Standard
	Ga	71	272745.3	1.5				mg/L	248575	Standard
⌈	**Rb**	85	165639.7	3.8				ug/L	15	Standard
| >	**Y**	89	2060824.9	2.8				ug/L	267564	Standard
⌊	**Rh**	103	36.7	55.1				ug/L	2	Standard
⌈	**Mo**	98	349.7	2.3	**0.0675**	0.002	2.8	ug/L	5	Standard
|	**Ag**	107	90.7	5.6	**-0.0003**	0.000	112.9	ug/L	44	Standard
|	**Cd**	111	2402.9	1.7	**0.3345**	0.011	3.2	mg/L	512	Standard
|	**Cd**	114	6183.6	3.0	**0.3464**	0.016	4.6	ug/L	1247	Standard
| >	**In**	115	821054.2	0.8				ug/L	743274	Standard
|	**Sn**	118	1369.1	1.4	**0.0231**	0.001	3.8	ug/L	816	Standard
|	**Sb**	123	118.0	6.2	**0.0073**	0.000	6.8	ug/L	15	Standard
⌊	**Ba**	135	106109.6	1.4	**18.4014**	0.362	2.0	ug/L	37	Standard
⌈	**Ce**	140	8967398.9	1.5				ug/L	44	Standard
⌊>	**Tb**	159	1095640.3	0.7				ug/L	826676	Standard
⌈	**Ho**	165	198207.6	1.7				ug/L	12	Standard
|	**Tl**	203	270.0	2.2	**0.0122**	0.000	2.3	ug/L	6	Standard
|	**Tl**	205	631.3	5.8	**0.0162**	0.001	5.1	ug/L	11	Standard
|	**Pb**	206	1015.4	3.6	**0.0477**	0.003	6.1	ug/L	301	Standard
|	**Pb**	207	811.0	5.0	**0.0443**	0.004	8.4	ug/L	250	Standard
|	**Pb**	208	3882.5	2.0	**0.0457**	0.002	3.8	ug/L	1166	Standard
|	**U**	238	4006.9	3.3	**0.1287**	0.005	4.0	ug/L	3	Standard
⌊>	**Bi**	209	463300.0	0.8				ug/L	454659	Standard
⌈	**Na**	23	24584.9	2.7	**4.5874**	0.184	4.0	mg/L	137	Standard
|	**Mg**	24	1437356.0	0.4	**1.9073**	0.034	1.8	mg/L	498	Standard

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	K	39	24676.7	0.9	**1.5171**	0.033	2.1	mg/L	557	Standard
	Ca	43	1988.5	4.6	**3.6109**	0.123	3.4	mg/L	52	Standard
	Fe	54	20646.0	3.8	**2.6837**	0.144	5.4	mg/L	865	Standard
	Fe	57	640804.8	2.3	**2.6869**	0.100	3.7	mg/L	6003	Standard
>	**Sc-1**	45	395425.8	1.4				mg/L	333080	Standard
	Cl	35	656985.9	0.9				ug/L	40103	Standard
	Kr	83	262.7	0.8				ug/L	67	Standard
	Br	81	42876.8	10.2				ug/L	15294	Standard
	P	31	88082.3	4.3				ug/L	74262	Standard
	S	34	3009469.0	1.3				ug/L	787377	Standard
	Sr	88	1243689.7	0.8				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		107.400	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		770.216	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		110.464	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		132.536	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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Pb	207	
Pb	208	
U	238	
> Bi	209	101.901
Na	23	
Mg	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
Tb 159 Int Std for sample	Tb	159	Rerun sample

Approved: May 09, 2012

Method 6020 - Summary Report

Sample ID: L1205012708

Sample Date/Time: Tuesday, May 08, 2012 12:56:22
Number of Replicates: 3
Autosampler Position: 315
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	76817.7	3.5	**28886.3648**	639.603	2.2	ug/L	17857	Standard
|	**Be**	9	163.3	12.4	**0.0288**	0.006	20.2	ug/L	12	Standard
|	**Al**	27	987585.9	6.7	**45.1049**	1.592	3.5	ug/L	13328	Standard
⌊>	**Sc**	45	380846.5	3.8				ug/L	333080	Standard
⌈	**Ti**	47	2264.8	27.9	**1.0899**	0.286	26.2	ug/L	113	Standard
|	**V**	51	11658.3	4.4	**0.3546**	0.007	2.0	ug/L	4349	Standard
|	**Cr**	52	20524.6	3.5	**0.3763**	0.012	3.2	ug/L	14000	Standard
|	**Cr**	53	1878.5	21.7	**0.6905**	0.157	22.8	ug/L	319	Standard
|	**Mn**	55	77507.2	3.6	**3.0553**	0.025	0.8	ug/L	1367	Standard
|	**Co**	59	2560.5	3.5	**0.1325**	0.003	2.3	ug/L	115	Standard
|	**Ni**	60	3199.3	6.2	**0.8050**	0.024	3.0	ug/L	76	Standard
|	**Cu**	65	1085.4	6.0	**0.2733**	0.009	3.5	ug/L	135	Standard
|	**Zn**	66	5090.2	5.5	**3.2503**	0.087	2.7	ug/L	185	Standard
| >	**Ge**	72	291481.6	3.2				ug/L	274929	Standard
|	**As**	75	-7.6	378.2	**0.1669**	0.019	11.4	ug/L	-262	Standard
|	**Se**	82	82.7	9.5	**0.2525**	0.048	19.0	ug/L	27	Standard
⌊	**Se-1**	77	145.0	7.3	**0.5158**	0.088	17.0	ug/L	94	Standard
	Ga	71	262853.5	3.5				mg/L	248575	Standard
⌈	**Rb**	85	29634.0	5.2				ug/L	15	Standard
| >	**Y**	89	273781.5	3.3				ug/L	267564	Standard
⌊	**Rh**	103	23.3	32.7				ug/L	2	Standard
⌈	**Mo**	98	100.8	12.0	**0.0236**	0.002	7.3	ug/L	5	Standard
|	**Ag**	107	84.0	23.0	**-0.0009**	0.001	162.4	ug/L	44	Standard
|	**Cd**	111	718.5	4.2	**0.0283**	0.003	11.3	mg/L	512	Standard
|	**Cd**	114	1840.0	2.6	**0.0354**	0.003	7.9	ug/L	1247	Standard
| >	**In**	115	820405.9	2.4				ug/L	743274	Standard
|	**Sn**	118	1768.8	1.8	**0.0440**	0.001	2.1	ug/L	816	Standard
|	**Sb**	123	147.6	10.8	**0.0095**	0.001	12.5	ug/L	15	Standard
⌊	**Ba**	135	218843.8	3.6	**37.9782**	0.454	1.2	ug/L	37	Standard
⌈	**Ce**	140	17905.6	4.9				ug/L	44	Standard
⌊>	**Tb**	159	899090.2	1.1				ug/L	826676	Standard
⌈	**Ho**	165	277.0	10.0				ug/L	12	Standard
|	**Tl**	203	515.0	1.0	**0.0252**	0.001	3.8	ug/L	6	Standard
|	**Tl**	205	1213.0	2.5	**0.0288**	0.001	4.3	ug/L	11	Standard
|	**Pb**	206	1849.1	5.6	**0.1024**	0.004	4.2	ug/L	301	Standard
|	**Pb**	207	1535.4	5.3	**0.1013**	0.004	4.2	ug/L	250	Standard
|	**Pb**	208	7120.3	4.8	**0.0997**	0.003	3.4	ug/L	1166	Standard
|	**U**	238	615.3	11.6	**0.0228**	0.002	8.0	ug/L	3	Standard
⌊>	**Bi**	209	467938.9	2.5				ug/L	454659	Standard
⌈	**Na**	23	15084.2	1.0	**2.9150**	0.092	3.2	mg/L	137	Standard
|	**Mg**	24	799863.5	3.6	**1.1012**	0.011	1.0	mg/L	498	Standard

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	K	39	17650.3	5.8	**1.1144**	0.025	2.3	mg/L	557	Standard
	Ca	43	3062.0	4.8	**5.8298**	0.195	3.3	mg/L	52	Standard
	Fe	54	1656.2	8.0	**0.0797**	0.013	16.0	mg/L	865	Standard
	Fe	57	28545.2	1.8	**0.0946**	0.003	3.3	mg/L	6003	Standard
>	**Sc-1**	45	380846.5	3.8				mg/L	333080	Standard
	Cl	35	1017524.8	1.0				ug/L	40103	Standard
	Kr	83	60.7	9.7				ug/L	67	Standard
	Br	81	29290.0	3.8				ug/L	15294	Standard
	P	31	115165.2	1.0				ug/L	74262	Standard
	S	34	1264289.9	3.2				ug/L	787377	Standard
	Sr	88	968485.5	6.5				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		106.021	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		102.324	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		110.377	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		108.760	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	102.921
	Na	23	
	Mg	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 09, 2012

Method 6020 - Summary Report

Sample ID: L1205012710
Sample Date/Time: Tuesday, May 08, 2012 12:59:14
Number of Replicates: 3
Autosampler Position: 316
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	27560.0	1.0	**4495.8145**	232.712	5.2	ug/L	17857	Standard
|	**Be**	9	176.7	12.8	**0.0334**	0.005	15.8	ug/L	12	Standard
|	**Al**	27	3189814.1	2.6	**154.4786**	5.067	3.3	ug/L	13328	Standard
⌊>	**Sc**	45	363379.4	0.8				ug/L	333080	Standard
⌈	**Ti**	47	5141.9	2.8	**2.5488**	0.116	4.5	ug/L	113	Standard
|	**V**	51	23741.6	3.3	**0.9631**	0.017	1.8	ug/L	4349	Standard
|	**Cr**	52	24719.2	2.5	**0.6649**	0.012	1.8	ug/L	14000	Standard
|	**Cr**	53	1762.6	10.8	**0.6409**	0.069	10.8	ug/L	319	Standard
|	**Mn**	55	7823797.1	5.0	**314.7714**	13.149	4.2	ug/L	1367	Standard
|	**Co**	59	72106.9	3.0	**3.8840**	0.068	1.8	ug/L	115	Standard
|	**Ni**	60	5666.4	3.3	**1.4430**	0.026	1.8	ug/L	76	Standard
|	**Cu**	65	1705.8	0.6	**0.4560**	0.011	2.5	ug/L	135	Standard
|	**Zn**	66	14972.7	2.2	**9.8407**	0.102	1.0	ug/L	185	Standard
| >	**Ge**	72	291399.2	2.0				ug/L	274929	Standard
|	**As**	75	1923.9	4.6	**1.4197**	0.032	2.3	ug/L	-262	Standard
|	**Se**	82	145.0	7.6	**0.6018**	0.057	9.4	ug/L	27	Standard
⌊	**Se-1**	77	118.3	12.7	**0.2496**	0.142	56.8	ug/L	94	Standard
	Ga	71	261476.0	1.8				mg/L	248575	Standard
⌈	**Rb**	85	82750.4	2.0				ug/L	15	Standard
| >	**Y**	89	296532.7	2.0				ug/L	267564	Standard
⌊	**Rh**	103	31.7	50.8				ug/L	2	Standard
⌈	**Mo**	98	538.5	3.8	**0.1013**	0.003	2.8	ug/L	5	Standard
|	**Ag**	107	76.0	9.9	**-0.0015**	0.001	39.9	ug/L	44	Standard
|	**Cd**	111	607.7	5.5	**0.0086**	0.005	63.2	mg/L	512	Standard
|	**Cd**	114	1589.6	1.2	**0.0179**	0.001	6.8	ug/L	1247	Standard
| >	**In**	115	817013.6	0.9				ug/L	743274	Standard
|	**Sn**	118	1484.1	3.8	**0.0295**	0.002	7.8	ug/L	816	Standard
|	**Sb**	123	497.1	7.6	**0.0358**	0.003	7.0	ug/L	15	Standard
⌊	**Ba**	135	161192.7	3.7	**28.0883**	0.784	2.8	ug/L	37	Standard
⌈	**Ce**	140	151939.0	3.6				ug/L	44	Standard
⌊>	**Tb**	159	889335.5	3.2				ug/L	826676	Standard
⌈	**Ho**	165	2369.5	5.1				ug/L	12	Standard
|	**Tl**	203	414.0	0.2	**0.0202**	0.000	0.9	ug/L	6	Standard
|	**Tl**	205	937.0	5.4	**0.0231**	0.001	4.8	ug/L	11	Standard
|	**Pb**	206	6542.7	3.4	**0.4220**	0.012	2.8	ug/L	301	Standard
|	**Pb**	207	5400.3	4.0	**0.4168**	0.015	3.6	ug/L	250	Standard
|	**Pb**	208	25280.9	2.7	**0.4135**	0.009	2.3	ug/L	1166	Standard
|	**U**	238	2311.2	3.2	**0.0763**	0.002	2.8	ug/L	3	Standard
⌊>	**Bi**	209	460007.4	1.0				ug/L	454659	Standard
⌈	**Na**	23	25458.1	3.3	**5.1714**	0.203	3.9	mg/L	137	Standard
|	**Mg**	24	1104688.1	1.9	**1.5948**	0.039	2.5	mg/L	498	Standard

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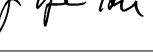
Approved: May 09, 2012

	K	39	76090.6	1.0	**5.1954**	0.011	0.2	mg/L	557	Standard
	Ca	43	3285.4	3.1	**6.5674**	0.242	3.7	mg/L	52	Standard
	Fe	54	33855.4	4.4	**4.9108**	0.258	5.3	mg/L	865	Standard
	Fe	57	1100778.1	3.6	**5.0490**	0.217	4.3	mg/L	6003	Standard
>	**Sc-1**	45	363379.4	0.8				mg/L	333080	Standard
	Cl	35	801390.5	1.1				ug/L	40103	Standard
	Kr	83	65.4	10.7				ug/L	67	Standard
	Br	81	63353.0	1.3				ug/L	15294	Standard
	P	31	457091.1	3.2				ug/L	74262	Standard
	S	34	1148463.2	2.6				ug/L	787377	Standard
	Sr	88	902827.5	0.7				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		105.991	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		110.827	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		109.921	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		107.580	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Approved: May 09, 2012

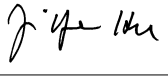


	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	101.176
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: May 09, 2012



Method 6020 - Summary Report

Sample ID: L1205012711
Sample Date/Time: Tuesday, May 08, 2012 13:02:07
Number of Replicates: 3
Autosampler Position: 317
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	21780.7	6.3	**1263.1670**	512.959	40.6	ug/L	17857	Standard
|	**Be**	9	186.7	6.7	**0.0352**	0.004	10.2	ug/L	12	Standard
|	**Al**	27	6874143.6	4.5	**329.7390**	19.821	6.0	ug/L	13328	Standard
⌊>	**Sc**	45	367947.1	2.1				ug/L	333080	Standard
⌈	**Ti**	47	13115.4	7.3	**6.8087**	0.640	9.4	ug/L	113	Standard
|	**V**	51	23451.4	2.2	**0.9901**	0.054	5.5	ug/L	4349	Standard
|	**Cr**	52	30672.7	1.6	**1.1475**	0.079	6.9	ug/L	14000	Standard
|	**Cr**	53	2759.4	3.5	**1.1302**	0.032	2.9	ug/L	319	Standard
|	**Mn**	55	976737.2	1.0	**40.6034**	0.528	1.3	ug/L	1367	Standard
|	**Co**	59	8267.9	2.3	**0.4560**	0.019	4.1	ug/L	115	Standard
|	**Ni**	60	4977.5	1.9	**1.3096**	0.027	2.1	ug/L	76	Standard
|	**Cu**	65	2263.8	4.5	**0.6426**	0.027	4.2	ug/L	135	Standard
|	**Zn**	66	8278.3	1.0	**5.5702**	0.187	3.4	ug/L	185	Standard
| >	**Ge**	72	281736.8	2.3				ug/L	274929	Standard
|	**As**	75	1114.6	2.0	**0.9201**	0.029	3.2	ug/L	-262	Standard
|	**Se**	82	257.3	4.3	**1.2834**	0.073	5.7	ug/L	27	Standard
⌊	**Se-1**	77	161.7	19.2	**0.7361**	0.299	40.7	ug/L	94	Standard
	Ga	71	250622.7	2.2				mg/L	248575	Standard
⌈	**Rb**	85	85805.7	2.7				ug/L	15	Standard
| >	**Y**	89	281772.1	4.1				ug/L	267564	Standard
⌊	**Rh**	103	20.0	25.0				ug/L	2	Standard
⌈	**Mo**	98	636.4	3.3	**0.1227**	0.003	2.8	ug/L	5	Standard
|	**Ag**	107	149.3	6.0	**0.0050**	0.001	12.9	ug/L	44	Standard
|	**Cd**	111	621.8	2.7	**0.0154**	0.005	32.5	mg/L	512	Standard
|	**Cd**	114	1585.2	4.5	**0.0217**	0.003	15.5	ug/L	1247	Standard
| >	**In**	115	788584.8	2.1				ug/L	743274	Standard
|	**Sn**	118	1796.1	2.2	**0.0493**	0.004	7.4	ug/L	816	Standard
|	**Sb**	123	872.5	4.3	**0.0663**	0.002	2.8	ug/L	15	Standard
⌊	**Ba**	135	193043.1	0.9	**34.8679**	0.739	2.1	ug/L	37	Standard
⌈	**Ce**	140	98995.7	0.7				ug/L	44	Standard
⌊>	**Tb**	159	868880.1	2.9				ug/L	826676	Standard
⌈	**Ho**	165	1746.1	2.7				ug/L	12	Standard
|	**Tl**	203	651.3	3.5	**0.0347**	0.001	2.1	ug/L	6	Standard
|	**Tl**	205	1473.4	4.9	**0.0365**	0.002	5.6	ug/L	11	Standard
|	**Pb**	206	8296.3	1.7	**0.5663**	0.010	1.8	ug/L	301	Standard
|	**Pb**	207	6864.6	0.5	**0.5611**	0.009	1.6	ug/L	250	Standard
|	**Pb**	208	32217.1	1.2	**0.5579**	0.007	1.2	ug/L	1166	Standard
|	**U**	238	6002.5	1.0	**0.2008**	0.005	2.5	ug/L	3	Standard
⌊>	**Bi**	209	439920.5	1.8				ug/L	454659	Standard
⌈	**Na**	23	47613.0	1.7	**9.5731**	0.261	2.7	mg/L	137	Standard
|	**Mg**	24	1559305.9	1.6	**2.2243**	0.065	2.9	mg/L	498	Standard

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	K	39	338939.3	0.9	**23.0123**	0.346	1.5	mg/L	557	Standard
	Ca	43	3395.4	3.0	**6.7034**	0.100	1.5	mg/L	52	Standard
	Fe	54	5075.7	0.9	**0.5937**	0.018	3.0	mg/L	865	Standard
	Fe	57	147407.0	1.7	**0.6409**	0.025	3.9	mg/L	6003	Standard
>	**Sc-1**	45	367947.1	2.1				mg/L	333080	Standard
	Cl	35	1513870.4	2.7				ug/L	40103	Standard
	Kr	83	62.1	1.2				ug/L	67	Standard
	Br	81	118356.5	2.7				ug/L	15294	Standard
	P	31	291416.9	2.5				ug/L	74262	Standard
	S	34	1351956.4	3.6				ug/L	787377	Standard
	Sr	88	934818.9	4.6				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		102.476	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		105.310	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		106.096	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		105.105	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	96.758
	Na	23	
	Mg	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 09, 2012

Method 6020 - Summary Report

Sample ID: L1205012712

Sample Date/Time: Tuesday, May 08, 2012 13:05:00
Number of Replicates: 3
Autosampler Position: 318
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	25887.1	0.9	**3464.6691**	104.809	3.0	ug/L	17857	Standard
|	**Be**	9	186.7	21.8	**0.0352**	0.009	25.6	ug/L	12	Standard
|	**Al**	27	3414262.3	3.9	**163.6649**	4.179	2.6	ug/L	13328	Standard
⌊>	**Sc**	45	367080.9	1.7				ug/L	333080	Standard
⌈	**Ti**	47	4019.9	17.9	**1.9982**	0.365	18.3	ug/L	113	Standard
|	**V**	51	16956.6	3.3	**0.6290**	0.030	4.7	ug/L	4349	Standard
|	**Cr**	52	22260.3	2.6	**0.5092**	0.043	8.4	ug/L	14000	Standard
|	**Cr**	53	1808.4	3.7	**0.6693**	0.030	4.5	ug/L	319	Standard
|	**Mn**	55	1662016.4	1.9	**67.4016**	1.346	2.0	ug/L	1367	Standard
|	**Co**	59	24248.1	2.3	**1.3137**	0.032	2.4	ug/L	115	Standard
|	**Ni**	60	4658.0	2.3	**1.1930**	0.027	2.3	ug/L	76	Standard
|	**Cu**	65	1455.4	3.2	**0.3860**	0.014	3.7	ug/L	135	Standard
|	**Zn**	66	6317.7	1.3	**4.1071**	0.050	1.2	ug/L	185	Standard
| >	**Ge**	72	288923.7	0.1				ug/L	274929	Standard
|	**As**	75	1218.1	0.7	**0.9689**	0.007	0.7	ug/L	-262	Standard
|	**Se**	82	89.2	1.8	**0.2930**	0.009	3.1	ug/L	27	Standard
⌊	**Se-1**	77	131.7	4.2	**0.3946**	0.054	13.7	ug/L	94	Standard
	Ga	71	259068.0	1.5				mg/L	248575	Standard
⌈	**Rb**	85	80441.3	0.8				ug/L	15	Standard
| >	**Y**	89	292461.2	1.7				ug/L	267564	Standard
⌊	**Rh**	103	38.3	7.5				ug/L	2	Standard
⌈	**Mo**	98	185.7	6.8	**0.0386**	0.002	6.3	ug/L	5	Standard
|	**Ag**	107	76.7	8.7	**-0.0015**	0.001	35.1	ug/L	44	Standard
|	**Cd**	111	658.0	2.4	**0.0172**	0.003	20.1	mg/L	512	Standard
|	**Cd**	114	1705.3	0.6	**0.0256**	0.001	4.5	ug/L	1247	Standard
| >	**In**	115	821260.3	0.7				ug/L	743274	Standard
|	**Sn**	118	1223.4	4.2	**0.0155**	0.002	16.0	ug/L	816	Standard
|	**Sb**	123	454.7	6.7	**0.0324**	0.002	6.3	ug/L	15	Standard
⌊	**Ba**	135	345014.8	2.5	**59.8225**	1.153	1.9	ug/L	37	Standard
⌈	**Ce**	140	128503.2	2.7				ug/L	44	Standard
⌊>	**Tb**	159	889390.7	0.7				ug/L	826676	Standard
⌈	**Ho**	165	1459.1	5.9				ug/L	12	Standard
|	**Tl**	203	647.3	3.3	**0.0322**	0.001	2.5	ug/L	6	Standard
|	**Tl**	205	1527.1	2.1	**0.0356**	0.000	1.1	ug/L	11	Standard
|	**Pb**	206	9013.7	2.0	**0.5788**	0.008	1.4	ug/L	301	Standard
|	**Pb**	207	7509.5	1.7	**0.5775**	0.004	0.7	ug/L	250	Standard
|	**Pb**	208	35076.9	2.0	**0.5714**	0.007	1.3	ug/L	1166	Standard
|	**U**	238	1657.8	1.2	**0.0550**	0.000	0.5	ug/L	3	Standard
⌊>	**Bi**	209	467970.5	1.0				ug/L	454659	Standard
⌈	**Na**	23	10878.9	1.0	**2.1738**	0.041	1.9	mg/L	137	Standard
|	**Mg**	24	1222106.5	3.3	**1.7462**	0.032	1.8	mg/L	498	Standard

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	K	39	31758.3	2.9	**2.1203**	0.055	2.6	mg/L	557	Standard
	Ca	43	2533.5	5.6	**4.9903**	0.249	5.0	mg/L	52	Standard
	Fe	54	13123.1	5.8	**1.7866**	0.086	4.8	mg/L	865	Standard
	Fe	57	400081.7	3.2	**1.7963**	0.054	3.0	mg/L	6003	Standard
>	**Sc-1**	45	367080.9	1.7				mg/L	333080	Standard
	Cl	35	1025300.3	0.4				ug/L	40103	Standard
	Kr	83	61.3	5.7				ug/L	67	Standard
	Br	81	40063.0	4.5				ug/L	15294	Standard
	P	31	183418.7	1.4				ug/L	74262	Standard
	S	34	1137079.0	1.4				ug/L	787377	Standard
	Sr	88	942506.4	1.6				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		105.090	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		109.305	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		110.492	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		107.586	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	102.928
	Na	23	
	Mg	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: L1205012712
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Method 6020 - Summary Report

Sample ID: L1205012713
Sample Date/Time: Tuesday, May 08, 2012 13:07:52
Number of Replicates: 3
Autosampler Position: 319
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	28917.6	4.1	**6197.7242**	492.728	8.0	ug/L	17857	Standard
|	**Be**	9	156.7	9.8	**0.0312**	0.004	13.0	ug/L	12	Standard
|	**Al**	27	1746951.6	3.5	**89.6656**	1.738	1.9	ug/L	13328	Standard
⌊>	**Sc**	45	341624.1	1.6				ug/L	333080	Standard
⌈	**Ti**	47	3681.1	30.3	**1.9168**	0.607	31.6	ug/L	113	Standard
|	**V**	51	10282.6	1.2	**0.3145**	0.010	3.0	ug/L	4349	Standard
|	**Cr**	52	19187.5	2.0	**0.3582**	0.024	6.6	ug/L	14000	Standard
|	**Cr**	53	1422.6	3.7	**0.5248**	0.007	1.4	ug/L	319	Standard
|	**Mn**	55	1481300.1	3.7	**62.8479**	0.978	1.6	ug/L	1367	Standard
|	**Co**	59	37329.3	2.7	**2.1197**	0.009	0.4	ug/L	115	Standard
|	**Ni**	60	4163.9	5.5	**1.1141**	0.034	3.1	ug/L	76	Standard
|	**Cu**	65	986.0	4.8	**0.2603**	0.007	2.6	ug/L	135	Standard
|	**Zn**	66	9813.8	2.8	**6.7642**	0.062	0.9	ug/L	185	Standard
|>	**Ge**	72	276104.2	2.7				ug/L	274929	Standard
|	**As**	75	845.7	4.5	**0.7508**	0.022	2.9	ug/L	-262	Standard
|	**Se**	82	118.4	7.1	**0.4893**	0.036	7.3	ug/L	27	Standard
⌊	**Se-1**	77	116.7	6.9	**0.2981**	0.079	26.5	ug/L	94	Standard
	Ga	71	246136.0	4.1				mg/L	248575	Standard
⌈	**Rb**	85	68573.2	1.2				ug/L	15	Standard
|>	**Y**	89	273289.8	1.8				ug/L	267564	Standard
⌊	**Rh**	103	30.0	50.0				ug/L	2	Standard
⌈	**Mo**	98	130.2	3.2	**0.0301**	0.001	3.8	ug/L	5	Standard
|	**Ag**	107	84.0	10.3	**-0.0005**	0.001	107.5	ug/L	44	Standard
|	**Cd**	111	637.8	2.6	**0.0197**	0.004	20.7	mg/L	512	Standard
|	**Cd**	114	1597.2	3.2	**0.0239**	0.001	2.5	ug/L	1247	Standard
|>	**In**	115	780083.4	2.7				ug/L	743274	Standard
|	**Sn**	118	1287.7	0.9	**0.0224**	0.002	10.1	ug/L	816	Standard
|	**Sb**	123	360.5	4.1	**0.0268**	0.001	2.7	ug/L	15	Standard
⌊	**Ba**	135	292312.7	1.0	**53.3793**	0.912	1.7	ug/L	37	Standard
⌈	**Ce**	140	44705.2	1.2				ug/L	44	Standard
⌊>	**Tb**	159	858913.4	1.8				ug/L	826676	Standard
⌈	**Ho**	165	675.0	0.9				ug/L	12	Standard
|	**Tl**	203	733.7	2.5	**0.0391**	0.001	2.9	ug/L	6	Standard
|	**Tl**	205	1689.8	2.4	**0.0413**	0.001	1.7	ug/L	11	Standard
|	**Pb**	206	3041.6	0.9	**0.1932**	0.001	0.4	ug/L	301	Standard
|	**Pb**	207	2571.9	1.1	**0.1956**	0.001	0.3	ug/L	250	Standard
|	**Pb**	208	12164.6	2.6	**0.1964**	0.003	1.5	ug/L	1166	Standard
|	**U**	238	886.4	3.9	**0.0327**	0.001	3.4	ug/L	3	Standard
⌊>	**Bi**	209	442881.9	1.3				ug/L	454659	Standard
⌈	**Na**	23	16070.2	4.0	**3.4634**	0.109	3.1	mg/L	137	Standard
|	**Mg**	24	1146015.3	2.6	**1.7596**	0.020	1.1	mg/L	498	Standard

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	K	39	29816.0	2.5	**2.1392**	0.036	1.7	mg/L	557	Standard
	Ca	43	2693.6	3.2	**5.7139**	0.097	1.7	mg/L	52	Standard
	Fe	54	9712.4	1.2	**1.3894**	0.009	0.6	mg/L	865	Standard
	Fe	57	301377.8	2.9	**1.4478**	0.024	1.7	mg/L	6003	Standard
>	**Sc-1**	45	341624.1	1.6				mg/L	333080	Standard
	Cl	35	1067332.7	1.6				ug/L	40103	Standard
	Kr	83	60.2	7.6				ug/L	67	Standard
	Br	81	55104.2	0.6				ug/L	15294	Standard
	P	31	128751.4	4.8				ug/L	74262	Standard
	S	34	1113629.3	3.9				ug/L	787377	Standard
	Sr	88	898920.6	2.6				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		100.427	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		102.140	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		104.952	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		103.900	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	97.410
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: May 09, 2012

Method 6020 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, May 08, 2012 13:10:46
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	17201.4	1.9	**-187.8532**	517.569	275.5	ug/L	17857	Standard
|	**Be**	9	205833.1	5.4	**51.2743**	2.210	4.3	ug/L	12	Standard
|	**Al**	27	1005153.7	4.7	**52.5952**	0.901	1.7	ug/L	13328	Standard
⌊>	**Sc**	45	333590.5	6.4				ug/L	333080	Standard
⌈	**Ti**	47	185397.2	5.0	**99.6644**	1.289	1.3	ug/L	113	Standard
|	**V**	51	940074.5	5.0	**50.2025**	1.142	2.3	ug/L	4349	Standard
|	**Cr**	52	712372.1	5.6	**51.1105**	1.358	2.7	ug/L	14000	Standard
|	**Cr**	53	105807.8	4.6	**50.3006**	0.643	1.3	ug/L	319	Standard
|	**Mn**	55	1211556.2	3.7	**51.9037**	0.524	1.0	ug/L	1367	Standard
|	**Co**	59	863003.6	4.8	**49.5955**	0.507	1.0	ug/L	115	Standard
|	**Ni**	60	179020.6	5.2	**49.2597**	0.351	0.7	ug/L	76	Standard
|	**Cu**	65	158390.7	4.4	**49.5385**	0.514	1.0	ug/L	135	Standard
|	**Zn**	66	71142.2	4.2	**50.3955**	0.554	1.1	ug/L	185	Standard
| >	**Ge**	72	273487.4	4.5				ug/L	274929	Standard
|	**As**	75	71171.7	4.1	**49.3985**	0.502	1.0	ug/L	-262	Standard
|	**Se**	82	7723.2	4.3	**46.0326**	0.746	1.6	ug/L	27	Standard
⌊	**Se-1**	77	4933.1	5.1	**51.5347**	0.339	0.7	ug/L	94	Standard
	Ga	71	244757.9	4.7				mg/L	248575	Standard
⌈	**Rb**	85	1368.4	9.3				ug/L	15	Standard
| >	**Y**	89	255412.1	5.3				ug/L	267564	Standard
⌊	**Rh**	103	35.0	37.8				ug/L	2	Standard
⌈	**Mo**	98	482145.3	5.7	**90.1897**	1.673	1.9	ug/L	5	Standard
|	**Ag**	107	544031.7	4.6	**47.5825**	0.376	0.8	ug/L	44	Standard
|	**Cd**	111	258352.2	5.0	**49.7315**	0.566	1.1	mg/L	512	Standard
|	**Cd**	114	671591.8	4.8	**50.9405**	0.800	1.6	ug/L	1247	Standard
| >	**In**	115	773605.5	3.8				ug/L	743274	Standard
|	**Sn**	118	888354.7	4.6	**49.1255**	0.711	1.4	ug/L	816	Standard
|	**Sb**	123	623706.7	3.5	**49.4540**	0.366	0.7	ug/L	15	Standard
⌊	**Ba**	135	264758.5	3.9	**48.7367**	0.503	1.0	ug/L	37	Standard
⌈	**Ce**	140	973.7	2.6				ug/L	44	Standard
⌊>	**Tb**	159	846602.9	4.1				ug/L	826676	Standard
⌈	**Ho**	165	31.0	3.2				ug/L	12	Standard
|	**Tl**	203	891552.5	2.3	**50.0709**	0.329	0.7	ug/L	6	Standard
|	**Tl**	205	2255685.7	2.8	**51.6662**	0.652	1.3	ug/L	11	Standard
|	**Pb**	206	708702.9	3.0	**49.5082**	0.239	0.5	ug/L	301	Standard
|	**Pb**	207	590831.6	3.0	**49.4797**	0.223	0.5	ug/L	250	Standard
|	**Pb**	208	2764190.5	3.4	**48.9996**	0.389	0.8	ug/L	1166	Standard
|	**U**	238	1432509.5	4.7	**46.4369**	1.067	2.3	ug/L	3	Standard
⌊>	**Bi**	209	445190.4	2.6				ug/L	454659	Standard
⌈	**Na**	23	23408.1	3.6	**5.1850**	0.147	2.8	mg/L	137	Standard
|	**Mg**	24	3322702.6	5.6	**5.2321**	0.192	3.7	mg/L	498	Standard

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	K	39	72270.5	4.4	**5.3815**	0.115	2.1	mg/L	557	Standard
	Ca	43	2556.9	5.9	**5.5567**	0.220	4.0	mg/L	52	Standard
	Fe	54	34487.1	6.5	**5.4675**	0.229	4.2	mg/L	865	Standard
	Fe	57	1071020.1	4.5	**5.3574**	0.172	3.2	mg/L	6003	Standard
>	**Sc-1**	45	333590.5	6.4				mg/L	333080	Standard
	Cl	35	71895.4	12.8				ug/L	40103	Standard
	Kr	83	51.9	3.5				ug/L	67	Standard
	Br	81	15648.2	11.9				ug/L	15294	Standard
	P	31	86196.2	2.3				ug/L	74262	Standard
	S	34	928937.2	6.1				ug/L	787377	Standard
	Sr	88	1050.0	8.0				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	105.190		
>	Sc	45			
	Ti	47	99.664		
	V	51	100.405		
	Cr	52	102.221		
	Cr	53			
	Mn	55	103.807		
	Co	59	99.191		
	Ni	60	98.519		
	Cu	65	99.077		
	Zn	66	100.791		
>	Ge	72		99.476	
	As	75	98.797		
	Se	82	92.065		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		95.458	
	Rh	103			
	Mo	98	90.190		
	Ag	107	95.165		
	Cd	111	99.463		
	Cd	114			
>	In	115		104.081	
	Sn	118	98.251		
	Sb	123	98.908		
	Ba	135	97.473		
	Ce	140			
>	Tb	159		102.410	
	Ho	165			
	Tl	203	100.142		
	Tl	205			
	Pb	206	99.016		

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	Pb	207	98.959	
	Pb	208	97.999	
	U	238	92.874	
>	Bi	209		97.917
	Na	23	103.700	
	Mg	24	104.643	
	K	39	107.629	
	Ca	43	111.135	
	Fe	54	109.349	
	Fe	57	107.148	
>	Sc-1	45		
	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	Ca	43	

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Method 6020 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, May 08, 2012 13:13:38
Number of Replicates: 3
Autosampler Position: 102
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	16363.8	1.4	**-617.1880**	134.403	21.8	ug/L	17857	Standard
|	**Be**	9	13.3	43.3	**-0.0036**	0.001	40.3	ug/L	12	Standard
|	**Al**	27	16035.3	14.1	**0.1564**	0.129	82.7	ug/L	13328	Standard
⌊>	**Sc**	45	330882.9	1.7				ug/L	333080	Standard
⌈	**Ti**	47	128.7	21.1	**0.0221**	0.015	69.5	ug/L	113	Standard
|	**V**	51	4219.3	0.4	**-0.0019**	0.005	286.6	ug/L	4349	Standard
|	**Cr**	52	13698.9	0.7	**-0.0134**	0.024	179.8	ug/L	14000	Standard
|	**Cr**	53	345.0	5.9	**0.0205**	0.013	61.6	ug/L	319	Standard
|	**Mn**	55	1470.4	8.2	**0.0010**	0.004	423.8	ug/L	1367	Standard
|	**Co**	59	133.7	14.1	**0.0022**	0.001	43.2	ug/L	115	Standard
|	**Ni**	60	85.3	14.6	**0.0029**	0.004	124.3	ug/L	76	Standard
|	**Cu**	65	150.3	8.7	**0.0025**	0.004	154.7	ug/L	135	Standard
|	**Zn**	66	198.7	3.8	**0.0032**	0.006	200.3	ug/L	185	Standard
| >	**Ge**	72	268959.1	1.9				ug/L	274929	Standard
|	**As**	75	-216.9	14.7	**0.0191**	0.021	109.4	ug/L	-262	Standard
|	**Se**	82	32.6	22.3	**-0.0139**	0.046	331.1	ug/L	27	Standard
⌊	**Se-1**	77	90.0	10.6	**0.0417**	0.093	222.4	ug/L	94	Standard
	Ga	71	246039.6	2.8				mg/L	248575	Standard
⌈	**Rb**	85	41.7	13.9				ug/L	15	Standard
| >	**Y**	89	251280.4	2.0				ug/L	267564	Standard
⌊	**Rh**	103	0.0					ug/L	2	Standard
⌈	**Mo**	98	81.6	61.8	**0.0212**	0.009	43.7	ug/L	5	Standard
|	**Ag**	107	84.7	39.2	**-0.0004**	0.003	804.0	ug/L	44	Standard
|	**Cd**	111	531.5	2.4	**0.0010**	0.003	298.8	mg/L	512	Standard
|	**Cd**	114	1346.6	1.6	**0.0066**	0.001	20.0	ug/L	1247	Standard
| >	**In**	115	767752.0	1.8				ug/L	743274	Standard
|	**Sn**	118	1060.0	9.3	**0.0108**	0.005	45.7	ug/L	816	Standard
|	**Sb**	123	319.4	49.3	**0.0239**	0.012	50.9	ug/L	15	Standard
⌊	**Ba**	135	91.3	54.4	**0.0103**	0.009	87.6	ug/L	37	Standard
⌈	**Ce**	140	108.3	86.4				ug/L	44	Standard
⌊>	**Tb**	159	823624.7	1.4				ug/L	826676	Standard
⌈	**Ho**	165	11.7	40.5				ug/L	12	Standard
|	**Tl**	203	62.7	68.3	**0.0011**	0.002	210.7	ug/L	6	Standard
|	**Tl**	205	154.3	69.5	**0.0058**	0.002	40.8	ug/L	11	Standard
|	**Pb**	206	340.3	12.6	**0.0029**	0.003	97.3	ug/L	301	Standard
|	**Pb**	207	292.0	8.6	**0.0031**	0.002	63.9	ug/L	250	Standard
|	**Pb**	208	1356.7	11.6	**0.0032**	0.003	80.2	ug/L	1166	Standard
|	**U**	238	76.0	65.0	**0.0062**	0.002	24.9	ug/L	3	Standard
⌊>	**Bi**	209	451868.4	1.2				ug/L	454659	Standard
⌈	**Na**	23	93.3	29.5	**-0.0029**	0.006	214.2	mg/L	137	Standard
|	**Mg**	24	713.4	15.4	**-0.0005**	0.000	36.2	mg/L	498	Standard

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	K	39	730.0	11.9	**0.0103**	0.006	55.3	mg/L	557	Standard
	Ca	43	41.7	56.7	**0.0023**	0.053	2293.2	mg/L	52	Standard
	Fe	54	992.5	4.4	**0.0066**	0.008	127.4	mg/L	865	Standard
	Fe	57	5937.8	1.9	**-0.0011**	0.001	96.2	mg/L	6003	Standard
>	**Sc-1**	45	330882.9	1.7				mg/L	333080	Standard
	Cl	35	61172.0	2.5				ug/L	40103	Standard
	Kr	83	57.0	6.5				ug/L	67	Standard
	Br	81	14617.0	0.1				ug/L	15294	Standard
	P	31	82720.4	3.5				ug/L	74262	Standard
	S	34	958520.5	1.2				ug/L	787377	Standard
	Sr	88	308.3	7.5				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		97.829	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		93.914	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		103.293	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		99.631	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	99.386
	Na	23	
	Mg	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: L1205012714
Sample Date/Time: Tuesday, May 08, 2012 13:16:32
Number of Replicates: 3
Autosampler Position: 320
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	30784.6	2.4	**6639.8688**	537.264	8.1	ug/L	17857	Standard
|	**Be**	9	113.3	9.2	**0.0197**	0.004	18.6	ug/L	12	Standard
|	**Al**	27	2017994.9	3.6	**100.0409**	5.426	5.4	ug/L	13328	Standard
⌊>	**Sc**	45	354466.8	4.4				ug/L	333080	Standard
⌈	**Ti**	47	2619.2	3.6	**1.3734**	0.060	4.3	ug/L	113	Standard
|	**V**	51	18065.9	2.8	**0.7459**	0.031	4.1	ug/L	4349	Standard
|	**Cr**	52	23257.2	2.3	**0.6846**	0.049	7.2	ug/L	14000	Standard
|	**Cr**	53	1519.2	4.2	**0.5839**	0.028	4.8	ug/L	319	Standard
|	**Mn**	55	11066321.4	2.4	**478.8438**	16.730	3.5	ug/L	1367	Standard
|	**Co**	59	140553.0	3.0	**8.1478**	0.335	4.1	ug/L	115	Standard
|	**Ni**	60	7367.8	1.6	**2.0260**	0.051	2.5	ug/L	76	Standard
|	**Cu**	65	1515.1	5.9	**0.4335**	0.035	8.1	ug/L	135	Standard
|	**Zn**	66	38662.0	3.0	**27.5737**	1.144	4.1	ug/L	185	Standard
| >	**Ge**	72	271080.6	1.7				ug/L	274929	Standard
|	**As**	75	1576.4	5.1	**1.2720**	0.071	5.6	ug/L	-262	Standard
|	**Se**	82	174.5	3.9	**0.8419**	0.057	6.8	ug/L	27	Standard
⌊	**Se-1**	77	112.0	3.2	**0.2710**	0.041	15.1	ug/L	94	Standard
	Ga	71	243308.1	1.8				mg/L	248575	Standard
⌈	**Rb**	85	94557.5	1.1				ug/L	15	Standard
| >	**Y**	89	274192.1	0.2				ug/L	267564	Standard
⌊	**Rh**	103	25.0	52.9				ug/L	2	Standard
⌈	**Mo**	98	566.1	3.5	**0.1130**	0.005	4.0	ug/L	5	Standard
|	**Ag**	107	78.0	13.3	**-0.0009**	0.001	97.0	ug/L	44	Standard
|	**Cd**	111	607.6	4.1	**0.0161**	0.005	32.8	mg/L	512	Standard
|	**Cd**	114	1482.8	1.4	**0.0174**	0.001	4.6	ug/L	1247	Standard
| >	**In**	115	765447.2	0.9				ug/L	743274	Standard
|	**Sn**	118	4222.6	3.6	**0.1880**	0.010	5.1	ug/L	816	Standard
|	**Sb**	123	485.5	5.8	**0.0374**	0.002	5.2	ug/L	15	Standard
⌊	**Ba**	135	181433.7	2.8	**33.7560**	1.085	3.2	ug/L	37	Standard
⌈	**Ce**	140	105214.9	3.0				ug/L	44	Standard
⌊>	**Tb**	159	844350.8	0.6				ug/L	826676	Standard
⌈	**Ho**	165	1906.8	5.2				ug/L	12	Standard
|	**Tl**	203	426.3	3.0	**0.0218**	0.001	4.4	ug/L	6	Standard
|	**Tl**	205	980.7	4.4	**0.0250**	0.001	4.9	ug/L	11	Standard
|	**Pb**	206	5160.9	2.4	**0.3438**	0.010	3.0	ug/L	301	Standard
|	**Pb**	207	4318.6	2.6	**0.3444**	0.011	3.3	ug/L	250	Standard
|	**Pb**	208	20044.2	2.7	**0.3386**	0.011	3.4	ug/L	1166	Standard
|	**U**	238	2301.2	5.3	**0.0792**	0.004	5.3	ug/L	3	Standard
⌊>	**Bi**	209	440857.8	1.0				ug/L	454659	Standard
⌈	**Na**	23	31517.8	2.0	**6.5783**	0.359	5.5	mg/L	137	Standard
|	**Mg**	24	1298492.2	2.2	**1.9245**	0.103	5.3	mg/L	498	Standard

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	K	39	96622.2	1.8	**6.7871**	0.378	5.6	mg/L	557	Standard
	Ca	43	4198.9	5.8	**8.6565**	0.889	10.3	mg/L	52	Standard
	Fe	54	29933.9	4.4	**4.4391**	0.229	5.2	mg/L	865	Standard
	Fe	57	940848.0	3.5	**4.4268**	0.299	6.7	mg/L	6003	Standard
>	**Sc-1**	45	354466.8	4.4				mg/L	333080	Standard
	Cl	35	909255.7	1.6				ug/L	40103	Standard
	Kr	83	67.0	10.8				ug/L	67	Standard
	Br	81	82777.2	1.9				ug/L	15294	Standard
	P	31	271526.8	1.6				ug/L	74262	Standard
	S	34	1130840.6	0.1				ug/L	787377	Standard
	Sr	88	1059307.5	1.4				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		98.600	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		102.477	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		102.983	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		102.138	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	96.964
	Na	23	
	Mg	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 09, 2012

Method 6020 - Summary Report

Sample ID: L1205015001
Sample Date/Time: Tuesday, May 08, 2012 13:19:25
Number of Replicates: 3
Autosampler Position: 321
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	41498.5	4.3	**8845.2655**	486.856	5.5	ug/L	17857	Standard
|	**Be**	9	2368.5	7.2	**0.4585**	0.017	3.7	ug/L	12	Standard
|	**Al**	27	43831463.7	4.8	**1833.8552**	24.671	1.3	ug/L	13328	Standard
⌊>	**Sc**	45	422247.9	4.2				ug/L	333080	Standard
⌈	**Ti**	47	327912.2	3.3	**180.2920**	1.861	1.0	ug/L	113	Standard
|	**V**	51	212766.5	3.6	**11.4392**	0.202	1.8	ug/L	4349	Standard
|	**Cr**	52	75313.9	3.9	**4.6038**	0.117	2.5	ug/L	14000	Standard
|	**Cr**	53	9382.1	7.6	**4.4236**	0.238	5.4	ug/L	319	Standard
|	**Mn**	55	2520789.8	2.4	**110.4826**	1.387	1.3	ug/L	1367	Standard
|	**Co**	59	52467.4	3.1	**3.0781**	0.036	1.2	ug/L	115	Standard
|	**Ni**	60	23102.9	2.5	**6.4838**	0.041	0.6	ug/L	76	Standard
|	**Cu**	65	42646.0	3.7	**13.6031**	0.180	1.3	ug/L	135	Standard
|	**Zn**	66	56556.8	2.9	**40.9358**	0.425	1.0	ug/L	185	Standard
| >	**Ge**	72	267445.0	2.4				ug/L	274929	Standard
|	**As**	75	65.2	54.8	**0.2179**	0.026	11.9	ug/L	-262	Standard
|	**Se**	82	141.2	7.4	**0.6515**	0.044	6.7	ug/L	27	Standard
⌊	**Se-1**	77	148.7	2.4	**0.6867**	0.056	8.2	ug/L	94	Standard
	Ga	71	247457.2	3.7				mg/L	248575	Standard
⌈	**Rb**	85	48173.3	6.2				ug/L	15	Standard
| >	**Y**	89	427528.0	3.6				ug/L	267564	Standard
⌊	**Rh**	103	21.7	74.2				ug/L	2	Standard
⌈	**Mo**	98	502.9	9.1	**0.1014**	0.007	6.6	ug/L	5	Standard
|	**Ag**	107	404.0	5.7	**0.0281**	0.001	4.5	ug/L	44	Standard
|	**Cd**	111	749.7	3.0	**0.0445**	0.002	3.4	mg/L	512	Standard
|	**Cd**	114	2025.9	2.2	**0.0599**	0.001	1.4	ug/L	1247	Standard
| >	**In**	115	761763.9	2.1				ug/L	743274	Standard
|	**Sn**	118	5116.2	2.8	**0.2393**	0.004	1.7	ug/L	816	Standard
|	**Sb**	123	163.0	4.9	**0.0116**	0.000	3.8	ug/L	15	Standard
⌊	**Ba**	135	475473.7	2.4	**88.8881**	0.480	0.5	ug/L	37	Standard
⌈	**Ce**	140	1070082.4	2.6				ug/L	44	Standard
⌊>	**Tb**	159	856670.9	1.9				ug/L	826676	Standard
⌈	**Ho**	165	20412.8	3.2				ug/L	12	Standard
|	**Tl**	203	467.7	7.2	**0.0242**	0.001	6.0	ug/L	6	Standard
|	**Tl**	205	1080.0	3.0	**0.0274**	0.001	2.0	ug/L	11	Standard
|	**Pb**	206	8553.7	3.1	**0.5849**	0.012	2.0	ug/L	301	Standard
|	**Pb**	207	6763.5	3.2	**0.5528**	0.010	1.8	ug/L	250	Standard
|	**Pb**	208	32951.9	3.0	**0.5714**	0.008	1.4	ug/L	1166	Standard
|	**U**	238	3681.4	2.6	**0.1247**	0.001	0.8	ug/L	3	Standard
⌊>	**Bi**	209	439587.0	1.9				ug/L	454659	Standard
⌈	**Na**	23	12406.7	3.8	**2.1563**	0.098	4.6	mg/L	137	Standard
|	**Mg**	24	1324338.0	3.3	**1.6457**	0.028	1.7	mg/L	498	Standard

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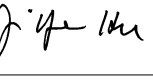
	K	39	10572.0	4.3	**0.5819**	0.022	3.8	mg/L	557	Standard
	Ca	43	1376.7	4.0	**2.3153**	0.192	8.3	mg/L	52	Standard
	Fe	54	24378.0	5.1	**2.9823**	0.059	2.0	mg/L	865	Standard
	Fe	57	764046.5	4.0	**3.0038**	0.091	3.0	mg/L	6003	Standard
>	**Sc-1**	45	422247.9	4.2				mg/L	333080	Standard
	Cl	35	446232.4	3.2				ug/L	40103	Standard
	Kr	83	82.2	6.1				ug/L	67	Standard
	Br	81	67708.5	2.2				ug/L	15294	Standard
	P	31	148751.0	4.6				ug/L	74262	Standard
	S	34	743667.7	7.8				ug/L	787377	Standard
	Sr	88	1052595.9	5.3				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		97.278	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		159.785	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		102.488	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		103.628	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	96.685
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	
Mn 55 Upper, S, EEE	Mn	55	
Y 89 Int Std for sample	Y	89	Rerun sample

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Method 6020 - Summary Report

Sample ID: L1205015002
Sample Date/Time: Tuesday, May 08, 2012 13:22:18
Number of Replicates: 3
Autosampler Position: 322
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	26718.6	3.3	**1837.3734**	93.424	5.1	ug/L	17857	Standard
|	**Be**	9	11.7	99.0	**-0.0047**	0.002	45.0	ug/L	12	Standard
|	**Al**	27	248834.2	8.3	**9.5297**	0.865	9.1	ug/L	13328	Standard
⌊>	**Sc**	45	430028.9	3.0				ug/L	333080	Standard
⌈	**Ti**	47	3745.8	4.7	**1.8860**	0.054	2.8	ug/L	113	Standard
|	**V**	51	27738.6	1.2	**1.1973**	0.020	1.7	ug/L	4349	Standard
|	**Cr**	52	20411.4	1.3	**0.4019**	0.021	5.1	ug/L	14000	Standard
|	**Cr**	53	1225.9	5.4	**0.4143**	0.023	5.5	ug/L	319	Standard
|	**Mn**	55	33437.5	2.9	**1.3139**	0.017	1.3	ug/L	1367	Standard
|	**Co**	59	421.7	5.3	**0.0177**	0.001	7.9	ug/L	115	Standard
|	**Ni**	60	2292.2	3.0	**0.5851**	0.012	2.0	ug/L	76	Standard
|	**Cu**	65	4473.7	3.6	**1.2994**	0.029	2.2	ug/L	135	Standard
|	**Zn**	66	4389.0	1.8	**2.8538**	0.041	1.4	ug/L	185	Standard
|>	**Ge**	72	284765.8	1.9				ug/L	274929	Standard
|	**As**	75	-201.6	13.5	**0.0373**	0.020	53.0	ug/L	-262	Standard
|	**Se**	82	38.7	14.1	**0.0098**	0.027	281.0	ug/L	27	Standard
⌊	**Se-1**	77	110.7	5.2	**0.2004**	0.079	39.4	ug/L	94	Standard
	Ga	71	260017.0	1.3				mg/L	248575	Standard
⌈	**Rb**	85	3512.1	4.6				ug/L	15	Standard
|>	**Y**	89	269050.9	3.1				ug/L	267564	Standard
⌊	**Rh**	103	38.3	27.2				ug/L	2	Standard
⌈	**Mo**	98	144.2	13.3	**0.0317**	0.003	10.1	ug/L	5	Standard
|	**Ag**	107	80.0	11.1	**-0.0011**	0.001	62.4	ug/L	44	Standard
|	**Cd**	111	688.1	4.2	**0.0250**	0.007	28.1	mg/L	512	Standard
|	**Cd**	114	1779.2	5.2	**0.0331**	0.005	16.1	ug/L	1247	Standard
|>	**In**	115	806877.2	1.4				ug/L	743274	Standard
|	**Sn**	118	1448.7	4.1	**0.0286**	0.002	7.4	ug/L	816	Standard
|	**Sb**	123	125.0	10.8	**0.0080**	0.001	11.8	ug/L	15	Standard
⌊	**Ba**	135	35546.0	2.8	**6.2669**	0.084	1.3	ug/L	37	Standard
⌈	**Ce**	140	1711.8	2.3				ug/L	44	Standard
⌊>	**Tb**	159	868576.1	1.9				ug/L	826676	Standard
⌈	**Ho**	165	24.3	15.6				ug/L	12	Standard
|	**Tl**	203	195.0	4.1	**0.0083**	0.000	4.5	ug/L	6	Standard
|	**Tl**	205	442.7	2.7	**0.0122**	0.000	2.1	ug/L	11	Standard
|	**Pb**	206	895.0	2.6	**0.0405**	0.002	5.0	ug/L	301	Standard
|	**Pb**	207	742.0	2.0	**0.0396**	0.001	2.3	ug/L	250	Standard
|	**Pb**	208	3448.5	1.1	**0.0392**	0.001	2.6	ug/L	1166	Standard
|	**U**	238	47.7	15.2	**0.0053**	0.000	4.1	ug/L	3	Standard
⌊>	**Bi**	209	456310.2	0.8				ug/L	454659	Standard
⌈	**Na**	23	26563.3	3.1	**4.5558**	0.015	0.3	mg/L	137	Standard
|	**Mg**	24	290419.1	1.7	**0.3531**	0.007	2.0	mg/L	498	Standard

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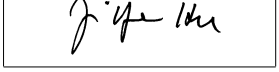
	K	39	2876.9	4.1	**0.1225**	0.005	3.7	mg/L	557	Standard
	Ca	43	1211.7	5.9	**1.9870**	0.172	8.7	mg/L	52	Standard
	Fe	54	1101.0	3.7	**-0.0172**	0.009	53.1	mg/L	865	Standard
	Fe	57	10091.7	1.5	**0.0082**	0.001	13.4	mg/L	6003	Standard
>	**Sc-1**	45	430028.9	3.0				mg/L	333080	Standard
	Cl	35	265564.7	2.1				ug/L	40103	Standard
	Kr	83	62.9	4.3				ug/L	67	Standard
	Br	81	21309.2	5.7				ug/L	15294	Standard
	P	31	247396.0	3.6				ug/L	74262	Standard
	S	34	739537.3	3.7				ug/L	787377	Standard
	Sr	88	1062633.8	1.1				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		103.578	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		100.556	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		108.557	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		105.068	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	100.363
	Na	23	
	Mg	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: L1205015002
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Method 6020 - Summary Report

Sample ID: L1205015003
Sample Date/Time: Tuesday, May 08, 2012 13:25:10
Number of Replicates: 3
Autosampler Position: 323
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	142362.9	3.7	**46470.2590**	3107.869	6.7	ug/L	17857	Standard
|	**Be**	9	540.0	13.1	**0.0850**	0.011	12.6	ug/L	12	Standard
|	**Al**	27	49714239.8	1.6	**1803.5783**	18.472	1.0	ug/L	13328	Standard
⌊>	**Sc**	45	487042.4	1.8				ug/L	333080	Standard
⌈	**Ti**	47	68778.1	2.2	**34.8166**	0.958	2.8	ug/L	113	Standard
|	**V**	51	156302.6	1.8	**7.6707**	0.188	2.5	ug/L	4349	Standard
|	**Cr**	52	53987.7	0.7	**2.6912**	0.044	1.6	ug/L	14000	Standard
|	**Cr**	53	6039.5	2.6	**2.5668**	0.083	3.2	ug/L	319	Standard
|	**Mn**	55	2203440.2	2.5	**88.9868**	2.746	3.1	ug/L	1367	Standard
|	**Co**	59	17281.9	1.2	**0.9305**	0.017	1.8	ug/L	115	Standard
|	**Ni**	60	31366.8	1.0	**8.1178**	0.130	1.6	ug/L	76	Standard
|	**Cu**	65	8506.7	1.5	**2.4642**	0.050	2.0	ug/L	135	Standard
|	**Zn**	66	106171.1	1.6	**70.9265**	1.525	2.1	ug/L	185	Standard
| >	**Ge**	72	290225.3	0.6				ug/L	274929	Standard
|	**As**	75	122.4	26.3	**0.2511**	0.020	8.1	ug/L	-262	Standard
|	**Se**	82	107.5	13.7	**0.3936**	0.081	20.6	ug/L	27	Standard
⌊	**Se-1**	77	153.3	14.5	**0.6051**	0.214	35.3	ug/L	94	Standard
	Ga	71	270080.9	1.5				mg/L	248575	Standard
⌈	**Rb**	85	35162.4	3.0				ug/L	15	Standard
| >	**Y**	89	319512.6	1.5				ug/L	267564	Standard
⌊	**Rh**	103	65.0	15.4				ug/L	2	Standard
⌈	**Mo**	98	899.3	1.0	**0.1678**	0.001	0.8	ug/L	5	Standard
|	**Ag**	107	451.0	4.4	**0.0302**	0.002	6.1	ug/L	44	Standard
|	**Cd**	111	711.6	4.8	**0.0297**	0.007	22.8	mg/L	512	Standard
|	**Cd**	114	1846.9	2.7	**0.0385**	0.004	10.1	ug/L	1247	Standard
| >	**In**	115	804124.9	0.7				ug/L	743274	Standard
|	**Sn**	118	17803.8	2.0	**0.8999**	0.016	1.8	ug/L	816	Standard
|	**Sb**	123	398.1	6.3	**0.0288**	0.002	7.0	ug/L	15	Standard
⌊	**Ba**	135	248536.4	1.3	**44.0141**	0.554	1.3	ug/L	37	Standard
⌈	**Ce**	140	1383065.5	1.5				ug/L	44	Standard
⌊>	**Tb**	159	894670.2	2.2				ug/L	826676	Standard
⌈	**Ho**	165	6128.6	4.1				ug/L	12	Standard
|	**Tl**	203	455.3	5.5	**0.0227**	0.001	6.1	ug/L	6	Standard
|	**Tl**	205	1153.7	6.7	**0.0283**	0.002	6.0	ug/L	11	Standard
|	**Pb**	206	12813.1	2.0	**0.8576**	0.016	1.9	ug/L	301	Standard
|	**Pb**	207	10045.3	1.2	**0.8043**	0.010	1.2	ug/L	250	Standard
|	**Pb**	208	48230.6	1.5	**0.8183**	0.011	1.4	ug/L	1166	Standard
|	**U**	238	11839.6	2.4	**0.3803**	0.009	2.4	ug/L	3	Standard
⌊>	**Bi**	209	454016.2	0.2				ug/L	454659	Standard
⌈	**Na**	23	44446.8	1.0	**6.7429**	0.058	0.9	mg/L	137	Standard
|	**Mg**	24	4104834.3	1.8	**4.4239**	0.054	1.2	mg/L	498	Standard

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	K	39	13439.3	4.5	**0.6454**	0.019	3.0	mg/L	557	Standard
	Ca	43	4384.0	2.0	**6.5377**	0.127	1.9	mg/L	52	Standard
	Fe	54	11643.6	2.5	**1.1436**	0.037	3.3	mg/L	865	Standard
	Fe	57	365902.6	1.3	**1.2286**	0.007	0.6	mg/L	6003	Standard
>	**Sc-1**	45	487042.4	1.8				mg/L	333080	Standard
	Cl	35	582042.7	1.3				ug/L	40103	Standard
	Kr	83	79.2	6.5				ug/L	67	Standard
	Br	81	51675.5	2.9				ug/L	15294	Standard
	P	31	340903.6	1.1				ug/L	74262	Standard
	S	34	1011397.1	1.7				ug/L	787377	Standard
	Sr	88	2139356.0	4.6				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		105.564	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		119.415	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		108.187	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		108.225	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	99.859
⌈	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1205015003
Report Date/Time: Tuesday, May 08, 2012 13:27:42
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Method 6020 - Summary Report

Sample ID: L1205015004
Sample Date/Time: Tuesday, May 08, 2012 13:28:02
Number of Replicates: 3
Autosampler Position: 324
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	25468.1	2.2	**3213.8425**	89.796	2.8	ug/L	17857	Standard
|	**Be**	9	296.7	7.6	**0.0600**	0.005	8.1	ug/L	12	Standard
|	**Al**	27	5099603.6	3.5	**244.3020**	5.529	2.3	ug/L	13328	Standard
⌊>	**Sc**	45	367837.1	1.5				ug/L	333080	Standard
⌈	**Ti**	47	32416.6	1.9	**17.3588**	0.408	2.4	ug/L	113	Standard
|	**V**	51	27487.2	2.0	**1.2401**	0.037	3.0	ug/L	4349	Standard
|	**Cr**	52	33633.3	2.5	**1.4247**	0.071	5.0	ug/L	14000	Standard
|	**Cr**	53	2966.1	5.5	**1.2650**	0.083	6.6	ug/L	319	Standard
|	**Mn**	55	540024.6	3.2	**23.0564**	0.839	3.6	ug/L	1367	Standard
|	**Co**	59	7055.0	1.4	**0.3993**	0.007	1.8	ug/L	115	Standard
|	**Ni**	60	5998.9	2.7	**1.6277**	0.040	2.4	ug/L	76	Standard
|	**Cu**	65	4688.7	1.9	**1.4199**	0.028	2.0	ug/L	135	Standard
|	**Zn**	66	80430.6	1.9	**56.8908**	1.354	2.4	ug/L	185	Standard
|>	**Ge**	72	273971.6	0.8				ug/L	274929	Standard
|	**As**	75	-25.4	182.6	**0.1539**	0.032	20.7	ug/L	-262	Standard
|	**Se**	82	38.2	23.3	**0.0154**	0.052	339.6	ug/L	27	Standard
⌊	**Se-1**	77	107.0	6.5	**0.2054**	0.082	39.9	ug/L	94	Standard
	Ga	71	245594.5	0.8				mg/L	248575	Standard
⌈	**Rb**	85	13564.4	1.2				ug/L	15	Standard
|>	**Y**	89	253328.8	1.3				ug/L	267564	Standard
⌊	**Rh**	103	25.0	52.9				ug/L	2	Standard
⌈	**Mo**	98	273.5	7.2	**0.0571**	0.004	6.7	ug/L	5	Standard
|	**Ag**	107	148.0	14.6	**0.0052**	0.002	35.9	ug/L	44	Standard
|	**Cd**	111	654.5	4.6	**0.0241**	0.006	26.9	mg/L	512	Standard
|	**Cd**	114	1646.9	2.5	**0.0288**	0.002	8.2	ug/L	1247	Standard
|>	**In**	115	772537.7	0.7				ug/L	743274	Standard
|	**Sn**	118	5252.2	2.6	**0.2428**	0.006	2.4	ug/L	816	Standard
|	**Sb**	123	682.3	4.4	**0.0526**	0.002	4.4	ug/L	15	Standard
⌊	**Ba**	135	138777.8	1.8	**25.5772**	0.301	1.2	ug/L	37	Standard
⌈	**Ce**	140	42987.9	2.6				ug/L	44	Standard
⌊>	**Tb**	159	832003.9	1.1				ug/L	826676	Standard
⌈	**Ho**	165	510.7	2.3				ug/L	12	Standard
|	**Tl**	203	196.7	3.5	**0.0088**	0.000	3.2	ug/L	6	Standard
|	**Tl**	205	470.7	3.0	**0.0132**	0.000	1.8	ug/L	11	Standard
|	**Pb**	206	16861.4	2.8	**1.1701**	0.022	1.9	ug/L	301	Standard
|	**Pb**	207	13898.7	1.1	**1.1556**	0.002	0.2	ug/L	250	Standard
|	**Pb**	208	65371.2	1.6	**1.1510**	0.008	0.7	ug/L	1166	Standard
|	**U**	238	433.0	5.6	**0.0180**	0.001	4.0	ug/L	3	Standard
⌊>	**Bi**	209	440604.6	0.9				ug/L	454659	Standard
⌈	**Na**	23	15641.4	0.4	**3.1292**	0.038	1.2	mg/L	137	Standard
|	**Mg**	24	437758.9	3.5	**0.6231**	0.013	2.0	mg/L	498	Standard

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	K	39	4143.9	3.9	**0.2370**	0.007	3.1	mg/L	557	Standard
	Ca	43	1308.4	3.5	**2.5282**	0.079	3.1	mg/L	52	Standard
	Fe	54	4646.1	0.8	**0.5304**	0.016	3.0	mg/L	865	Standard
	Fe	57	131118.6	3.0	**0.5665**	0.014	2.5	mg/L	6003	Standard
>	**Sc-1**	45	367837.1	1.5				mg/L	333080	Standard
	Cl	35	300803.6	1.4				ug/L	40103	Standard
	Kr	83	59.0	9.6				ug/L	67	Standard
	Br	81	17963.2	5.4				ug/L	15294	Standard
	P	31	123814.9	2.7				ug/L	74262	Standard
	S	34	717445.1	2.6				ug/L	787377	Standard
	Sr	88	869175.1	2.8				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		99.652	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		94.680	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		103.937	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		100.644	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	96.909
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1205015005
Sample Date/Time: Tuesday, May 08, 2012 13:30:55
Number of Replicates: 3
Autosampler Position: 325
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	49678.0	2.1	**13077.3170**	1416.852	10.8	ug/L	17857	Standard
|	**Be**	9	23.3	12.4	**-0.0023**	0.001	33.6	ug/L	12	Standard
|	**Al**	27	3534895.8	1.1	**150.2786**	4.802	3.2	ug/L	13328	Standard
⌊>	**Sc**	45	414198.3	4.2				ug/L	333080	Standard
⌈	**Ti**	47	12684.6	2.8	**6.3111**	0.099	1.6	ug/L	113	Standard
|	**V**	51	17869.7	3.8	**0.6617**	0.035	5.3	ug/L	4349	Standard
|	**Cr**	52	39201.7	4.6	**1.6421**	0.125	7.6	ug/L	14000	Standard
|	**Cr**	53	2037.6	7.9	**0.7591**	0.077	10.1	ug/L	319	Standard
|	**Mn**	55	4290677.0	1.8	**171.4745**	3.846	2.2	ug/L	1367	Standard
|	**Co**	59	45487.2	1.1	**2.4319**	0.032	1.3	ug/L	115	Standard
|	**Ni**	60	5648.1	1.4	**1.4289**	0.033	2.3	ug/L	76	Standard
|	**Cu**	65	1305.7	3.8	**0.3358**	0.018	5.3	ug/L	135	Standard
|	**Zn**	66	3839.2	0.5	**2.4019**	0.035	1.5	ug/L	185	Standard
| >	**Ge**	72	293390.8	1.6				ug/L	274929	Standard
|	**As**	75	446.6	12.9	**0.4594**	0.037	8.2	ug/L	-262	Standard
|	**Se**	82	273.3	5.8	**1.3129**	0.089	6.8	ug/L	27	Standard
⌊	**Se-1**	77	134.7	7.8	**0.4034**	0.087	21.5	ug/L	94	Standard
	Ga	71	262419.4	0.8				mg/L	248575	Standard
⌈	**Rb**	85	12099.8	4.1				ug/L	15	Standard
| >	**Y**	89	284807.0	0.9				ug/L	267564	Standard
⌊	**Rh**	103	200.0	21.8				ug/L	2	Standard
⌈	**Mo**	98	272.0	1.1	**0.0540**	0.001	1.3	ug/L	5	Standard
|	**Ag**	107	121.7	8.8	**0.0023**	0.001	37.6	ug/L	44	Standard
|	**Cd**	111	689.2	3.3	**0.0234**	0.004	15.6	mg/L	512	Standard
|	**Cd**	114	1682.7	1.0	**0.0244**	0.001	5.6	ug/L	1247	Standard
| >	**In**	115	818151.5	0.5				ug/L	743274	Standard
|	**Sn**	118	1457.7	2.4	**0.0280**	0.001	5.2	ug/L	816	Standard
|	**Sb**	123	160.4	9.0	**0.0105**	0.001	9.8	ug/L	15	Standard
⌊	**Ba**	135	606030.5	0.5	**105.4944**	0.922	0.9	ug/L	37	Standard
⌈	**Ce**	140	57772.3	1.3				ug/L	44	Standard
⌊>	**Tb**	159	893551.6	1.8				ug/L	826676	Standard
⌈	**Ho**	165	734.0	5.5				ug/L	12	Standard
|	**Tl**	203	402.0	13.8	**0.0200**	0.003	16.8	ug/L	6	Standard
|	**Tl**	205	953.0	3.9	**0.0239**	0.001	4.9	ug/L	11	Standard
|	**Pb**	206	2057.8	2.7	**0.1216**	0.003	2.4	ug/L	301	Standard
|	**Pb**	207	1681.1	2.4	**0.1182**	0.005	4.5	ug/L	250	Standard
|	**Pb**	208	7960.8	0.6	**0.1191**	0.003	2.2	ug/L	1166	Standard
|	**U**	238	1439.1	7.6	**0.0499**	0.003	6.9	ug/L	3	Standard
⌊>	**Bi**	209	450534.3	1.6				ug/L	454659	Standard
⌈	**Na**	23	41918.0	3.8	**7.4806**	0.070	0.9	mg/L	137	Standard
|	**Mg**	24	5140471.9	0.5	**6.5229**	0.291	4.5	mg/L	498	Standard

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	K	39	10652.1	2.1	**0.5992**	0.020	3.3	mg/L	557	Standard
	Ca	43	8986.0	2.2	**15.9022**	0.739	4.6	mg/L	52	Standard
	Fe	54	2955.9	4.4	**0.2315**	0.007	2.9	mg/L	865	Standard
	Fe	57	77415.7	2.0	**0.2827**	0.017	6.1	mg/L	6003	Standard
>	**Sc-1**	45	414198.3	4.2				mg/L	333080	Standard
	Cl	35	646984.0	2.2				ug/L	40103	Standard
	Kr	83	73.2	4.5				ug/L	67	Standard
	Br	81	132929.1	2.5				ug/L	15294	Standard
	P	31	151919.9	2.9				ug/L	74262	Standard
	S	34	1272065.7	6.6				ug/L	787377	Standard
	Sr	88	6381591.8	4.2				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		106.715	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		106.444	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		110.074	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		108.090	
	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

99.093

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Ba 135 Upper, S, EEE	Ba	135	

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Method 6020 - Summary Report

Sample ID: L1205015006
Sample Date/Time: Tuesday, May 08, 2012 13:33:48
Number of Replicates: 3
Autosampler Position: 326
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	94822.6	2.3	**32754.6276**	1753.721	5.4	ug/L	17857	Standard
|	**Be**	9	51.7	36.6	**0.0031**	0.004	122.3	ug/L	12	Standard
|	**Al**	27	4705717.8	8.8	**193.4200**	11.886	6.1	ug/L	13328	Standard
⌊>	**Sc**	45	428161.7	4.5				ug/L	333080	Standard
⌈	**Ti**	47	19314.4	9.0	**9.6920**	0.861	8.9	ug/L	113	Standard
|	**V**	51	26641.4	2.8	**1.1081**	0.033	3.0	ug/L	4349	Standard
|	**Cr**	52	22159.5	1.7	**0.4877**	0.024	4.8	ug/L	14000	Standard
|	**Cr**	53	1270.1	5.8	**0.4209**	0.032	7.6	ug/L	319	Standard
|	**Mn**	55	1087687.6	2.8	**43.6710**	1.137	2.6	ug/L	1367	Standard
|	**Co**	59	3681.4	5.1	**0.1928**	0.010	5.0	ug/L	115	Standard
|	**Ni**	60	2466.5	3.6	**0.6157**	0.021	3.4	ug/L	76	Standard
|	**Cu**	65	1653.8	2.5	**0.4401**	0.012	2.8	ug/L	135	Standard
|	**Zn**	66	5054.5	3.0	**3.2260**	0.103	3.2	ug/L	185	Standard
| >	**Ge**	72	291664.2	0.4				ug/L	274929	Standard
|	**As**	75	-144.8	11.4	**0.0775**	0.011	14.3	ug/L	-262	Standard
|	**Se**	82	57.4	10.2	**0.1099**	0.032	29.5	ug/L	27	Standard
⌊	**Se-1**	77	129.0	6.8	**0.3555**	0.085	24.0	ug/L	94	Standard
	Ga	71	263833.0	0.8				mg/L	248575	Standard
⌈	**Rb**	85	6694.8	3.4				ug/L	15	Standard
| >	**Y**	89	287821.5	0.7				ug/L	267564	Standard
⌊	**Rh**	103	65.0	33.5				ug/L	2	Standard
⌈	**Mo**	98	1669.9	3.4	**0.2975**	0.007	2.3	ug/L	5	Standard
|	**Ag**	107	90.0	4.8	**-0.0004**	0.000	98.7	ug/L	44	Standard
|	**Cd**	111	648.8	2.8	**0.0145**	0.003	18.0	mg/L	512	Standard
|	**Cd**	114	1713.9	2.0	**0.0251**	0.002	6.0	ug/L	1247	Standard
| >	**In**	115	828917.8	1.9				ug/L	743274	Standard
|	**Sn**	118	1449.1	4.0	**0.0265**	0.002	8.6	ug/L	816	Standard
|	**Sb**	123	185.7	4.6	**0.0122**	0.001	6.2	ug/L	15	Standard
⌊	**Ba**	135	114032.7	2.7	**19.5903**	0.608	3.1	ug/L	37	Standard
⌈	**Ce**	140	444230.1	3.0				ug/L	44	Standard
⌊>	**Tb**	159	891704.1	0.9				ug/L	826676	Standard
⌈	**Ho**	165	1238.1	6.1				ug/L	12	Standard
|	**Tl**	203	183.0	8.2	**0.0076**	0.001	11.7	ug/L	6	Standard
|	**Tl**	205	456.3	5.2	**0.0124**	0.000	3.8	ug/L	11	Standard
|	**Pb**	206	1976.8	4.3	**0.1126**	0.005	4.4	ug/L	301	Standard
|	**Pb**	207	1553.4	2.2	**0.1044**	0.002	1.9	ug/L	250	Standard
|	**Pb**	208	7510.4	3.1	**0.1079**	0.003	2.8	ug/L	1166	Standard
|	**U**	238	5742.1	3.0	**0.1833**	0.004	2.2	ug/L	3	Standard
⌊>	**Bi**	209	461853.1	0.8				ug/L	454659	Standard
⌈	**Na**	23	33127.9	1.8	**5.7177**	0.171	3.0	mg/L	137	Standard
|	**Mg**	24	3230707.6	1.1	**3.9643**	0.135	3.4	mg/L	498	Standard

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	K	39	19767.9	2.1	**1.1122**	0.059	5.3	mg/L	557	Standard
	Ca	43	5562.7	3.6	**9.4895**	0.563	5.9	mg/L	52	Standard
	Fe	54	2101.9	2.9	**0.1108**	0.018	16.2	mg/L	865	Standard
	Fe	57	47350.6	2.8	**0.1544**	0.004	2.5	mg/L	6003	Standard
>	**Sc-1**	45	428161.7	4.5				mg/L	333080	Standard
	Cl	35	230897.7	2.9				ug/L	40103	Standard
	Kr	83	64.4	5.5				ug/L	67	Standard
	Br	81	24340.4	2.3				ug/L	15294	Standard
	P	31	153633.0	3.2				ug/L	74262	Standard
	S	34	1002768.1	1.4				ug/L	787377	Standard
	Sr	88	1847463.3	3.7				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		106.087	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		107.571	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		111.522	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		107.866	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	101.582
	Na	23	
	Mg	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: L1205015006
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Method 6020 - Summary Report

Sample ID: L1205012702
Sample Date/Time: Tuesday, May 08, 2012 13:37:14
Number of Replicates: 3
Autosampler Position: 307
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	19903.1	1.2	**588.2478**	54.738	9.3	ug/L	17857	Standard
|	**Be**	9	51.7	55.9	**0.0050**	0.007	132.2	ug/L	12	Standard
|	**Al**	27	441590.8	2.8	**21.1331**	0.447	2.1	ug/L	13328	Standard
⌊>	**Sc**	45	357438.8	0.7				ug/L	333080	Standard
⌈	**Ti**	47	483.7	10.2	**0.1914**	0.026	13.5	ug/L	113	Standard
|	**V**	51	5614.9	1.5	**0.0453**	0.006	13.0	ug/L	4349	Standard
|	**Cr**	52	17603.9	1.9	**0.1536**	0.032	20.6	ug/L	14000	Standard
|	**Cr**	53	649.2	3.5	**0.1381**	0.009	6.4	ug/L	319	Standard
|	**Mn**	55	29195.4	0.9	**1.0900**	0.013	1.2	ug/L	1367	Standard
|	**Co**	59	1391.7	2.0	**0.0681**	0.002	2.7	ug/L	115	Standard
|	**Ni**	60	499.0	0.6	**0.1055**	0.000	0.3	ug/L	76	Standard
|	**Cu**	65	360.3	5.9	**0.0586**	0.005	9.2	ug/L	135	Standard
|	**Zn**	66	2450.9	8.4	**1.4622**	0.123	8.4	ug/L	185	Standard
|>	**Ge**	72	296968.5	0.8				ug/L	274929	Standard
|	**As**	75	-237.6	13.3	**0.0201**	0.021	105.1	ug/L	-262	Standard
|	**Se**	82	37.5	24.7	**-0.0059**	0.050	834.3	ug/L	27	Standard
⌊	**Se-1**	77	95.0	8.4	**-0.0002**	0.082	35536.1	ug/L	94	Standard
	Ga	71	270637.9	1.2				mg/L	248575	Standard
⌈	**Rb**	85	4987.5	2.9				ug/L	15	Standard
|>	**Y**	89	272502.5	1.8				ug/L	267564	Standard
⌊	**Rh**	103	0.0					ug/L	2	Standard
⌈	**Mo**	98	43.5	6.0	**0.0135**	0.000	3.4	ug/L	5	Standard
|	**Ag**	107	53.0	19.1	**-0.0034**	0.001	24.2	ug/L	44	Standard
|	**Cd**	111	619.9	2.7	**0.0101**	0.003	29.5	mg/L	512	Standard
|	**Cd**	114	1552.0	3.6	**0.0144**	0.004	27.8	ug/L	1247	Standard
|>	**In**	115	822619.2	0.2				ug/L	743274	Standard
|	**Sn**	118	1443.4	3.1	**0.0268**	0.002	8.7	ug/L	816	Standard
|	**Sb**	123	82.9	4.7	**0.0047**	0.000	6.4	ug/L	15	Standard
⌊	**Ba**	135	34100.0	0.9	**5.8973**	0.056	0.9	ug/L	37	Standard
⌈	**Ce**	140	22964.1	1.6				ug/L	44	Standard
⌊>	**Tb**	159	876381.7	0.6				ug/L	826676	Standard
⌈	**Ho**	165	253.3	5.6				ug/L	12	Standard
|	**Tl**	203	106.7	4.8	**0.0033**	0.000	7.4	ug/L	6	Standard
|	**Tl**	205	252.3	5.2	**0.0078**	0.000	3.9	ug/L	11	Standard
|	**Pb**	206	1276.4	1.3	**0.0640**	0.001	2.2	ug/L	301	Standard
|	**Pb**	207	1104.4	2.7	**0.0667**	0.003	3.9	ug/L	250	Standard
|	**Pb**	208	5097.3	1.0	**0.0652**	0.000	0.8	ug/L	1166	Standard
|	**U**	238	142.3	10.0	**0.0082**	0.000	5.6	ug/L	3	Standard
⌊>	**Bi**	209	469746.1	0.5				ug/L	454659	Standard
⌈	**Na**	23	2596.9	8.3	**0.5149**	0.045	8.8	mg/L	137	Standard
|	**Mg**	24	91909.6	1.8	**0.1334**	0.003	2.4	mg/L	498	Standard

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	K	39	2066.8	3.2	**0.0998**	0.005	5.3	mg/L	557	Standard
	Ca	43	80.0	10.8	**0.0739**	0.017	23.5	mg/L	52	Standard
	Fe	54	1149.6	5.9	**0.0183**	0.011	57.6	mg/L	865	Standard
	Fe	57	8994.3	1.4	**0.0110**	0.001	6.7	mg/L	6003	Standard
>	**Sc-1**	45	357438.8	0.7				mg/L	333080	Standard
	Cl	35	120950.5	1.0				ug/L	40103	Standard
	Kr	83	64.3	13.1				ug/L	67	Standard
	Br	81	17316.6	2.1				ug/L	15294	Standard
	P	31	85469.6	1.2				ug/L	74262	Standard
	S	34	1029687.5	0.8				ug/L	787377	Standard
	Sr	88	33423.5	2.8				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		108.016	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		101.846	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		110.675	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		106.013	
	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

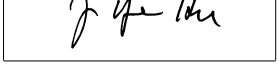
103.318

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1205012702
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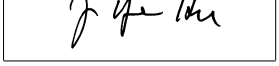
Sample ID: L1205012702PS WG397320-01
Sample Date/Time: Tuesday, May 08, 2012 13:40:06
Number of Replicates: 3
Autosampler Position: 308
Sample Description: 5
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	18638.2	6.1	**-107.7478**	505.172	468.8	ug/L	17857	Standard
|	**Be**	9	220224.2	4.4	**51.1054**	1.751	3.4	ug/L	12	Standard
|	**Al**	27	1471271.4	5.1	**71.9768**	2.680	3.7	ug/L	13328	Standard
⌊>	**Sc**	45	357683.3	1.5				ug/L	333080	Standard
⌈	**Ti**	47	464.0	31.9	**0.1846**	0.074	39.8	ug/L	113	Standard
|	**V**	51	1006893.1	4.6	**50.2222**	2.024	4.0	ug/L	4349	Standard
|	**Cr**	52	765134.1	3.7	**51.2864**	1.624	3.2	ug/L	14000	Standard
|	**Cr**	53	113774.4	4.2	**50.5183**	1.862	3.7	ug/L	319	Standard
|	**Mn**	55	1341139.1	4.1	**53.6530**	1.868	3.5	ug/L	1367	Standard
|	**Co**	59	922040.3	4.2	**49.4944**	1.784	3.6	ug/L	115	Standard
|	**Ni**	60	194906.0	3.6	**50.1037**	1.523	3.0	ug/L	76	Standard
|	**Cu**	65	172672.4	3.3	**50.4419**	1.363	2.7	ug/L	135	Standard
|	**Zn**	66	99448.9	7.5	**65.8245**	4.572	6.9	ug/L	185	Standard
| >	**Ge**	72	292769.2	0.6				ug/L	274929	Standard
|	**As**	75	75137.3	2.3	**48.7088**	0.807	1.7	ug/L	-262	Standard
|	**Se**	82	8274.9	3.8	**46.0615**	1.473	3.2	ug/L	27	Standard
⌊	**Se-1**	77	5106.9	4.6	**49.8069**	2.072	4.2	ug/L	94	Standard
	Ga	71	266482.7	1.5				mg/L	248575	Standard
⌈	**Rb**	85	4510.7	9.6				ug/L	15	Standard
| >	**Y**	89	280657.7	3.6				ug/L	267564	Standard
⌊	**Rh**	103	23.3	12.4				ug/L	2	Standard
⌈	**Mo**	98	163.8	5.6	**0.0348**	0.001	3.4	ug/L	5	Standard
|	**Ag**	107	554295.3	3.3	**45.8302**	0.974	2.1	ug/L	44	Standard
|	**Cd**	111	275549.4	4.0	**50.1369**	0.967	1.9	mg/L	512	Standard
|	**Cd**	114	703332.1	2.9	**50.4289**	0.372	0.7	ug/L	1247	Standard
| >	**In**	115	818461.3	2.2				ug/L	743274	Standard
|	**Sn**	118	1654.4	7.9	**0.0382**	0.005	13.0	ug/L	816	Standard
|	**Sb**	123	647525.6	3.2	**48.5170**	0.582	1.2	ug/L	15	Standard
⌊	**Ba**	135	306870.2	3.7	**53.3854**	1.116	2.1	ug/L	37	Standard
⌈	**Ce**	140	22386.5	4.1				ug/L	44	Standard
⌊>	**Tb**	159	878581.5	1.4				ug/L	826676	Standard
⌈	**Ho**	165	238.3	9.6				ug/L	12	Standard
|	**Tl**	203	935092.4	2.4	**49.6398**	0.638	1.3	ug/L	6	Standard
|	**Tl**	205	2368679.1	1.7	**51.2875**	0.156	0.3	ug/L	11	Standard
|	**Pb**	206	750525.0	2.9	**49.5617**	0.758	1.5	ug/L	301	Standard
|	**Pb**	207	641232.8	3.2	**50.7628**	1.006	2.0	ug/L	250	Standard
|	**Pb**	208	2963280.4	3.2	**49.6579**	1.015	2.0	ug/L	1166	Standard
|	**U**	238	1499329.9	3.3	**45.9569**	1.001	2.2	ug/L	3	Standard
⌊>	**Bi**	209	470927.9	1.5				ug/L	454659	Standard
⌈	**Na**	23	2491.9	5.0	**0.4928**	0.028	5.7	mg/L	137	Standard
|	**Mg**	24	86690.8	3.6	**0.1256**	0.003	2.2	mg/L	498	Standard

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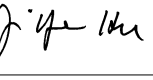


	K	39	2061.8	3.6	**0.0994**	0.006	6.2	mg/L	557	Standard
	Ca	43	100.0	13.2	**0.1153**	0.030	26.0	mg/L	52	Standard
	Fe	54	1097.3	13.4	**0.0102**	0.022	214.0	mg/L	865	Standard
	Fe	57	9289.5	3.9	**0.0124**	0.001	8.5	mg/L	6003	Standard
>	**Sc-1**	45	357683.3	1.5				mg/L	333080	Standard
	Cl	35	115634.8	2.7				ug/L	40103	Standard
	Kr	83	66.2	5.5				ug/L	67	Standard
	Br	81	16927.8	4.1				ug/L	15294	Standard
	P	31	85460.8	5.4				ug/L	74262	Standard
	S	34	976155.3	5.3				ug/L	787377	Standard
	Sr	88	32798.9	5.7				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		106.489	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		104.894	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		110.116	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		106.279	
	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

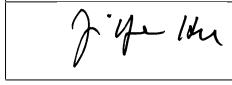
103.578

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1205012702PS WG397320-01
Report Date/Time: Tuesday, May 08, 2012 13:42:39
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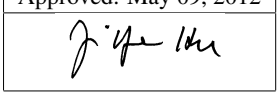
Sample ID: L1205012702SDL WG397152-02

Sample Date/Time: Tuesday, May 08, 2012 13:42:59
Number of Replicates: 3
Autosampler Position: 309
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	17318.2	3.3	**249.3664**	429.610	172.3	ug/L	17857	Standard
|	**Be**	9	25.0	52.9	**-0.0004**	0.004	984.5	ug/L	12	Standard
|	**Al**	27	110236.4	2.8	**5.3765**	0.479	8.9	ug/L	13328	Standard
⌊>	**Sc**	45	321449.8	5.1				ug/L	333080	Standard
⌈	**Ti**	47	202.0	36.1	**0.0612**	0.041	67.8	ug/L	113	Standard
|	**V**	51	4765.2	3.2	**0.0254**	0.011	44.7	ug/L	4349	Standard
|	**Cr**	52	15151.2	3.1	**0.0836**	0.038	45.2	ug/L	14000	Standard
|	**Cr**	53	411.7	5.7	**0.0508**	0.014	27.8	ug/L	319	Standard
|	**Mn**	55	7114.0	5.9	**0.2443**	0.023	9.5	ug/L	1367	Standard
|	**Co**	59	401.3	6.7	**0.0177**	0.003	15.8	ug/L	115	Standard
|	**Ni**	60	181.3	7.5	**0.0294**	0.006	19.3	ug/L	76	Standard
|	**Cu**	65	190.3	8.1	**0.0149**	0.008	50.6	ug/L	135	Standard
|	**Zn**	66	2158.2	5.2	**1.4020**	0.018	1.3	ug/L	185	Standard
| >	**Ge**	72	271922.7	6.1				ug/L	274929	Standard
|	**As**	75	-238.0	7.7	**0.0050**	0.022	437.0	ug/L	-262	Standard
|	**Se**	82	29.6	0.5	**-0.0337**	0.010	29.7	ug/L	27	Standard
⌊	**Se-1**	77	92.0	17.3	**0.0489**	0.109	221.8	ug/L	94	Standard
	Ga	71	245851.8	5.2				mg/L	248575	Standard
⌈	**Rb**	85	895.0	15.9				ug/L	15	Standard
| >	**Y**	89	254498.1	8.6				ug/L	267564	Standard
⌊	**Rh**	103	0.0					ug/L	2	Standard
⌈	**Mo**	98	49.6	77.6	**0.0152**	0.007	48.2	ug/L	5	Standard
|	**Ag**	107	187.3	56.3	**0.0088**	0.009	108.2	ug/L	44	Standard
|	**Cd**	111	547.9	13.3	**0.0037**	0.012	321.5	mg/L	512	Standard
|	**Cd**	114	1529.5	5.4	**0.0204**	0.008	40.7	ug/L	1247	Standard
| >	**In**	115	770240.3	4.8				ug/L	743274	Standard
|	**Sn**	118	1077.7	1.3	**0.0117**	0.002	20.2	ug/L	816	Standard
|	**Sb**	123	2027.5	42.3	**0.1622**	0.076	46.7	ug/L	15	Standard
⌊	**Ba**	135	6603.8	2.5	**1.2154**	0.033	2.7	ug/L	37	Standard
⌈	**Ce**	140	4457.7	6.7				ug/L	44	Standard
⌊>	**Tb**	159	823807.4	4.8				ug/L	826676	Standard
⌈	**Ho**	165	61.0	9.1				ug/L	12	Standard
|	**Tl**	203	114.3	59.2	**0.0041**	0.004	94.0	ug/L	6	Standard
|	**Tl**	205	267.7	51.1	**0.0085**	0.003	37.6	ug/L	11	Standard
|	**Pb**	206	550.3	11.4	**0.0181**	0.005	28.4	ug/L	301	Standard
|	**Pb**	207	499.3	8.7	**0.0209**	0.004	19.9	ug/L	250	Standard
|	**Pb**	208	2234.1	7.8	**0.0193**	0.004	18.2	ug/L	1166	Standard
|	**U**	238	142.3	41.4	**0.0085**	0.002	23.4	ug/L	3	Standard
⌊>	**Bi**	209	444248.2	2.9				ug/L	454659	Standard
⌈	**Na**	23	551.7	13.6	**0.1033**	0.014	13.9	mg/L	137	Standard
|	**Mg**	24	18469.6	7.0	**0.0286**	0.003	9.8	mg/L	498	Standard

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	K	39	963.4	7.9	**0.0303**	0.007	24.0	mg/L	557	Standard
	Ca	43	68.3	15.2	**0.0651**	0.016	24.4	mg/L	52	Standard
	Fe	54	1027.1	5.2	**0.0172**	0.003	18.7	mg/L	865	Standard
	Fe	57	7120.0	7.7	**0.0060**	0.003	48.9	mg/L	6003	Standard
>	**Sc-1**	45	321449.8	5.1				mg/L	333080	Standard
	Cl	35	63508.2	2.8				ug/L	40103	Standard
	Kr	83	58.8	2.0				ug/L	67	Standard
	Br	81	14765.6	7.5				ug/L	15294	Standard
	P	31	71654.2	9.4				ug/L	74262	Standard
	S	34	874001.6	5.8				ug/L	787377	Standard
	Sr	88	7255.1	20.4				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		98.907	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		95.117	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		103.628	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		99.653	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1205012702SDL WG397152-02
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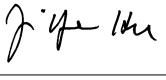
Approved: May 09, 2012

	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	97.710
	Na	23	
	Mg	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

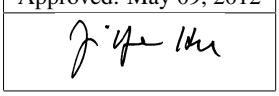
Sample ID: QC Std 6
Sample Date/Time: Tuesday, May 08, 2012 13:45:54
Number of Replicates: 3
Autosampler Position: 101
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	17533.5	3.9	**-173.1230**	354.111	204.5	ug/L	17857	Standard
|	**Be**	9	219019.5	3.5	**53.6614**	1.262	2.4	ug/L	12	Standard
|	**Al**	27	1058202.5	2.1	**54.5087**	1.075	2.0	ug/L	13328	Standard
⌊>	**Sc**	45	338894.0	3.3				ug/L	333080	Standard
⌈	**Ti**	47	195900.0	2.9	**100.8087**	1.125	1.1	ug/L	113	Standard
|	**V**	51	994832.3	1.4	**50.8639**	0.307	0.6	ug/L	4349	Standard
|	**Cr**	52	756886.9	1.2	**52.0152**	0.364	0.7	ug/L	14000	Standard
|	**Cr**	53	110445.5	2.8	**50.2581**	0.854	1.7	ug/L	319	Standard
|	**Mn**	55	1276072.5	3.4	**52.3113**	0.952	1.8	ug/L	1367	Standard
|	**Co**	59	906818.9	4.1	**49.8764**	1.125	2.3	ug/L	115	Standard
|	**Ni**	60	189595.6	2.4	**49.9483**	0.378	0.8	ug/L	76	Standard
|	**Cu**	65	168276.9	3.1	**50.3726**	0.677	1.3	ug/L	135	Standard
|	**Zn**	66	75949.7	3.1	**51.4921**	0.681	1.3	ug/L	185	Standard
| >	**Ge**	72	285694.3	1.8				ug/L	274929	Standard
|	**As**	75	74557.2	1.8	**49.5302**	0.140	0.3	ug/L	-262	Standard
|	**Se**	82	8189.9	1.3	**46.7333**	0.785	1.7	ug/L	27	Standard
⌊	**Se-1**	77	5048.8	0.4	**50.4936**	1.102	2.2	ug/L	94	Standard
	Ga	71	257811.5	2.6				mg/L	248575	Standard
⌈	**Rb**	85	1321.7	9.4				ug/L	15	Standard
| >	**Y**	89	264561.5	0.4				ug/L	267564	Standard
⌊	**Rh**	103	51.7	31.1				ug/L	2	Standard
⌈	**Mo**	98	501745.7	2.5	**91.4201**	1.271	1.4	ug/L	5	Standard
|	**Ag**	107	571155.2	3.5	**48.6370**	0.858	1.8	ug/L	44	Standard
|	**Cd**	111	269475.7	2.1	**50.5191**	0.248	0.5	mg/L	512	Standard
|	**Cd**	114	693502.6	1.7	**51.2269**	0.125	0.2	ug/L	1247	Standard
| >	**In**	115	794562.5	1.8				ug/L	743274	Standard
|	**Sn**	118	924684.4	2.0	**49.7939**	0.451	0.9	ug/L	816	Standard
|	**Sb**	123	645730.3	1.9	**49.8443**	0.043	0.1	ug/L	15	Standard
⌊	**Ba**	135	275540.9	2.0	**49.3827**	0.098	0.2	ug/L	37	Standard
⌈	**Ce**	140	1040.7	1.4				ug/L	44	Standard
⌊>	**Tb**	159	876373.9	2.1				ug/L	826676	Standard
⌈	**Ho**	165	29.0	20.7				ug/L	12	Standard
|	**Tl**	203	922894.6	1.7	**51.0375**	0.211	0.4	ug/L	6	Standard
|	**Tl**	205	2352131.5	1.0	**53.0554**	0.204	0.4	ug/L	11	Standard
|	**Pb**	206	737741.1	0.7	**50.7586**	0.316	0.6	ug/L	301	Standard
|	**Pb**	207	611405.9	0.8	**50.4295**	0.351	0.7	ug/L	250	Standard
|	**Pb**	208	2868261.0	0.9	**50.0790**	0.194	0.4	ug/L	1166	Standard
|	**U**	238	1478898.7	0.4	**47.2311**	0.455	1.0	ug/L	3	Standard
⌊>	**Bi**	209	452075.2	1.3				ug/L	454659	Standard
⌈	**Na**	23	25466.4	2.3	**5.5489**	0.073	1.3	mg/L	137	Standard
|	**Mg**	24	3443832.4	1.9	**5.3360**	0.104	2.0	mg/L	498	Standard

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	K	39	74594.8	0.7	**5.4677**	0.194	3.5	mg/L	557	Standard
	Ca	43	2566.9	2.4	**5.4901**	0.218	4.0	mg/L	52	Standard
	Fe	54	36123.9	2.3	**5.6417**	0.135	2.4	mg/L	865	Standard
	Fe	57	1135103.3	1.9	**5.5884**	0.196	3.5	mg/L	6003	Standard
>	**Sc-1**	45	338894.0	3.3				mg/L	333080	Standard
	Cl	35	60125.7	0.2				ug/L	40103	Standard
	Kr	83	60.4	7.3				ug/L	67	Standard
	Br	81	14526.1	2.3				ug/L	15294	Standard
	P	31	90384.8	2.9				ug/L	74262	Standard
	S	34	990474.1	1.8				ug/L	787377	Standard
	Sr	88	1120.0	9.1				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	109.017		
>	Sc	45			
	Ti	47	100.809		
	V	51	101.728		
	Cr	52	104.030		
	Cr	53			
	Mn	55	104.623		
	Co	59	99.753		
	Ni	60	99.897		
	Cu	65	100.745		
	Zn	66	102.984		
>	Ge	72		103.916	
	As	75	99.060		
	Se	82	93.467		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		98.878	
	Rh	103			
	Mo	98	91.420		
	Ag	107	97.274		
	Cd	111	101.038		
	Cd	114			
>	In	115		106.900	
	Sn	118	99.588		
	Sb	123	99.689		
	Ba	135	98.765		
	Ce	140			
>	Tb	159		106.012	
	Ho	165			
	Tl	203	102.075		
	Tl	205			
	Pb	206	101.517		

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	Pb	207	100.859	
	Pb	208	100.158	
	U	238	94.462	
>	Bi	209		99.432
	Na	23	110.979	
	Mg	24	106.720	
	K	39	109.354	
	Ca	43	109.802	
	Fe	54	112.834	
	Fe	57	111.768	
>	Sc-1	45		
	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	Na	23	
QC Std 6	Fe	54	
QC Std 6	Fe	57	

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Method 6020 - Summary Report

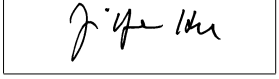
Sample ID: QC Std 7
Sample Date/Time: Tuesday, May 08, 2012 13:48:47
Number of Replicates: 3
Autosampler Position: 102
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	16745.9	2.8	**-243.8263**	248.421	101.9	ug/L	17857	Standard
|	**Be**	9	15.0	57.7	**-0.0031**	0.002	71.7	ug/L	12	Standard
|	**Al**	27	14448.6	6.7	**0.0822**	0.044	53.4	ug/L	13328	Standard
⌊>	**Sc**	45	325912.3	2.1				ug/L	333080	Standard
⌈	**Ti**	47	111.0	9.5	**0.0110**	0.006	58.1	ug/L	113	Standard
|	**V**	51	4210.4	2.1	**-0.0078**	0.004	51.6	ug/L	4349	Standard
|	**Cr**	52	13563.1	1.7	**-0.0476**	0.004	8.8	ug/L	14000	Standard
|	**Cr**	53	307.5	16.4	**-0.0016**	0.022	1379.0	ug/L	319	Standard
|	**Mn**	55	1356.1	0.9	**-0.0053**	0.001	28.3	ug/L	1367	Standard
|	**Co**	59	156.3	21.7	**0.0034**	0.002	57.0	ug/L	115	Standard
|	**Ni**	60	76.7	7.5	**-0.0001**	0.001	1731.5	ug/L	76	Standard
|	**Cu**	65	140.7	6.0	**-0.0016**	0.002	122.8	ug/L	135	Standard
|	**Zn**	66	194.7	2.5	**-0.0031**	0.002	51.3	ug/L	185	Standard
| >	**Ge**	72	275444.6	1.7				ug/L	274929	Standard
|	**As**	75	-237.9	6.1	**0.0080**	0.013	160.0	ug/L	-262	Standard
|	**Se**	82	25.4	22.1	**-0.0615**	0.032	51.8	ug/L	27	Standard
⌊	**Se-1**	77	95.0	10.9	**0.0713**	0.096	134.1	ug/L	94	Standard
	Ga	71	248711.4	1.6				mg/L	248575	Standard
⌈	**Rb**	85	21.7	53.3				ug/L	15	Standard
| >	**Y**	89	260590.4	1.2				ug/L	267564	Standard
⌊	**Rh**	103	3.3	173.2				ug/L	2	Standard
⌈	**Mo**	98	78.1	51.5	**0.0206**	0.008	36.6	ug/L	5	Standard
|	**Ag**	107	84.7	19.9	**-0.0003**	0.001	414.3	ug/L	44	Standard
|	**Cd**	111	526.5	1.0	**-0.0001**	0.001	518.1	mg/L	512	Standard
|	**Cd**	114	1354.7	2.9	**0.0071**	0.002	31.6	ug/L	1247	Standard
| >	**In**	115	768659.4	0.9				ug/L	743274	Standard
|	**Sn**	118	1058.4	4.1	**0.0106**	0.002	19.0	ug/L	816	Standard
|	**Sb**	123	476.6	35.1	**0.0365**	0.013	36.3	ug/L	15	Standard
⌊	**Ba**	135	57.7	2.6	**0.0041**	0.000	4.7	ug/L	37	Standard
⌈	**Ce**	140	46.3	3.3				ug/L	44	Standard
⌊>	**Tb**	159	823757.4	1.1				ug/L	826676	Standard
⌈	**Ho**	165	6.7	43.3				ug/L	12	Standard
|	**Tl**	203	53.0	49.5	**0.0006**	0.001	228.5	ug/L	6	Standard
|	**Tl**	205	123.7	46.8	**0.0052**	0.001	25.6	ug/L	11	Standard
|	**Pb**	206	353.3	10.8	**0.0043**	0.003	66.3	ug/L	301	Standard
|	**Pb**	207	307.3	9.0	**0.0049**	0.002	48.0	ug/L	250	Standard
|	**Pb**	208	1421.0	10.1	**0.0049**	0.003	56.7	ug/L	1166	Standard
|	**U**	238	80.3	63.9	**0.0064**	0.002	25.9	ug/L	3	Standard
⌊>	**Bi**	209	442728.6	1.1				ug/L	454659	Standard
⌈	**Na**	23	91.7	15.7	**-0.0030**	0.003	95.3	mg/L	137	Standard
|	**Mg**	24	655.0	11.5	**-0.0006**	0.000	17.9	mg/L	498	Standard

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	K	39	686.7	13.8	**0.0079**	0.008	101.2	mg/L	557	Standard
	Ca	43	60.0		**0.0447**	0.003	6.5	mg/L	52	Standard
	Fe	54	950.7	4.4	**0.0020**	0.007	337.5	mg/L	865	Standard
	Fe	57	5959.5	4.5	**-0.0005**	0.002	424.9	mg/L	6003	Standard
>	**Sc-1**	45	325912.3	2.1				mg/L	333080	Standard
	Cl	35	57168.3	1.4				ug/L	40103	Standard
	Kr	83	62.2	11.4				ug/L	67	Standard
	Br	81	14290.1	1.1				ug/L	15294	Standard
	P	31	82733.7	3.0				ug/L	74262	Standard
	S	34	978102.8	1.2				ug/L	787377	Standard
	Sr	88	325.0	5.5				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		100.188	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		97.394	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		103.415	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		99.647	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	97.376
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

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: Tuesday, May 08, 2012 13:51:41
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	17067.9	2.9	**-486.4616**	358.533	73.7	ug/L	17857	Standard
|	**Be**	9	8.3	91.7	**-0.0049**	0.002	37.5	ug/L	12	Standard
|	**Al**	27	20438.8	4.8	**0.3595**	0.040	11.2	ug/L	13328	Standard
⌊>	**Sc**	45	340515.9	1.2				ug/L	333080	Standard
⌈	**Ti**	47	97.0	13.5	**0.0028**	0.007	266.0	ug/L	113	Standard
|	**V**	51	12123.6	1.9	**0.4048**	0.019	4.6	ug/L	4349	Standard
|	**Cr**	52	25242.0	0.1	**0.7759**	0.021	2.8	ug/L	14000	Standard
|	**Cr**	53	2071.0	1.3	**0.8200**	0.023	2.8	ug/L	319	Standard
|	**Mn**	55	13696.9	3.1	**0.5122**	0.023	4.5	ug/L	1367	Standard
|	**Co**	59	7026.3	4.6	**0.3900**	0.022	5.6	ug/L	115	Standard
|	**Ni**	60	5841.8	2.8	**1.5540**	0.055	3.5	ug/L	76	Standard
|	**Cu**	65	2717.6	2.0	**0.7877**	0.024	3.1	ug/L	135	Standard
|	**Zn**	66	9704.8	1.8	**6.6091**	0.167	2.5	ug/L	185	Standard
| >	**Ge**	72	279341.4	1.1				ug/L	274929	Standard
|	**As**	75	325.9	11.0	**0.3920**	0.022	5.6	ug/L	-262	Standard
|	**Se**	82	89.7	1.3	**0.3133**	0.009	2.7	ug/L	27	Standard
⌊	**Se-1**	77	127.3	11.3	**0.3960**	0.161	40.6	ug/L	94	Standard
	Ga	71	254370.2	0.8				mg/L	248575	Standard
⌈	**Rb**	85	23.3	32.7				ug/L	15	Standard
| >	**Y**	89	258258.7	3.0				ug/L	267564	Standard
⌊	**Rh**	103	3.3	173.2				ug/L	2	Standard
⌈	**Mo**	98	27.8	7.2	**0.0111**	0.000	3.5	ug/L	5	Standard
|	**Ag**	107	4242.9	3.4	**0.3638**	0.014	3.8	ug/L	44	Standard
|	**Cd**	111	1774.1	0.6	**0.2402**	0.001	0.4	mg/L	512	Standard
|	**Cd**	114	4499.3	1.3	**0.2458**	0.006	2.6	ug/L	1247	Standard
| >	**In**	115	772982.4	0.9				ug/L	743274	Standard
|	**Sn**	118	1021.7	2.7	**0.0083**	0.002	22.5	ug/L	816	Standard
|	**Sb**	123	5064.1	1.6	**0.4003**	0.006	1.5	ug/L	15	Standard
⌊	**Ba**	135	3884.5	0.5	**0.7091**	0.003	0.5	ug/L	37	Standard
⌈	**Ce**	140	47.3	21.2				ug/L	44	Standard
⌊>	**Tb**	159	831629.9	0.2				ug/L	826676	Standard
⌈	**Ho**	165	10.0	26.5				ug/L	12	Standard
|	**Tl**	203	1463.4	1.8	**0.0790**	0.002	3.0	ug/L	6	Standard
|	**Tl**	205	3398.0	1.0	**0.0794**	0.002	2.1	ug/L	11	Standard
|	**Pb**	206	3139.0	3.9	**0.1966**	0.008	4.1	ug/L	301	Standard
|	**Pb**	207	2624.6	2.5	**0.1966**	0.007	3.7	ug/L	250	Standard
|	**Pb**	208	12408.7	1.9	**0.1973**	0.005	2.4	ug/L	1166	Standard
|	**U**	238	11352.3	2.4	**0.3682**	0.013	3.6	ug/L	3	Standard
⌊>	**Bi**	209	449914.3	1.3				ug/L	454659	Standard
⌈	**Na**	23	113.3	25.9	**0.0009**	0.007	745.7	mg/L	137	Standard
|	**Mg**	24	566.7	11.2	**-0.0007**	0.000	14.1	mg/L	498	Standard

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	K	39	715.0	0.7	**0.0077**	0.001	12.3	mg/L	557	Standard
	Ca	43	53.3	23.6	**0.0243**	0.026	107.4	mg/L	52	Standard
	Fe	54	981.8	10.6	**0.0003**	0.019	5753.9	mg/L	865	Standard
	Fe	57	6239.6	0.6	**-0.0004**	0.000	66.8	mg/L	6003	Standard
>	**Sc-1**	45	340515.9	1.2				mg/L	333080	Standard
	Cl	35	55036.1	1.3				ug/L	40103	Standard
	Kr	83	59.2	5.6				ug/L	67	Standard
	Br	81	14152.4	1.1				ug/L	15294	Standard
	P	31	82773.8	0.6				ug/L	74262	Standard
	S	34	969923.3	2.5				ug/L	787377	Standard
	Sr	88	385.0	10.4				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51	101.205		
	Cr	52	96.990		
	Cr	53			
	Mn	55	102.432		
	Co	59	97.495		
	Ni	60	97.128		
	Cu	65	98.467		
	Zn	66	105.746		
>	Ge	72		101.605	
	As	75	97.993		
	Se	82	78.313		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		96.522	
	Rh	103			
	Mo	98			
	Ag	107	90.946		
	Cd	111	100.087		
	Cd	114			
>	In	115		103.997	
	Sn	118			
	Sb	123	100.077		
	Ba	135	94.549		
	Ce	140			
>	Tb	159		100.599	
	Ho	165			
	Tl	203	98.742		
	Tl	205			
	Pb	206			

Sample ID: QC Std 8
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	Pb	207			
	Pb	208	98.672		
	U	238	92.041		
>	Bi	209		98.956	
	Na	23			
	Mg	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 SD WG397302-02
Sample Date/Time: Tuesday, May 08, 2012 14:08:34
Number of Replicates: 3
Autosampler Position: 240
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	36647.7	4.7	**3814.8722**	46.763	1.2	ug/L	17857	Standard
|	**Be**	9	21.7	48.0	**-0.0034**	0.002	53.2	ug/L	12	Standard
|	**Al**	27	84517.8	8.2	**2.2442**	0.105	4.7	ug/L	13328	Standard
⌊>	**Sc**	45	506639.5	4.6				ug/L	333080	Standard
⌈	**Ti**	47	273.0	9.5	**0.0689**	0.010	14.4	ug/L	113	Standard
|	**V**	51	180216.1	9.1	**7.4855**	0.630	8.4	ug/L	4349	Standard
|	**Cr**	52	98262.1	6.4	**4.7149**	0.430	9.1	ug/L	14000	Standard
|	**Cr**	53	573581.0	2.5	**218.3107**	7.575	3.5	ug/L	319	Standard
|	**Mn**	55	15689.5	3.5	**0.4744**	0.024	5.1	ug/L	1367	Standard
|	**Co**	59	206.3	11.2	**0.0039**	0.001	28.6	ug/L	115	Standard
|	**Ni**	60	549.7	8.3	**0.0999**	0.011	10.8	ug/L	76	Standard
|	**Cu**	65	738.0	4.0	**0.1393**	0.009	6.6	ug/L	135	Standard
|	**Zn**	66	4271.6	0.9	**2.2830**	0.045	2.0	ug/L	185	Standard
| >	**Ge**	72	342439.8	1.1				ug/L	274929	Standard
|	**As**	75	-869.6	69.7	**-0.3112**	0.342	109.8	ug/L	-262	Standard
|	**Se**	82	50.6	11.0	**0.0299**	0.029	98.2	ug/L	27	Standard
⌊	**Se-1**	77	14390.5	0.4	**121.3310**	1.280	1.1	ug/L	94	Standard
	Ga	71	321486.8	1.7				mg/L	248575	Standard
⌈	**Rb**	85	60.0	38.2				ug/L	15	Standard
| >	**Y**	89	324697.9	1.7				ug/L	267564	Standard
⌊	**Rh**	103	0.0					ug/L	2	Standard
⌈	**Mo**	98	3735.6	3.7	**0.5047**	0.008	1.6	ug/L	5	Standard
|	**Ag**	107	80.3	10.4	**-0.0028**	0.001	18.5	ug/L	44	Standard
|	**Cd**	111	924.6	0.7	**0.0250**	0.002	9.5	mg/L	512	Standard
|	**Cd**	114	2599.0	3.3	**0.0444**	0.002	3.7	ug/L	1247	Standard
| >	**In**	115	1083959.9	2.3				ug/L	743274	Standard
|	**Sn**	118	3800.1	4.6	**0.1018**	0.004	3.6	ug/L	816	Standard
|	**Sb**	123	285.1	16.9	**0.0146**	0.002	16.5	ug/L	15	Standard
⌊	**Ba**	135	298.7	5.2	**0.0326**	0.002	5.9	ug/L	37	Standard
⌈	**Ce**	140	168.7	2.5				ug/L	44	Standard
⌊>	**Tb**	159	1110721.5	3.4				ug/L	826676	Standard
⌈	**Ho**	165	11.0	50.6				ug/L	12	Standard
|	**Tl**	203	161.0	5.0	**0.0052**	0.000	5.9	ug/L	6	Standard
|	**Tl**	205	405.0	5.6	**0.0101**	0.000	4.0	ug/L	11	Standard
|	**Pb**	206	954.0	4.2	**0.0351**	0.002	4.6	ug/L	301	Standard
|	**Pb**	207	786.0	10.0	**0.0339**	0.005	14.4	ug/L	250	Standard
|	**Pb**	208	3753.5	7.3	**0.0350**	0.003	9.7	ug/L	1166	Standard
|	**U**	238	22.3	14.4	**0.0044**	0.000	1.9	ug/L	3	Standard
⌊>	**Bi**	209	533882.2	1.3				ug/L	454659	Standard
⌈	**Na**	23	260.0	8.8	**0.0143**	0.005	31.5	mg/L	137	Standard
|	**Mg**	24	3055.3	1.1	**0.0015**	0.000	9.0	mg/L	498	Standard

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	K	39	1198.4	8.9	**0.0143**	0.003	21.4	mg/L	557	Standard
	Ca	43	80.0	16.5	**0.0256**	0.020	78.1	mg/L	52	Standard
	Fe	54	1727.0	1.8	**0.0290**	0.009	29.5	mg/L	865	Standard
	Fe	57	10964.0	8.2	**0.0051**	0.002	30.0	mg/L	6003	Standard
>	**Sc-1**	45	506639.5	4.6				mg/L	333080	Standard
	Cl	35	365394399.8	2.9				ug/L	40103	Standard
	Kr	83	65.2	9.5				ug/L	67	Standard
	Br	81	33159.8	9.1				ug/L	15294	Standard
	P	31	212923.0	7.0				ug/L	74262	Standard
	S	34	1416189.3	8.3				ug/L	787377	Standard
	Sr	88	1335.1	6.0				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		124.556	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		121.353	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		145.836	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		134.360	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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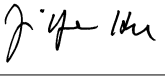
	Pb	207
	Pb	208
	U	238
>	Bi	209
	Na	23
	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

117.425

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Cr 53 Upper, S, EEE	Cr	53	
Ge 72 Int Std for sample	Ge	72	Rerun sample
Se-1 77 Upper, S, EEE	Se-1	77	
Y 89 Int Std for sample	Y	89	Rerun sample
In 115 Int Std for sample	In	115	Rerun sample
Tb 159 Int Std for sample	Tb	159	Rerun sample

Approved: May 09, 2012



Method 6020 - Summary Report

Sample ID: PBS SD WG397302-02
Sample Date/Time: Tuesday, May 08, 2012 14:16:15
Number of Replicates: 3
Autosampler Position: 240
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	22593.5	1.6	**2184.4857**	137.275	6.3	ug/L	17857	Standard
|	**Be**	9	10.0	50.0	**-0.0046**	0.001	24.2	ug/L	12	Standard
|	**Al**	27	32282.8	7.3	**0.9146**	0.144	15.7	ug/L	13328	Standard
⌊>	**Sc**	45	353518.2	2.4				ug/L	333080	Standard
⌈	**Ti**	47	155.0	21.3	**0.0377**	0.019	50.3	ug/L	113	Standard
|	**V**	51	75289.8	12.8	**3.9333**	0.537	13.7	ug/L	4349	Standard
|	**Cr**	52	44206.4	2.1	**2.3036**	0.060	2.6	ug/L	14000	Standard
|	**Cr**	53	245421.3	3.2	**120.5130**	3.970	3.3	ug/L	319	Standard
|	**Mn**	55	2571.6	5.6	**0.0507**	0.006	12.5	ug/L	1367	Standard
|	**Co**	59	101.3	4.0	**0.0004**	0.000	64.1	ug/L	115	Standard
|	**Ni**	60	886.7	1.4	**0.2307**	0.002	0.8	ug/L	76	Standard
|	**Cu**	65	907.0	2.6	**0.2475**	0.008	3.0	ug/L	135	Standard
|	**Zn**	66	4736.7	1.6	**3.3289**	0.057	1.7	ug/L	185	Standard
| >	**Ge**	72	265228.7	0.7				ug/L	274929	Standard
|	**As**	75	-500.4	17.3	**-0.1851**	0.059	31.9	ug/L	-262	Standard
|	**Se**	82	32.0	6.7	**-0.0150**	0.015	96.9	ug/L	27	Standard
⌊	**Se-1**	77	7103.3	2.9	**76.9817**	2.143	2.8	ug/L	94	Standard
	Ga	71	233053.0	1.7				mg/L	248575	Standard
⌈	**Rb**	85	40.0	33.1				ug/L	15	Standard
| >	**Y**	89	238066.1	1.9				ug/L	267564	Standard
⌊	**Rh**	103	5.0	100.0				ug/L	2	Standard
⌈	**Mo**	98	21.7	9.1	**0.0096**	0.000	3.0	ug/L	5	Standard
|	**Ag**	107	43.7	16.2	**-0.0042**	0.001	14.3	ug/L	44	Standard
|	**Cd**	111	276.6	5.1	**-0.0527**	0.002	4.5	mg/L	512	Standard
|	**Cd**	114	792.8	2.5	**-0.0405**	0.002	4.6	ug/L	1247	Standard
| >	**In**	115	831952.7	2.3				ug/L	743274	Standard
|	**Sn**	118	1314.7	8.5	**0.0193**	0.004	22.6	ug/L	816	Standard
|	**Sb**	123	222.8	12.2	**0.0149**	0.002	13.2	ug/L	15	Standard
⌊	**Ba**	135	121.0	3.8	**0.0141**	0.001	8.2	ug/L	37	Standard
⌈	**Ce**	140	75.7	5.3				ug/L	44	Standard
⌊>	**Tb**	159	872953.9	2.1				ug/L	826676	Standard
⌈	**Ho**	165	9.0	33.3				ug/L	12	Standard
|	**Tl**	203	93.3	13.5	**0.0027**	0.001	22.0	ug/L	6	Standard
|	**Tl**	205	201.0	4.5	**0.0068**	0.000	4.1	ug/L	11	Standard
|	**Pb**	206	2853.3	0.6	**0.1733**	0.005	2.9	ug/L	301	Standard
|	**Pb**	207	2406.5	1.4	**0.1749**	0.002	1.2	ug/L	250	Standard
|	**Pb**	208	11222.3	1.4	**0.1729**	0.001	0.6	ug/L	1166	Standard
|	**U**	238	8.7	58.1	**0.0041**	0.000	3.8	ug/L	3	Standard
⌊>	**Bi**	209	458231.0	1.9				ug/L	454659	Standard
⌈	**Na**	23	166.7	13.5	**0.0111**	0.005	43.9	mg/L	137	Standard
|	**Mg**	24	953.4	3.3	**-0.0002**	0.000	34.0	mg/L	498	Standard

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	K	39	1015.0	4.9	**0.0270**	0.004	13.2	mg/L	557	Standard
	Ca	43	65.0	20.4	**0.0448**	0.030	66.2	mg/L	52	Standard
	Fe	54	627.2	4.8	**-0.0601**	0.005	8.7	mg/L	865	Standard
	Fe	57	7863.7	2.6	**0.0061**	0.001	15.2	mg/L	6003	Standard
>	**Sc-1**	45	353518.2	2.4				mg/L	333080	Standard
	Cl	35	147793932.1	2.7				ug/L	40103	Standard
	Kr	83	48.0	3.7				ug/L	67	Standard
	Br	81	15950.1	2.5				ug/L	15294	Standard
	P	31	50192.2	1.7				ug/L	74262	Standard
	S	34	885148.3	3.0				ug/L	787377	Standard
	Sr	88	548.3	6.5				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		96.472	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		88.975	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		111.931	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		105.598	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: PBS SD WG397302-02
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	100.786
	Na	23	
	Mg	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
Cr 53 Upper, S, EEE	Cr	53	

Sample ID: PBS SD WG397302-02
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Method 6020 - Summary Report

Sample ID: LCSS SD WG397302-03
Sample Date/Time: Tuesday, May 08, 2012 14:19:26
Number of Replicates: 3
Autosampler Position: 241
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	38894.9	0.5	**4291.9532**	663.089	15.4	ug/L	17857	Standard
|	**Be**	9	212796.5	3.1	**33.9497**	1.158	3.4	ug/L	12	Standard
|	**Al**	27	1187777.7	0.8	**39.6651**	1.633	4.1	ug/L	13328	Standard
⌊>	**Sc**	45	520757.6	4.8				ug/L	333080	Standard
⌈	**Ti**	47	342.0	2.5	**0.1041**	0.005	5.0	ug/L	113	Standard
|	**V**	51	1085357.2	1.0	**48.0196**	0.553	1.2	ug/L	4349	Standard
|	**Cr**	52	715292.1	1.7	**42.3576**	0.553	1.3	ug/L	14000	Standard
|	**Cr**	53	744666.4	3.2	**294.0048**	6.947	2.4	ug/L	319	Standard
|	**Mn**	55	905749.7	1.0	**32.1206**	0.090	0.3	ug/L	1367	Standard
|	**Co**	59	603888.9	0.5	**28.7568**	0.114	0.4	ug/L	115	Standard
|	**Ni**	60	122506.7	1.8	**27.9272**	0.278	1.0	ug/L	76	Standard
|	**Cu**	65	105560.2	1.7	**27.3357**	0.443	1.6	ug/L	135	Standard
|	**Zn**	66	45748.0	1.8	**26.7832**	0.322	1.2	ug/L	185	Standard
| >	**Ge**	72	330054.7	0.9				ug/L	274929	Standard
|	**As**	75	38144.0	1.1	**22.0299**	0.181	0.8	ug/L	-262	Standard
|	**Se**	82	3686.7	0.8	**18.0777**	0.070	0.4	ug/L	27	Standard
⌊	**Se-1**	77	21130.7	0.8	**185.3253**	1.702	0.9	ug/L	94	Standard
	Ga	71	312126.4	1.1				mg/L	248575	Standard
⌈	**Rb**	85	83.3	19.3				ug/L	15	Standard
| >	**Y**	89	297066.5	2.2				ug/L	267564	Standard
⌊	**Rh**	103	18.3	63.0				ug/L	2	Standard
⌈	**Mo**	98	837.5	3.1	**0.1195**	0.003	2.5	ug/L	5	Standard
|	**Ag**	107	272269.0	1.1	**17.2588**	0.131	0.8	ug/L	44	Standard
|	**Cd**	111	158435.3	1.5	**22.0540**	0.173	0.8	mg/L	512	Standard
|	**Cd**	114	452575.7	0.8	**24.8391**	0.360	1.5	ug/L	1247	Standard
| >	**In**	115	1067333.6	1.1				ug/L	743274	Standard
|	**Sn**	118	4274.3	1.8	**0.1232**	0.005	4.0	ug/L	816	Standard
|	**Sb**	123	386272.5	0.3	**22.1979**	0.271	1.2	ug/L	15	Standard
⌊	**Ba**	135	186191.7	0.3	**24.8411**	0.341	1.4	ug/L	37	Standard
⌈	**Ce**	140	176.7	5.9				ug/L	44	Standard
⌊>	**Tb**	159	1110244.5	0.8				ug/L	826676	Standard
⌈	**Ho**	165	17.3	29.6				ug/L	12	Standard
|	**Tl**	203	563216.4	0.4	**26.5826**	0.189	0.7	ug/L	6	Standard
|	**Tl**	205	1304185.2	0.6	**25.1074**	0.129	0.5	ug/L	11	Standard
|	**Pb**	206	447188.2	0.8	**26.2496**	0.422	1.6	ug/L	301	Standard
|	**Pb**	207	381908.9	0.9	**26.8742**	0.369	1.4	ug/L	250	Standard
|	**Pb**	208	1766501.8	0.8	**26.3138**	0.375	1.4	ug/L	1166	Standard
|	**U**	238	888199.3	2.7	**24.2125**	0.803	3.3	ug/L	3	Standard
⌊>	**Bi**	209	529710.0	0.9				ug/L	454659	Standard
⌈	**Na**	23	238.3	13.3	**0.0100**	0.003	30.4	mg/L	137	Standard
|	**Mg**	24	2533.5	4.6	**0.0009**	0.000	8.7	mg/L	498	Standard

Sample ID: LCSS SD WG397302-03
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	K	39	1255.1	5.3	**0.0155**	0.005	30.3	mg/L	557	Standard
	Ca	43	86.7	20.3	**0.0314**	0.021	67.6	mg/L	52	Standard
	Fe	54	1831.3	5.7	**0.0346**	0.007	19.0	mg/L	865	Standard
	Fe	57	9858.2	2.6	**0.0006**	0.002	359.3	mg/L	6003	Standard
>	**Sc-1**	45	520757.6	4.8				mg/L	333080	Standard
	Cl	35	523060180.5	1.2				ug/L	40103	Standard
	Kr	83	59.3	4.1				ug/L	67	Standard
	Br	81	29381.0	1.5				ug/L	15294	Standard
	P	31	203529.4	2.7				ug/L	74262	Standard
	S	34	1310561.1	3.0				ug/L	787377	Standard
	Sr	88	1051.7	3.2				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		120.051	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		111.026	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		143.599	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		134.302	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: LCSS SD WG397302-03
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	116.507
	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
Cr 53 Upper, S, EEE	Cr	53	
Ge 72 Int Std for sample	Ge	72	Rerun sample
Se-1 77 Upper, S, EEE	Se-1	77	
In 115 Int Std for sample	In	115	Rerun sample
Tb 159 Int Std for sample	Tb	159	Rerun sample

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Method 6020 - Summary Report

Sample ID: PBW 60 WG397303-03
Sample Date/Time: Tuesday, May 08, 2012 14:48:29
Number of Replicates: 3
Autosampler Position: 327
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	15144.2	1.6	**-465.2356**	178.754	38.4	ug/L	17857	Standard
|	**Be**	9	3.3	86.6	**-0.0060**	0.001	12.9	ug/L	12	Standard
|	**Al**	27	18062.4	3.7	**0.3584**	0.052	14.5	ug/L	13328	Standard
⌊>	**Sc**	45	301539.9	3.4				ug/L	333080	Standard
⌈	**Ti**	47	91.7	18.3	**0.0028**	0.009	331.6	ug/L	113	Standard
|	**V**	51	4442.2	2.9	**0.0152**	0.007	48.1	ug/L	4349	Standard
|	**Cr**	52	12994.9	1.3	**-0.0463**	0.013	28.4	ug/L	14000	Standard
|	**Cr**	53	1324.2	6.0	**0.5082**	0.039	7.7	ug/L	319	Standard
|	**Mn**	55	1485.4	3.5	**0.0030**	0.002	77.0	ug/L	1367	Standard
|	**Co**	59	115.3	2.2	**0.0013**	0.000	11.2	ug/L	115	Standard
|	**Ni**	60	145.7	7.8	**0.0206**	0.003	15.7	ug/L	76	Standard
|	**Cu**	65	201.3	6.6	**0.0201**	0.004	21.5	ug/L	135	Standard
|	**Zn**	66	2489.5	3.9	**1.6945**	0.073	4.3	ug/L	185	Standard
| >	**Ge**	72	263561.2	0.1				ug/L	274929	Standard
|	**As**	75	-217.5	13.8	**0.0154**	0.022	140.9	ug/L	-262	Standard
|	**Se**	82	26.7	28.0	**-0.0464**	0.047	100.1	ug/L	27	Standard
⌊	**Se-1**	77	114.7	1.8	**0.3345**	0.023	6.9	ug/L	94	Standard
	Ga	71	234125.2	1.2				mg/L	248575	Standard
⌈	**Rb**	85	21.7	81.0				ug/L	15	Standard
| >	**Y**	89	246312.7	0.5				ug/L	267564	Standard
⌊	**Rh**	103	1.7	173.2				ug/L	2	Standard
⌈	**Mo**	98	77.2	3.6	**0.0218**	0.001	3.5	ug/L	5	Standard
|	**Ag**	107	55.0	12.6	**-0.0025**	0.001	23.5	ug/L	44	Standard
|	**Cd**	111	464.2	3.9	**-0.0039**	0.005	134.8	mg/L	512	Standard
|	**Cd**	114	1173.1	3.3	**0.0014**	0.003	200.8	ug/L	1247	Standard
| >	**In**	115	704234.0	1.6				ug/L	743274	Standard
|	**Sn**	118	4000.9	2.0	**0.1951**	0.007	3.7	ug/L	816	Standard
|	**Sb**	123	116.5	6.4	**0.0086**	0.001	9.2	ug/L	15	Standard
⌊	**Ba**	135	42.7	13.5	**0.0020**	0.001	52.7	ug/L	37	Standard
⌈	**Ce**	140	43.7	15.6				ug/L	44	Standard
⌊>	**Tb**	159	751009.7	1.8				ug/L	826676	Standard
⌈	**Ho**	165	10.3	20.1				ug/L	12	Standard
|	**Tl**	203	213.7	2.6	**0.0105**	0.000	4.0	ug/L	6	Standard
|	**Tl**	205	496.7	6.0	**0.0146**	0.001	4.4	ug/L	11	Standard
|	**Pb**	206	453.3	6.8	**0.0135**	0.002	16.9	ug/L	301	Standard
|	**Pb**	207	381.3	4.9	**0.0133**	0.002	14.5	ug/L	250	Standard
|	**Pb**	208	1777.7	0.2	**0.0134**	0.000	1.6	ug/L	1166	Standard
|	**U**	238	22.7	47.2	**0.0046**	0.000	8.2	ug/L	3	Standard
⌊>	**Bi**	209	414477.6	0.8				ug/L	454659	Standard
⌈	**Na**	23	115.0	24.2	**0.0043**	0.006	136.1	mg/L	137	Standard
|	**Mg**	24	545.0	11.7	**-0.0007**	0.000	13.8	mg/L	498	Standard

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	K	39	600.0	17.3	**0.0048**	0.007	154.1	mg/L	557	Standard
	Ca	43	41.7	18.3	**0.0105**	0.015	144.0	mg/L	52	Standard
	Fe	54	878.8	2.8	**0.0019**	0.002	87.8	mg/L	865	Standard
	Fe	57	6633.1	2.3	**0.0057**	0.002	30.7	mg/L	6003	Standard
>	**Sc-1**	45	301539.9	3.4				mg/L	333080	Standard
	Cl	35	322988.2	3.2				ug/L	40103	Standard
	Kr	83	58.8	0.9				ug/L	67	Standard
	Br	81	13293.3	4.7				ug/L	15294	Standard
	P	31	59994.7	6.2				ug/L	74262	Standard
	S	34	756815.9	0.0				ug/L	787377	Standard
	Sr	88	316.7	15.8				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		95.865	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		92.057	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		94.748	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		90.847	
	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: F BLANK WG397255-01
Sample Date/Time: Tuesday, May 08, 2012 14:51:21
Number of Replicates: 3
Autosampler Position: 328
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	15040.8	1.7	**-665.8453**	377.841	56.7	ug/L	17857	Standard
|	**Be**	9	5.0	100.0	**-0.0056**	0.001	24.0	ug/L	12	Standard
|	**Al**	27	19087.1	12.6	**0.4003**	0.117	29.3	ug/L	13328	Standard
⌊>	**Sc**	45	305890.6	3.2				ug/L	333080	Standard
⌈	**Ti**	47	89.3	20.0	**0.0015**	0.010	648.4	ug/L	113	Standard
|	**V**	51	4418.9	5.2	**0.0139**	0.012	85.4	ug/L	4349	Standard
|	**Cr**	52	13417.3	2.3	**-0.0141**	0.016	110.2	ug/L	14000	Standard
|	**Cr**	53	1255.1	2.9	**0.4742**	0.023	4.8	ug/L	319	Standard
|	**Mn**	55	1476.7	2.0	**0.0027**	0.002	57.7	ug/L	1367	Standard
|	**Co**	59	114.0	10.6	**0.0012**	0.001	62.4	ug/L	115	Standard
|	**Ni**	60	130.7	5.8	**0.0163**	0.002	11.9	ug/L	76	Standard
|	**Cu**	65	216.0	1.7	**0.0249**	0.001	3.4	ug/L	135	Standard
|	**Zn**	66	2433.9	0.8	**1.6538**	0.011	0.7	ug/L	185	Standard
| >	**Ge**	72	263521.7	0.9				ug/L	274929	Standard
|	**As**	75	-229.7	17.6	**0.0067**	0.028	423.6	ug/L	-262	Standard
|	**Se**	82	27.3	21.2	**-0.0427**	0.035	83.1	ug/L	27	Standard
⌊	**Se-1**	77	114.0	4.6	**0.3277**	0.066	20.2	ug/L	94	Standard
	Ga	71	237744.1	0.8				mg/L	248575	Standard
⌈	**Rb**	85	33.3	31.2				ug/L	15	Standard
| >	**Y**	89	252200.5	1.9				ug/L	267564	Standard
⌊	**Rh**	103	1.7	173.2				ug/L	2	Standard
⌈	**Mo**	98	77.9	12.2	**0.0217**	0.002	9.1	ug/L	5	Standard
|	**Ag**	107	43.3	19.6	**-0.0037**	0.001	22.6	ug/L	44	Standard
|	**Cd**	111	462.9	4.9	**-0.0053**	0.005	97.1	mg/L	512	Standard
|	**Cd**	114	1196.9	2.8	**0.0023**	0.002	83.2	ug/L	1247	Standard
| >	**In**	115	712182.9	1.4				ug/L	743274	Standard
|	**Sn**	118	4118.6	2.1	**0.1993**	0.003	1.6	ug/L	816	Standard
|	**Sb**	123	94.6	15.0	**0.0066**	0.001	17.0	ug/L	15	Standard
⌊	**Ba**	135	50.3	12.1	**0.0034**	0.001	31.7	ug/L	37	Standard
⌈	**Ce**	140	54.7	7.4				ug/L	44	Standard
⌊>	**Tb**	159	760109.3	1.5				ug/L	826676	Standard
⌈	**Ho**	165	7.7	19.9				ug/L	12	Standard
|	**Tl**	203	225.0	9.3	**0.0108**	0.001	13.4	ug/L	6	Standard
|	**Tl**	205	519.7	8.2	**0.0148**	0.001	6.4	ug/L	11	Standard
|	**Pb**	206	458.3	7.8	**0.0129**	0.003	21.4	ug/L	301	Standard
|	**Pb**	207	405.3	8.3	**0.0143**	0.002	16.5	ug/L	250	Standard
|	**Pb**	208	1839.0	4.4	**0.0135**	0.001	8.0	ug/L	1166	Standard
|	**U**	238	7.0	28.6	**0.0040**	0.000	1.6	ug/L	3	Standard
⌊>	**Bi**	209	427249.5	1.6				ug/L	454659	Standard
⌈	**Na**	23	95.0	29.3	**-0.0007**	0.007	1135.6	mg/L	137	Standard
|	**Mg**	24	535.0	3.4	**-0.0007**	0.000	4.2	mg/L	498	Standard

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	K	39	600.0	9.2	**0.0043**	0.005	119.4	mg/L	557	Standard
	Ca	43	50.0	17.3	**0.0299**	0.024	78.9	mg/L	52	Standard
	Fe	54	922.6	4.5	**0.0075**	0.009	122.7	mg/L	865	Standard
	Fe	57	6469.7	3.8	**0.0043**	0.002	38.6	mg/L	6003	Standard
>	**Sc-1**	45	305890.6	3.2				mg/L	333080	Standard
	Cl	35	314932.5	0.7				ug/L	40103	Standard
	Kr	83	56.7	13.2				ug/L	67	Standard
	Br	81	13256.6	3.9				ug/L	15294	Standard
	P	31	60851.2	4.0				ug/L	74262	Standard
	S	34	755318.6	1.4				ug/L	787377	Standard
	Sr	88	321.7	11.8				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		95.851	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		94.258	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		95.817	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		91.948	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: F BLANK WG397255-01
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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

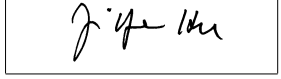
93.971

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: F BLANK WG397255-01
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Method 6020 - Summary Report

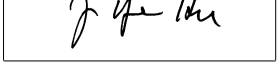
Sample ID: LCSW 60 WG397303-04
Sample Date/Time: Tuesday, May 08, 2012 14:55:00
Number of Replicates: 3
Autosampler Position: 329
Sample Description: 1
Method File: C:\NexION Data\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	16445.6	1.7	**-991.2204**	295.222	29.8	ug/L	17857	Standard
|	**Be**	9	97915.5	2.8	**23.4806**	0.481	2.0	ug/L	12	Standard
|	**Al**	27	477711.2	1.0	**23.6965**	0.354	1.5	ug/L	13328	Standard
⌊>	**Sc**	45	346128.0	1.7				ug/L	333080	Standard
⌈	**Ti**	47	118.0	22.2	**0.0116**	0.012	106.3	ug/L	113	Standard
|	**V**	51	477052.5	1.3	**24.0006**	0.709	3.0	ug/L	4349	Standard
|	**Cr**	52	370938.9	1.7	**24.6804**	0.886	3.6	ug/L	14000	Standard
|	**Cr**	53	55162.8	1.9	**24.7565**	0.894	3.6	ug/L	319	Standard
|	**Mn**	55	625580.0	0.9	**25.3342**	0.569	2.2	ug/L	1367	Standard
|	**Co**	59	448017.7	1.4	**24.3741**	0.604	2.5	ug/L	115	Standard
|	**Ni**	60	94405.2	1.0	**24.5857**	0.434	1.8	ug/L	76	Standard
|	**Cu**	65	84038.4	1.2	**24.8568**	0.316	1.3	ug/L	135	Standard
|	**Zn**	66	36561.7	0.7	**24.4423**	0.298	1.2	ug/L	185	Standard
| >	**Ge**	72	288947.7	1.8				ug/L	274929	Standard
|	**As**	75	36075.6	0.8	**23.7927**	0.618	2.6	ug/L	-262	Standard
|	**Se**	82	4094.3	0.5	**22.9952**	0.512	2.2	ug/L	27	Standard
⌊	**Se-1**	77	2395.9	2.0	**23.1973**	0.730	3.1	ug/L	94	Standard
	Ga	71	266817.7	1.2				mg/L	248575	Standard
⌈	**Rb**	85	33.3	45.8				ug/L	15	Standard
| >	**Y**	89	288093.9	2.1				ug/L	267564	Standard
⌊	**Rh**	103	13.3	21.7				ug/L	2	Standard
⌈	**Mo**	98	37.6	16.4	**0.0129**	0.001	9.3	ug/L	5	Standard
|	**Ag**	107	295575.2	2.7	**25.9326**	0.706	2.7	ug/L	44	Standard
|	**Cd**	111	127031.3	1.4	**24.4836**	0.440	1.8	mg/L	512	Standard
|	**Cd**	114	313801.3	2.0	**23.8291**	0.536	2.2	ug/L	1247	Standard
| >	**In**	115	771269.9	0.9				ug/L	743274	Standard
|	**Sn**	118	1577.1	2.1	**0.0393**	0.001	3.5	ug/L	816	Standard
|	**Sb**	123	298487.0	1.4	**23.7371**	0.418	1.8	ug/L	15	Standard
⌊	**Ba**	135	127253.9	1.6	**23.4935**	0.423	1.8	ug/L	37	Standard
⌈	**Ce**	140	81.7	2.8				ug/L	44	Standard
⌊>	**Tb**	159	814610.1	1.9				ug/L	826676	Standard
⌈	**Ho**	165	8.7	33.3				ug/L	12	Standard
|	**Tl**	203	440389.8	1.6	**24.5985**	0.244	1.0	ug/L	6	Standard
|	**Tl**	205	1034180.6	1.5	**23.5624**	0.209	0.9	ug/L	11	Standard
|	**Pb**	206	353423.0	0.9	**24.5499**	0.176	0.7	ug/L	301	Standard
|	**Pb**	207	304102.1	1.7	**25.3239**	0.401	1.6	ug/L	250	Standard
|	**Pb**	208	1402890.5	1.2	**24.7302**	0.299	1.2	ug/L	1166	Standard
|	**U**	238	706189.7	1.4	**22.7823**	0.418	1.8	ug/L	3	Standard
⌊>	**Bi**	209	447561.2	0.6				ug/L	454659	Standard
⌈	**Na**	23	116.7	13.8	**0.0011**	0.003	266.3	mg/L	137	Standard
|	**Mg**	24	615.0	12.9	**-0.0007**	0.000	15.1	mg/L	498	Standard

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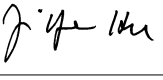
	K	39	573.3	12.5	**-0.0035**	0.005	135.0	mg/L	557	Standard
	Ca	43	35.0	51.5	**-0.0163**	0.039	239.1	mg/L	52	Standard
	Fe	54	1331.4	4.7	**0.0525**	0.006	11.8	mg/L	865	Standard
	Fe	57	6819.9	4.0	**0.0019**	0.001	40.9	mg/L	6003	Standard
>	**Sc-1**	45	346128.0	1.7				mg/L	333080	Standard
	Cl	35	395827.9	5.4				ug/L	40103	Standard
	Kr	83	63.3	10.5				ug/L	67	Standard
	Br	81	15676.4	2.9				ug/L	15294	Standard
	P	31	96219.0	3.5				ug/L	74262	Standard
	S	34	834487.2	3.6				ug/L	787377	Standard
	Sr	88	730.0	5.4				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		105.099	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		107.673	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		103.767	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		98.540	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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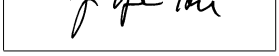
	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	98.439
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

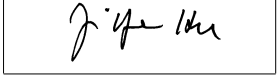
Sample ID: QC Std 6
Sample Date/Time: Tuesday, May 08, 2012 14:57:55
Number of Replicates: 3
Autosampler Position: 101
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	14944.0	0.8	**-940.3381**	201.019	21.4	ug/L	17857	Standard
|	**Be**	9	197657.8	1.7	**52.4808**	1.514	2.9	ug/L	12	Standard
|	**Al**	27	901361.8	1.1	**50.2501**	1.209	2.4	ug/L	13328	Standard
⌊>	**Sc**	45	312751.9	1.4				ug/L	333080	Standard
⌈	**Ti**	47	179509.9	1.2	**95.8613**	1.668	1.7	ug/L	113	Standard
|	**V**	51	923979.3	1.9	**49.0094**	1.209	2.5	ug/L	4349	Standard
|	**Cr**	52	689117.2	1.5	**49.0797**	1.009	2.1	ug/L	14000	Standard
|	**Cr**	53	102801.8	2.1	**48.5382**	1.150	2.4	ug/L	319	Standard
|	**Mn**	55	1183326.8	2.8	**50.3442**	1.695	3.4	ug/L	1367	Standard
|	**Co**	59	852396.6	2.6	**48.6637**	1.524	3.1	ug/L	115	Standard
|	**Ni**	60	179074.9	1.5	**48.9555**	1.019	2.1	ug/L	76	Standard
|	**Cu**	65	158558.5	1.6	**49.2575**	1.066	2.2	ug/L	135	Standard
|	**Zn**	66	72331.6	0.6	**50.8887**	0.410	0.8	ug/L	185	Standard
| >	**Ge**	72	275346.8	0.5				ug/L	274929	Standard
|	**As**	75	72425.7	1.6	**49.9242**	1.034	2.1	ug/L	-262	Standard
|	**Se**	82	8152.1	3.1	**48.2709**	1.715	3.6	ug/L	27	Standard
⌊	**Se-1**	77	4979.8	1.3	**51.6828**	0.572	1.1	ug/L	94	Standard
	Ga	71	244566.1	0.9				mg/L	248575	Standard
⌈	**Rb**	85	1245.1	8.4				ug/L	15	Standard
| >	**Y**	89	266425.6	1.3				ug/L	267564	Standard
⌊	**Rh**	103	45.0	69.4				ug/L	2	Standard
⌈	**Mo**	98	496121.8	1.2	**97.7354**	0.582	0.6	ug/L	5	Standard
|	**Ag**	107	572393.4	0.6	**52.7115**	0.156	0.3	ug/L	44	Standard
|	**Cd**	111	255609.1	1.3	**51.8121**	0.300	0.6	mg/L	512	Standard
|	**Cd**	114	645497.3	1.1	**51.5512**	0.290	0.6	ug/L	1247	Standard
| >	**In**	115	734905.4	0.8				ug/L	743274	Standard
|	**Sn**	118	868993.9	0.8	**50.5966**	0.593	1.2	ug/L	816	Standard
|	**Sb**	123	611498.9	0.9	**51.0359**	0.536	1.1	ug/L	15	Standard
⌊	**Ba**	135	252614.1	1.5	**48.9506**	0.675	1.4	ug/L	37	Standard
⌈	**Ce**	140	948.0	2.0				ug/L	44	Standard
⌊>	**Tb**	159	796558.2	2.2				ug/L	826676	Standard
⌈	**Ho**	165	19.3	26.5				ug/L	12	Standard
|	**Tl**	203	873061.3	1.2	**50.6257**	0.409	0.8	ug/L	6	Standard
|	**Tl**	205	2187011.7	1.0	**51.7230**	0.239	0.5	ug/L	11	Standard
|	**Pb**	206	701083.0	1.2	**50.5741**	0.379	0.7	ug/L	301	Standard
|	**Pb**	207	582828.2	0.9	**50.4023**	0.175	0.3	ug/L	250	Standard
|	**Pb**	208	2732362.8	1.1	**50.0192**	0.348	0.7	ug/L	1166	Standard
|	**U**	238	1399176.5	1.6	**46.8481**	0.469	1.0	ug/L	3	Standard
⌊>	**Bi**	209	431150.1	0.6				ug/L	454659	Standard
⌈	**Na**	23	22268.0	1.1	**5.2560**	0.115	2.2	mg/L	137	Standard
|	**Mg**	24	3000280.7	1.2	**5.0361**	0.096	1.9	mg/L	498	Standard

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	K	39	66207.7	2.0	**5.2529**	0.073	1.4	mg/L	557	Standard
	Ca	43	2288.5	9.0	**5.3004**	0.532	10.0	mg/L	52	Standard
	Fe	54	33900.8	3.7	**5.7393**	0.272	4.7	mg/L	865	Standard
	Fe	57	979142.2	0.9	**5.2190**	0.107	2.1	mg/L	6003	Standard
>	**Sc-1**	45	312751.9	1.4				mg/L	333080	Standard
	Cl	35	347709.0	4.5				ug/L	40103	Standard
	Kr	83	59.4	9.5				ug/L	67	Standard
	Br	81	13706.2	1.8				ug/L	15294	Standard
	P	31	78454.4	2.9				ug/L	74262	Standard
	S	34	878235.7	1.8				ug/L	787377	Standard
	Sr	88	1005.0	5.3				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	100.500		
>	Sc	45			
	Ti	47	95.861		
	V	51	98.019		
	Cr	52	98.159		
	Cr	53			
	Mn	55	100.688		
	Co	59	97.327		
	Ni	60	97.911		
	Cu	65	98.515		
	Zn	66	101.777		
>	Ge	72		100.152	
	As	75	99.848		
	Se	82	96.542		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		99.574	
	Rh	103			
	Mo	98	97.735		
	Ag	107	105.423		
	Cd	111	103.624		
	Cd	114			
>	In	115		98.874	
	Sn	118	101.193		
	Sb	123	102.072		
	Ba	135	97.901		
	Ce	140			
>	Tb	159		96.357	
	Ho	165			
	Tl	203	101.251		
	Tl	205			
	Pb	206	101.148		

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	Pb	207	100.805	
	Pb	208	100.038	
	U	238	93.696	
>	Bi	209		94.829
	Na	23	105.120	
	Mg	24	100.721	
	K	39	105.058	
	Ca	43	106.009	
	Fe	54	114.785	
	Fe	57	104.380	
>	Sc-1	45		
	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

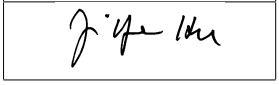
Sample ID: QC Std 7
Sample Date/Time: Tuesday, May 08, 2012 15:00:47
Number of Replicates: 3
Autosampler Position: 102
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	15130.9	2.7	**-524.1055**	317.232	60.5	ug/L	17857	Standard
|	**Be**	9	16.7	34.6	**-0.0024**	0.001	59.3	ug/L	12	Standard
|	**Al**	27	11687.8	5.4	**-0.0190**	0.046	242.4	ug/L	13328	Standard
⌊>	**Sc**	45	303171.1	3.9				ug/L	333080	Standard
⌈	**Ti**	47	97.7	23.3	**0.0062**	0.012	199.0	ug/L	113	Standard
|	**V**	51	4037.3	1.8	**-0.0070**	0.007	94.4	ug/L	4349	Standard
|	**Cr**	52	12276.6	1.0	**-0.0996**	0.017	17.4	ug/L	14000	Standard
|	**Cr**	53	811.7	5.4	**0.2550**	0.017	6.8	ug/L	319	Standard
|	**Mn**	55	1274.1	1.0	**-0.0063**	0.000	7.8	ug/L	1367	Standard
|	**Co**	59	129.0	14.0	**0.0021**	0.001	47.7	ug/L	115	Standard
|	**Ni**	60	80.0	20.5	**0.0018**	0.005	244.9	ug/L	76	Standard
|	**Cu**	65	126.3	5.8	**-0.0042**	0.003	65.1	ug/L	135	Standard
|	**Zn**	66	202.3	9.4	**0.0090**	0.014	158.9	ug/L	185	Standard
|>	**Ge**	72	263250.1	1.2				ug/L	274929	Standard
|	**As**	75	-192.8	13.4	**0.0330**	0.017	51.9	ug/L	-262	Standard
|	**Se**	82	28.2	26.0	**-0.0367**	0.048	130.8	ug/L	27	Standard
⌊	**Se-1**	77	110.7	7.7	**0.2923**	0.101	34.6	ug/L	94	Standard
	Ga	71	236900.9	2.2				mg/L	248575	Standard
⌈	**Rb**	85	38.3	52.7				ug/L	15	Standard
|>	**Y**	89	252424.2	2.1				ug/L	267564	Standard
⌊	**Rh**	103	5.0	173.2				ug/L	2	Standard
⌈	**Mo**	98	80.2	48.2	**0.0223**	0.008	35.1	ug/L	5	Standard
|	**Ag**	107	65.0	22.8	**-0.0016**	0.001	89.5	ug/L	44	Standard
|	**Cd**	111	492.2	2.2	**0.0019**	0.002	125.2	mg/L	512	Standard
|	**Cd**	114	1216.9	0.6	**0.0050**	0.001	24.2	ug/L	1247	Standard
|>	**In**	115	704580.6	0.6				ug/L	743274	Standard
|	**Sn**	118	964.0	7.6	**0.0103**	0.004	40.4	ug/L	816	Standard
|	**Sb**	123	303.3	48.1	**0.0248**	0.013	50.4	ug/L	15	Standard
⌊	**Ba**	135	50.0	18.3	**0.0035**	0.002	51.7	ug/L	37	Standard
⌈	**Ce**	140	40.0	10.9				ug/L	44	Standard
⌊>	**Tb**	159	752990.1	0.5				ug/L	826676	Standard
⌈	**Ho**	165	7.0	57.1				ug/L	12	Standard
|	**Tl**	203	245.3	5.2	**0.0121**	0.001	6.6	ug/L	6	Standard
|	**Tl**	205	576.0	8.5	**0.0162**	0.001	7.6	ug/L	11	Standard
|	**Pb**	206	337.0	19.3	**0.0042**	0.005	114.2	ug/L	301	Standard
|	**Pb**	207	273.0	15.2	**0.0030**	0.004	123.5	ug/L	250	Standard
|	**Pb**	208	1296.7	11.4	**0.0037**	0.003	76.2	ug/L	1166	Standard
|	**U**	238	55.0	52.3	**0.0057**	0.001	17.4	ug/L	3	Standard
⌊>	**Bi**	209	423602.2	0.4				ug/L	454659	Standard
⌈	**Na**	23	95.0	32.0	**-0.0008**	0.007	865.5	mg/L	137	Standard
|	**Mg**	24	588.3	10.5	**-0.0006**	0.000	11.9	mg/L	498	Standard

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	K	39	575.0	7.1	**0.0026**	0.002	87.0	mg/L	557	Standard
	Ca	43	46.7	49.5	**0.0234**	0.058	248.4	mg/L	52	Standard
	Fe	54	901.3	8.4	**0.0050**	0.011	214.4	mg/L	865	Standard
	Fe	57	5252.6	1.2	**-0.0021**	0.001	41.4	mg/L	6003	Standard
>	**Sc-1**	45	303171.1	3.9				mg/L	333080	Standard
	Cl	35	303380.2	1.9				ug/L	40103	Standard
	Kr	83	53.6	11.5				ug/L	67	Standard
	Br	81	12835.4	2.5				ug/L	15294	Standard
	P	31	71430.7	3.9				ug/L	74262	Standard
	S	34	851256.8	4.7				ug/L	787377	Standard
	Sr	88	316.7	22.5				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		95.752	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		94.341	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		94.794	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		91.086	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	93.169
	Na	23	
	Mg	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: Tuesday, May 08, 2012 15:03:20
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Method 6020 - Summary Report

Sample ID: L1205017101 WG397303-01
Sample Date/Time: Tuesday, May 08, 2012 15:03:41
Number of Replicates: 3
Autosampler Position: 330
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	247863.1	1.9	**131313.6630**	4349.375	3.3	ug/L	17857	Standard
|	**Be**	9	15.0	66.7	**-0.0033**	0.002	73.7	ug/L	12	Standard
|	**Al**	27	237812.1	9.2	**11.6820**	1.119	9.6	ug/L	13328	Standard
⌊>	**Sc**	45	339435.4	1.2				ug/L	333080	Standard
⌈	**Ti**	47	2098.1	14.8	**1.1130**	0.176	15.8	ug/L	113	Standard
|	**V**	51	9701.3	1.3	**0.3033**	0.009	2.8	ug/L	4349	Standard
|	**Cr**	52	22496.4	1.9	**0.6608**	0.036	5.5	ug/L	14000	Standard
|	**Cr**	53	4978.3	23.8	**2.2936**	0.575	25.1	ug/L	319	Standard
|	**Mn**	55	2244663.3	1.8	**98.9569**	1.756	1.8	ug/L	1367	Standard
|	**Co**	59	2863.3	4.9	**0.1638**	0.009	5.4	ug/L	115	Standard
|	**Ni**	60	7896.7	2.7	**2.2158**	0.066	3.0	ug/L	76	Standard
|	**Cu**	65	1985.8	1.9	**0.5942**	0.012	2.0	ug/L	135	Standard
|	**Zn**	66	30879.4	1.9	**22.4226**	0.467	2.1	ug/L	185	Standard
| >	**Ge**	72	265855.8	0.3				ug/L	274929	Standard
|	**As**	75	227.3	7.4	**0.3332**	0.012	3.5	ug/L	-262	Standard
|	**Se**	82	187.5	11.4	**0.9422**	0.129	13.7	ug/L	27	Standard
⌊	**Se-1**	77	309.3	13.7	**2.4529**	0.455	18.5	ug/L	94	Standard
	Ga	71	237826.7	0.4				mg/L	248575	Standard
⌈	**Rb**	85	30119.9	2.9				ug/L	15	Standard
| >	**Y**	89	260744.8	1.5				ug/L	267564	Standard
⌊	**Rh**	103	260.0	8.8				ug/L	2	Standard
⌈	**Mo**	98	1692.5	4.3	**0.3447**	0.018	5.3	ug/L	5	Standard
|	**Ag**	107	61.7	17.8	**-0.0020**	0.001	47.1	ug/L	44	Standard
|	**Cd**	111	652.1	4.0	**0.0322**	0.006	18.1	mg/L	512	Standard
|	**Cd**	114	1659.3	1.8	**0.0383**	0.001	3.7	ug/L	1247	Standard
| >	**In**	115	723431.2	1.5				ug/L	743274	Standard
|	**Sn**	118	1433.1	2.8	**0.0365**	0.003	7.7	ug/L	816	Standard
|	**Sb**	123	1677.3	1.3	**0.1407**	0.001	0.9	ug/L	15	Standard
⌊	**Ba**	135	232226.5	1.8	**45.7198**	1.105	2.4	ug/L	37	Standard
⌈	**Ce**	140	3055.3	1.5				ug/L	44	Standard
⌊>	**Tb**	159	801996.5	1.3				ug/L	826676	Standard
⌈	**Ho**	165	90.0	12.5				ug/L	12	Standard
|	**Tl**	203	588.3	3.4	**0.0345**	0.001	2.2	ug/L	6	Standard
|	**Tl**	205	1464.7	2.8	**0.0398**	0.001	2.4	ug/L	11	Standard
|	**Pb**	206	3649.8	1.5	**0.2641**	0.002	0.9	ug/L	301	Standard
|	**Pb**	207	3021.3	1.8	**0.2615**	0.009	3.4	ug/L	250	Standard
|	**Pb**	208	14183.9	0.3	**0.2603**	0.005	2.0	ug/L	1166	Standard
|	**U**	238	6819.5	3.2	**0.2506**	0.010	3.9	ug/L	3	Standard
⌊>	**Bi**	209	398995.4	1.5				ug/L	454659	Standard
⌈	**Na**	23	160202.8	2.2	**34.9780**	1.175	3.4	mg/L	137	Standard
|	**Mg**	24	4403661.0	2.2	**6.8118**	0.219	3.2	mg/L	498	Standard

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	K	39	27493.3	0.8	**1.9824**	0.035	1.8	mg/L	557	Standard
	Ca	43	21842.4	2.9	**47.3010**	1.681	3.6	mg/L	52	Standard
	Fe	54	1781.3	1.5	**0.1288**	0.003	2.6	mg/L	865	Standard
	Fe	57	63643.4	2.6	**0.2833**	0.011	3.9	mg/L	6003	Standard
>	**Sc-1**	45	339435.4	1.2				mg/L	333080	Standard
	Cl	35	5060811.7	2.6				ug/L	40103	Standard
	Kr	83	58.8	6.9				ug/L	67	Standard
	Br	81	74240.8	3.8				ug/L	15294	Standard
	P	31	189434.0	2.4				ug/L	74262	Standard
	S	34	3766079.7	2.1				ug/L	787377	Standard
	Sr	88	9354324.6	0.4				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		96.700	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		97.451	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		97.330	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		97.015	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1205017101 WG397303-01
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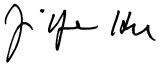
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	87.757
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: May 09, 2012



Method 6020 - Summary Report

Sample ID: L1205017103S WG397303-05

Sample Date/Time: Tuesday, May 08, 2012 15:06:33
Number of Replicates: 3
Autosampler Position: 331
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	254910.2	1.7	**136357.6494**	2922.688	2.1	ug/L	17857	Standard
|	**Be**	9	97655.7	4.0	**24.0570**	1.088	4.5	ug/L	12	Standard
|	**Al**	27	721210.9	3.1	**37.1289**	1.345	3.6	ug/L	13328	Standard
⌊>	**Sc**	45	337010.2	0.7				ug/L	333080	Standard
⌈	**Ti**	47	2240.2	10.9	**1.1873**	0.147	12.4	ug/L	113	Standard
|	**V**	51	461376.1	2.2	**25.1304**	0.479	1.9	ug/L	4349	Standard
|	**Cr**	52	349875.2	2.0	**25.2110**	0.381	1.5	ug/L	14000	Standard
|	**Cr**	53	54830.7	2.4	**26.6378**	0.500	1.9	ug/L	319	Standard
|	**Mn**	55	2779333.9	1.4	**122.0552**	0.829	0.7	ug/L	1367	Standard
|	**Co**	59	395502.6	2.1	**23.2864**	0.350	1.5	ug/L	115	Standard
|	**Ni**	60	89413.2	2.9	**25.2006**	0.477	1.9	ug/L	76	Standard
|	**Cu**	65	73218.3	3.4	**23.4354**	0.570	2.4	ug/L	135	Standard
|	**Zn**	66	64803.0	3.0	**47.0156**	1.027	2.2	ug/L	185	Standard
|>	**Ge**	72	266914.0	1.1				ug/L	274929	Standard
|	**As**	75	35705.6	1.2	**25.4724**	0.051	0.2	ug/L	-262	Standard
|	**Se**	82	4041.2	2.1	**24.5771**	0.285	1.2	ug/L	27	Standard
⌊	**Se-1**	77	2653.9	1.6	**27.9978**	0.653	2.3	ug/L	94	Standard
	Ga	71	232077.5	1.7				mg/L	248575	Standard
⌈	**Rb**	85	29241.6	4.1				ug/L	15	Standard
|>	**Y**	89	255505.1	1.8				ug/L	267564	Standard
⌊	**Rh**	103	290.0	15.3				ug/L	2	Standard
⌈	**Mo**	98	1742.1	1.4	**0.3505**	0.007	2.1	ug/L	5	Standard
|	**Ag**	107	229714.7	2.5	**21.2341**	0.395	1.9	ug/L	44	Standard
|	**Cd**	111	122765.3	2.6	**24.9321**	0.486	2.0	mg/L	512	Standard
|	**Cd**	114	309871.0	2.6	**24.7951**	0.347	1.4	ug/L	1247	Standard
|>	**In**	115	731976.5	1.8				ug/L	743274	Standard
|	**Sn**	118	1546.4	3.6	**0.0422**	0.003	6.2	ug/L	816	Standard
|	**Sb**	123	296202.0	1.8	**24.8192**	0.255	1.0	ug/L	15	Standard
⌊	**Ba**	135	351118.5	2.0	**68.3138**	0.871	1.3	ug/L	37	Standard
⌈	**Ce**	140	3411.1	9.6				ug/L	44	Standard
⌊>	**Tb**	159	805754.7	1.1				ug/L	826676	Standard
⌈	**Ho**	165	88.0	12.5				ug/L	12	Standard
|	**Tl**	203	406366.3	1.4	**25.4919**	0.466	1.8	ug/L	6	Standard
|	**Tl**	205	949281.2	1.1	**24.2896**	0.352	1.4	ug/L	11	Standard
|	**Pb**	206	325037.3	2.0	**25.3567**	0.585	2.3	ug/L	301	Standard
|	**Pb**	207	276217.8	2.2	**25.8328**	0.667	2.6	ug/L	250	Standard
|	**Pb**	208	1282571.9	2.2	**25.3916**	0.647	2.5	ug/L	1166	Standard
|	**U**	238	672935.8	2.7	**24.3796**	0.750	3.1	ug/L	3	Standard
⌊>	**Bi**	209	398549.1	0.5				ug/L	454659	Standard
⌈	**Na**	23	161527.0	3.3	**35.5171**	1.365	3.8	mg/L	137	Standard
|	**Mg**	24	4428833.0	1.0	**6.8987**	0.077	1.1	mg/L	498	Standard

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	K	39	27636.9	2.5	**2.0076**	0.060	3.0	mg/L	557	Standard
	Ca	43	22159.6	5.2	**48.3353**	2.757	5.7	mg/L	52	Standard
	Fe	54	1766.7	4.4	**0.1284**	0.010	8.1	mg/L	865	Standard
	Fe	57	63854.4	4.2	**0.2865**	0.014	4.8	mg/L	6003	Standard
>	**Sc-1**	45	337010.2	0.7				mg/L	333080	Standard
	Cl	35	5119478.5	0.8				ug/L	40103	Standard
	Kr	83	59.8	2.3				ug/L	67	Standard
	Br	81	73229.9	0.9				ug/L	15294	Standard
	P	31	188150.3	1.0				ug/L	74262	Standard
	S	34	3844965.8	1.4				ug/L	787377	Standard
	Sr	88	9061370.8	4.1				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		97.085	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		95.493	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		98.480	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		97.469	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	87.659
	Na	23	
	Mg	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 09, 2012

Method 6020 - Summary Report

Sample ID: L1205017105SD WG397303-06

Sample Date/Time: Tuesday, May 08, 2012 15:09:25
Number of Replicates: 3
Autosampler Position: 332
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	251429.1	0.7	**132757.4782**	2178.807	1.6	ug/L	17857	Standard
|	**Be**	9	103040.9	2.0	**25.0981**	0.438	1.7	ug/L	12	Standard
|	**Al**	27	738811.1	1.8	**37.6266**	1.182	3.1	ug/L	13328	Standard
⌊>	**Sc**	45	340804.1	1.5				ug/L	333080	Standard
⌈	**Ti**	47	2177.5	13.1	**1.1696**	0.166	14.2	ug/L	113	Standard
|	**V**	51	469756.9	2.1	**25.9692**	0.932	3.6	ug/L	4349	Standard
|	**Cr**	52	357560.3	2.0	**26.1814**	0.981	3.7	ug/L	14000	Standard
|	**Cr**	53	56445.0	1.3	**27.8295**	0.800	2.9	ug/L	319	Standard
|	**Mn**	55	2776241.4	0.9	**123.6915**	2.925	2.4	ug/L	1367	Standard
|	**Co**	59	413088.0	0.8	**24.6759**	0.556	2.3	ug/L	115	Standard
|	**Ni**	60	90817.4	1.0	**25.9704**	0.500	1.9	ug/L	76	Standard
|	**Cu**	65	75409.9	1.9	**24.4955**	0.821	3.4	ug/L	135	Standard
|	**Zn**	66	62260.0	0.4	**45.8230**	0.610	1.3	ug/L	185	Standard
| >	**Ge**	72	263159.0	1.6				ug/L	274929	Standard
|	**As**	75	36035.5	0.4	**26.0761**	0.515	2.0	ug/L	-262	Standard
|	**Se**	82	4020.1	0.5	**24.8046**	0.359	1.4	ug/L	27	Standard
⌊	**Se-1**	77	2628.6	1.4	**28.1340**	0.736	2.6	ug/L	94	Standard
	Ga	71	235508.6	0.8				mg/L	248575	Standard
⌈	**Rb**	85	28920.9	2.9				ug/L	15	Standard
| >	**Y**	89	248771.8	2.9				ug/L	267564	Standard
⌊	**Rh**	103	313.3	16.8				ug/L	2	Standard
⌈	**Mo**	98	1592.4	4.5	**0.3243**	0.011	3.3	ug/L	5	Standard
|	**Ag**	107	234814.2	1.7	**21.9553**	0.473	2.2	ug/L	44	Standard
|	**Cd**	111	125358.1	0.9	**25.7551**	0.476	1.8	mg/L	512	Standard
|	**Cd**	114	321286.3	0.6	**26.0113**	0.494	1.9	ug/L	1247	Standard
| >	**In**	115	723791.6	1.9				ug/L	743274	Standard
|	**Sn**	118	1515.1	4.3	**0.0414**	0.005	11.3	ug/L	816	Standard
|	**Sb**	123	306608.1	0.2	**25.9872**	0.482	1.9	ug/L	15	Standard
⌊	**Ba**	135	352569.3	0.6	**69.3931**	1.760	2.5	ug/L	37	Standard
⌈	**Ce**	140	3100.0	0.5				ug/L	44	Standard
⌊>	**Tb**	159	801130.2	2.0				ug/L	826676	Standard
⌈	**Ho**	165	87.3	7.6				ug/L	12	Standard
|	**Tl**	203	413237.2	0.4	**26.1167**	0.516	2.0	ug/L	6	Standard
|	**Tl**	205	970503.5	1.3	**25.0186**	0.587	2.3	ug/L	11	Standard
|	**Pb**	206	330679.3	1.4	**25.9911**	0.673	2.6	ug/L	301	Standard
|	**Pb**	207	284823.0	1.0	**26.8375**	0.610	2.3	ug/L	250	Standard
|	**Pb**	208	1312146.5	1.3	**26.1718**	0.623	2.4	ug/L	1166	Standard
|	**U**	238	696041.2	0.5	**25.4032**	0.421	1.7	ug/L	3	Standard
⌊>	**Bi**	209	395651.7	1.6				ug/L	454659	Standard
⌈	**Na**	23	156117.0	2.0	**33.9430**	0.759	2.2	mg/L	137	Standard
|	**Mg**	24	4409312.1	1.2	**6.7932**	0.174	2.6	mg/L	498	Standard

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	K	39	27197.7	3.2	**1.9519**	0.035	1.8	mg/L	557	Standard
	Ca	43	21854.1	1.1	**47.1310**	0.629	1.3	mg/L	52	Standard
	Fe	54	1735.2	0.3	**0.1203**	0.005	4.0	mg/L	865	Standard
	Fe	57	61168.2	1.3	**0.2698**	0.005	1.9	mg/L	6003	Standard
>	**Sc-1**	45	340804.1	1.5				mg/L	333080	Standard
	Cl	35	5009930.4	1.1				ug/L	40103	Standard
	Kr	83	60.6	5.3				ug/L	67	Standard
	Br	81	73090.0	1.0				ug/L	15294	Standard
	P	31	188826.4	2.1				ug/L	74262	Standard
	S	34	3737990.1	1.2				ug/L	787377	Standard
	Sr	88	8920745.6	1.5				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		95.719	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		92.976	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		97.379	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		96.910	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1205017105SD WG397303-06
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	87.022
	Na	23	
	Mg	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 09, 2012

Method 6020 - Summary Report

Sample ID: L1205013408
Sample Date/Time: Tuesday, May 08, 2012 15:12:17
Number of Replicates: 3
Autosampler Position: 333
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	16749.3	7.0	**121.0828**	623.010	514.5	ug/L	17857	Standard
|	**Be**	9	20.0	25.0	**-0.0017**	0.001	65.0	ug/L	12	Standard
|	**Al**	27	141171.9	3.7	**7.2371**	0.263	3.6	ug/L	13328	Standard
⌊>	**Sc**	45	314587.9	5.2				ug/L	333080	Standard
⌈	**Ti**	47	513.0	40.8	**0.2384**	0.118	49.5	ug/L	113	Standard
|	**V**	51	5563.3	1.9	**0.0777**	0.007	8.5	ug/L	4349	Standard
|	**Cr**	52	17134.3	0.6	**0.2686**	0.010	3.6	ug/L	14000	Standard
|	**Cr**	53	1432.6	4.8	**0.5621**	0.035	6.2	ug/L	319	Standard
|	**Mn**	55	17737.4	2.1	**0.7264**	0.016	2.2	ug/L	1367	Standard
|	**Co**	59	320.7	3.8	**0.0136**	0.001	6.0	ug/L	115	Standard
|	**Ni**	60	674.0	7.1	**0.1716**	0.013	7.7	ug/L	76	Standard
|	**Cu**	65	906.4	6.9	**0.2492**	0.021	8.6	ug/L	135	Standard
|	**Zn**	66	4024.2	1.4	**2.8266**	0.057	2.0	ug/L	185	Standard
| >	**Ge**	72	263487.7	0.5				ug/L	274929	Standard
|	**As**	75	-186.8	13.2	**0.0373**	0.018	47.9	ug/L	-262	Standard
|	**Se**	82	36.4	7.3	**0.0135**	0.018	131.1	ug/L	27	Standard
⌊	**Se-1**	77	102.0	12.5	**0.1955**	0.146	74.7	ug/L	94	Standard
	Ga	71	238773.0	1.6				mg/L	248575	Standard
⌈	**Rb**	85	431.7	9.9				ug/L	15	Standard
| >	**Y**	89	250209.1	0.4				ug/L	267564	Standard
⌊	**Rh**	103	1.7	173.2				ug/L	2	Standard
⌈	**Mo**	98	609.0	3.6	**0.1255**	0.002	1.4	ug/L	5	Standard
|	**Ag**	107	74.0	15.9	**-0.0010**	0.001	97.5	ug/L	44	Standard
|	**Cd**	111	537.9	2.7	**0.0066**	0.001	8.9	mg/L	512	Standard
|	**Cd**	114	1343.7	2.5	**0.0107**	0.001	8.5	ug/L	1247	Standard
| >	**In**	115	736965.1	2.2				ug/L	743274	Standard
|	**Sn**	118	2450.9	3.8	**0.0941**	0.002	2.4	ug/L	816	Standard
|	**Sb**	123	273.5	0.6	**0.0212**	0.001	3.0	ug/L	15	Standard
⌊	**Ba**	135	1289.1	0.6	**0.2426**	0.006	2.6	ug/L	37	Standard
⌈	**Ce**	140	1633.4	3.8				ug/L	44	Standard
⌊>	**Tb**	159	794162.8	2.3				ug/L	826676	Standard
⌈	**Ho**	165	31.0	11.6				ug/L	12	Standard
|	**Tl**	203	265.7	29.2	**0.0131**	0.004	32.5	ug/L	6	Standard
|	**Tl**	205	623.0	30.5	**0.0171**	0.004	25.0	ug/L	11	Standard
|	**Pb**	206	1336.7	3.4	**0.0764**	0.002	2.5	ug/L	301	Standard
|	**Pb**	207	1074.0	4.9	**0.0723**	0.003	4.3	ug/L	250	Standard
|	**Pb**	208	5206.0	3.3	**0.0753**	0.002	2.2	ug/L	1166	Standard
|	**U**	238	90.3	23.8	**0.0068**	0.001	10.0	ug/L	3	Standard
⌊>	**Bi**	209	429036.6	1.6				ug/L	454659	Standard
⌈	**Na**	23	513.3	14.7	**0.0974**	0.019	19.5	mg/L	137	Standard
|	**Mg**	24	5817.8	3.2	**0.0081**	0.000	2.4	mg/L	498	Standard

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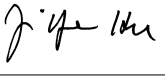
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	K	39	788.4	5.4	**0.0180**	0.007	36.2	mg/L	557	Standard
	Ca	43	68.3	29.6	**0.0680**	0.041	60.4	mg/L	52	Standard
	Fe	54	1113.6	4.3	**0.0361**	0.008	22.2	mg/L	865	Standard
	Fe	57	10942.3	5.5	**0.0272**	0.002	6.0	mg/L	6003	Standard
>	**Sc-1**	45	314587.9	5.2				mg/L	333080	Standard
	Cl	35	321821.6	12.7				ug/L	40103	Standard
	Kr	83	55.3	6.4				ug/L	67	Standard
	Br	81	15920.9	11.2				ug/L	15294	Standard
	P	31	76683.8	4.6				ug/L	74262	Standard
	S	34	988100.4	1.6				ug/L	787377	Standard
	Sr	88	5609.4	3.4				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		95.838	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		93.514	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		99.151	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		96.067	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	94.364
	Na	23	
	Mg	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 09, 2012

Method 6020 - Summary Report

Sample ID: L1205015030
Sample Date/Time: Tuesday, May 08, 2012 15:15:09
Number of Replicates: 3
Autosampler Position: 334
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	55568.4	1.1	**21462.2685**	195.261	0.9	ug/L	17857	Standard
|	**Be**	9	415.0	13.9	**0.0944**	0.014	15.3	ug/L	12	Standard
|	**Al**	27	43062951.8	1.7	**2237.6967**	29.253	1.3	ug/L	13328	Standard
⌊>	**Sc**	45	340059.5	1.7				ug/L	333080	Standard
⌈	**Ti**	47	160792.1	1.0	**104.0034**	2.205	2.1	ug/L	113	Standard
|	**V**	51	295811.7	2.8	**18.8616**	0.652	3.5	ug/L	4349	Standard
|	**Cr**	52	206400.2	2.5	**17.1467**	0.612	3.6	ug/L	14000	Standard
|	**Cr**	53	29649.0	0.8	**16.8591**	0.291	1.7	ug/L	319	Standard
|	**Mn**	55	34202616.4	0.3	**1764.4351**	29.580	1.7	ug/L	1367	Standard
|	**Co**	59	84445.7	1.6	**5.8340**	0.147	2.5	ug/L	115	Standard
|	**Ni**	60	33512.7	0.5	**11.0793**	0.139	1.3	ug/L	76	Standard
|	**Cu**	65	28480.7	0.7	**10.6812**	0.249	2.3	ug/L	135	Standard
|	**Zn**	66	346294.9	0.9	**295.7460**	3.799	1.3	ug/L	185	Standard
|>	**Ge**	72	227373.4	1.8				ug/L	274929	Standard
|	**As**	75	6770.8	2.5	**5.8033**	0.059	1.0	ug/L	-262	Standard
|	**Se**	82	1123.4	3.7	**7.8760**	0.166	2.1	ug/L	27	Standard
⌊	**Se-1**	77	216.7	4.4	**1.8408**	0.101	5.5	ug/L	94	Standard
	Ga	71	200055.8	0.8				mg/L	248575	Standard
⌈	**Rb**	85	77100.7	2.4				ug/L	15	Standard
|>	**Y**	89	265630.6	2.2				ug/L	267564	Standard
⌊	**Rh**	103	626.7	3.9				ug/L	2	Standard
⌈	**Mo**	98	3316.8	2.0	**0.7828**	0.004	0.6	ug/L	5	Standard
|	**Ag**	107	453.3	1.8	**0.0419**	0.002	3.8	ug/L	44	Standard
|	**Cd**	111	1203.1	1.0	**0.1882**	0.002	0.8	mg/L	512	Standard
|	**Cd**	114	3258.2	0.8	**0.2135**	0.002	1.0	ug/L	1247	Standard
|>	**In**	115	618052.4	1.4				ug/L	743274	Standard
|	**Sn**	118	28205.2	2.9	**1.9064**	0.061	3.2	ug/L	816	Standard
|	**Sb**	123	5099.3	3.5	**0.5045**	0.013	2.6	ug/L	15	Standard
⌊	**Ba**	135	3440660.5	0.2	**792.9648**	10.850	1.4	ug/L	37	Standard
⌈	**Ce**	140	425673.6	0.8				ug/L	44	Standard
⌊>	**Tb**	159	732989.6	0.5				ug/L	826676	Standard
⌈	**Ho**	165	8932.6	2.4				ug/L	12	Standard
|	**Tl**	203	550.3	2.8	**0.0369**	0.001	2.8	ug/L	6	Standard
|	**Tl**	205	1277.7	1.0	**0.0395**	0.000	1.1	ug/L	11	Standard
|	**Pb**	206	44593.5	0.5	**3.9407**	0.002	0.1	ug/L	301	Standard
|	**Pb**	207	36287.1	0.7	**3.8433**	0.029	0.7	ug/L	250	Standard
|	**Pb**	208	170689.7	0.8	**3.8273**	0.017	0.4	ug/L	1166	Standard
|	**U**	238	4732.1	1.1	**0.1988**	0.002	0.8	ug/L	3	Standard
⌊>	**Bi**	209	350272.9	0.5				ug/L	454659	Standard
⌈	**Na**	23	160859.4	0.6	**35.0554**	0.716	2.0	mg/L	137	Standard
|	**Mg**	24	4651404.1	1.1	**7.1808**	0.046	0.6	mg/L	498	Standard

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	K	39	96944.2	0.8	**7.0902**	0.075	1.1	mg/L	557	Standard
	Ca	43	49273.3	1.2	**106.6317**	2.844	2.7	mg/L	52	Standard
	Fe	54	187248.4	1.6	**29.7909**	0.736	2.5	mg/L	865	Standard
	Fe	57	5459055.8	1.5	**26.8906**	0.636	2.4	mg/L	6003	Standard
>	**Sc-1**	45	340059.5	1.7				mg/L	333080	Standard
	Cl	35	3621524.1	0.6				ug/L	40103	Standard
	Kr	83	72.3	8.4				ug/L	67	Standard
	Br	81	633678.3	1.8				ug/L	15294	Standard
	P	31	1666627.1	1.3				ug/L	74262	Standard
	S	34	1199444.3	0.8				ug/L	787377	Standard
	Sr	88	27289479.8	1.7				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		82.703	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		99.277	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		83.153	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		88.667	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	77.041
	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
Ti 47 Upper, S, EEE	Ti	47	
Mn 55 Upper, S, EEE	Mn	55	
Zn 66 Upper, S, EEE	Zn	66	
Ba 135 Upper, S, EEE	Ba	135	
Ca 43 Upper, S, EEE	Ca	43	

Approved: May 09, 2012

Method 6020 - Summary Report

Sample ID: L1205015402
Sample Date/Time: Tuesday, May 08, 2012 15:18:01
Number of Replicates: 3
Autosampler Position: 335
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	31360.8	1.9	**6310.1363**	489.743	7.8	ug/L	17857	Standard
|	**Be**	9	18.3	68.6	**-0.0028**	0.003	98.6	ug/L	12	Standard
|	**Al**	27	1579810.7	2.4	**75.1474**	0.721	1.0	ug/L	13328	Standard
⌊>	**Sc**	45	368206.4	3.1				ug/L	333080	Standard
⌈	**Ti**	47	1277.7	3.5	**0.6366**	0.019	3.0	ug/L	113	Standard
|	**V**	51	144573.3	1.3	**7.4988**	0.036	0.5	ug/L	4349	Standard
|	**Cr**	52	39068.0	0.4	**1.8175**	0.029	1.6	ug/L	14000	Standard
|	**Cr**	53	4328.1	1.4	**1.9099**	0.014	0.7	ug/L	319	Standard
|	**Mn**	55	15362.9	16.0	**0.5942**	0.110	18.6	ug/L	1367	Standard
|	**Co**	59	2827.3	3.0	**0.1564**	0.004	2.4	ug/L	115	Standard
|	**Ni**	60	11833.6	3.3	**3.2267**	0.106	3.3	ug/L	76	Standard
|	**Cu**	65	923035.9	2.4	**287.9395**	5.222	1.8	ug/L	135	Standard
|	**Zn**	66	3245.3	3.2	**2.1573**	0.076	3.5	ug/L	185	Standard
| >	**Ge**	72	274383.6	0.9				ug/L	274929	Standard
|	**As**	75	3721.9	2.5	**2.7371**	0.066	2.4	ug/L	-262	Standard
|	**Se**	82	262.9	11.8	**1.3570**	0.190	14.0	ug/L	27	Standard
⌊	**Se-1**	77	184.7	3.5	**1.0265**	0.052	5.1	ug/L	94	Standard
	Ga	71	254198.2	1.4				mg/L	248575	Standard
⌈	**Rb**	85	6301.3	3.5				ug/L	15	Standard
| >	**Y**	89	270800.8	1.9				ug/L	267564	Standard
⌊	**Rh**	103	333.3	9.0				ug/L	2	Standard
⌈	**Mo**	98	93228.0	1.1	**17.4933**	0.269	1.5	ug/L	5	Standard
|	**Ag**	107	90.3	6.3	**0.0001**	0.001	388.4	ug/L	44	Standard
|	**Cd**	111	844.2	4.8	**0.0609**	0.007	11.0	mg/L	512	Standard
|	**Cd**	114	2339.4	4.8	**0.0817**	0.010	11.8	ug/L	1247	Standard
| >	**In**	115	771825.0	0.7				ug/L	743274	Standard
|	**Sn**	118	1892.5	1.8	**0.0567**	0.003	4.6	ug/L	816	Standard
|	**Sb**	123	5074.7	4.7	**0.4018**	0.021	5.3	ug/L	15	Standard
⌊	**Ba**	135	63357.5	1.6	**11.6853**	0.218	1.9	ug/L	37	Standard
⌈	**Ce**	140	485.7	6.9				ug/L	44	Standard
⌊>	**Tb**	159	853113.5	0.8				ug/L	826676	Standard
⌈	**Ho**	165	17.3	8.8				ug/L	12	Standard
|	**Tl**	203	420.0	4.1	**0.0228**	0.001	5.2	ug/L	6	Standard
|	**Tl**	205	936.4	2.1	**0.0252**	0.001	2.3	ug/L	11	Standard
|	**Pb**	206	644.0	4.4	**0.0274**	0.002	8.9	ug/L	301	Standard
|	**Pb**	207	535.0	4.4	**0.0267**	0.002	8.0	ug/L	250	Standard
|	**Pb**	208	2502.1	1.6	**0.0268**	0.001	3.6	ug/L	1166	Standard
|	**U**	238	147.7	11.6	**0.0089**	0.001	6.6	ug/L	3	Standard
⌊>	**Bi**	209	418268.5	0.6				ug/L	454659	Standard
⌈	**Na**	23	52761.7	0.7	**10.6066**	0.319	3.0	mg/L	137	Standard
|	**Mg**	24	34891.8	2.5	**0.0482**	0.003	5.6	mg/L	498	Standard

Sample ID: L1205015402
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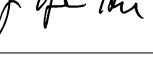
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	K	39	23762.0	2.0	**1.5718**	0.082	5.2	mg/L	557	Standard
	Ca	43	38493.8	2.0	**76.9067**	0.888	1.2	mg/L	52	Standard
	Fe	54	1288.2	4.8	**0.0338**	0.013	38.0	mg/L	865	Standard
	Fe	57	57266.4	3.1	**0.2296**	0.003	1.5	mg/L	6003	Standard
>	**Sc-1**	45	368206.4	3.1				mg/L	333080	Standard
	Cl	35	819262.3	4.4				ug/L	40103	Standard
	Kr	83	67.3	12.2				ug/L	67	Standard
	Br	81	43056.0	13.3				ug/L	15294	Standard
	P	31	155430.9	4.5				ug/L	74262	Standard
	S	34	7571536.4	1.5				ug/L	787377	Standard
	Sr	88	4589128.5	1.7				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		99.802	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		101.210	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		103.841	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		103.198	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	91.996
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Cu 65 Upper, S, EEE	Cu	65	

Approved: May 09, 2012

Method 6020 - Summary Report

Sample ID: L1205015402PS WG397375-01

Sample Date/Time: Tuesday, May 08, 2012 15:20:54
Number of Replicates: 3
Autosampler Position: 336
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	32570.0	3.1	**6703.5121**	121.562	1.8	ug/L	17857	Standard
|	**Be**	9	218075.4	2.4	**48.5039**	0.570	1.2	ug/L	12	Standard
|	**Al**	27	2416122.6	3.2	**113.7080**	2.639	2.3	ug/L	13328	Standard
⌊>	**Sc**	45	373277.2	2.4				ug/L	333080	Standard
⌈	**Ti**	47	1319.7	2.2	**0.6469**	0.016	2.5	ug/L	113	Standard
|	**V**	51	1175807.7	2.6	**61.5536**	1.546	2.5	ug/L	4349	Standard
|	**Cr**	52	794626.2	3.5	**55.9446**	1.922	3.4	ug/L	14000	Standard
|	**Cr**	53	116073.1	2.3	**54.0563**	1.193	2.2	ug/L	319	Standard
|	**Mn**	55	1308928.2	0.6	**54.9137**	0.295	0.5	ug/L	1367	Standard
|	**Co**	59	899957.0	0.9	**50.6599**	0.443	0.9	ug/L	115	Standard
|	**Ni**	60	198160.8	0.5	**53.4190**	0.262	0.5	ug/L	76	Standard
|	**Cu**	65	1100462.0	1.5	**337.3602**	5.021	1.5	ug/L	135	Standard
|	**Zn**	66	74650.5	1.3	**51.7922**	0.662	1.3	ug/L	185	Standard
| >	**Ge**	72	279223.4	0.1				ug/L	274929	Standard
|	**As**	75	78484.2	1.7	**53.3337**	0.902	1.7	ug/L	-262	Standard
|	**Se**	82	8618.6	2.2	**50.3276**	1.071	2.1	ug/L	27	Standard
⌊	**Se-1**	77	4966.8	0.8	**50.8172**	0.458	0.9	ug/L	94	Standard
	Ga	71	257667.2	0.2				mg/L	248575	Standard
⌈	**Rb**	85	6036.2	2.3				ug/L	15	Standard
| >	**Y**	89	279600.8	2.7				ug/L	267564	Standard
⌊	**Rh**	103	388.3	1.5				ug/L	2	Standard
⌈	**Mo**	98	92708.3	1.7	**16.7962**	0.372	2.2	ug/L	5	Standard
|	**Ag**	107	593125.9	2.2	**50.2177**	1.345	2.7	ug/L	44	Standard
|	**Cd**	111	271364.6	1.7	**50.5708**	1.129	2.2	mg/L	512	Standard
|	**Cd**	114	682500.9	1.8	**50.1105**	1.164	2.3	ug/L	1247	Standard
| >	**In**	115	799399.7	0.5				ug/L	743274	Standard
|	**Sn**	118	2648.6	2.8	**0.0936**	0.005	4.9	ug/L	816	Standard
|	**Sb**	123	668050.9	1.0	**51.2584**	0.765	1.5	ug/L	15	Standard
⌊	**Ba**	135	343219.0	0.8	**61.1457**	0.834	1.4	ug/L	37	Standard
⌈	**Ce**	140	451.3	4.0				ug/L	44	Standard
⌊>	**Tb**	159	884220.7	0.8				ug/L	826676	Standard
⌈	**Ho**	165	21.3	14.3				ug/L	12	Standard
|	**Tl**	203	915785.2	0.5	**53.7853**	0.199	0.4	ug/L	6	Standard
|	**Tl**	205	2317472.0	1.1	**55.5120**	0.551	1.0	ug/L	11	Standard
|	**Pb**	206	719981.8	1.4	**52.6034**	0.454	0.9	ug/L	301	Standard
|	**Pb**	207	614809.0	2.4	**53.8478**	0.990	1.8	ug/L	250	Standard
|	**Pb**	208	2841353.3	1.8	**52.6805**	0.642	1.2	ug/L	1166	Standard
|	**U**	238	1554461.7	2.9	**52.7117**	1.199	2.3	ug/L	3	Standard
⌊>	**Bi**	209	425695.9	0.8				ug/L	454659	Standard
⌈	**Na**	23	53385.6	2.0	**10.5807**	0.089	0.8	mg/L	137	Standard
|	**Mg**	24	34699.7	2.4	**0.0472**	0.001	1.9	mg/L	498	Standard

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	K	39	24030.7	0.2	**1.5669**	0.040	2.6	mg/L	557	Standard
	Ca	43	37788.7	1.9	**74.4630**	1.118	1.5	mg/L	52	Standard
	Fe	54	1116.4	3.9	**0.0062**	0.009	146.6	mg/L	865	Standard
	Fe	57	58855.9	4.0	**0.2332**	0.006	2.7	mg/L	6003	Standard
>	**Sc-1**	45	373277.2	2.4				mg/L	333080	Standard
	Cl	35	831232.5	1.1				ug/L	40103	Standard
	Kr	83	65.8	4.4				ug/L	67	Standard
	Br	81	35668.6	0.9				ug/L	15294	Standard
	P	31	160655.7	1.7				ug/L	74262	Standard
	S	34	7646829.6	1.7				ug/L	787377	Standard
	Sr	88	4534672.7	3.5				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		101.562	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		104.499	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		107.551	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		106.961	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	93.630
	Na	23	
	Mg	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
Cu 65 Upper, S, EEE	Cu	65	

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Report Date/Time: Tuesday, May 08, 2012 15:23:28
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Method 6020 - Summary Report

Sample ID: L1205015402SDL WG397375-02

Sample Date/Time: Tuesday, May 08, 2012 15:23:47
Number of Replicates: 3
Autosampler Position: 337
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	17178.1	4.6	**1668.4722**	456.519	27.4	ug/L	17857	Standard
|	**Be**	9	31.7	48.2	**0.0024**	0.004	184.6	ug/L	12	Standard
|	**Al**	27	312899.1	4.7	**19.0241**	0.901	4.7	ug/L	13328	Standard
⌊>	**Sc**	45	280401.4	1.8				ug/L	333080	Standard
⌈	**Ti**	47	290.3	4.2	**0.1346**	0.004	3.1	ug/L	113	Standard
|	**V**	51	28530.4	4.0	**1.5613**	0.039	2.5	ug/L	4349	Standard
|	**Cr**	52	16810.3	1.2	**0.4090**	0.018	4.3	ug/L	14000	Standard
|	**Cr**	53	1166.7	4.0	**0.5050**	0.025	4.9	ug/L	319	Standard
|	**Mn**	55	3336.4	2.5	**0.1046**	0.002	2.1	ug/L	1367	Standard
|	**Co**	59	598.7	8.6	**0.0348**	0.003	9.8	ug/L	115	Standard
|	**Ni**	60	2063.1	0.9	**0.6448**	0.007	1.1	ug/L	76	Standard
|	**Cu**	65	168797.3	1.9	**61.8831**	0.944	1.5	ug/L	135	Standard
|	**Zn**	66	2996.6	3.2	**2.3539**	0.057	2.4	ug/L	185	Standard
| >	**Ge**	72	233365.5	1.9				ug/L	274929	Standard
|	**As**	75	618.5	5.1	**0.6726**	0.016	2.4	ug/L	-262	Standard
|	**Se**	82	62.6	9.3	**0.2262**	0.036	15.9	ug/L	27	Standard
⌊	**Se-1**	77	106.0	10.6	**0.3897**	0.131	33.5	ug/L	94	Standard
	Ga	71	203981.6	2.1				mg/L	248575	Standard
⌈	**Rb**	85	1040.0	11.4				ug/L	15	Standard
| >	**Y**	89	211352.8	2.4				ug/L	267564	Standard
⌊	**Rh**	103	55.0	32.8				ug/L	2	Standard
⌈	**Mo**	98	15091.0	2.4	**3.1663**	0.025	0.8	ug/L	5	Standard
|	**Ag**	107	76.3	8.4	**-0.0003**	0.001	194.2	ug/L	44	Standard
|	**Cd**	111	252.7	7.8	**-0.0478**	0.004	8.9	mg/L	512	Standard
|	**Cd**	114	719.8	9.0	**-0.0352**	0.006	18.4	ug/L	1247	Standard
| >	**In**	115	691267.5	2.2				ug/L	743274	Standard
|	**Sn**	118	854.0	6.1	**0.0047**	0.004	92.8	ug/L	816	Standard
|	**Sb**	123	2312.1	18.2	**0.2032**	0.033	16.2	ug/L	15	Standard
⌊	**Ba**	135	12193.9	2.3	**2.5057**	0.005	0.2	ug/L	37	Standard
⌈	**Ce**	140	120.3	8.3				ug/L	44	Standard
⌊>	**Tb**	159	745062.1	2.2				ug/L	826676	Standard
⌈	**Ho**	165	9.0	22.2				ug/L	12	Standard
|	**Tl**	203	349.3	7.3	**0.0189**	0.001	6.9	ug/L	6	Standard
|	**Tl**	205	768.7	11.8	**0.0214**	0.002	8.5	ug/L	11	Standard
|	**Pb**	206	449.3	9.4	**0.0135**	0.003	19.9	ug/L	301	Standard
|	**Pb**	207	375.3	14.7	**0.0131**	0.005	37.8	ug/L	250	Standard
|	**Pb**	208	1724.0	11.1	**0.0127**	0.003	27.0	ug/L	1166	Standard
|	**U**	238	210.0	71.5	**0.0112**	0.005	47.0	ug/L	3	Standard
⌊>	**Bi**	209	410830.9	2.3				ug/L	454659	Standard
⌈	**Na**	23	10712.1	3.7	**2.8080**	0.058	2.1	mg/L	137	Standard
|	**Mg**	24	6844.9	3.7	**0.0112**	0.000	3.5	mg/L	498	Standard

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	K	39	5401.0	5.0	**0.4371**	0.022	5.0	mg/L	557	Standard
	Ca	43	7385.1	2.4	**19.3056**	0.524	2.7	mg/L	52	Standard
	Fe	54	538.3	4.2	**-0.0522**	0.004	7.1	mg/L	865	Standard
	Fe	57	15763.2	1.8	**0.0631**	0.001	2.1	mg/L	6003	Standard
>	**Sc-1**	45	280401.4	1.8				mg/L	333080	Standard
	Cl	35	294616.2	8.0				ug/L	40103	Standard
	Kr	83	49.4	8.8				ug/L	67	Standard
	Br	81	14768.9	4.0				ug/L	15294	Standard
	P	31	44496.2	6.3				ug/L	74262	Standard
	S	34	2229570.2	2.4				ug/L	787377	Standard
	Sr	88	756537.6	0.4				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		84.882	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		78.991	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		93.003	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		90.127	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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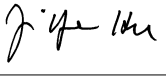
Approved: May 09, 2012

	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	90.360
	Na	23	
	Mg	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

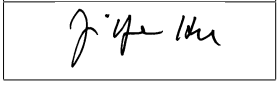
Sample ID: QC Std 6
Sample Date/Time: Tuesday, May 08, 2012 15:26:40
Number of Replicates: 3
Autosampler Position: 101
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	15643.1	1.4	**-330.3012**	317.052	96.0	ug/L	17857	Standard
|	**Be**	9	196131.4	1.0	**53.0272**	1.804	3.4	ug/L	12	Standard
|	**Al**	27	883547.1	1.1	**50.1567**	1.716	3.4	ug/L	13328	Standard
⌊>	**Sc**	45	307228.0	2.3				ug/L	333080	Standard
⌈	**Ti**	47	170514.5	0.8	**98.5871**	2.245	2.3	ug/L	113	Standard
|	**V**	51	861423.8	1.2	**49.4746**	1.493	3.0	ug/L	4349	Standard
|	**Cr**	52	651126.5	1.0	**50.2365**	1.513	3.0	ug/L	14000	Standard
|	**Cr**	53	96614.6	0.8	**49.3883**	0.927	1.9	ug/L	319	Standard
|	**Mn**	55	1104625.1	0.3	**50.8776**	1.015	2.0	ug/L	1367	Standard
|	**Co**	59	780943.7	1.0	**48.2603**	0.467	1.0	ug/L	115	Standard
|	**Ni**	60	162711.5	1.7	**48.1470**	0.199	0.4	ug/L	76	Standard
|	**Cu**	65	145562.6	0.8	**48.9525**	0.688	1.4	ug/L	135	Standard
|	**Zn**	66	65542.5	1.1	**49.9178**	0.751	1.5	ug/L	185	Standard
| >	**Ge**	72	254377.1	2.0				ug/L	274929	Standard
|	**As**	75	66115.1	0.4	**49.3398**	0.762	1.5	ug/L	-262	Standard
|	**Se**	82	7298.0	1.1	**46.7791**	1.260	2.7	ug/L	27	Standard
⌊	**Se-1**	77	4573.4	1.4	**51.3831**	1.148	2.2	ug/L	94	Standard
	Ga	71	227523.9	2.9				mg/L	248575	Standard
⌈	**Rb**	85	1128.4	2.4				ug/L	15	Standard
| >	**Y**	89	234925.1	3.1				ug/L	267564	Standard
⌊	**Rh**	103	26.7	60.3				ug/L	2	Standard
⌈	**Mo**	98	449752.4	1.6	**89.6972**	2.615	2.9	ug/L	5	Standard
|	**Ag**	107	507373.8	0.7	**47.2942**	0.813	1.7	ug/L	44	Standard
|	**Cd**	111	243235.3	1.8	**49.9176**	1.829	3.7	mg/L	512	Standard
|	**Cd**	114	630474.5	0.9	**50.9732**	1.367	2.7	ug/L	1247	Standard
| >	**In**	115	726218.5	2.4				ug/L	743274	Standard
|	**Sn**	118	844310.7	0.8	**49.7679**	1.506	3.0	ug/L	816	Standard
|	**Sb**	123	600654.5	1.3	**50.7521**	1.586	3.1	ug/L	15	Standard
⌊	**Ba**	135	245602.7	1.0	**48.1772**	1.154	2.4	ug/L	37	Standard
⌈	**Ce**	140	945.7	4.2				ug/L	44	Standard
⌊>	**Tb**	159	798462.9	2.2				ug/L	826676	Standard
⌈	**Ho**	165	26.3	12.2				ug/L	12	Standard
|	**Tl**	203	851228.0	0.6	**50.0359**	0.339	0.7	ug/L	6	Standard
|	**Tl**	205	2044441.1	6.2	**48.9997**	2.654	5.4	ug/L	11	Standard
|	**Pb**	206	681804.1	0.3	**49.8583**	0.481	1.0	ug/L	301	Standard
|	**Pb**	207	566193.1	0.5	**49.6362**	0.594	1.2	ug/L	250	Standard
|	**Pb**	208	2639934.5	0.8	**48.9921**	0.801	1.6	ug/L	1166	Standard
|	**U**	238	1376320.7	0.3	**46.7170**	0.504	1.1	ug/L	3	Standard
⌊>	**Bi**	209	425338.7	0.8				ug/L	454659	Standard
⌈	**Na**	23	21787.3	2.7	**5.2369**	0.226	4.3	mg/L	137	Standard
|	**Mg**	24	3022871.3	2.0	**5.1681**	0.225	4.4	mg/L	498	Standard

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	K	39	65297.1	1.4	**5.2761**	0.156	3.0	mg/L	557	Standard
	Ca	43	2313.5	4.9	**5.4521**	0.161	2.9	mg/L	52	Standard
	Fe	54	30294.1	1.6	**5.2058**	0.052	1.0	mg/L	865	Standard
	Fe	57	945022.5	1.2	**5.1290**	0.180	3.5	mg/L	6003	Standard
>	**Sc-1**	45	307228.0	2.3				mg/L	333080	Standard
	Cl	35	205314.7	2.6				ug/L	40103	Standard
	Kr	83	57.1	3.4				ug/L	67	Standard
	Br	81	13408.4	3.3				ug/L	15294	Standard
	P	31	73206.5	2.1				ug/L	74262	Standard
	S	34	854179.9	1.5				ug/L	787377	Standard
	Sr	88	1605.1	21.6				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	100.313		
>	Sc	45			
	Ti	47	98.587		
	V	51	98.949		
	Cr	52	100.473		
	Cr	53			
	Mn	55	101.755		
	Co	59	96.521		
	Ni	60	96.294		
	Cu	65	97.905		
	Zn	66	99.836		
>	Ge	72		92.525	
	As	75	98.680		
	Se	82	93.558		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		87.801	
	Rh	103			
	Mo	98	89.697		
	Ag	107	94.588		
	Cd	111	99.835		
	Cd	114			
>	In	115		97.705	
	Sn	118	99.536		
	Sb	123	101.504		
	Ba	135	96.354		
	Ce	140			
>	Tb	159		96.587	
	Ho	165			
	Tl	203	100.072		
	Tl	205			
	Pb	206	99.717		

Sample ID: QC Std 6
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	Pb	207	99.272	
	Pb	208	97.984	
	U	238	93.434	
>	Bi	209		93.551
	Na	23	104.738	
	Mg	24	103.361	
	K	39	105.522	
	Ca	43	109.041	
	Fe	54	104.117	
	Fe	57	102.581	
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Mo	98	

Sample ID: QC Std 6
Report Date/Time: Tuesday, May 08, 2012 15:29:13
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Method 6020 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, May 08, 2012 15:29:32
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	15768.2	2.1	**-379.8041**	307.409	80.9	ug/L	17857	Standard
|	**Be**	9	11.7	99.0	**-0.0038**	0.003	81.6	ug/L	12	Standard
|	**Al**	27	12915.5	5.0	**0.0322**	0.028	88.2	ug/L	13328	Standard
⌊>	**Sc**	45	311244.4	2.9				ug/L	333080	Standard
⌈	**Ti**	47	129.0	13.0	**0.0245**	0.010	41.1	ug/L	113	Standard
|	**V**	51	3983.3	0.8	**-0.0080**	0.004	55.6	ug/L	4349	Standard
|	**Cr**	52	12548.5	0.3	**-0.0703**	0.012	17.5	ug/L	14000	Standard
|	**Cr**	53	509.2	5.9	**0.1076**	0.015	13.8	ug/L	319	Standard
|	**Mn**	55	1344.4	4.0	**-0.0026**	0.003	108.9	ug/L	1367	Standard
|	**Co**	59	137.0	12.1	**0.0027**	0.001	40.5	ug/L	115	Standard
|	**Ni**	60	88.3	5.8	**0.0045**	0.002	34.8	ug/L	76	Standard
|	**Cu**	65	164.3	7.4	**0.0087**	0.005	53.7	ug/L	135	Standard
|	**Zn**	66	242.0	6.5	**0.0399**	0.013	31.5	ug/L	185	Standard
|>	**Ge**	72	260875.9	1.3				ug/L	274929	Standard
|	**As**	75	-199.0	10.4	**0.0273**	0.013	48.2	ug/L	-262	Standard
|	**Se**	82	32.6	1.5	**-0.0079**	0.003	41.0	ug/L	27	Standard
⌊	**Se-1**	77	85.0	7.7	**0.0168**	0.074	441.8	ug/L	94	Standard
	Ga	71	235717.1	0.5				mg/L	248575	Standard
⌈	**Rb**	85	21.7	13.3				ug/L	15	Standard
|>	**Y**	89	252705.4	1.8				ug/L	267564	Standard
⌊	**Rh**	103	1.7	173.2				ug/L	2	Standard
⌈	**Mo**	98	114.1	30.2	**0.0281**	0.007	24.8	ug/L	5	Standard
|	**Ag**	107	70.0	16.8	**-0.0014**	0.001	78.3	ug/L	44	Standard
|	**Cd**	111	513.1	2.8	**0.0005**	0.001	240.9	mg/L	512	Standard
|	**Cd**	114	1308.3	2.1	**0.0069**	0.003	48.1	ug/L	1247	Standard
|>	**In**	115	744221.1	1.6				ug/L	743274	Standard
|	**Sn**	118	1046.0	4.8	**0.0119**	0.004	30.8	ug/L	816	Standard
|	**Sb**	123	477.6	32.8	**0.0380**	0.014	35.6	ug/L	15	Standard
⌊	**Ba**	135	68.0	17.0	**0.0064**	0.002	37.8	ug/L	37	Standard
⌈	**Ce**	140	42.3	11.9				ug/L	44	Standard
⌊>	**Tb**	159	803981.8	0.7				ug/L	826676	Standard
⌈	**Ho**	165	9.7	23.9				ug/L	12	Standard
|	**Tl**	203	159.3	13.1	**0.0068**	0.001	17.8	ug/L	6	Standard
|	**Tl**	205	366.7	15.7	**0.0109**	0.001	12.5	ug/L	11	Standard
|	**Pb**	206	333.7	3.6	**0.0032**	0.001	27.5	ug/L	301	Standard
|	**Pb**	207	301.3	7.0	**0.0046**	0.002	39.6	ug/L	250	Standard
|	**Pb**	208	1377.0	2.8	**0.0044**	0.001	18.4	ug/L	1166	Standard
|	**U**	238	105.7	31.3	**0.0073**	0.001	15.2	ug/L	3	Standard
⌊>	**Bi**	209	437883.1	0.6				ug/L	454659	Standard
⌈	**Na**	23	101.7	14.2	**0.0004**	0.003	875.4	mg/L	137	Standard
|	**Mg**	24	618.3	18.3	**-0.0006**	0.000	36.9	mg/L	498	Standard

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	K	39	730.0	4.9	**0.0138**	0.001	8.5	mg/L	557	Standard
	Ca	43	51.7	34.0	**0.0306**	0.038	123.4	mg/L	52	Standard
	Fe	54	885.9	6.3	**-0.0018**	0.008	464.9	mg/L	865	Standard
	Fe	57	5447.6	4.2	**-0.0018**	0.001	59.2	mg/L	6003	Standard
>	**Sc-1**	45	311244.4	2.9				mg/L	333080	Standard
	Cl	35	200653.0	1.0				ug/L	40103	Standard
	Kr	83	51.8	7.5				ug/L	67	Standard
	Br	81	13501.0	0.5				ug/L	15294	Standard
	P	31	76885.4	0.9				ug/L	74262	Standard
	S	34	889721.6	1.4				ug/L	787377	Standard
	Sr	88	318.3	6.3				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		94.888	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		94.447	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		100.127	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		97.255	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: QC Std 7
Report Date/Time: Tuesday, May 08, 2012 15:32:05
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	96.310
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
Report Date/Time: Tuesday, May 08, 2012 15:32:05
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Method 6020 - Summary Report

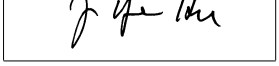
Sample ID: L1205017102 WG397303-02
Sample Date/Time: Tuesday, May 08, 2012 15:32:25
Number of Replicates: 3
Autosampler Position: 338
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	269159.7	3.2	**139478.5678**	4132.852	3.0	ug/L	17857	Standard
|	**Be**	9	11.7	24.7	**-0.0042**	0.001	17.2	ug/L	12	Standard
|	**Al**	27	85884.5	2.4	**3.6561**	0.094	2.6	ug/L	13328	Standard
⌊>	**Sc**	45	348484.5	3.1				ug/L	333080	Standard
⌈	**Ti**	47	1689.4	2.5	**0.9102**	0.014	1.6	ug/L	113	Standard
|	**V**	51	8771.2	1.7	**0.2643**	0.001	0.3	ug/L	4349	Standard
|	**Cr**	52	20769.2	2.3	**0.5703**	0.010	1.8	ug/L	14000	Standard
|	**Cr**	53	5110.9	17.9	**2.4283**	0.496	20.4	ug/L	319	Standard
|	**Mn**	55	2304746.2	3.1	**104.1751**	1.784	1.7	ug/L	1367	Standard
|	**Co**	59	2677.6	2.3	**0.1568**	0.001	0.7	ug/L	115	Standard
|	**Ni**	60	7180.0	2.4	**2.0641**	0.017	0.8	ug/L	76	Standard
|	**Cu**	65	899.4	8.7	**0.2514**	0.021	8.4	ug/L	135	Standard
|	**Zn**	66	2744.6	3.8	**1.9154**	0.045	2.3	ug/L	185	Standard
|>	**Ge**	72	259274.6	1.7				ug/L	274929	Standard
|	**As**	75	233.2	17.9	**0.3413**	0.028	8.1	ug/L	-262	Standard
|	**Se**	82	163.8	5.3	**0.8218**	0.042	5.1	ug/L	27	Standard
⌊	**Se-1**	77	303.0	11.8	**2.4735**	0.453	18.3	ug/L	94	Standard
	Ga	71	232254.7	2.0				mg/L	248575	Standard
⌈	**Rb**	85	31188.7	2.6				ug/L	15	Standard
|>	**Y**	89	248714.8	0.4				ug/L	267564	Standard
⌊	**Rh**	103	283.3	10.6				ug/L	2	Standard
⌈	**Mo**	98	1525.8	0.4	**0.3026**	0.005	1.5	ug/L	5	Standard
|	**Ag**	107	57.7	16.1	**-0.0025**	0.001	33.2	ug/L	44	Standard
|	**Cd**	111	557.8	8.0	**0.0095**	0.010	104.0	mg/L	512	Standard
|	**Cd**	114	1413.7	1.0	**0.0151**	0.003	16.7	ug/L	1247	Standard
|>	**In**	115	744556.3	1.3				ug/L	743274	Standard
|	**Sn**	118	1142.7	6.2	**0.0174**	0.003	19.8	ug/L	816	Standard
|	**Sb**	123	1736.5	2.6	**0.1415**	0.004	2.8	ug/L	15	Standard
⌊	**Ba**	135	240428.4	1.1	**45.9877**	0.595	1.3	ug/L	37	Standard
⌈	**Ce**	140	1493.1	0.1				ug/L	44	Standard
⌊>	**Tb**	159	821205.4	1.0				ug/L	826676	Standard
⌈	**Ho**	165	62.7	19.2				ug/L	12	Standard
|	**Tl**	203	565.3	1.1	**0.0327**	0.000	0.9	ug/L	6	Standard
|	**Tl**	205	1308.1	0.9	**0.0354**	0.001	2.1	ug/L	11	Standard
|	**Pb**	206	432.7	4.7	**0.0128**	0.002	14.8	ug/L	301	Standard
|	**Pb**	207	380.3	7.0	**0.0141**	0.003	19.0	ug/L	250	Standard
|	**Pb**	208	1735.4	2.0	**0.0135**	0.000	3.0	ug/L	1166	Standard
|	**U**	238	6846.9	2.6	**0.2487**	0.002	0.9	ug/L	3	Standard
⌊>	**Bi**	209	403653.2	2.0				ug/L	454659	Standard
⌈	**Na**	23	163093.2	1.3	**34.6990**	1.249	3.6	mg/L	137	Standard
|	**Mg**	24	4809719.8	3.1	**7.2451**	0.014	0.2	mg/L	498	Standard

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	K	39	29522.1	0.6	**2.0763**	0.053	2.6	mg/L	557	Standard
	Ca	43	22648.6	3.5	**47.7803**	1.699	3.6	mg/L	52	Standard
	Fe	54	1601.7	1.4	**0.0934**	0.005	4.9	mg/L	865	Standard
	Fe	57	58650.1	3.5	**0.2510**	0.006	2.4	mg/L	6003	Standard
>	**Sc-1**	45	348484.5	3.1				mg/L	333080	Standard
	Cl	35	5167520.6	2.1				ug/L	40103	Standard
	Kr	83	57.3	2.7				ug/L	67	Standard
	Br	81	60946.6	2.8				ug/L	15294	Standard
	P	31	195506.7	1.3				ug/L	74262	Standard
	S	34	3811671.7	2.4				ug/L	787377	Standard
	Sr	88	9417862.5	4.6				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		94.306	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		92.955	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		100.172	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		99.338	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	88.782
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1205017102 WG397303-02
Report Date/Time: Tuesday, May 08, 2012 15:34:58
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Approved: May 09, 2012

Method 6020 - Summary Report

Sample ID: L1205017104S WG397303-07

Sample Date/Time: Tuesday, May 08, 2012 15:35:17
Number of Replicates: 3
Autosampler Position: 339
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	258741.0	1.8	**135015.7403**	3560.598	2.6	ug/L	17857	Standard
|	**Be**	9	100672.5	6.0	**24.1984**	1.340	5.5	ug/L	12	Standard
|	**Al**	27	548244.3	3.7	**27.3749**	1.343	4.9	ug/L	13328	Standard
⌊>	**Sc**	45	345444.6	4.1				ug/L	333080	Standard
⌈	**Ti**	47	1403.1	2.5	**0.7442**	0.026	3.5	ug/L	113	Standard
|	**V**	51	465823.5	3.7	**26.0146**	1.173	4.5	ug/L	4349	Standard
|	**Cr**	52	357766.2	3.5	**26.4737**	1.159	4.4	ug/L	14000	Standard
|	**Cr**	53	55390.3	2.7	**27.5856**	0.921	3.3	ug/L	319	Standard
|	**Mn**	55	2758042.6	1.9	**124.1352**	3.185	2.6	ug/L	1367	Standard
|	**Co**	59	401735.2	2.4	**24.2432**	0.744	3.1	ug/L	115	Standard
|	**Ni**	60	88453.2	2.5	**25.5543**	0.813	3.2	ug/L	76	Standard
|	**Cu**	65	71927.1	2.5	**23.5990**	0.745	3.2	ug/L	135	Standard
|	**Zn**	66	35667.6	2.8	**26.4643**	0.939	3.5	ug/L	185	Standard
| >	**Ge**	72	260469.5	0.8				ug/L	274929	Standard
|	**As**	75	35223.7	0.8	**25.7508**	0.403	1.6	ug/L	-262	Standard
|	**Se**	82	3934.2	1.9	**24.5225**	0.647	2.6	ug/L	27	Standard
⌊	**Se-1**	77	2662.2	2.1	**28.8050**	0.688	2.4	ug/L	94	Standard
	Ga	71	231060.9	1.9				mg/L	248575	Standard
⌈	**Rb**	85	28284.7	3.3				ug/L	15	Standard
| >	**Y**	89	252247.9	1.8				ug/L	267564	Standard
⌊	**Rh**	103	293.3	8.4				ug/L	2	Standard
⌈	**Mo**	98	1557.2	4.6	**0.3097**	0.014	4.4	ug/L	5	Standard
|	**Ag**	107	195364.9	1.3	**17.8192**	0.427	2.4	ug/L	44	Standard
|	**Cd**	111	124477.8	2.4	**24.9472**	0.835	3.3	mg/L	512	Standard
|	**Cd**	114	317778.4	2.3	**25.0955**	0.819	3.3	ug/L	1247	Standard
| >	**In**	115	741898.0	1.1				ug/L	743274	Standard
|	**Sn**	118	1405.7	1.0	**0.0328**	0.002	4.9	ug/L	816	Standard
|	**Sb**	123	303127.9	2.8	**25.0659**	0.962	3.8	ug/L	15	Standard
⌊	**Ba**	135	353451.3	2.2	**67.8621**	2.190	3.2	ug/L	37	Standard
⌈	**Ce**	140	1858.4	5.3				ug/L	44	Standard
⌊>	**Tb**	159	817482.2	0.5				ug/L	826676	Standard
⌈	**Ho**	165	62.3	17.6				ug/L	12	Standard
|	**Tl**	203	411399.4	1.3	**25.5994**	0.234	0.9	ug/L	6	Standard
|	**Tl**	205	962657.1	1.5	**24.4336**	0.295	1.2	ug/L	11	Standard
|	**Pb**	206	325358.3	1.4	**25.1768**	0.235	0.9	ug/L	301	Standard
|	**Pb**	207	277398.4	2.2	**25.7320**	0.360	1.4	ug/L	250	Standard
|	**Pb**	208	1282010.7	1.8	**25.1740**	0.250	1.0	ug/L	1166	Standard
|	**U**	238	689878.8	4.0	**24.7882**	0.853	3.4	ug/L	3	Standard
⌊>	**Bi**	209	401771.5	1.0				ug/L	454659	Standard
⌈	**Na**	23	160797.1	0.1	**34.5271**	1.435	4.2	mg/L	137	Standard
|	**Mg**	24	4496074.5	2.1	**6.8392**	0.289	4.2	mg/L	498	Standard

Sample ID: L1205017104S WG397303-07
Report Date/Time: Tuesday, May 08, 2012 15:37:51
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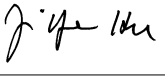
Approved: May 09, 2012

	K	39	27960.8	3.0	**1.9825**	0.089	4.5	mg/L	557	Standard
	Ca	43	21320.0	3.4	**45.3837**	1.733	3.8	mg/L	52	Standard
	Fe	54	1615.3	11.2	**0.0976**	0.026	26.3	mg/L	865	Standard
	Fe	57	58154.8	1.9	**0.2515**	0.015	5.8	mg/L	6003	Standard
>	**Sc-1**	45	345444.6	4.1				mg/L	333080	Standard
	Cl	35	5039597.4	0.2				ug/L	40103	Standard
	Kr	83	61.7	3.9				ug/L	67	Standard
	Br	81	75907.4	3.9				ug/L	15294	Standard
	P	31	192647.0	0.1				ug/L	74262	Standard
	S	34	3716604.1	1.8				ug/L	787377	Standard
	Sr	88	8941014.3	2.9				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		94.741	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		94.276	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		99.815	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		98.888	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Approved: May 09, 2012

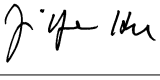


	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	88.368
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: May 09, 2012



Method 6020 - Summary Report

Sample ID: L1205017106SD WG397303-08

Sample Date/Time: Tuesday, May 08, 2012 15:38:10
Number of Replicates: 3
Autosampler Position: 340
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	256922.1	1.7	**136404.1248**	3641.658	2.7	ug/L	17857	Standard
|	**Be**	9	101119.8	2.3	**24.7135**	0.137	0.6	ug/L	12	Standard
|	**Al**	27	523290.4	3.1	**26.5289**	0.378	1.4	ug/L	13328	Standard
⌊>	**Sc**	45	339619.9	1.9				ug/L	333080	Standard
⌈	**Ti**	47	1435.7	4.2	**0.7632**	0.027	3.5	ug/L	113	Standard
|	**V**	51	472471.5	3.5	**26.4104**	0.876	3.3	ug/L	4349	Standard
|	**Cr**	52	356828.9	2.7	**26.4242**	0.693	2.6	ug/L	14000	Standard
|	**Cr**	53	56157.3	3.0	**27.9929**	0.662	2.4	ug/L	319	Standard
|	**Mn**	55	2780333.9	2.7	**125.2463**	2.646	2.1	ug/L	1367	Standard
|	**Co**	59	407242.9	3.2	**24.5976**	0.735	3.0	ug/L	115	Standard
|	**Ni**	60	90010.7	2.7	**26.0276**	0.640	2.5	ug/L	76	Standard
|	**Cu**	65	72774.1	2.3	**23.9001**	0.570	2.4	ug/L	135	Standard
|	**Zn**	66	36435.8	1.7	**27.0597**	0.265	1.0	ug/L	185	Standard
| >	**Ge**	72	260199.0	1.0				ug/L	274929	Standard
|	**As**	75	35685.7	1.7	**26.1108**	0.313	1.2	ug/L	-262	Standard
|	**Se**	82	3986.2	1.3	**24.8717**	0.146	0.6	ug/L	27	Standard
⌊	**Se-1**	77	2714.9	0.5	**29.4246**	0.261	0.9	ug/L	94	Standard
	Ga	71	230480.5	0.9				mg/L	248575	Standard
⌈	**Rb**	85	28281.4	3.9				ug/L	15	Standard
| >	**Y**	89	253823.9	2.0				ug/L	267564	Standard
⌊	**Rh**	103	255.0	13.7				ug/L	2	Standard
⌈	**Mo**	98	1446.6	6.1	**0.2902**	0.015	5.3	ug/L	5	Standard
|	**Ag**	107	229876.7	3.0	**21.1198**	0.521	2.5	ug/L	44	Standard
|	**Cd**	111	125519.8	3.3	**25.3374**	0.695	2.7	mg/L	512	Standard
|	**Cd**	114	321522.8	2.6	**25.5754**	0.508	2.0	ug/L	1247	Standard
| >	**In**	115	736400.4	0.8				ug/L	743274	Standard
|	**Sn**	118	1354.1	3.1	**0.0304**	0.002	6.0	ug/L	816	Standard
|	**Sb**	123	309131.0	1.8	**25.7451**	0.307	1.2	ug/L	15	Standard
⌊	**Ba**	135	354968.6	1.9	**68.6428**	0.827	1.2	ug/L	37	Standard
⌈	**Ce**	140	1458.1	3.4				ug/L	44	Standard
⌊>	**Tb**	159	817346.5	1.1				ug/L	826676	Standard
⌈	**Ho**	165	54.3	13.8				ug/L	12	Standard
|	**Tl**	203	420409.8	0.2	**26.2478**	0.189	0.7	ug/L	6	Standard
|	**Tl**	205	976529.9	0.5	**24.8690**	0.279	1.1	ug/L	11	Standard
|	**Pb**	206	329531.9	2.0	**25.5854**	0.535	2.1	ug/L	301	Standard
|	**Pb**	207	280975.9	1.9	**26.1529**	0.515	2.0	ug/L	250	Standard
|	**Pb**	208	1309501.5	1.8	**25.8015**	0.488	1.9	ug/L	1166	Standard
|	**U**	238	701091.8	2.5	**25.2770**	0.572	2.3	ug/L	3	Standard
⌊>	**Bi**	209	400440.5	0.8				ug/L	454659	Standard
⌈	**Na**	23	161437.2	1.0	**35.2263**	0.666	1.9	mg/L	137	Standard
|	**Mg**	24	4577088.2	2.1	**7.0745**	0.035	0.5	mg/L	498	Standard

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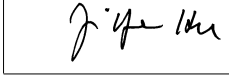
	K	39	27932.4	2.5	**2.0132**	0.014	0.7	mg/L	557	Standard
	Ca	43	22309.8	2.0	**48.2783**	0.089	0.2	mg/L	52	Standard
	Fe	54	1576.3	6.1	**0.0959**	0.018	18.6	mg/L	865	Standard
	Fe	57	57487.2	0.5	**0.2527**	0.004	1.6	mg/L	6003	Standard
>	**Sc-1**	45	339619.9	1.9				mg/L	333080	Standard
	Cl	35	5052985.5	1.5				ug/L	40103	Standard
	Kr	83	59.3	8.5				ug/L	67	Standard
	Br	81	72813.7	0.8				ug/L	15294	Standard
	P	31	194899.0	1.5				ug/L	74262	Standard
	S	34	3745935.5	1.5				ug/L	787377	Standard
	Sr	88	8880079.2	2.3				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		94.642	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		94.865	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		99.075	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		98.871	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1205017106SD WG397303-08
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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

88.075

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1205017106SD WG397303-08
Report Date/Time: Tuesday, May 08, 2012 15:40:43
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Method 6020 - Summary Report

Sample ID: L1205017107
Sample Date/Time: Tuesday, May 08, 2012 15:41:02
Number of Replicates: 3
Autosampler Position: 341
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	905468.7	1.3	**334694.1530**	7081.464	2.1	ug/L	17857	Standard
|	**Be**	9	1421.7	3.4	**0.2250**	0.004	1.7	ug/L	12	Standard
|	**Al**	27	104768665.5	2.1	**3639.2542**	48.329	1.3	ug/L	13328	Standard
⌊>	**Sc**	45	508890.9	3.3				ug/L	333080	Standard
⌈	**Ti**	47	199651.8	2.0	**120.8083**	3.059	2.5	ug/L	113	Standard
|	**V**	51	244926.0	1.9	**14.5558**	0.346	2.4	ug/L	4349	Standard
|	**Cr**	52	157266.2	3.4	**11.9243**	0.500	4.2	ug/L	14000	Standard
|	**Cr**	53	22601.9	4.4	**11.9816**	0.605	5.0	ug/L	319	Standard
|	**Mn**	55	12795721.8	2.2	**617.4511**	16.254	2.6	ug/L	1367	Standard
|	**Co**	59	101379.2	2.5	**6.5523**	0.193	2.9	ug/L	115	Standard
|	**Ni**	60	58261.5	1.0	**18.0315**	0.298	1.7	ug/L	76	Standard
|	**Cu**	65	45508.3	2.3	**15.9867**	0.442	2.8	ug/L	135	Standard
|	**Zn**	66	76358.9	1.1	**60.8931**	0.931	1.5	ug/L	185	Standard
| >	**Ge**	72	243037.1	0.6				ug/L	274929	Standard
|	**As**	75	12603.7	0.2	**9.9802**	0.065	0.6	ug/L	-262	Standard
|	**Se**	82	180.5	3.4	**1.0032**	0.034	3.4	ug/L	27	Standard
⌊	**Se-1**	77	347.7	11.3	**3.2324**	0.496	15.3	ug/L	94	Standard
	Ga	71	233814.5	1.5				mg/L	248575	Standard
⌈	**Rb**	85	181712.1	3.0				ug/L	15	Standard
| >	**Y**	89	586004.8	1.9				ug/L	267564	Standard
⌊	**Rh**	103	1476.7	2.3				ug/L	2	Standard
⌈	**Mo**	98	6454.8	3.0	**1.3857**	0.044	3.2	ug/L	5	Standard
|	**Ag**	107	656.3	5.2	**0.0578**	0.003	5.7	ug/L	44	Standard
|	**Cd**	111	894.4	4.0	**0.0948**	0.008	8.9	mg/L	512	Standard
|	**Cd**	114	2312.8	0.2	**0.1043**	0.000	0.3	ug/L	1247	Standard
| >	**In**	115	677241.0	0.4				ug/L	743274	Standard
|	**Sn**	118	2473.2	2.1	**0.1081**	0.004	3.6	ug/L	816	Standard
|	**Sb**	123	863.2	4.0	**0.0766**	0.003	3.8	ug/L	15	Standard
⌊	**Ba**	135	1176572.7	2.5	**247.4303**	6.159	2.5	ug/L	37	Standard
⌈	**Ce**	140	2272165.9	2.7				ug/L	44	Standard
⌊>	**Tb**	159	862903.8	1.4				ug/L	826676	Standard
⌈	**Ho**	165	48551.7	4.0				ug/L	12	Standard
|	**Tl**	203	2207.5	3.4	**0.1552**	0.005	3.1	ug/L	6	Standard
|	**Tl**	205	5010.8	3.0	**0.1482**	0.004	2.5	ug/L	11	Standard
|	**Pb**	206	106085.2	2.4	**9.4028**	0.147	1.6	ug/L	301	Standard
|	**Pb**	207	86300.8	2.4	**9.1691**	0.144	1.6	ug/L	250	Standard
|	**Pb**	208	407595.7	2.1	**9.1677**	0.103	1.1	ug/L	1166	Standard
|	**U**	238	23128.0	3.7	**0.9568**	0.027	2.8	ug/L	3	Standard
⌊>	**Bi**	209	350254.4	0.9				ug/L	454659	Standard
⌈	**Na**	23	103578.0	2.4	**15.0728**	0.387	2.6	mg/L	137	Standard
|	**Mg**	24	41092700.8	2.9	**42.4035**	0.579	1.4	mg/L	498	Standard

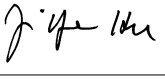
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	K	39	35478.2	2.0	**1.7003**	0.023	1.4	mg/L	557	Standard
	Ca	43	62081.9	0.2	**89.8082**	3.158	3.5	mg/L	52	Standard
	Fe	54	87325.9	0.6	**9.1805**	0.282	3.1	mg/L	865	Standard
	Fe	57	2733723.5	2.2	**8.9781**	0.103	1.1	mg/L	6003	Standard
>	**Sc-1**	45	508890.9	3.3				mg/L	333080	Standard
	Cl	35	4325664.6	0.6				ug/L	40103	Standard
	Kr	83	114.2	6.8				ug/L	67	Standard
	Br	81	48669.7	1.9				ug/L	15294	Standard
	P	31	1606186.9	0.2				ug/L	74262	Standard
	S	34	2784051.7	1.6				ug/L	787377	Standard
	Sr	88	59449744.6	4.9				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		88.400	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		219.014	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		91.116	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		104.382	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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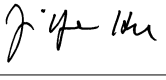


	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	77.037
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	
Mn 55 Upper, S, EEE	Mn	55	
Y 89 Int Std for sample	Y	89	Rerun sample
Ba 135 Upper, S, EEE	Ba	135	

Approved: May 09, 2012



Method 6020 - Summary Report

Sample ID: L1205017108

Sample Date/Time: Tuesday, May 08, 2012 15:43:55
Number of Replicates: 3
Autosampler Position: 342
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	535085.9	2.3	**281936.5282**	9337.198	3.3	ug/L	17857	Standard
|	**Be**	9	25.0	20.0	**-0.0011**	0.001	112.5	ug/L	12	Standard
|	**Al**	27	597264.1	6.3	**29.0235**	1.373	4.7	ug/L	13328	Standard
⌊>	**Sc**	45	355005.8	2.5				ug/L	333080	Standard
⌈	**Ti**	47	3393.7	3.7	**1.8881**	0.057	3.0	ug/L	113	Standard
|	**V**	51	10561.4	4.6	**0.3689**	0.022	6.1	ug/L	4349	Standard
|	**Cr**	52	25872.4	3.6	**0.9758**	0.055	5.6	ug/L	14000	Standard
|	**Cr**	53	3696.3	9.2	**1.7235**	0.182	10.6	ug/L	319	Standard
|	**Mn**	55	335635.2	2.2	**15.2069**	0.255	1.7	ug/L	1367	Standard
|	**Co**	59	1520.7	2.3	**0.0872**	0.001	1.3	ug/L	115	Standard
|	**Ni**	60	5454.3	1.1	**1.5723**	0.008	0.5	ug/L	76	Standard
|	**Cu**	65	1086.4	5.2	**0.3154**	0.015	4.8	ug/L	135	Standard
|	**Zn**	66	3205.3	4.2	**2.2749**	0.090	4.0	ug/L	185	Standard
|>	**Ge**	72	257772.4	1.1				ug/L	274929	Standard
|	**As**	75	8867.1	2.0	**6.6772**	0.071	1.1	ug/L	-262	Standard
|	**Se**	82	144.8	9.7	**0.7078**	0.097	13.7	ug/L	27	Standard
⌊	**Se-1**	77	225.7	4.4	**1.6160**	0.116	7.2	ug/L	94	Standard
	Ga	71	228867.7	1.1				mg/L	248575	Standard
⌈	**Rb**	85	13851.3	6.4				ug/L	15	Standard
|>	**Y**	89	243830.4	2.5				ug/L	267564	Standard
⌊	**Rh**	103	1685.1	6.2				ug/L	2	Standard
⌈	**Mo**	98	5227.5	2.9	**1.0681**	0.015	1.4	ug/L	5	Standard
|	**Ag**	107	65.3	4.9	**-0.0016**	0.000	13.8	ug/L	44	Standard
|	**Cd**	111	522.4	4.7	**0.0071**	0.005	65.8	mg/L	512	Standard
|	**Cd**	114	1337.5	3.2	**0.0139**	0.002	13.5	ug/L	1247	Standard
|>	**In**	115	712381.8	1.8				ug/L	743274	Standard
|	**Sn**	118	1176.7	1.2	**0.0224**	0.001	2.4	ug/L	816	Standard
|	**Sb**	123	269.1	2.3	**0.0217**	0.001	4.4	ug/L	15	Standard
⌊	**Ba**	135	969477.5	3.2	**193.7870**	3.057	1.6	ug/L	37	Standard
⌈	**Ce**	140	11867.2	25.1				ug/L	44	Standard
⌊>	**Tb**	159	828132.2	2.4				ug/L	826676	Standard
⌈	**Ho**	165	227.0	10.2				ug/L	12	Standard
|	**Tl**	203	583.7	4.2	**0.0362**	0.002	4.2	ug/L	6	Standard
|	**Tl**	205	1378.4	1.4	**0.0395**	0.001	1.8	ug/L	11	Standard
|	**Pb**	206	795.4	2.6	**0.0448**	0.002	4.1	ug/L	301	Standard
|	**Pb**	207	647.0	3.2	**0.0427**	0.002	5.6	ug/L	250	Standard
|	**Pb**	208	3032.8	0.4	**0.0428**	0.001	1.6	ug/L	1166	Standard
|	**U**	238	6051.2	4.3	**0.2343**	0.009	3.7	ug/L	3	Standard
⌊>	**Bi**	209	378869.9	0.7				ug/L	454659	Standard
⌈	**Na**	23	107944.9	1.9	**22.5248**	0.446	2.0	mg/L	137	Standard
|	**Mg**	24	19621970.5	3.8	**29.0208**	0.900	3.1	mg/L	498	Standard

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	K	39	16826.0	1.1	**1.1419**	0.041	3.6	mg/L	557	Standard
	Ca	43	17860.5	3.7	**36.9508**	0.786	2.1	mg/L	52	Standard
	Fe	54	6955.0	1.9	**0.9093**	0.039	4.3	mg/L	865	Standard
	Fe	57	222836.2	3.4	**1.0217**	0.045	4.4	mg/L	6003	Standard
>	**Sc-1**	45	355005.8	2.5				mg/L	333080	Standard
	Cl	35	4415630.9	0.6				ug/L	40103	Standard
	Kr	83	51.7	9.5				ug/L	67	Standard
	Br	81	72646.3	2.9				ug/L	15294	Standard
	P	31	88706.4	0.9				ug/L	74262	Standard
	S	34	2658748.0	2.1				ug/L	787377	Standard
	Sr	88	59352684.0	5.0				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		93.760	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		91.130	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		95.844	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		100.176	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	83.331
	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
Ba 135 Upper, S, EEE	Ba	135	

Approved: May 09, 2012

Method 6020 - Summary Report

Sample ID: L1205022305
Sample Date/Time: Tuesday, May 08, 2012 15:46:48
Number of Replicates: 3
Autosampler Position: 343
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	15654.8	2.4	**96.9998**	84.556	87.2	ug/L	17857	Standard
|	**Be**	9	20.0	43.3	**-0.0013**	0.003	197.7	ug/L	12	Standard
|	**Al**	27	156706.9	6.6	**8.7043**	0.642	7.4	ug/L	13328	Standard
⌊>	**Sc**	45	294553.0	2.1				ug/L	333080	Standard
⌈	**Ti**	47	153.3	12.0	**0.0414**	0.011	26.5	ug/L	113	Standard
|	**V**	51	5577.3	1.8	**0.0936**	0.006	6.3	ug/L	4349	Standard
|	**Cr**	52	17783.4	1.6	**0.3836**	0.014	3.8	ug/L	14000	Standard
|	**Cr**	53	960.9	7.1	**0.3520**	0.040	11.3	ug/L	319	Standard
|	**Mn**	55	6639.5	19.7	**0.2471**	0.063	25.7	ug/L	1367	Standard
|	**Co**	59	211.0	21.3	**0.0077**	0.003	38.4	ug/L	115	Standard
|	**Ni**	60	222.7	12.6	**0.0457**	0.008	17.9	ug/L	76	Standard
|	**Cu**	65	510.7	8.0	**0.1287**	0.014	10.8	ug/L	135	Standard
|	**Zn**	66	2171.2	0.7	**1.5382**	0.016	1.0	ug/L	185	Standard
| >	**Ge**	72	251266.4	1.0				ug/L	274929	Standard
|	**As**	75	-192.7	25.2	**0.0266**	0.036	133.5	ug/L	-262	Standard
|	**Se**	82	34.0	5.9	**0.0090**	0.015	167.4	ug/L	27	Standard
⌊	**Se-1**	77	86.3	8.7	**0.0690**	0.096	139.4	ug/L	94	Standard
	Ga	71	226048.3	2.8				mg/L	248575	Standard
⌈	**Rb**	85	156.7	12.9				ug/L	15	Standard
| >	**Y**	89	240274.1	2.2				ug/L	267564	Standard
⌊	**Rh**	103	1.7	173.2				ug/L	2	Standard
⌈	**Mo**	98	37.2	6.1	**0.0134**	0.001	3.9	ug/L	5	Standard
|	**Ag**	107	70.3	21.9	**-0.0011**	0.002	136.1	ug/L	44	Standard
|	**Cd**	111	499.3	3.5	**0.0020**	0.002	101.2	mg/L	512	Standard
|	**Cd**	114	1281.1	4.2	**0.0090**	0.006	64.0	ug/L	1247	Standard
| >	**In**	115	713992.0	1.6				ug/L	743274	Standard
|	**Sn**	118	1128.7	0.8	**0.0194**	0.001	6.1	ug/L	816	Standard
|	**Sb**	123	124.2	16.2	**0.0091**	0.002	18.1	ug/L	15	Standard
⌊	**Ba**	135	602.0	16.2	**0.1135**	0.020	17.3	ug/L	37	Standard
⌈	**Ce**	140	1066.0	6.6				ug/L	44	Standard
⌊>	**Tb**	159	766616.5	1.4				ug/L	826676	Standard
⌈	**Ho**	165	17.0	15.6				ug/L	12	Standard
|	**Tl**	203	219.0	36.4	**0.0108**	0.005	46.2	ug/L	6	Standard
|	**Tl**	205	461.3	33.1	**0.0136**	0.004	28.6	ug/L	11	Standard
|	**Pb**	206	606.7	2.9	**0.0246**	0.001	5.0	ug/L	301	Standard
|	**Pb**	207	502.0	3.5	**0.0238**	0.002	9.3	ug/L	250	Standard
|	**Pb**	208	2262.1	1.8	**0.0223**	0.001	5.9	ug/L	1166	Standard
|	**U**	238	87.7	43.4	**0.0069**	0.001	19.9	ug/L	3	Standard
⌊>	**Bi**	209	418228.0	1.4				ug/L	454659	Standard
⌈	**Na**	23	281.7	13.3	**0.0471**	0.010	21.6	mg/L	137	Standard
|	**Mg**	24	5394.7	74.8	**0.0080**	0.007	91.0	mg/L	498	Standard

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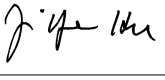
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	K	39	648.3	4.0	**0.0102**	0.002	22.9	mg/L	557	Standard
	Ca	43	78.3	16.1	**0.1050**	0.032	30.5	mg/L	52	Standard
	Fe	54	1047.6	13.9	**0.0372**	0.031	82.2	mg/L	865	Standard
	Fe	57	8120.5	7.1	**0.0151**	0.004	26.0	mg/L	6003	Standard
>	**Sc-1**	45	294553.0	2.1				mg/L	333080	Standard
	Cl	35	225280.1	15.3				ug/L	40103	Standard
	Kr	83	51.9	4.6				ug/L	67	Standard
	Br	81	16440.6	7.4				ug/L	15294	Standard
	P	31	71859.2	1.9				ug/L	74262	Standard
	S	34	974190.5	2.2				ug/L	787377	Standard
	Sr	88	8221.0	56.6				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		91.393	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		89.800	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		96.060	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		92.735	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	91.987
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1205015030
Sample Date/Time: Tuesday, May 08, 2012 15:56:35
Number of Replicates: 3
Autosampler Position: 334
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	18312.7	2.5	**1857.0833**	171.686	9.2	ug/L	17857	Standard
|	**Be**	9	70.0	25.8	**0.0128**	0.005	37.9	ug/L	12	Standard
|	**Al**	27	4941462.8	3.2	**296.0804**	5.739	1.9	ug/L	13328	Standard
⌊>	**Sc**	45	294255.3	1.5				ug/L	333080	Standard
⌈	**Ti**	47	17034.9	1.9	**10.2383**	0.072	0.7	ug/L	113	Standard
|	**V**	51	34551.7	2.2	**1.8489**	0.025	1.3	ug/L	4349	Standard
|	**Cr**	52	32679.2	2.1	**1.6524**	0.036	2.2	ug/L	14000	Standard
|	**Cr**	53	3555.4	6.8	**1.7555**	0.109	6.2	ug/L	319	Standard
|	**Mn**	55	3804561.7	1.7	**183.0968**	1.008	0.6	ug/L	1367	Standard
|	**Co**	59	8868.6	3.4	**0.5667**	0.014	2.4	ug/L	115	Standard
|	**Ni**	60	4102.2	2.1	**1.2471**	0.022	1.8	ug/L	76	Standard
|	**Cu**	65	3487.1	1.9	**1.1802**	0.009	0.8	ug/L	135	Standard
|	**Zn**	66	36559.4	1.5	**29.0128**	0.217	0.7	ug/L	185	Standard
| >	**Ge**	72	243598.5	1.3				ug/L	274929	Standard
|	**As**	75	525.2	8.0	**0.5791**	0.030	5.2	ug/L	-262	Standard
|	**Se**	82	143.1	8.7	**0.7493**	0.077	10.3	ug/L	27	Standard
⌊	**Se-1**	77	86.3	11.7	**0.1009**	0.131	129.9	ug/L	94	Standard
	Ga	71	213654.9	1.0				mg/L	248575	Standard
⌈	**Rb**	85	8962.7	4.4				ug/L	15	Standard
| >	**Y**	89	235039.5	4.2				ug/L	267564	Standard
⌊	**Rh**	103	101.7	30.0				ug/L	2	Standard
⌈	**Mo**	98	397.3	2.3	**0.0912**	0.000	0.5	ug/L	5	Standard
|	**Ag**	107	89.7	8.4	**0.0012**	0.001	51.7	ug/L	44	Standard
|	**Cd**	111	539.6	8.3	**0.0170**	0.010	57.9	mg/L	512	Standard
|	**Cd**	114	1427.9	2.8	**0.0280**	0.005	18.2	ug/L	1247	Standard
| >	**In**	115	674493.6	1.8				ug/L	743274	Standard
|	**Sn**	118	3721.8	2.1	**0.1880**	0.005	2.7	ug/L	816	Standard
|	**Sb**	123	624.8	1.4	**0.0553**	0.002	3.2	ug/L	15	Standard
⌊	**Ba**	135	359598.0	1.3	**75.9327**	0.894	1.2	ug/L	37	Standard
⌈	**Ce**	140	45258.5	2.1				ug/L	44	Standard
⌊>	**Tb**	159	746717.8	1.8				ug/L	826676	Standard
⌈	**Ho**	165	895.0	5.0				ug/L	12	Standard
|	**Tl**	203	381.0	5.0	**0.0213**	0.001	5.3	ug/L	6	Standard
|	**Tl**	205	846.4	7.6	**0.0238**	0.002	7.2	ug/L	11	Standard
|	**Pb**	206	5259.6	2.6	**0.3855**	0.008	2.2	ug/L	301	Standard
|	**Pb**	207	4356.3	1.8	**0.3821**	0.005	1.4	ug/L	250	Standard
|	**Pb**	208	20331.3	1.5	**0.3779**	0.004	1.1	ug/L	1166	Standard
|	**U**	238	518.3	4.2	**0.0224**	0.001	3.2	ug/L	3	Standard
⌊>	**Bi**	209	403039.3	0.5				ug/L	454659	Standard
⌈	**Na**	23	20644.1	3.1	**5.1769**	0.088	1.7	mg/L	137	Standard
|	**Mg**	24	498276.9	1.5	**0.8875**	0.003	0.4	mg/L	498	Standard

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	K	39	11876.3	2.3	**0.9651**	0.008	0.9	mg/L	557	Standard
	Ca	43	5522.7	2.8	**13.7342**	0.570	4.1	mg/L	52	Standard
	Fe	54	21801.0	1.8	**3.8731**	0.120	3.1	mg/L	865	Standard
	Fe	57	665758.3	2.6	**3.7622**	0.066	1.8	mg/L	6003	Standard
>	**Sc-1**	45	294255.3	1.5				mg/L	333080	Standard
	Cl	35	548812.2	0.6				ug/L	40103	Standard
	Kr	83	45.3	3.8				ug/L	67	Standard
	Br	81	73306.9	0.9				ug/L	15294	Standard
	P	31	270831.4	3.1				ug/L	74262	Standard
	S	34	908464.3	5.2				ug/L	787377	Standard
	Sr	88	3077583.2	3.3				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		88.604	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		87.844	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		90.746	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		90.328	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	88.646
	Na	23	
	Mg	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: L1205015030
Report Date/Time: Tuesday, May 08, 2012 15:59:08
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Approved: May 09, 2012

Method 6020 - Summary Report

Sample ID: L1205015402
Sample Date/Time: Tuesday, May 08, 2012 15:59:28
Number of Replicates: 3
Autosampler Position: 335
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	16877.7	1.0	**668.9350**	62.045	9.3	ug/L	17857	Standard
|	**Be**	9	3.3	86.6	**-0.0060**	0.001	13.1	ug/L	12	Standard
|	**Al**	27	211574.4	2.9	**11.7280**	0.313	2.7	ug/L	13328	Standard
⌊>	**Sc**	45	300861.2	0.8				ug/L	333080	Standard
⌈	**Ti**	47	234.7	9.7	**0.0839**	0.012	14.7	ug/L	113	Standard
|	**V**	51	16991.2	0.7	**0.7231**	0.011	1.5	ug/L	4349	Standard
|	**Cr**	52	16923.8	1.4	**0.2648**	0.024	9.1	ug/L	14000	Standard
|	**Cr**	53	800.0	9.6	**0.2529**	0.040	15.8	ug/L	319	Standard
|	**Mn**	55	6734.2	2.6	**0.2395**	0.007	2.9	ug/L	1367	Standard
|	**Co**	59	400.3	12.5	**0.0186**	0.003	16.8	ug/L	115	Standard
|	**Ni**	60	1510.7	7.7	**0.4149**	0.035	8.5	ug/L	76	Standard
|	**Cu**	65	89471.4	1.4	**29.3018**	0.448	1.5	ug/L	135	Standard
|	**Zn**	66	4586.7	2.4	**3.2734**	0.093	2.8	ug/L	185	Standard
| >	**Ge**	72	261010.7	0.5				ug/L	274929	Standard
|	**As**	75	151.9	30.2	**0.2815**	0.033	11.8	ug/L	-262	Standard
|	**Se**	82	51.4	9.2	**0.1100**	0.031	27.8	ug/L	27	Standard
⌊	**Se-1**	77	107.3	6.5	**0.2650**	0.074	27.8	ug/L	94	Standard
	Ga	71	230818.9	0.6				mg/L	248575	Standard
⌈	**Rb**	85	525.0	2.5				ug/L	15	Standard
| >	**Y**	89	246239.1	2.7				ug/L	267564	Standard
⌊	**Rh**	103	33.3	8.7				ug/L	2	Standard
⌈	**Mo**	98	8080.3	1.5	**1.6232**	0.033	2.0	ug/L	5	Standard
|	**Ag**	107	43.3	4.8	**-0.0037**	0.000	5.5	ug/L	44	Standard
|	**Cd**	111	516.0	5.9	**0.0041**	0.006	141.9	mg/L	512	Standard
|	**Cd**	114	1394.2	3.2	**0.0168**	0.003	20.5	ug/L	1247	Standard
| >	**In**	115	723331.4	0.6				ug/L	743274	Standard
|	**Sn**	118	17816.8	1.5	**1.0066**	0.011	1.1	ug/L	816	Standard
|	**Sb**	123	584.3	1.3	**0.0480**	0.000	0.8	ug/L	15	Standard
⌊	**Ba**	135	6058.9	1.7	**1.1865**	0.027	2.3	ug/L	37	Standard
⌈	**Ce**	140	155.7	2.6				ug/L	44	Standard
⌊>	**Tb**	159	789177.1	1.2				ug/L	826676	Standard
⌈	**Ho**	165	9.3	48.3				ug/L	12	Standard
|	**Tl**	203	137.0	2.5	**0.0057**	0.000	3.8	ug/L	6	Standard
|	**Tl**	205	300.3	3.7	**0.0095**	0.000	3.5	ug/L	11	Standard
|	**Pb**	206	490.3	2.7	**0.0153**	0.001	6.5	ug/L	301	Standard
|	**Pb**	207	419.3	5.4	**0.0157**	0.002	14.3	ug/L	250	Standard
|	**Pb**	208	1948.0	0.2	**0.0157**	0.000	2.8	ug/L	1166	Standard
|	**U**	238	18.7	21.7	**0.0044**	0.000	3.2	ug/L	3	Standard
⌊>	**Bi**	209	425923.6	1.0				ug/L	454659	Standard
⌈	**Na**	23	5451.0	1.2	**1.3195**	0.021	1.6	mg/L	137	Standard
|	**Mg**	24	4459.0	0.7	**0.0062**	0.000	1.2	mg/L	498	Standard

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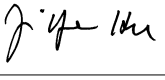
Approved: May 09, 2012

	K	39	2932.0	3.2	**0.1990**	0.010	4.9	mg/L	557	Standard
	Ca	43	3787.1	9.2	**9.1816**	0.913	9.9	mg/L	52	Standard
	Fe	54	955.5	6.0	**0.0161**	0.009	57.1	mg/L	865	Standard
	Fe	57	12318.3	1.4	**0.0375**	0.001	1.4	mg/L	6003	Standard
>	**Sc-1**	45	300861.2	0.8				mg/L	333080	Standard
	Cl	35	196668.6	1.1				ug/L	40103	Standard
	Kr	83	53.8	15.3				ug/L	67	Standard
	Br	81	15975.9	4.1				ug/L	15294	Standard
	P	31	81236.4	1.1				ug/L	74262	Standard
	S	34	1678536.5	2.0				ug/L	787377	Standard
	Sr	88	394994.2	3.2				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		94.937	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		92.030	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		97.317	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		95.464	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	93.680
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: May 09, 2012

Method 6020 - Summary Report

Sample ID: L1205015402PS WG397375-01

Sample Date/Time: Tuesday, May 08, 2012 16:02:20
Number of Replicates: 3
Autosampler Position: 336
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	16243.7	1.2	**-53.4091**	558.492	1045.7	ug/L	17857	Standard
|	**Be**	9	203514.8	2.3	**54.4183**	1.118	2.1	ug/L	12	Standard
|	**Al**	27	1193360.6	3.2	**67.2173**	0.877	1.3	ug/L	13328	Standard
⌊>	**Sc**	45	310659.6	4.3				ug/L	333080	Standard
⌈	**Ti**	47	237.3	2.7	**0.0850**	0.001	1.5	ug/L	113	Standard
|	**V**	51	963593.9	1.5	**53.7591**	0.520	1.0	ug/L	4349	Standard
|	**Cr**	52	722805.0	2.1	**54.2256**	0.183	0.3	ug/L	14000	Standard
|	**Cr**	53	108291.8	3.7	**53.7704**	1.643	3.1	ug/L	319	Standard
|	**Mn**	55	1232705.7	2.5	**55.1387**	0.751	1.4	ug/L	1367	Standard
|	**Co**	59	867590.8	3.1	**52.0665**	0.967	1.9	ug/L	115	Standard
|	**Ni**	60	184200.4	3.4	**52.9336**	0.898	1.7	ug/L	76	Standard
|	**Cu**	65	260009.4	2.3	**84.9492**	0.792	0.9	ug/L	135	Standard
|	**Zn**	66	76757.0	2.1	**56.7914**	0.164	0.3	ug/L	185	Standard
|>	**Ge**	72	261899.5	2.2				ug/L	274929	Standard
|	**As**	75	74274.2	3.1	**53.8043**	0.601	1.1	ug/L	-262	Standard
|	**Se**	82	8011.3	3.1	**49.8699**	0.765	1.5	ug/L	27	Standard
⌊	**Se-1**	77	5043.5	2.3	**55.0912**	0.175	0.3	ug/L	94	Standard
	Ga	71	235849.5	1.8				mg/L	248575	Standard
⌈	**Rb**	85	650.0	15.6				ug/L	15	Standard
|>	**Y**	89	248256.5	2.5				ug/L	267564	Standard
⌊	**Rh**	103	85.0	21.2				ug/L	2	Standard
⌈	**Mo**	98	8846.2	1.9	**1.7289**	0.026	1.5	ug/L	5	Standard
|	**Ag**	107	517811.8	2.9	**47.1401**	0.832	1.8	ug/L	44	Standard
|	**Cd**	111	267168.3	2.4	**53.5463**	0.797	1.5	mg/L	512	Standard
|	**Cd**	114	684455.8	2.8	**54.0444**	0.808	1.5	ug/L	1247	Standard
|>	**In**	115	743287.5	1.4				ug/L	743274	Standard
|	**Sn**	118	1782.8	2.6	**0.0544**	0.004	7.4	ug/L	816	Standard
|	**Sb**	123	649072.2	1.9	**53.5571**	0.459	0.9	ug/L	15	Standard
⌊	**Ba**	135	279560.2	2.0	**53.5606**	0.726	1.4	ug/L	37	Standard
⌈	**Ce**	140	157.3	10.5				ug/L	44	Standard
⌊>	**Tb**	159	803057.9	1.2				ug/L	826676	Standard
⌈	**Ho**	165	9.3	6.2				ug/L	12	Standard
|	**Tl**	203	925009.5	1.6	**52.8424**	0.523	1.0	ug/L	6	Standard
|	**Tl**	205	2374334.5	1.7	**55.3188**	0.480	0.9	ug/L	11	Standard
|	**Pb**	206	737636.6	1.6	**52.4221**	0.452	0.9	ug/L	301	Standard
|	**Pb**	207	634030.0	2.4	**54.0161**	0.921	1.7	ug/L	250	Standard
|	**Pb**	208	2931222.2	1.8	**52.8635**	0.494	0.9	ug/L	1166	Standard
|	**U**	238	1489034.4	3.2	**49.1139**	1.189	2.4	ug/L	3	Standard
⌊>	**Bi**	209	437636.7	0.9				ug/L	454659	Standard
⌈	**Na**	23	5481.0	7.9	**1.2832**	0.060	4.7	mg/L	137	Standard
|	**Mg**	24	4590.7	0.9	**0.0061**	0.000	4.6	mg/L	498	Standard

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	K	39	3105.3	3.1	**0.2058**	0.019	9.1	mg/L	557	Standard
	Ca	43	4047.2	6.2	**9.5297**	0.991	10.4	mg/L	52	Standard
	Fe	54	990.4	8.2	**0.0167**	0.010	62.4	mg/L	865	Standard
	Fe	57	12968.9	1.4	**0.0389**	0.003	8.9	mg/L	6003	Standard
>	**Sc-1**	45	310659.6	4.3				mg/L	333080	Standard
	Cl	35	194581.3	1.4				ug/L	40103	Standard
	Kr	83	55.1	3.5				ug/L	67	Standard
	Br	81	15279.4	0.4				ug/L	15294	Standard
	P	31	78043.2	4.4				ug/L	74262	Standard
	S	34	1719596.5	3.6				ug/L	787377	Standard
	Sr	88	437191.1	4.5				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		95.261	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		92.784	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		100.002	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		97.143	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	96.256
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1205015402SDL WG397375-02

Sample Date/Time: Tuesday, May 08, 2012 16:05:13
Number of Replicates: 3
Autosampler Position: 337
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	14959.1	3.7	**-77.1727**	178.786	231.7	ug/L	17857	Standard
	Be	9	21.7	35.3	**-0.0007**	0.002	316.2	ug/L	12	Standard
	Al	27	56031.9	5.1	**2.7572**	0.110	4.0	ug/L	13328	Standard
>	Sc	45	286251.0	1.9				ug/L	333080	Standard
	Ti	47	104.7	8.0	**0.0142**	0.005	36.2	ug/L	113	Standard
	V	51	6992.9	2.7	**0.1846**	0.012	6.7	ug/L	4349	Standard
	Cr	52	14743.8	2.4	**0.1654**	0.031	18.7	ug/L	14000	Standard
	Cr	53	569.2	9.4	**0.1545**	0.028	18.0	ug/L	319	Standard
	Mn	55	4877.1	2.9	**0.1693**	0.008	4.4	ug/L	1367	Standard
	Co	59	207.3	11.4	**0.0077**	0.002	19.9	ug/L	115	Standard
	Ni	60	398.0	2.8	**0.1007**	0.003	3.0	ug/L	76	Standard
	Cu	65	17184.7	2.9	**5.9296**	0.186	3.1	ug/L	135	Standard
	Zn	66	3312.4	2.4	**2.4728**	0.070	2.8	ug/L	185	Standard
>	Ge	72	246242.9	0.3				ug/L	274929	Standard
	As	75	-140.4	12.4	**0.0637**	0.013	20.6	ug/L	-262	Standard
	Se	82	28.5	12.4	**-0.0229**	0.024	103.0	ug/L	27	Standard
	Se-1	77	90.3	16.1	**0.1362**	0.173	127.2	ug/L	94	Standard
	Ga	71	217313.8	1.0				mg/L	248575	Standard
	Rb	85	120.0	35.6				ug/L	15	Standard
>	Y	89	231850.7	1.4				ug/L	267564	Standard
	Rh	103	8.3	69.3				ug/L	2	Standard
	Mo	98	1552.6	3.9	**0.3295**	0.006	1.9	ug/L	5	Standard
	Ag	107	75.7	23.7	**-0.0004**	0.002	354.9	ug/L	44	Standard
	Cd	111	474.1	1.7	**-0.0004**	0.003	714.5	mg/L	512	Standard
	Cd	114	1255.8	2.5	**0.0098**	0.001	12.6	ug/L	1247	Standard
>	In	115	694335.0	2.3				ug/L	743274	Standard
	Sn	118	3774.5	3.2	**0.1845**	0.004	2.2	ug/L	816	Standard
	Sb	123	1729.3	43.2	**0.1503**	0.062	41.2	ug/L	15	Standard
	Ba	135	1215.4	3.8	**0.2426**	0.004	1.8	ug/L	37	Standard
	Ce	140	82.3	19.5				ug/L	44	Standard
>	Tb	159	744709.7	1.0				ug/L	826676	Standard
	Ho	165	7.7	32.8				ug/L	12	Standard
	Tl	203	148.7	30.3	**0.0066**	0.003	39.8	ug/L	6	Standard
	Tl	205	373.0	18.4	**0.0115**	0.002	13.9	ug/L	11	Standard
	Pb	206	386.3	4.6	**0.0086**	0.001	13.9	ug/L	301	Standard
	Pb	207	352.0	10.7	**0.0107**	0.003	29.5	ug/L	250	Standard
	Pb	208	1570.7	9.5	**0.0095**	0.003	27.6	ug/L	1166	Standard
	U	238	128.3	22.7	**0.0083**	0.001	11.8	ug/L	3	Standard
>	Bi	209	413363.8	1.0				ug/L	454659	Standard
	Na	23	1011.7	7.3	**0.2384**	0.023	9.5	mg/L	137	Standard
	Mg	24	1500.1	3.7	**0.0011**	0.000	9.0	mg/L	498	Standard

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	K	39	1080.0	12.8	**0.0495**	0.012	23.5	mg/L	557	Standard
	Ca	43	791.7	10.9	**1.9439**	0.190	9.8	mg/L	52	Standard
	Fe	54	941.3	6.2	**0.0221**	0.008	34.9	mg/L	865	Standard
	Fe	57	7516.9	4.8	**0.0128**	0.001	10.2	mg/L	6003	Standard
>	**Sc-1**	45	286251.0	1.9				mg/L	333080	Standard
	Cl	35	146648.4	1.7				ug/L	40103	Standard
	Kr	83	47.7	7.4				ug/L	67	Standard
	Br	81	12991.4	3.3				ug/L	15294	Standard
	P	31	68379.0	2.7				ug/L	74262	Standard
	S	34	1057367.1	1.8				ug/L	787377	Standard
	Sr	88	76626.8	3.5				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		89.566	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		86.652	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		93.416	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		90.085	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	90.917
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1205015402SDL WG397375-02
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Method 6020 - Summary Report

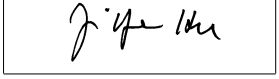
Sample ID: QC Std 4
Sample Date/Time: Tuesday, May 08, 2012 16:08:08
Number of Replicates: 3
Autosampler Position: 203
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	15266.0	5.8	**-178.8690**	415.080	232.1	ug/L	17857	Standard
|	**Be**	9	5.0	100.0	**-0.0056**	0.001	25.0	ug/L	12	Standard
|	**Al**	27	82631387.7	3.5	**4953.8072**	277.745	5.6	ug/L	13328	Standard
⌊>	**Sc**	45	295209.0	4.7				ug/L	333080	Standard
⌈	**Ti**	47	196445.7	3.0	**114.7938**	2.066	1.8	ug/L	113	Standard
|	**V**	51	5401.8	4.7	**0.0832**	0.022	26.6	ug/L	4349	Standard
|	**Cr**	52	14700.1	2.6	**0.1364**	0.031	22.7	ug/L	14000	Standard
|	**Cr**	53	3853.0	6.2	**1.8482**	0.071	3.8	ug/L	319	Standard
|	**Mn**	55	2323.5	2.3	**0.0452**	0.001	2.0	ug/L	1367	Standard
|	**Co**	59	416.0	3.4	**0.0204**	0.000	1.0	ug/L	115	Standard
|	**Ni**	60	1517.1	0.7	**0.4331**	0.010	2.3	ug/L	76	Standard
|	**Cu**	65	675.0	3.7	**0.1844**	0.010	5.3	ug/L	135	Standard
|	**Zn**	66	2388.9	1.5	**1.7050**	0.076	4.4	ug/L	185	Standard
| >	**Ge**	72	251657.2	3.0				ug/L	274929	Standard
|	**As**	75	-227.9	5.7	**0.0002**	0.006	2835.2	ug/L	-262	Standard
|	**Se**	82	32.3	15.4	**-0.0021**	0.035	1676.6	ug/L	27	Standard
⌊	**Se-1**	77	287.3	9.0	**2.3867**	0.203	8.5	ug/L	94	Standard
	Ga	71	220180.4	3.3				mg/L	248575	Standard
⌈	**Rb**	85	4589.0	6.9				ug/L	15	Standard
| >	**Y**	89	239486.3	3.8				ug/L	267564	Standard
⌊	**Rh**	103	3.3	173.2				ug/L	2	Standard
⌈	**Mo**	98	455103.2	3.7	**93.1281**	1.760	1.9	ug/L	5	Standard
|	**Ag**	107	102.3	4.9	**0.0020**	0.001	33.3	ug/L	44	Standard
|	**Cd**	111	1076.4	3.7	**0.1248**	0.010	7.9	mg/L	512	Standard
|	**Cd**	114	4037.1	1.4	**0.2392**	0.010	4.0	ug/L	1247	Standard
| >	**In**	115	707544.2	3.4				ug/L	743274	Standard
|	**Sn**	118	1173.7	1.9	**0.0228**	0.001	5.1	ug/L	816	Standard
|	**Sb**	123	807.9	2.8	**0.0686**	0.004	6.3	ug/L	15	Standard
⌊	**Ba**	135	152.0	6.6	**0.0240**	0.001	6.1	ug/L	37	Standard
⌈	**Ce**	140	2034.1	2.2				ug/L	44	Standard
⌊>	**Tb**	159	791530.5	3.2				ug/L	826676	Standard
⌈	**Ho**	165	14.0	31.1				ug/L	12	Standard
|	**Tl**	203	474.3	4.7	**0.0268**	0.002	5.6	ug/L	6	Standard
|	**Tl**	205	1101.0	2.7	**0.0299**	0.000	1.5	ug/L	11	Standard
|	**Pb**	206	583.7	4.8	**0.0240**	0.002	7.6	ug/L	301	Standard
|	**Pb**	207	468.7	9.4	**0.0218**	0.003	14.3	ug/L	250	Standard
|	**Pb**	208	2183.7	3.0	**0.0218**	0.000	2.2	ug/L	1166	Standard
|	**U**	238	27.7	11.6	**0.0048**	0.000	1.9	ug/L	3	Standard
⌊>	**Bi**	209	407675.0	2.5				ug/L	454659	Standard
⌈	**Na**	23	52465.8	4.3	**13.1560**	0.234	1.8	mg/L	137	Standard
|	**Mg**	24	3064675.8	2.5	**5.4548**	0.202	3.7	mg/L	498	Standard

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	K	39	66517.4	1.6	**5.5997**	0.183	3.3	mg/L	557	Standard
	Ca	43	6874.9	1.6	**17.0771**	0.661	3.9	mg/L	52	Standard
	Fe	54	79607.4	2.8	**14.5253**	0.701	4.8	mg/L	865	Standard
	Fe	57	2375202.7	1.2	**13.4783**	0.619	4.6	mg/L	6003	Standard
>	**Sc-1**	45	295209.0	4.7				mg/L	333080	Standard
	Cl	35	8402224.2	2.4				ug/L	40103	Standard
	Kr	83	55.1	6.2				ug/L	67	Standard
	Br	81	13084.0	1.9				ug/L	15294	Standard
	P	31	6617547.3	1.2				ug/L	74262	Standard
	S	34	1641753.5	1.2				ug/L	787377	Standard
	Sr	88	1361.7	4.4				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	99.076		
>	Sc	45			
	Ti	47	114.794		
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		91.535	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		89.506	
	Rh	103			
	Mo	98	93.128		
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		95.193	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		95.749	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207		
	Pb	208		
	U	238		
>	Bi	209		89.666
	Na	23	105.248	
	Mg	24	109.096	
	K	39	111.994	
	Ca	43	113.847	
	Fe	54	116.202	
	Fe	57	107.826	
>	Sc-1	45		
	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	Cd	111	

Sample ID: QC Std 4
Report Date/Time: Tuesday, May 08, 2012 16:10:40
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Method 6020 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Tuesday, May 08, 2012 16:11:00
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	15109.2	3.3	**-267.6196**	195.848	73.2	ug/L	17857	Standard
|	**Be**	9	361162.8	1.6	**101.7689**	2.316	2.3	ug/L	12	Standard
|	**Al**	27	76216663.4	1.3	**4571.1701**	72.484	1.6	ug/L	13328	Standard
⌊>	**Sc**	45	294685.1	1.3				ug/L	333080	Standard
⌈	**Ti**	47	177556.7	0.4	**102.6289**	1.385	1.3	ug/L	113	Standard
|	**V**	51	1669655.1	0.4	**96.0775**	1.771	1.8	ug/L	4349	Standard
|	**Cr**	52	1261339.0	0.3	**98.2462**	1.540	1.6	ug/L	14000	Standard
|	**Cr**	53	192336.6	1.5	**98.4420**	2.051	2.1	ug/L	319	Standard
|	**Mn**	55	2101476.7	1.3	**96.8108**	0.499	0.5	ug/L	1367	Standard
|	**Co**	59	1522491.0	0.3	**94.0787**	1.436	1.5	ug/L	115	Standard
|	**Ni**	60	314803.0	1.2	**93.1573**	0.785	0.8	ug/L	76	Standard
|	**Cu**	65	280670.6	1.0	**94.4153**	1.775	1.9	ug/L	135	Standard
|	**Zn**	66	132397.6	0.6	**100.9720**	2.417	2.4	ug/L	185	Standard
|>	**Ge**	72	254425.5	1.8				ug/L	274929	Standard
|	**As**	75	133693.6	2.1	**99.5537**	0.429	0.4	ug/L	-262	Standard
|	**Se**	82	14266.9	2.9	**91.5931**	1.034	1.1	ug/L	27	Standard
⌊	**Se-1**	77	9286.8	1.3	**105.2631**	0.531	0.5	ug/L	94	Standard
	Ga	71	224051.9	2.7				mg/L	248575	Standard
⌈	**Rb**	85	4047.2	3.9				ug/L	15	Standard
|>	**Y**	89	238973.8	2.3				ug/L	267564	Standard
⌊	**Rh**	103	78.3	7.4				ug/L	2	Standard
⌈	**Mo**	98	418712.6	1.2	**85.5697**	1.964	2.3	ug/L	5	Standard
|	**Ag**	107	878627.4	1.2	**83.9296**	1.112	1.3	ug/L	44	Standard
|	**Cd**	111	477105.2	1.1	**100.4126**	1.492	1.5	mg/L	512	Standard
|	**Cd**	114	1233468.5	0.6	**102.2955**	2.763	2.7	ug/L	1247	Standard
|>	**In**	115	708677.3	2.6				ug/L	743274	Standard
|	**Sn**	118	1733.4	2.2	**0.0565**	0.002	3.4	ug/L	816	Standard
|	**Sb**	123	1169663.2	0.9	**101.2639**	1.982	2.0	ug/L	15	Standard
⌊	**Ba**	135	481036.8	0.3	**96.7082**	2.331	2.4	ug/L	37	Standard
⌈	**Ce**	140	1891.8	1.0				ug/L	44	Standard
⌊>	**Tb**	159	790465.8	2.6				ug/L	826676	Standard
⌈	**Ho**	165	21.0	9.5				ug/L	12	Standard
|	**Tl**	203	1626935.1	1.5	**98.2958**	0.224	0.2	ug/L	6	Standard
|	**Tl**	205	4104824.1	0.8	**101.1550**	1.091	1.1	ug/L	11	Standard
|	**Pb**	206	1301803.3	0.1	**97.8779**	1.503	1.5	ug/L	301	Standard
|	**Pb**	207	1117408.7	0.6	**100.7229**	2.029	2.0	ug/L	250	Standard
|	**Pb**	208	5385229.9	0.2	**102.7511**	1.527	1.5	ug/L	1166	Standard
|	**U**	238	2857587.0	0.5	**99.6994**	1.305	1.3	ug/L	3	Standard
⌊>	**Bi**	209	413814.7	1.5				ug/L	454659	Standard
⌈	**Na**	23	47638.2	3.3	**11.9623**	0.398	3.3	mg/L	137	Standard
|	**Mg**	24	2796253.6	1.5	**4.9806**	0.011	0.2	mg/L	498	Standard

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	K	39	61447.8	3.0	**5.1734**	0.140	2.7	mg/L	557	Standard
	Ca	43	6271.3	0.8	**15.5810**	0.216	1.4	mg/L	52	Standard
	Fe	54	73693.5	1.3	**13.4441**	0.323	2.4	mg/L	865	Standard
	Fe	57	2116792.7	0.8	**12.0137**	0.128	1.1	mg/L	6003	Standard
>	**Sc-1**	45	294685.1	1.3				mg/L	333080	Standard
	Cl	35	7707453.0	1.5				ug/L	40103	Standard
	Kr	83	61.2	5.5				ug/L	67	Standard
	Br	81	12878.0	4.3				ug/L	15294	Standard
	P	31	5991040.8	1.1				ug/L	74262	Standard
	S	34	1526608.6	1.3				ug/L	787377	Standard
	Sr	88	1465.1	2.7				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	91.423		
>	Sc	45			
	Ti	47	102.629		
	V	51	96.077		
	Cr	52	98.246		
	Cr	53			
	Mn	55	96.811		
	Co	59	94.079		
	Ni	60	93.157		
	Cu	65	94.415		
	Zn	66	100.972		
>	Ge	72		92.542	
	As	75	99.554		
	Se	82	91.593		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		89.314	
	Rh	103			
	Mo	98	85.570		
	Ag	107	83.930		
	Cd	111	100.413		
	Cd	114			
>	In	115		95.345	
	Sn	118			
	Sb	123	101.264		
	Ba	135	96.708		
	Ce	140			
>	Tb	159		95.620	
	Ho	165			
	Tl	203	98.296		
	Tl	205			
	Pb	206	97.878		

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	Pb	207	100.723	
	Pb	208	102.751	
	U	238	99.699	
>	Bi	209		91.016
	Na	23	95.699	
	Mg	24	99.611	
	K	39	103.469	
	Ca	43	103.873	
	Fe	54	107.553	
	Fe	57	96.110	
>	Sc-1	45		
	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: Tuesday, May 08, 2012 16:13:55
Number of Replicates: 3
Autosampler Position: 101
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	14792.2	4.0	**-991.4680**	482.560	48.7	ug/L	17857	Standard
|	**Be**	9	186319.3	3.0	**49.6712**	0.962	1.9	ug/L	12	Standard
|	**Al**	27	905020.4	2.7	**50.6741**	1.283	2.5	ug/L	13328	Standard
⌊>	**Sc**	45	311440.0	2.9				ug/L	333080	Standard
⌈	**Ti**	47	172992.3	2.4	**96.0775**	2.397	2.5	ug/L	113	Standard
|	**V**	51	879995.2	2.7	**48.5461**	1.612	3.3	ug/L	4349	Standard
|	**Cr**	52	659416.8	4.6	**48.8490**	2.657	5.4	ug/L	14000	Standard
|	**Cr**	53	97883.7	3.3	**48.0710**	1.905	4.0	ug/L	319	Standard
|	**Mn**	55	1128665.7	1.9	**49.9399**	1.244	2.5	ug/L	1367	Standard
|	**Co**	59	797490.5	1.9	**47.3513**	1.160	2.4	ug/L	115	Standard
|	**Ni**	60	167345.6	1.5	**47.5802**	0.964	2.0	ug/L	76	Standard
|	**Cu**	65	149207.1	2.8	**48.2113**	1.679	3.5	ug/L	135	Standard
|	**Zn**	66	68262.4	1.1	**49.9494**	0.895	1.8	ug/L	185	Standard
| >	**Ge**	72	264746.0	0.7				ug/L	274929	Standard
|	**As**	75	68227.3	2.0	**48.9192**	1.288	2.6	ug/L	-262	Standard
|	**Se**	82	7469.3	1.2	**45.9878**	0.884	1.9	ug/L	27	Standard
⌊	**Se-1**	77	4718.1	1.3	**50.9177**	1.002	2.0	ug/L	94	Standard
	Ga	71	233005.3	0.2				mg/L	248575	Standard
⌈	**Rb**	85	1300.1	14.3				ug/L	15	Standard
| >	**Y**	89	247721.1	2.4				ug/L	267564	Standard
⌊	**Rh**	103	35.0	51.5				ug/L	2	Standard
⌈	**Mo**	98	464903.1	2.2	**92.3588**	1.423	1.5	ug/L	5	Standard
|	**Ag**	107	519355.4	1.0	**48.2318**	0.264	0.5	ug/L	44	Standard
|	**Cd**	111	247200.9	2.3	**50.5290**	0.843	1.7	mg/L	512	Standard
|	**Cd**	114	635828.3	2.3	**51.2069**	0.871	1.7	ug/L	1247	Standard
| >	**In**	115	728714.0	0.7				ug/L	743274	Standard
|	**Sn**	118	841384.5	3.2	**49.3974**	1.300	2.6	ug/L	816	Standard
|	**Sb**	123	599116.4	2.3	**50.4227**	0.874	1.7	ug/L	15	Standard
⌊	**Ba**	135	249974.3	0.7	**48.8501**	0.208	0.4	ug/L	37	Standard
⌈	**Ce**	140	918.0	2.6				ug/L	44	Standard
⌊>	**Tb**	159	800882.0	0.6				ug/L	826676	Standard
⌈	**Ho**	165	25.7	11.9				ug/L	12	Standard
|	**Tl**	203	857143.8	0.9	**50.0592**	0.700	1.4	ug/L	6	Standard
|	**Tl**	205	2143529.1	7.6	**51.0191**	3.108	6.1	ug/L	11	Standard
|	**Pb**	206	682625.4	2.1	**49.5869**	0.352	0.7	ug/L	301	Standard
|	**Pb**	207	572325.8	3.2	**49.8344**	0.864	1.7	ug/L	250	Standard
|	**Pb**	208	2669732.2	2.4	**49.2132**	0.495	1.0	ug/L	1166	Standard
|	**U**	238	1365139.0	2.7	**46.0273**	0.636	1.4	ug/L	3	Standard
⌊>	**Bi**	209	428141.5	1.6				ug/L	454659	Standard
⌈	**Na**	23	21166.4	0.8	**5.0172**	0.114	2.3	mg/L	137	Standard
|	**Mg**	24	3008694.6	4.0	**5.0699**	0.082	1.6	mg/L	498	Standard

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	K	39	67265.7	0.8	**5.3640**	0.197	3.7	mg/L	557	Standard
	Ca	43	2366.9	6.4	**5.5099**	0.424	7.7	mg/L	52	Standard
	Fe	54	33097.9	4.0	**5.6223**	0.174	3.1	mg/L	865	Standard
	Fe	57	988503.2	1.5	**5.2920**	0.075	1.4	mg/L	6003	Standard
>	**Sc-1**	45	311440.0	2.9				mg/L	333080	Standard
	Cl	35	210469.9	24.7				ug/L	40103	Standard
	Kr	83	61.1	11.7				ug/L	67	Standard
	Br	81	13139.9	4.7				ug/L	15294	Standard
	P	31	72701.0	5.6				ug/L	74262	Standard
	S	34	845328.4	2.1				ug/L	787377	Standard
	Sr	88	888.4	6.4				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	101.348		
>	Sc	45			
	Ti	47	96.078		
	V	51	97.092		
	Cr	52	97.698		
	Cr	53			
	Mn	55	99.880		
	Co	59	94.703		
	Ni	60	95.160		
	Cu	65	96.423		
	Zn	66	99.899		
>	Ge	72		96.296	
	As	75	97.838		
	Se	82	91.976		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		92.584	
	Rh	103			
	Mo	98	92.359		
	Ag	107	96.464		
	Cd	111	101.058		
	Cd	114			
>	In	115		98.041	
	Sn	118	98.795		
	Sb	123	100.845		
	Ba	135	97.700		
	Ce	140			
>	Tb	159		96.880	
	Ho	165			
	Tl	203	100.118		
	Tl	205			
	Pb	206	99.174		

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	Pb	207	99.669	
	Pb	208	98.426	
	U	238	92.055	
>	Bi	209		94.168
	Na	23	100.345	
	Mg	24	101.397	
	K	39	107.280	
	Ca	43	110.197	
	Fe	54	112.446	
	Fe	57	105.840	
>	Sc-1	45		
	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	Ca	43	
QC Std 6	Fe	54	

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Method 6020 - Summary Report

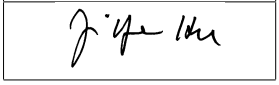
Sample ID: QC Std 7
Sample Date/Time: Tuesday, May 08, 2012 16:16:48
Number of Replicates: 3
Autosampler Position: 102
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	14293.4	6.8	**-695.5254**	813.385	116.9	ug/L	17857	Standard
|	**Be**	9	20.0	75.0	**-0.0012**	0.004	365.2	ug/L	12	Standard
|	**Al**	27	15551.4	13.8	**0.2433**	0.150	61.6	ug/L	13328	Standard
⌊>	**Sc**	45	291692.0	2.4				ug/L	333080	Standard
⌈	**Ti**	47	116.3	6.3	**0.0210**	0.006	28.4	ug/L	113	Standard
|	**V**	51	3883.0	1.4	**-0.0015**	0.009	626.5	ug/L	4349	Standard
|	**Cr**	52	12126.5	0.9	**-0.0510**	0.022	43.8	ug/L	14000	Standard
|	**Cr**	53	491.7	10.4	**0.1120**	0.020	17.8	ug/L	319	Standard
|	**Mn**	55	1483.7	5.0	**0.0074**	0.004	49.1	ug/L	1367	Standard
|	**Co**	59	166.0	15.2	**0.0050**	0.002	37.2	ug/L	115	Standard
|	**Ni**	60	84.3	11.7	**0.0047**	0.003	74.2	ug/L	76	Standard
|	**Cu**	65	149.0	7.5	**0.0063**	0.004	67.7	ug/L	135	Standard
|	**Zn**	66	210.3	7.2	**0.0251**	0.014	57.1	ug/L	185	Standard
| >	**Ge**	72	247227.4	2.9				ug/L	274929	Standard
|	**As**	75	-207.0	4.0	**0.0131**	0.003	21.7	ug/L	-262	Standard
|	**Se**	82	27.7	21.1	**-0.0293**	0.036	121.1	ug/L	27	Standard
⌊	**Se-1**	77	82.3	11.9	**0.0394**	0.132	334.2	ug/L	94	Standard
	Ga	71	222483.9	2.5				mg/L	248575	Standard
⌈	**Rb**	85	25.0	69.3				ug/L	15	Standard
| >	**Y**	89	232873.7	3.0				ug/L	267564	Standard
⌊	**Rh**	103	1.7	173.2				ug/L	2	Standard
⌈	**Mo**	98	108.8	45.2	**0.0288**	0.010	35.3	ug/L	5	Standard
|	**Ag**	107	172.7	9.9	**0.0092**	0.002	16.4	ug/L	44	Standard
|	**Cd**	111	492.1	5.5	**0.0045**	0.004	88.6	mg/L	512	Standard
|	**Cd**	114	1307.0	4.9	**0.0154**	0.005	33.2	ug/L	1247	Standard
| >	**In**	115	686784.1	1.8				ug/L	743274	Standard
|	**Sn**	118	935.0	3.0	**0.0100**	0.002	22.9	ug/L	816	Standard
|	**Sb**	123	779.3	23.4	**0.0681**	0.016	23.7	ug/L	15	Standard
⌊	**Ba**	135	65.0	6.7	**0.0068**	0.001	11.1	ug/L	37	Standard
⌈	**Ce**	140	51.3	11.9				ug/L	44	Standard
⌊>	**Tb**	159	738201.5	2.7				ug/L	826676	Standard
⌈	**Ho**	165	7.7	45.8				ug/L	12	Standard
|	**Tl**	203	158.0	14.8	**0.0072**	0.001	17.2	ug/L	6	Standard
|	**Tl**	205	358.0	9.3	**0.0112**	0.001	5.3	ug/L	11	Standard
|	**Pb**	206	342.7	4.4	**0.0052**	0.001	15.5	ug/L	301	Standard
|	**Pb**	207	311.0	8.3	**0.0069**	0.002	23.1	ug/L	250	Standard
|	**Pb**	208	1385.0	5.3	**0.0059**	0.001	12.7	ug/L	1166	Standard
|	**U**	238	148.0	14.1	**0.0090**	0.001	9.7	ug/L	3	Standard
⌊>	**Bi**	209	414352.2	2.7				ug/L	454659	Standard
⌈	**Na**	23	90.0	25.5	**-0.0009**	0.006	659.9	mg/L	137	Standard
|	**Mg**	24	831.7	27.7	**-0.0001**	0.000	370.1	mg/L	498	Standard

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	K	39	696.7	9.6	**0.0149**	0.005	35.9	mg/L	557	Standard
	Ca	43	46.7	34.4	**0.0263**	0.037	141.8	mg/L	52	Standard
	Fe	54	857.2	2.9	**0.0033**	0.006	171.1	mg/L	865	Standard
	Fe	57	5544.4	7.0	**0.0007**	0.003	392.5	mg/L	6003	Standard
>	**Sc-1**	45	291692.0	2.4				mg/L	333080	Standard
	Cl	35	153890.8	2.0				ug/L	40103	Standard
	Kr	83	48.4	2.8				ug/L	67	Standard
	Br	81	12360.9	1.4				ug/L	15294	Standard
	P	31	69769.7	4.7				ug/L	74262	Standard
	S	34	830598.5	0.9				ug/L	787377	Standard
	Sr	88	436.7	72.1				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		89.924	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		87.035	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		92.400	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		89.298	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	91.135
	Na	23	
	Mg	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: Tuesday, May 08, 2012 16:19:42
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	13599.4	2.7	**-1059.0724**	145.595	13.7	ug/L	17857	Standard
|	**Be**	9	16.7	45.8	**-0.0021**	0.002	104.6	ug/L	12	Standard
|	**Al**	27	17798.8	4.0	**0.3901**	0.030	7.8	ug/L	13328	Standard
⌊>	**Sc**	45	288224.2	1.3				ug/L	333080	Standard
⌈	**Ti**	47	98.0	19.4	**0.0100**	0.009	95.1	ug/L	113	Standard
|	**V**	51	10116.8	3.7	**0.3705**	0.003	0.7	ug/L	4349	Standard
|	**Cr**	52	21598.7	3.3	**0.7224**	0.015	2.1	ug/L	14000	Standard
|	**Cr**	53	1898.5	3.6	**0.8583**	0.029	3.3	ug/L	319	Standard
|	**Mn**	55	11672.2	4.1	**0.4927**	0.005	1.0	ug/L	1367	Standard
|	**Co**	59	6047.9	5.8	**0.3803**	0.011	3.0	ug/L	115	Standard
|	**Ni**	60	5005.8	7.0	**1.5081**	0.055	3.6	ug/L	76	Standard
|	**Cu**	65	2365.2	2.7	**0.7770**	0.016	2.1	ug/L	135	Standard
|	**Zn**	66	8236.2	4.6	**6.3535**	0.075	1.2	ug/L	185	Standard
|>	**Ge**	72	246305.4	3.5				ug/L	274929	Standard
|	**As**	75	310.3	10.5	**0.4095**	0.019	4.8	ug/L	-262	Standard
|	**Se**	82	86.0	13.5	**0.3588**	0.069	19.2	ug/L	27	Standard
⌊	**Se-1**	77	115.3	19.1	**0.4262**	0.213	50.0	ug/L	94	Standard
	Ga	71	220936.7	4.6				mg/L	248575	Standard
⌈	**Rb**	85	25.0	34.6				ug/L	15	Standard
|>	**Y**	89	229573.8	2.9				ug/L	267564	Standard
⌊	**Rh**	103	3.3	86.6				ug/L	2	Standard
⌈	**Mo**	98	44.5	61.1	**0.0154**	0.006	36.5	ug/L	5	Standard
|	**Ag**	107	3595.4	8.8	**0.3520**	0.024	6.8	ug/L	44	Standard
|	**Cd**	111	1548.3	5.6	**0.2395**	0.013	5.2	mg/L	512	Standard
|	**Cd**	114	4031.0	6.9	**0.2540**	0.016	6.4	ug/L	1247	Standard
|>	**In**	115	675789.7	2.2				ug/L	743274	Standard
|	**Sn**	118	853.4	2.4	**0.0058**	0.002	30.5	ug/L	816	Standard
|	**Sb**	123	4695.1	5.4	**0.4244**	0.014	3.2	ug/L	15	Standard
⌊	**Ba**	135	3474.7	3.5	**0.7255**	0.010	1.3	ug/L	37	Standard
⌈	**Ce**	140	261.3	143.0				ug/L	44	Standard
⌊>	**Tb**	159	727065.5	1.7				ug/L	826676	Standard
⌈	**Ho**	165	7.7	19.9				ug/L	12	Standard
|	**Tl**	203	1378.1	3.4	**0.0813**	0.001	1.4	ug/L	6	Standard
|	**Tl**	205	3269.4	3.6	**0.0833**	0.001	1.6	ug/L	11	Standard
|	**Pb**	206	2866.6	5.4	**0.1959**	0.008	3.9	ug/L	301	Standard
|	**Pb**	207	2407.9	5.9	**0.1969**	0.010	5.0	ug/L	250	Standard
|	**Pb**	208	11179.3	4.3	**0.1938**	0.006	2.9	ug/L	1166	Standard
|	**U**	238	10215.8	4.1	**0.3617**	0.008	2.3	ug/L	3	Standard
⌊>	**Bi**	209	411901.9	2.0				ug/L	454659	Standard
⌈	**Na**	23	100.0	22.9	**0.0019**	0.006	310.3	mg/L	137	Standard
|	**Mg**	24	703.3	14.6	**-0.0003**	0.000	50.0	mg/L	498	Standard

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	K	39	678.3	14.5	**0.0140**	0.008	59.3	mg/L	557	Standard
	Ca	43	75.0	11.5	**0.1007**	0.022	21.4	mg/L	52	Standard
	Fe	54	894.9	7.8	**0.0123**	0.015	119.6	mg/L	865	Standard
	Fe	57	5384.3	3.9	**0.0001**	0.001	581.8	mg/L	6003	Standard
>	**Sc-1**	45	288224.2	1.3				mg/L	333080	Standard
	Cl	35	139193.0	2.4				ug/L	40103	Standard
	Kr	83	53.7	5.9				ug/L	67	Standard
	Br	81	12421.8	5.2				ug/L	15294	Standard
	P	31	68296.2	3.7				ug/L	74262	Standard
	S	34	807915.3	2.9				ug/L	787377	Standard
	Sr	88	1720.2	113.8				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51	92.634		
	Cr	52	90.300		
	Cr	53			
	Mn	55	98.531		
	Co	59	95.065		
	Ni	60	94.258		
	Cu	65	97.129		
	Zn	66	101.656		
>	Ge	72		89.589	
	As	75	102.363		
	Se	82	89.695		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		85.801	
	Rh	103			
	Mo	98			
	Ag	107	87.991		
	Cd	111	99.778		
	Cd	114			
>	In	115		90.921	
	Sn	118			
	Sb	123	106.102		
	Ba	135	96.738		
	Ce	140			
>	Tb	159		87.950	
	Ho	165			
	Tl	203	101.606		
	Tl	205			
	Pb	206			

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	Pb	207			
	Pb	208	96.899		
	U	238	90.436		
>	Bi	209			90.596
	Na	23			
	Mg	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: PBW 41 WG397001-02
Sample Date/Time: Tuesday, May 08, 2012 16:26:03
Number of Replicates: 3
Autosampler Position: 338
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	14343.5	1.2	**-506.6540**	147.803	29.2	ug/L	17857	Standard
|	**Be**	9	3.3	86.6	**-0.0060**	0.001	14.1	ug/L	12	Standard
|	**Al**	27	27373.0	0.6	**0.9864**	0.020	2.0	ug/L	13328	Standard
⌊>	**Sc**	45	286715.9	1.1				ug/L	333080	Standard
⌈	**Ti**	47	94.7	17.7	**0.0081**	0.009	108.9	ug/L	113	Standard
|	**V**	51	3851.5	0.9	**-0.0026**	0.003	97.5	ug/L	4349	Standard
|	**Cr**	52	12259.6	0.5	**-0.0365**	0.019	51.6	ug/L	14000	Standard
|	**Cr**	53	403.3	6.6	**0.0666**	0.013	20.2	ug/L	319	Standard
|	**Mn**	55	9174.8	0.7	**0.3740**	0.009	2.3	ug/L	1367	Standard
|	**Co**	59	125.0	6.8	**0.0024**	0.000	17.8	ug/L	115	Standard
|	**Ni**	60	215.3	8.4	**0.0448**	0.006	13.1	ug/L	76	Standard
|	**Cu**	65	229.3	6.4	**0.0344**	0.004	12.2	ug/L	135	Standard
|	**Zn**	66	3961.9	0.7	**2.9854**	0.066	2.2	ug/L	185	Standard
| >	**Ge**	72	246277.9	2.0				ug/L	274929	Standard
|	**As**	75	-197.9	7.8	**0.0195**	0.011	58.1	ug/L	-262	Standard
|	**Se**	82	26.7	16.0	**-0.0347**	0.030	85.2	ug/L	27	Standard
⌊	**Se-1**	77	87.0	7.2	**0.0963**	0.066	68.6	ug/L	94	Standard
	Ga	71	220268.4	1.2				mg/L	248575	Standard
⌈	**Rb**	85	30.0	33.3				ug/L	15	Standard
| >	**Y**	89	233190.8	0.8				ug/L	267564	Standard
⌊	**Rh**	103	1.7	173.2				ug/L	2	Standard
⌈	**Mo**	98	25.4	25.8	**0.0113**	0.001	12.4	ug/L	5	Standard
|	**Ag**	107	48.7	9.5	**-0.0030**	0.000	14.9	ug/L	44	Standard
|	**Cd**	111	484.3	2.5	**0.0032**	0.002	77.9	mg/L	512	Standard
|	**Cd**	114	1221.4	6.3	**0.0083**	0.006	76.7	ug/L	1247	Standard
| >	**In**	115	684767.8	0.3				ug/L	743274	Standard
|	**Sn**	118	3516.7	2.2	**0.1716**	0.005	3.1	ug/L	816	Standard
|	**Sb**	123	199.0	1.4	**0.0163**	0.000	1.5	ug/L	15	Standard
⌊	**Ba**	135	74.7	4.7	**0.0089**	0.001	8.6	ug/L	37	Standard
⌈	**Ce**	140	67.0	6.8				ug/L	44	Standard
⌊>	**Tb**	159	738385.1	0.3				ug/L	826676	Standard
⌈	**Ho**	165	9.7	15.8				ug/L	12	Standard
|	**Tl**	203	76.7	13.2	**0.0024**	0.001	24.7	ug/L	6	Standard
|	**Tl**	205	163.7	10.3	**0.0065**	0.000	6.1	ug/L	11	Standard
|	**Pb**	206	334.7	0.9	**0.0051**	0.000	9.2	ug/L	301	Standard
|	**Pb**	207	285.3	3.8	**0.0051**	0.001	15.2	ug/L	250	Standard
|	**Pb**	208	1347.7	4.2	**0.0057**	0.001	18.5	ug/L	1166	Standard
|	**U**	238	23.7	25.8	**0.0047**	0.000	4.5	ug/L	3	Standard
⌊>	**Bi**	209	407109.1	0.9				ug/L	454659	Standard
⌈	**Na**	23	110.0	16.4	**0.0046**	0.005	106.4	mg/L	137	Standard
|	**Mg**	24	868.4	7.7	**-0.0000**	0.000	446.6	mg/L	498	Standard

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	K	39	665.0	4.2	**0.0132**	0.002	17.1	mg/L	557	Standard
	Ca	43	58.3	13.1	**0.0591**	0.021	35.8	mg/L	52	Standard
	Fe	54	876.1	11.0	**0.0097**	0.020	204.5	mg/L	865	Standard
	Fe	57	5517.7	1.5	**0.0011**	0.000	28.5	mg/L	6003	Standard
>	**Sc-1**	45	286715.9	1.1				mg/L	333080	Standard
	Cl	35	122595.7	0.8				ug/L	40103	Standard
	Kr	83	55.4	2.4				ug/L	67	Standard
	Br	81	12661.1	1.7				ug/L	15294	Standard
	P	31	67869.2	0.3				ug/L	74262	Standard
	S	34	801721.7	1.4				ug/L	787377	Standard
	Sr	88	553.3	9.7				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		89.579	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		87.153	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		92.129	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		89.320	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	89.542
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

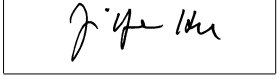
Sample ID: LCSW 41 WG397001-03
Sample Date/Time: Tuesday, May 08, 2012 16:28:56
Number of Replicates: 3
Autosampler Position: 339
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	15272.7	1.8	**-778.7302**	228.605	29.4	ug/L	17857	Standard
|	**Be**	9	92781.7	2.8	**24.5150**	0.458	1.9	ug/L	12	Standard
|	**Al**	27	534199.4	3.4	**29.3523**	0.727	2.5	ug/L	13328	Standard
⌊>	**Sc**	45	314124.8	1.1				ug/L	333080	Standard
⌈	**Ti**	47	147.0	6.6	**0.0334**	0.006	19.0	ug/L	113	Standard
|	**V**	51	463474.0	5.1	**25.4420**	0.863	3.4	ug/L	4349	Standard
|	**Cr**	52	360219.9	4.5	**26.1981**	0.746	2.8	ug/L	14000	Standard
|	**Cr**	53	53936.0	4.9	**26.4059**	0.853	3.2	ug/L	319	Standard
|	**Mn**	55	614037.8	4.6	**27.1249**	0.685	2.5	ug/L	1367	Standard
|	**Co**	59	434678.7	3.6	**25.7977**	0.539	2.1	ug/L	115	Standard
|	**Ni**	60	91555.2	4.6	**26.0072**	0.658	2.5	ug/L	76	Standard
|	**Cu**	65	81662.1	4.6	**26.3483**	0.629	2.4	ug/L	135	Standard
|	**Zn**	66	35031.5	4.9	**25.5457**	0.478	1.9	ug/L	185	Standard
| >	**Ge**	72	264851.7	3.6				ug/L	274929	Standard
|	**As**	75	34295.6	3.7	**24.6643**	0.422	1.7	ug/L	-262	Standard
|	**Se**	82	3791.2	5.7	**23.2214**	0.876	3.8	ug/L	27	Standard
⌊	**Se-1**	77	2274.2	3.2	**24.0626**	0.938	3.9	ug/L	94	Standard
	Ga	71	242408.2	3.8				mg/L	248575	Standard
⌈	**Rb**	85	58.3	17.8				ug/L	15	Standard
| >	**Y**	89	260532.4	3.3				ug/L	267564	Standard
⌊	**Rh**	103	16.7	75.5				ug/L	2	Standard
⌈	**Mo**	98	62.4	14.4	**0.0181**	0.002	10.4	ug/L	5	Standard
|	**Ag**	107	261729.1	3.8	**23.9490**	0.383	1.6	ug/L	44	Standard
|	**Cd**	111	126164.7	3.1	**25.3668**	0.205	0.8	mg/L	512	Standard
|	**Cd**	114	314230.2	3.4	**24.8920**	0.235	0.9	ug/L	1247	Standard
| >	**In**	115	739327.6	2.5				ug/L	743274	Standard
|	**Sn**	118	1593.4	5.9	**0.0439**	0.004	8.1	ug/L	816	Standard
|	**Sb**	123	300084.2	3.7	**24.8888**	0.292	1.2	ug/L	15	Standard
⌊	**Ba**	135	129871.5	5.2	**25.0010**	0.691	2.8	ug/L	37	Standard
⌈	**Ce**	140	188.3	2.4				ug/L	44	Standard
⌊>	**Tb**	159	794216.4	3.6				ug/L	826676	Standard
⌈	**Ho**	165	11.3	25.5				ug/L	12	Standard
|	**Tl**	203	450895.7	3.7	**26.0119**	0.157	0.6	ug/L	6	Standard
|	**Tl**	205	1050848.3	3.7	**24.7277**	0.114	0.5	ug/L	11	Standard
|	**Pb**	206	360347.7	3.8	**25.8519**	0.161	0.6	ug/L	301	Standard
|	**Pb**	207	309327.9	4.2	**26.6019**	0.269	1.0	ug/L	250	Standard
|	**Pb**	208	1431630.9	4.3	**26.0616**	0.293	1.1	ug/L	1166	Standard
|	**U**	238	708757.3	4.1	**23.6109**	0.232	1.0	ug/L	3	Standard
⌊>	**Bi**	209	433312.9	3.2				ug/L	454659	Standard
⌈	**Na**	23	115.0	26.1	**0.0033**	0.007	215.5	mg/L	137	Standard
|	**Mg**	24	1485.1	9.5	**0.0009**	0.000	25.2	mg/L	498	Standard

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	K	39	608.3	10.9	**0.0036**	0.005	144.1	mg/L	557	Standard
	Ca	43	73.3	30.7	**0.0813**	0.054	66.0	mg/L	52	Standard
	Fe	54	1237.2	1.7	**0.0576**	0.006	9.9	mg/L	865	Standard
	Fe	57	6166.3	6.5	**0.0017**	0.002	112.3	mg/L	6003	Standard
>	**Sc-1**	45	314124.8	1.1				mg/L	333080	Standard
	Cl	35	189060.4	1.6				ug/L	40103	Standard
	Kr	83	64.3	3.4				ug/L	67	Standard
	Br	81	14907.3	4.7				ug/L	15294	Standard
	P	31	104335.0	4.0				ug/L	74262	Standard
	S	34	842428.2	5.3				ug/L	787377	Standard
	Sr	88	1270.1	7.3				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		96.335	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		97.372	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		99.469	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		96.073	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: LCSW 41 WG397001-03
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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: LCSW 41 WG397001-03
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Method 6020 - Summary Report

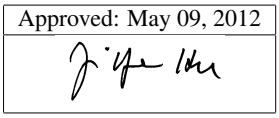
Sample ID: L1205004908 WG397001-01
Sample Date/Time: Tuesday, May 08, 2012 16:31:48
Number of Replicates: 3
Autosampler Position: 340
Sample Description: 1
Method File: C:\NexION Data\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	151244.6	1.6	**73011.0414**	1327.435	1.8	ug/L	17857	Standard
|	**Be**	9	10.0	50.0	**-0.0046**	0.001	25.1	ug/L	12	Standard
|	**Al**	27	48061.1	1.6	**1.7116**	0.076	4.5	ug/L	13328	Standard
⌊>	**Sc**	45	352197.3	1.8				ug/L	333080	Standard
⌈	**Ti**	47	1435.1	1.4	**0.7899**	0.005	0.6	ug/L	113	Standard
|	**V**	51	23137.0	2.2	**1.1162**	0.045	4.0	ug/L	4349	Standard
|	**Cr**	52	19091.7	3.0	**0.4846**	0.054	11.1	ug/L	14000	Standard
|	**Cr**	53	1712.6	14.1	**0.7400**	0.126	17.0	ug/L	319	Standard
|	**Mn**	55	6361451.2	1.6	**296.2125**	7.237	2.4	ug/L	1367	Standard
|	**Co**	59	6159.3	1.4	**0.3789**	0.010	2.6	ug/L	115	Standard
|	**Ni**	60	7644.9	1.9	**2.2653**	0.069	3.1	ug/L	76	Standard
|	**Cu**	65	17009.5	1.7	**5.7379**	0.163	2.8	ug/L	135	Standard
|	**Zn**	66	16402.5	1.7	**12.5130**	0.333	2.7	ug/L	185	Standard
| >	**Ge**	72	251851.8	1.1				ug/L	274929	Standard
|	**As**	75	1069.3	2.2	**0.9745**	0.015	1.5	ug/L	-262	Standard
|	**Se**	82	188.3	8.2	**1.0114**	0.089	8.8	ug/L	27	Standard
⌊	**Se-1**	77	159.3	9.4	**0.9089**	0.163	18.0	ug/L	94	Standard
	Ga	71	225087.6	0.6				mg/L	248575	Standard
⌈	**Rb**	85	6919.9	2.9				ug/L	15	Standard
| >	**Y**	89	242852.5	0.9				ug/L	267564	Standard
⌊	**Rh**	103	143.3	19.2				ug/L	2	Standard
⌈	**Mo**	98	2629.0	1.1	**0.5466**	0.015	2.8	ug/L	5	Standard
|	**Ag**	107	75.7	28.5	**-0.0005**	0.002	440.0	ug/L	44	Standard
|	**Cd**	111	552.7	1.5	**0.0148**	0.003	19.0	mg/L	512	Standard
|	**Cd**	114	1422.5	3.3	**0.0224**	0.006	27.8	ug/L	1247	Standard
| >	**In**	115	704065.0	2.2				ug/L	743274	Standard
|	**Sn**	118	1116.0	2.5	**0.0196**	0.003	13.8	ug/L	816	Standard
|	**Sb**	123	678.5	13.9	**0.0577**	0.010	16.5	ug/L	15	Standard
⌊	**Ba**	135	539429.3	1.7	**109.1682**	3.949	3.6	ug/L	37	Standard
⌈	**Ce**	140	217.3	7.1				ug/L	44	Standard
⌊>	**Tb**	159	779553.1	0.7				ug/L	826676	Standard
⌈	**Ho**	165	10.0	30.0				ug/L	12	Standard
|	**Tl**	203	951.0	3.6	**0.0571**	0.002	3.9	ug/L	6	Standard
|	**Tl**	205	2168.8	3.0	**0.0576**	0.002	2.8	ug/L	11	Standard
|	**Pb**	206	12829.4	1.3	**0.9768**	0.015	1.6	ug/L	301	Standard
|	**Pb**	207	10651.7	1.6	**0.9716**	0.016	1.6	ug/L	250	Standard
|	**Pb**	208	49700.8	1.0	**0.9600**	0.012	1.2	ug/L	1166	Standard
|	**U**	238	7664.6	1.2	**0.2802**	0.004	1.3	ug/L	3	Standard
⌊>	**Bi**	209	400273.0	0.2				ug/L	454659	Standard
⌈	**Na**	23	73581.6	1.8	**15.4722**	0.546	3.5	mg/L	137	Standard
|	**Mg**	24	2688714.5	3.6	**4.0086**	0.193	4.8	mg/L	498	Standard

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	K	39	10193.4	1.0	**0.6797**	0.020	3.0	mg/L	557	Standard
	Ca	43	20397.1	0.9	**42.5631**	0.899	2.1	mg/L	52	Standard
	Fe	54	1037.9	3.7	**0.0036**	0.004	103.0	mg/L	865	Standard
	Fe	57	35869.1	2.8	**0.1397**	0.007	4.8	mg/L	6003	Standard
>	**Sc-1**	45	352197.3	1.8				mg/L	333080	Standard
	Cl	35	1470113.3	1.5				ug/L	40103	Standard
	Kr	83	58.3	12.9				ug/L	67	Standard
	Br	81	82192.4	1.8				ug/L	15294	Standard
	P	31	72644.6	0.7				ug/L	74262	Standard
	S	34	1760597.2	2.0				ug/L	787377	Standard
	Sr	88	4023249.7	0.9				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		91.606	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		90.764	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		94.725	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		94.300	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	88.038
	Na	23	
	Mg	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	

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Method 6020 - Summary Report

Sample ID: L1205004908S WG397001-04

Sample Date/Time: Tuesday, May 08, 2012 16:34:40
Number of Replicates: 3
Autosampler Position: 341
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	143127.2	4.8	**74505.4296**	2174.490	2.9	ug/L	17857	Standard
|	**Be**	9	89780.2	1.2	**22.8041**	1.400	6.1	ug/L	12	Standard
|	**Al**	27	489011.5	2.0	**25.7374**	1.426	5.5	ug/L	13328	Standard
⌊>	**Sc**	45	327630.2	6.3				ug/L	333080	Standard
⌈	**Ti**	47	1389.7	6.3	**0.7972**	0.041	5.2	ug/L	113	Standard
|	**V**	51	431350.9	2.6	**25.9690**	1.135	4.4	ug/L	4349	Standard
|	**Cr**	52	322440.1	2.4	**25.6979**	1.300	5.1	ug/L	14000	Standard
|	**Cr**	53	47832.1	3.9	**25.6520**	0.484	1.9	ug/L	319	Standard
|	**Mn**	55	6640242.2	3.9	**322.1645**	11.485	3.6	ug/L	1367	Standard
|	**Co**	59	378899.6	2.9	**24.6409**	0.669	2.7	ug/L	115	Standard
|	**Ni**	60	84101.0	3.5	**26.1771**	0.480	1.8	ug/L	76	Standard
|	**Cu**	65	84443.5	3.5	**29.8642**	0.774	2.6	ug/L	135	Standard
|	**Zn**	66	47258.0	3.6	**37.8518**	1.551	4.1	ug/L	185	Standard
|>	**Ge**	72	241869.9	5.1				ug/L	274929	Standard
|	**As**	75	33894.2	2.9	**26.6963**	0.616	2.3	ug/L	-262	Standard
|	**Se**	82	3729.4	3.5	**25.0491**	0.423	1.7	ug/L	27	Standard
⌊	**Se-1**	77	2326.8	1.7	**27.0905**	1.044	3.9	ug/L	94	Standard
	Ga	71	213218.4	4.8				mg/L	248575	Standard
⌈	**Rb**	85	6666.5	4.1				ug/L	15	Standard
|>	**Y**	89	229414.3	2.1				ug/L	267564	Standard
⌊	**Rh**	103	116.7	8.9				ug/L	2	Standard
⌈	**Mo**	98	2513.5	1.4	**0.5461**	0.016	2.9	ug/L	5	Standard
|	**Ag**	107	163133.9	2.7	**16.3799**	0.240	1.5	ug/L	44	Standard
|	**Cd**	111	114822.8	1.4	**25.3469**	0.870	3.4	mg/L	512	Standard
|	**Cd**	114	298560.2	1.5	**25.9716**	0.897	3.5	ug/L	1247	Standard
|>	**In**	115	674069.9	4.2				ug/L	743274	Standard
|	**Sn**	118	1448.1	2.7	**0.0438**	0.005	11.7	ug/L	816	Standard
|	**Sb**	123	283090.4	1.8	**25.7790**	0.844	3.3	ug/L	15	Standard
⌊	**Ba**	135	633680.2	2.2	**133.9865**	4.310	3.2	ug/L	37	Standard
⌈	**Ce**	140	206.3	6.2				ug/L	44	Standard
⌊>	**Tb**	159	748035.4	4.4				ug/L	826676	Standard
⌈	**Ho**	165	12.0	25.0				ug/L	12	Standard
|	**Tl**	203	400497.2	3.6	**25.8615**	0.135	0.5	ug/L	6	Standard
|	**Tl**	205	936353.8	2.9	**24.6691**	0.452	1.8	ug/L	11	Standard
|	**Pb**	206	327386.9	1.7	**26.3047**	0.631	2.4	ug/L	301	Standard
|	**Pb**	207	281797.3	1.9	**27.1454**	0.783	2.9	ug/L	250	Standard
|	**Pb**	208	1298131.2	2.1	**26.4689**	0.706	2.7	ug/L	1166	Standard
|	**U**	238	655801.6	1.4	**24.4787**	1.002	4.1	ug/L	3	Standard
⌊>	**Bi**	209	387191.8	4.0				ug/L	454659	Standard
⌈	**Na**	23	70957.5	2.4	**16.0746**	1.042	6.5	mg/L	137	Standard
|	**Mg**	24	2627612.5	2.1	**4.2191**	0.244	5.8	mg/L	498	Standard

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	K	39	9544.7	1.8	**0.6856**	0.034	4.9	mg/L	557	Standard
	Ca	43	20450.5	3.3	**46.0296**	3.914	8.5	mg/L	52	Standard
	Fe	54	1049.5	3.0	**0.0178**	0.007	36.5	mg/L	865	Standard
	Fe	57	33928.0	2.9	**0.1428**	0.010	7.2	mg/L	6003	Standard
>	**Sc-1**	45	327630.2	6.3				mg/L	333080	Standard
	Cl	35	1329096.5	2.8				ug/L	40103	Standard
	Kr	83	54.9	6.7				ug/L	67	Standard
	Br	81	79857.4	1.8				ug/L	15294	Standard
	P	31	65130.8	5.8				ug/L	74262	Standard
	S	34	1689927.2	3.9				ug/L	787377	Standard
	Sr	88	3728228.5	1.9				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		87.975	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		85.742	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		90.689	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		90.487	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	85.161
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Ba 135 Upper, S, EEE	Ba	135	

Approved: May 09, 2012

Method 6020 - Summary Report

Sample ID: L1205004908SD WG397001-05

Sample Date/Time: Tuesday, May 08, 2012 16:37:33
Number of Replicates: 3
Autosampler Position: 342
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	146190.3	1.2	**75304.8018**	1300.869	1.7	ug/L	17857	Standard
|	**Be**	9	90392.2	2.1	**22.6484**	0.407	1.8	ug/L	12	Standard
|	**Al**	27	582747.9	2.0	**30.3909**	0.523	1.7	ug/L	13328	Standard
⌊>	**Sc**	45	331270.6	0.4				ug/L	333080	Standard
⌈	**Ti**	47	2025.8	5.0	**1.1918**	0.051	4.3	ug/L	113	Standard
|	**V**	51	435440.1	2.8	**26.3574**	0.423	1.6	ug/L	4349	Standard
|	**Cr**	52	319556.9	2.4	**25.5948**	0.345	1.3	ug/L	14000	Standard
|	**Cr**	53	48207.4	1.2	**26.0163**	0.062	0.2	ug/L	319	Standard
|	**Mn**	55	6645033.3	3.6	**324.2431**	7.948	2.5	ug/L	1367	Standard
|	**Co**	59	382264.8	2.3	**25.0034**	0.305	1.2	ug/L	115	Standard
|	**Ni**	60	85447.5	3.5	**26.7553**	0.640	2.4	ug/L	76	Standard
|	**Cu**	65	84693.1	1.7	**30.1328**	0.266	0.9	ug/L	135	Standard
|	**Zn**	66	48116.7	2.7	**38.7590**	0.684	1.8	ug/L	185	Standard
| >	**Ge**	72	240256.4	1.2				ug/L	274929	Standard
|	**As**	75	34059.1	1.9	**26.9823**	0.219	0.8	ug/L	-262	Standard
|	**Se**	82	3767.5	3.3	**25.4606**	0.613	2.4	ug/L	27	Standard
⌊	**Se-1**	77	2400.5	2.8	**28.1320**	0.479	1.7	ug/L	94	Standard
	Ga	71	214163.6	0.3				mg/L	248575	Standard
⌈	**Rb**	85	6944.9	1.8				ug/L	15	Standard
| >	**Y**	89	228644.8	2.8				ug/L	267564	Standard
⌊	**Rh**	103	101.7	27.1				ug/L	2	Standard
⌈	**Mo**	98	2464.1	5.0	**0.5304**	0.028	5.3	ug/L	5	Standard
|	**Ag**	107	204694.1	3.3	**20.3623**	0.673	3.3	ug/L	44	Standard
|	**Cd**	111	116083.2	2.5	**25.3734**	0.703	2.8	mg/L	512	Standard
|	**Cd**	114	299646.2	2.1	**25.8100**	0.639	2.5	ug/L	1247	Standard
| >	**In**	115	680196.2	1.1				ug/L	743274	Standard
|	**Sn**	118	1454.1	1.4	**0.0432**	0.001	3.2	ug/L	816	Standard
|	**Sb**	123	286087.2	1.3	**25.7980**	0.438	1.7	ug/L	15	Standard
⌊	**Ba**	135	636893.2	2.0	**133.3580**	2.715	2.0	ug/L	37	Standard
⌈	**Ce**	140	1862.8	5.5				ug/L	44	Standard
⌊>	**Tb**	159	757710.9	2.1				ug/L	826676	Standard
⌈	**Ho**	165	20.0	15.0				ug/L	12	Standard
|	**Tl**	203	402880.3	2.2	**25.9691**	0.264	1.0	ug/L	6	Standard
|	**Tl**	205	944201.7	1.4	**24.8269**	0.189	0.8	ug/L	11	Standard
|	**Pb**	206	329774.4	2.0	**26.4365**	0.316	1.2	ug/L	301	Standard
|	**Pb**	207	282754.8	2.1	**27.1734**	0.320	1.2	ug/L	250	Standard
|	**Pb**	208	1304895.8	2.4	**26.5456**	0.411	1.5	ug/L	1166	Standard
|	**U**	238	656679.9	2.6	**24.4453**	0.474	1.9	ug/L	3	Standard
⌊>	**Bi**	209	387824.6	1.3				ug/L	454659	Standard
⌈	**Na**	23	69664.9	3.7	**15.5665**	0.518	3.3	mg/L	137	Standard
|	**Mg**	24	2618333.4	1.8	**4.1483**	0.060	1.4	mg/L	498	Standard

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	K	39	9858.2	1.1	**0.6998**	0.006	0.8	mg/L	557	Standard
	Ca	43	20188.4	1.6	**44.7842**	0.782	1.7	mg/L	52	Standard
	Fe	54	1017.0	7.6	**0.0104**	0.013	128.8	mg/L	865	Standard
	Fe	57	34654.6	4.1	**0.1442**	0.007	4.5	mg/L	6003	Standard
>	**Sc-1**	45	331270.6	0.4				mg/L	333080	Standard
	Cl	35	1354233.8	1.2				ug/L	40103	Standard
	Kr	83	56.8	6.4				ug/L	67	Standard
	Br	81	86419.9	1.0				ug/L	15294	Standard
	P	31	69395.5	4.7				ug/L	74262	Standard
	S	34	1725924.9	2.0				ug/L	787377	Standard
	Sr	88	3740245.7	5.6				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		87.389	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		85.454	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		91.513	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		91.658	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1205004908SD WG397001-05
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	85.300
	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
Mn 55 Upper, S, EEE	Mn	55	
Ba 135 Upper, S, EEE	Ba	135	

Approved: May 09, 2012

Method 6020 - Summary Report

Sample ID: L1205004902
Sample Date/Time: Tuesday, May 08, 2012 16:40:26
Number of Replicates: 3
Autosampler Position: 343
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	252525.6	3.7	**136423.9155**	1045.409	0.8	ug/L	17857	Standard
|	**Be**	9	18.3	41.7	**-0.0023**	0.002	84.9	ug/L	12	Standard
|	**Al**	27	61802.7	5.6	**2.5710**	0.074	2.9	ug/L	13328	Standard
⌊>	**Sc**	45	333755.5	4.4				ug/L	333080	Standard
⌈	**Ti**	47	1621.1	6.4	**0.9128**	0.034	3.7	ug/L	113	Standard
|	**V**	51	15272.2	5.2	**0.6713**	0.022	3.3	ug/L	4349	Standard
|	**Cr**	52	17812.8	4.4	**0.4046**	0.025	6.2	ug/L	14000	Standard
|	**Cr**	53	1177.5	9.9	**0.4715**	0.043	9.2	ug/L	319	Standard
|	**Mn**	55	5126392.2	4.5	**242.3541**	4.822	2.0	ug/L	1367	Standard
|	**Co**	59	6063.2	5.1	**0.3787**	0.008	2.2	ug/L	115	Standard
|	**Ni**	60	23811.4	4.6	**7.2088**	0.167	2.3	ug/L	76	Standard
|	**Cu**	65	40471.1	4.9	**13.9240**	0.318	2.3	ug/L	135	Standard
|	**Zn**	66	16456.6	3.4	**12.7518**	0.159	1.2	ug/L	185	Standard
|>	**Ge**	72	247941.3	2.9				ug/L	274929	Standard
|	**As**	75	2157.8	5.1	**1.8169**	0.047	2.6	ug/L	-262	Standard
|	**Se**	82	147.1	5.6	**0.7584**	0.035	4.6	ug/L	27	Standard
⌊	**Se-1**	77	114.7	12.0	**0.4147**	0.162	39.1	ug/L	94	Standard
	Ga	71	220132.1	4.2				mg/L	248575	Standard
⌈	**Rb**	85	7623.6	6.2				ug/L	15	Standard
|>	**Y**	89	235953.3	1.4				ug/L	267564	Standard
⌊	**Rh**	103	150.0	41.6				ug/L	2	Standard
⌈	**Mo**	98	5570.7	6.3	**1.1727**	0.053	4.5	ug/L	5	Standard
|	**Ag**	107	60.7	6.9	**-0.0019**	0.000	17.0	ug/L	44	Standard
|	**Cd**	111	574.4	4.0	**0.0217**	0.004	16.3	mg/L	512	Standard
|	**Cd**	114	1475.8	4.0	**0.0291**	0.003	9.9	ug/L	1247	Standard
|>	**In**	115	690774.4	1.8				ug/L	743274	Standard
|	**Sn**	118	1391.4	4.5	**0.0379**	0.003	6.8	ug/L	816	Standard
|	**Sb**	123	375.5	4.1	**0.0318**	0.002	5.8	ug/L	15	Standard
⌊	**Ba**	135	371687.6	3.6	**76.6115**	1.427	1.9	ug/L	37	Standard
⌈	**Ce**	140	336.0	12.4				ug/L	44	Standard
⌊>	**Tb**	159	765899.4	2.4				ug/L	826676	Standard
⌈	**Ho**	165	18.0	38.9				ug/L	12	Standard
|	**Tl**	203	557.7	5.6	**0.0329**	0.002	5.0	ug/L	6	Standard
|	**Tl**	205	1268.4	7.2	**0.0350**	0.002	5.5	ug/L	11	Standard
|	**Pb**	206	16920.5	3.9	**1.3088**	0.010	0.8	ug/L	301	Standard
|	**Pb**	207	14255.0	4.6	**1.3213**	0.021	1.6	ug/L	250	Standard
|	**Pb**	208	66172.6	4.6	**1.2986**	0.020	1.5	ug/L	1166	Standard
|	**U**	238	13520.7	3.8	**0.4966**	0.003	0.7	ug/L	3	Standard
⌊>	**Bi**	209	395987.7	3.1				ug/L	454659	Standard
⌈	**Na**	23	49532.5	1.3	**10.9899**	0.358	3.3	mg/L	137	Standard
|	**Mg**	24	3584134.1	5.7	**5.6355**	0.146	2.6	mg/L	498	Standard

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	K	39	14480.3	2.2	**1.0419**	0.042	4.0	mg/L	557	Standard
	Ca	43	21241.6	5.1	**46.7692**	1.024	2.2	mg/L	52	Standard
	Fe	54	6723.1	3.6	**0.9396**	0.046	4.9	mg/L	865	Standard
	Fe	57	218504.4	4.2	**1.0667**	0.018	1.7	mg/L	6003	Standard
>	**Sc-1**	45	333755.5	4.4				mg/L	333080	Standard
	Cl	35	691736.5	3.4				ug/L	40103	Standard
	Kr	83	54.9	8.0				ug/L	67	Standard
	Br	81	63335.5	2.0				ug/L	15294	Standard
	P	31	126478.2	4.8				ug/L	74262	Standard
	S	34	1662705.1	4.1				ug/L	787377	Standard
	Sr	88	5185225.6	6.6				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		90.184	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		88.186	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		92.937	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		92.648	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1205004902
Report Date/Time: Tuesday, May 08, 2012 16:42:58
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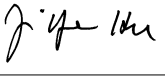
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	87.096
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

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: L1205004903
Sample Date/Time: Tuesday, May 08, 2012 16:43:17
Number of Replicates: 3
Autosampler Position: 344
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	246699.6	2.4	**118684.1701**	2357.341	2.0	ug/L	17857	Standard
|	**Be**	9	16.7	62.4	**-0.0032**	0.002	73.4	ug/L	12	Standard
|	**Al**	27	123766.2	5.8	**5.1955**	0.267	5.1	ug/L	13328	Standard
⌊>	**Sc**	45	370850.8	1.3				ug/L	333080	Standard
⌈	**Ti**	47	1988.5	6.1	**1.0859**	0.087	8.0	ug/L	113	Standard
|	**V**	51	6742.3	7.7	**0.1510**	0.025	16.7	ug/L	4349	Standard
|	**Cr**	52	49192.4	2.4	**2.7823**	0.033	1.2	ug/L	14000	Standard
|	**Cr**	53	6397.2	3.5	**3.0842**	0.063	2.0	ug/L	319	Standard
|	**Mn**	55	7728823.4	3.1	**351.0644**	5.281	1.5	ug/L	1367	Standard
|	**Co**	59	6852.2	4.2	**0.4117**	0.011	2.6	ug/L	115	Standard
|	**Ni**	60	16089.5	2.8	**4.6724**	0.060	1.3	ug/L	76	Standard
|	**Cu**	65	1930.1	2.0	**0.5951**	0.020	3.4	ug/L	135	Standard
|	**Zn**	66	6937.6	3.0	**5.0804**	0.099	1.9	ug/L	185	Standard
|>	**Ge**	72	258104.5	1.6				ug/L	274929	Standard
|	**As**	75	3922.0	3.1	**3.0450**	0.044	1.5	ug/L	-262	Standard
|	**Se**	82	311.8	4.5	**1.7656**	0.077	4.3	ug/L	27	Standard
⌊	**Se-1**	77	186.3	11.3	**1.1684**	0.224	19.2	ug/L	94	Standard
	Ga	71	233273.0	1.7				mg/L	248575	Standard
⌈	**Rb**	85	11589.5	8.6				ug/L	15	Standard
|>	**Y**	89	256279.3	0.6				ug/L	267564	Standard
⌊	**Rh**	103	260.0	8.4				ug/L	2	Standard
⌈	**Mo**	98	1545.7	2.6	**0.3197**	0.010	3.0	ug/L	5	Standard
|	**Ag**	107	62.3	18.6	**-0.0019**	0.001	54.6	ug/L	44	Standard
|	**Cd**	111	734.7	2.3	**0.0515**	0.005	10.6	mg/L	512	Standard
|	**Cd**	114	1861.4	1.9	**0.0570**	0.002	3.6	ug/L	1247	Standard
|>	**In**	115	713134.6	1.2				ug/L	743274	Standard
|	**Sn**	118	1319.7	3.8	**0.0309**	0.003	8.6	ug/L	816	Standard
|	**Sb**	123	355.6	9.1	**0.0290**	0.003	8.7	ug/L	15	Standard
⌊	**Ba**	135	365878.7	2.5	**73.0578**	0.903	1.2	ug/L	37	Standard
⌈	**Ce**	140	360.0	4.3				ug/L	44	Standard
⌊>	**Tb**	159	803636.1	0.7				ug/L	826676	Standard
⌈	**Ho**	165	11.0	24.1				ug/L	12	Standard
|	**Tl**	203	747.7	3.4	**0.0450**	0.001	1.8	ug/L	6	Standard
|	**Tl**	205	1725.4	2.0	**0.0470**	0.001	3.1	ug/L	11	Standard
|	**Pb**	206	3021.3	1.3	**0.2178**	0.003	1.3	ug/L	301	Standard
|	**Pb**	207	2445.9	5.4	**0.2103**	0.012	5.7	ug/L	250	Standard
|	**Pb**	208	11421.7	2.3	**0.2082**	0.004	2.0	ug/L	1166	Standard
|	**U**	238	3747.5	1.3	**0.1410**	0.003	2.1	ug/L	3	Standard
⌊>	**Bi**	209	394418.7	2.0				ug/L	454659	Standard
⌈	**Na**	23	72019.1	1.6	**14.3777**	0.401	2.8	mg/L	137	Standard
|	**Mg**	24	3829895.9	4.1	**5.4203**	0.190	3.5	mg/L	498	Standard

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	K	39	22106.1	1.9	**1.4468**	0.014	0.9	mg/L	557	Standard
	Ca	43	34574.4	3.4	**68.5465**	1.492	2.2	mg/L	52	Standard
	Fe	54	15832.6	4.3	**2.1643**	0.072	3.3	mg/L	865	Standard
	Fe	57	498594.8	3.7	**2.2230**	0.078	3.5	mg/L	6003	Standard
>	**Sc-1**	45	370850.8	1.3				mg/L	333080	Standard
	Cl	35	2127919.4	1.1				ug/L	40103	Standard
	Kr	83	62.1	7.1				ug/L	67	Standard
	Br	81	145338.8	0.5				ug/L	15294	Standard
	P	31	106246.6	3.9				ug/L	74262	Standard
	S	34	2622693.1	2.8				ug/L	787377	Standard
	Sr	88	8086169.0	5.5				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		93.880	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		95.782	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		95.945	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		97.213	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

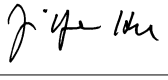
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	86.750
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: May 09, 2012



Method 6020 - Summary Report

Sample ID: L1205004903PS WG397387-01

Sample Date/Time: Tuesday, May 08, 2012 16:46:10
Number of Replicates: 3
Autosampler Position: 345
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	264730.0	2.1	**124526.7103**	7142.846	5.7	ug/L	17857	Standard
|	**Be**	9	146849.9	0.3	**32.0071**	1.065	3.3	ug/L	12	Standard
|	**Al**	27	859284.7	2.8	**39.1671**	1.361	3.5	ug/L	13328	Standard
⌊>	**Sc**	45	381163.7	3.5				ug/L	333080	Standard
⌈	**Ti**	47	2022.8	1.2	**1.0736**	0.021	1.9	ug/L	113	Standard
|	**V**	51	734788.9	1.0	**40.4159**	0.405	1.0	ug/L	4349	Standard
|	**Cr**	52	588652.2	1.1	**43.4058**	0.824	1.9	ug/L	14000	Standard
|	**Cr**	53	87753.4	0.8	**42.9924**	0.107	0.2	ug/L	319	Standard
|	**Mn**	55	9168871.1	0.7	**405.3510**	3.003	0.7	ug/L	1367	Standard
|	**Co**	59	662114.1	0.9	**39.2381**	0.640	1.6	ug/L	115	Standard
|	**Ni**	60	151742.1	0.9	**43.0595**	0.494	1.1	ug/L	76	Standard
|	**Cu**	65	117983.9	0.6	**38.0367**	0.247	0.6	ug/L	135	Standard
|	**Zn**	66	57233.6	0.6	**41.7751**	0.160	0.4	ug/L	185	Standard
|>	**Ge**	72	265242.6	0.8				ug/L	274929	Standard
|	**As**	75	58970.4	0.3	**42.2229**	0.300	0.7	ug/L	-262	Standard
|	**Se**	82	6243.7	1.7	**38.3308**	0.499	1.3	ug/L	27	Standard
⌊	**Se-1**	77	3623.1	1.3	**38.8112**	0.828	2.1	ug/L	94	Standard
	Ga	71	238158.2	0.5				mg/L	248575	Standard
⌈	**Rb**	85	13010.6	1.9				ug/L	15	Standard
|>	**Y**	89	259759.6	1.2				ug/L	267564	Standard
⌊	**Rh**	103	306.7	13.9				ug/L	2	Standard
⌈	**Mo**	98	1795.9	1.3	**0.3600**	0.003	0.8	ug/L	5	Standard
|	**Ag**	107	376312.3	1.6	**34.6885**	0.836	2.4	ug/L	44	Standard
|	**Cd**	111	191482.7	1.0	**38.8290**	0.652	1.7	mg/L	512	Standard
|	**Cd**	114	484027.4	0.4	**38.6699**	0.324	0.8	ug/L	1247	Standard
|>	**In**	115	734210.4	0.8				ug/L	743274	Standard
|	**Sn**	118	1686.8	1.8	**0.0501**	0.001	2.2	ug/L	816	Standard
|	**Sb**	123	459375.0	0.1	**38.3758**	0.292	0.8	ug/L	15	Standard
⌊	**Ba**	135	590980.2	0.4	**114.6380**	0.973	0.8	ug/L	37	Standard
⌈	**Ce**	140	392.3	4.3				ug/L	44	Standard
⌊>	**Tb**	159	831375.6	0.8				ug/L	826676	Standard
⌈	**Ho**	165	15.0	30.6				ug/L	12	Standard
|	**Tl**	203	669237.6	0.8	**41.2246**	0.065	0.2	ug/L	6	Standard
|	**Tl**	205	1564813.3	0.7	**39.3151**	0.086	0.2	ug/L	11	Standard
|	**Pb**	206	527863.9	0.5	**40.4483**	0.212	0.5	ug/L	301	Standard
|	**Pb**	207	451955.1	1.1	**41.5162**	0.191	0.5	ug/L	250	Standard
|	**Pb**	208	2081917.6	0.6	**40.4837**	0.166	0.4	ug/L	1166	Standard
|	**U**	238	1121100.3	0.7	**39.8792**	0.304	0.8	ug/L	3	Standard
⌊>	**Bi**	209	405860.8	0.7				ug/L	454659	Standard
⌈	**Na**	23	75008.6	1.4	**14.5800**	0.609	4.2	mg/L	137	Standard
|	**Mg**	24	4081155.3	3.0	**5.6221**	0.138	2.5	mg/L	498	Standard

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	K	39	23259.5	0.6	**1.4837**	0.062	4.2	mg/L	557	Standard
	Ca	43	36413.7	1.9	**70.3383**	3.684	5.2	mg/L	52	Standard
	Fe	54	16758.3	2.0	**2.2363**	0.105	4.7	mg/L	865	Standard
	Fe	57	534373.0	1.5	**2.3223**	0.120	5.1	mg/L	6003	Standard
>	**Sc-1**	45	381163.7	3.5				mg/L	333080	Standard
	Cl	35	2233288.6	0.4				ug/L	40103	Standard
	Kr	83	64.7	6.8				ug/L	67	Standard
	Br	81	152750.3	0.7				ug/L	15294	Standard
	P	31	109524.5	1.4				ug/L	74262	Standard
	S	34	2678813.0	1.6				ug/L	787377	Standard
	Sr	88	8386894.2	2.3				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		96.477	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		97.083	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		98.781	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		100.568	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1205004903PS WG397387-01
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	89.267
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Ba 135 Upper, S, EEE	Ba	135	

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Method 6020 - Summary Report

Sample ID: L1205004903SDL WG397387-02

Sample Date/Time: Tuesday, May 08, 2012 16:49:03
Number of Replicates: 3
Autosampler Position: 346
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	51836.9	1.8	**28089.5524**	140.812	0.5	ug/L	17857	Standard
|	**Be**	9	16.7	96.4	**-0.0017**	0.005	292.2	ug/L	12	Standard
|	**Al**	27	49479.0	3.0	**2.6326**	0.052	2.0	ug/L	13328	Standard
⌊>	**Sc**	45	262298.0	1.7				ug/L	333080	Standard
⌈	**Ti**	47	386.7	1.3	**0.2031**	0.007	3.5	ug/L	113	Standard
|	**V**	51	4102.8	3.6	**0.0340**	0.010	30.7	ug/L	4349	Standard
|	**Cr**	52	16910.8	0.2	**0.4633**	0.036	7.9	ug/L	14000	Standard
|	**Cr**	53	1509.2	6.6	**0.7225**	0.049	6.8	ug/L	319	Standard
|	**Mn**	55	1380044.6	2.7	**71.4522**	0.130	0.2	ug/L	1367	Standard
|	**Co**	59	1196.0	2.9	**0.0775**	0.001	1.1	ug/L	115	Standard
|	**Ni**	60	2675.6	3.2	**0.8692**	0.008	0.9	ug/L	76	Standard
|	**Cu**	65	474.7	5.1	**0.1342**	0.006	4.1	ug/L	135	Standard
|	**Zn**	66	3575.8	1.7	**2.9310**	0.127	4.3	ug/L	185	Standard
| >	**Ge**	72	226306.9	2.5				ug/L	274929	Standard
|	**As**	75	655.4	1.8	**0.7195**	0.019	2.6	ug/L	-262	Standard
|	**Se**	82	71.5	9.5	**0.3058**	0.060	19.7	ug/L	27	Standard
⌊	**Se-1**	77	83.3	3.5	**0.1412**	0.063	44.7	ug/L	94	Standard
	Ga	71	194259.4	2.0				mg/L	248575	Standard
⌈	**Rb**	85	1913.5	7.8				ug/L	15	Standard
| >	**Y**	89	215201.0	1.3				ug/L	267564	Standard
⌊	**Rh**	103	26.7	28.6				ug/L	2	Standard
⌈	**Mo**	98	271.9	5.4	**0.0669**	0.003	4.2	ug/L	5	Standard
|	**Ag**	107	61.3	18.9	**-0.0013**	0.001	100.5	ug/L	44	Standard
|	**Cd**	111	222.2	4.8	**-0.0510**	0.003	5.0	mg/L	512	Standard
|	**Cd**	114	622.5	8.3	**-0.0398**	0.004	10.1	ug/L	1247	Standard
| >	**In**	115	645102.5	2.4				ug/L	743274	Standard
|	**Sn**	118	614.7	5.5	**-0.0075**	0.003	41.7	ug/L	816	Standard
|	**Sb**	123	807.0	26.6	**0.0749**	0.018	24.6	ug/L	15	Standard
⌊	**Ba**	135	67040.0	2.1	**14.7950**	0.046	0.3	ug/L	37	Standard
⌈	**Ce**	140	135.7	6.7				ug/L	44	Standard
⌊>	**Tb**	159	704635.3	1.7				ug/L	826676	Standard
⌈	**Ho**	165	8.7	17.6				ug/L	12	Standard
|	**Tl**	203	491.0	6.8	**0.0293**	0.003	10.1	ug/L	6	Standard
|	**Tl**	205	1123.0	2.0	**0.0319**	0.001	4.3	ug/L	11	Standard
|	**Pb**	206	791.0	5.7	**0.0429**	0.004	9.1	ug/L	301	Standard
|	**Pb**	207	664.7	6.8	**0.0429**	0.005	12.6	ug/L	250	Standard
|	**Pb**	208	3056.5	2.5	**0.0417**	0.003	6.0	ug/L	1166	Standard
|	**U**	238	738.7	9.5	**0.0313**	0.002	7.6	ug/L	3	Standard
⌊>	**Bi**	209	388414.5	2.7				ug/L	454659	Standard
⌈	**Na**	23	13069.0	2.9	**3.6698**	0.047	1.3	mg/L	137	Standard
|	**Mg**	24	641382.3	1.4	**1.2823**	0.011	0.8	mg/L	498	Standard

Sample ID: L1205004903SDL WG397387-02
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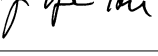
Approved: May 09, 2012

	K	39	4595.7	2.7	**0.3936**	0.013	3.2	mg/L	557	Standard
	Ca	43	6676.5	1.8	**18.6515**	0.044	0.2	mg/L	52	Standard
	Fe	54	3057.1	3.9	**0.4770**	0.015	3.1	mg/L	865	Standard
	Fe	57	94830.9	0.9	**0.5751**	0.012	2.2	mg/L	6003	Standard
>	**Sc-1**	45	262298.0	1.7				mg/L	333080	Standard
	Cl	35	508333.4	3.4				ug/L	40103	Standard
	Kr	83	51.0	3.9				ug/L	67	Standard
	Br	81	35001.3	6.4				ug/L	15294	Standard
	P	31	32018.0	4.7				ug/L	74262	Standard
	S	34	1079619.4	2.5				ug/L	787377	Standard
	Sr	88	1339693.3	1.0				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		82.315	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		80.430	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		86.792	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		85.237	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	85.430
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: May 09, 2012

Method 6020 - Summary Report

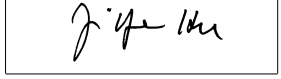
Sample ID: QC Std 6
Sample Date/Time: Tuesday, May 08, 2012 16:51:58
Number of Replicates: 3
Autosampler Position: 101
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	14245.0	6.1	**-547.4903**	288.761	52.7	ug/L	17857	Standard
|	**Be**	9	173414.4	6.3	**50.3342**	0.772	1.5	ug/L	12	Standard
|	**Al**	27	884594.3	6.3	**53.9642**	0.729	1.4	ug/L	13328	Standard
⌊>	**Sc**	45	285993.5	6.0				ug/L	333080	Standard
⌈	**Ti**	47	163177.4	5.5	**96.6528**	3.178	3.3	ug/L	113	Standard
|	**V**	51	833635.0	3.9	**49.0559**	0.816	1.7	ug/L	4349	Standard
|	**Cr**	52	626283.5	4.5	**49.4892**	1.094	2.2	ug/L	14000	Standard
|	**Cr**	53	92217.9	6.0	**48.2889**	1.740	3.6	ug/L	319	Standard
|	**Mn**	55	1067896.6	4.5	**50.3983**	1.161	2.3	ug/L	1367	Standard
|	**Co**	59	763517.5	4.8	**48.3506**	1.153	2.4	ug/L	115	Standard
|	**Ni**	60	161778.7	4.0	**49.0659**	0.815	1.7	ug/L	76	Standard
|	**Cu**	65	143900.6	5.1	**49.5854**	1.358	2.7	ug/L	135	Standard
|	**Zn**	66	64631.4	3.8	**50.4494**	0.764	1.5	ug/L	185	Standard
| >	**Ge**	72	248112.8	2.5				ug/L	274929	Standard
|	**As**	75	64416.8	4.2	**49.2621**	0.871	1.8	ug/L	-262	Standard
|	**Se**	82	7106.1	4.0	**46.6719**	0.717	1.5	ug/L	27	Standard
⌊	**Se-1**	77	4564.7	2.8	**52.5874**	0.267	0.5	ug/L	94	Standard
	Ga	71	220670.6	3.9				mg/L	248575	Standard
⌈	**Rb**	85	1205.0	4.4				ug/L	15	Standard
| >	**Y**	89	238345.4	1.7				ug/L	267564	Standard
⌊	**Rh**	103	33.3	22.9				ug/L	2	Standard
⌈	**Mo**	98	440574.2	3.9	**92.2721**	1.415	1.5	ug/L	5	Standard
|	**Ag**	107	456353.7	3.7	**44.6796**	0.689	1.5	ug/L	44	Standard
|	**Cd**	111	230733.2	3.1	**49.7258**	0.331	0.7	mg/L	512	Standard
|	**Cd**	114	601081.9	3.4	**51.0376**	0.514	1.0	ug/L	1247	Standard
| >	**In**	115	691104.3	2.4				ug/L	743274	Standard
|	**Sn**	118	789065.7	3.8	**48.8399**	0.688	1.4	ug/L	816	Standard
|	**Sb**	123	562271.3	3.4	**49.8915**	0.530	1.1	ug/L	15	Standard
⌊	**Ba**	135	237916.6	3.1	**49.0193**	0.493	1.0	ug/L	37	Standard
⌈	**Ce**	140	890.7	3.0				ug/L	44	Standard
⌊>	**Tb**	159	759014.3	2.8				ug/L	826676	Standard
⌈	**Ho**	165	21.7	9.6				ug/L	12	Standard
|	**Tl**	203	822508.3	2.8	**49.7859**	0.201	0.4	ug/L	6	Standard
|	**Tl**	205	1907074.2	2.9	**47.0802**	0.243	0.5	ug/L	11	Standard
|	**Pb**	206	655674.2	3.1	**49.3701**	0.404	0.8	ug/L	301	Standard
|	**Pb**	207	547665.8	3.2	**49.4350**	0.433	0.9	ug/L	250	Standard
|	**Pb**	208	2569127.2	3.0	**49.0917**	0.321	0.7	ug/L	1166	Standard
|	**U**	238	1303816.3	4.6	**45.5599**	1.110	2.4	ug/L	3	Standard
⌊>	**Bi**	209	413015.3	2.4				ug/L	454659	Standard
⌈	**Na**	23	20527.2	1.1	**5.3112**	0.346	6.5	mg/L	137	Standard
|	**Mg**	24	2942876.3	4.2	**5.4050**	0.095	1.8	mg/L	498	Standard

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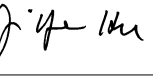
	K	39	64301.2	2.9	**5.5898**	0.227	4.1	mg/L	557	Standard
	Ca	43	2341.8	13.2	**5.9228**	0.444	7.5	mg/L	52	Standard
	Fe	54	32727.7	5.7	**6.0666**	0.057	0.9	mg/L	865	Standard
	Fe	57	969563.1	4.6	**5.6567**	0.130	2.3	mg/L	6003	Standard
>	**Sc-1**	45	285993.5	6.0				mg/L	333080	Standard
	Cl	35	121383.0	5.8				ug/L	40103	Standard
	Kr	83	55.7	4.1				ug/L	67	Standard
	Br	81	14012.3	7.0				ug/L	15294	Standard
	P	31	76765.3	5.9				ug/L	74262	Standard
	S	34	852340.8	4.8				ug/L	787377	Standard
	Sr	88	900.0	15.6				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	107.928		
>	Sc	45			
	Ti	47	96.653		
	V	51	98.112		
	Cr	52	98.978		
	Cr	53			
	Mn	55	100.797		
	Co	59	96.701		
	Ni	60	98.132		
	Cu	65	99.171		
	Zn	66	100.899		
>	Ge	72		90.246	
	As	75	98.524		
	Se	82	93.344		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		89.080	
	Rh	103			
	Mo	98	92.272		
	Ag	107	89.359		
	Cd	111	99.452		
	Cd	114			
>	In	115		92.981	
	Sn	118	97.680		
	Sb	123	99.783		
	Ba	135	98.039		
	Ce	140			
>	Tb	159		91.815	
	Ho	165			
	Tl	203	99.572		
	Tl	205			
	Pb	206	98.740		

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	Pb	207	98.870	
	Pb	208	98.183	
	U	238	91.120	
>	Bi	209		90.841
	Na	23	106.224	
	Mg	24	108.099	
	K	39	111.797	
	Ca	43	118.456	
	Fe	54	121.332	
	Fe	57	113.134	
>	Sc-1	45		
	Cl	35		
	Kr	83		
	Br	81		
	P	31		
	S	34		
	Sr	88		

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Ag	107	
QC Std 6	K	39	
QC Std 6	Ca	43	
QC Std 6	Fe	54	
QC Std 6	Fe	57	

Sample ID: QC Std 6
Report Date/Time: Tuesday, May 08, 2012 16:54:31
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Method 6020 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, May 08, 2012 16:54:51
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	13771.3	2.7	**-763.7885**	197.557	25.9	ug/L	17857	Standard
|	**Be**	9	18.3	78.7	**-0.0016**	0.004	274.3	ug/L	12	Standard
|	**Al**	27	13112.3	2.5	**0.1188**	0.031	26.5	ug/L	13328	Standard
⌊>	**Sc**	45	282752.7	1.5				ug/L	333080	Standard
⌈	**Ti**	47	109.0	4.2	**0.0177**	0.003	15.6	ug/L	113	Standard
|	**V**	51	3597.6	1.7	**-0.0146**	0.002	16.9	ug/L	4349	Standard
|	**Cr**	52	11667.5	0.6	**-0.0708**	0.008	11.1	ug/L	14000	Standard
|	**Cr**	53	377.5	1.8	**0.0559**	0.003	4.9	ug/L	319	Standard
|	**Mn**	55	1538.1	9.7	**0.0113**	0.008	67.0	ug/L	1367	Standard
|	**Co**	59	151.0	39.7	**0.0042**	0.004	92.9	ug/L	115	Standard
|	**Ni**	60	77.3	20.3	**0.0030**	0.005	165.8	ug/L	76	Standard
|	**Cu**	65	153.0	19.2	**0.0087**	0.011	121.8	ug/L	135	Standard
|	**Zn**	66	220.7	3.9	**0.0363**	0.006	17.1	ug/L	185	Standard
| >	**Ge**	72	242663.5	0.7				ug/L	274929	Standard
|	**As**	75	-189.3	21.7	**0.0240**	0.031	128.8	ug/L	-262	Standard
|	**Se**	82	29.5	16.3	**-0.0135**	0.034	248.0	ug/L	27	Standard
⌊	**Se-1**	77	80.7	7.5	**0.0357**	0.066	186.2	ug/L	94	Standard
	Ga	71	214560.7	1.3				mg/L	248575	Standard
⌈	**Rb**	85	21.7	53.3				ug/L	15	Standard
| >	**Y**	89	232907.1	2.3				ug/L	267564	Standard
⌊	**Rh**	103	1.7	173.2				ug/L	2	Standard
⌈	**Mo**	98	102.2	70.3	**0.0281**	0.016	55.3	ug/L	5	Standard
|	**Ag**	107	78.7	48.8	**0.0002**	0.004	1799.8	ug/L	44	Standard
|	**Cd**	111	455.8	2.6	**0.0001**	0.002	2386.3	mg/L	512	Standard
|	**Cd**	114	1189.0	9.6	**0.0087**	0.009	108.8	ug/L	1247	Standard
| >	**In**	115	664001.4	0.8				ug/L	743274	Standard
|	**Sn**	118	923.0	7.2	**0.0112**	0.004	37.3	ug/L	816	Standard
|	**Sb**	123	359.4	40.8	**0.0316**	0.013	42.3	ug/L	15	Standard
⌊	**Ba**	135	83.3	29.0	**0.0112**	0.005	45.3	ug/L	37	Standard
⌈	**Ce**	140	40.3	19.9				ug/L	44	Standard
⌊>	**Tb**	159	731257.4	1.0				ug/L	826676	Standard
⌈	**Ho**	165	6.3	24.1				ug/L	12	Standard
|	**Tl**	203	118.7	46.7	**0.0049**	0.003	67.9	ug/L	6	Standard
|	**Tl**	205	261.7	41.6	**0.0089**	0.003	30.1	ug/L	11	Standard
|	**Pb**	206	369.0	22.5	**0.0076**	0.006	80.3	ug/L	301	Standard
|	**Pb**	207	299.7	24.4	**0.0064**	0.006	101.5	ug/L	250	Standard
|	**Pb**	208	1339.4	19.4	**0.0055**	0.005	88.2	ug/L	1166	Standard
|	**U**	238	114.7	102.3	**0.0079**	0.004	52.3	ug/L	3	Standard
⌊>	**Bi**	209	407253.2	0.8				ug/L	454659	Standard
⌈	**Na**	23	95.0	13.9	**0.0011**	0.004	341.9	mg/L	137	Standard
|	**Mg**	24	688.4	36.1	**-0.0003**	0.000	138.8	mg/L	498	Standard

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	K	39	636.7	14.9	**0.0115**	0.009	77.7	mg/L	557	Standard
	Ca	43	58.3	48.7	**0.0617**	0.076	123.5	mg/L	52	Standard
	Fe	54	875.6	4.7	**0.0119**	0.010	87.8	mg/L	865	Standard
	Fe	57	5379.3	4.5	**0.0007**	0.001	169.6	mg/L	6003	Standard
>	**Sc-1**	45	282752.7	1.5				mg/L	333080	Standard
	Cl	35	109408.7	2.4				ug/L	40103	Standard
	Kr	83	50.3	14.9				ug/L	67	Standard
	Br	81	13093.2	2.4				ug/L	15294	Standard
	P	31	71893.6	2.3				ug/L	74262	Standard
	S	34	851249.2	1.0				ug/L	787377	Standard
	Sr	88	335.0	15.7				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		88.264	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		87.047	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		89.335	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		88.458	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: QC Std 7
Report Date/Time: Tuesday, May 08, 2012 16:57:23
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	89.573
	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: QC Std 7
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Method 6020 - Summary Report

Sample ID: L1205004904

Sample Date/Time: Tuesday, May 08, 2012 16:57:45
Number of Replicates: 3
Autosampler Position: 347
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	203445.6	2.4	**106422.1693**	2436.793	2.3	ug/L	17857	Standard
|	**Be**	9	15.0	57.7	**-0.0033**	0.002	63.7	ug/L	12	Standard
|	**Al**	27	1084983.0	2.4	**56.0291**	0.312	0.6	ug/L	13328	Standard
⌊>	**Sc**	45	338019.8	1.9				ug/L	333080	Standard
⌈	**Ti**	47	3623.1	1.8	**2.2291**	0.033	1.5	ug/L	113	Standard
|	**V**	51	10980.2	3.2	**0.4564**	0.023	5.0	ug/L	4349	Standard
|	**Cr**	52	18998.2	2.0	**0.5919**	0.029	4.8	ug/L	14000	Standard
|	**Cr**	53	2056.8	5.5	**0.9995**	0.073	7.3	ug/L	319	Standard
|	**Mn**	55	9174727.3	1.3	**459.7497**	8.289	1.8	ug/L	1367	Standard
|	**Co**	59	2343.5	4.5	**0.1519**	0.007	4.8	ug/L	115	Standard
|	**Ni**	60	7369.1	2.6	**2.3504**	0.073	3.1	ug/L	76	Standard
|	**Cu**	65	1598.4	1.2	**0.5395**	0.012	2.2	ug/L	135	Standard
|	**Zn**	66	6691.5	1.0	**5.4143**	0.093	1.7	ug/L	185	Standard
|>	**Ge**	72	234024.9	0.9				ug/L	274929	Standard
|	**As**	75	2508.8	2.0	**2.1994**	0.059	2.7	ug/L	-262	Standard
|	**Se**	82	302.0	3.5	**1.9008**	0.093	4.9	ug/L	27	Standard
⌊	**Se-1**	77	150.0	8.8	**0.9344**	0.180	19.2	ug/L	94	Standard
	Ga	71	206951.8	0.9				mg/L	248575	Standard
⌈	**Rb**	85	6544.7	1.9				ug/L	15	Standard
|>	**Y**	89	225912.2	2.0				ug/L	267564	Standard
⌊	**Rh**	103	76.7	19.9				ug/L	2	Standard
⌈	**Mo**	98	1789.3	2.6	**0.4042**	0.008	2.0	ug/L	5	Standard
|	**Ag**	107	77.0	20.2	**0.0002**	0.002	719.4	ug/L	44	Standard
|	**Cd**	111	517.6	7.8	**0.0165**	0.010	58.6	mg/L	512	Standard
|	**Cd**	114	1385.5	3.7	**0.0288**	0.004	13.8	ug/L	1247	Standard
|>	**In**	115	650192.6	0.7				ug/L	743274	Standard
|	**Sn**	118	1302.7	1.4	**0.0375**	0.001	2.1	ug/L	816	Standard
|	**Sb**	123	575.1	4.7	**0.0527**	0.002	4.6	ug/L	15	Standard
⌊	**Ba**	135	720262.3	0.6	**157.7671**	0.128	0.1	ug/L	37	Standard
⌈	**Ce**	140	6834.2	1.1				ug/L	44	Standard
⌊>	**Tb**	159	727628.3	1.0				ug/L	826676	Standard
⌈	**Ho**	165	91.0	4.4				ug/L	12	Standard
|	**Tl**	203	623.0	8.2	**0.0391**	0.003	8.0	ug/L	6	Standard
|	**Tl**	205	1494.7	2.6	**0.0429**	0.001	2.0	ug/L	11	Standard
|	**Pb**	206	6068.9	2.9	**0.4822**	0.017	3.5	ug/L	301	Standard
|	**Pb**	207	5067.5	1.5	**0.4821**	0.004	0.9	ug/L	250	Standard
|	**Pb**	208	23695.9	1.0	**0.4776**	0.009	1.9	ug/L	1166	Standard
|	**U**	238	3504.4	2.8	**0.1385**	0.004	2.7	ug/L	3	Standard
⌊>	**Bi**	209	375685.6	1.2				ug/L	454659	Standard
⌈	**Na**	23	111784.2	1.3	**24.4970**	0.157	0.6	mg/L	137	Standard
|	**Mg**	24	2139849.5	20.9	**3.3190**	0.665	20.0	mg/L	498	Standard

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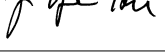
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	K	39	13090.7	0.8	**0.9246**	0.024	2.6	mg/L	557	Standard
	Ca	43	16784.3	2.1	**36.4708**	0.108	0.3	mg/L	52	Standard
	Fe	54	5977.0	4.3	**0.8048**	0.032	4.0	mg/L	865	Standard
	Fe	57	176576.9	3.0	**0.8446**	0.011	1.3	mg/L	6003	Standard
>	**Sc-1**	45	338019.8	1.9				mg/L	333080	Standard
	Cl	35	1587573.0	0.6				ug/L	40103	Standard
	Kr	83	54.3	17.7				ug/L	67	Standard
	Br	81	158037.2	3.4				ug/L	15294	Standard
	P	31	89109.0	3.9				ug/L	74262	Standard
	S	34	1052506.3	1.3				ug/L	787377	Standard
	Sr	88	2933524.6	1.4				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		85.122	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		84.433	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		87.477	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		88.019	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	82.630
	Na	23	
	Mg	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 09, 2012

Method 6020 - Summary Report

Sample ID: L1205004905
Sample Date/Time: Tuesday, May 08, 2012 17:00:37
Number of Replicates: 3
Autosampler Position: 348
Sample Description: 1
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	211208.0	3.4	**108400.4646**	7479.721	6.9	ug/L	17857	Standard
|	**Be**	9	8.3	91.7	**-0.0049**	0.002	38.4	ug/L	12	Standard
|	**Al**	27	103181.9	1.5	**4.5796**	0.073	1.6	ug/L	13328	Standard
⌊>	**Sc**	45	345450.8	2.9				ug/L	333080	Standard
⌈	**Ti**	47	1829.4	3.8	**1.0355**	0.025	2.5	ug/L	113	Standard
|	**V**	51	19248.5	1.9	**0.9056**	0.013	1.5	ug/L	4349	Standard
|	**Cr**	52	15564.0	0.8	**0.2219**	0.009	4.0	ug/L	14000	Standard
|	**Cr**	53	1770.1	4.0	**0.7833**	0.050	6.4	ug/L	319	Standard
|	**Mn**	55	2374455.9	2.7	**112.1105**	2.647	2.4	ug/L	1367	Standard
|	**Co**	59	1607.4	1.8	**0.0962**	0.003	3.0	ug/L	115	Standard
|	**Ni**	60	5960.8	3.1	**1.7871**	0.052	2.9	ug/L	76	Standard
|	**Cu**	65	18363.5	1.5	**6.2874**	0.016	0.3	ug/L	135	Standard
|	**Zn**	66	15027.1	1.4	**11.6187**	0.161	1.4	ug/L	185	Standard
| >	**Ge**	72	248254.2	1.5				ug/L	274929	Standard
|	**As**	75	1613.8	5.8	**1.4007**	0.063	4.5	ug/L	-262	Standard
|	**Se**	82	296.0	5.4	**1.7393**	0.094	5.4	ug/L	27	Standard
⌊	**Se-1**	77	162.7	4.4	**0.9746**	0.059	6.0	ug/L	94	Standard
	Ga	71	219740.4	2.0				mg/L	248575	Standard
⌈	**Rb**	85	2733.6	5.0				ug/L	15	Standard
| >	**Y**	89	241926.9	2.5				ug/L	267564	Standard
⌊	**Rh**	103	76.7	3.8				ug/L	2	Standard
⌈	**Mo**	98	1638.8	2.2	**0.3478**	0.010	2.9	ug/L	5	Standard
|	**Ag**	107	48.3	7.3	**-0.0031**	0.000	10.3	ug/L	44	Standard
|	**Cd**	111	541.9	2.7	**0.0142**	0.004	31.0	mg/L	512	Standard
|	**Cd**	114	1434.5	3.1	**0.0250**	0.003	11.5	ug/L	1247	Standard
| >	**In**	115	694007.6	1.1				ug/L	743274	Standard
|	**Sn**	118	1066.0	4.3	**0.0175**	0.002	13.8	ug/L	816	Standard
|	**Sb**	123	380.1	2.7	**0.0321**	0.001	3.4	ug/L	15	Standard
⌊	**Ba**	135	211902.0	1.3	**43.4857**	0.935	2.2	ug/L	37	Standard
⌈	**Ce**	140	678.3	4.5				ug/L	44	Standard
⌊>	**Tb**	159	770744.7	0.9				ug/L	826676	Standard
⌈	**Ho**	165	15.7	9.8				ug/L	12	Standard
|	**Tl**	203	691.7	5.2	**0.0415**	0.003	6.4	ug/L	6	Standard
|	**Tl**	205	1661.4	1.5	**0.0453**	0.001	2.1	ug/L	11	Standard
|	**Pb**	206	3166.3	0.9	**0.2292**	0.004	1.9	ug/L	301	Standard
|	**Pb**	207	2669.9	2.0	**0.2315**	0.006	2.8	ug/L	250	Standard
|	**Pb**	208	12208.2	1.1	**0.2239**	0.003	1.5	ug/L	1166	Standard
|	**U**	238	11382.9	2.7	**0.4204**	0.013	3.1	ug/L	3	Standard
⌊>	**Bi**	209	394494.6	0.9				ug/L	454659	Standard
⌈	**Na**	23	114382.1	3.2	**24.5255**	0.355	1.4	mg/L	137	Standard
|	**Mg**	24	2404483.1	2.0	**3.6541**	0.081	2.2	mg/L	498	Standard

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	K	39	8365.6	1.6	**0.5614**	0.017	3.1	mg/L	557	Standard
	Ca	43	18224.3	1.7	**38.7669**	0.786	2.0	mg/L	52	Standard
	Fe	54	1112.9	6.2	**0.0185**	0.008	45.5	mg/L	865	Standard
	Fe	57	32910.7	2.0	**0.1286**	0.002	1.3	mg/L	6003	Standard
>	**Sc-1**	45	345450.8	2.9				mg/L	333080	Standard
	Cl	35	1455697.8	1.1				ug/L	40103	Standard
	Kr	83	53.2	9.5				ug/L	67	Standard
	Br	81	137949.6	2.6				ug/L	15294	Standard
	P	31	106157.5	3.0				ug/L	74262	Standard
	S	34	1994232.7	2.2				ug/L	787377	Standard
	Sr	88	2783023.5	2.8				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		90.298	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		90.418	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		93.372	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		93.234	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

Sample ID: L1205004905
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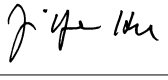
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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	86.767
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: May 09, 2012



Method 6020 - Summary Report

Sample ID: L1205004906
Sample Date/Time: Tuesday, May 08, 2012 17:03:28
Number of Replicates: 3
Autosampler Position: 349
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	148171.2	2.2	**72280.8116**	3392.814	4.7	ug/L	17857	Standard
|	**Be**	9	18.3	15.7	**-0.0026**	0.001	31.0	ug/L	12	Standard
|	**Al**	27	55391.1	2.9	**2.1127**	0.157	7.4	ug/L	13328	Standard
⌊>	**Sc**	45	348296.6	2.9				ug/L	333080	Standard
⌈	**Ti**	47	1712.1	0.8	**0.9608**	0.014	1.5	ug/L	113	Standard
|	**V**	51	9352.6	1.6	**0.3177**	0.009	2.8	ug/L	4349	Standard
|	**Cr**	52	20870.4	2.6	**0.6411**	0.058	9.0	ug/L	14000	Standard
|	**Cr**	53	1471.7	11.3	**0.6223**	0.091	14.6	ug/L	319	Standard
|	**Mn**	55	4067629.8	0.2	**191.0809**	1.731	0.9	ug/L	1367	Standard
|	**Co**	59	1794.4	3.5	**0.1075**	0.004	3.9	ug/L	115	Standard
|	**Ni**	60	5930.5	0.9	**1.7684**	0.027	1.5	ug/L	76	Standard
|	**Cu**	65	46664.1	0.6	**15.9620**	0.181	1.1	ug/L	135	Standard
|	**Zn**	66	18788.0	0.5	**14.4831**	0.181	1.3	ug/L	185	Standard
| >	**Ge**	72	249588.1	1.0				ug/L	274929	Standard
|	**As**	75	18757.7	0.6	**14.3864**	0.067	0.5	ug/L	-262	Standard
|	**Se**	82	236.4	3.7	**1.3382**	0.054	4.0	ug/L	27	Standard
⌊	**Se-1**	77	132.7	5.3	**0.6156**	0.091	14.8	ug/L	94	Standard
	Ga	71	225297.4	2.0				mg/L	248575	Standard
⌈	**Rb**	85	4389.0	2.3				ug/L	15	Standard
| >	**Y**	89	241001.7	0.9				ug/L	267564	Standard
⌊	**Rh**	103	191.7	11.8				ug/L	2	Standard
⌈	**Mo**	98	3086.8	2.2	**0.6458**	0.016	2.6	ug/L	5	Standard
|	**Ag**	107	127.7	8.4	**0.0046**	0.001	24.1	ug/L	44	Standard
|	**Cd**	111	570.1	5.2	**0.0195**	0.006	32.4	mg/L	512	Standard
|	**Cd**	114	1436.6	3.8	**0.0244**	0.005	19.5	ug/L	1247	Standard
| >	**In**	115	698357.9	0.6				ug/L	743274	Standard
|	**Sn**	118	1520.1	2.0	**0.0449**	0.002	4.4	ug/L	816	Standard
|	**Sb**	123	497.8	3.3	**0.0422**	0.001	3.6	ug/L	15	Standard
⌊	**Ba**	135	610112.5	1.0	**124.4200**	0.854	0.7	ug/L	37	Standard
⌈	**Ce**	140	473.3	7.0				ug/L	44	Standard
⌊>	**Tb**	159	779449.5	0.9				ug/L	826676	Standard
⌈	**Ho**	165	14.3	49.5				ug/L	12	Standard
|	**Tl**	203	376.3	11.9	**0.0210**	0.003	13.3	ug/L	6	Standard
|	**Tl**	205	896.7	12.4	**0.0251**	0.003	11.2	ug/L	11	Standard
|	**Pb**	206	23431.4	0.7	**1.7914**	0.011	0.6	ug/L	301	Standard
|	**Pb**	207	19518.6	1.2	**1.7884**	0.021	1.2	ug/L	250	Standard
|	**Pb**	208	90798.4	0.1	**1.7614**	0.001	0.1	ug/L	1166	Standard
|	**U**	238	1555.1	2.6	**0.0596**	0.001	2.4	ug/L	3	Standard
⌊>	**Bi**	209	402369.7	0.1				ug/L	454659	Standard
⌈	**Na**	23	62776.5	1.7	**13.3462**	0.422	3.2	mg/L	137	Standard
|	**Mg**	24	3469478.8	0.7	**5.2319**	0.169	3.2	mg/L	498	Standard

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	K	39	10528.7	2.0	**0.7118**	0.010	1.4	mg/L	557	Standard
	Ca	43	19334.0	0.8	**40.8095**	1.380	3.4	mg/L	52	Standard
	Fe	54	11585.2	2.1	**1.6536**	0.083	5.0	mg/L	865	Standard
	Fe	57	349129.4	2.1	**1.6506**	0.064	3.9	mg/L	6003	Standard
>	**Sc-1**	45	348296.6	2.9				mg/L	333080	Standard
	Cl	35	1188419.9	0.8				ug/L	40103	Standard
	Kr	83	56.2	10.2				ug/L	67	Standard
	Br	81	108567.7	2.1				ug/L	15294	Standard
	P	31	95752.5	1.5				ug/L	74262	Standard
	S	34	1058917.1	1.2				ug/L	787377	Standard
	Sr	88	5722159.8	1.5				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72			90.783
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89			90.072
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115			93.957
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159			94.287
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	88.499
	Na	23	
	Mg	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 09, 2012

Method 6020 - Summary Report

Sample ID: L1205004907
Sample Date/Time: Tuesday, May 08, 2012 17:06:20
Number of Replicates: 3
Autosampler Position: 350
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	152237.8	1.4	**76521.1939**	1966.546	2.6	ug/L	17857	Standard
|	**Be**	9	6.7	43.3	**-0.0053**	0.001	13.3	ug/L	12	Standard
|	**Al**	27	79320.4	1.1	**3.4203**	0.025	0.7	ug/L	13328	Standard
⌊>	**Sc**	45	340175.0	1.2				ug/L	333080	Standard
⌈	**Ti**	47	1600.1	3.4	**0.8806**	0.028	3.2	ug/L	113	Standard
|	**V**	51	24248.3	0.5	**1.1722**	0.012	1.0	ug/L	4349	Standard
|	**Cr**	52	18438.2	0.3	**0.4236**	0.013	3.2	ug/L	14000	Standard
|	**Cr**	53	1635.1	6.2	**0.6943**	0.046	6.6	ug/L	319	Standard
|	**Mn**	55	6488377.4	1.8	**300.2723**	5.180	1.7	ug/L	1367	Standard
|	**Co**	59	6148.9	2.0	**0.3759**	0.007	1.9	ug/L	115	Standard
|	**Ni**	60	7799.7	2.8	**2.2969**	0.054	2.4	ug/L	76	Standard
|	**Cu**	65	15965.4	0.2	**5.3496**	0.051	1.0	ug/L	135	Standard
|	**Zn**	66	14618.7	2.2	**11.0676**	0.239	2.2	ug/L	185	Standard
|>	**Ge**	72	253367.3	0.8				ug/L	274929	Standard
|	**As**	75	1504.7	2.9	**1.2948**	0.033	2.6	ug/L	-262	Standard
|	**Se**	82	342.1	3.4	**1.9981**	0.058	2.9	ug/L	27	Standard
⌊	**Se-1**	77	157.7	3.2	**0.8792**	0.056	6.4	ug/L	94	Standard
	Ga	71	222595.9	0.8				mg/L	248575	Standard
⌈	**Rb**	85	7635.3	4.4				ug/L	15	Standard
|>	**Y**	89	251810.4	1.1				ug/L	267564	Standard
⌊	**Rh**	103	110.0	4.5				ug/L	2	Standard
⌈	**Mo**	98	2624.2	4.0	**0.5453**	0.021	3.8	ug/L	5	Standard
|	**Ag**	107	69.3	7.9	**-0.0011**	0.001	47.8	ug/L	44	Standard
|	**Cd**	111	498.0	4.3	**0.0032**	0.004	134.9	mg/L	512	Standard
|	**Cd**	114	1358.9	5.0	**0.0169**	0.005	31.9	ug/L	1247	Standard
|>	**In**	115	704227.1	0.3				ug/L	743274	Standard
|	**Sn**	118	5634.4	2.3	**0.2943**	0.007	2.3	ug/L	816	Standard
|	**Sb**	123	442.9	3.9	**0.0370**	0.001	4.0	ug/L	15	Standard
⌊	**Ba**	135	542802.7	1.4	**109.7688**	1.205	1.1	ug/L	37	Standard
⌈	**Ce**	140	652.0	8.9				ug/L	44	Standard
⌊>	**Tb**	159	777657.4	1.7				ug/L	826676	Standard
⌈	**Ho**	165	19.3	31.2				ug/L	12	Standard
|	**Tl**	203	763.0	10.6	**0.0458**	0.005	10.8	ug/L	6	Standard
|	**Tl**	205	1804.4	6.9	**0.0488**	0.003	6.2	ug/L	11	Standard
|	**Pb**	206	12576.2	1.4	**0.9670**	0.012	1.3	ug/L	301	Standard
|	**Pb**	207	10368.2	0.7	**0.9550**	0.010	1.0	ug/L	250	Standard
|	**Pb**	208	48864.6	1.2	**0.9533**	0.013	1.4	ug/L	1166	Standard
|	**U**	238	7584.6	1.9	**0.2801**	0.004	1.5	ug/L	3	Standard
⌊>	**Bi**	209	396247.2	0.4				ug/L	454659	Standard
⌈	**Na**	23	72364.1	1.2	**15.7480**	0.068	0.4	mg/L	137	Standard
|	**Mg**	24	2720723.7	0.6	**4.1980**	0.025	0.6	mg/L	498	Standard

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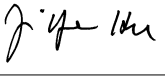
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	K	39	9848.2	0.9	**0.6796**	0.003	0.5	mg/L	557	Standard
	Ca	43	21520.3	2.0	**46.4898**	0.609	1.3	mg/L	52	Standard
	Fe	54	1109.5	6.1	**0.0207**	0.009	43.9	mg/L	865	Standard
	Fe	57	38590.8	1.4	**0.1590**	0.000	0.3	mg/L	6003	Standard
>	**Sc-1**	45	340175.0	1.2				mg/L	333080	Standard
	Cl	35	1368834.4	0.6				ug/L	40103	Standard
	Kr	83	60.0	4.3				ug/L	67	Standard
	Br	81	164743.5	5.7				ug/L	15294	Standard
	P	31	79794.6	2.2				ug/L	74262	Standard
	S	34	1758807.9	2.1				ug/L	787377	Standard
	Sr	88	3898739.7	1.5				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		92.157	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		94.112	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		94.747	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		94.070	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	87.153
	Na	23	
	Mg	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 09, 2012

Method 6020 - Summary Report

Sample ID: L1205008802
Sample Date/Time: Tuesday, May 08, 2012 17:09:12
Number of Replicates: 3
Autosampler Position: 351
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	264754.0	2.5	**137906.4225**	7675.466	5.6	ug/L	17857	Standard
|	**Be**	9	11.7	49.5	**-0.0041**	0.001	34.2	ug/L	12	Standard
|	**Al**	27	274986.8	1.7	**13.3247**	0.362	2.7	ug/L	13328	Standard
⌊>	**Sc**	45	346657.6	2.6				ug/L	333080	Standard
⌈	**Ti**	47	2135.5	5.8	**1.1912**	0.058	4.9	ug/L	113	Standard
|	**V**	51	11031.5	6.0	**0.4066**	0.034	8.5	ug/L	4349	Standard
|	**Cr**	52	39322.3	2.3	**2.0742**	0.065	3.1	ug/L	14000	Standard
|	**Cr**	53	5144.2	4.5	**2.5005**	0.110	4.4	ug/L	319	Standard
|	**Mn**	55	844666.8	1.7	**39.0358**	0.277	0.7	ug/L	1367	Standard
|	**Co**	59	2679.9	1.1	**0.1607**	0.002	1.0	ug/L	115	Standard
|	**Ni**	60	7800.0	1.5	**2.2976**	0.051	2.2	ug/L	76	Standard
|	**Cu**	65	1440.7	3.2	**0.4415**	0.010	2.4	ug/L	135	Standard
|	**Zn**	66	2810.6	2.7	**2.0143**	0.033	1.7	ug/L	185	Standard
| >	**Ge**	72	253352.9	1.3				ug/L	274929	Standard
|	**As**	75	2045.5	0.7	**1.6986**	0.011	0.6	ug/L	-262	Standard
|	**Se**	82	314.1	1.5	**1.8181**	0.056	3.1	ug/L	27	Standard
⌊	**Se-1**	77	157.7	6.2	**0.8785**	0.088	10.1	ug/L	94	Standard
	Ga	71	227753.4	2.6				mg/L	248575	Standard
⌈	**Rb**	85	10028.3	2.6				ug/L	15	Standard
| >	**Y**	89	248066.1	1.3				ug/L	267564	Standard
⌊	**Rh**	103	181.7	9.7				ug/L	2	Standard
⌈	**Mo**	98	3251.8	3.6	**0.6786**	0.027	4.0	ug/L	5	Standard
|	**Ag**	107	67.3	11.1	**-0.0013**	0.001	55.7	ug/L	44	Standard
|	**Cd**	111	564.2	1.2	**0.0180**	0.001	6.8	mg/L	512	Standard
|	**Cd**	114	1369.9	2.4	**0.0186**	0.003	15.9	ug/L	1247	Standard
| >	**In**	115	699836.3	0.4				ug/L	743274	Standard
|	**Sn**	118	7586.2	3.7	**0.4160**	0.018	4.3	ug/L	816	Standard
|	**Sb**	123	468.3	4.1	**0.0395**	0.002	4.6	ug/L	15	Standard
⌊	**Ba**	135	391591.1	1.4	**79.6897**	1.399	1.8	ug/L	37	Standard
⌈	**Ce**	140	2957.0	6.4				ug/L	44	Standard
⌊>	**Tb**	159	780950.5	0.5				ug/L	826676	Standard
⌈	**Ho**	165	48.0	9.1				ug/L	12	Standard
|	**Tl**	203	542.7	0.9	**0.0317**	0.000	0.9	ug/L	6	Standard
|	**Tl**	205	1294.1	0.5	**0.0355**	0.000	0.5	ug/L	11	Standard
|	**Pb**	206	6912.6	3.8	**0.5194**	0.019	3.6	ug/L	301	Standard
|	**Pb**	207	6183.9	3.6	**0.5580**	0.018	3.2	ug/L	250	Standard
|	**Pb**	208	27628.8	3.3	**0.5272**	0.016	3.1	ug/L	1166	Standard
|	**U**	238	12103.5	3.7	**0.4424**	0.014	3.3	ug/L	3	Standard
⌊>	**Bi**	209	398337.0	0.6				ug/L	454659	Standard
⌈	**Na**	23	78415.8	1.9	**16.7522**	0.381	2.3	mg/L	137	Standard
|	**Mg**	24	3906821.1	3.1	**5.9199**	0.288	4.9	mg/L	498	Standard

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	K	39	18115.8	0.8	**1.2635**	0.033	2.6	mg/L	557	Standard
	Ca	43	21902.5	2.9	**46.4611**	2.089	4.5	mg/L	52	Standard
	Fe	54	1697.8	7.7	**0.1100**	0.025	22.4	mg/L	865	Standard
	Fe	57	54136.6	2.7	**0.2308**	0.011	4.9	mg/L	6003	Standard
>	**Sc-1**	45	346657.6	2.6				mg/L	333080	Standard
	Cl	35	1427804.7	1.0				ug/L	40103	Standard
	Kr	83	62.8	2.5				ug/L	67	Standard
	Br	81	148477.3	0.9				ug/L	15294	Standard
	P	31	88037.0	4.2				ug/L	74262	Standard
	S	34	1960778.7	1.2				ug/L	787377	Standard
	Sr	88	5983196.9	3.1				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		92.152	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		92.713	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		94.156	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		94.469	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	87.612
	Na	23	
	Mg	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 09, 2012

Method 6020 - Summary Report

Sample ID: L1205008803
Sample Date/Time: Tuesday, May 08, 2012 17:12:04
Number of Replicates: 3
Autosampler Position: 352
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	245691.0	0.6	**131357.6244**	2660.744	2.0	ug/L	17857	Standard
|	**Be**	9	18.3	15.7	**-0.0024**	0.001	25.3	ug/L	12	Standard
|	**Al**	27	119420.6	2.4	**5.5758**	0.193	3.5	ug/L	13328	Standard
⌊>	**Sc**	45	336377.7	2.4				ug/L	333080	Standard
⌈	**Ti**	47	1705.1	4.3	**0.9778**	0.045	4.6	ug/L	113	Standard
|	**V**	51	10658.1	0.3	**0.4077**	0.015	3.8	ug/L	4349	Standard
|	**Cr**	52	41245.7	1.6	**2.3461**	0.125	5.3	ug/L	14000	Standard
|	**Cr**	53	5498.5	2.3	**2.7874**	0.130	4.7	ug/L	319	Standard
|	**Mn**	55	1099988.5	2.7	**52.7091**	1.369	2.6	ug/L	1367	Standard
|	**Co**	59	2732.2	3.4	**0.1701**	0.002	1.4	ug/L	115	Standard
|	**Ni**	60	7457.8	3.6	**2.2756**	0.046	2.0	ug/L	76	Standard
|	**Cu**	65	2688.6	1.3	**0.8964**	0.023	2.5	ug/L	135	Standard
|	**Zn**	66	12029.8	0.7	**9.4213**	0.271	2.9	ug/L	185	Standard
|>	**Ge**	72	244513.8	2.7				ug/L	274929	Standard
|	**As**	75	2396.7	1.1	**2.0263**	0.052	2.5	ug/L	-262	Standard
|	**Se**	82	371.9	3.0	**2.2789**	0.087	3.8	ug/L	27	Standard
⌊	**Se-1**	77	158.7	17.9	**0.9520**	0.297	31.2	ug/L	94	Standard
	Ga	71	219273.7	2.7				mg/L	248575	Standard
⌈	**Rb**	85	8499.1	3.5				ug/L	15	Standard
|>	**Y**	89	237548.1	1.9				ug/L	267564	Standard
⌊	**Rh**	103	160.0	3.1				ug/L	2	Standard
⌈	**Mo**	98	4384.7	2.4	**0.9329**	0.013	1.4	ug/L	5	Standard
|	**Ag**	107	66.3	18.8	**-0.0012**	0.001	99.5	ug/L	44	Standard
|	**Cd**	111	505.7	4.8	**0.0078**	0.004	49.5	mg/L	512	Standard
|	**Cd**	114	1328.5	4.0	**0.0176**	0.006	32.1	ug/L	1247	Standard
|>	**In**	115	684766.5	1.9				ug/L	743274	Standard
|	**Sn**	118	15453.9	1.0	**0.9186**	0.027	2.9	ug/L	816	Standard
|	**Sb**	123	391.8	5.4	**0.0336**	0.002	6.8	ug/L	15	Standard
⌊	**Ba**	135	368590.3	0.8	**76.6759**	1.685	2.2	ug/L	37	Standard
⌈	**Ce**	140	967.0	3.6				ug/L	44	Standard
⌊>	**Tb**	159	762187.7	2.1				ug/L	826676	Standard
⌈	**Ho**	165	20.7	10.1				ug/L	12	Standard
|	**Tl**	203	581.7	0.5	**0.0351**	0.000	1.4	ug/L	6	Standard
|	**Tl**	205	1364.1	4.8	**0.0381**	0.001	3.1	ug/L	11	Standard
|	**Pb**	206	1584.4	2.0	**0.1063**	0.001	1.1	ug/L	301	Standard
|	**Pb**	207	1316.4	5.0	**0.1054**	0.008	7.9	ug/L	250	Standard
|	**Pb**	208	6052.8	1.3	**0.1025**	0.003	2.5	ug/L	1166	Standard
|	**U**	238	11165.1	0.9	**0.4186**	0.008	2.0	ug/L	3	Standard
⌊>	**Bi**	209	388664.0	1.6				ug/L	454659	Standard
⌈	**Na**	23	72772.7	1.5	**16.0234**	0.511	3.2	mg/L	137	Standard
|	**Mg**	24	3665329.1	1.3	**5.7219**	0.158	2.8	mg/L	498	Standard

Sample ID: L1205008803
Report Date/Time: Tuesday, May 08, 2012 17:14:38
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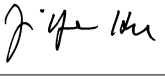
Approved: May 09, 2012

	K	39	17403.3	1.2	**1.2506**	0.046	3.7	mg/L	557	Standard
	Ca	43	20989.5	2.9	**45.8667**	1.430	3.1	mg/L	52	Standard
	Fe	54	1839.7	6.9	**0.1408**	0.020	14.1	mg/L	865	Standard
	Fe	57	61991.6	0.7	**0.2780**	0.009	3.3	mg/L	6003	Standard
>	**Sc-1**	45	336377.7	2.4				mg/L	333080	Standard
	Cl	35	1357847.4	1.6				ug/L	40103	Standard
	Kr	83	63.1	10.2				ug/L	67	Standard
	Br	81	178917.0	5.1				ug/L	15294	Standard
	P	31	84622.3	1.1				ug/L	74262	Standard
	S	34	1903380.5	2.5				ug/L	787377	Standard
	Sr	88	5455935.6	1.6				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		88.937	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		88.782	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		92.128	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		92.199	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	85.485
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1205008803
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Method 6020 - Summary Report

Sample ID: L1205008804
Sample Date/Time: Tuesday, May 08, 2012 17:14:57
Number of Replicates: 3
Autosampler Position: 353
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	256744.1	3.9	**132898.8351**	6579.317	5.0	ug/L	17857	Standard
|	**Be**	9	16.7	105.4	**-0.0030**	0.004	140.6	ug/L	12	Standard
|	**Al**	27	94992.0	2.7	**4.1270**	0.078	1.9	ug/L	13328	Standard
⌊>	**Sc**	45	347715.1	1.4				ug/L	333080	Standard
⌈	**Ti**	47	1512.4	1.1	**0.8370**	0.019	2.3	ug/L	113	Standard
|	**V**	51	10662.0	2.4	**0.3902**	0.006	1.5	ug/L	4349	Standard
|	**Cr**	52	32741.7	1.6	**1.5748**	0.040	2.5	ug/L	14000	Standard
|	**Cr**	53	4002.2	2.9	**1.9289**	0.025	1.3	ug/L	319	Standard
|	**Mn**	55	18046.1	7.2	**0.7787**	0.054	7.0	ug/L	1367	Standard
|	**Co**	59	1655.8	3.1	**0.0980**	0.003	3.0	ug/L	115	Standard
|	**Ni**	60	6671.8	3.5	**1.9772**	0.031	1.5	ug/L	76	Standard
|	**Cu**	65	759.7	1.7	**0.2135**	0.006	2.7	ug/L	135	Standard
|	**Zn**	66	8083.8	3.7	**6.1052**	0.122	2.0	ug/L	185	Standard
| >	**Ge**	72	251372.3	2.0				ug/L	274929	Standard
|	**As**	75	1801.5	4.5	**1.5267**	0.045	3.0	ug/L	-262	Standard
|	**Se**	82	390.3	2.7	**2.3297**	0.022	0.9	ug/L	27	Standard
⌊	**Se-1**	77	164.3	0.7	**0.9711**	0.026	2.7	ug/L	94	Standard
	Ga	71	223962.4	2.4				mg/L	248575	Standard
⌈	**Rb**	85	8704.2	1.8				ug/L	15	Standard
| >	**Y**	89	240040.1	1.5				ug/L	267564	Standard
⌊	**Rh**	103	138.3	26.1				ug/L	2	Standard
⌈	**Mo**	98	3074.7	1.2	**0.6444**	0.005	0.7	ug/L	5	Standard
|	**Ag**	107	47.0	20.3	**-0.0032**	0.001	27.5	ug/L	44	Standard
|	**Cd**	111	494.2	5.6	**0.0035**	0.007	197.3	mg/L	512	Standard
|	**Cd**	114	1312.6	1.5	**0.0142**	0.001	4.9	ug/L	1247	Standard
| >	**In**	115	697117.0	0.9				ug/L	743274	Standard
|	**Sn**	118	3175.0	1.4	**0.1467**	0.002	1.1	ug/L	816	Standard
|	**Sb**	123	397.6	4.6	**0.0335**	0.002	4.5	ug/L	15	Standard
⌊	**Ba**	135	350422.4	2.6	**71.5793**	1.282	1.8	ug/L	37	Standard
⌈	**Ce**	140	198.7	1.6				ug/L	44	Standard
⌊>	**Tb**	159	761649.6	2.0				ug/L	826676	Standard
⌈	**Ho**	165	11.3	22.2				ug/L	12	Standard
|	**Tl**	203	616.7	1.7	**0.0367**	0.001	2.2	ug/L	6	Standard
|	**Tl**	205	1452.7	2.0	**0.0399**	0.001	1.4	ug/L	11	Standard
|	**Pb**	206	2093.5	3.2	**0.1444**	0.004	2.8	ug/L	301	Standard
|	**Pb**	207	1762.1	1.6	**0.1454**	0.002	1.4	ug/L	250	Standard
|	**Pb**	208	8065.2	2.8	**0.1408**	0.003	2.2	ug/L	1166	Standard
|	**U**	238	11202.1	2.2	**0.4133**	0.005	1.3	ug/L	3	Standard
⌊>	**Bi**	209	394884.9	0.9				ug/L	454659	Standard
⌈	**Na**	23	73645.3	2.3	**15.6784**	0.214	1.4	mg/L	137	Standard
|	**Mg**	24	3784044.9	3.5	**5.7123**	0.179	3.1	mg/L	498	Standard

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	K	39	17655.3	4.7	**1.2261**	0.066	5.4	mg/L	557	Standard
	Ca	43	18261.0	3.9	**38.5708**	0.963	2.5	mg/L	52	Standard
	Fe	54	1088.6	6.6	**0.0136**	0.011	81.5	mg/L	865	Standard
	Fe	57	33517.1	4.2	**0.1304**	0.006	4.3	mg/L	6003	Standard
>	**Sc-1**	45	347715.1	1.4				mg/L	333080	Standard
	Cl	35	1376049.8	1.1				ug/L	40103	Standard
	Kr	83	59.1	10.4				ug/L	67	Standard
	Br	81	184895.6	1.5				ug/L	15294	Standard
	P	31	76239.7	1.1				ug/L	74262	Standard
	S	34	1964130.4	0.9				ug/L	787377	Standard
	Sr	88	5471146.3	2.2				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		91.432	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		89.713	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		93.790	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		92.134	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	86.853
	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

Sample ID: L1205008804
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Method 6020 - Summary Report

Sample ID: L1205008806
Sample Date/Time: Tuesday, May 08, 2012 17:17:50
Number of Replicates: 3
Autosampler Position: 354
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	249531.6	1.3	**130819.1847**	1700.266	1.3	ug/L	17857	Standard
|	**Be**	9	5.0	0.0	**-0.0057**	0.000	0.4	ug/L	12	Standard
|	**Al**	27	232976.3	2.1	**11.3118**	0.347	3.1	ug/L	13328	Standard
⌊>	**Sc**	45	342880.7	2.0				ug/L	333080	Standard
⌈	**Ti**	47	1554.1	3.8	**0.8627**	0.044	5.1	ug/L	113	Standard
|	**V**	51	10975.0	1.3	**0.4096**	0.015	3.7	ug/L	4349	Standard
|	**Cr**	52	38300.3	0.9	**2.0217**	0.023	1.1	ug/L	14000	Standard
|	**Cr**	53	4931.6	2.1	**2.4150**	0.047	2.0	ug/L	319	Standard
|	**Mn**	55	858740.6	0.7	**40.0619**	0.325	0.8	ug/L	1367	Standard
|	**Co**	59	2564.2	2.4	**0.1550**	0.002	1.3	ug/L	115	Standard
|	**Ni**	60	7367.8	2.2	**2.1893**	0.037	1.7	ug/L	76	Standard
|	**Cu**	65	1134.7	2.0	**0.3417**	0.004	1.2	ug/L	135	Standard
|	**Zn**	66	2405.5	4.2	**1.7209**	0.059	3.4	ug/L	185	Standard
| >	**Ge**	72	251005.5	1.1				ug/L	274929	Standard
|	**As**	75	2144.5	1.4	**1.7873**	0.011	0.6	ug/L	-262	Standard
|	**Se**	82	349.0	2.5	**2.0645**	0.061	2.9	ug/L	27	Standard
⌊	**Se-1**	77	153.0	8.0	**0.8413**	0.125	14.8	ug/L	94	Standard
	Ga	71	225126.4	1.3				mg/L	248575	Standard
⌈	**Rb**	85	8807.6	4.4				ug/L	15	Standard
| >	**Y**	89	242814.0	2.0				ug/L	267564	Standard
⌊	**Rh**	103	155.0	6.5				ug/L	2	Standard
⌈	**Mo**	98	2929.9	1.3	**0.6129**	0.011	1.7	ug/L	5	Standard
|	**Ag**	107	62.0	4.3	**-0.0018**	0.000	13.1	ug/L	44	Standard
|	**Cd**	111	513.8	6.5	**0.0074**	0.007	101.4	mg/L	512	Standard
|	**Cd**	114	1314.6	2.3	**0.0141**	0.003	20.7	ug/L	1247	Standard
| >	**In**	115	698809.9	0.6				ug/L	743274	Standard
|	**Sn**	118	1308.4	3.7	**0.0319**	0.003	8.8	ug/L	816	Standard
|	**Sb**	123	357.4	3.1	**0.0299**	0.001	3.8	ug/L	15	Standard
⌊	**Ba**	135	365255.2	0.5	**74.4385**	0.732	1.0	ug/L	37	Standard
⌈	**Ce**	140	2720.6	1.9				ug/L	44	Standard
⌊>	**Tb**	159	773559.6	1.7				ug/L	826676	Standard
⌈	**Ho**	165	39.7	13.9				ug/L	12	Standard
|	**Tl**	203	637.3	4.8	**0.0384**	0.002	4.4	ug/L	6	Standard
|	**Tl**	205	1468.4	2.5	**0.0406**	0.001	2.9	ug/L	11	Standard
|	**Pb**	206	987.7	1.8	**0.0580**	0.002	3.1	ug/L	301	Standard
|	**Pb**	207	829.7	3.4	**0.0581**	0.003	5.7	ug/L	250	Standard
|	**Pb**	208	3823.9	1.6	**0.0567**	0.001	1.4	ug/L	1166	Standard
|	**U**	238	11298.2	1.5	**0.4205**	0.004	0.8	ug/L	3	Standard
⌊>	**Bi**	209	391359.1	0.8				ug/L	454659	Standard
⌈	**Na**	23	74288.5	3.4	**16.0373**	0.287	1.8	mg/L	137	Standard
|	**Mg**	24	3698133.6	0.8	**5.6629**	0.115	2.0	mg/L	498	Standard

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	K	39	17006.2	2.7	**1.1962**	0.011	0.9	mg/L	557	Standard
	Ca	43	20637.4	1.5	**44.2368**	0.893	2.0	mg/L	52	Standard
	Fe	54	1761.2	3.1	**0.1229**	0.013	10.5	mg/L	865	Standard
	Fe	57	56639.0	1.7	**0.2458**	0.002	0.9	mg/L	6003	Standard
>	**Sc-1**	45	342880.7	2.0				mg/L	333080	Standard
	Cl	35	1406360.4	1.5				ug/L	40103	Standard
	Kr	83	56.4	2.2				ug/L	67	Standard
	Br	81	160213.5	1.0				ug/L	15294	Standard
	P	31	81466.0	2.5				ug/L	74262	Standard
	S	34	1931526.2	0.4				ug/L	787377	Standard
	Sr	88	5356124.5	1.2				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		91.298	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		90.750	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		94.018	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		93.575	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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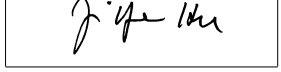
	Pb	207
	Pb	208
	U	238
>	Bi	209
	Na	23
	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

86.077

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1205008807
Sample Date/Time: Tuesday, May 08, 2012 17:20:42
Number of Replicates: 3
Autosampler Position: 355
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	166725.7	1.3	**81813.3239**	1725.787	2.1	ug/L	17857	Standard
|	**Be**	9	10.0	86.6	**-0.0046**	0.002	46.9	ug/L	12	Standard
|	**Al**	27	52644.7	3.6	**1.9480**	0.021	1.1	ug/L	13328	Standard
⌊>	**Sc**	45	351197.7	3.1				ug/L	333080	Standard
⌈	**Ti**	47	1940.1	1.0	**1.1033**	0.016	1.4	ug/L	113	Standard
|	**V**	51	73232.2	3.5	**4.1038**	0.163	4.0	ug/L	4349	Standard
|	**Cr**	52	23379.7	4.2	**0.8555**	0.085	9.9	ug/L	14000	Standard
|	**Cr**	53	2244.3	1.2	**1.0339**	0.009	0.9	ug/L	319	Standard
|	**Mn**	55	4219.3	1.8	**0.1366**	0.004	2.7	ug/L	1367	Standard
|	**Co**	59	1298.7	4.1	**0.0768**	0.004	4.9	ug/L	115	Standard
|	**Ni**	60	5135.9	2.0	**1.5396**	0.038	2.5	ug/L	76	Standard
|	**Cu**	65	2278.8	4.0	**0.7420**	0.033	4.5	ug/L	135	Standard
|	**Zn**	66	3248.3	2.2	**2.4059**	0.067	2.8	ug/L	185	Standard
| >	**Ge**	72	247834.9	0.5				ug/L	274929	Standard
|	**As**	75	1076.9	3.4	**0.9933**	0.027	2.7	ug/L	-262	Standard
|	**Se**	82	415.1	2.5	**2.5303**	0.079	3.1	ug/L	27	Standard
⌊	**Se-1**	77	192.7	13.2	**1.3308**	0.304	22.8	ug/L	94	Standard
	Ga	71	219936.4	1.6				mg/L	248575	Standard
⌈	**Rb**	85	6388.0	1.2				ug/L	15	Standard
| >	**Y**	89	239346.1	4.1				ug/L	267564	Standard
⌊	**Rh**	103	76.7	19.9				ug/L	2	Standard
⌈	**Mo**	98	847.7	4.1	**0.1830**	0.007	3.6	ug/L	5	Standard
|	**Ag**	107	45.3	23.8	**-0.0034**	0.001	31.5	ug/L	44	Standard
|	**Cd**	111	490.7	5.0	**0.0033**	0.005	143.1	mg/L	512	Standard
|	**Cd**	114	1295.0	2.4	**0.0134**	0.003	19.9	ug/L	1247	Standard
| >	**In**	115	692924.3	0.9				ug/L	743274	Standard
|	**Sn**	118	1097.0	5.6	**0.0195**	0.004	18.9	ug/L	816	Standard
|	**Sb**	123	220.7	8.6	**0.0180**	0.002	8.6	ug/L	15	Standard
⌊	**Ba**	135	209836.4	0.5	**43.1262**	0.516	1.2	ug/L	37	Standard
⌈	**Ce**	140	191.3	3.9				ug/L	44	Standard
⌊>	**Tb**	159	769268.7	0.9				ug/L	826676	Standard
⌈	**Ho**	165	10.3	40.3				ug/L	12	Standard
|	**Tl**	203	517.3	10.3	**0.0306**	0.004	11.7	ug/L	6	Standard
|	**Tl**	205	1249.1	3.1	**0.0348**	0.001	3.7	ug/L	11	Standard
|	**Pb**	206	1150.4	4.0	**0.0707**	0.004	5.7	ug/L	301	Standard
|	**Pb**	207	1013.0	1.9	**0.0752**	0.001	1.7	ug/L	250	Standard
|	**Pb**	208	4577.9	1.9	**0.0716**	0.002	2.7	ug/L	1166	Standard
|	**U**	238	8339.3	2.1	**0.3105**	0.006	1.9	ug/L	3	Standard
⌊>	**Bi**	209	392546.0	0.9				ug/L	454659	Standard
⌈	**Na**	23	70279.3	2.4	**14.8221**	0.568	3.8	mg/L	137	Standard
|	**Mg**	24	1307363.9	2.4	**1.9532**	0.013	0.7	mg/L	498	Standard

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	K	39	14672.1	1.3	**1.0011**	0.026	2.6	mg/L	557	Standard
	Ca	43	21830.7	2.6	**45.6887**	0.770	1.7	mg/L	52	Standard
	Fe	54	1051.5	2.2	**0.0063**	0.005	78.9	mg/L	865	Standard
	Fe	57	33164.6	2.4	**0.1272**	0.001	0.8	mg/L	6003	Standard
>	**Sc-1**	45	351197.7	3.1				mg/L	333080	Standard
	Cl	35	1042444.1	0.4				ug/L	40103	Standard
	Kr	83	57.8	8.4				ug/L	67	Standard
	Br	81	156137.1	1.1				ug/L	15294	Standard
	P	31	77862.4	5.3				ug/L	74262	Standard
	S	34	1748120.2	1.1				ug/L	787377	Standard
	Sr	88	2336135.2	1.2				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		90.145	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		89.454	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		93.226	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		93.056	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	86.339
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: May 09, 2012

Method 6020 - Summary Report

Sample ID: L1205008808

Sample Date/Time: Tuesday, May 08, 2012 17:23:35
Number of Replicates: 3
Autosampler Position: 356
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	174021.0	3.2	**85004.0632**	1662.443	2.0	ug/L	17857	Standard
|	**Be**	9	15.0	66.7	**-0.0035**	0.002	65.2	ug/L	12	Standard
|	**Al**	27	48806.9	2.6	**1.7348**	0.016	0.9	ug/L	13328	Standard
⌊>	**Sc**	45	354128.8	2.4				ug/L	333080	Standard
⌈	**Ti**	47	1784.1	5.0	**1.0029**	0.058	5.8	ug/L	113	Standard
|	**V**	51	74870.4	0.9	**4.1676**	0.067	1.6	ug/L	4349	Standard
|	**Cr**	52	20043.3	3.0	**0.5739**	0.057	9.9	ug/L	14000	Standard
|	**Cr**	53	1998.5	0.6	**0.8967**	0.005	0.6	ug/L	319	Standard
|	**Mn**	55	3725.5	2.6	**0.1119**	0.006	5.1	ug/L	1367	Standard
|	**Co**	59	1348.1	2.7	**0.0793**	0.002	3.1	ug/L	115	Standard
|	**Ni**	60	5303.3	1.1	**1.5782**	0.010	0.7	ug/L	76	Standard
|	**Cu**	65	1084.4	4.7	**0.3266**	0.020	6.1	ug/L	135	Standard
|	**Zn**	66	2359.2	4.0	**1.6953**	0.086	5.1	ug/L	185	Standard
| >	**Ge**	72	249706.9	0.7				ug/L	274929	Standard
|	**As**	75	1259.1	7.2	**1.1250**	0.064	5.7	ug/L	-262	Standard
|	**Se**	82	482.6	6.0	**2.9516**	0.177	6.0	ug/L	27	Standard
⌊	**Se-1**	77	193.7	3.6	**1.3251**	0.078	5.9	ug/L	94	Standard
	Ga	71	222111.9	0.5				mg/L	248575	Standard
⌈	**Rb**	85	6916.6	4.0				ug/L	15	Standard
| >	**Y**	89	246110.5	2.9				ug/L	267564	Standard
⌊	**Rh**	103	75.0	35.3				ug/L	2	Standard
⌈	**Mo**	98	880.8	3.0	**0.1904**	0.005	2.4	ug/L	5	Standard
|	**Ag**	107	46.3	3.3	**-0.0033**	0.000	5.7	ug/L	44	Standard
|	**Cd**	111	493.7	3.8	**0.0042**	0.004	83.8	mg/L	512	Standard
|	**Cd**	114	1301.7	1.5	**0.0142**	0.002	16.9	ug/L	1247	Standard
| >	**In**	115	691138.8	0.8				ug/L	743274	Standard
|	**Sn**	118	1231.1	1.7	**0.0280**	0.001	4.8	ug/L	816	Standard
|	**Sb**	123	274.4	2.4	**0.0228**	0.001	3.4	ug/L	15	Standard
⌊	**Ba**	135	217851.1	1.1	**44.8857**	0.137	0.3	ug/L	37	Standard
⌈	**Ce**	140	148.3	3.0				ug/L	44	Standard
⌊>	**Tb**	159	769184.8	0.8				ug/L	826676	Standard
⌈	**Ho**	165	11.0	15.7				ug/L	12	Standard
|	**Tl**	203	548.0	12.9	**0.0325**	0.004	13.9	ug/L	6	Standard
|	**Tl**	205	1319.4	1.3	**0.0365**	0.000	1.2	ug/L	11	Standard
|	**Pb**	206	627.3	1.6	**0.0290**	0.001	2.7	ug/L	301	Standard
|	**Pb**	207	493.0	3.7	**0.0257**	0.002	6.8	ug/L	250	Standard
|	**Pb**	208	2369.4	0.5	**0.0271**	0.000	0.7	ug/L	1166	Standard
|	**U**	238	8630.5	1.0	**0.3202**	0.003	0.9	ug/L	3	Standard
⌊>	**Bi**	209	393721.9	0.1				ug/L	454659	Standard
⌈	**Na**	23	72853.1	2.4	**15.2374**	0.625	4.1	mg/L	137	Standard
|	**Mg**	24	1374728.8	0.9	**2.0372**	0.032	1.6	mg/L	498	Standard

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	K	39	15005.8	2.7	**1.0156**	0.015	1.5	mg/L	557	Standard
	Ca	43	22651.9	0.5	**47.0271**	1.163	2.5	mg/L	52	Standard
	Fe	54	1010.3	2.2	**-0.0014**	0.003	180.6	mg/L	865	Standard
	Fe	57	33901.2	1.3	**0.1294**	0.005	3.5	mg/L	6003	Standard
>	**Sc-1**	45	354128.8	2.4				mg/L	333080	Standard
	Cl	35	1092665.7	1.0				ug/L	40103	Standard
	Kr	83	57.3	5.5				ug/L	67	Standard
	Br	81	188465.7	3.3				ug/L	15294	Standard
	P	31	79595.2	1.9				ug/L	74262	Standard
	S	34	1804599.0	2.0				ug/L	787377	Standard
	Sr	88	2492026.5	1.5				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		90.826	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		91.982	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		92.986	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		93.045	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	86.597
	Na	23	
	Mg	24	
	K	39	
	Ca	43	
	Fe	54	
	Fe	57	
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: May 09, 2012

Method 6020 - Summary Report

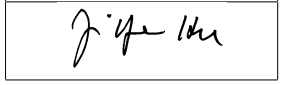
Sample ID: QC Std 6
Sample Date/Time: Tuesday, May 08, 2012 17:26:30
Number of Replicates: 3
Autosampler Position: 101
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	13491.0	2.6	**-993.4169**	147.919	14.9	ug/L	17857	Standard
|	**Be**	9	175293.8	3.0	**51.2526**	0.632	1.2	ug/L	12	Standard
|	**Al**	27	899039.7	2.3	**55.2846**	1.718	3.1	ug/L	13328	Standard
⌊>	**Sc**	45	284002.7	3.7				ug/L	333080	Standard
⌈	**Ti**	47	164045.1	1.6	**96.5232**	0.098	0.1	ug/L	113	Standard
|	**V**	51	841430.3	1.7	**49.1773**	0.652	1.3	ug/L	4349	Standard
|	**Cr**	52	630783.4	2.5	**49.5046**	0.671	1.4	ug/L	14000	Standard
|	**Cr**	53	93621.1	3.2	**48.6962**	0.730	1.5	ug/L	319	Standard
|	**Mn**	55	1079581.9	1.1	**50.6075**	0.327	0.6	ug/L	1367	Standard
|	**Co**	59	769087.5	1.6	**48.3762**	0.254	0.5	ug/L	115	Standard
|	**Ni**	60	161612.8	1.5	**48.6810**	0.290	0.6	ug/L	76	Standard
|	**Cu**	65	142557.9	1.4	**48.7963**	0.157	0.3	ug/L	135	Standard
|	**Zn**	66	64920.1	1.2	**50.3291**	0.495	1.0	ug/L	185	Standard
|>	**Ge**	72	249888.9	1.7				ug/L	274929	Standard
|	**As**	75	65095.9	1.4	**49.4430**	0.149	0.3	ug/L	-262	Standard
|	**Se**	82	7216.3	1.6	**47.0785**	0.843	1.8	ug/L	27	Standard
⌊	**Se-1**	77	4533.7	4.2	**51.8720**	2.808	5.4	ug/L	94	Standard
	Ga	71	224031.4	3.5				mg/L	248575	Standard
⌈	**Rb**	85	1223.4	9.3				ug/L	15	Standard
|>	**Y**	89	239821.7	1.5				ug/L	267564	Standard
⌊	**Rh**	103	38.3	19.9				ug/L	2	Standard
⌈	**Mo**	98	440974.7	1.4	**93.1112**	2.145	2.3	ug/L	5	Standard
|	**Ag**	107	457923.4	0.7	**45.1962**	0.839	1.9	ug/L	44	Standard
|	**Cd**	111	232300.1	0.3	**50.4656**	0.756	1.5	mg/L	512	Standard
|	**Cd**	114	604306.8	0.9	**51.7273**	1.009	2.0	ug/L	1247	Standard
|>	**In**	115	685776.4	1.2				ug/L	743274	Standard
|	**Sn**	118	802704.4	1.3	**50.0863**	0.778	1.6	ug/L	816	Standard
|	**Sb**	123	559562.1	0.5	**50.0491**	0.494	1.0	ug/L	15	Standard
⌊	**Ba**	135	239758.8	0.7	**49.7936**	0.831	1.7	ug/L	37	Standard
⌈	**Ce**	140	863.7	4.6				ug/L	44	Standard
⌊>	**Tb**	159	752261.0	1.0				ug/L	826676	Standard
⌈	**Ho**	165	20.7	7.4				ug/L	12	Standard
|	**Tl**	203	827412.1	0.9	**51.1376**	0.370	0.7	ug/L	6	Standard
|	**Tl**	205	1924840.2	1.4	**48.5179**	0.337	0.7	ug/L	11	Standard
|	**Pb**	206	665321.0	1.2	**51.1535**	0.392	0.8	ug/L	301	Standard
|	**Pb**	207	551491.0	1.9	**50.8281**	0.464	0.9	ug/L	250	Standard
|	**Pb**	208	2577607.0	1.0	**50.2928**	0.419	0.8	ug/L	1166	Standard
|	**U**	238	1302261.6	1.2	**46.4737**	0.212	0.5	ug/L	3	Standard
⌊>	**Bi**	209	404547.3	1.4				ug/L	454659	Standard
⌈	**Na**	23	19841.3	0.5	**5.1601**	0.169	3.3	mg/L	137	Standard
|	**Mg**	24	2929746.1	3.2	**5.4156**	0.040	0.7	mg/L	498	Standard

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	K	39	64691.2	2.2	**5.6599**	0.214	3.8	mg/L	557	Standard
	Ca	43	2401.9	3.6	**6.1457**	0.407	6.6	mg/L	52	Standard
	Fe	54	33155.7	2.1	**6.1943**	0.123	2.0	mg/L	865	Standard
	Fe	57	966699.8	0.8	**5.6801**	0.167	2.9	mg/L	6003	Standard
>	**Sc-1**	45	284002.7	3.7				mg/L	333080	Standard
	Cl	35	103655.1	8.7				ug/L	40103	Standard
	Kr	83	59.6	5.1				ug/L	67	Standard
	Br	81	23816.3	27.6				ug/L	15294	Standard
	P	31	73712.3	2.6				ug/L	74262	Standard
	S	34	834330.0	1.3				ug/L	787377	Standard
	Sr	88	860.0	5.0				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27	110.569		
>	Sc	45			
	Ti	47	96.523		
	V	51	98.355		
	Cr	52	99.009		
	Cr	53			
	Mn	55	101.215		
	Co	59	96.752		
	Ni	60	97.362		
	Cu	65	97.593		
	Zn	66	100.658		
>	Ge	72		90.892	
	As	75	98.886		
	Se	82	94.157		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		89.631	
	Rh	103			
	Mo	98	93.111		
	Ag	107	90.392		
	Cd	111	100.931		
	Cd	114			
>	In	115		92.264	
	Sn	118	100.173		
	Sb	123	100.098		
	Ba	135	99.587		
	Ce	140			
>	Tb	159		90.998	
	Ho	165			
	Tl	203	102.275		
	Tl	205			
	Pb	206	102.307		

Sample ID: QC Std 6
Report Date/Time: Tuesday, May 08, 2012 17:29:04
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	Pb	207	101.656	
	Pb	208	100.586	
	U	238	92.947	
>	Bi	209		88.978
	Na	23	103.202	
	Mg	24	108.311	
	K	39	113.198	
	Ca	43	122.913	
	Fe	54	123.885	
	Fe	57	113.603	
>	Sc-1	45		
	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	Al	27	
QC Std 6	K	39	
QC Std 6	Ca	43	
QC Std 6	Fe	54	
QC Std 6	Fe	57	

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Method 6020 - Summary Report

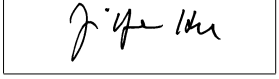
Sample ID: QC Std 7
Sample Date/Time: Tuesday, May 08, 2012 17:29:23
Number of Replicates: 3
Autosampler Position: 102
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	13509.4	0.8	**-790.6964**	93.495	11.8	ug/L	17857	Standard
|	**Be**	9	20.0	75.0	**-0.0010**	0.004	463.7	ug/L	12	Standard
|	**Al**	27	14448.6	11.7	**0.2172**	0.112	51.4	ug/L	13328	Standard
⌊>	**Sc**	45	278206.4	1.7				ug/L	333080	Standard
⌈	**Ti**	47	113.0	12.5	**0.0214**	0.009	43.8	ug/L	113	Standard
|	**V**	51	3587.6	3.4	**-0.0115**	0.009	77.8	ug/L	4349	Standard
|	**Cr**	52	11366.6	2.1	**-0.0796**	0.028	34.9	ug/L	14000	Standard
|	**Cr**	53	363.3	5.3	**0.0516**	0.011	20.7	ug/L	319	Standard
|	**Mn**	55	2045.5	46.7	**0.0378**	0.048	127.3	ug/L	1367	Standard
|	**Co**	59	157.0	45.8	**0.0048**	0.005	100.7	ug/L	115	Standard
|	**Ni**	60	85.0	8.5	**0.0058**	0.002	41.9	ug/L	76	Standard
|	**Cu**	65	161.3	5.3	**0.0126**	0.003	22.8	ug/L	135	Standard
|	**Zn**	66	225.0	7.0	**0.0428**	0.012	28.3	ug/L	185	Standard
|>	**Ge**	72	238625.5	0.9				ug/L	274929	Standard
|	**As**	75	-159.6	16.2	**0.0449**	0.021	47.9	ug/L	-262	Standard
|	**Se**	82	37.1	27.2	**0.0415**	0.067	162.1	ug/L	27	Standard
⌊	**Se-1**	77	73.0	12.3	**-0.0412**	0.109	264.2	ug/L	94	Standard
	Ga	71	214559.8	1.6				mg/L	248575	Standard
⌈	**Rb**	85	21.7	13.3				ug/L	15	Standard
|>	**Y**	89	228324.3	1.0				ug/L	267564	Standard
⌊	**Rh**	103	0.0					ug/L	2	Standard
⌈	**Mo**	98	95.4	86.8	**0.0265**	0.018	66.2	ug/L	5	Standard
|	**Ag**	107	87.3	65.1	**0.0010**	0.006	533.5	ug/L	44	Standard
|	**Cd**	111	457.8	2.9	**0.0006**	0.001	182.6	mg/L	512	Standard
|	**Cd**	114	1178.0	5.7	**0.0078**	0.004	52.5	ug/L	1247	Standard
|>	**In**	115	663809.7	1.9				ug/L	743274	Standard
|	**Sn**	118	910.7	7.6	**0.0104**	0.004	38.4	ug/L	816	Standard
|	**Sb**	123	240.2	58.6	**0.0205**	0.012	60.8	ug/L	15	Standard
⌊	**Ba**	135	109.7	60.3	**0.0167**	0.014	81.6	ug/L	37	Standard
⌈	**Ce**	140	42.7	7.2				ug/L	44	Standard
⌊>	**Tb**	159	721156.6	0.2				ug/L	826676	Standard
⌈	**Ho**	165	8.7	43.7				ug/L	12	Standard
|	**Tl**	203	84.3	38.3	**0.0029**	0.002	68.0	ug/L	6	Standard
|	**Tl**	205	179.0	44.3	**0.0069**	0.002	28.7	ug/L	11	Standard
|	**Pb**	206	306.3	10.0	**0.0032**	0.002	66.2	ug/L	301	Standard
|	**Pb**	207	263.0	23.7	**0.0034**	0.006	164.6	ug/L	250	Standard
|	**Pb**	208	1223.7	12.0	**0.0036**	0.003	74.3	ug/L	1166	Standard
|	**U**	238	140.7	83.3	**0.0089**	0.004	47.3	ug/L	3	Standard
⌊>	**Bi**	209	400745.3	1.1				ug/L	454659	Standard
⌈	**Na**	23	108.3	35.3	**0.0051**	0.010	201.3	mg/L	137	Standard
|	**Mg**	24	1463.4	88.6	**0.0011**	0.002	213.4	mg/L	498	Standard

Sample ID: QC Std 7
Report Date/Time: Tuesday, May 08, 2012 17:31:57
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	K	39	621.7	6.7	**0.0110**	0.003	25.6	mg/L	557	Standard
	Ca	43	58.3	26.2	**0.0636**	0.041	63.9	mg/L	52	Standard
	Fe	54	885.9	5.8	**0.0165**	0.009	52.5	mg/L	865	Standard
	Fe	57	5192.6	5.7	**0.0001**	0.001	1235.8	mg/L	6003	Standard
>	**Sc-1**	45	278206.4	1.7				mg/L	333080	Standard
	Cl	35	92078.0	1.7				ug/L	40103	Standard
	Kr	83	52.7	5.5				ug/L	67	Standard
	Br	81	16686.7	2.8				ug/L	15294	Standard
	P	31	71799.8	3.3				ug/L	74262	Standard
	S	34	827983.6	0.4				ug/L	787377	Standard
	Sr	88	1536.8	120.1				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51			
	Cr	52			
	Cr	53			
	Mn	55			
	Co	59			
	Ni	60			
	Cu	65			
	Zn	66			
>	Ge	72		86.795	
	As	75			
	Se	82			
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		85.334	
	Rh	103			
	Mo	98			
	Ag	107			
	Cd	111			
	Cd	114			
>	In	115		89.309	
	Sn	118			
	Sb	123			
	Ba	135			
	Ce	140			
>	Tb	159		87.236	
	Ho	165			
	Tl	203			
	Tl	205			
	Pb	206			

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	Pb	207	
	Pb	208	
	U	238	
>	Bi	209	88.142
	Na	23	
	Mg	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

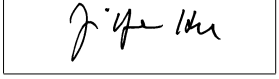
Sample ID: QC Std 8
Sample Date/Time: Tuesday, May 08, 2012 17:32:18
Number of Replicates: 3
Autosampler Position: 202
Sample Description:
Method File: C:\NexIONData\Method\6020a.mth
Aliquot Volume (mL):
Diluted to Volume (mL):
User Name: JYH user
Cumulative Autodilution Factor: 1
Nexion-ICP 200.8\6020

Concentration Results

IS	Analyte	Mass	Intensity	RSD	Conc.	SD	RSD	Units	Blank Intens.	Mode
⌈	**Li**	7	13674.5	4.9	**-471.9108**	444.928	94.3	ug/L	17857	Standard
|	**Be**	9	6.7	86.6	**-0.0049**	0.002	36.1	ug/L	12	Standard
|	**Al**	27	17301.6	7.1	**0.4224**	0.091	21.5	ug/L	13328	Standard
⌊>	**Sc**	45	272332.5	1.1				ug/L	333080	Standard
⌈	**Ti**	47	108.7	10.7	**0.0188**	0.007	38.6	ug/L	113	Standard
|	**V**	51	9713.0	3.0	**0.3667**	0.017	4.7	ug/L	4349	Standard
|	**Cr**	52	20544.6	3.2	**0.6948**	0.053	7.6	ug/L	14000	Standard
|	**Cr**	53	1763.4	4.4	**0.8192**	0.041	5.0	ug/L	319	Standard
|	**Mn**	55	11618.1	1.1	**0.5095**	0.006	1.2	ug/L	1367	Standard
|	**Co**	59	5905.2	3.3	**0.3845**	0.012	3.2	ug/L	115	Standard
|	**Ni**	60	5010.5	2.9	**1.5642**	0.044	2.8	ug/L	76	Standard
|	**Cu**	65	2399.5	5.2	**0.8178**	0.044	5.4	ug/L	135	Standard
|	**Zn**	66	7917.7	1.5	**6.3219**	0.086	1.4	ug/L	185	Standard
| >	**Ge**	72	237997.3	0.2				ug/L	274929	Standard
|	**As**	75	287.4	9.6	**0.3998**	0.022	5.4	ug/L	-262	Standard
|	**Se**	82	84.8	6.3	**0.3710**	0.036	9.8	ug/L	27	Standard
⌊	**Se-1**	77	114.7	6.6	**0.4706**	0.094	19.9	ug/L	94	Standard
	Ga	71	212372.0	0.4				mg/L	248575	Standard
⌈	**Rb**	85	20.0	0.0				ug/L	15	Standard
| >	**Y**	89	231821.8	0.9				ug/L	267564	Standard
⌊	**Rh**	103	1.7	173.2				ug/L	2	Standard
⌈	**Mo**	98	24.0	4.9	**0.0111**	0.000	2.5	ug/L	5	Standard
|	**Ag**	107	3405.7	4.0	**0.3399**	0.012	3.4	ug/L	44	Standard
|	**Cd**	111	1479.4	2.4	**0.2307**	0.007	3.0	mg/L	512	Standard
|	**Cd**	114	3879.4	1.7	**0.2476**	0.006	2.5	ug/L	1247	Standard
| >	**In**	115	662979.5	0.7				ug/L	743274	Standard
|	**Sn**	118	812.4	2.0	**0.0042**	0.001	31.6	ug/L	816	Standard
|	**Sb**	123	4259.8	2.6	**0.3925**	0.008	2.1	ug/L	15	Standard
⌊	**Ba**	135	3424.1	2.2	**0.7289**	0.013	1.8	ug/L	37	Standard
⌈	**Ce**	140	53.3	4.7				ug/L	44	Standard
⌊>	**Tb**	159	717526.2	0.2				ug/L	826676	Standard
⌈	**Ho**	165	4.7	44.6				ug/L	12	Standard
|	**Tl**	203	1309.4	3.6	**0.0793**	0.004	4.7	ug/L	6	Standard
|	**Tl**	205	3037.0	1.7	**0.0795**	0.001	1.0	ug/L	11	Standard
|	**Pb**	206	2870.9	2.4	**0.2021**	0.007	3.6	ug/L	301	Standard
|	**Pb**	207	2382.2	0.8	**0.2004**	0.004	1.8	ug/L	250	Standard
|	**Pb**	208	11020.6	1.5	**0.1964**	0.003	1.5	ug/L	1166	Standard
|	**U**	238	9949.6	3.3	**0.3617**	0.009	2.5	ug/L	3	Standard
⌊>	**Bi**	209	401303.2	1.3				ug/L	454659	Standard
⌈	**Na**	23	90.0	5.6	**0.0007**	0.001	213.3	mg/L	137	Standard
|	**Mg**	24	493.3	7.7	**-0.0007**	0.000	11.2	mg/L	498	Standard

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	K	39	653.3	8.8	**0.0152**	0.006	38.0	mg/L	557	Standard
	Ca	43	63.3	9.1	**0.0804**	0.016	20.4	mg/L	52	Standard
	Fe	54	966.6	4.3	**0.0365**	0.010	28.2	mg/L	865	Standard
	Fe	57	5254.2	4.8	**0.0012**	0.002	153.7	mg/L	6003	Standard
>	**Sc-1**	45	272332.5	1.1				mg/L	333080	Standard
	Cl	35	88037.0	0.6				ug/L	40103	Standard
	Kr	83	55.1	8.7				ug/L	67	Standard
	Br	81	15392.8	4.4				ug/L	15294	Standard
	P	31	73143.6	0.9				ug/L	74262	Standard
	S	34	805889.3	1.9				ug/L	787377	Standard
	Sr	88	335.0	19.7				ug/L	290	Standard

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery
	Li	7			
	Be	9			
	Al	27			
>	Sc	45			
	Ti	47			
	V	51	91.672		
	Cr	52	86.854		
	Cr	53			
	Mn	55	101.891		
	Co	59	96.114		
	Ni	60	97.765		
	Cu	65	102.227		
	Zn	66	101.151		
>	Ge	72		86.567	
	As	75	99.960		
	Se	82	92.762		
	Se-1	77			
	Ga	71			
	Rb	85			
>	Y	89		86.641	
	Rh	103			
	Mo	98			
	Ag	107	84.965		
	Cd	111	96.119		
	Cd	114			
>	In	115		89.197	
	Sn	118			
	Sb	123	98.136		
	Ba	135	97.188		
	Ce	140			
>	Tb	159		86.797	
	Ho	165			
	Tl	203	99.072		
	Tl	205			
	Pb	206			

Sample ID: QC Std 8
Report Date/Time: Tuesday, May 08, 2012 17:34:51
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	Pb	207			
	Pb	208	98.199		
	U	238	90.420		
>	Bi	209		88.265	
	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 8
Report Date/Time: Tuesday, May 08, 2012 17:34:51
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2.3.3 Metals CVAA Data (Mercury)

2.3.3.1 Summary Data

Login Number: L12050171
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: WG397594 - Sample 01 was chosen by the client for MS/MSD analysis. Samples 03(MS) and 05(MSD) met all acceptance criteria. Sample 02 was chosen by the client for MS/MSD analysis. Samples 04(MS) and 06(MSD) met all acceptance criteria.

SAMPLES

Samples: All acceptance criteria were met.

Narrative ID: 46141
Approved By: Sheri Pfalzgraf

Certificate of Analysis

Sample #: L12050171-01 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-12-050412 **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 11:55
Collect Date: 05/04/2012 10:30 **Dilution:** 1 **File ID:** HY.051012.115538
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 #: L12050171-02 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-12-050412 **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 11:57
Collect Date: 05/04/2012 10:30 **Dilution:** 1 **File ID:** HY.051012.115750
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 #: L12050171-03 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-12-050412 **Prep Method:** 7470A **Prep Date:** 05/08/2012 12:34
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 05/10/2012 09:40
Workgroup #: WG397594 **Analyst:** PDM **Run Date:** 05/10/2012 11:59
Collect Date: 05/04/2012 10:30 **Dilution:** 1 **File ID:** HY.051012.115945
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Mercury	7439-97-6	0.00436		0.000222	0.000111

Sample #: L12050171-04 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-12-050412 **Prep Method:** 7470A **Prep Date:** 05/08/2012 12:34
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 05/10/2012 09:40
Workgroup #: WG397594 **Analyst:** PDM **Run Date:** 05/10/2012 12:01
Collect Date: 05/04/2012 10:30 **Dilution:** 1 **File ID:** HY.051012.120129
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Mercury, Dissolved	7439-97-6	0.00416		0.000222	0.000111

Certificate of Analysis

Sample #: L12050171-05 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-12-050412 **Prep Method:** 7470A **Prep Date:** 05/08/2012 12:34
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 05/10/2012 09:40
Workgroup #: WG397594 **Analyst:** PDM **Run Date:** 05/10/2012 12:03
Collect Date: 05/04/2012 10:30 **Dilution:** 1 **File ID:** HY.051012.120313
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Mercury	7439-97-6	0.00476		0.000222	0.000111

Sample #: L12050171-06 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: MW-12-050412 **Prep Method:** 7470A **Prep Date:** 05/08/2012 12:34
Matrix: Water **Analytical Method:** 7470A **Cal Date:** 05/10/2012 09:40
Workgroup #: WG397594 **Analyst:** PDM **Run Date:** 05/10/2012 12:04
Collect Date: 05/04/2012 10:30 **Dilution:** 1 **File ID:** HY.051012.120458
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Mercury, Dissolved	7439-97-6	0.00474		0.000222	0.000111

Sample #: L12050171-07 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: PZ-01-050412 **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 12:07
Collect Date: 05/04/2012 12:07 **Dilution:** 1 **File ID:** HY.051012.120723
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 #: L12050171-08 **PrePrep Method:** N/A **Instrument:** HYDRA
Client ID: PZ-01-050412 **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 12:09
Collect Date: 05/04/2012 12:07 **Dilution:** 1 **File ID:** HY.051012.120907
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Mercury, Dissolved	7439-97-6		U	0.000200	0.000100

Certificate of Analysis

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: 2406248
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

Page: 2 Approved: May 10, 2012

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: L12050171

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-12-050412	01	05/04/12					05/08/12	4.1	28		05/10/12	6.1	28	
MW-12-050412	03	05/04/12					05/08/12	4.1	28		05/10/12	6.1	28	
MW-12-050412	05	05/04/12					05/08/12	4.1	28		05/10/12	6.1	28	
PZ-01-050412	07	05/04/12					05/08/12	4	28		05/10/12	6	28	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2409719
Report generated 05/10/2012 13:23

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 7470A AAB#: WG397594

Login Number: L12050171

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-12-050412	02	05/04/12					05/08/12	4.1	28		05/10/12	6.1	28	
MW-12-050412	04	05/04/12					05/08/12	4.1	28		05/10/12	6.1	28	
MW-12-050412	06	05/04/12					05/08/12	4.1	28		05/10/12	6.1	28	
PZ-01-050412	08	05/04/12					05/08/12	4	28		05/10/12	6	28	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2409736
Report generated 05/10/2012 13:24

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12050171
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-12-050412	L12050171-01	HY.051012.115538	05/10/12 11:55	01
MW-12-050412	L12050171-02	HY.051012.115750	05/10/12 11:57	01
MW-12-050412	L12050171-03	HY.051012.115945	05/10/12 11:59	01
MW-12-050412	L12050171-04	HY.051012.120129	05/10/12 12:01	01
MW-12-050412	L12050171-05	HY.051012.120313	05/10/12 12:03	01
MW-12-050412	L12050171-06	HY.051012.120458	05/10/12 12:04	01
PZ-01-050412	L12050171-07	HY.051012.120723	05/10/12 12:07	01
PZ-01-050412	L12050171-08	HY.051012.120907	05/10/12 12:09	01

Report Name: BLANK_SUMMARY
PDF File ID: 2409720
Report generated 05/10/2012 13:24

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12050171
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-12-050412	L12050171-01	HY.051012.115538	05/10/12 11:55	01
MW-12-050412	L12050171-02	HY.051012.115750	05/10/12 11:57	01
MW-12-050412	L12050171-03	HY.051012.115945	05/10/12 11:59	01
MW-12-050412	L12050171-04	HY.051012.120129	05/10/12 12:01	01
MW-12-050412	L12050171-05	HY.051012.120313	05/10/12 12:03	01
MW-12-050412	L12050171-06	HY.051012.120458	05/10/12 12:04	01
PZ-01-050412	L12050171-07	HY.051012.120723	05/10/12 12:07	01
PZ-01-050412	L12050171-08	HY.051012.120907	05/10/12 12:09	01

Report Name: BLANK_SUMMARY
PDF File ID: 2409737
Report generated 05/10/2012 13:24

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050171 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: 2409721
10-MAY-2012 13:24

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050171 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: 2409738
10-MAY-2012 13:24

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050171 **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: 2409722
Report generated: 05/10/2012 13:24

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050171 **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: 2409739
Report generated: 05/10/2012 13:24

Microbac Laboratories Inc.

MS/MSD REPORT

Loginnum:L12050171 Cal ID:HYDRA- 10-MAY-12 Worknum:WG397594

Instrument ID:HYDRA Contract #: Prep Method:7470A

Parent ID:L12050171-01 File ID:HY.051012.115538 Dil:1 Method:7470A

Sample ID:L12050171-03 MS File ID:HY.051012.115945 Dil:1 Matrix:Water

Sample ID:L12050171-05 MSD File ID:HY.051012.120313 Dil:1 Units:mg/L

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Mercury	U	0.00444	0.00436	98	0.00444	0.00476	107	8.78	85 - 115	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

MS_MSD - Modified 03/06/2008

PDF File ID: 2409723

Report generated 05/10/2012 13:24

Microbac Laboratories Inc.

MS/MSD REPORT

Loginnum:L12050171 Cal ID:HYDRA- 10-MAY-12 Worknum:WG397594

Instrument ID:HYDRA Contract #: Prep Method:7470A

Parent ID:L12050171-02 File ID:HY.051012.115750 Dil:1 Method:7470A

Sample ID:L12050171-04 MS File ID:HY.051012.120129 Dil:1 Matrix:Water

Sample ID:L12050171-06 MSD File ID:HY.051012.120458 Dil:1 Units:mg/L

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Mercury, Dissolved	U	0.00444	0.00416	93.5	0.00444	0.00474	107	13.2	85 - 115	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

MS_MSD - Modified 03/06/2008

PDF File ID: 2409740

Report generated 05/10/2012 13:24

Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L12050171 **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: 2409718
Report generated: 05/10/2012 13:23

Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L12050171 **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: 2409735
Report generated: 05/10/2012 13:24

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L12050171
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: 2409725
Report generated 05/10/2012 13:24

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L12050171
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: 2409725
Report generated 05/10/2012 13:24

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L12050171
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: 2409741
Report generated 05/10/2012 13:24

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L12050171
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: 2409741
Report generated 05/10/2012 13:24

Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L12050171 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: 2409727
Report generated 05/10/2012 13:24

Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L12050171 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: 2409743
Report generated 05/10/2012 13:24

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L12050171	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: 2409729
Report generated 05/10/2012 13:24

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L12050171	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: 2409729
Report generated 05/10/2012 13:24

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050171 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: 2409729
Report generated 05/10/2012 13:24

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L12050171	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: 2409729
Report generated 05/10/2012 13:24

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L12050171	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: 2409745
Report generated 05/10/2012 13:24

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L12050171 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: 2409745
Report generated 05/10/2012 13:24

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L12050171	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: 2409745
Report generated 05/10/2012 13:24

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L12050171	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: 2409745
Report generated 05/10/2012 13:24

Microbac Laboratories Inc.

INITIAL CALIBRATION VERIFICATION (ICV)
(Alternate Source)

Login Number: L12050171 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: 2409726
Report generated 05/10/2012 13:24

Microbac Laboratories Inc.

INITIAL CALIBRATION VERIFICATION (ICV)
(Alternate Source)

Login Number: L12050171 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: 2409742
Report generated 05/10/2012 13:24

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050171 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: 2409728

Report generated 05/10/2012 13:24

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050171 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: 2409728

Report generated 05/10/2012 13:24

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050171 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: 2409728

Report generated 05/10/2012 13:24

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050171 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: 2409728

Report generated 05/10/2012 13:24

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050171 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: 2409744

Report generated 05/10/2012 13:24

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050171 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: 2409744

Report generated 05/10/2012 13:24

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050171 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: 2409744

Report generated 05/10/2012 13:24

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L12050171 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: 2409744

Report generated 05/10/2012 13:24

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\ PBW 71 Seq: 20 10:41:19 10 May 12 HG

Hg .064 ppb .000 .064

*** Sample ID: WG39732303 051012B\ LCSW 71 Seq: 21 10:43:03 10 May 12 HG

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
                                                                              =
```

Approved: 05/10/2012 14:00

Pierce Morris

```
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: L12050171
Department: Conventionals
Analyst: Jeremy Kinney

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: Recoveries out of range were observed for the following analytes: Alkalinity, Total (as CaCO3). Please see the applicable QC report for a detailed presentation of the failures.

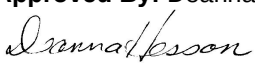
Duplicates: All acceptance criteria were met.

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: 46785
Approved By: Deanna Hesson



Certificate of Analysis

Sample #: L12050171-01 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-12-050412 **Prep Method:** 310.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 310.2 **Cal Date:** 05/10/2012 14:05
Workgroup #: WG397664 **Analyst:** JBK **Run Date:** 05/10/2012 14:21
Collect Date: 05/04/2012 10:30 **Dilution:** 1 **File ID:** SC120510002.035
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Alkalinity, Total (as CaCO3)		290		20.0	10.0

Sample #: L12050171-03 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-12-050412 **Prep Method:** 310.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 310.2 **Cal Date:** 05/10/2012 14:05
Workgroup #: WG397664 **Analyst:** JBK **Run Date:** 05/10/2012 14:22
Collect Date: 05/04/2012 10:30 **Dilution:** 1 **File ID:** SC120510002.037
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Alkalinity, Total (as CaCO3)		343		20.0	10.0

Sample #: L12050171-05 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-12-050412 **Prep Method:** 310.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 310.2 **Cal Date:** 05/10/2012 14:05
Workgroup #: WG397664 **Analyst:** JBK **Run Date:** 05/10/2012 14:23
Collect Date: 05/04/2012 10:30 **Dilution:** 1 **File ID:** SC120510002.038
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Alkalinity, Total (as CaCO3)		347		20.0	10.0

Sample #: L12050171-07 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: PZ-01-050412 **Prep Method:** 310.2 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 310.2 **Cal Date:** 05/10/2012 14:05
Workgroup #: WG397664 **Analyst:** JBK **Run Date:** 05/10/2012 14:23
Collect Date: 05/04/2012 12:07 **Dilution:** 1 **File ID:** SC120510002.039
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Alkalinity, Total (as CaCO3)		21.6		20.0	10.0

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: 10-MAY-2012
Analyst: JBK
Analyst: NA
Method: ALK
Instrument: SC
Curve Workgroup: NA
Runlog ID:
Analytical Workgroups: WG397664

Calibration/Linearity	05/10/2012
Second Source Check	X
ICV/CCV (std)	X
ICB/CCB	X
Blank	X
LCS/LCS Dup	X
MS/MSD	X
Duplicate	X
Upload Results	X
Client Forms	X
QC Violation Sheet	X
Case Narratives	X
Signed Raw Data	X
STD/LCS on benchsheet	X
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	JBK
Secondary Reviewer	DIH
Comments	

Primary Reviewer:
15-MAY-2012

Secondary Reviewer:
16-MAY-2012

CHECKLIST1 - Modified 03/05/2008
Generated: MAY-16-2012 15:28:33

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 310.2 AAB#: WG397664

Login Number: L12050171

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-12-050412	01	05/04/12							14		05/10/12	6.2	14	
MW-12-050412	03	05/04/12							14		05/10/12	6.2	14	
MW-12-050412	05	05/04/12							14		05/10/12	6.2	14	
PZ-01-050412	07	05/04/12							14		05/10/12	6.1	14	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2416133
Report generated 05/15/2012 19:14

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number:	L12050171	Work Group:	WG397664
Blank File ID:	SC120510002.010	Blank Sample ID:	WG397664-01
Prep Date:	05/10/12 14:06	Instrument ID:	SMARTCHEM
Analyzed Date:	05/10/12 14:06	Method:	310.2
Analyst:	JBK		

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG397664-02	SC120510002.011	05/10/12 14:07	01
LCS2	WG397664-03	SC120510002.012	05/10/12 14:07	01
MW-12-050412	L12050171-01	SC120510002.035	05/10/12 14:21	01
DUP	WG397664-05	SC120510002.036	05/10/12 14:22	01
MW-12-050412	L12050171-03	SC120510002.037	05/10/12 14:22	01
MW-12-050412	L12050171-05	SC120510002.038	05/10/12 14:23	01
PZ-01-050412	L12050171-07	SC120510002.039	05/10/12 14:23	01

Report Name: BLANK_SUMMARY
PDF File ID: 2416134
Report generated 05/15/2012 19:14

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050171 Prep Date: 05/10/12 14:06 Sample ID: WG397664-01
Instrument ID: SMARTCHEM Run Date: 05/10/12 14:06 Prep Method: 310.2
File ID: SC120510002.010 Analyst: JBK Method: 310.2
Workgroup (AAB#): WG397664 Matrix: Water Units: mg/L
Contract #: Cal ID: SMARTC-10-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: 2416135
15-MAY-2012 19:14

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050171 **Analyst:** JBK **Prep Method:** 310.2
Instrument ID: SMARTCHEM **Matrix:** Water **Method:** 310.2
Workgroup (AAB#): WG397664 **Units:** mg/L
QC Key: WATERLOO **Lot #:** STD51238

Sample ID: WG397664-02 LCS **File ID:** SC120510002.011 **Run Date:** 05/10/2012 14:07
Sample ID: WG397664-03 LCS2 **File ID:** SC120510002.012 **Run Date:** 05/10/2012 14:07

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Alkalinity, Total (as CaCO3)	200	202	101	200	200	100	0.889	85 - 115	25	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 2416136
Report generated: 05/15/2012 19:14

Microbac Laboratories Inc.

MS/MSD REPORT

Loginnum:L12050171 Cal ID: SMARTCHEM- 10-MAY-12 Worknum:WG397664

Instrument ID:SMARTCHEM Contract #: Prep Method:310.2

Parent ID:L12050171-01 File ID:SC120510002.035 Dil:1 Method:310.2

Sample ID:L12050171-03 MS File ID:SC120510002.037 Dil:1 Matrix:Water

Sample ID:L12050171-05 MSD File ID:SC120510002.038 Dil:1 Units:mg/L

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Alkalinity, Total (as CaCO3)	290	100	343	52.8	100	347	56.6	1.12	85 - 115	25	*

* FAILS %REC LIMIT

FAILS RPD LIMIT

MS_MSD - Modified 03/06/2008

PDF File ID: 2416137

Report generated 05/15/2012 19:14

2.4.1.3 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] WBL Run
- [x] Reagents Full
- [x] Dilution H_2O Full
- [x] Waste Container Check
- [ ] NO3 Reagent bottle connected / purged
- [ ] NO3 pH adj to pH 5-9

Syringe filter lot # _____

1) **Workgroup** _____
Plan # 20120510002
2) **Workgroup** _____
Plan # _____
3) **Workgroup** _____
Plan # _____

	Analyte	1	2	3
	AIK	Dilution		
SC Prepared Curve				
Position				
1-1	ICV250			
1-2	BlankL			
1-3	LCS260			
1-4	LCSDup			
1-5	05-151-01			
1-6	-02			
1-7	-03			
1-8	-04			
1-9	-05			
1-10	-06			
1-11	-07			
1-12	-08			
1-13	-09			
1-14	-10			
1-15	-11	(1/10)		color
1-16	-12			
1-17	-13	(1/10)		color
1-18	-14			
1-19	05-237-02	1/4		color
1-20	-03	↓		↓
1-21	-05			
1-22	-06			
2-1	05-171-01			
2-2	Dup-01			
2-3	MS-03			

Position	Analyte	1	2	3
2-4	SD 171-05			
2-5	-07			
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#90832

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)
- [x] Alkalinity — EPA 310.2
- [ ] Nitrate-Nitrite — EPA 353.2/SM 4500-NO3 F
- [ ] Ammonia — EPA 350.1/SM 4500-NH3 B
- [ ] TKN — EPA 351.2
- [ ] Phos — EPA 365.4

Analyte	ALK		Reagents
SOP & Revision	IC3152RM		RGT17341
Curve Stock (SC made)	STD50178		
Curve ID (user made)			
ICV	ICV51237		
CCV	S1236		
LCS	S1238		
MS	S050179		
	Dilution 0.2/5(2500)=100		

Comments: *CLB & RL, Results >10x CLB not reanalyzed. All other QC requirements met.

Analyst: _____ Date: 5/10/12

DCN#90832

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	0.5939	0.00		1:59:34 PM
DIL-1	RBL	0.0	0.5934	0.00		1:59:52 PM
DIL-1	RBL	0.0	0.5977	0.00		2:00:46 PM
DIL-1	Std-1	0.0	0.0046	0.00	INV	2:01:04 PM
SR5-1	Std-2	10.0	-0.0003	0.00		2:01:58 PM
SR5-2	Std-3	20.0	-0.0177	0.00		2:02:16 PM
SR5-3	Std-4	50.0	-0.0583	0.00		2:03:10 PM
SR5-4	Std-5	100.0	-0.1220	0.00		2:03:28 PM
SR5-5	Std-6	200.0	-0.2585	0.00		2:04:22 PM
SR5-6	Std-7	250.0	-0.3302	0.00		2:04:40 PM
SR5-7	Std-8	300.0	-0.3902	0.00		2:05:34 PM
1	ICV 250	249.3	-0.3249	0.00		2:05:52 PM
2	WG397664-01 BLANK	6.1	0.0010	0.00	INV	2:06:46 PM
3	WG397664-02 LCS200	202.1	-0.2614	0.00		2:07:04 PM
4	WG397664-03 LCSDUP	200.3	-0.2590	0.00		2:07:58 PM
5	L12050151-01	35.5	-0.0383	0.00		2:08:16 PM
6	L12050151-02	18.4	-0.0155	0.00		2:09:10 PM
7	L12050151-03	20.7	-0.0185	0.00		2:09:28 PM
8	L12050151-04	293.8	-0.3847	0.00		2:10:22 PM
9	L12050151-05	40.8	-0.0454	0.00		2:10:40 PM
10	L12050151-06	30.8	-0.0320	0.00		2:11:34 PM
ST-2	CCV (150 mg/L)	148.1	-0.1890	98.73		2:11:52 PM
ST-3	CCB (0 mg/L)	11.0	-0.0055	0.00		2:12:46 PM
11	L12050151-07	190.5	-0.2459	0.00		2:13:04 PM
12	L12050151-08	117.9	-0.1485	0.00		2:13:59 PM
13	L12050151-09	106.5	-0.1333	0.00		2:14:17 PM
14	L12050151-10	357.6	-0.4707	0.00	>,LH	2:15:11 PM
15	L12050151-11 (10)	63.1	-0.0752	0.00		2:15:29 PM
16	L12050151-12	85.4	-0.1050	0.00		2:16:23 PM
17	L12050151-13 (10)	54.2	-0.0633	0.00		2:16:41 PM
18	L12050151-14	205.9	-0.2666	0.00		2:17:35 PM
19	L12050237-02 (4)	209.4	-0.2712	0.00		2:17:53 PM

Report Date :05/10/2012 **Run Date :5/10/2012** **Operator : WESTCO** **Plan # :20120510002**

Plan Description : ALK-A-JBK/05/10/2012

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	L12050237-03 (4)	119.4	-0.1506	0.00		2:18:47 PM
ST-2	CCV (150 mg/L)	150.6	-0.1923	100.37		2:19:05 PM
ST-3	CCB (0 mg/L)	17.8	-0.0148	0.00		2:19:59 PM
21	L12050237-05 (4)	129.6	-0.1642	0.00		2:20:17 PM
22	L12050237-06 (4)	103.7	-0.1296	0.00		2:21:11 PM
23	L12050171-01	290.3	-0.3800	0.00		2:21:29 PM
24	WG397664-05 DUP	298.6	-0.3912	0.00	><	2:22:23 PM
25	L12050171-03 MS	343.1 OK	-0.4511	0.00	><,LH	2:22:40 PM
26	L12050171-05 SD	346.9 OK	-0.4563	0.00	><,LH	2:23:35 PM
27	L12050171-07	21.6	-0.0198	0.00		2:23:53 PM
28	ID 28	15.0	-0.0109	0.00		2:24:47 PM
29	ID 29 CCV	157.7	-0.2019	0.00		2:25:05 PM
30	ID 30 CCB	8.3	-0.0019	0.00		2:25:59 PM
ST-2	CCV (150 mg/L)	156.4	-0.2002	104.30		2:26:17 PM
ST-3	CCB (0 mg/L)	20.8	-0.0187	0.00		2:27:11 PM
14-[1/2]	L12050151-10	493.8	-0.3216	0.00	LH	2:34:51 PM
25-[1/2]	L12050171-03 MS	411.9	-0.2666	0.00	LH	2:36:03 PM
26-[1/2]	L12050171-05 SD	414.1	-0.2681	0.00	LH	2:37:15 PM
ST-2	CCV (150 mg/L)	163.5	-0.2097	109.02		2:37:15 PM
ST-3	CCB (0 mg/L) *	22.7	-0.0213	0.00		2:38:09 PM

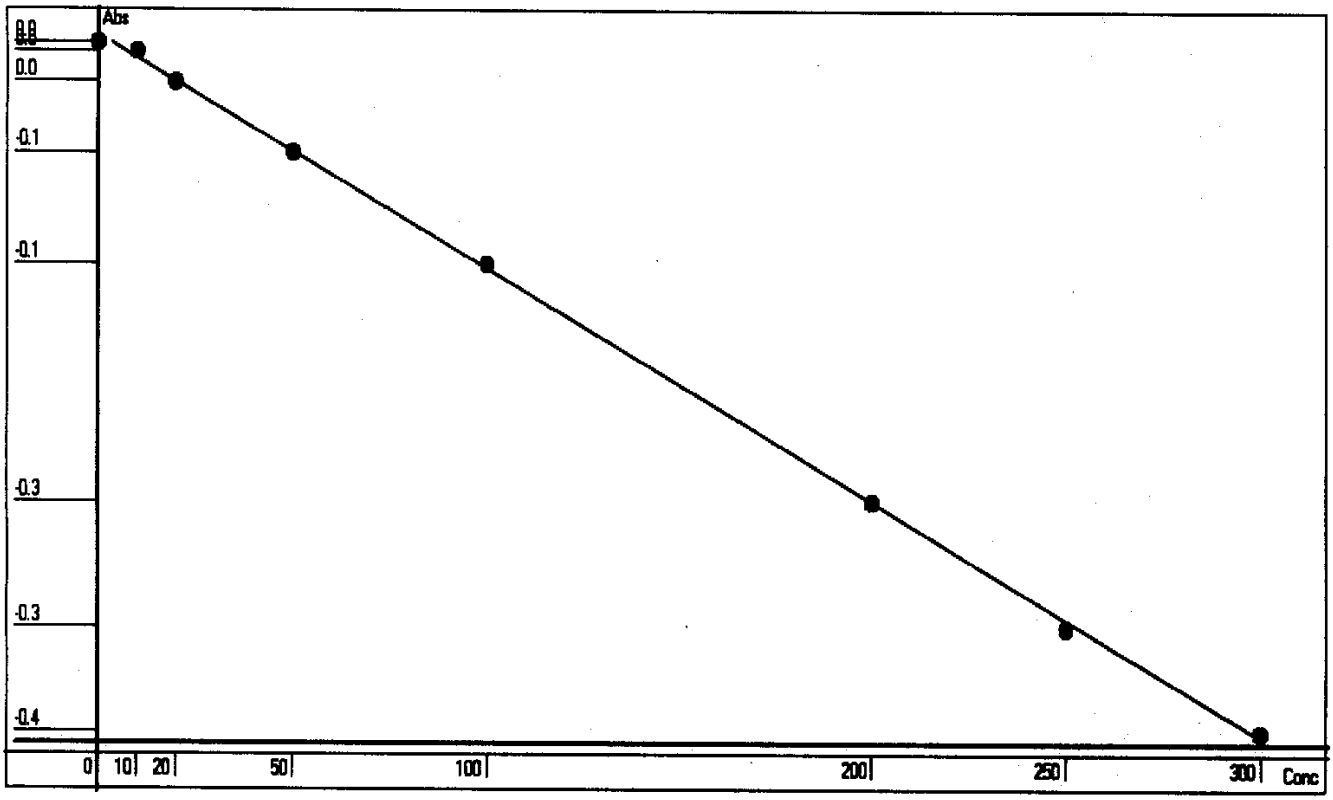
Report Date :05/10/2012 **Run Date :5/10/2012** **Operator : WESTCO** **Plan # :20120510002**

Plan Description : ALK-A-JBK/05/10/2012

Calibrant Report - WALK -

Calib Lot #:010104 Exp Date:6/21/2020 User:MICROBAC

Plan # : 20120510002 Description : [ALK-A-JBK/05/10/2012]



Point	OD	Conc	Recalc Conc	% Error
1	0.0046	0	3.3486	334.86
2	-0.0003	10	7.0208	-29.79
3	-0.0177	20	20.0576	0.29
4	-0.0583	50	50.4566	0.91
5	-0.1220	100	98.0950	-1.91
6	-0.2585	200	199.9441	-0.03
7	-0.3302	250	253.3155	1.33
8	-0.3902	300	297.9103	-0.70

Conc= -8.5316*Abso^2 -749.3934*Abso +6.796 R^2=0.9996

RBL
0.5937
0

Report Date 5/10/2012 Run Date 5/10/2012

2.4.2 Nitrate Data

2.4.2.1 Summary Data

Login Number: L12050171
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.

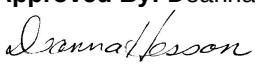
Duplicates: All acceptance criteria were met.

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: 46788
Approved By: Deanna Hesson



Certificate of Analysis

Sample #: L12050171-01 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-12-050412 **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: 05/04/2012 10:30 **Dilution:** 1 **File ID:** SC12050910173301
Sample Tag: **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8	1.58		0.0500	0.0250

Sample #: L12050171-03 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-12-050412 **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: 05/04/2012 10:30 **Dilution:** 1 **File ID:** SC12050910174201
Sample Tag: **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8	2.09		0.0500	0.0250

Sample #: L12050171-05 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-12-050412 **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: 05/04/2012 10:30 **Dilution:** 1 **File ID:** SC12050910175201
Sample Tag: **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8	2.12		0.0500	0.0250

Sample #: L12050171-07 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: PZ-01-050412 **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: 05/04/2012 12:07 **Dilution:** 1 **File ID:** SC12050910180001
Sample Tag: **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Nitrate (as N)	14797-55-8	0.163		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: L12050171

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-12-050412	01	05/04/12							2		05/07/12	3	2	*
MW-12-050412	03	05/04/12							2		05/07/12	3	2	*
MW-12-050412	05	05/04/12							2		05/07/12	3	2	*
PZ-01-050412	07	05/04/12							2		05/07/12	3	2	*

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2407735
Report generated 05/09/2012 13:08

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12050171
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
MW-12-050412	L12050171-01	SC12050910173301	05/07/12 11:15	
LCS2	WG397183-03	SC12050910135001	05/07/12 11:15	
DUP	WG397183-05	SC12050910140401	05/07/12 11:15	
MW-12-050412	L12050171-03	SC12050910174901	05/07/12 11:15	
MW-12-050412	L12050171-03	SC12050910174201	05/07/12 11:15	
PZ-01-050412	L12050171-07	SC12050910180601	05/07/12 11:15	
MW-12-050412	L12050171-01	SC12050910173701	05/07/12 11:15	
LCS	WG397183-02	SC12050910133901	05/07/12 11:15	
PZ-01-050412	L12050171-07	SC12050910180001	05/07/12 11:15	
MW-12-050412	L12050171-05	SC12050910175201	05/07/12 11:15	
MW-12-050412	L12050171-05	SC12050910175701	05/07/12 11:15	

Report Name: BLANK_SUMMARY
PDF File ID: 2407736
Report generated 05/09/2012 13:08

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050171 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: 2407737
09-MAY-2012 13:08

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050171 **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: 2407738
Report generated: 05/09/2012 13:08

Microbac Laboratories Inc.

MS/MSD REPORT

Loginnum:L12050171 Cal ID: SMARTCHEM- 07-MAY-12 Worknum:WG397183

Instrument ID:SMARTCHEM Contract #: Prep Method:353.2

Parent ID:L12050171-01 File ID:SC12050910173301 Dil:1 Method:353.2

Sample ID:L12050171-03 MS File ID:SC12050910174201 Dil:1 Matrix:Water

Sample ID:L12050171-05 MSD File ID:SC12050910175201 Dil:1 Units:mg/L

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Nitrate (as N)	1.58	0.500	2.09	103	0.500	2.12	108	1.23	90 - 110	15	

* FAILS %REC LIMIT

FAILS RPD LIMIT

MS_MSD - Modified 03/06/2008

PDF File ID: 2407740

Report generated 05/09/2012 13:08

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 # _____

	Analyte	1 NO3	2	3
		Dilution		
SC Prepared Curve				
Position				
1-1	ICV 1.5			
1-2	BLK			
1-3	LCS 1			
1-4	LCSDUP			
1-5	NO2 1			
1-6	05-143-02	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~~		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		R&I 17230
Curve ID (user made) NO2	std 51363		R&I 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 mL	0.6601	0.00	><,LH		11:44:12 AM
23	ID 23 05 msd	2.125 mL	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)	2.999 X	0.2352	0.00	LH		12:02:58 PM
22-[1/4]	ID 22	2.233 X	0.1749	0.00	LH		12:05:04 PM
23-[1/4]	ID 23	2.317 X	0.1815	0.00	LH		12:07:11 PM
ST-2	CCV (1 mg/L)	1.533 X	0.4817	153.26			12:08:05 PM
ST-3	CCB (0 mg/L)	0.002 X	-0.0003	0.00	INV,><		12:09:17 PM

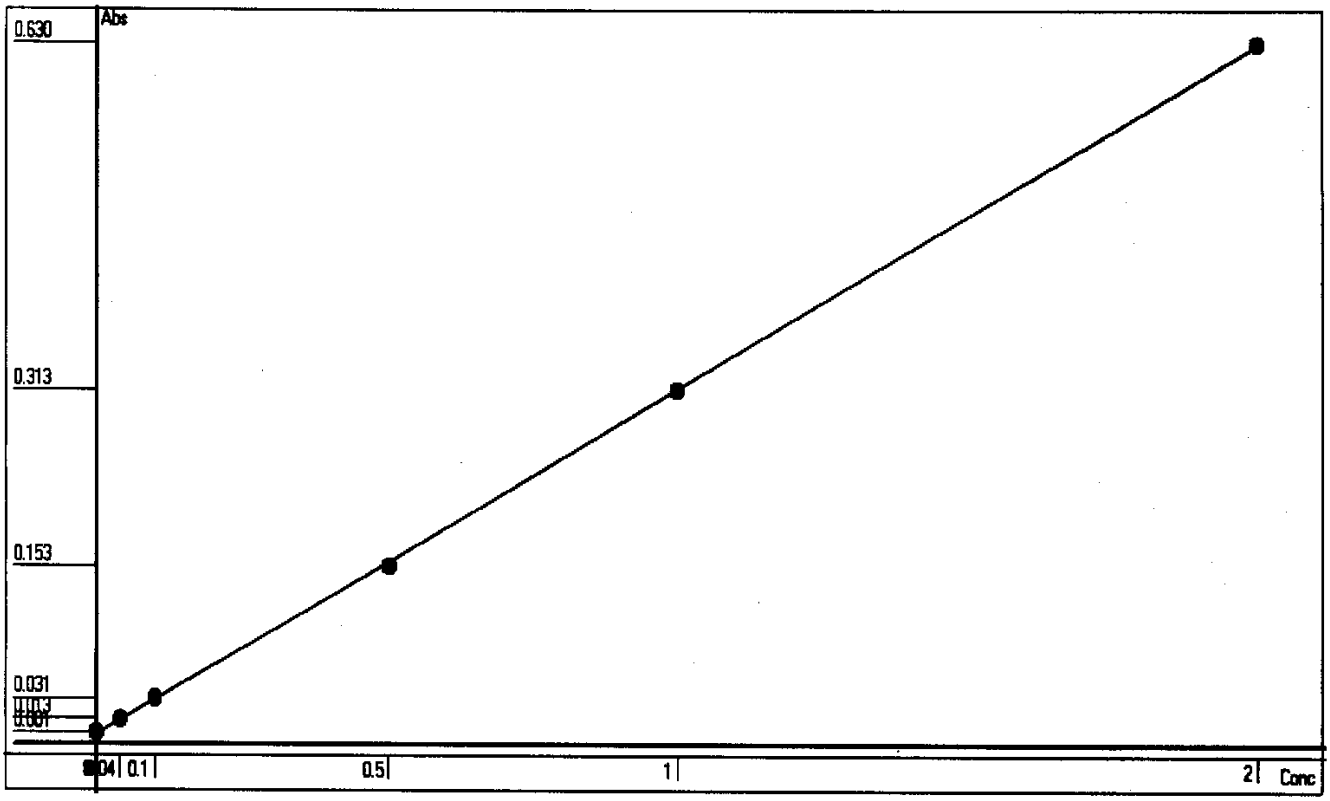
Report Date :05/07/2012 **Run Date :5/7/2012** **Operator : WESTCO** **Plan # :20120507002**

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: L12050171
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.

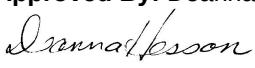
Duplicates: All acceptance criteria were met.

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: 46786
Approved By: Deanna Hesson



Certificate of Analysis

Sample #: L12050171-01 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-12-050412 **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 08:50
Collect Date: 05/04/2012 10:30 **Dilution:** 1 **File ID:** SC120515001.022
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Phosphorus, Total	7723-14-0	0.110		0.200	0.100

Sample #: L12050171-03 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-12-050412 **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 08:51
Collect Date: 05/04/2012 10:30 **Dilution:** 1 **File ID:** SC120515001.024
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Phosphorus, Total	7723-14-0	1.00		0.200	0.100

Sample #: L12050171-05 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-12-050412 **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 08:51
Collect Date: 05/04/2012 10:30 **Dilution:** 1 **File ID:** SC120515001.025
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Phosphorus, Total	7723-14-0	1.04		0.200	0.100

Sample #: L12050171-07 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: PZ-01-050412 **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 09:08
Collect Date: 05/04/2012 12:07 **Dilution:** 2 **File ID:** SC120515001.041
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Phosphorus, Total	7723-14-0	2.64		0.400	0.200

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: L12050171

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-12-050412	01	05/04/12							28		05/15/12	10.9	28	
MW-12-050412	03	05/04/12							28		05/15/12	10.9	28	
MW-12-050412	05	05/04/12							28		05/15/12	10.9	28	
PZ-01-050412	07	05/04/12							28		05/15/12	10.9	28	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2417204
Report generated 05/16/2012 14:42

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number:	L12050171	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-12-050412	L12050171-01	SC120515001.022	05/15/12 08:50	01
DUP	WG397809-04	SC120515001.023	05/15/12 08:50	01
MW-12-050412	L12050171-03	SC120515001.024	05/15/12 08:51	01
MW-12-050412	L12050171-05	SC120515001.025	05/15/12 08:51	01
PZ-01-050412	L12050171-07	SC120515001.041	05/15/12 09:08	DL01

Report Name: BLANK_SUMMARY
PDF File ID: 2417206
Report generated 05/16/2012 14:42

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050171 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: 2417207
16-MAY-2012 14:42

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050171 **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: 2417208
Report generated: 05/16/2012 14:42

Microbac Laboratories Inc.

MS/MSD REPORT

Loginnum:L12050171 Cal ID: SMARTCHEM- 15-MAY-12 Worknum:WG397809

Instrument ID:SMARTCHEM Contract #: Prep Method:365.4

Parent ID:L12050171-01 File ID:SC120515001.022 Dil:1 Method:365.4

Sample ID:L12050171-03 MS File ID:SC120515001.024 Dil:1 Matrix:Water

Sample ID:L12050171-05 MSD File ID:SC120515001.025 Dil:1 Units:mg/L

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Phosphorus, Total	0.110	1.00	1.00	89	1.00	1.04	93.1	4.00	70 - 130	25	

* FAILS %REC LIMIT

FAILS RPD LIMIT

MS_MSD - Modified 03/06/2008

PDF File ID: 2417210

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
~~Blos~~		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	05-281-01				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

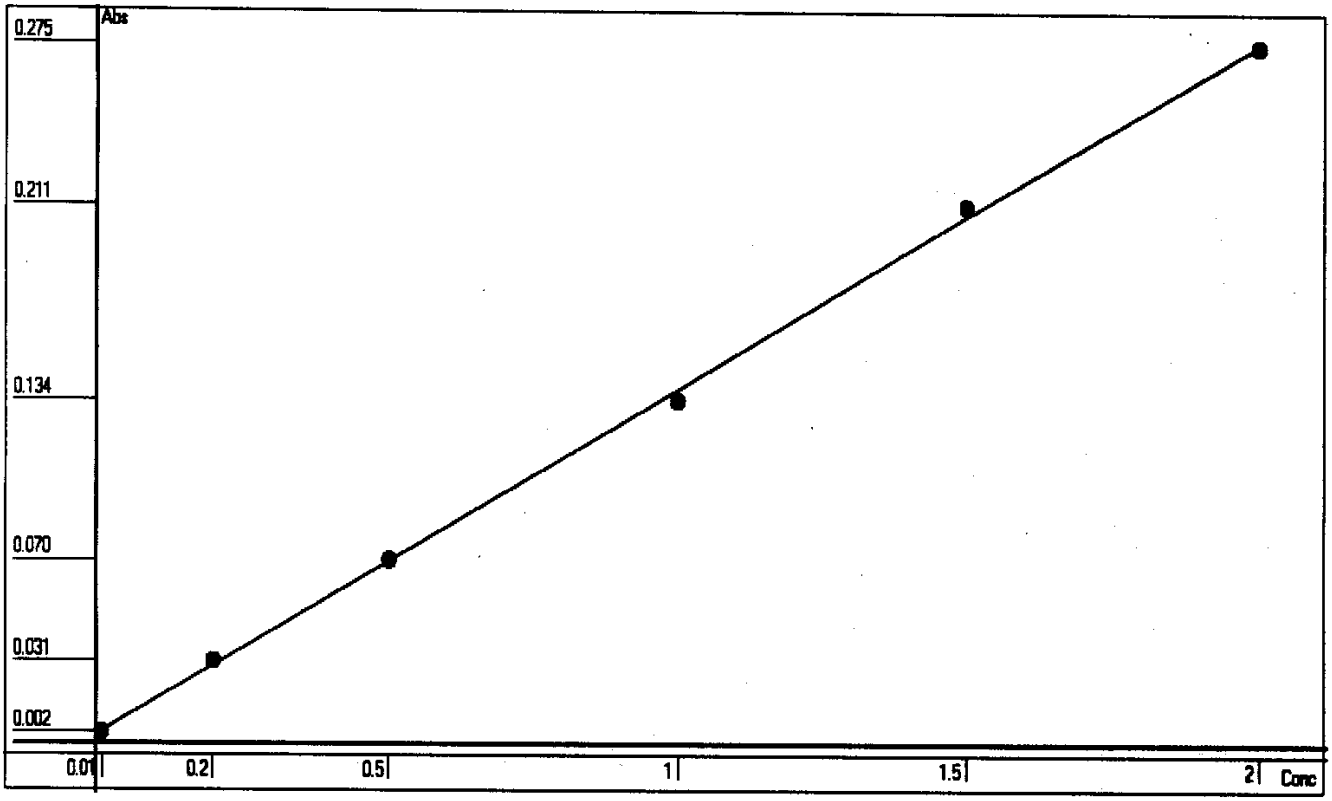
Report Date :05/15/2012 **Run Date :5/15/2012** **Operator : WESTCO** **Plan # :20120515001**

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: L12050171
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.

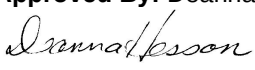
Matrix Spikes: Recoveries out of range were observed for the following analytes: Sulfate. Please see the applicable QC report for a detailed presentation of the failures.

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: 46787
Approved By: Deanna Hesson



Certificate of Analysis

Sample #: L12050171-01 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-12-050412 **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 14:19
Collect Date: 05/04/2012 10:30 **Dilution:** 5 **File ID:** SC120507003.026
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	114		25.0	12.5

Sample #: L12050171-03 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-12-050412 **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 14:21
Collect Date: 05/04/2012 10:30 **Dilution:** 5 **File ID:** SC120507003.029
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	126		25.0	12.5

Sample #: L12050171-05 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: MW-12-050412 **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 14:22
Collect Date: 05/04/2012 10:30 **Dilution:** 5 **File ID:** SC120507003.030
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	128		25.0	12.5

Sample #: L12050171-07 **PrePrep Method:** N/A **Instrument:** SMARTCHEM
Client ID: PZ-01-050412 **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 14:34
Collect Date: 05/04/2012 12:07 **Dilution:** 4 **File ID:** SC120507003.038
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Sulfate	14808-79-8	84.4		20.0	10.0

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: L12050171

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-12-050412	01	05/04/12							28		05/07/12	3.2	28	
MW-12-050412	03	05/04/12							28		05/07/12	3.2	28	
MW-12-050412	05	05/04/12							28		05/07/12	3.2	28	
PZ-01-050412	07	05/04/12							28		05/07/12	3.1	28	

*** = SEE PROJECT QAPP REQUIREMENTS**

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2407624
Report generated 05/09/2012 12:33

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12050171
Work Group: WG397213
Blank File ID: SC120507003.010
Blank Sample ID: WG397213-01
Prep Date: 05/07/12 14:10
Instrument ID: SMARTCHEM
Analyzed Date: 05/07/12 14:10
Method: 375.4
Analyst: DIH

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-12-050412	L12050171-01	SC120507003.026	05/07/12 14:19	DL01
DUP	WG397213-05	SC120507003.027	05/07/12 14:20	DL01
MW-12-050412	L12050171-03	SC120507003.029	05/07/12 14:21	DL01
MW-12-050412	L12050171-05	SC120507003.030	05/07/12 14:22	DL01
PZ-01-050412	L12050171-07	SC120507003.038	05/07/12 14:34	DL01

Report Name: BLANK_SUMMARY
PDF File ID: 2407625
Report generated 05/09/2012 12:33

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050171 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: 2407626
09-MAY-2012 12:33

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050171 **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: 2407627
Report generated: 05/09/2012 12:33

Microbac Laboratories Inc.

MS/MSD REPORT

Loginnum:L12050171 Cal ID: SMARTCHEM- 07-MAY-12 Worknum:WG397213

Instrument ID:SMARTCHEM Contract #: Prep Method:375.4

Parent ID:L12050171-01 File ID:SC120507003.026 Dil:5 Method:375.4

Sample ID:L12050171-03 MS File ID:SC120507003.029 Dil:5 Matrix:Water

Sample ID:L12050171-05 MSD File ID:SC120507003.030 Dil:5 Units:mg/L

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Sulfate	114	10.0	126	120	10.0	128	140	1.53	85 - 115	10	*

* FAILS %REC LIMIT

FAILS RPD LIMIT

MS_MSD - Modified 03/06/2008

PDF File ID: 2407628

Report generated 05/09/2012 12:33

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	2	3
		504		
		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 23 05-099-07 (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

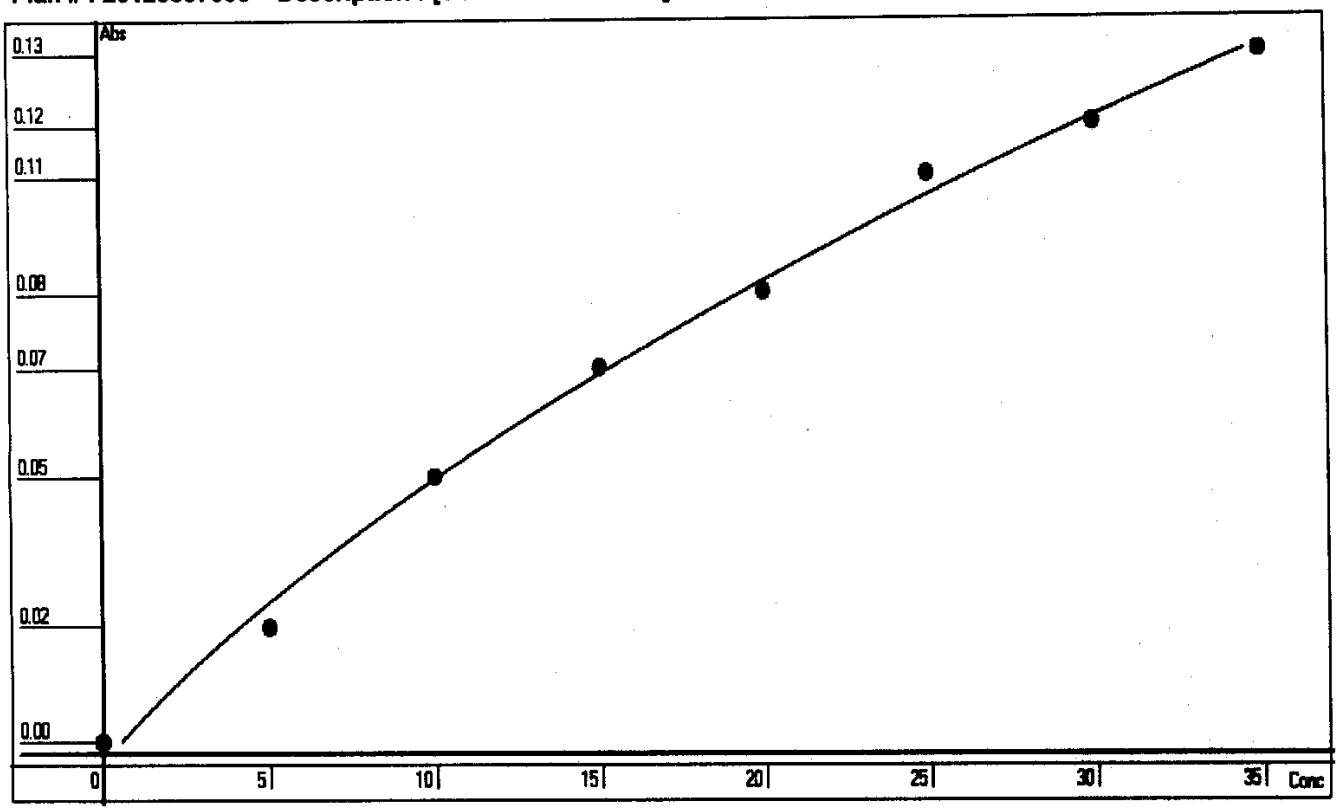
Report Date :05/07/2012 **Run Date :5/7/2012** **Operator : WESTCO** **Plan # :20120507003**

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: L12050171
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.

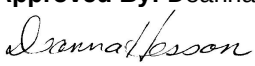
Matrix Spikes: All acceptance criteria were met.

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: 46789
Approved By: Deanna Hesson



Certificate of Analysis

Sample #: L12050171-01 **PrePrep Method:** N/A **Instrument:** TOC-VWP
Client ID: MW-12-050412 **Prep Method:** 415.1 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 415.1 **Cal Date:** 12/06/2011 09:40
Workgroup #: WG397599 **Analyst:** JBK **Run Date:** 05/12/2012 14:57
Collect Date: 05/04/2012 10:30 **Dilution:** 1 **File ID:** TC05122012.022
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		5.89		1.00	0.500

Sample #: L12050171-03 **PrePrep Method:** N/A **Instrument:** TOC-VWP
Client ID: MW-12-050412 **Prep Method:** 415.1 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 415.1 **Cal Date:** 12/06/2011 09:40
Workgroup #: WG397599 **Analyst:** JBK **Run Date:** 05/12/2012 15:25
Collect Date: 05/04/2012 10:30 **Dilution:** 1 **File ID:** TC05122012.024
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		15.2		1.00	0.500

Sample #: L12050171-05 **PrePrep Method:** N/A **Instrument:** TOC-VWP
Client ID: MW-12-050412 **Prep Method:** 415.1 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 415.1 **Cal Date:** 12/06/2011 09:40
Workgroup #: WG397599 **Analyst:** JBK **Run Date:** 05/12/2012 15:38
Collect Date: 05/04/2012 10:30 **Dilution:** 1 **File ID:** TC05122012.025
Sample Tag: 01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		15.2		1.00	0.500

Sample #: L12050171-07 **PrePrep Method:** N/A **Instrument:** TOC-VWP
Client ID: PZ-01-050412 **Prep Method:** 415.1 **Prep Date:** N/A
Matrix: Water **Analytical Method:** 415.1 **Cal Date:** 12/06/2011 09:40
Workgroup #: WG397599 **Analyst:** JBK **Run Date:** 05/12/2012 16:13
Collect Date: 05/04/2012 12:07 **Dilution:** 10 **File ID:** TC05122012.028
Sample Tag: DL01 **Units:** mg/L

Analyte	CAS #	Result	Qual	RL	MDL
Total Organic Carbon		13.7		10.0	5.00

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: 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#:** WG397599

Login Number: L12050171

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-12-050412	01	05/04/12							28		05/12/12	8.2	28	
MW-12-050412	03	05/04/12							28		05/12/12	8.2	28	
MW-12-050412	05	05/04/12							28		05/12/12	8.2	28	
PZ-01-050412	07	05/04/12							28		05/12/12	8.2	28	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 2416055
Report generated 05/15/2012 19:10

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L12050171
Blank File ID: TC05122012.003
Prep Date: 05/12/12 10:48
Analyzed Date: 05/12/12 10:48
Analyst: JBK

Work Group: WG397599
Blank Sample ID: WG397599-01
Instrument ID: TOC-VWP
Method: 415.1

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG397599-02	TC05122012.004	05/12/12 11:00	01
LCS2	WG397599-03	TC05122012.005	05/12/12 11:12	01
MW-12-050412	L12050171-01	TC05122012.022	05/12/12 14:57	01
DUP	WG397599-05	TC05122012.023	05/12/12 15:11	01
MW-12-050412	L12050171-03	TC05122012.024	05/12/12 15:25	01
MW-12-050412	L12050171-05	TC05122012.025	05/12/12 15:38	01
PZ-01-050412	L12050171-07	TC05122012.028	05/12/12 16:13	DL01

Report Name: BLANK_SUMMARY
PDF File ID: 2416057
Report generated 05/15/2012 19:10

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L12050171 Prep Date: 05/12/12 10:48 Sample ID: WG397599-01
Instrument ID: TOC-VWP Run Date: 05/12/12 10:48 Prep Method: 415.1
File ID: TC05122012.003 Analyst: JBK Method: 415.1
Workgroup (AAB#): WG397599 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: 2416058
15-MAY-2012 19:10

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L12050171 Analyst: JBK Prep Method: 415.1
Instrument ID: TOC-VWP Matrix: Water Method: 415.1
Workgroup (AAB#): WG397599 Units: mg/L
QC Key: WATERLOO Lot #: STD50986

Sample ID: WG397599-02 LCS File ID: TC05122012.004 Run Date: 05/12/2012 11:00
Sample ID: WG397599-03 LCS2 File ID: TC05122012.005 Run Date: 05/12/2012 11:12

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Total Organic Carbon	25.0	23.3	93.0	25.0	23.0	92.2	0.950	85 - 115	15	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 2416060
Report generated: 05/15/2012 19:10

Microbac Laboratories Inc.

MS/MSD REPORT

Loginnum:L12050171 Cal ID:TOC-VWP- 06-DEC-11 Worknum:WG397599

Instrument ID:TOC-VWP Contract #: Prep Method:415.1

Parent ID:L12050171-01 File ID:TC05122012.022 Dil:1 Method:415.1

Sample ID:L12050171-03 MS File ID:TC05122012.024 Dil:1 Matrix:Water

Sample ID:L12050171-05 MSD File ID:TC05122012.025 Dil:1 Units:mg/L

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Total Organic Carbon	5.89	10.0	15.2	92.6	10.0	15.2	93.1	0.329	85 - 115	15	

* FAILS %REC LIMIT

FAILS RPD LIMIT

MS_MSD - Modified 03/06/2008

PDF File ID: 2416061

Report generated 05/15/2012 19:10

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

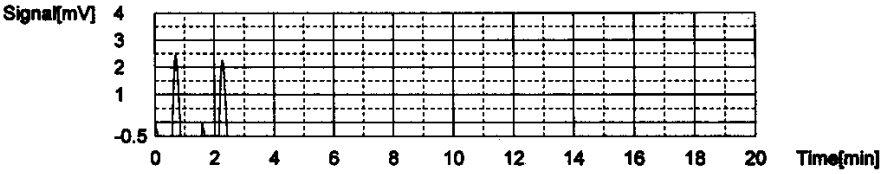
Sample Name:	TC CURVE
Sample ID:	Untitled
Cal. Curve:	TCCURVE-12-06-2011.2011_12_06_08_40_57.cal
Status	Completed

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

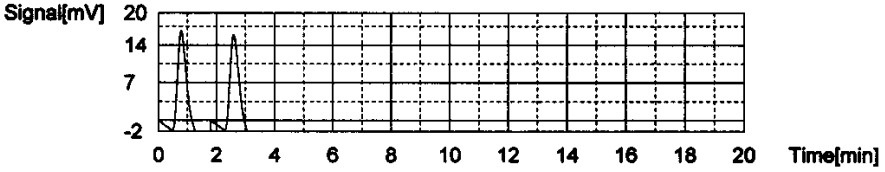
Acid Add. 0.000%
Mean Area 5.716



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

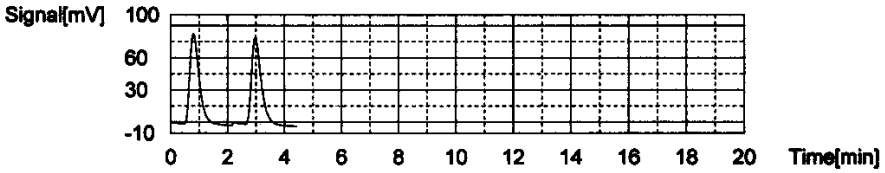
Acid Add. 0.000%
Mean Area 39.48



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

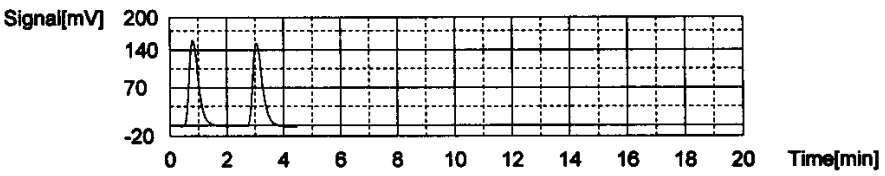
Acid Add. 0.000%
Mean Area 190.6



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

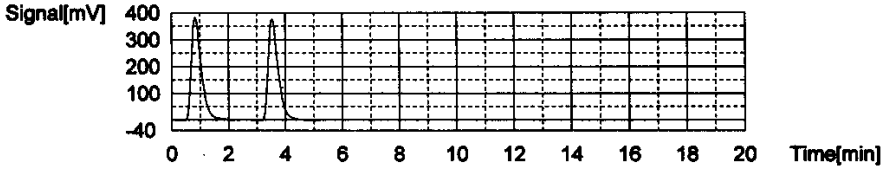
Acid Add. 0.000%
Mean Area 367.4



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

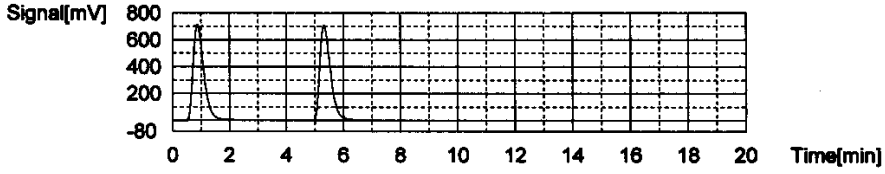
Acid Add. 0.000%
Mean Area 933.4



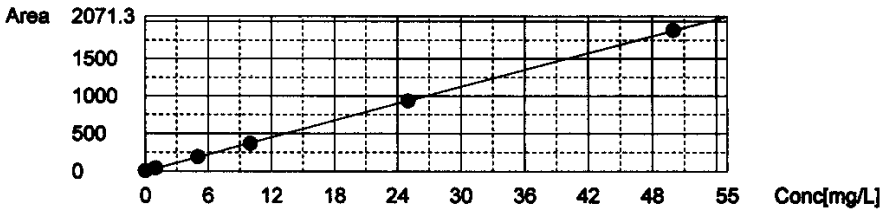
Conc: 50.00mg/L

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

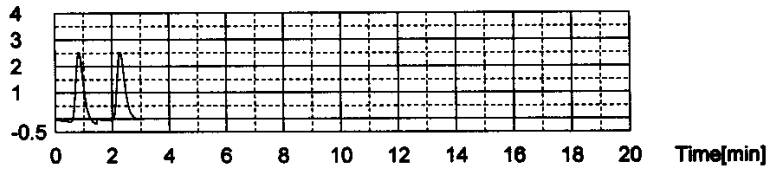
Sample Name: TIC CURVE
Sample ID: Untitled
Cal. Curve: TICCURVE-12-06-2011B.2011_12_06_15_47_44.cal
Status Completed

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

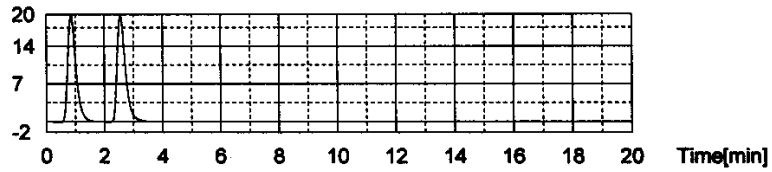
Acid Add. 10.00%
Mean Area 4.883



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

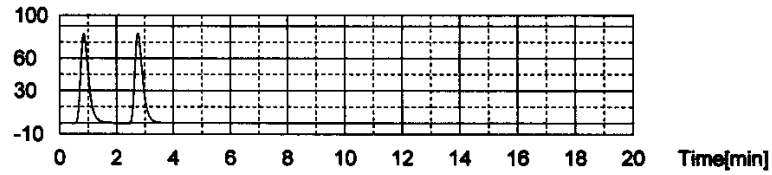
Acid Add. 10.00%
Mean Area 38.90



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

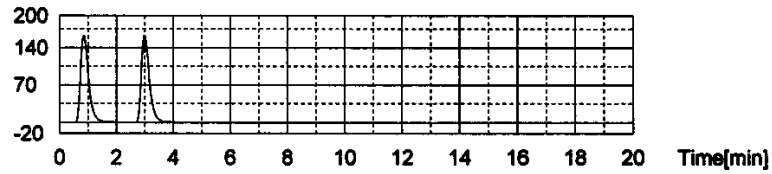
Acid Add. 10.00%
Mean Area 161.3



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

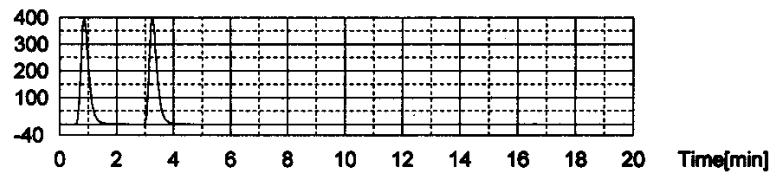
Acid Add. 10.00%
Mean Area 318.9



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

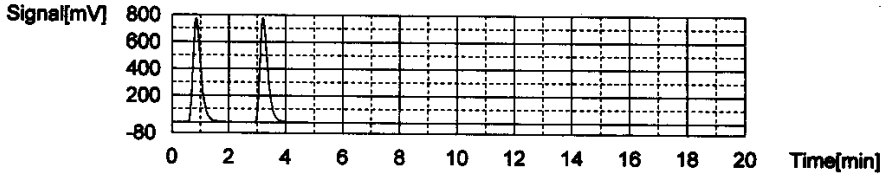
Acid Add. 10.00%
Mean Area 765.5



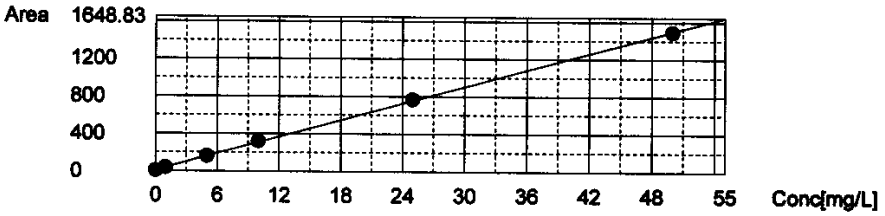
Conc: 50.00mg/L

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

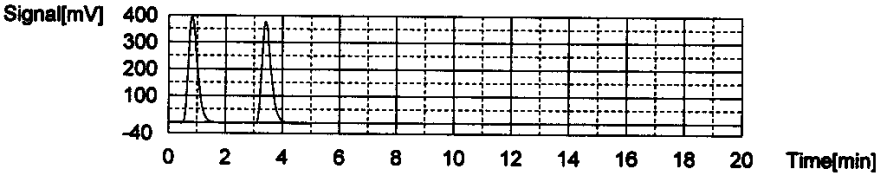
Type	Anal.	Dil.	Result
Unknown	TC	1.000	TC:23.27mg/L

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

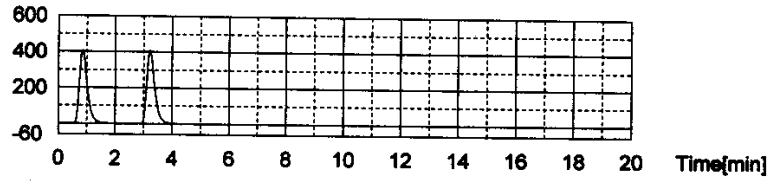
Type	Anal.	Dil.	Result
Unknown	IC	1.000	IC:26.21mg/L

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: 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~~ 1	CCV	
~~70~~ 0	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 06:36:53 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

C:\TOC3201\Data\05-12-2012-JBK-TOC.t32

	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

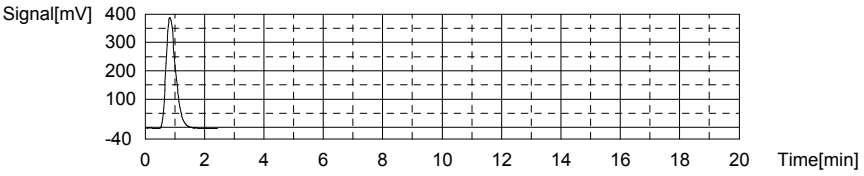
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.68mg/L TC:23.51mg/L IC:-0.1659mg/L

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

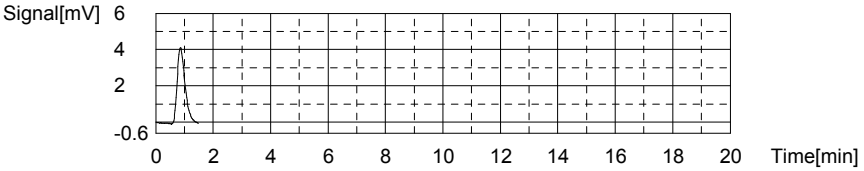
Mean Area 883.5
Mean Conc. 23.51mg/L



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

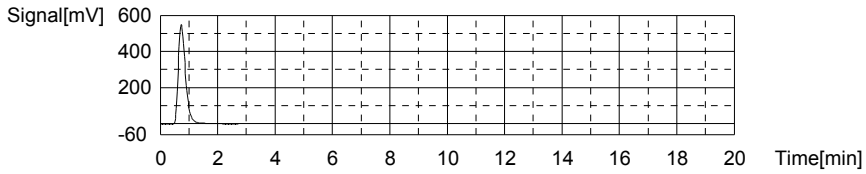
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.862mg/L TC:25.94mg/L IC:24.08mg/L

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

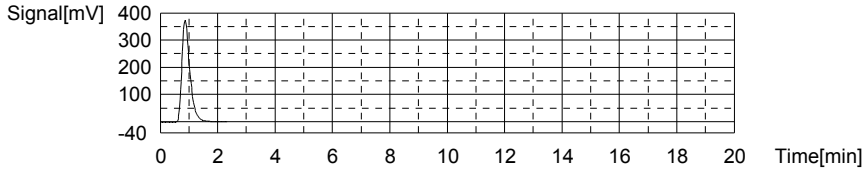
Mean Area 974.8
Mean Conc. 25.94mg/L



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

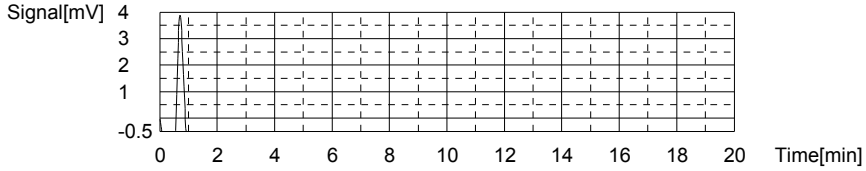
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.4364mg/L TC:0.2839mg/L IC:-0.1525mg/L

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

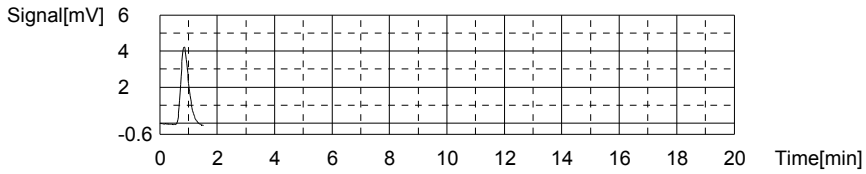
Mean Area 10.76
Mean Conc. 0.2839mg/L



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

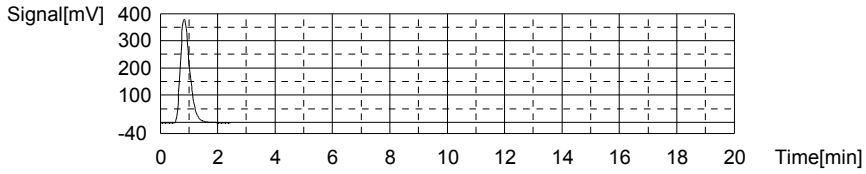
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.26mg/L TC:22.98mg/L IC:-0.2778mg/L

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

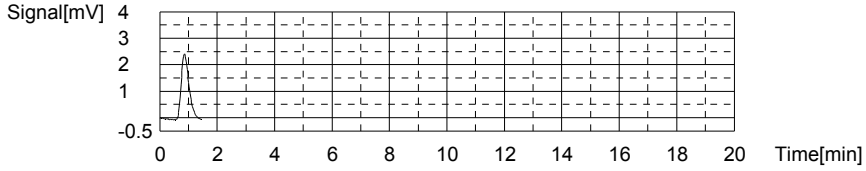
Mean Area 863.5
Mean Conc. 22.98mg/L



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

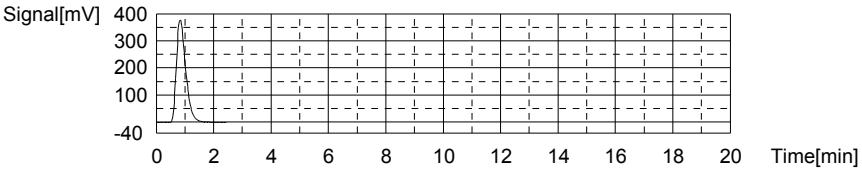
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.04mg/L TC:22.76mg/L IC:-0.2833mg/L

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

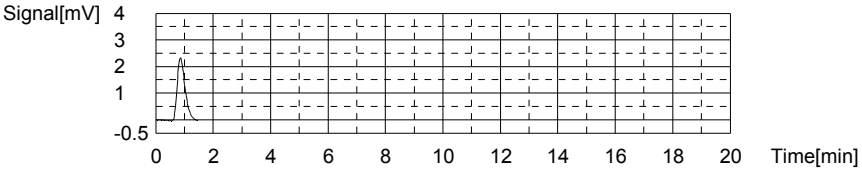
Mean Area 855.2
Mean Conc. 22.76mg/L



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

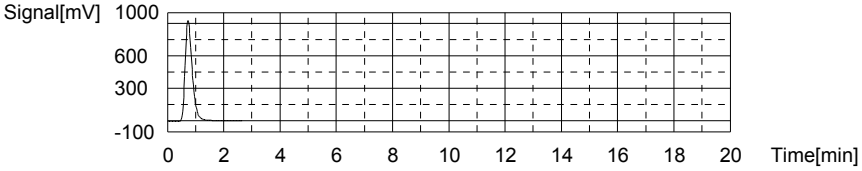
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.869mg/L TC:43.49mg/L IC:37.62mg/L

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

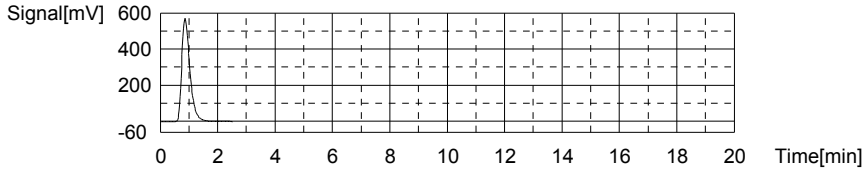
Mean Area 1634
Mean Conc. 43.49mg/L



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

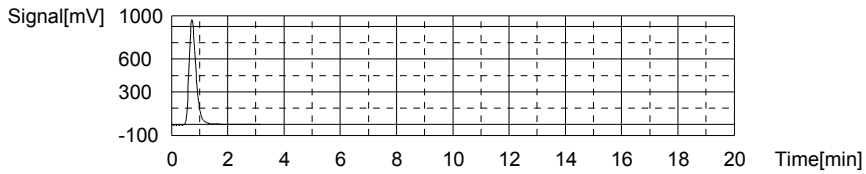
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:6.842mg/L TC:44.90mg/L IC:38.06mg/L

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

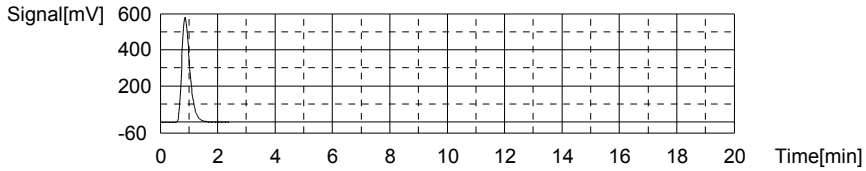
Mean Area 1687
Mean Conc. 44.90mg/L



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

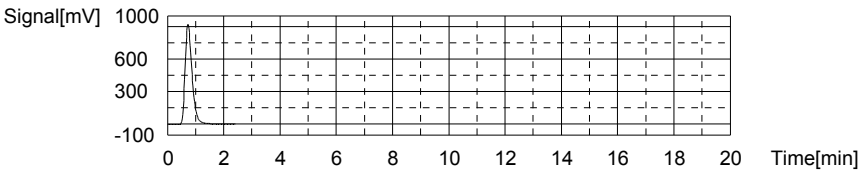
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.248mg/L TC:42.40mg/L IC:37.15mg/L

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

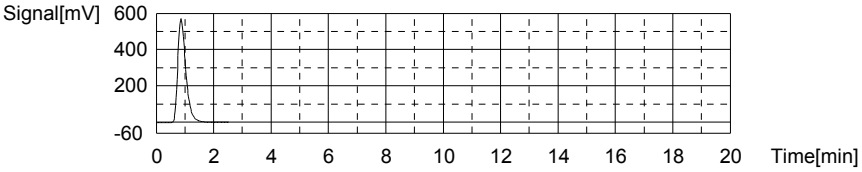
Mean Area 1593
Mean Conc. 42.40mg/L



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

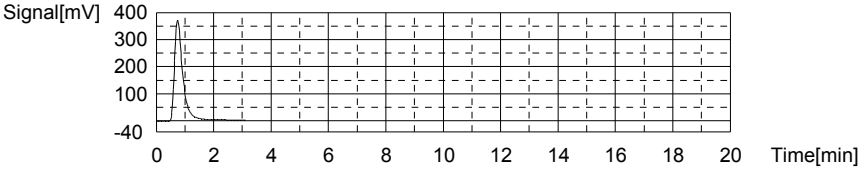
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:6.813mg/L TC:20.43mg/L IC:13.62mg/L

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

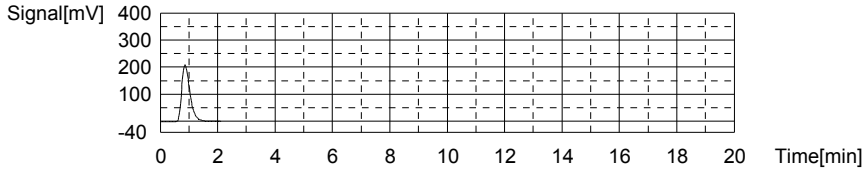
Mean Area 767.8
Mean Conc. 20.43mg/L



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

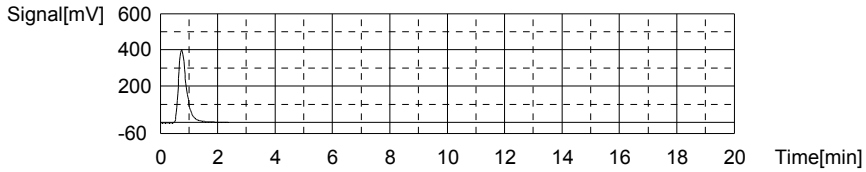
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:6.736mg/L TC:20.88mg/L IC:14.14mg/L

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

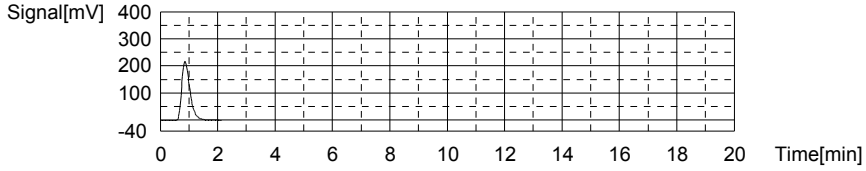
Mean Area 784.5
Mean Conc. 20.88mg/L



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

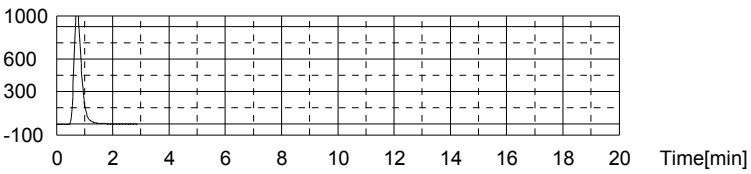
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:7.170mg/L TC:51.55mg/L IC:44.38mg/L

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

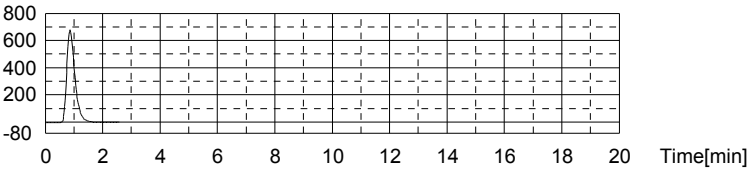
Mean Area 1937
Mean Conc. 51.55mg/L



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

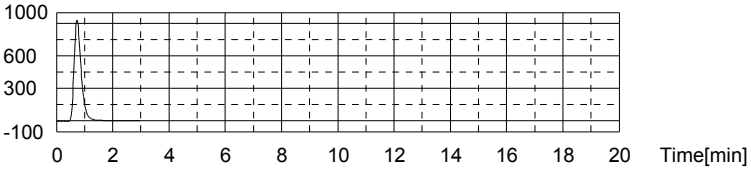
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:6.484mg/L TC:43.83mg/L IC:37.35mg/L

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

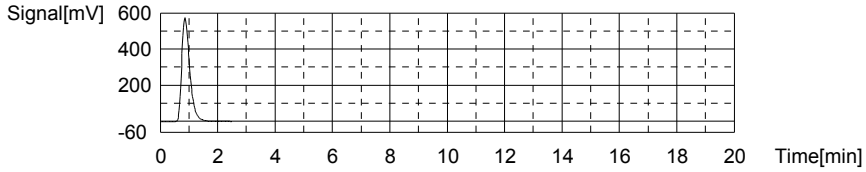
Mean Area 1647
Mean Conc. 43.83mg/L



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

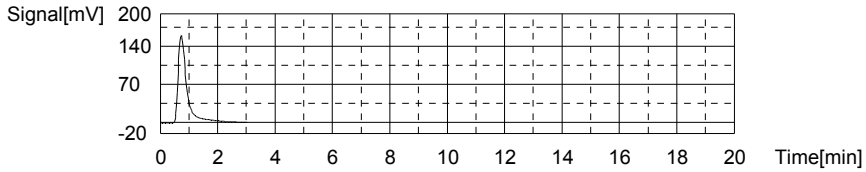
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:2.711mg/L TC:9.148mg/L IC:6.437mg/L

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

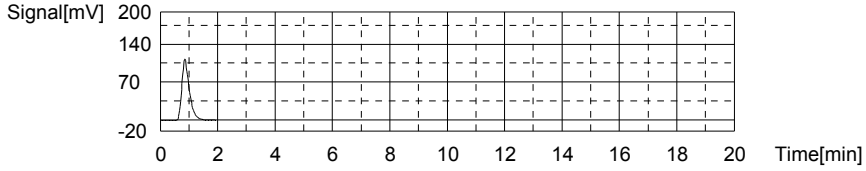
Mean Area 343.8
Mean Conc. 9.148mg/L



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

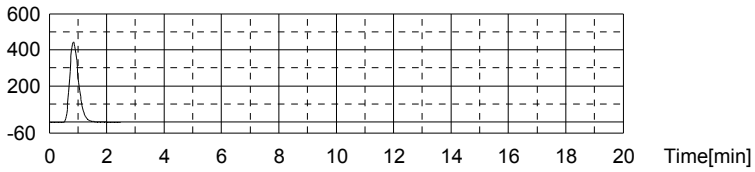
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:25.83mg/L TC:25.67mg/L IC:-0.1642mg/L

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

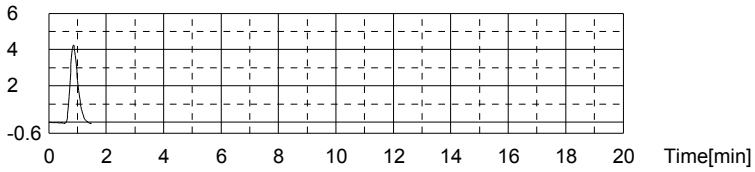
Mean Area 964.5
Mean Conc. 25.67mg/L



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

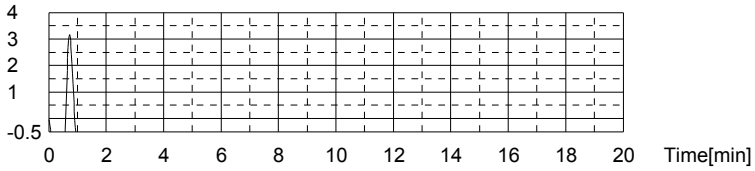
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.4375mg/L TC:0.2406mg/L IC:-0.1969mg/L

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

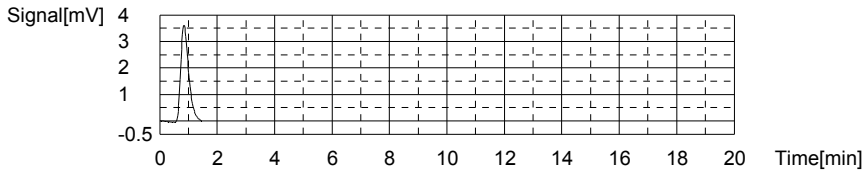
Mean Area 9.133
Mean Conc. 0.2406mg/L



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

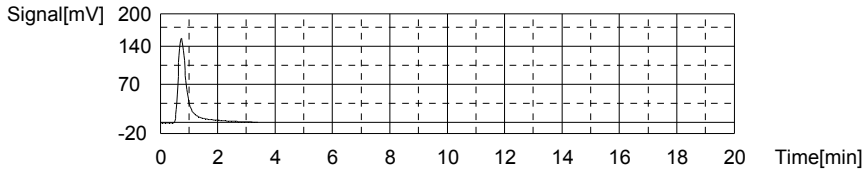
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.780mg/L TC:9.231mg/L IC:5.451mg/L

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

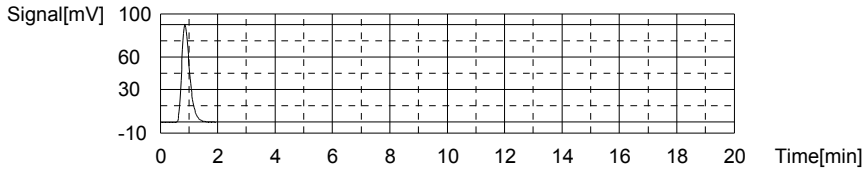
Mean Area 346.9
Mean Conc. 9.231mg/L



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

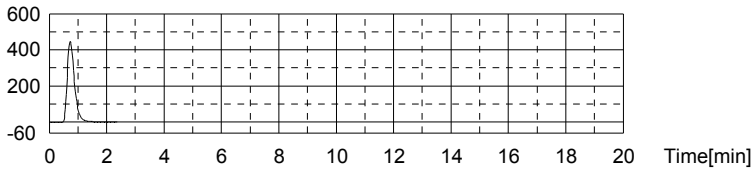
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.003mg/L TC:21.14mg/L IC:18.14mg/L

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

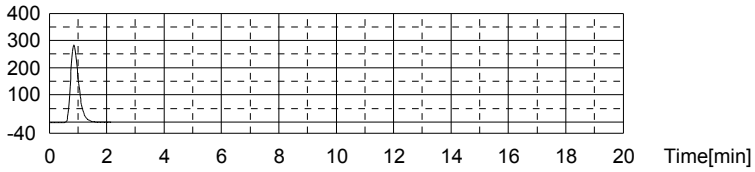
Mean Area 794.4
Mean Conc. 21.14mg/L



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

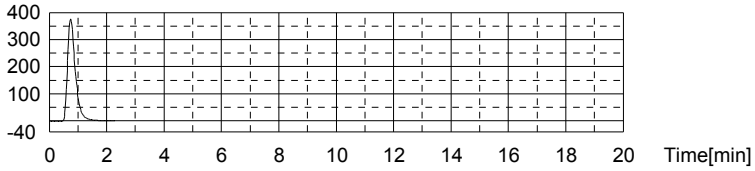
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:6.402mg/L TC:19.15mg/L IC:12.75mg/L

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

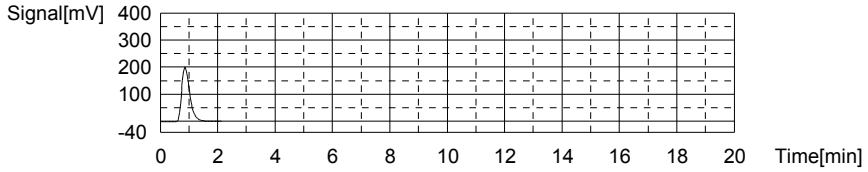
Mean Area 719.5
Mean Conc. 19.15mg/L



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

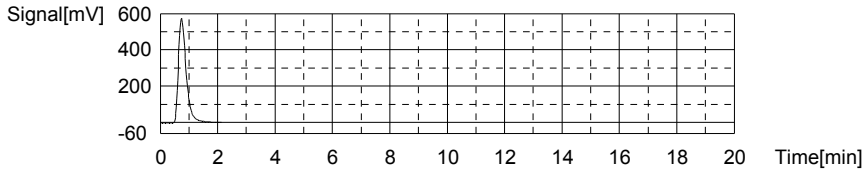
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:8.066mg/L TC:28.82mg/L IC:20.76mg/L

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

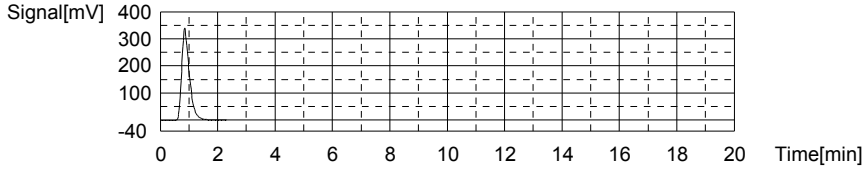
Mean Area 1083
Mean Conc. 28.82mg/L



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

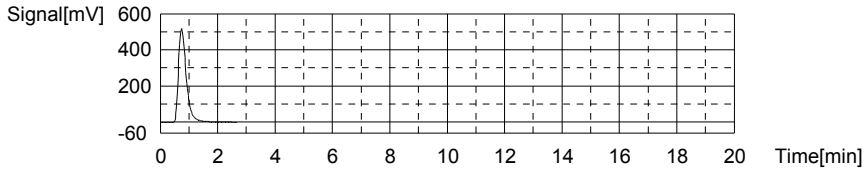
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:8.125mg/L TC:26.39mg/L IC:18.26mg/L

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

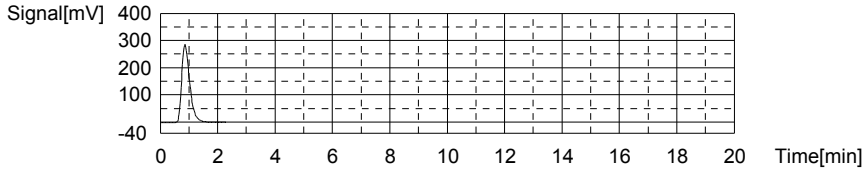
Mean Area 991.4
Mean Conc. 26.39mg/L



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

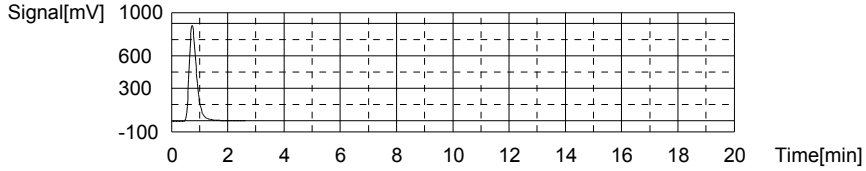
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:8.810mg/L TC:43.44mg/L IC:34.63mg/L

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

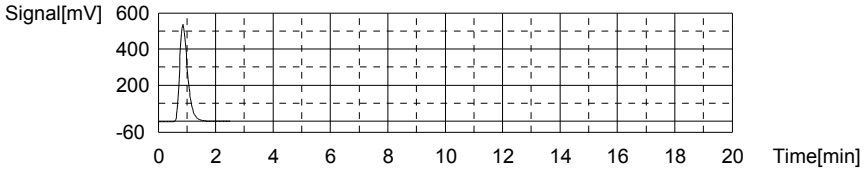
Mean Area 1632
Mean Conc. 43.44mg/L



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

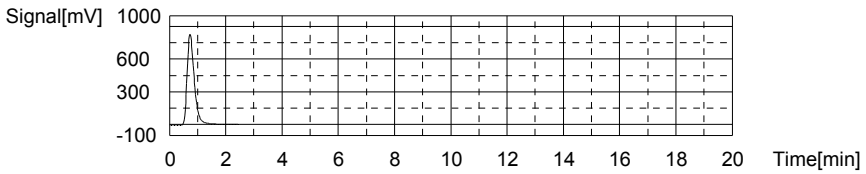
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.890mg/L TC:39.20mg/L IC:33.31mg/L

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

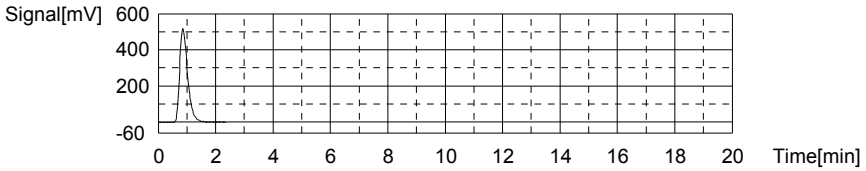
Mean Area 1473
Mean Conc. 39.20mg/L



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

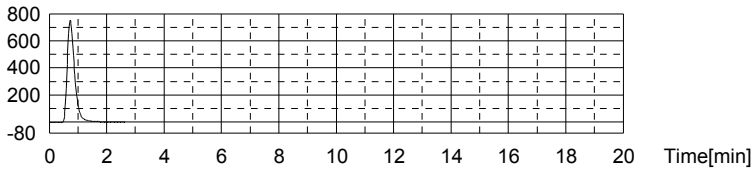
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:4.271mg/L TC:35.98mg/L IC:31.71mg/L

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

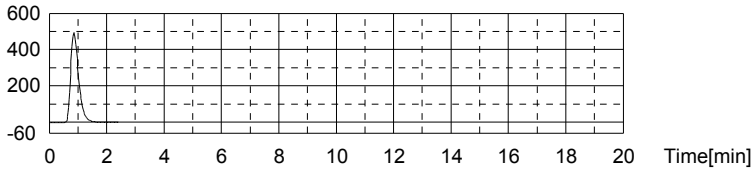
Mean Area 1352
Mean Conc. 35.98mg/L



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

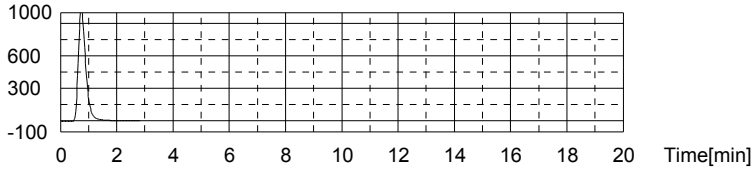
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:15.15mg/L TC:51.02mg/L IC:35.87mg/L

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

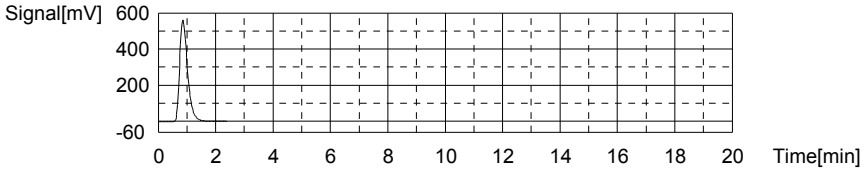
Mean Area 1917
Mean Conc. 51.02mg/L



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

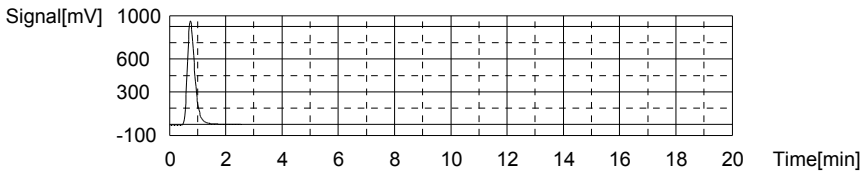
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:15.20mg/L TC:47.03mg/L IC:31.83mg/L

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

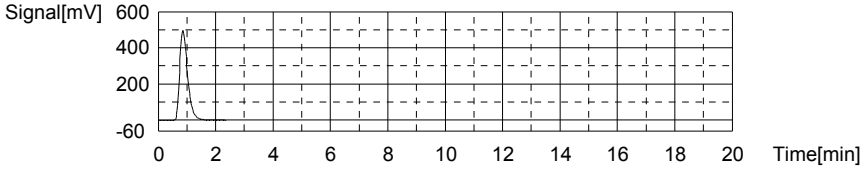
Mean Area 1767
Mean Conc. 47.03mg/L



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

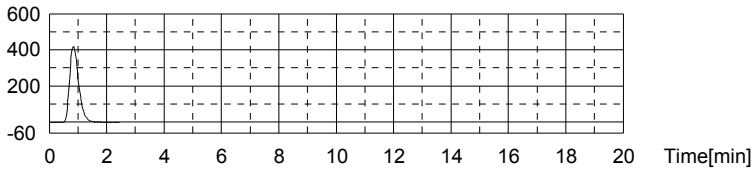
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:25.00mg/L TC:24.92mg/L IC:-0.07186mg/L

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

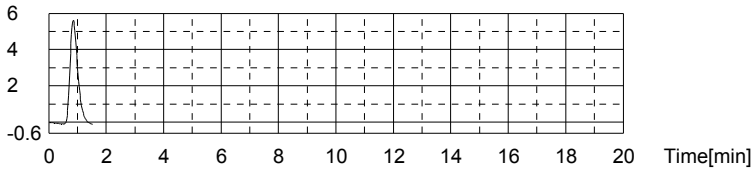
Mean Area 936.5
Mean Conc. 24.92mg/L



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

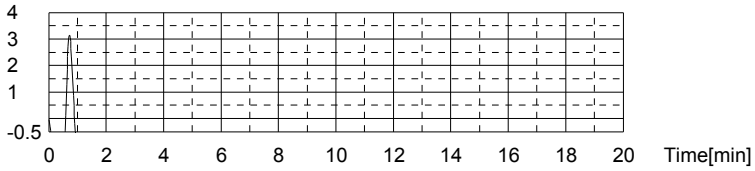
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.4377mg/L TC:0.2516mg/L IC:-0.1861mg/L

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

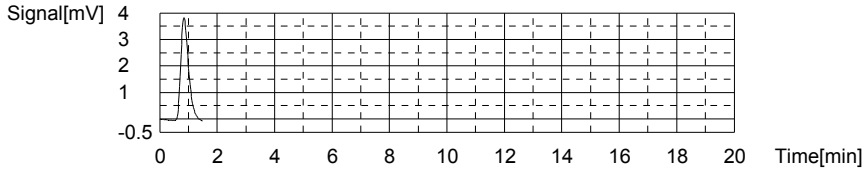
Mean Area 9.546
Mean Conc. 0.2516mg/L



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

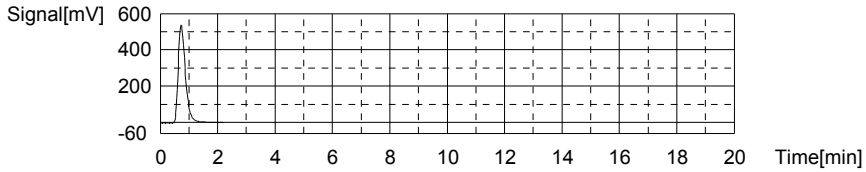
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.372mg/L TC:25.07mg/L IC:23.70mg/L

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

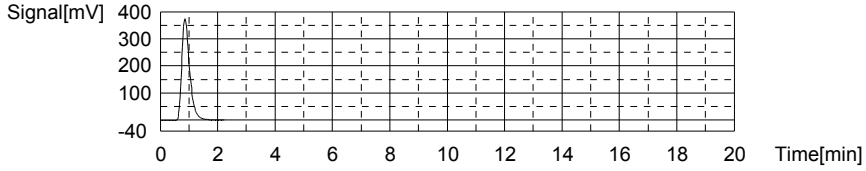
Mean Area 942.1
Mean Conc. 25.07mg/L



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

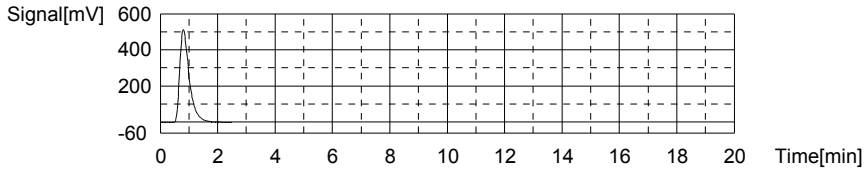
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:31.25mg/L TC:31.59mg/L IC:0.3460mg/L

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

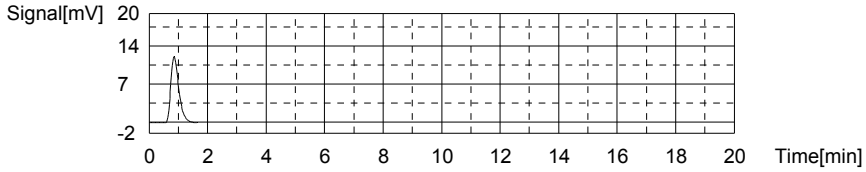
Mean Area 1187
Mean Conc. 31.59mg/L



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

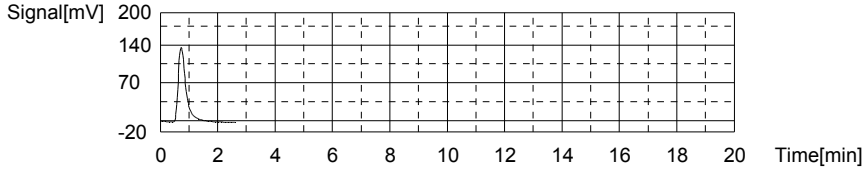
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.809mg/L TC:7.072mg/L IC:5.263mg/L

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

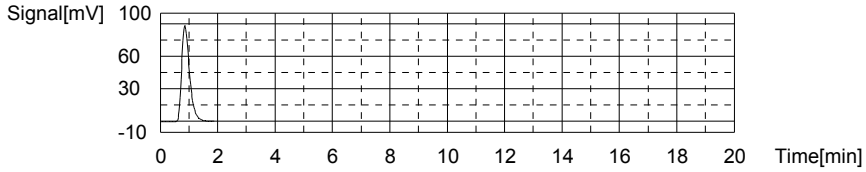
Mean Area 265.8
Mean Conc. 7.072mg/L



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

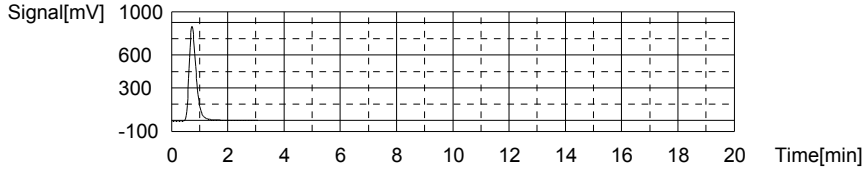
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.580mg/L TC:40.56mg/L IC:36.98mg/L

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

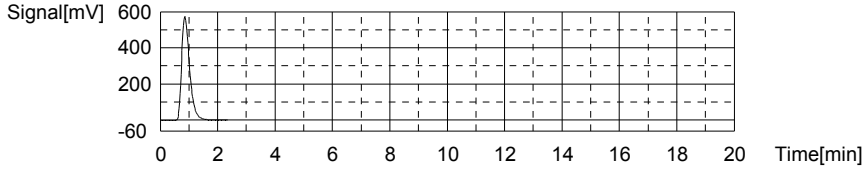
Mean Area 1524
Mean Conc. 40.56mg/L



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

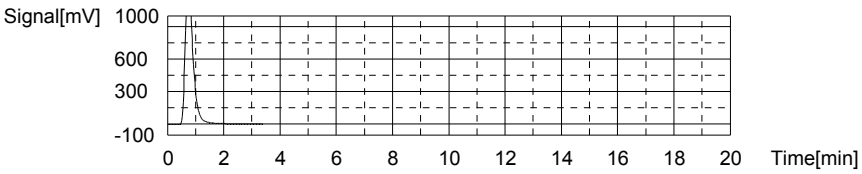
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:17.61mg/L TC:66.54mg/L IC:48.93mg/L

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

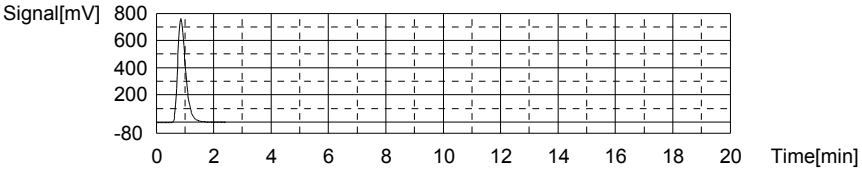
Mean Area 2500
Mean Conc. 66.54mg/L



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

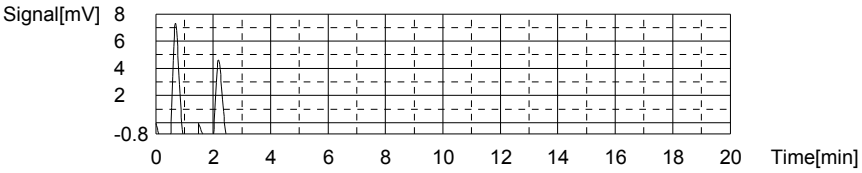
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.4759mg/L TC:0.3571mg/L IC:-0.1188mg/L

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

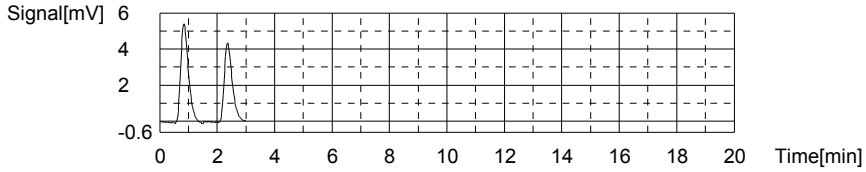
Mean Area 13.51
Mean Conc. 0.3571mg/L



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

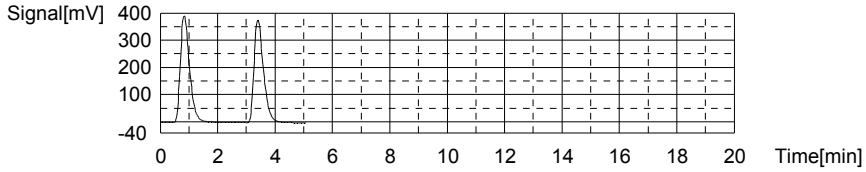
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.29mg/L TC:23.06mg/L IC:-0.2312mg/L

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

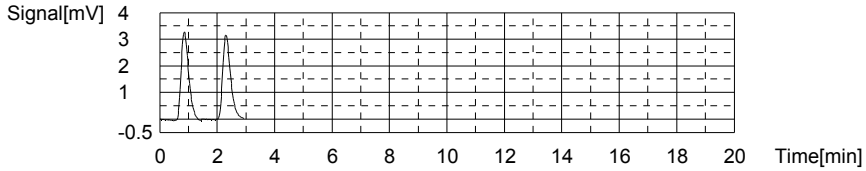
Mean Area 866.4
Mean Conc. 23.06mg/L



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

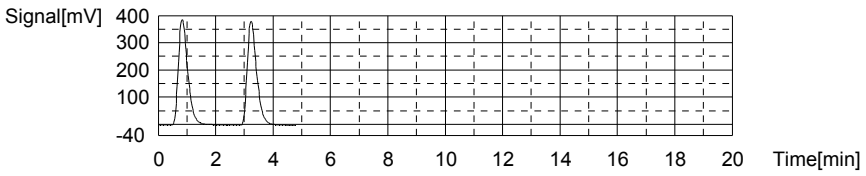
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.46mg/L TC:23.22mg/L IC:-0.2415mg/L

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

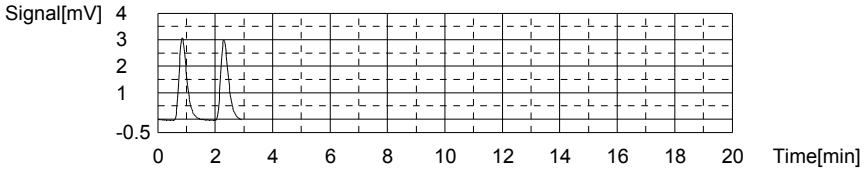
Mean Area 872.6
Mean Conc. 23.22mg/L



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

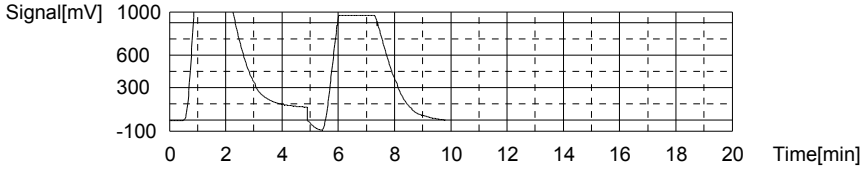
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:266.2mg/L TC:266.1mg/L IC:-0.08946mg/L

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

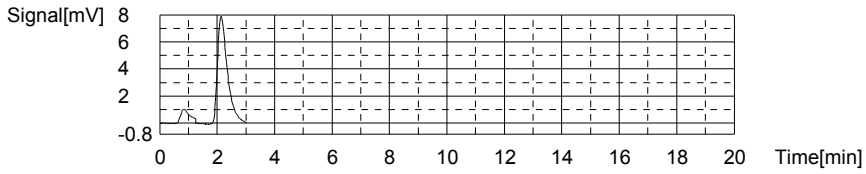
Mean Area 9999
Mean Conc. 266.1mg/L



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

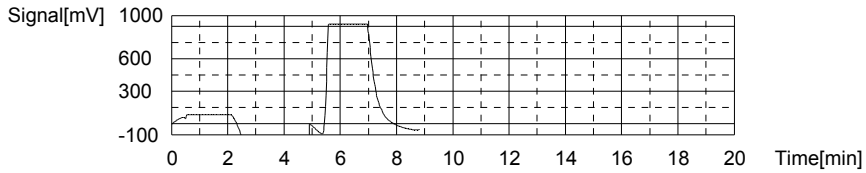
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:109.4mg/L TC:169.2mg/L IC:59.81mg/L

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

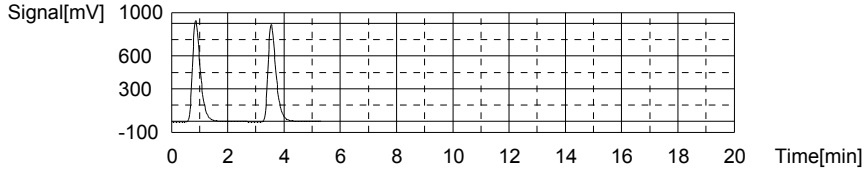
Mean Area 6357
Mean Conc. 169.2mg/L



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

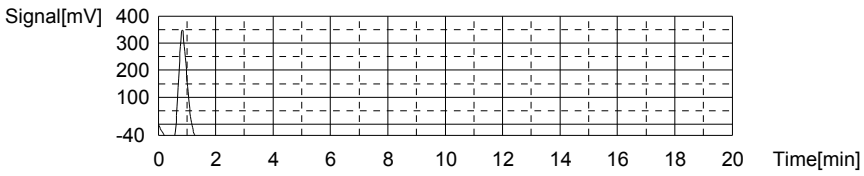
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:22.63mg/L TC:22.79mg/L IC:0.1556mg/L

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

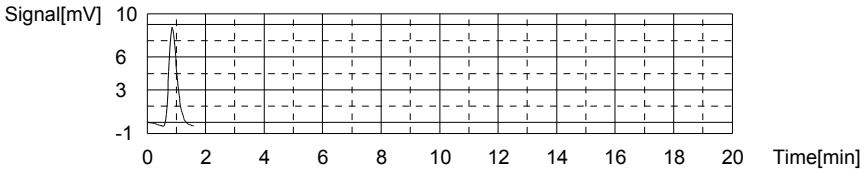
Mean Area 856.2
Mean Conc. 22.79mg/L



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

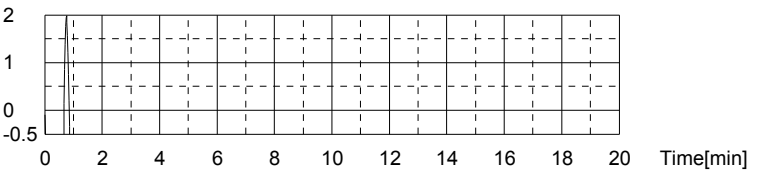
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.6383mg/L TC:0.5022mg/L IC:-0.1362mg/L

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

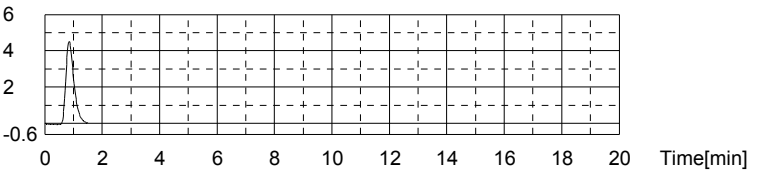
Mean Area 18.96
Mean Conc. 0.5022mg/L



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

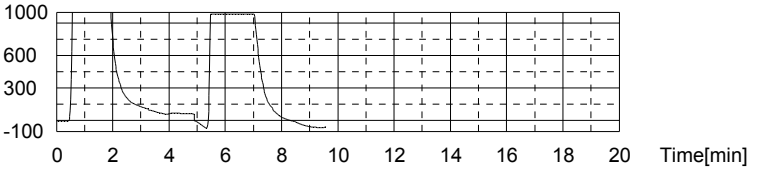
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:146.6mg/L TC:266.1mg/L IC:119.5mg/L

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

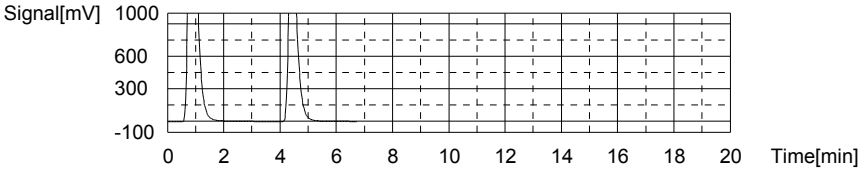
Mean Area 9999
Mean Conc. 266.1mg/L



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

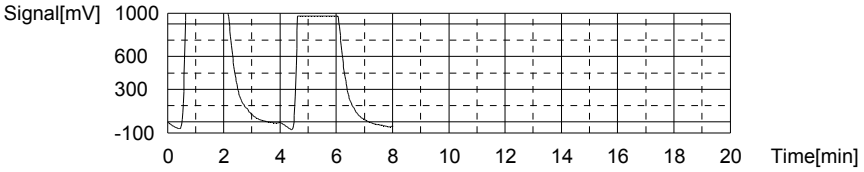
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:194.4mg/L TC:266.1mg/L IC:71.69mg/L

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

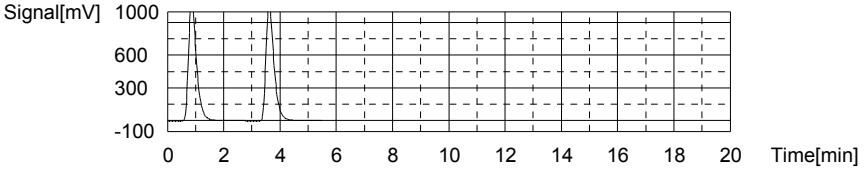
Mean Area 9999
Mean Conc. 266.1mg/L



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

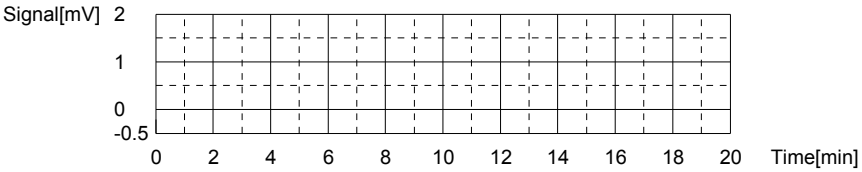
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:-0.1954mg/L TC:-0.00248mg/L IC:0.1929mg/L

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

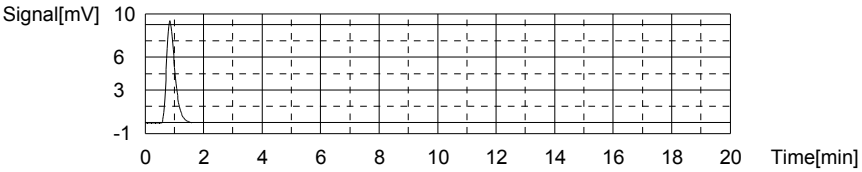
Mean Area 0.000
Mean Conc. -0.00248mg/L



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

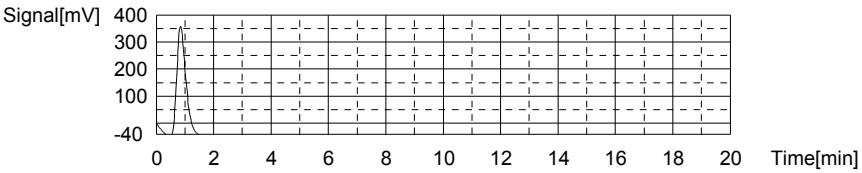
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:23.86mg/L TC:23.80mg/L IC:-0.06042mg/L

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

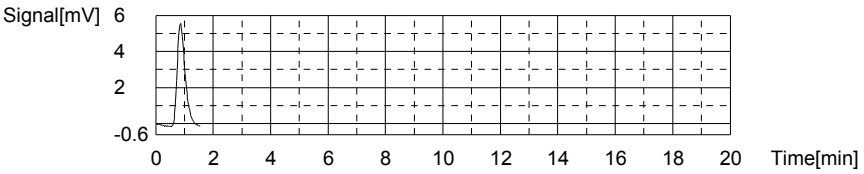
Mean Area 894.3
Mean Conc. 23.80mg/L



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

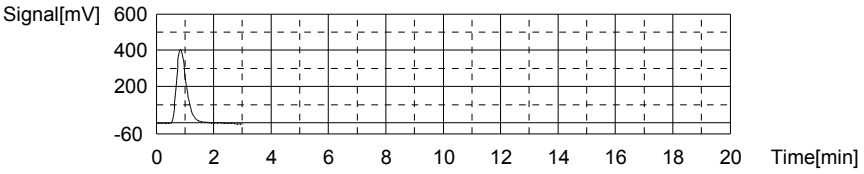
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:26.84mg/L TC:26.69mg/L IC:-0.1497mg/L

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

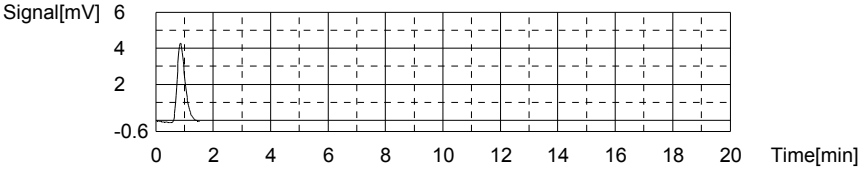
Mean Area 1003
Mean Conc. 26.69mg/L



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

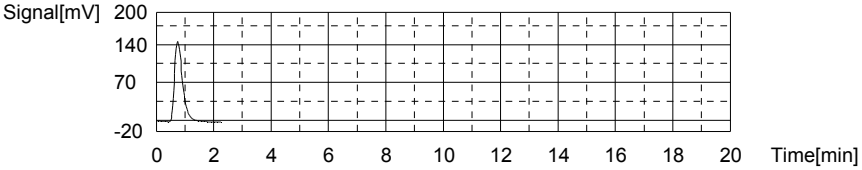
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.173mg/L TC:7.793mg/L IC:4.620mg/L

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

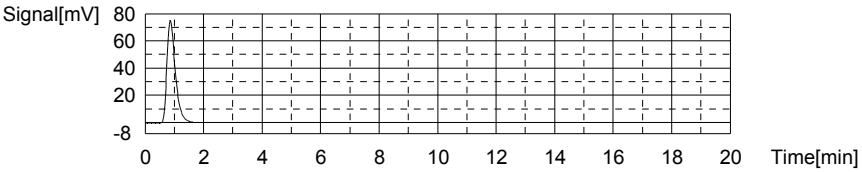
Mean Area 292.9
Mean Conc. 7.793mg/L



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

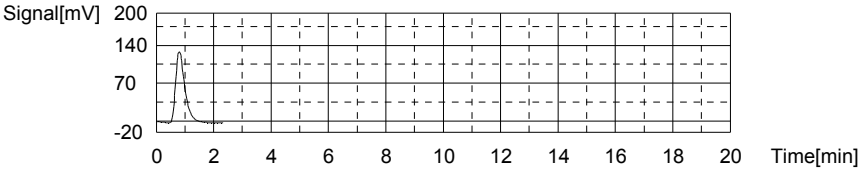
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:6.855mg/L TC:7.857mg/L IC:1.003mg/L

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

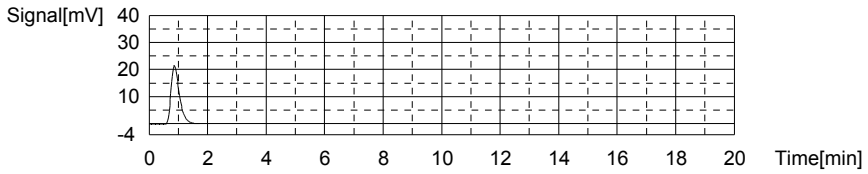
Mean Area 295.3
Mean Conc. 7.857mg/L



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

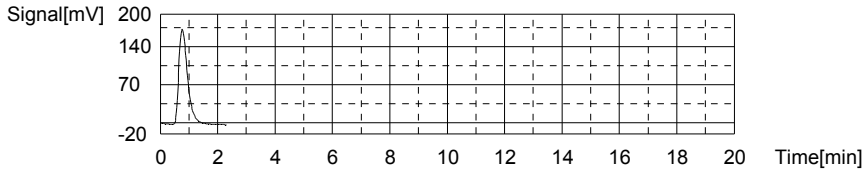
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:6.246mg/L TC:9.957mg/L IC:3.712mg/L

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

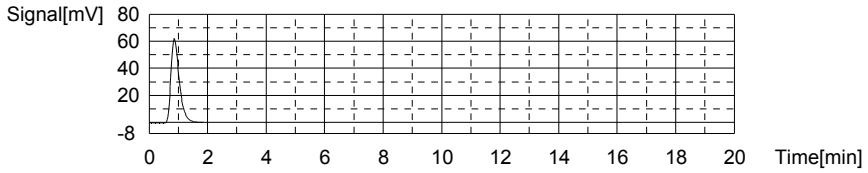
Mean Area 374.2
Mean Conc. 9.957mg/L



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

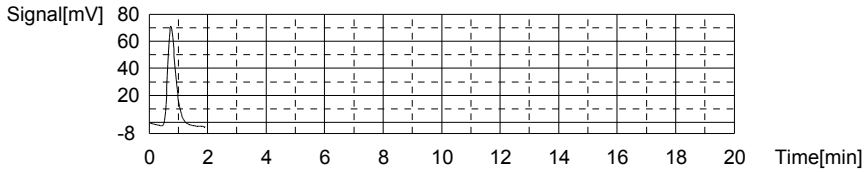
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.809mg/L TC:3.769mg/L IC:1.960mg/L

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

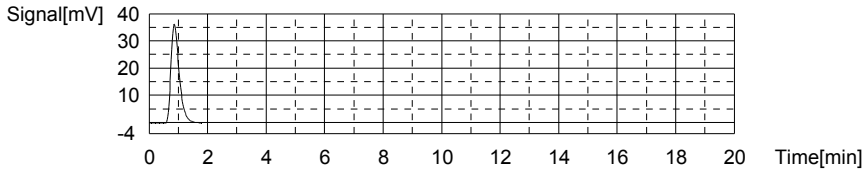
Mean Area 141.7
Mean Conc. 3.769mg/L



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

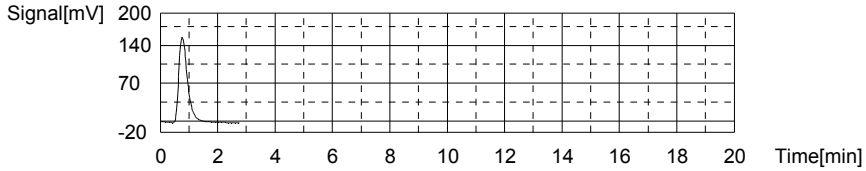
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.135mg/L TC:9.005mg/L IC:3.870mg/L

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

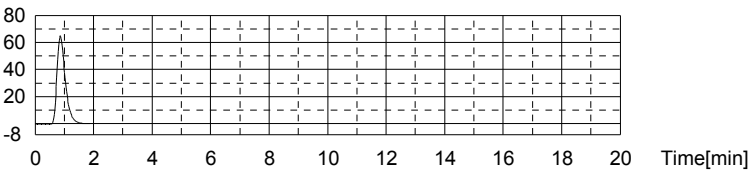
Mean Area 338.4
Mean Conc. 9.005mg/L



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

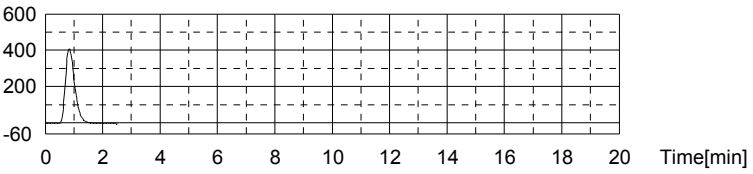
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:24.73mg/L TC:24.70mg/L IC:-0.03317mg/L

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

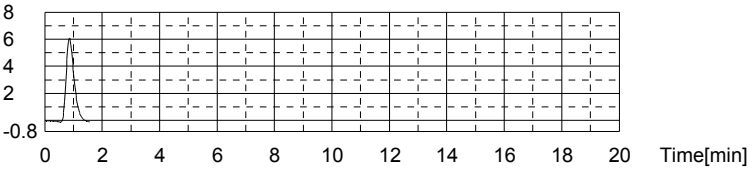
Mean Area 928.0
Mean Conc. 24.70mg/L



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

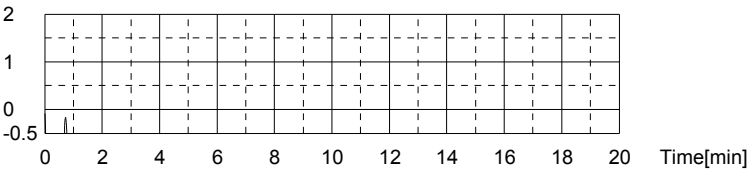
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.4010mg/L TC:0.2358mg/L IC:-0.1652mg/L

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

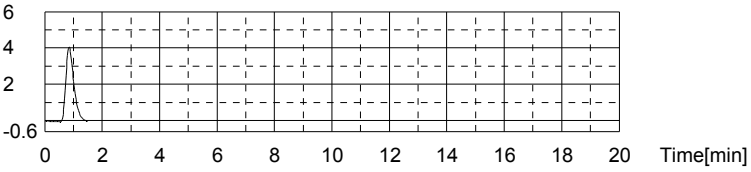
Mean Area 8.951
Mean Conc. 0.2358mg/L



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

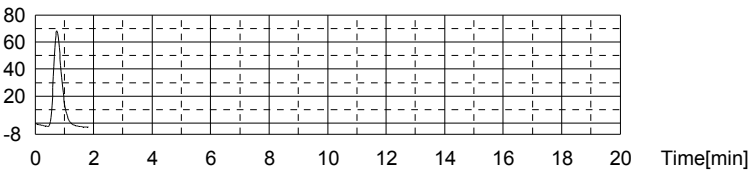
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:1.599mg/L TC:3.609mg/L IC:2.011mg/L

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

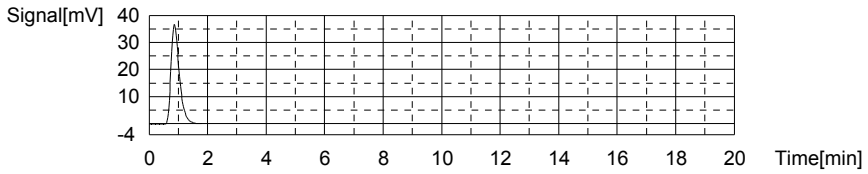
Mean Area 135.7
Mean Conc. 3.609mg/L



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

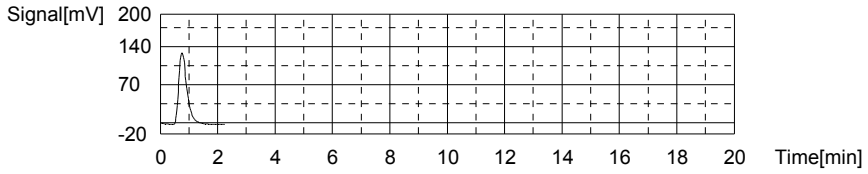
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.863mg/L TC:7.056mg/L IC:3.194mg/L

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

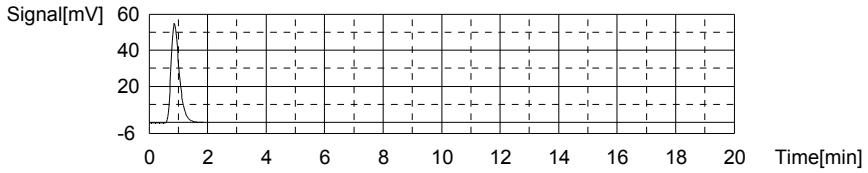
Mean Area 265.2
Mean Conc. 7.056mg/L



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

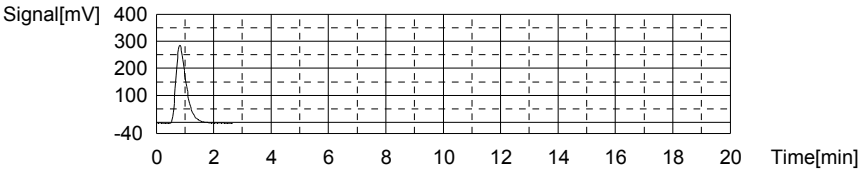
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:17.09mg/L TC:19.12mg/L IC:2.029mg/L

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

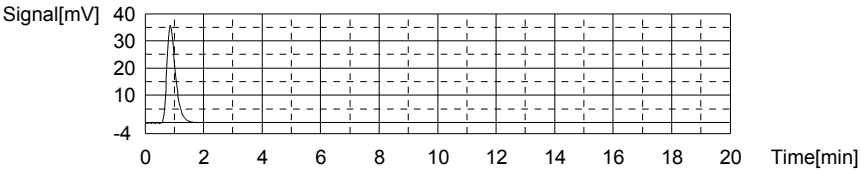
Mean Area 718.4
Mean Conc. 19.12mg/L



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

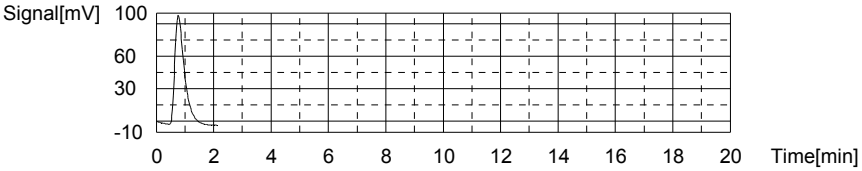
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:3.885mg/L TC:6.207mg/L IC:2.322mg/L

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

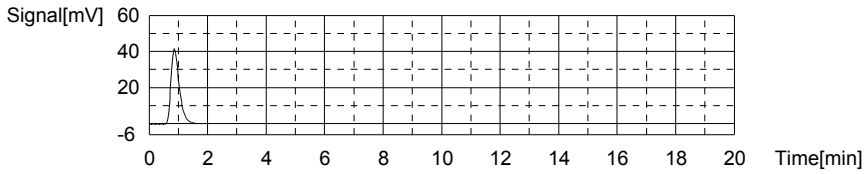
Mean Area 233.3
Mean Conc. 6.207mg/L



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

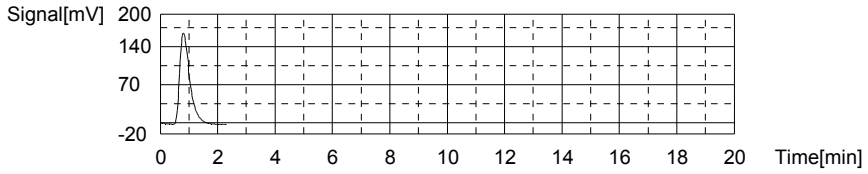
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:10.13mg/L TC:10.93mg/L IC:0.8016mg/L

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

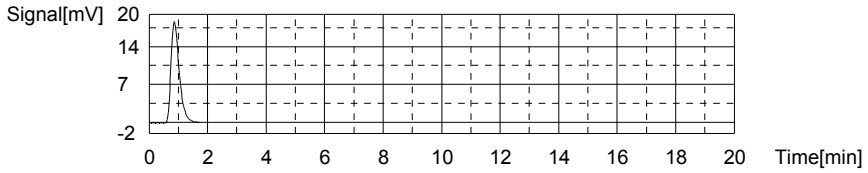
Mean Area 410.8
Mean Conc. 10.93mg/L



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

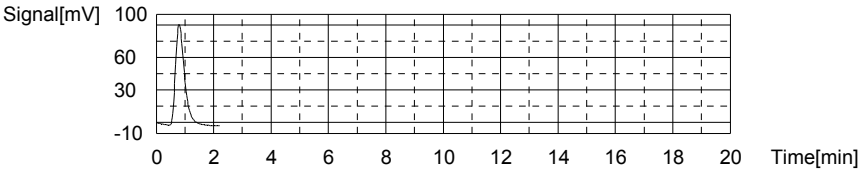
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:4.739mg/L TC:5.390mg/L IC:0.6505mg/L

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

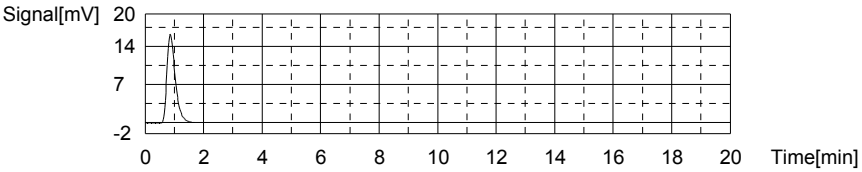
Mean Area 202.6
Mean Conc. 5.390mg/L



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

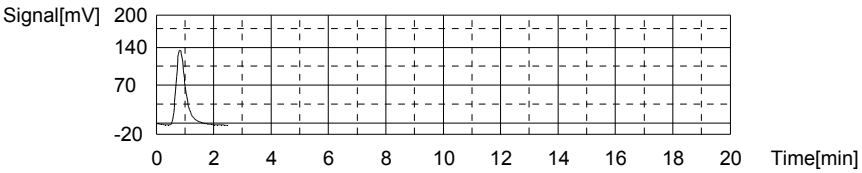
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:8.336mg/L TC:8.659mg/L IC:0.3221mg/L

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

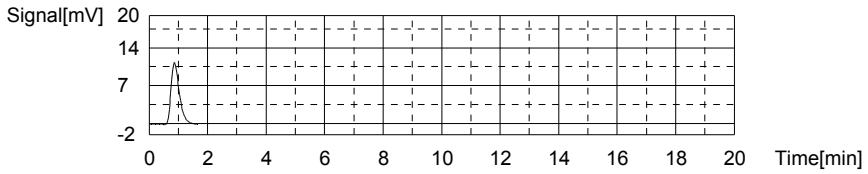
Mean Area 325.4
Mean Conc. 8.659mg/L



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

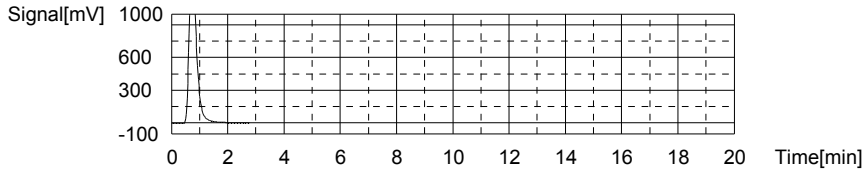
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:23.94mg/L TC:67.82mg/L IC:43.88mg/L

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

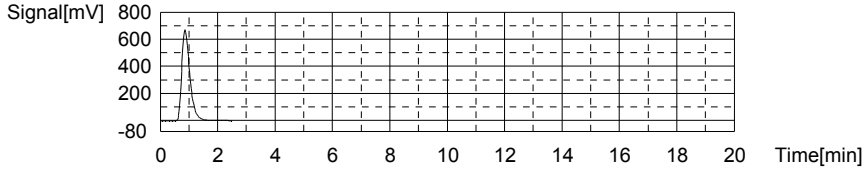
Mean Area 2548
Mean Conc. 67.82mg/L



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

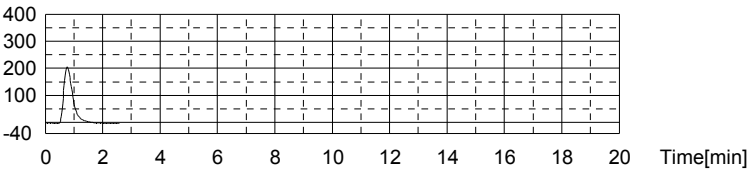
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:7.553mg/L TC:12.19mg/L IC:4.640mg/L

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

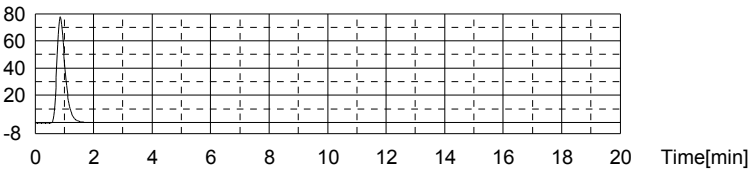
Mean Area 458.2
Mean Conc. 12.19mg/L



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

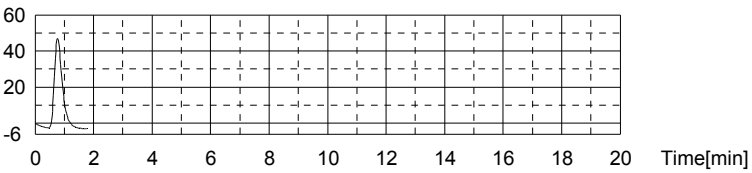
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:2.645mg/L TC:2.488mg/L IC:-0.1570mg/L

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

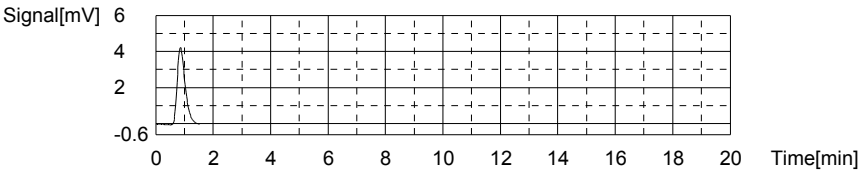
Mean Area 93.58
Mean Conc. 2.488mg/L



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

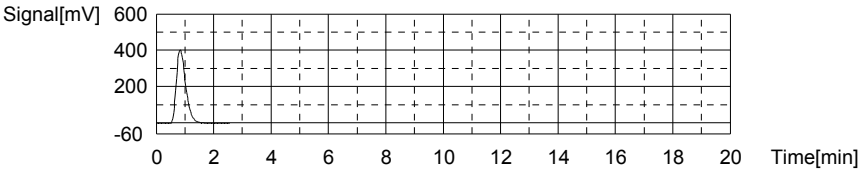
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:24.51mg/L TC:24.52mg/L IC:0.01024mg/L

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

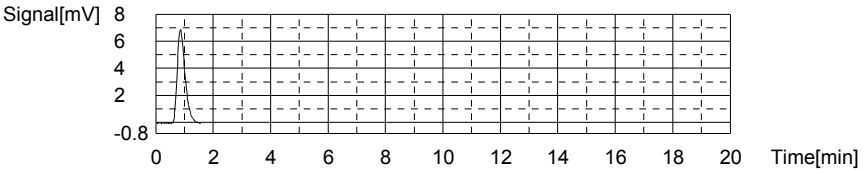
Mean Area 921.3
Mean Conc. 24.52mg/L



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

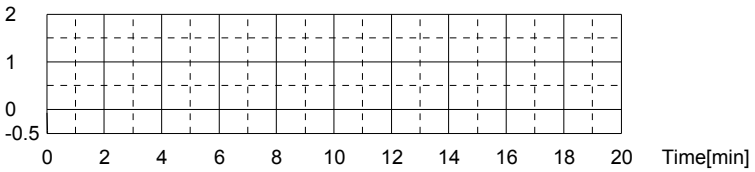
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3839mg/L TC:0.2189mg/L IC:-0.1651mg/L

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

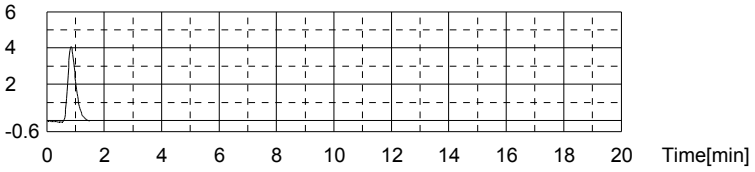
Mean Area 8.317
Mean Conc. 0.2189mg/L



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

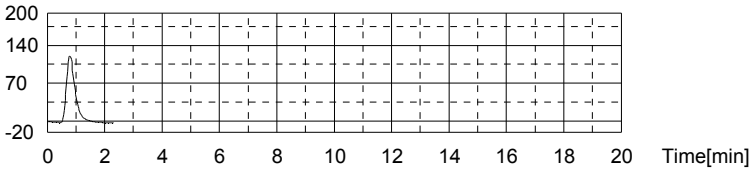
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.602mg/L TC:6.958mg/L IC:1.356mg/L

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

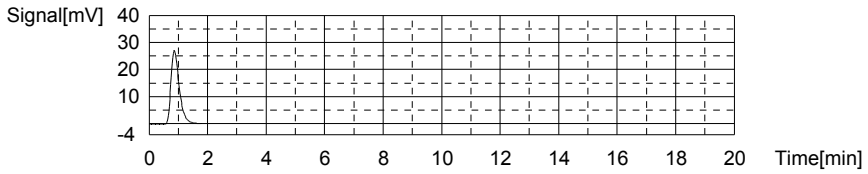
Mean Area 261.5
Mean Conc. 6.958mg/L



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

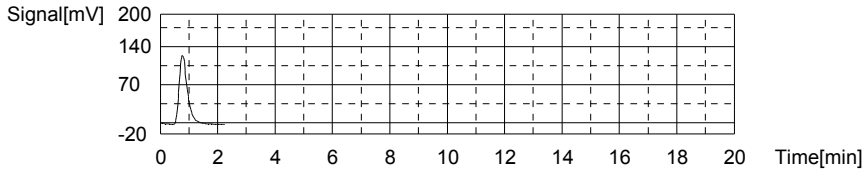
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:5.149mg/L TC:6.793mg/L IC:1.644mg/L

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

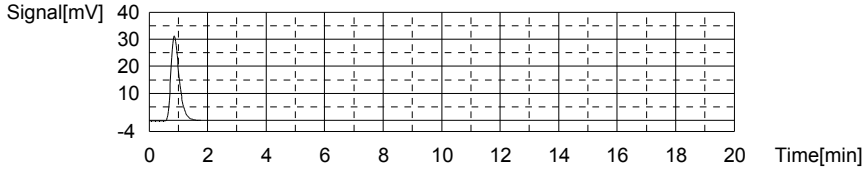
Mean Area 255.3
Mean Conc. 6.793mg/L



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

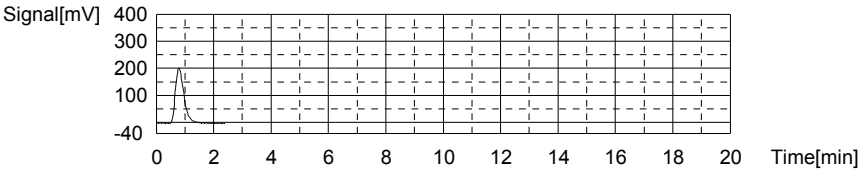
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:9.559mg/L TC:11.24mg/L IC:1.684mg/L

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

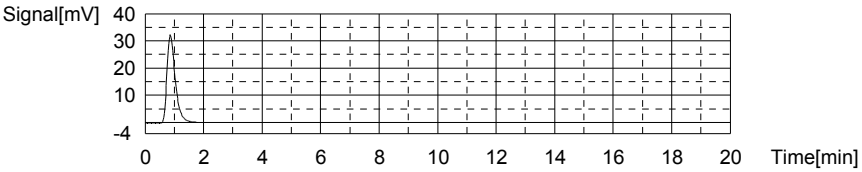
Mean Area 422.5
Mean Conc. 11.24mg/L



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

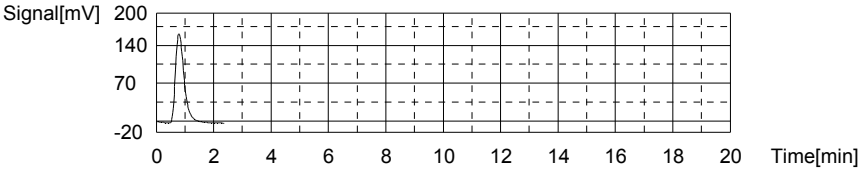
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:8.308mg/L TC:9.260mg/L IC:0.9517mg/L

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

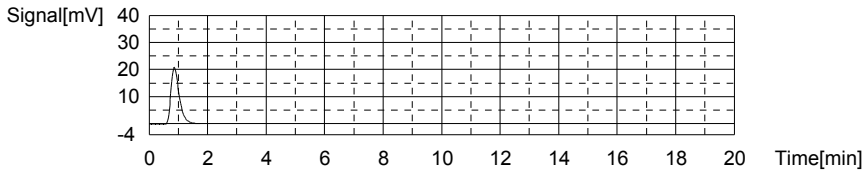
Mean Area 348.0
Mean Conc. 9.260mg/L



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

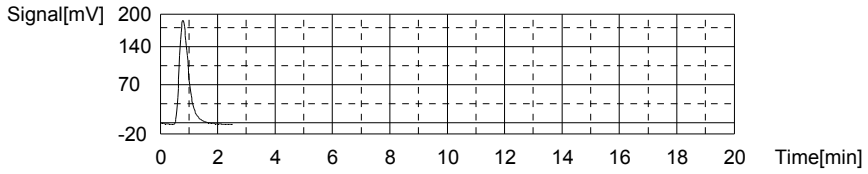
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:9.186mg/L TC:11.70mg/L IC:2.518mg/L

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

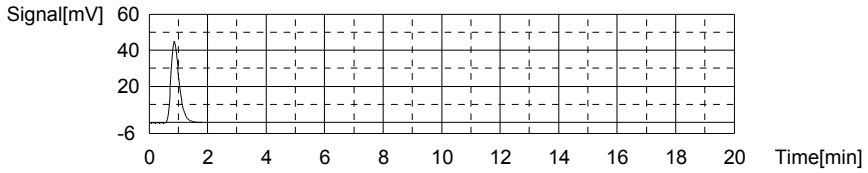
Mean Area 439.8
Mean Conc. 11.70mg/L



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

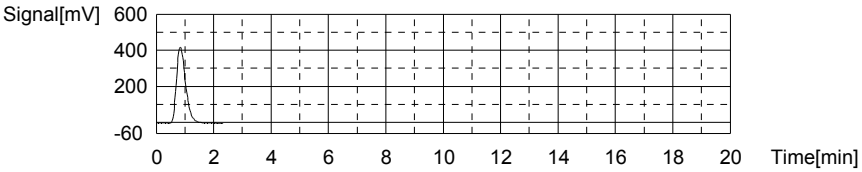
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	TOC:24.82mg/L TC:24.86mg/L IC:0.04388mg/L

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

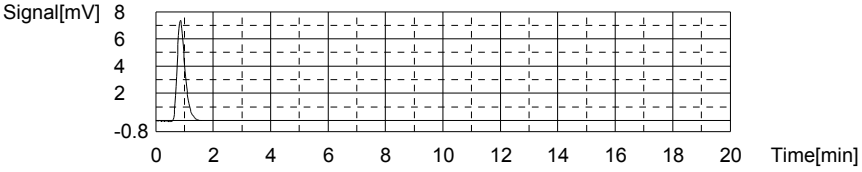
Mean Area 934.2
Mean Conc. 24.86mg/L



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

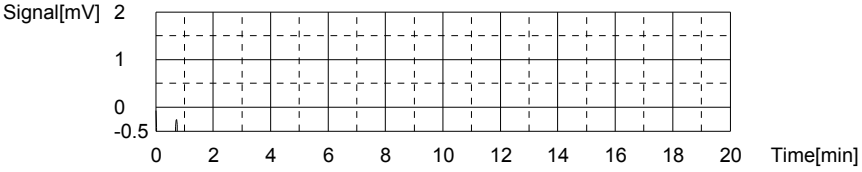
Type	Anal.	Dil.	Result
Unknown	TOC	1.000	!!Error!! TOC:0.3926mg/L TC:0.2204mg/L IC:-0.1722mg/L

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

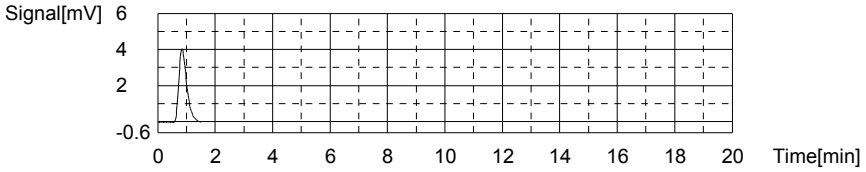
Mean Area 8.374
Mean Conc. 0.2204mg/L



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: L12050171
Account: 2736
Project: 2736.061
Samples: 9
Due Date: 21-MAY-2012

Samplenum	Container ID	Products
L12050171-01	967749	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	07-MAY-2012 10:30	RLK		<2
2	ANALYZ	V1	ORG4	08-MAY-2012 07:47	MRT	JKT	
3	STORE	ORG4	A2	21-MAY-2012 08:38	JKT	AGK	

Comments:Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	07-MAY-2012 10:30	RLK		<2
2	ANALYZ	V1	ORG4	08-MAY-2012 07:47	MRT	JKT	
3	STORE	ORG4	A2	21-MAY-2012 08:38	JKT	AGK	

Comments:Products cancelled.

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	ORG4	07-MAY-2012 10:30	RLK		<2
2	STORE	ORG4	A2	21-MAY-2012 08:39	JKT	AGK	

Comments:Products cancelled.Products cancelled.

Samplenum	Container ID	Products
L12050171-01	967750	826-SPE 827-PAHL 827-SPE-DIOX RSK175EXT

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	07-MAY-2012 10:30	RLK		
2	ANALYZ	V1	ORG4	08-MAY-2012 07:46	MRT	JKT	
3	STORE	ORG4	A2	18-MAY-2012 09:01	JKT	AGK	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	07-MAY-2012 10:30	RLK		
2	ANALYZ	V1	ORG4	08-MAY-2012 07:46	MRT	JKT	
3	STORE	ORG4	A2	18-MAY-2012 09:01	JKT	AGK	

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	07-MAY-2012 10:30	RLK		
2	ANALYZ	V1	ORG4	08-MAY-2012 07:46	MRT	JKT	
3	STORE	ORG4	A2	18-MAY-2012 09:01	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: L12050171
Account: 2736
Project: 2736.061
Samples: 9
Due Date: 21-MAY-2012

Samplenum	Container ID	Products
L12050171-01	967751	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	07-MAY-2012 10:30	RLK		
2	PREP	W1	EXT	07-MAY-2012 13:32	CSH	CLS	
3	DISP	EXT	DISP	08-MAY-2012 08:42	RLB	RLB	
4	ANALYZ*	EXT	SEMI	10-MAY-2012 08:21	CAA	CSH	

***Sample extract/digestate/leachate**

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	07-MAY-2012 10:30	RLK		
2	STORE	W1	A1	08-MAY-2012 08:09	BLG	BLG	

***Sample extract/digestate/leachate**

Samplenum	Container ID	Products
L12050171-01	967752	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	07-MAY-2012 10:30	RLK		
2	PREP	W1	EXT	09-MAY-2012 09:17	CEB	CLS	
3	ANALYZ*	EXT	SEMI	10-MAY-2012 08:21	CAA	CEB	
4	DISP	EXT	DISP	10-MAY-2012 08:40	RLB	RLB	

***Sample extract/digestate/leachate**

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	07-MAY-2012 10:30	RLK		
2	STORE	W1	A1	08-MAY-2012 08:09	BLG	BLG	

***Sample extract/digestate/leachate**

Samplenum	Container ID	Products
L12050171-01	967753	ALK

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	07-MAY-2012 10:30	RLK		
2	ANALYZ	W1	WET	10-MAY-2012 13:12	JBK	RLK	
3	STORE	WET	A2	15-MAY-2012 08:53	RLK	JBK	

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: L12050171
Account: 2736
Project: 2736.061
Samples: 9
Due Date: 21-MAY-2012

Samplenum	Container ID	Products
L12050171-01	967754	NO3 SO4

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	07-MAY-2012 10:30	RLK		
2	ANALYZ	W1	WET	07-MAY-2012 10:59	DIH	RLK	

Samplenum	Container ID	Products
L12050171-01	967755	PHOS TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	07-MAY-2012 10:30	RLK		<2
2	ANALYZ	W1	WET	07-MAY-2012 10:59	DIH	RLK	
3	STORE	WET	A2	15-MAY-2012 08:49	RLK	JBK	

Samplenum	Container ID	Products
L12050171-01	967756	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	07-MAY-2012 10:30	RLK		
2	PREP	W1	DIG	08-MAY-2012 06:23	VC	AZH	
3	ANALYZ*	DIG	METALS	08-MAY-2012 14:35	JYH	VC	
4	STORE	DIG	A2	10-MAY-2012 15:36	JKS	BRG	

Sample extract/digestate/leachate

Samplenum	Container ID	Products
L12050171-02	967757	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	07-MAY-2012 10:30	RLK		
2	PREP	W1	DIG	08-MAY-2012 06:23	VC	AZH	
3	ANALYZ*	DIG	METALS	08-MAY-2012 14:35	JYH	VC	
4	STORE	DIG	A2	10-MAY-2012 15:36	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

Internal Chain of Custody Report

Login: L12050171
Account: 2736
Project: 2736.061
Samples: 9
Due Date: 21-MAY-2012

Samplenum	Container ID	Products
L12050171-03	967758	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	07-MAY-2012 10:30	RLK		<2
2	ANALYZ	V1	ORG4	08-MAY-2012 07:47	MRT	JKT	
3	STORE	ORG4	A2	21-MAY-2012 08:39	JKT	AGK	

Comments:Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	07-MAY-2012 10:30	RLK		<2
2	ANALYZ	V1	ORG4	08-MAY-2012 07:47	MRT	JKT	
3	STORE	ORG4	A2	21-MAY-2012 08:39	JKT	AGK	

Comments:Products cancelled.

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	07-MAY-2012 10:30	RLK		<2
2	ANALYZ	V1	ORG4	08-MAY-2012 07:47	MRT	JKT	
3	STORE	ORG4	A2	21-MAY-2012 08:39	JKT	AGK	

Comments:Products cancelled.

Samplenum	Container ID	Products
L12050171-03	967759	826-SPE 827-PAHL 827-SPE-DIOX RSK175EXT

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	07-MAY-2012 10:30	RLK		
2	ANALYZ	V1	ORG4	08-MAY-2012 07:46	MRT	JKT	
3	STORE	ORG4	A2	18-MAY-2012 09:01	JKT	AGK	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	07-MAY-2012 10:30	RLK		
2	ANALYZ	V1	ORG4	08-MAY-2012 07:46	MRT	JKT	
3	STORE	ORG4	A2	18-MAY-2012 09:01	JKT	AGK	

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	07-MAY-2012 10:30	RLK		
2	ANALYZ	V1	ORG4	08-MAY-2012 07:46	MRT	JKT	
3	STORE	ORG4	A2	18-MAY-2012 09:01	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: L12050171
Account: 2736
Project: 2736.061
Samples: 9
Due Date: 21-MAY-2012

Samplenum	Container ID	Products
L12050171-03	967760	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	07-MAY-2012 10:30	RLK		
2	PREP	W1	EXT	07-MAY-2012 13:32	CSH	CLS	
3	DISP	EXT	DISP	08-MAY-2012 08:42	RLB	RLB	
4	ANALYZ*	EXT	SEMI	10-MAY-2012 08:21	CAA	CSH	

***Sample extract/digestate/leachate**

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	07-MAY-2012 10:30	RLK		
2	STORE	W1	A1	08-MAY-2012 08:09	BLG	BLG	

***Sample extract/digestate/leachate**

Samplenum	Container ID	Products
L12050171-03	967761	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	07-MAY-2012 10:30	RLK		
2	PREP	W1	EXT	09-MAY-2012 09:17	CEB	CLS	
3	ANALYZ*	EXT	SEMI	10-MAY-2012 08:21	CAA	CEB	
4	DISP	EXT	DISP	10-MAY-2012 08:41	RLB	RLB	

***Sample extract/digestate/leachate**

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	07-MAY-2012 10:30	RLK		
2	STORE	W1	A1	08-MAY-2012 08:09	BLG	BLG	

***Sample extract/digestate/leachate**

Samplenum	Container ID	Products
L12050171-03	967762	ALK

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	07-MAY-2012 10:30	RLK		
2	ANALYZ	W1	WET	10-MAY-2012 13:12	JBK	RLK	
3	STORE	WET	A2	15-MAY-2012 08:53	RLK	JBK	

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: L12050171
Account: 2736
Project: 2736.061
Samples: 9
Due Date: 21-MAY-2012

Samplenum	Container ID	Products
L12050171-03	967763	NO3 SO4

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	07-MAY-2012 10:30	RLK		
2	ANALYZ	W1	WET	07-MAY-2012 10:59	DIH	RLK	
3	STORE	WET	A2	14-MAY-2012 08:05	RLK	JDH	

Samplenum	Container ID	Products
L12050171-03	967764	PHOS TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	07-MAY-2012 10:30	RLK		<2
2	ANALYZ	W1	WET	07-MAY-2012 10:59	DIH	RLK	
3	STORE	WET	A2	15-MAY-2012 08:49	RLK	JBK	

Samplenum	Container ID	Products
L12050171-03	967765	AG AL AS-MS BA BE-AX CA CD-AX CO CR-AX CU FE ⊦

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	07-MAY-2012 10:30	RLK		
2	PREP	W1	DIG	08-MAY-2012 06:23	VC	AZH	
3	ANALYZ*	DIG	METALS	08-MAY-2012 14:35	JYH	VC	
4	STORE	DIG	A2	10-MAY-2012 15:36	JKS	BRG	

Sample extract/digestate/leachate

Samplenum	Container ID	Products
L12050171-04	967766	AL-D AS-MSD BA-D BE-AXD CA-D CD-AXD CO-D CR-A›

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	07-MAY-2012 10:30	RLK		
2	PREP	W1	DIG	08-MAY-2012 06:23	VC	AZH	
3	ANALYZ*	DIG	METALS	08-MAY-2012 14:35	JYH	VC	
4	STORE	DIG	A2	10-MAY-2012 15:36	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

Internal Chain of Custody Report

Login: L12050171
Account: 2736
Project: 2736.061
Samples: 9
Due Date: 21-MAY-2012

Samplenum	Container ID	Products
L12050171-05	967767	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	07-MAY-2012 10:30	RLK		<2
2	ANALYZ	V1	ORG4	08-MAY-2012 07:47	MRT	JKT	
3	STORE	ORG4	A2	21-MAY-2012 08:39	JKT	AGK	

Comments:Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	07-MAY-2012 10:30	RLK		<2
2	ANALYZ	V1	ORG4	08-MAY-2012 07:47	MRT	JKT	
3	STORE	ORG4	A2	21-MAY-2012 08:39	JKT	AGK	

Comments:Products cancelled.

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	07-MAY-2012 10:30	RLK		<2
2	ANALYZ	V1	ORG4	08-MAY-2012 07:47	MRT	JKT	
3	STORE	ORG4	A2	21-MAY-2012 08:39	JKT	AGK	

Comments:Products cancelled.

Samplenum	Container ID	Products
L12050171-05	967768	826-SPE 827-PAHL 827-SPE-DIOX RSK175EXT

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	07-MAY-2012 10:30	RLK		
2	ANALYZ	V1	ORG4	08-MAY-2012 07:46	MRT	JKT	
3	STORE	ORG4	A2	18-MAY-2012 09:01	JKT	AGK	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	07-MAY-2012 10:30	RLK		
2	ANALYZ	V1	ORG4	08-MAY-2012 07:46	MRT	JKT	
3	STORE	ORG4	A2	18-MAY-2012 09:01	JKT	AGK	

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	07-MAY-2012 10:30	RLK		
2	ANALYZ	V1	ORG4	08-MAY-2012 07:46	MRT	JKT	
3	STORE	ORG4	A2	18-MAY-2012 09:01	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: L12050171
Account: 2736
Project: 2736.061
Samples: 9
Due Date: 21-MAY-2012

Samplenum	Container ID	Products
L12050171-05	967769	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	07-MAY-2012 10:30	RLK		
2	PREP	W1	EXT	07-MAY-2012 13:32	CSH	CLS	
3	DISP	EXT	DISP	08-MAY-2012 08:43	RLB	RLB	
4	ANALYZ*	EXT	SEMI	10-MAY-2012 08:21	CAA	CSH	

***Sample extract/digestate/leachate**

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	07-MAY-2012 10:30	RLK		
2	STORE	W1	A1	08-MAY-2012 08:09	BLG	BLG	

***Sample extract/digestate/leachate**

Samplenum	Container ID	Products
L12050171-05	967770	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	07-MAY-2012 10:30	RLK		
2	PREP	W1	EXT	09-MAY-2012 09:17	CEB	CLS	
3	ANALYZ*	EXT	SEMI	10-MAY-2012 08:21	CAA	CEB	
4	DISP	EXT	DISP	10-MAY-2012 08:41	RLB	RLB	

***Sample extract/digestate/leachate**

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	07-MAY-2012 10:30	RLK		
2	STORE	W1	A1	08-MAY-2012 08:09	BLG	BLG	

***Sample extract/digestate/leachate**

Samplenum	Container ID	Products
L12050171-05	967771	ALK

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	07-MAY-2012 10:30	RLK		
2	ANALYZ	W1	WET	10-MAY-2012 13:11	JBK	RLK	
3	STORE	WET	A2	15-MAY-2012 08:53	RLK	JBK	

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: L12050171
Account: 2736
Project: 2736.061
Samples: 9
Due Date: 21-MAY-2012

Samplenum	Container ID	Products
L12050171-05	967772	NO3 SO4

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	WET	07-MAY-2012 10:30	RLK		
2	STORE	WET	A2	14-MAY-2012 08:05	RLK	JDH	

Samplenum	Container ID	Products
L12050171-05	967773	PHOS TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	07-MAY-2012 10:30	RLK		<2
2	ANALYZ	W1	WET	07-MAY-2012 10:59	DIH	RLK	
3	STORE	WET	A2	15-MAY-2012 08:49	RLK	JBK	

Samplenum	Container ID	Products
L12050171-05	967774	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	07-MAY-2012 10:30	RLK		
2	PREP	W1	DIG	08-MAY-2012 06:23	VC	AZH	
3	ANALYZ*	DIG	METALS	08-MAY-2012 14:35	JYH	VC	
4	STORE	DIG	A2	10-MAY-2012 15:36	JKS	BRG	

Sample extract/digestate/leachate

Samplenum	Container ID	Products
L12050171-06	967775	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	07-MAY-2012 10:30	RLK		
2	PREP	W1	DIG	08-MAY-2012 06:23	VC	AZH	
3	ANALYZ*	DIG	METALS	08-MAY-2012 14:35	JYH	VC	
4	STORE	DIG	A2	10-MAY-2012 15:36	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

Internal Chain of Custody Report

Login: L12050171
Account: 2736
Project: 2736.061
Samples: 9
Due Date: 21-MAY-2012

Samplenum	Container ID	Products
L12050171-07	967776	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	07-MAY-2012 10:30	RLK		<2
2	ANALYZ	V1	ORG4	08-MAY-2012 07:47	MRT	JKT	
3	STORE	ORG4	A2	21-MAY-2012 08:39	JKT	AGK	

Comments:Products cancelled.

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	07-MAY-2012 10:30	RLK		<2
2	ANALYZ	V1	ORG4	08-MAY-2012 07:47	MRT	JKT	
3	STORE	ORG4	A2	21-MAY-2012 08:39	JKT	AGK	

Comments:Products cancelled.

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	07-MAY-2012 10:30	RLK		<2
2	ANALYZ	V1	ORG4	08-MAY-2012 07:47	MRT	JKT	
3	STORE	ORG4	A2	21-MAY-2012 08:39	JKT	AGK	

Comments:Products cancelled.

Samplenum	Container ID	Products
L12050171-07	967777	826-SPE 827-PAHL 827-SPE-DIOX RSK175EXT

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	07-MAY-2012 10:30	RLK		
2	ANALYZ	V1	ORG4	08-MAY-2012 07:46	MRT	JKT	
3	STORE	ORG4	A2	18-MAY-2012 09:01	JKT	AGK	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	07-MAY-2012 10:30	RLK		
2	ANALYZ	V1	ORG4	08-MAY-2012 07:46	MRT	JKT	
3	STORE	ORG4	A2	18-MAY-2012 09:01	JKT	AGK	

Bottle: 3

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	07-MAY-2012 10:30	RLK		
2	ANALYZ	V1	ORG4	08-MAY-2012 07:46	MRT	JKT	
3	STORE	ORG4	A2	18-MAY-2012 09:01	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: L12050171
Account: 2736
Project: 2736.061
Samples: 9
Due Date: 21-MAY-2012

Samplenum	Container ID	Products
L12050171-07	967778	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	07-MAY-2012 10:30	RLK		
2	PREP	W1	EXT	07-MAY-2012 13:32	CSH	CLS	
3	DISP	EXT	DISP	08-MAY-2012 08:41	RLB	RLB	
4	ANALYZ*	EXT	SEMI	10-MAY-2012 08:21	CAA	CSH	

***Sample extract/digestate/leachate**

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	07-MAY-2012 10:30	RLK		
2	STORE	W1	A1	11-MAY-2012 08:52	BLG	BLG	

Comments:Products cancelled.

***Sample extract/digestate/leachate**

Samplenum	Container ID	Products
L12050171-07	967779	

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	07-MAY-2012 10:30	RLK		
2	PREP	W1	EXT	09-MAY-2012 09:17	CEB	CLS	
3	ANALYZ*	EXT	SEMI	10-MAY-2012 08:21	CAA	CEB	
4	DISP	EXT	DISP	10-MAY-2012 08:39	RLB	RLB	

***Sample extract/digestate/leachate**

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	07-MAY-2012 10:30	RLK		
2	STORE	W1	A1	11-MAY-2012 08:52	BLG	BLG	

Comments:Products cancelled.

***Sample extract/digestate/leachate**

Samplenum	Container ID	Products
L12050171-07	967780	ALK

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	07-MAY-2012 10:30	RLK		
2	ANALYZ	W1	WET	10-MAY-2012 13:12	JBK	RLK	
3	STORE	WET	A2	15-MAY-2012 08:53	RLK	JBK	

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: L12050171
Account: 2736
Project: 2736.061
Samples: 9
Due Date: 21-MAY-2012

Samplenum	Container ID	Products
L12050171-07	967781	NO3 SO4

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	07-MAY-2012 10:30	RLK		
2	ANALYZ	W1	WET	07-MAY-2012 10:59	DIH	RLK	
3	STORE	WET	A2	14-MAY-2012 08:05	RLK	JDH	

Samplenum	Container ID	Products
L12050171-07	967782	PHOS TOC

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	W1	07-MAY-2012 10:30	RLK		<2
2	ANALYZ	W1	WET	07-MAY-2012 10:59	DIH	RLK	
3	STORE	WET	A2	15-MAY-2012 08:55	RLK	JBK	

Samplenum	Container ID	Products
L12050171-07	967783	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	07-MAY-2012 10:30	RLK		
2	PREP	W1	DIG	08-MAY-2012 06:23	VC	AZH	
3	ANALYZ*	DIG	METALS	08-MAY-2012 14:35	JYH	VC	
4	STORE	DIG	A2	10-MAY-2012 15:36	JKS	BRG	

Sample extract/digestate/leachate

Samplenum	Container ID	Products
L12050171-08	967784	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	07-MAY-2012 10:30	RLK		
2	PREP	W1	DIG	08-MAY-2012 06:23	VC	AZH	
3	ANALYZ*	DIG	METALS	08-MAY-2012 14:35	JYH	VC	
4	STORE	DIG	A2	10-MAY-2012 15:36	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: L12050171
Account: 2736
Project: 2736.061
Samples: 9
Due Date: 21-MAY-2012

Samplenum	Container ID	Products
L12050171-09	967785	826-SPE

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	07-MAY-2012 10:30	RLK		<2
2	ANALYZ	V1	ORG4	08-MAY-2012 07:47	MRT	JKT	
3	STORE	ORG4	A2	21-MAY-2012 08:39	JKT	AGK	

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish	pH
1	LOGIN	COOLER	V1	07-MAY-2012 10:30	RLK		<2
2	ANALYZ	V1	ORG4	08-MAY-2012 07:47	MRT	JKT	
3	STORE	ORG4	A2	21-MAY-2012 08:39	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 RSKOI/GC-FID

Isobutane
n-Butane
Propane
Propylene
Propyne

OVL HPLC07/HPLC-MS-MS

Hexamethylphosphoramide (XMPA-LCMS)

SOLID AND HAZARDOUS CHEMICALS

OVL HPLCOS-HPLC-UV

Nitroguanidine

OVL KNITRO-C-S/UV-VIS

Nitrocellulose

OVL MSS0I/GC-MS

1-Methylnaphthalene
Benzaldehyde
Biphenyl
Caprolactam
Pentachloroethane

NELAP Accreditation by Laboratory SOP

SOLID AND HAZARDOUS CHEMICALS

OVL MSV0I/GC-MS

1.3-Butadiene
Cyclohexane
Cyclohexanone
Dimethyl disulfide
Dimethylsulfide
Ethyl-t-butylether (ETBE)
Isoprene
Methylacetate
Methylcyclohexane
n-Hexane
T-amylmethylether (TAME)